

# FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

## Florida Department of Community Affairs Residential Whole Building Performance Method A

Project Name: **711296LipscombEagleDevelopment**  
 Address: **Lot: 115, Sub: Preserve, Plat:**  
 City, State: **, FL**  
 Owner: **Mediterranean Model Spec House**  
 Climate Zone: **North**

Builder: **Lipscomb**  
 Permitting Office: **Columbia**  
 Permit Number: **26586**  
 Jurisdiction Number: **221000**

1. New construction or existing	New	___	12. Cooling systems		
2. Single family or multi-family	Single family	___	a. Central Unit	Cap: 44.0 kBtu/hr	___
3. Number of units, if multi-family	1	___		SEER: 13.00	___
4. Number of Bedrooms	4	___	b. N/A		___
5. Is this a worst case?	Yes	___	c. N/A		___
6. Conditioned floor area (ft²)	2747 ft²	___	13. Heating systems		
7. Glass type <sup>1</sup> and area: (Label reqd. by 13-104.4.5 if not default)			a. Electric Heat Pump	Cap: 44.0 kBtu/hr	___
a. U-factor:	Description Area			HSPF: 7.90	___
(or Single or Double DEFAULT) 7a. (Dble Default) 240.5 ft²		___	b. N/A		___
b. SHGC:			c. N/A		___
(or Clear or Tint DEFAULT) 7b. (Clear) 240.5 ft²		___	14. Hot water systems		
8. Floor types			a. Electric Resistance	Cap: 40.0 gallons	___
a. Slab-On-Grade Edge Insulation	R=0.0, 187.0(p) ft	___		EF: 0.93	___
b. N/A		___	b. N/A		___
c. N/A		___	c. Conservation credits		___
9. Wall types			(HR-Heat recovery, Solar		
a. Frame, Wood, Exterior	R=13.0, 2157.5 ft²	___	DHP-Dedicated heat pump)		
b. Frame, Wood, Adjacent	R=13.0, 268.0 ft²	___	15. HVAC credits		
c. N/A		___	(CF-Ceiling fan, CV-Cross ventilation,		
d. N/A		___	HF-Whole house fan,		
e. N/A		___	PT-Programmable Thermostat,		
10. Ceiling types			MZ-C-Multizone cooling,		
a. Under Attic	R=30.0, 2747.0 ft²	___	MZ-H-Multizone heating)		
b. N/A		___			
c. N/A		___			
11. Ducts					
a. Sup: Unc. Ret: Unc. AH: Interior	Sup. R=6.0, 200.0 ft	___			
b. N/A		___			

Glass/Floor Area: 0.09

Total as-built points: 32689

Total base points: 39051

# PASS

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

PREPARED BY: [Signature]  
 DATE: 12-14-07

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.

BUILDING OFFICIAL: \_\_\_\_\_  
 DATE: \_\_\_\_\_



<sup>1</sup> Predominant glass type. For actual glass type and areas, see Summer & Winter Glass output on pages 2&4.

## Residential Whole Building Performance Method A - Details

PERMIT #:

BASE				AS-BUILT										
GLASS TYPES .18 X Conditioned X BSPM = Points Floor Area				Overhang Type/SC Ornt Len Hgt Area X SPM X SOF = Points										
.18	2747.0	20.04	9909.0	Double, Clear	S	1.5	0.0	80.0	35.87	0.43	1239.3			
				Double, Clear	SE	1.5	0.0	10.0	42.75	0.38	162.2			
				Double, Clear	S	1.5	0.0	10.0	35.87	0.43	154.9			
				Double, Clear	SW	1.5	0.0	10.0	40.16	0.37	147.8			
				Double, Clear	W	1.5	5.5	12.5	38.52	0.90	431.9			
				Double, Clear	W	1.5	10.8	20.0	38.52	0.98	758.4			
				Double, Clear	N	1.5	5.5	20.0	19.20	0.93	356.4			
				Double, Clear	N	1.5	5.5	30.0	19.20	0.93	534.7			
				Double, Clear	N	1.5	2.5	4.7	19.20	0.80	71.9			
				Double, Clear	N	1.5	5.5	30.0	19.20	0.93	534.7			
				Double, Clear	E	1.5	5.5	13.3	42.06	0.90	501.4			
				As-Built Total:								240.5	4893.7	
				WALL TYPES Area X BSPM = Points				Type R-Value Area X SPM = Points						
Adjacent	268.0	0.70	187.6	Frame, Wood, Exterior			13.0	2157.5	1.50	3236.3				
Exterior	2157.5	1.70	3667.8	Frame, Wood, Adjacent			13.0	268.0	0.60	160.8				
Base Total:		2425.5	3855.3	As-Built Total:		2425.5		3397.1						
DOOR TYPES Area X BSPM = Points				Type Area X SPM = Points										
Adjacent	20.0	1.60	32.0	Exterior Insulated				40.0	4.10	164.0				
Exterior	40.0	4.10	164.0	Adjacent Insulated				20.0	1.60	32.0				
Base Total:		60.0	196.0	As-Built Total:		60.0		196.0						
CEILING TYPES Area X BSPM = Points				Type R-Value Area X SPM X SCM = Points										
Under Attic	1797.0	1.73	3108.8	Under Attic			30.0	2747.0	1.73 X 1.00	4752.3				
Base Total:		1797.0	3108.8	As-Built Total:		2747.0		4752.3						
FLOOR TYPES Area X BSPM = Points				Type R-Value Area X SPM = Points										
Slab	187.0(p)	-37.0	-6919.0	Slab-On-Grade Edge Insulation			0.0	187.0(p)	-41.20	-7704.4				
Raised	0.0	0.00	0.0											
Base Total:		-6919.0		As-Built Total:		187.0		-7704.4						
INFILTRATION Area X BSPM = Points				Area X SPM = Points										
2747.0		10.21	28046.9			2747.0		10.21	28046.9					

# SUMMER CALCULATIONS

## Residential Whole Building Performance Method A - Details

ADDRESS: Lot: 115, Sub: Preserve, Plat: , , FL,

PERMIT #:

BASE				AS-BUILT						
<b>Summer Base Points: 38197.0</b>				<b>Summer As-Built Points: 33581.5</b>						
Total Summer Points	X System Multiplier	=	Cooling Points	Total Component (System - Points)	X Cap Ratio	X Duct Multiplier	X System Multiplier	X Credit Multiplier	=	Cooling Points
						(DM x DSM x AHU)				
				(sys 1: Central Unit 44000 btuh ,SEER/EFF(13.0) Ducts:Unc(S),Unc(R),Int(AH),R6.0(INS)						
				33582	1.00	(1.09 x 1.147 x 0.91)	0.263	1.000		10030.5
<b>38197.0</b>	<b>0.4266</b>		<b>16294.8</b>	<b>33581.5</b>	<b>1.00</b>	<b>1.138</b>	<b>0.263</b>	<b>1.000</b>		<b>10030.5</b>

# WINTER CALCULATIONS

## Residential Whole Building Performance Method A - Details

ADDRESS: Lot: 115, Sub: Preserve, Plat: , FL,

PERMIT #:

BASE				AS-BUILT											
GLASS TYPES .18 X Conditioned X BWPM = Points Floor Area				Type/SC                      Overhang Ornt   Len   Hgt   Area X WPM X WOF = Points											
.18	2747.0	12.74	6299.4	Double, Clear	S	1.5	0.0	80.0	13.30	3.66	3893.5				
				Double, Clear	SE	1.5	0.0	10.0	14.71	2.65	389.7				
				Double, Clear	S	1.5	0.0	10.0	13.30	3.66	486.7				
				Double, Clear	SW	1.5	0.0	10.0	16.74	2.03	339.9				
				Double, Clear	W	1.5	5.5	12.5	20.73	1.03	266.4				
				Double, Clear	W	1.5	10.8	20.0	20.73	1.00	416.4				
				Double, Clear	N	1.5	5.5	20.0	24.58	1.00	493.0				
				Double, Clear	N	1.5	5.5	30.0	24.58	1.00	739.5				
				Double, Clear	N	1.5	2.5	4.7	24.58	1.01	116.9				
				Double, Clear	N	1.5	5.5	30.0	24.58	1.00	739.5				
				Double, Clear	E	1.5	5.5	13.3	18.79	1.04	260.3				
				As-Built Total:				240.5				8141.8			
				WALL TYPES    Area X BWPM = Points				Type    R-Value                      Area X WPM    =    Points							
Adjacent	268.0	3.60	964.8	Frame, Wood, Exterior	13.0		2157.5	3.40	7335.5						
Exterior	2157.5	3.70	7982.8	Frame, Wood, Adjacent	13.0		268.0	3.30	884.4						
Base Total:		2425.5	8947.5	As-Built Total:		2425.5		8219.9							
DOOR TYPES    Area X BWPM = Points				Type    Area X WPM    =    Points											
Adjacent	20.0	8.00	160.0	Exterior Insulated			40.0	8.40	336.0						
Exterior	40.0	8.40	336.0	Adjacent Insulated			20.0	8.00	160.0						
Base Total:		60.0	496.0	As-Built Total:		60.0		496.0							
CEILING TYPESArea X BWPM = Points				Type    R-Value                      Area X WPM X WCM =    Points											
Under Attic	1797.0	2.05	3683.8	Under Attic	30.0		2747.0	2.05 X 1.00	5631.4						
Base Total:		1797.0	3683.8	As-Built Total:		2747.0		5631.4							
FLOOR TYPES    Area X BWPM = Points				Type    R-Value                      Area X WPM    =    Points											
Slab	187.0(p)	8.9	1664.3	Slab-On-Grade Edge Insulation	0.0		187.0(p)	18.80	3515.6						
Raised	0.0	0.00	0.0												
Base Total:		1664.3	1664.3	As-Built Total:		187.0		3515.6							
INFILTRATION    Area X BWPM = Points				Area X WPM    =    Points											
2747.0		-0.59	-1620.7			2747.0		-0.59	-1620.7						

# WINTER CALCULATIONS

## Residential Whole Building Performance Method A - Details

ADDRESS: Lot: 115, Sub: Preserve, Plat: , , FL,

PERMIT #:

BASE				AS-BUILT						
Winter Base Points: 19470.4				Winter As-Built Points: 24383.9						
Total Winter X Points	System = Multiplier	Heating Points		Total Component (System - Points)	X Cap Ratio	X Duct Multiplier (DM x DSM x AHU)	X System Multiplier	X Credit Multiplier	= Heating Points	
19470.4	0.6274	12215.7		(sys 1: Electric Heat Pump 44000 btuh ,EFF(7.9) Ducts:Unc(S),Unc(R),Int(AH),R6.0 24383.9 1.000 (1.069 x 1.169 x 0.93) 0.432 1.000 12232.3 24383.9 1.00 1.162 0.432 1.000 12232.3						

# Residential Whole Building Performance Method A - Details

PERMIT #:

CODE COMPLIANCE STATUS											
BASE						AS-BUILT					
Cooling Points	+	Heating Points	+	Hot Water Points	= Total Points	Cooling Points	+	Heating Points	+	Hot Water Points	= Total Points
16295		12216		10540	39051	10031		12232		10427	32689

# PASS



# Code Compliance Checklist

## Residential Whole Building Performance Method A - Details

ADDRESS: Lot: 115, Sub: Preserve, Plat: , , FL,

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 612.1.ABC.3.2. 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.	

# ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

**ESTIMATED ENERGY PERFORMANCE SCORE\* = 86.1**

**The higher the score, the more efficient the home.**

Mediterranean Model Spec House, Lot: 115, Sub: Preserve, Plat: , , FL,

1. New construction or existing	New	12. Cooling systems	
2. Single family or multi-family	Single family	a. Central Unit	Cap: 44.0 kBtu/hr
3. Number of units, if multi-family	1		SEER: 13.00
4. Number of Bedrooms	4	b. N/A	
5. Is this a worst case?	Yes	c. N/A	
6. Conditioned floor area (ft <sup>2</sup> )	2747 ft <sup>2</sup>		
7. Glass type <sup>1</sup> and area: (Label reqd. by 13-104.4.5 if not default)		13. Heating systems	
a. U-factor:	Description Area	a. Electric Heat Pump	Cap: 44.0 kBtu/hr
(or Single or Double DEFAULT)	7a. (Dble Default) 240.5 ft <sup>2</sup>		HSPF: 7.90
b. SHGC:		b. N/A	
(or Clear or Tint DEFAULT)	7b. (Clear) 240.5 ft <sup>2</sup>	c. N/A	
8. Floor types			
a. Slab-On-Grade Edge Insulation	R=0.0, 187.0(p) ft	14. Hot water systems	
b. N/A		a. Electric Resistance	Cap: 40.0 gallons
c. N/A			EF: 0.93
9. Wall types		b. N/A	
a. Frame, Wood, Exterior	R=13.0, 2157.5 ft <sup>2</sup>	c. Conservation credits	
b. Frame, Wood, Adjacent	R=13.0, 268.0 ft <sup>2</sup>	(HR-Heat recovery, Solar	
c. N/A		DHP-Dedicated heat pump)	
d. N/A		15. HVAC credits	
e. N/A		(CF-Ceiling fan, CV-Cross ventilation,	
10. Ceiling types		HF-Whole house fan,	
a. Under Attic	R=30.0, 2747.0 ft <sup>2</sup>	PT-Programmable Thermostat,	
b. N/A		MZ-C-Multizone cooling,	
c. N/A		MZ-H-Multizone heating)	
11. Ducts			
a. Sup: Unc. Ret: Unc. AH: Interior	Sup. R=6.0, 200.0 ft		
b. N/A			

I certify that this home has complied with the Florida Energy Efficiency Code For Building Construction through the above energy saving features which will be installed (or exceeded) in this home before final inspection. Otherwise, a new EPL Display Card will be completed based on installed Code compliant features.

Builder Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Address of New Home: \_\_\_\_\_ City/FL Zip: \_\_\_\_\_



*\*NOTE: The home's estimated energy performance score is only available through the FLA/RES computer program. This is not a Building Energy Rating. If your score is 80 or greater (or 86 for a US EPA/DOE EnergyStar<sup>TM</sup> designation), your home may qualify for energy efficiency mortgage (EEM) incentives if you obtain a Florida Energy Gauge Rating. Contact the Energy Gauge Hotline at 321/638-1492 or see the Energy Gauge web site at [www.fsec.ucf.edu](http://www.fsec.ucf.edu) for information and a list of certified Raters. For information about Florida's Energy Efficiency Code For Building Construction, contact the Department of Community Affairs at 850/487-1824.*

<sup>1</sup> Predominant glass type. For actual glass type and areas, see Summer & Winter Glass output on pages 2&4.  
EnergyGauge® (Version: FLR2PB v4.1)



# New Construction Subterranean Termite Soil Treatment Record

OMB Approval No. 2502-0525

This form is completed by the licensed Pest Control Company.

**Public reporting burden** for this collection of information is estimated to average 15 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. This information is mandatory and is required to obtain benefits. HUD may not collect this information, and you are not required to complete this form, unless it displays a currently valid OMB control number.

Section 24 CFR 200.926d(b)(3) requires that the sites for HUD insured structures must be free of termite hazards. This information collection requires the builder to certify that an authorized Pest Control company performed all required treatment for termites, and that the builder guarantees the treated area against infestation for one year. Builders, pest control companies, mortgage lenders, homebuyers, and HUD as a record of treatment for specific homes will use the information collected. The information is not considered confidential.

This report is submitted for informational purposes to the builder on proposed (new) construction cases when soil treatment for prevention of subterranean termite infestation is specified by the builder, architect, or required by the lender, architect, FHA, or VA.

All contracts for services are between the Pest Control Operator and builder, unless stated otherwise.

## Section 1: General Information (Treating Company Information)

Company Name: Aspen Pest Control, Inc.  
Company Address: P.O. Box 1795 City Lake City State FL Zip 32865  
Company Business License No. JB100476 Company Phone No. 386-735-3911 • 352-624-5781  
FHA/VA Case No. (if any) \_\_\_\_\_

## Section 2: Builder Information

Company Name: L. J. Smith & Family Company Phone No. \_\_\_\_\_

## Section 3: Property Information

Location of Structure(s) Treated (Street Address or Legal Description, City, State and Zip) 391 S.W. Rosemary Dr. Lake City, FL

Type of Construction (More than one box may be checked) ☒ Slab ☐ Basement ☐ Crawl ☐ Other \_\_\_\_\_  
Approximate Depth of Footing: Outside 12 Inside 24 Type of Fill Block

## Section 4: Treatment Information

Date(s) of Treatment(s) 3-4-08  
Brand Name of Product(s) Used Bifen  
EPA Registration No. 53843-144  
Approximate Final Mix Solution % .06  
Approximate Size of Treatment Area: Sq. ft. 2294 Linear ft. 196 Linear ft. of Masonry Voids 196  
Approximate Total Gallons of Solution Applied 386  
Was treatment completed on exterior? ☐ Yes ☒ No  
Service Agreement Available? ☒ Yes ☐ No

Note: Some state laws require service agreements to be issued. This form does not preempt state law.

Attachments (List) \_\_\_\_\_

Comments \_\_\_\_\_

Name of Applicator(s) Steve Brannon Certification No. (if required by State law) JB100476

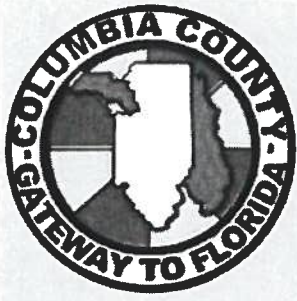
The applicator has used a product in accordance with the product label and state requirements. All treatment materials and methods used comply with state and federal regulations.

Authorized Signature [Signature] Date 3.4.08

**Warning:** HUD will prosecute false claims and statements. Conviction may result in criminal and/or civil penalties. (18 U.S.C. 1001, 1010, 1012; 31 U.S.C. 3729, 3802)

Form NPCA-99-B may still be used

form HUD-NPCA-99-B (04/2003)



**From: The Columbia County Building & Zoning Department**  
**Plan Review**  
**135 NE Hernando Av.**  
**P.O. Box 1529**  
**Lake City Florida 32056-1529**

Reference to a building permit application Number: **0712-55**

Applicant: Susan Eagle  
Owner: Gateway Developers of Lake City  
Contractor: James Mack Lipscomb  
Property Identification # 03-4s-16-02731-115

On the date of December 20, 2007 building permit application number 0712-55 and the submitted plans for construction of a single family dwelling were reviewed. 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.

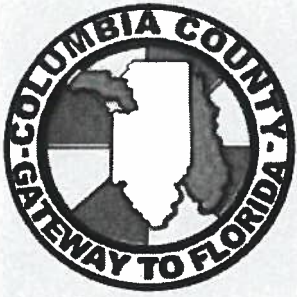
**Please include application number 0712-55 and when making reference to this application.**

**This is a plan review for compliance with the Florida Residential Codes 2004 only and doesn't make any consideration toward the land use and zoning requirement**

1. In bedroom 2 and 3 the emergency escape and rescue opening are shown as 2'6"x5'0" windows. Section R310.1 of the Florida Residential Building Code requires that each bedroom have one emergency escape and rescue openings with a minimum net clear opening of 5.7 square feet for second story emergency escape and rescue opening. The minimum net clear opening height shall be 24 inches and the minimum net clear opening width shall be 20 inches. Please verify in writing that these windows will comply with the Florida Residential Building Code.
2. Provide a drawing detail, which will verify compliance with section R311.5 of the Florida Residential Building Code which sets minimum construction standards for stairs and stairways.
3. Provide a drawing showing compliance with R312.1 of the Florida Residential Building Code which required interior walking surfaces located more than 30 inches above the floor to have guards not less than 36 inches in height.

Thank You:

Joe Haltiwanger  
Plan Examiner  
Columbia County Building Department



**From: The Columbia County Building & Zoning Department**  
**Plan Review**  
**135 NE Hernando Av.**  
**P.O. Box 1529**  
**Lake City Florida 32056-1529**

Reference to a building permit application Number: **0712-55**

Applicant: Susan Eagle  
Owner: Gateway Developers of Lake City  
Contractor: James Mack Lipscomb  
Property Identification # 03-4s-16-02731-115

On the date of December 20, 2007 building permit application number 0712-55 and the submitted plans for construction of a single family dwelling were reviewed. 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 0712-55 and when making reference to this application.**

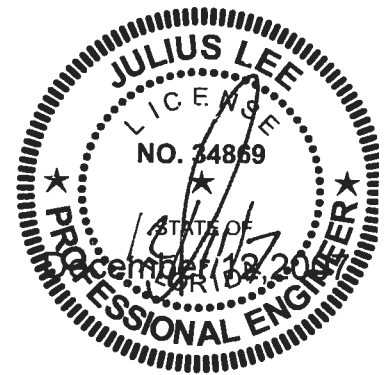
**This is a plan review for compliance with the Florida Residential Codes 2004 only and doesn't make any consideration toward the land use and zoning requirement**

1. In bedroom 2 and 3 the emergency escape and rescue opening are shown as 2'6"x5'0" windows. Section R310.1 of the Florida Residential Building Code requires that each bedroom have one emergency escape and rescue openings with a minimum net clear opening of 5.7 square feet for second story emergency escape and rescue opening. The minimum net clear opening height shall be 24 inches and the minimum net clear opening width shall be 20 inches. Please verify in writing that these windows will comply with the Florida Residential Building Code.
2. Provide a drawing detail, which will verify compliance with section R311.5 of the Florida Residential Building Code which sets minimum construction standards for stairs and stairways.
3. Provide a drawing showing compliance with R312.1 of the Florida Residential Building Code which required interior walking surfaces located more than 30 inches above the floor to have guards not less than 36 inches in height.

Thank You:

A red ink signature of Joe Haltiwanger, written in a cursive style.

Joe Haltiwanger  
Plan Examiner  
Columbia County Building Department



**Project Information for: L235554F1**

Builder: Lipscomb and Eagle Development Inc.  
Lot : 115-1  
Subdivision: Preserve at Laurel Lake  
County: Columbia  
Truss Count: 2  
Design Program: MiTek 20/20 6.3

**Truss Design Load Information:**

**Gravity:** **Wind:**

**Building Code:**FBC2004/TPI2002

Roof (psf):42.0 Wind Standard:ASCE 7-02  
Floor (psf):55.0 Wind Speed (mph):110

Note: See the individual truss drawings for special loading conditions.

**Engineer of Record:** James M. Lipscomb Florida P.E. License No. CBC1253543

Address: 255 Southwest Woods Terrace Lake City, Florida 32025

**Truss Design Engineer:** Julius Lee, PE Florida P.E. License No. 34869

Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

**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 1-2002 Section 2.2
2. The seal date shown on the individual truss component drawings must match the seal date on this index sheet.
3. The Truss Design Engineer's responsibility relative to this structure consists solely of the design of the individual truss components and does not include the design of any additional structural elements including but not limited to continuous lateral bracing elements in the web and chord planes. See Florida Administrative Code 61G15-31.003 section 3 c) & 5 and Chapter 2 of the National Design Standard for Metal Plate Connected Wood Truss Construction ANSI/TPI 1-2002 for additional information on the responsibilities of the delegated "Truss Design Engineer". Builders FirstSource and Julius Lee, PE do not accept any additional delegations beyond the scope of work described in the referenced documents above.

#	Truss ID	Dwg. #	Seal Date
1	F01	J1917170	12/12/07
2	F02KW	J1917171	12/12/07

Job	Truss	Truss Type	Qty	Ply	0 0	J1917170
L235554F	F01	FLOOR	1	<b>3</b>	Job Reference (optional)	

Builders FirstSource, Lake City, FL 32055

6.300 s Apr 19 2006 MiTek Industries, Inc. Wed Dec 12 17:14:55 2007 Page 1

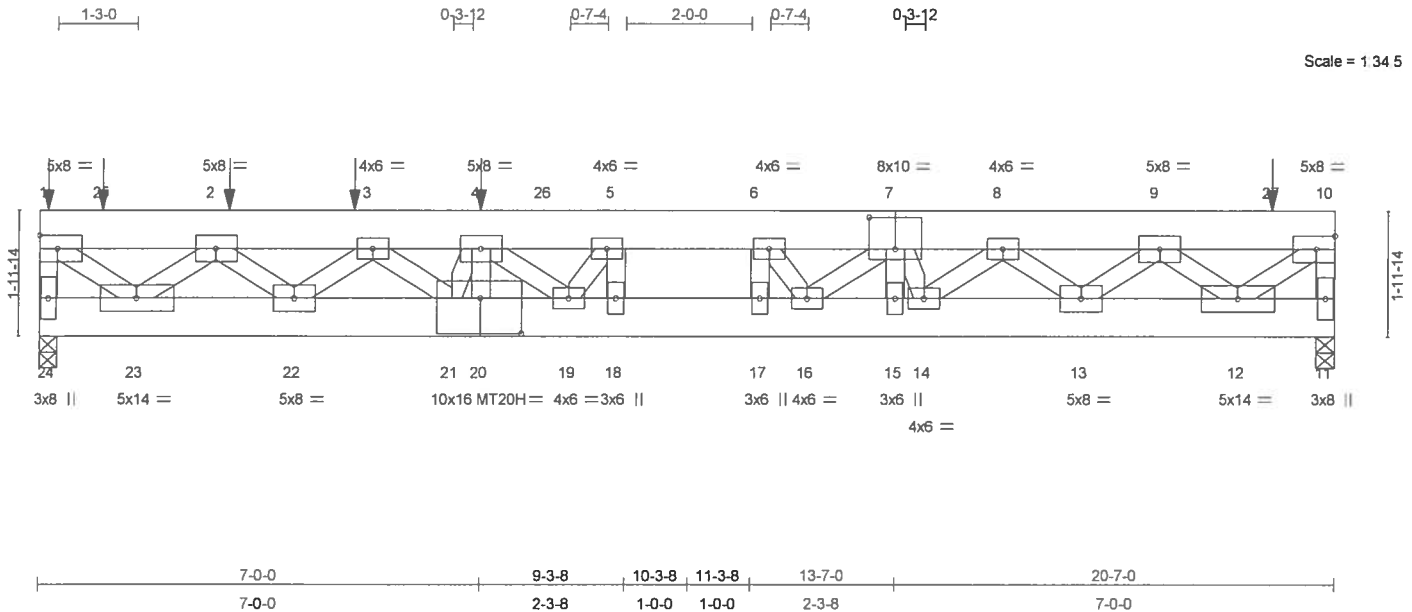


Plate Offsets (X,Y): [7:0-5-0,0-6-0], [20:0-7-12,0-6-12]

LOADING (psf)	SPACING	2-0-0	CSI	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plates Increase	1.00	TC 0.82	Vert(LL)	-0.28 17-18	>869	360	MT20	244/190
TCDL 10.0	Lumber Increase	1.00	BC 0.74	Vert(TL)	-0.52 17-18	>467	240	MT20H	187/143
BCLL 0.0	Rep Stress Incr	NO	WB 0.76	Horz(TL)	0.09 11	n/a	n/a		
BCDL 5.0	Code FBC2004/TPI2002		(Matrix)						Weight: 496 lb

#### LUMBER

TOP CHORD 2 X 8 SYP 2400F 2.0E  
 BOT CHORD 2 X 8 SYP 2400F 2.0E  
 WEBS 2 X 4 SYP No.2 \*Except\*  
 4-20 2 X 4 SYP No.3, 5-18 2 X 4 SYP No.3  
 6-17 2 X 4 SYP No.3, 7-15 2 X 4 SYP No.3  
 4-21 2 X 4 SYP No.3, 5-19 2 X 4 SYP No.3  
 6-16 2 X 4 SYP No.3, 7-14 2 X 4 SYP No.3

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 24=8670/0-3-8, 11=10403/0-3-8

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-24=-7585/0, 10-11=-9040/0, 1-25=-7026/0, 2-25=-7026/0, 2-3=-18913/0, 3-4=-28209/0, 4-26=-31857/0, 5-26=-31857/0, 5-6=-32875/0, 6-7=-31950/0, 7-8=-28759/0, 8-9=-20627/0, 9-27=-8108/0, 10-27=-8108/0  
 BOT CHORD 23-24=0/887, 22-23=0/13478, 21-22=0/24139, 20-21=0/29491, 19-20=0/29491, 18-19=0/32875, 17-18=0/32875, 16-17=0/32875, 15-16=0/29794, 14-15=0/29794, 13-14=0/25519, 12-13=0/15569, 11-12=0/1143  
 WEBS 4-20=-1008/0, 5-18=-948/707, 6-17=-1001/663, 7-15=-688/0, 1-23=0/8649, 2-23=-9631/0, 2-22=0/8115, 3-22=-7800/0, 3-21=0/6076, 4-21=-4083/0, 4-19=0/3332, 5-19=-2666/304, 7-16=0/3037, 6-16=-2553/440, 10-12=0/9814, 9-12=-11138/0, 9-13=0/7550, 8-13=-7302/0, 8-14=0/4838, 7-14=-3294/0

#### JOINT STRESS INDEX

1 = 0.79, 2 = 0.91, 3 = 0.94, 4 = 0.58, 5 = 0.25, 6 = 0.25, 7 = 0.80, 8 = 0.94, 9 = 0.91, 10 = 0.79, 11 = 0.74, 12 = 0.87, 13 = 0.79, 14 = 0.94, 15 = 0.14, 16 = 0.51, 17 = 0.14, 18 = 0.14, 19 = 0.51, 20 = 0.96, 21 = 0.00, 22 = 0.79, 23 = 0.87 and 24 = 0.74

December 12, 2007

Continued on page 2

**Warning - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 BEFORE USE**  
 This design is based only upon the parameters shown for an individual building component that is installed and loaded vertically and fabricated with MiTek connectors. Applicability of design parameters and proper incorporation of component into the overall building structure, including all temporary and permanent bracing, is the responsibility of building designer and/or contractor per ANSI/TPI 1 as referenced by the building code. For general guidance regarding storage, delivery, erection and bracing, consult BCSI-1 or HIB-91 Handling/Installing and Bracing Recommendation available from the Wood Truss Council of America, 1 WTCA Center, 6300 Enterprise Lane, Madison, WI 53719 or the Truss Plate Institute, 583 D'Oonofrio Drive, Madison, WI 53719



Job	Truss	Truss Type	Qty	Ply	0 0
L235554F	F01	FLOOR	1	<b>3</b>	J1917170
					Job Reference (optional)

Builders FirstSource, Lake City, FL 32055

6.300 s Apr 19 2006 MiTek Industries, Inc. Wed Dec 12 17:14:55 2007 Page 2

#### NOTES

- 1) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2 X 4 - 1 row at 0-9-0 oc, 2 X 8 - 2 rows at 0-9-0 oc.  
Bottom chords connected as follows: 2 X 8 - 2 rows at 0-9-0 oc.  
Webs connected as follows: 2 X 4 - 1 row at 0-9-0 oc.
- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced floor live loads have been considered for this design.
- 4) All plates are MT20 plates unless otherwise indicated.
- 5) This truss requires plate inspection per the Tooth Count Method when this truss is chosen for quality assurance inspection.
- 6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-16d nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 7) CAUTION, Do not erect truss backwards.

Loading has been calculated by the truss manufacturer. It is the responsibility of the Architect/Engineer of Record to verify and approve the loading.

#### LOAD CASE(S) Standard Except:

- 1) Floor: Lumber Increase=1.00, Plate Increase=1.00  
Uniform Loads (plf)  
Vert: 11-24=-10, 1-26=-421(F=-201), 26-27=-936(F=-201), 10-27=-421(F=-201)  
Concentrated Loads (lb)  
Vert: 1=-407 4=-2028 2=-204 3=-257 25=-179 27=-1292

Julius A. Lauer  
Truss Design Engineer  
Builders FirstSource  
11700 Enterprise Lane, Madison, WI 53719  
608.271.1234

December 12, 2007

#### Warning - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 BEFORE USE

This design is based only upon the parameters shown for an individual building component that is installed and loaded vertically and fabricated with MiTek connectors. Applicability of design parameters and proper incorporation of component into the overall building structure, including all temporary and permanent bracing, is the responsibility of building designer and / or contractor per ANSI / TPI 1 as referenced by the building code. For general guidance regarding storage, delivery, erection and bracing, consult BCSI-1 or HIB-91 Handling, Installing and Bracing Recommendation available from the Wood Truss Council of America, 1 WTCA Center, 6300 Enterprise Lane, Madison, WI 53719 or the Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719

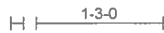


Job	Truss	Truss Type	Qty	Ply	0 0	J1917171
L235554F	F02KW	GABLE	1	1		
Job Reference (optional)						

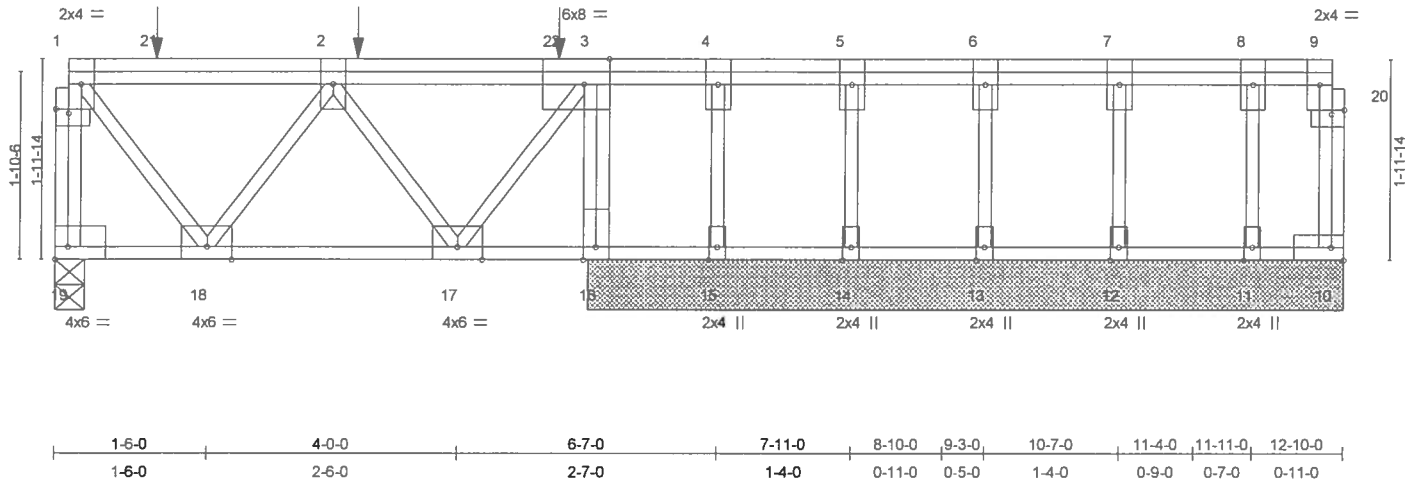
Builders FirstSource, Lake City, FL 32055

6.300 s Apr 19 2006 MiTek Industries, Inc. Wed Dec 12 17:27:31 2007 Page 1

0-1-8



0-1-8  
Scale = 1:21.6



LOADING (psf)	SPACING	2-0-0	CSI	DEFL	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 40.0	Plates Increase	1.00	TC 0.94	Vert(LL)	-0.01 17-18	>999	360	MT20	244/190
TCDL 10.0	Lumber Increase	1.00	BC 0.26	Vert(TL)	-0.02 17-18	>999	240		
BCLL 0.0	Rep Stress Incr	NO	WB 0.34	Horz(TL)	0.00 10	n/a	n/a		
BCDL 5.0	Code FBC2004/TPI2002		(Matrix)						Weight: 95 lb

#### LUMBER

TOP CHORD 4 X 2 SYP No.2  
BOT CHORD 4 X 2 SYP No.2  
WEBS 4 X 2 SYP No.3  
OTHERS 4 X 2 SYP No.3

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (lb/size) 19=1167/0-3-8, 10=24/7-6-8, 16=1432/7-6-8, 15=-5/7-6-8, 14=178/7-6-8,  
13=139/7-6-8, 12=153/7-6-8, 11=126/7-6-8  
Max Uplift 15=-5(load case 1)

#### FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-19=-1162/0, 10-20=-21/0, 9-20=-21/0, 1-21=-525/0, 2-21=-520/0, 2-22=-515/0,  
3-22=-515/0, 3-4=-1/0, 4-5=-1/0, 5-6=-1/0, 6-7=-1/0, 7-8=-1/0, 8-9=-1/0  
BOT CHORD 18-19=0/0, 17-18=0/974, 16-17=0/1, 15-16=0/1, 14-15=0/1, 13-14=0/1, 12-13=0/1,  
11-12=0/1, 10-11=0/1  
WEBS 1-18=0/853, 2-18=-795/0, 2-17=-806/0, 3-17=0/848, 3-16=-1405/0, 4-15=0/8, 5-14=-162/0,  
6-13=-126/0, 7-12=-139/0, 8-11=-114/0

#### JOINT STRESS INDEX

1 = 0.85, 1 = 0.00, 2 = 0.57, 3 = 0.52, 4 = 0.00, 5 = 0.07, 6 = 0.05, 7 = 0.06, 8 = 0.05, 9 = 0.01, 10 = 0.02, 11 = 0.07, 12 = 0.09, 13 = 0.08, 14 = 0.10, 15 = 0.01, 16 = 0.61, 17 = 0.64, 18 = 0.65, 19 = 0.54, 20 = 0.00 and 20 = 0.00

#### NOTES

- All plates are 3x6 MT20 unless otherwise indicated.
- Gable studs spaced at 1-4-0 oc.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 5 lb uplift at joint 15.

Truss Design Engineer  
Printed on: 12/12/2007  
1:15:54 PM  
C:\Users\user\Documents\Truss Design\12-12-2007

December 12, 2007

Continued on page 2

**Warning - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 BEFORE USE**  
This design is based only upon the parameters shown for an individual building component that is installed and loaded vertically and fabricated with MiTek connectors. Applicability of design parameters and proper incorporation of component into the overall building structure, including all temporary and permanent bracing, is the responsibility of building designer and/or contractor per ANSI/TPI 1 as referenced by the building code. For general guidance regarding storage, delivery, erection and bracing, consult BCSI-1 or HIB-91 Handling, Installing and Bracing Recommendation available from the Wood Truss Council of America, 1 WTCA Center, 6300 Enterprise Lane, Madison, WI 53719 or the Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719



Job	Truss	Truss Type	Qty	Ply	0 0
L235554F	F02KW	GABLE	1	1	J1917171
Job Reference (optional)					

Builders FirstSource, Lake City, FL 32055

6.300 s Apr 19 2006 MiTek Industries, Inc. Wed Dec 12 17:27:31 2007 Page 2

#### NOTES

- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-16d nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

Loading has been calculated by the truss manufacturer. It is the responsibility of the Architect/Engineer of Record to verify and approve the loading.

#### LOAD CASE(S)

- 1) Floor: Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (plf)

Vert: 10-19=-10, 1-3=-220, 3-9=-100

Concentrated Loads (lb)

Vert: 2=-380 21=-446 22=-380

John Lee  
Truss Design Engineer  
Florida Professional Engineer  
1100 Coastal Bay Blvd  
Lake City, FL 32055

December 12, 2007

#### Warning - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 BEFORE USE

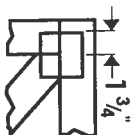
This design is based only upon the parameters shown for an individual building component that is installed and loaded vertically and fabricated with MiTek connectors. Applicability of design parameters and proper incorporation of component into the overall building structure, including all temporary and permanent bracing, is the responsibility of building designer and / or contractor per ANSI / TPI 1 as referenced by the building code. For general guidance regarding storage, delivery, erection and bracing, consult BCSI-1 or HIB-91 Handling, Installing and Bracing Recommendation available from the Wood Truss Council of America, 1 WTCA Center, 6300 Enterprise Lane, Madison, WI 53719 or the Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719



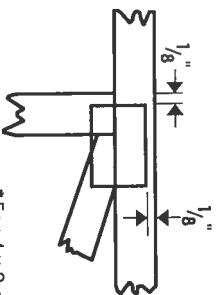


# Symbols

## PLATE LOCATION AND ORIENTATION



\* Center plate on joint unless dimensions indicate otherwise. Dimensions are in inches. Apply plates to both sides of truss and securely seat.



\* For 4 x 2 orientation, locate plates 1/8" from outside edge of truss and vertical web.



\* This symbol indicates the required direction of slots in connector plates.

## PLATE SIZE

4 X 4

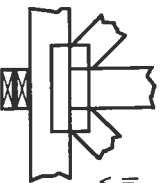
The first dimension is the width perpendicular to slots. Second dimension is the length parallel to slots.

## LATERAL BRACING



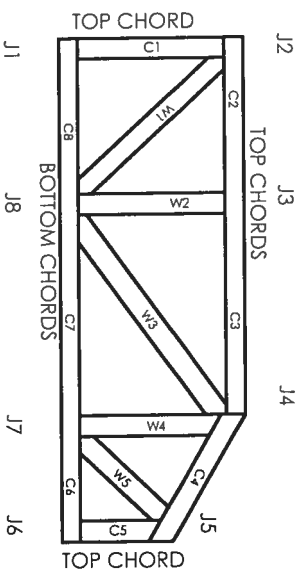
Indicates location of required continuous lateral bracing.

## BEARING



Indicates location of joints at which bearings (supports) occur.

# Numbering System



JOINTS AND CHORDS ARE NUMBERED CLOCKWISE AROUND THE TRUSS STARTING AT THE LOWEST JOINT FARTHEST TO THE LEFT.

WEBS ARE NUMBERED FROM LEFT TO RIGHT

## CONNECTOR PLATE CODE APPROVALS

BOCA	96-31, 96-67
ICBO	3907, 4922
SBCCI	9667, 9432A
WISC/DLHR	960022-W, 970036-N
NER	561



MITek Engineering Reference Sheet: MIT-7473



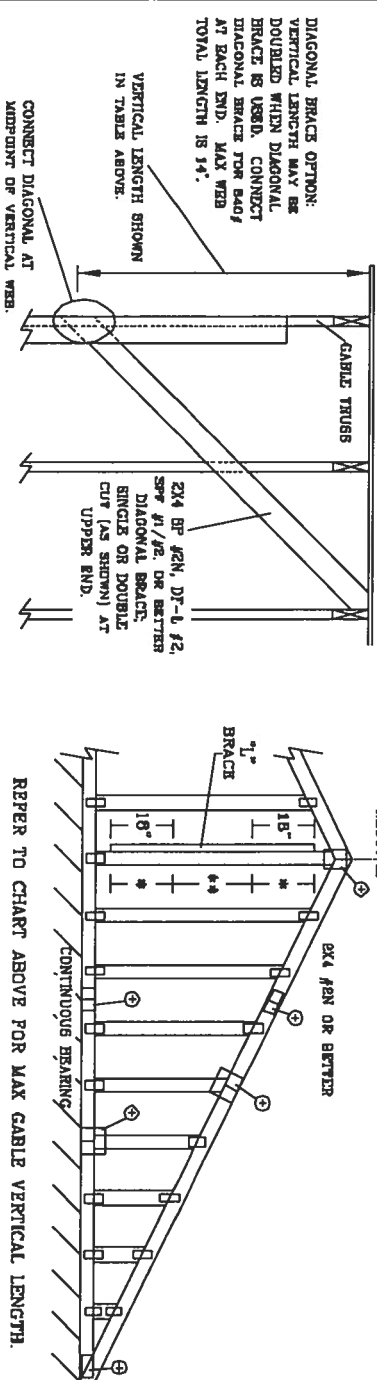
# General Safety Notes

## Failure to Follow Could Cause Property Damage or Personal Injury

1. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
2. Cut members to bear tightly against each other.
3. Place plates on each face of truss at each joint and embed fully. Avoid knots and wane at joint locations.
4. Unless otherwise noted, locate chord splices at 1/4 panel length (± 6" from adjacent joint.)
5. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
6. Unless expressly noted, this design is not applicable for use with fire retardant or preservative treated lumber.
7. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
8. Plate type, size and location dimensions shown indicate minimum plating requirements.
9. Lumber shall be of the species and size, and in all respects, equal to or better than the grade specified.
10. Top chords must be sheathed or purlins provided at spacing shown on design.
11. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
12. Anchorage and / or load transferring connections to trusses are the responsibility of others unless shown.
13. Do not overload roof or floor trusses with stacks of construction materials.
14. Do not cut or alter truss member or plate without prior approval of a professional engineer.
15. Care should be exercised in handling, erection and installation of trusses.

© 1993 MITek® Holdings, Inc.

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



CABLE TRUSS DETAIL NOTES:	
LIVE LOAD DEPLETION CRITERIA IS L/240.	
PROVIDE UPLIFT CONNECTIONS FOR 136 PSF OVER CONTINUOUS BEARING (6 PSF TO DEAD LOAD).	
CABLE END SUPPORTS LOAD FROM 4' 0" OUTLIMBERS WITH 2' 0" OVERHANG, OR 12" PLYWOOD OVERHANG.	
ATTACH EACH 7" BRACE WITH 10d NAILS.	
* FOR (1) 7" BRACE: SPACE NAILS AT 8" O.C. IN 18" END ZONES AND 4" O.C. BETWEEN ZONES.	
** FOR (2) 7" BRACES: SPACE NAILS AT 3" O.C. IN 18" END ZONES AND 6" O.C. BETWEEN ZONES.	
7" BRACING MUST BE A MINIMUM OF 60% OF WEB MEMBER LENGTH.	

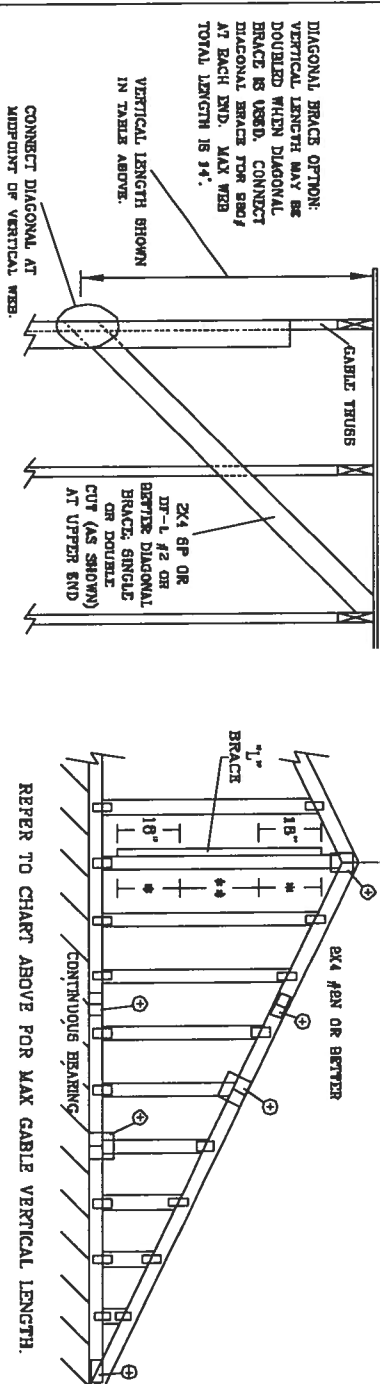
\*\*\*WARNING\*\*\* TRUSSES REQUIRE EXTREME CARE IN FABRICATING, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO BCSI-1-93 (BUILDING COMPONENT SAFETY INFORMATION, PUBLISHED BY THE TRUSS OF AMERICA, 6500 ENTERPRISE LN, MADISON, WI 53719) FOR SAFETY PRACTICES PRIOR TO PERFORMING THESE FUNCTIONS. UNLESS OTHERWISE INDICATED, TOP CHORD SHALL HAVE PROPERLY ATTACHED STRUCTURAL PANELS AND BOTTOM CHORD SHALL HAVE A PROPERLY ATTACHED RIGID CLING.

**JULIUS LEE'S**  
CONS. ENGINEERS P.A.  
1465 6TH AVE. N.W.  
DELRAY BEACH, FL 33444-8161

No. 34889  
STATE OF FLORIDA

MAX. TOT. LD. 60 PSF  
MAX. SPACING 24.0"

REF ASCE 7-02: CAB 2015  
DATE 11/26/03  
DRWG WTRK STD CABLE 16 E HT  
-ENG



BRACING GROUP SPECIES AND GRADES:			
GROUP A:		H&M - PIR	
SPRUCE - PINE - FIR		#1	#2
#1 / #2	STANDARD		STUD
#3	STUD	#3	STANDARD
DOUGLAS FIR - LARCH		SOUTHERN PINE	
#3		#3	
STUD		STUD	
STANDARD		STANDARD	
GROUP B:			
H&M - PIR			
#1 & BTR			
#1			
SOUTHERN PINE		DOUGLAS FIR - LARCH	
#1		#1	
#2		#2	

**CABLE TRUSS DETAIL NOTES:**

**LIVE LOAD DEPLETION CRITERIA IS L/240**

**PROVIDE UPLIFT CONNECTIONS FOR 180 PLF OVER CONTINUOUS BEARING (6 PSF TC DEAD LOAD).**

CABLE END SUPPORTS LOAD FROM 4' 0"

OUTDOORS WITH 2" 0" OVERHANG, OR 12"  
PLYWOOD OVERHANG.

ATTACH EACH 2" BRACE WITH 10d NAILS

\* FOR (1) 7" BRACE: SPACE NAILS AT 2" O.C. IN 18" END ZONES AND 4" O.C. BETWEEN ZONES

\* FOR (2) " BRACKETS: SPACE NAILS AT 3" O.C.  
IN 16" END ZONES AND 6" O.C. BETWEEN ZONES

7. BRACING MUST BE A MINIMUM OF 80% OF WEB

MEMBER LENGTH

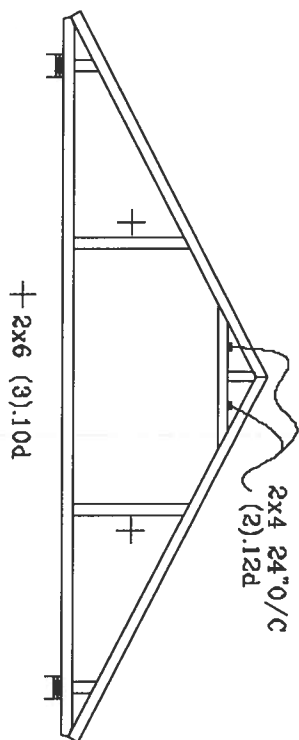
CABLE VERTICAL PLATE SIZES	
VERTICAL LENGTH	NO SPICE
LESS THAN 4' 0"	1X4 DR BR3
GREATER THAN 4' 0", BUT LESS THAN 11' 6"	2X4
GREATER THAN 11' 6"	2.5X4

+ REFERS TO COMMON TRUSS DESIGN FOR  
PEAK, SPICE, AND HEEL PLATES.

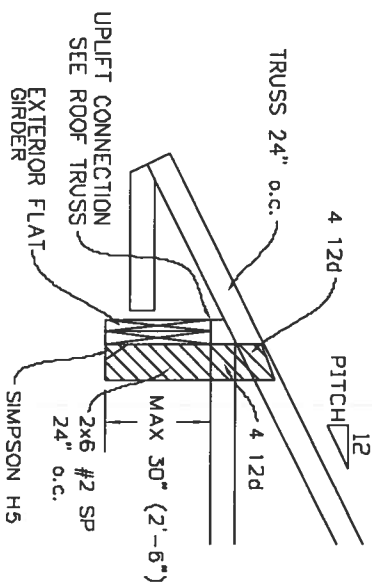
+ REFER TO COMMON TRUSS DESIGN FOR  
PEAK, SPICE, AND HEEL PLATES.

REF	ASCB7-02-CAB13030
DATE	11/26/03
DWG	MATEX STD CABLE 30" x 17"
-ENG	
MAX. TOT. LD.	60 PSF
MAX. SPACING	24.0"

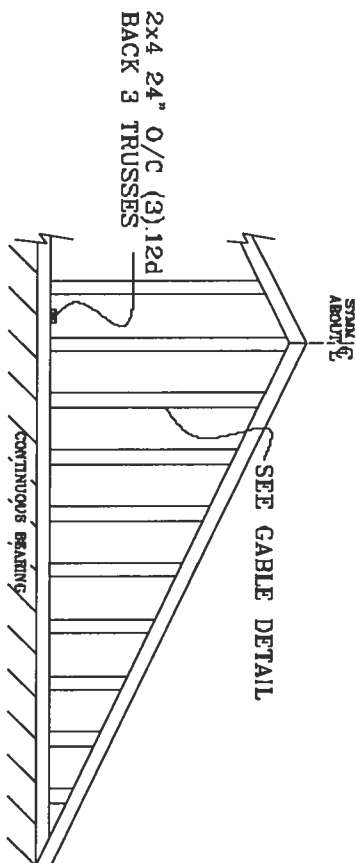
# TYPICAL ATTIC TRUSS BRACING



# TYPICAL ALTERNATE BRACING DETAIL FOR EXTERIOR FLAT GIRDER TRUSS

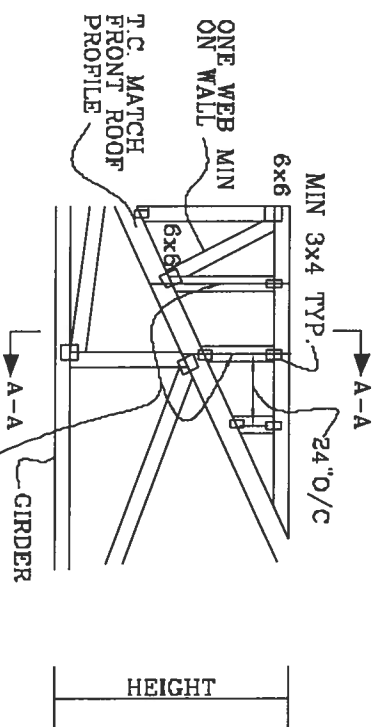


# GABLE END TRUSS DETAIL



MINIMUM BC BRACING ON GABLE TRUSS. OTHER PERMANENT BRACING DESIGNS BY ARCHITECT OR BOR

# TYPICAL WALL GIRDER VERTICAL WEB BRACING DETAIL



**JULIUS LEE'S**  
CONS. ENGINEERS P.A.  
1456 SW 4TH AVENUE  
DELRAY BEACH, FL 33444-2161

No. 34869  
STATE OF FLORIDA

TOP CHORD 2X4 #2 OR BETTER  
BOT CHORD 2X4 #2 OR BETTER  
WEBS 2X4 #3 OR BETTER

# PIGGYBACK DETAIL

REFER TO SEALED DESIGN FOR DASHED PLATES.

SPACE PIGGYBACK VERTICALS AT 4' OC MAX.

TOP AND BOTTOM CHORD SPLICES MUST BE STAGGERED SO THAT ONE SPLICE IS NOT DIRECTLY OVER ANOTHER.

PIGGYBACK BOTTOM CHORD MAY BE OMITTED. ATTACH VERTICAL WEBS TO TRUSS TOP CHORD WITH 1.5X3 PLATE.

ATTACH PURLINS TO TOP OF PLAT TOP CHORD. IF PIGGYBACK IS SOLID LUMBER OR THE BOTTOM CHORD IS OMITTED, PURLINS MAY BE APPLIED BENEATH THE TOP CHORD OF SUPPORTING TRUSS.

REFER TO ENGINEER'S SEALED DESIGN FOR REQUIRED PURLIN SPACING.

THIS DETAIL IS APPLICABLE FOR THE FOLLOWING WIND CONDITIONS:

110 MPH WIND, 30' MEAN HGT, ASCE 7-02, CLOSED BLDG. LOCATED ANYWHERE IN ROOF, 1 MI FROM COAST

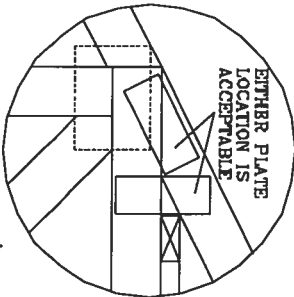
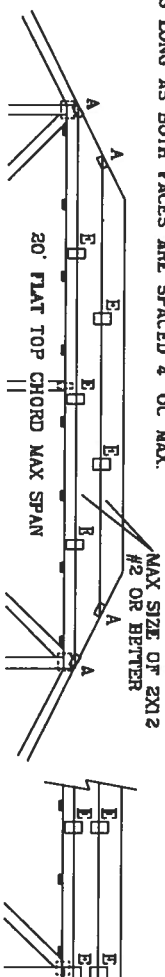
CAT I, EXP C, WIND TC DL=5 PSF, WIND BC DL=5 PSF

110 MPH WIND, 30' MEAN HGT, FBC ENCLOSED BLDG, LOCATED ANYWHERE IN ROOF

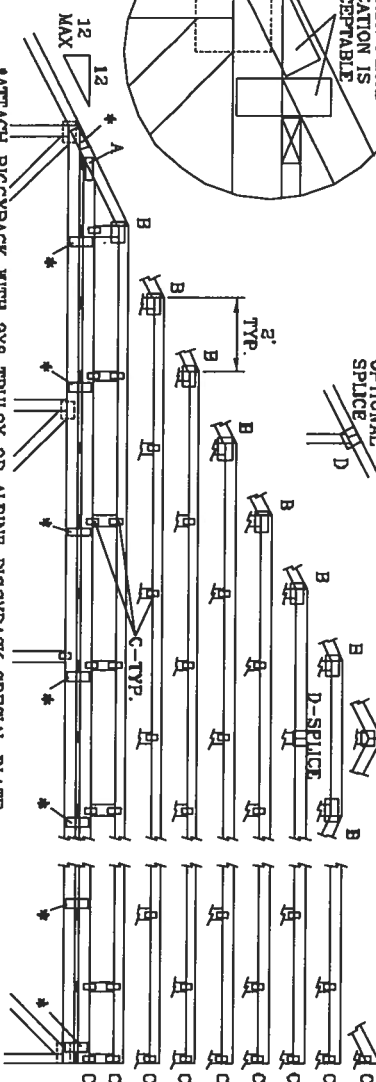
WIND TC DL=5 PSF, WIND BC DL=5 PSF

FRONT FACE (B,\*) PLATES MAY BE OFFSET FROM BACK FACE PLATES AS LONG AS BOTH FACES ARE SPACED 4' OC MAX.

130 MPH WIND, 30' MEAN HGT, ASCE 7-02, CLOSED BLDG, LOCATED ANYWHERE IN ROOF, CAT II, EXP. C, WIND TC DL=6 PSF, WIND BC DL=6 PSF



\*ATTACH PIGGYBACK WITH 3X6 TRUSS OR ALPINE PIGGYBACK SPECIAL PLATE.



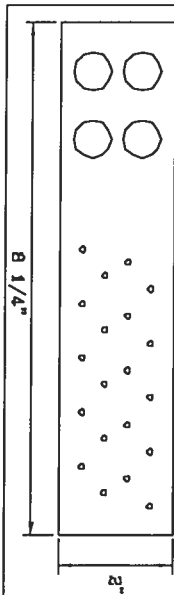
REVIEWER: TRUSSES BEARING EXTERIOR CASE IN FABRICATING, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO BEST I-DO BUILDING CONVENTION SAFETY INFORMATION, PUBLISHED BY THE TRUSS MANUFACTURING INSTITUTE, 3605 BOWLING DR., SUITE 200, MANASSAS, VA 20108 AND AIAA CODED TRUSS CONSTRUCTION. TRUSSES MUST BE DESIGNED AND MANUFACTURED TO MEET THE REQUIREMENTS OF THE TRUSS MANUFACTURING INSTITUTE. UNLESS OTHERWISE INDICATED, TOP CHORD SHALL HAVE A MINIMUM OF 1.5X3 PLATE. STRUCTURAL PANELS AND BOTTOM CHORD SHALL HAVE A MINIMUM OF 1.5X3 PLATE.

ATTACH TRUSS PLATES WITH (B) 0.120" X 1.375" NAILS, OR EQUAL, PER FACE PER PLY. (4) NAILS IN EACH MEMBER TO BE CONNECTED. REFER TO DRAWING 160 TL FOR TRUSS INFORMATION.

JOINT TYPE	SPANS UP TO			
	30'	34'	38'	62'
A	2X4	2.5X4	2.5X4	3X6
B	4X6	5X6	5X6	5X6
C	1.5X3	1.5X4	1.5X4	1.5X4
D	5X4	5X6	5X5	5X6
E	4X6 OR 3X6 TRUSS AT 4' OC, ROTATED VERTICALLY			

WEB LENGTH	REQUIRED BRACING
0' TO 7'9"	NO BRACING
7'9" TO 10'	1X4 "T" BRACE. SAME GRADE, SPECIES AS WEB MEMBER, OR BETTER AND 80% LENGTH OF WEB MEMBER. ATTACH WITH 8d NAILS AT 4' OC.
10' TO 14'	2X4 "T" BRACE. SAME GRADE, SPECIES AS WEB MEMBER, OR BETTER AND 80% LENGTH OF WEB MEMBER. ATTACH WITH 16d NAILS AT 4' OC.

\* PIGGYBACK SPECIAL PLATE  
ATTACH TEETH TO THE PIGGYBACK AT THE TIME OF FABRICATION. ATTACH TO SUPPORTING TRUSS WITH (4) 0.120" X 1.375" NAILS PER FACE PER PLY. APPLY PIGGYBACK SPECIAL PLATE TO EACH TRUSS FACE AND SPACE 4' OC OR LESS.



THIS DRAWING REPLACES DRAWINGS 634.016 634.017 & 847.045

JULIUS LEE'S  
CONS. ENGINEERS P.A.  
1400 SW 4TH AVENUE  
DIKRAY BRICK, FL 33444-2161

MAX LOADING

55 PSF AT  
1.33 DUR. FAC.  
50 PSF AT  
1.25 DUR. FAC.

47 PSF AT  
1.15 DUR. FAC.

SPACING 24.0"

REF PIGGYBACK

DATE 09/12/07

DRWG/ITEK STD PIGGY

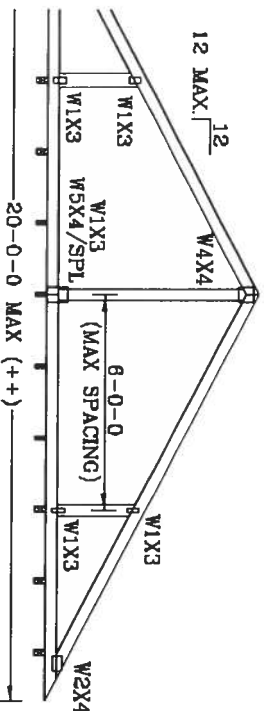
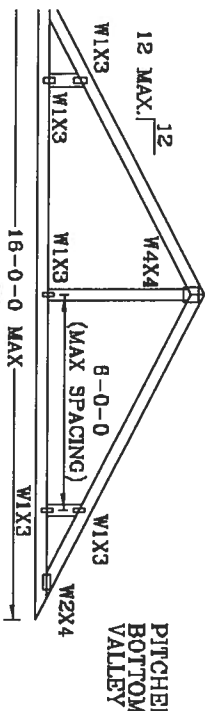
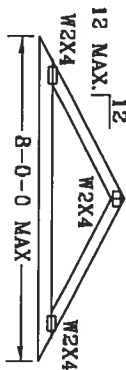
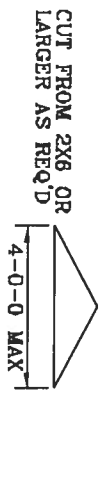
-ENG JL

No: 34968  
STATE OF FLORIDA

# VALLEY TRUSS DETAIL

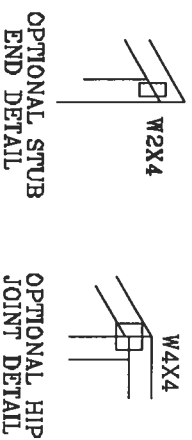
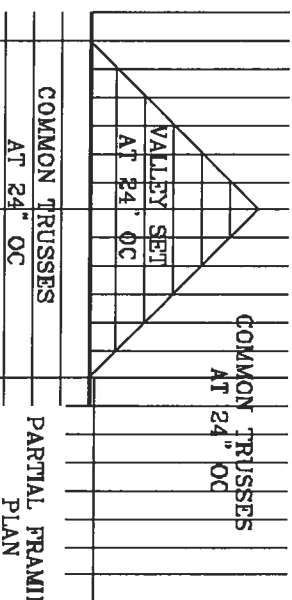
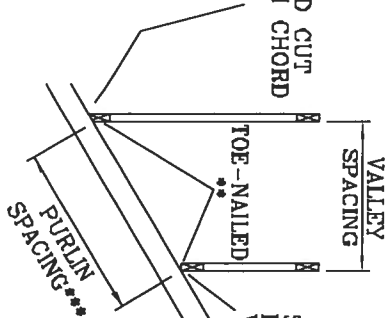
TOP CHORD 2X4 SP #2 OR SPF #1/#2 OR BETTER.  
BOT CHORD 2X3(\*) OR 2X4 SP #2N OR SPF #1/#2 OR BETTER.  
WEBS 2X4 SP #3 OR BETTER.

- \* 2X3 MAY BE RIPPED FROM A 2X6 (PITCHED OR SQUARE).
- \*\* ATTACH EACH VALLEY TO EVERY SUPPORTING TRUSS WITH:  
(2) 16d BOX (0.135" X 3.5") NAILS TOE-NAILED FOR  
FBC 2004 110 MPH, ASCE 7-02 110 MPH WIND OR (3) 16d FOR  
ASCE 7-02 130 MPH WIND. 15' MEAN HEIGHT, ENCLOSED  
BUILDING. EXP. C. RESIDENTIAL, WIND TC DL=5 PSF.



SUPPORTING TRUSSES AT 24" OC MAXIMUM SPACING.

\*\*\* NOTE THAT THE PURLIN SPACING FOR BRACING THE TOP CHORD OF THE TRUSS  
BENEATH THE VALLEY IS MEASURED ALONG THE SLOPE OF THE TOP CHORD.  
++ LARGER SPANS MAY BE BUILT AS LONG AS THE VERTICAL HEIGHT DOES  
NOT EXCEED 12'0".  
BOTTOM CHORD MAY BE SQUARE OR PITCHED CUT AS SHOWN.



WARRANTY: TRUSSES REQUIRE CARE IN FABRICATING, HANDLING, SHIPPING, INSTALLING AND  
BRACING. REFER TO BEST L-TO BUILDING CONSTRUCTION SAFETY PRACTICES AND AIAA TRUST COUNCIL  
OF AMERICA, 6300 CENTERVILLE LN, MADISON, WI 53709 FOR SAFETY PRACTICES PRIOR TO PERFORMING  
THESE FUNCTIONS. TRUSSES OTHERWISE INDICATED, TOP CHORD SHALL HAVE PROPERLY ATTACHED  
STRUCTURAL PANELS AND BOTTOM CHORD SHALL HAVE A PROPERLY ATTACHED RIGID CEILING.

JULIUS LEE'S  
CONS. ENGINEERS P.A.  
1455 SW 4th AVENUE  
DEALY BACH, FL 33444-2101

No. 34869  
STATE OF FLORIDA

TC LL	20	20	PSF	REF	VALLEY DETAIL
TC DL	7	15	PSF	DATE	11/26/03
BC DL	5	5	PSF	DRWG	VALTRUSS1103
BC LL	0	0	PSF	-ENG	JL
TOT. LD.	32	40	PSF		
DUR.FAC.	1.25	1.25			
SPACING	24"				

THIS DRAWING REPLACES DRAWING A105

# TOE-NAIL DETAIL

TOE-NAILS TO BE DRIVEN AT AN ANGLE OF APPROXIMATELY THIRTY DEGREES WITH THE PIECE AND STARTED APPROXIMATELY ONE-THIRD THE LENGTH OF THE NAIL FROM THE END OF THE MEMBER.

PER ANSI/AF&PA NDS-2001 SECTION 12.4.1 - EDGE DISTANCE, END DISTANCE, SPACING, "EDGE DISTANCES, END DISTANCES AND SPACINGS FOR NAILS AND SPIKES SHALL BE SUFFICIENT TO PREVENT SPLITTING OF THE WOOD.

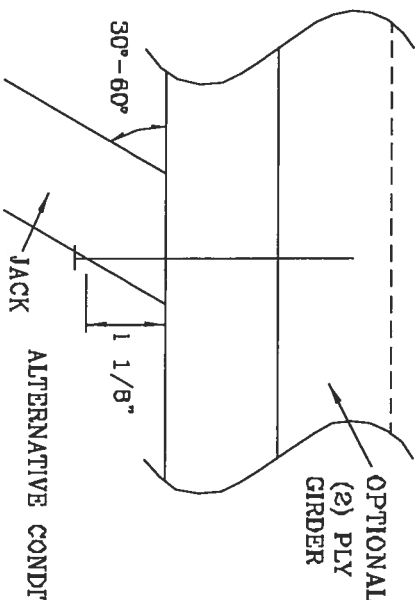
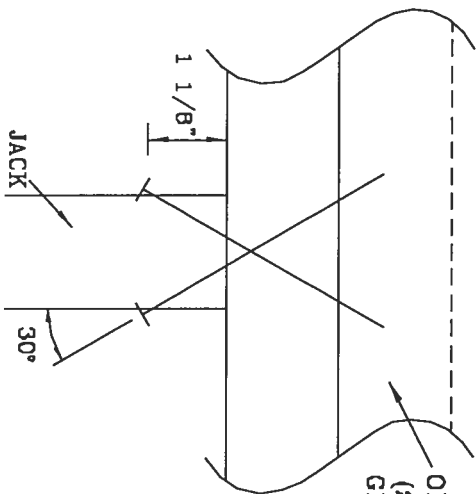
THE NUMBER OF TOE-NAILS TO BE USED IN A SPECIFIC APPLICATION IS DEPENDENT UPON PROPERTIES FOR THE CHORD SIZE, LUMBER SPECIES, AND NAIL TYPE. PROPER CONSTRUCTION PRACTICES AS WELL AS GOOD JUDGEMENT SHOULD DETERMINE THE NUMBER OF NAILS TO BE USED.

THIS DETAIL DISPLAYS A TOE-NAILED CONNECTION FOR JACK FRAMING INTO A SINGLE OR DOUBLE PLY SUPPORTING GIRDER.

MAXIMUM VERTICAL RESISTANCE OF 16d (0.162"x3.5") COMMON TOE-NAILS

NUMBER OF TOE-NAILS	SOUTHERN PINE		DOUGLAS FIR-LARCH		HEM-FIR		SPRUCE PINE FIR	
	1 PLY	2 PLYS	1 PLY	2 PLYS	1 PLY	2 PLYS	1 PLY	2 PLYS
2	197#	256#	181#	234#	156#	203#	154#	199#
3	296#	383#	271#	351#	234#	304#	230#	298#
4	394#	511#	361#	468#	312#	406#	307#	397#
5	493#	639#	452#	585#	390#	507#	384#	496#

ALL VALUES MAY BE MULTIPLIED BY APPROPRIATE DURATION OF LOAD FACTOR.



THIS DRAWING REPLACES DRAWING 784040

WARNING: TRUSSES REQUIRE EXTREME CARE IN FABRICATING, HANDLING, STORING, INSTALLING AND BRACING. REFER TO BEST PRACTICES, CONCRETE SAFETY INFORMATION PUBLISHED BY THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION, INC., 318 FIFTH AVENUE, NEW YORK, NY 10017-1701, AND VICA (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.

JULIUS LEE'S  
CONS. ENGINEERS P.A.

1450 ST 4TH AVENUE  
DELRAY BEACH, FL 33441-2161

No. 34869  
STATE OF FLORIDA

TC LL PSF REF TOE-NAIL

TC DL PSF DATE 09/12/07

BC DL PSF DRWG CNTONAIL103

BC LL PSF -ENG JL

TOT. LD. PSF

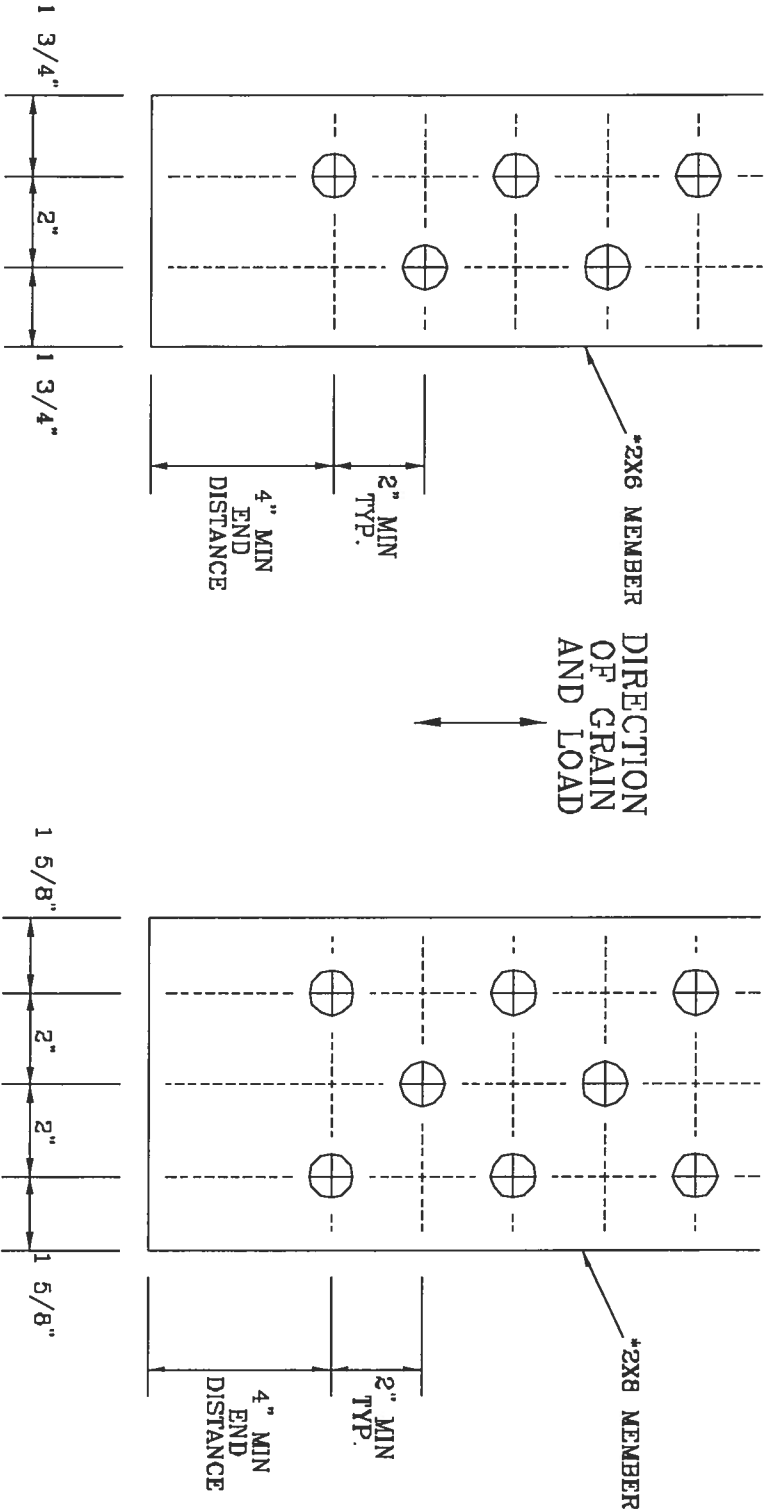
DUR. FAC. 1.00

SPACING

1/2" DIAMETER BOLT SPACING FOR LOAD APPLIED PARALLEL TO GRAIN.

\* GRADE AND SPECIES AS SPECIFIED ON THE ALPINE DESIGN.  
BOLT HOLES SHALL BE A MINIMUM OF 1/32" TO A MAXIMUM OF 1/16" LARGER THAN BOLT DIAMETER.

TYPICAL LOCATION OF 1/2" DIAMETER THRU BOLTS. BOLT QUANTITIES AS NOTED ON SEALED DESIGN MUST BE APPLIED IN ONE OF THE PATTERNS SHOWN BELOW.  
WASHERS REQUIRED UNDER BOLT HEAD AND NUT



2X6 DETAIL

2X8 DETAIL

THIS DRAWING REPLACES DRAWING A888.016

\*\*\*WARNING\*\*\* TRUSSES REQUIRE EXTREME CARE IN FABRICATING, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO 2051 I-20 (BUILDING COMPONENT SAFETY INFORMATION), PUBLISHED BY THE TRUSS PLATE INSTITUTE, 380 DODGERS DR., SUITE 200, MADISON, WI 53719 AND VICA CODED 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.

JULIUS LEE'S  
CONS. ENGINEERS P.A.  
1450 W 4TH AVENUE  
DELMAR BEACH, FL 33444-2161

No. 34889  
STATE OF FLORIDA

TC LL	PSF	REF	BOLT SPACING
TC DL	PSF	DATE	11/26/03
BC DL	PSF	DRWG	CNBOL7SP1103
BC LL	PSF	-ENG	JL
TOT. LD.	PSF		
DUR. FAC.			
SPACING			



# TRULOX CONNECTION DETAIL

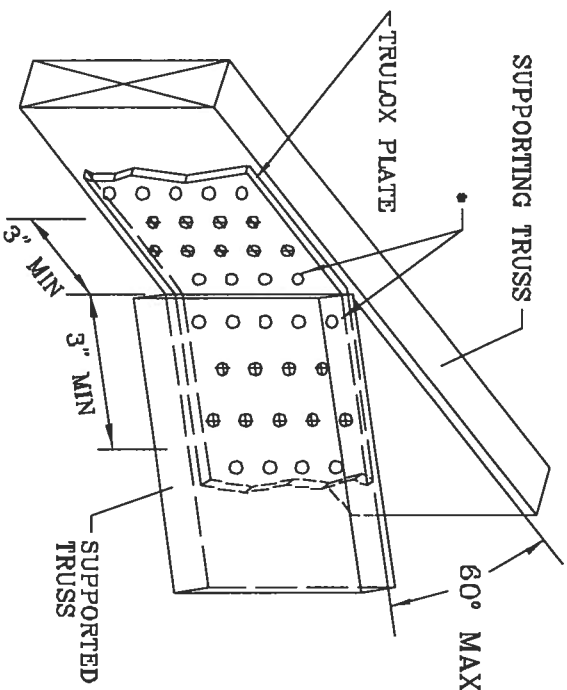
11 GAUGE (0.120" X 1.375") NAILS REQUIRED FOR TRULOX PLATE ATTACHMENT. FILL ROWS COMPLETELY WHERE SHOWN (Φ).

\* NAILS MAY BE OMITTED FROM THESE ROWS.

THIS DETAIL MAY BE USED WITH SO. PINE, DOUGLAS-FIR OR HEM-FIR CHORDS WITH A MINIMUM 1.00 DURATION OF LOAD OR SPRUCE-PINE-FIR CHORDS WITH A MINIMUM 1.15 DURATION OF LOAD. CHORD SIZE OF BOTH TRUSSES MUST EXCEED THE TRULOX PLATE WIDTH.

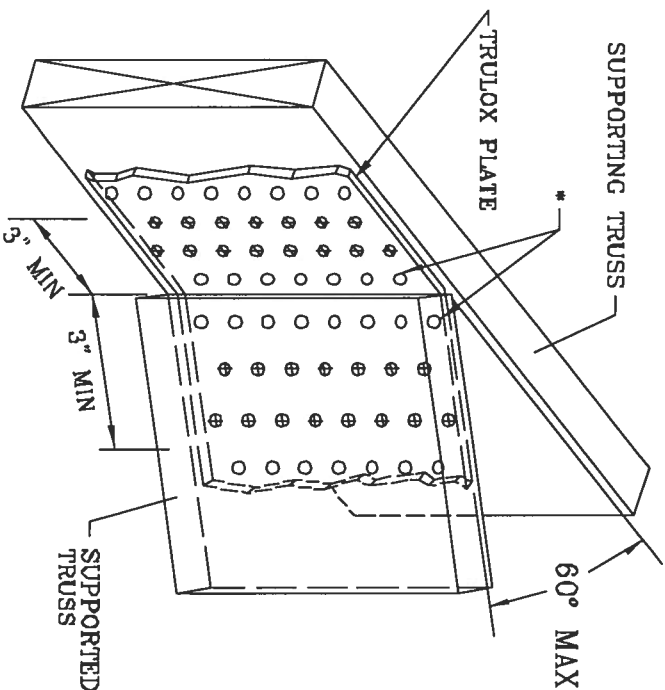
TRULOX PLATE IS CENTERED ON THE CHORDS AND BENT BETWEEN NAIL ROWS.

REFER TO ENGINEER'S SEALED DESIGN REFERENCING THIS DETAIL FOR LUMBER, PLATES, AND OTHER INFORMATION NOT SHOWN.



MINIMUM 3X6 TRULOX PLATE

TRULOX PLATE SIZE	REQUIRED NAILS PER TRUSS	MAXIMUM LOAD UP OR DOWN
3X6	9	350#
6X6	15	990#



MINIMUM 5X6 TRULOX PLATE

THIS DRAWING REPLACES DRAWINGS 1,158,989 1,158,989/R 1,154,844 1,152,217 1,152,017 1,159,154 & 1,151,524

\*\*WARNING\*\* TRUSSES REQUIRE EXTREME CARE IN FABRICATING, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO BC31 1-CO (BUILDING CODE) SAFETY INFORMATION, PUBLISHED BY THE TRUSS OF AMERICA, 5300 ENTERPRISE LN, MADISON, VI 32793 AND VICA (VED) TRUSS COUNCIL THESE INSTRUCTIONS. UNLESS OTHERWISE INDICATED, TOP CHORD SHALL HAVE PROPERLY ATTACHED STRUCTURAL PANELS AND BOTTOM CHORD SHALL HAVE A PROPERLY ATTACHED RIGID CEILING.

JULIUS LEE'S  
CONS. ENGINEERS P.A.

1155 SW 4TH AVENUE  
DELRAY BEACH, FL 33444-2101

No. 34859  
STATE OF FLORIDA

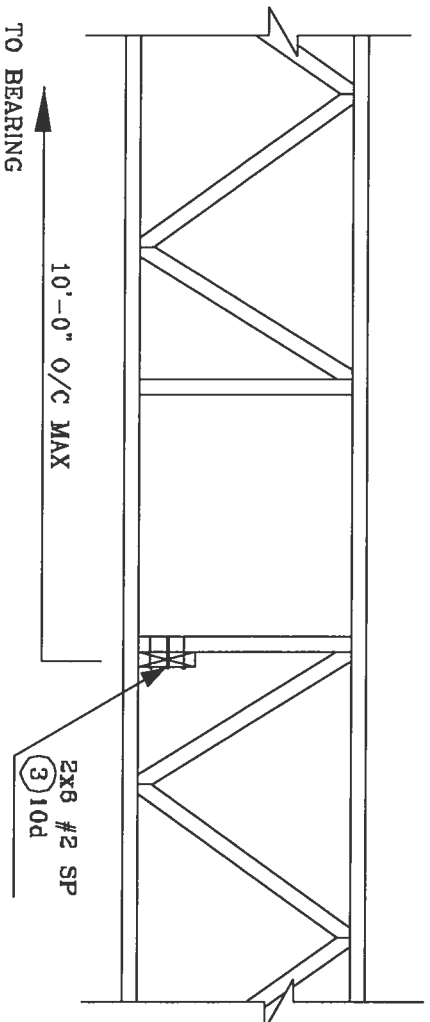
REF TRULOX

DATE 11/26/03

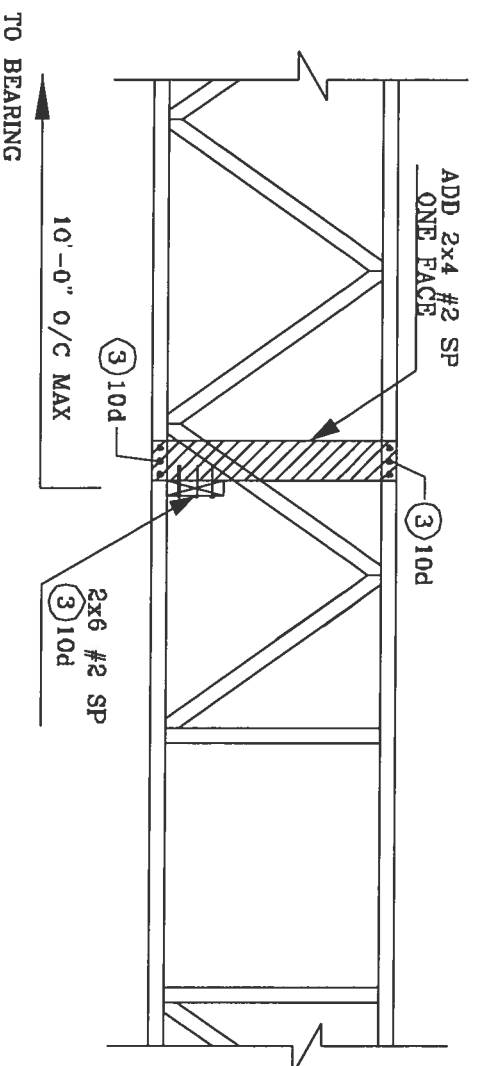
DRWG CNTRULOX1103

-ENG JL

**STRONG BACK DETAIL  
SYSTEM-42 OR FLAT TRUSS**



**ALTERNATE DETAIL FOR  
STRONG BACK WITH VERTICAL  
NOT LINING UP**



**JULIUS LEE'S**  
CONS. ENGINEERS P.A.  
1455 SW 4TH AVENUE  
DELRAY BEACH, FL 33444-2161

No. 34869  
STATE OF FLORIDA