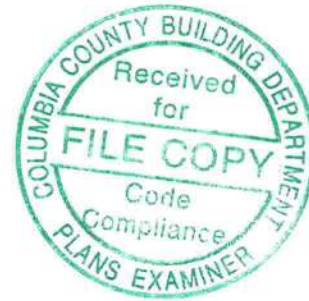


E



Prepared for:

ONEAL CONSTRUCTION  
THE NELSON RESIDENCE  
COLUMBIA COUNTY, FLORIDA

By:

Schafer Engineering, LLC

386-462-1340 / 352-375-6329

*NO COPIES ARE TO BE PERMITTED*



**SCHAFER ENGINEERING, LLC**  
7104 NW 42ND LANE \ GAINESVILLE FL. 32606  
PHONE: 386-462-1340 \ 352-375-6329

Trusses: Pre-engineered, pre-fabricated with the manufacturers required bracing system installed.

Roof Sheathing: Type: OSB plywood Size: 1/2 Fastener type nails: 8d / .113 Ring Shank  
Interior zone spacing: Interior: 6" Periphery: 4"  
Edge and end zone spacing: Interior: 6" Periphery: 4"

Double Top Plate: Type: Spruce Grade: #1 #2 Size: 2 x 6 Nail Spacing: 8 in

Stud Type: Spruce Grade: #1 #2 Size: 2 x 6  
Interior stud spacing: 16" End stud spacing: 16"

Shear Wall Siding: Type: OSB Thickness: 7/16  
73 ft Trans: Fastener 8d/131 Spacing: Int: 8 Edge: 4  
33 ft Trans: Fastener 8d/131 Spacing: Int: 8 Edge: 4

Allowable Unit Shear on Shear Walls: 314 pounds per linear foot  
Unit Shear Transferred from Diaphragm: Trans: 84 Long: 195

Wall Tension Transferred by: Siding Nails: 8d/131 @ 4 O.C. Edges

Foundation Anchor Bolts: Concrete Strength: 3000 psi Size: 1/2"

Washer: 2" Embedment: 7" Location of first anchor bolt from corner: 8"

Anchor Bolts @ 48" o.c. Model: A307 Loc. from corner: 8"

Type of Foundation: (1) - #5 rebar continuous required in bond beam.  
Floor Slab: 4" Cmu size: 8" x 16" Height: 24" Rein.: #5 at 72" o.c.

Monolithic Footing: Depth: 20" Bottom Width: 12 Rein.: 2 #5 rebars

Stemwall Footing: Width: 20 Depth: 10 Rein.: 2 #5 rebar

Interior Footings 16" Wide X 10" Deep with 2-#5 rebar continuous

Porch Columns: 6x6x10 syp tr @ 8' o.c. max Column Fasteners: Simpson CB66/CC66 or Equal

Special Comments: Install ceiling diaphragm on screen porch  
ceiling using same nail pattern, nail size, & same grade  
material as roof sheathing.

Install 2 ply 2x12 syp tr with 7/16" OSB fute for all window & door  
headers.

Install 2 ply 2x12 syp tr with 7/16" OSB fute for screen porch header.  
Garage door header to be sized by others.

**Notes:**

1. Balloon frame all gable ends unless accompanied by gable end detail
2. All trusses must bear on exterior walls and porch beams.
3. All wall and roof sheathing to be nailed with same nail pattern as the shear walls.
4. This wind load is not valid without a raised, embossed seal.
5. It is assumed that ideal soil conditions and pad preparations are provided.
6. Fiber mesh or WWM may be used in concrete slab.
7. Trusses must be installed and anchored in accordance to the truss engineering.
8. All headers spanning over 12' must be pre-engineered.
9. The foundation and walls are minimum design use, and may be increased.
10. Wind load is for one use only \ FBC-2007 \ No copies permitted

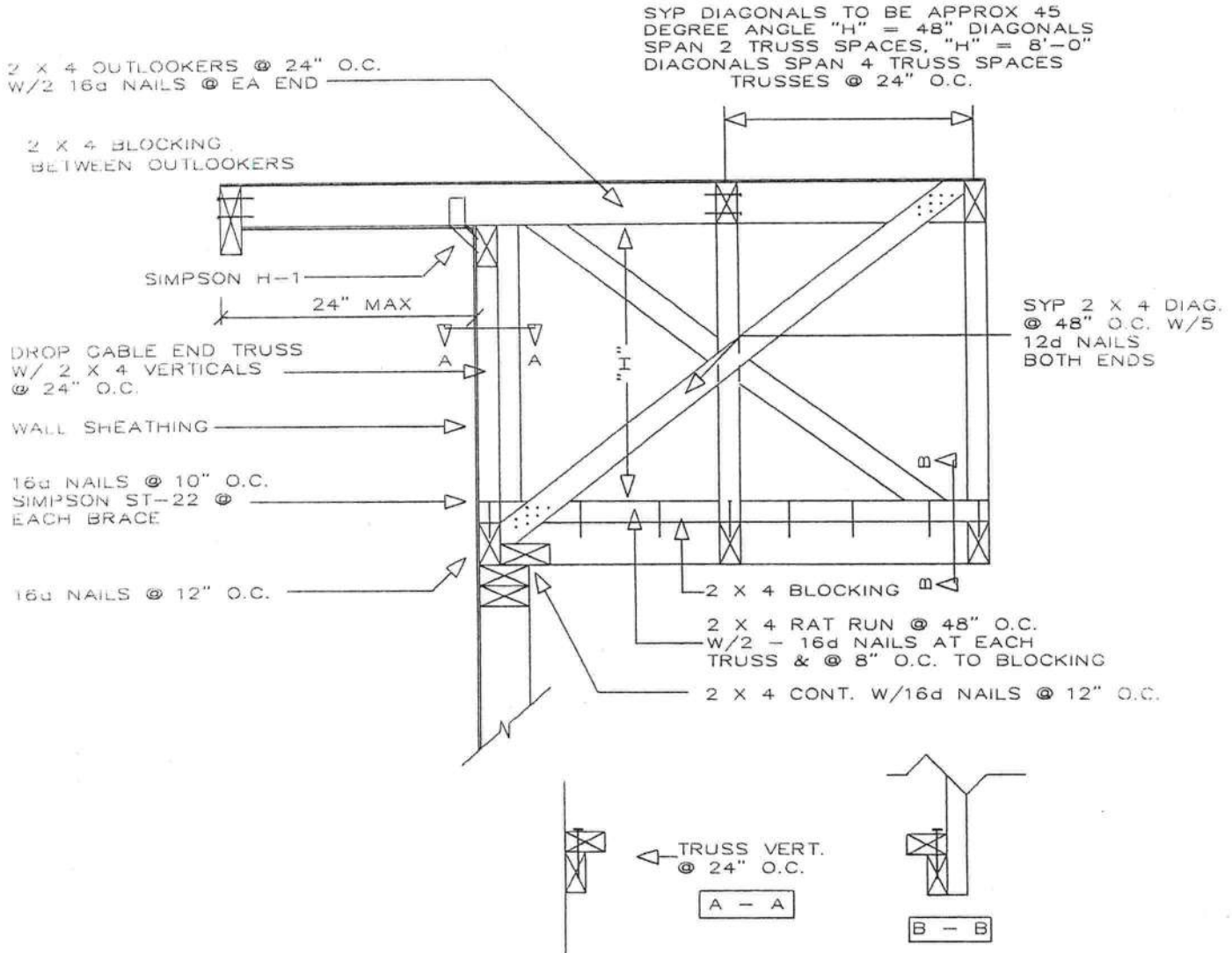
Bruce Schafer, P. E. #48984  
7104 NW 42ND LN  
GAINESVILLE, FL. 32606





# SCHAFER ENGINEERING, LLC

7104 NW 42ND LANE \ GAINESVILLE FL. 32606  
 PHONE: 386-462-1340 \ 352-375-6329



## TYPICAL GABLE END BRACING

DETAIL MAY BE USED WITH INTERIOR CATH. CEILING BY  
 INSTALLING A SYP 2 X 4 LEDGER IN PLANE WITH THE INTERIOR  
 CEILING USING 2 - 16d NAILS ON EACH POINT WHERE THE  
 LEDGER CROSSES THE GABLE END TRUSS VERTICALS

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 7104 NW 42ND LN  
 GAINESVILLE, FL. 32606

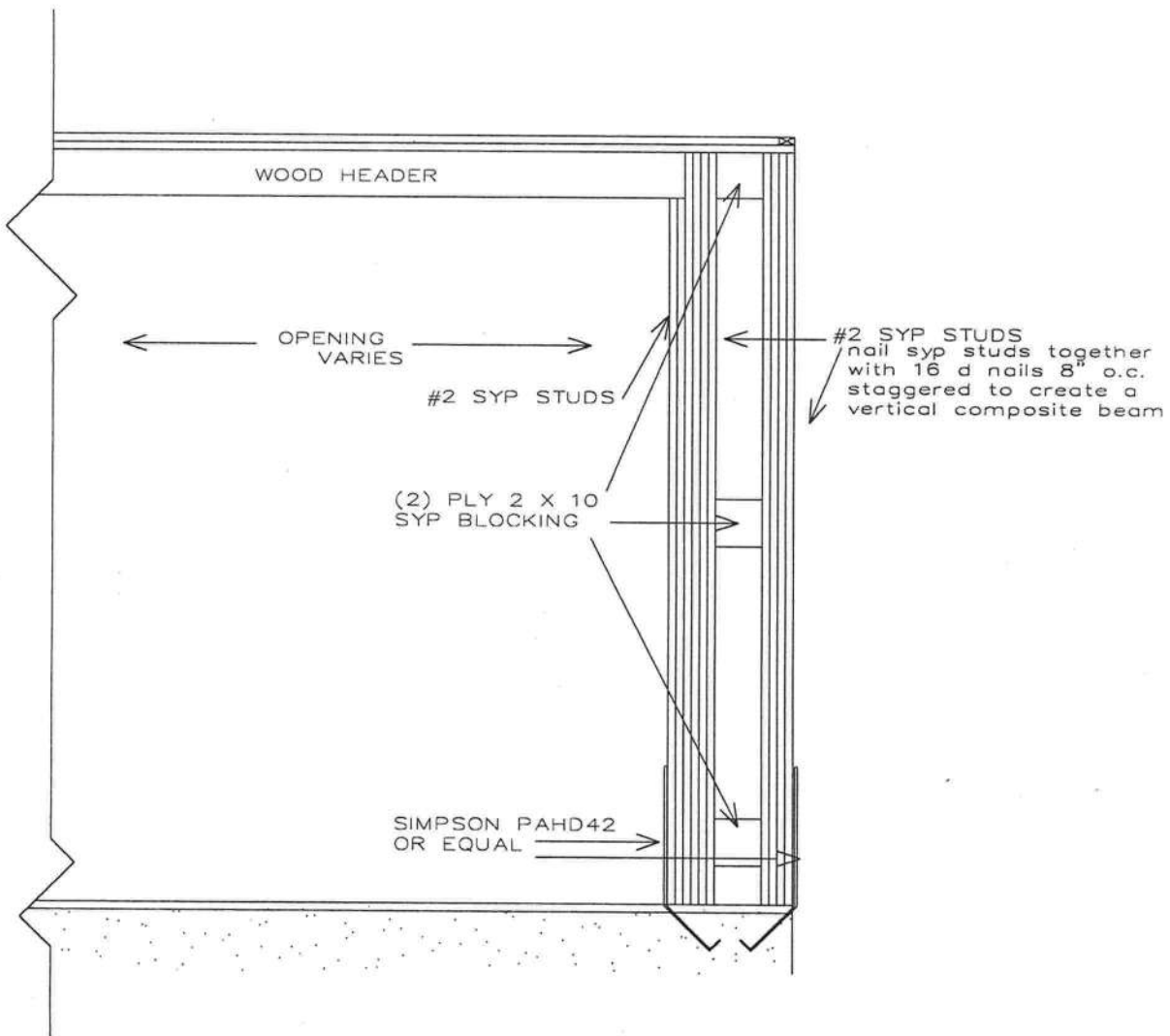
*B. Schafer*  
 6-21-11



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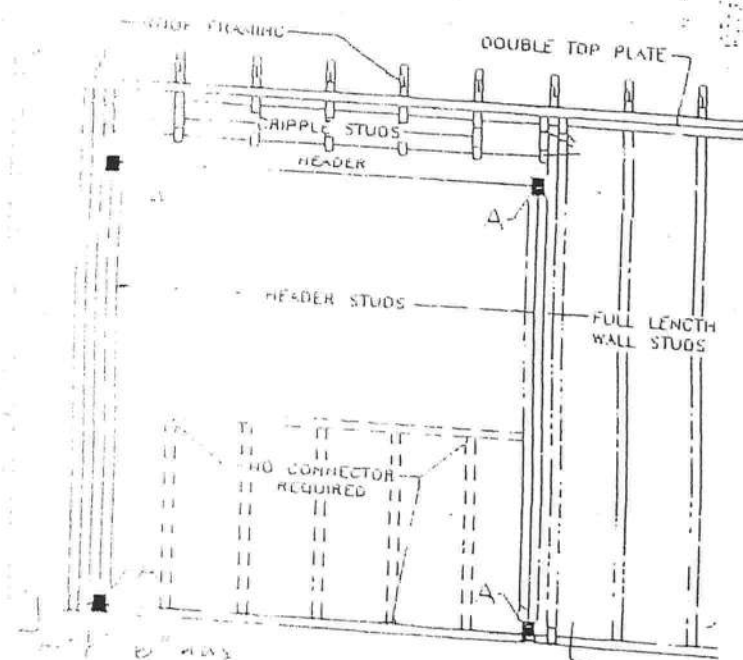
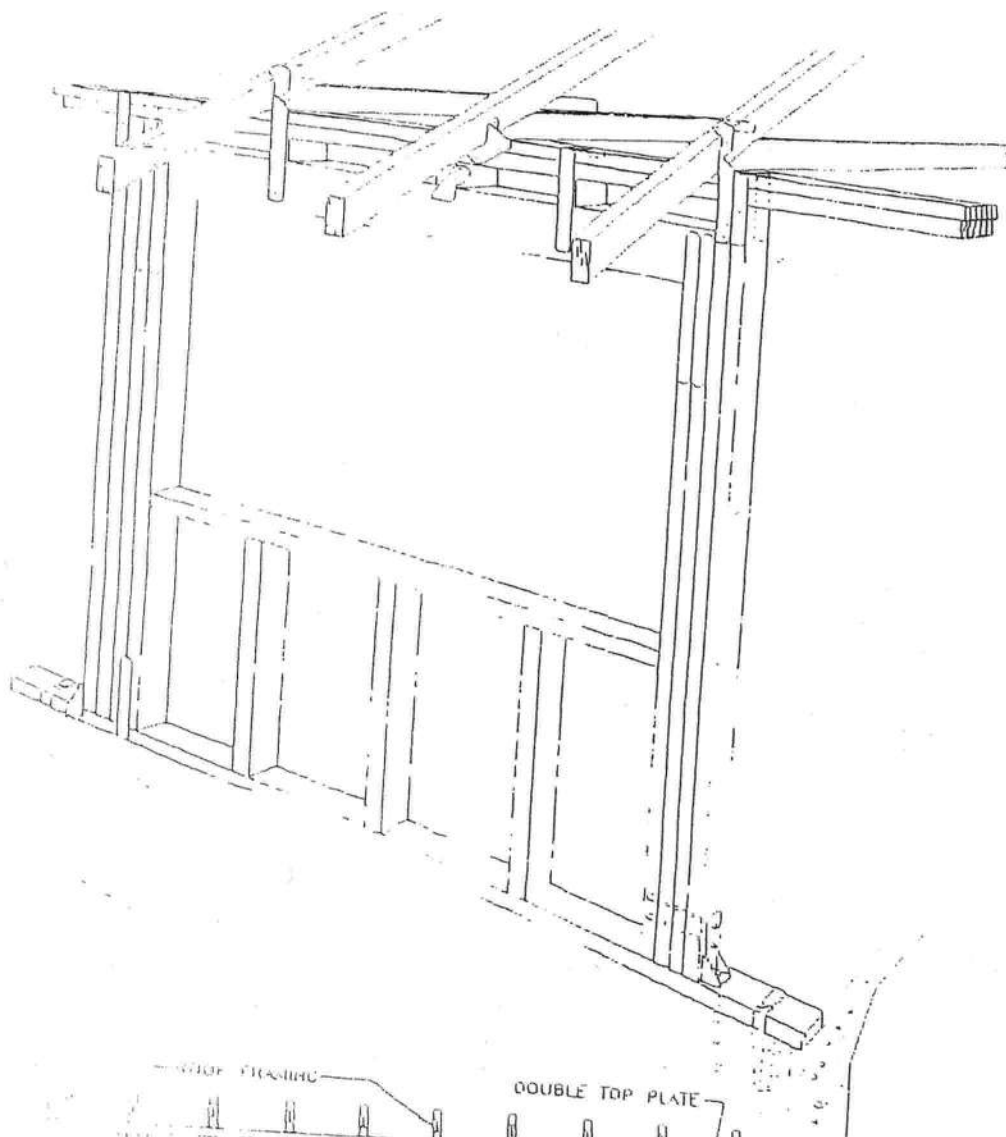


EQUIVALENT 3'-0" SHEAR WALL SEGMENT

*Sh*  
6-21-11

Bruce Schafer, P. E. #48984  
7104 NW 42ND LN  
GAINESVILLE, FL. 32606





Total each truss uplift on the header divide by 2 for header anchorage





# SCHAFFER ENGINEERING, LLC

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HEADER STRAPPING				
Uplift Lbs	Top Connector	Rating Lbs	Bottom Connector	Rating Lbs
to 455	LSTA19	635	H3	320
to 910	LSTA12	795	2-H3	640
to 1265	LSTA18	1110	LTT19	1305
to 1750	2-LSTA12	1810	LTT20	1750
to 2530	2-LSTA18	2530	HD2A-2.5	2165
to 2865	3-LSTA18	3255	HD2A-3.5	2865
to 3700	3-LSTA24	3880	HD5A-3	3130
Total the uplift for each truss sitting on the header and divide by 2 to determine the uplift on the header. Use proper bolt anchors sufficient to support required uplift loads.				

TRUSSES \ GIRDERS			
Uplift Lbs	Top Connector	Bottom Connector	Rating Lbs
to 535	H2.5A	NA	
to 1015	H10A	NA	
to 1215	TS22	LTT19	1305
to 1750	2-TS22	LTT20	1750
to 2570	2-TS22	HD2A	2775
to 3665	3-TS22	HD5A	4010
to 5420	2-MST37	HTT22	5250
to 9660	2-MST60	HD10A	9540
Two 12a common toenails are required per truss for each bearing point into top plate. It is the contractors responsibility to provide a continuous load path from truss to foundation.			

	TOP CONNECTOR	RATING LBS	BOTTOM CONNECTOR	RATING LBS
BEAM SEATS	LSTA18	1110	LTT19	1305
POSTS	2-LSTA18	2220	ABU44	2300

1. Simpson or equivalent hardware may be used.  
For nailing into spruce members, multiply table values by .86
2. See truss engineering for anchor uplift values.
3. This schedule is not meant to be a replacement to the specified values of any manufactures values.



## ASCE 7-05

User Input Data		
Structure Type	Building	
Basic Wind Speed (V)	110	mph
Structural Category	II	
Exposure	B	
Struc Nat Frequency (n1)	1	Hz
Slope of Roof (Theta)	26.6	Deg
Type of Roof	Hipped	
Eave Height (Eht)	10.00	ft
Ridge Height (Rht)	24.67	ft
Mean Roof Height (Ht)	18.33	ft
Width Perp. to Wind (B)	72.00	ft
Width Parallel to Wind (L)	54.00	ft
Damping Ratio (beta)	0.01	

Red values should be changed only through "Main Menu"

Calculated Parameters	
Type of Structure	
Height/Least Horizontal Dim	0.34
Flexible Structure	No

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

Gust Factor Category I: Rigid Structures - Simplified Method			
Gust1	For rigid structures (Nat Freq > 1 Hz) use 0.85	0.85	
Gust Factor Category II: Rigid Structures - Complete Analysis			
Zm	Zmin	30.00	ft
Izm	$Cc * (33/z)^{0.167}$	0.3048	
Lzm	$I * (zm/33)^{Epsilon}$	309.99	ft
Q	$(1/(1+0.63*((B+Ht)/Lzm)^{0.63}))^{0.5}$	0.8806	
Gust2	$0.925 * ((1+1.7 * Izm * 3.4 * Q)/(1+1.7 * 3.4 * Izm))$	0.8545	
Gust Factor Category III: Flexible or Dynamically Sensitive Structures			
Vhref	$V * (5280/3600)$	161.33	ft/s
Vzm	$bm * (zm/33)^{Am} * Vhref$	70.89	ft/s
NF1	$NatFreq * Lzm / Vzm$	4.37	Hz
Rn	$(7.47 * NF1) / (1 + 10.302 * NF1)^{1.667}$	0.0552	
Nh	$4.6 * NatFreq * Ht / Vzm$	1.19	
Nb	$4.6 * NatFreq * B / Vzm$	4.67	
Nd	$15.4 * NatFreq * Depth / Vzm$	11.73	
Rh	$1/Nh - (1/(2 * Nh^2) * (1 - Exp(-2 * Nh)))$	0.5201	
Rb	$1/Nb - (1/(2 * Nb^2) * (1 - Exp(-2 * Nb)))$	0.1911	
Rd	$1/Nd - (1/(2 * Nd^2) * (1 - Exp(-2 * Nd)))$	0.0816	
RR	$((1/Beta) * Rn * Rh * Rb * (0.53 + 0.47 * Rd))^{0.5}$	0.5583	
gg	$+(2 * LN(3600 * n1))^{0.5} + 0.577 / (2 * LN(3600 * n1))^{0.5}$	4.19	
Gust3	$0.925 * ((1+1.7 * Izm * (3.4^2 * Q^2 + GG^2 * RR^2)^{0.5}) / (1+1.7 * 3.4 * Izm))$	0.99	

Gust Factor Summary			
Main Wind-force resisting system:		Components and Cladding:	
Gust Factor Category:	I	Gust Factor Category:	I
Gust Factor (G)	0.85	Gust Factor (G)	0.85



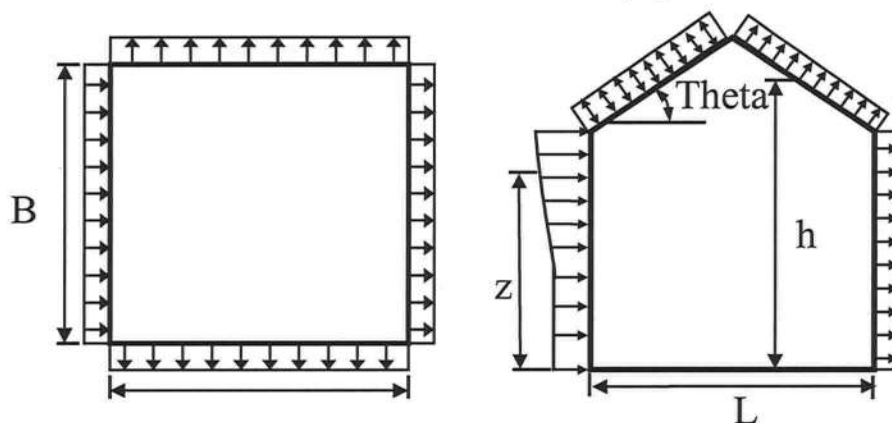
## ASCE 7-05

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

Elev. ft	Kz	Kzt	Kd	qz lb/ft <sup>2</sup>	Pressure (lb/ft <sup>2</sup> )	
					Windward Wall*	
			1.00		+GCpi	-GCpi
24.67	0.70	1.00	1.00	21.70	11.44	18.23
20	0.70	1.00	1.00	21.70	11.44	18.23
18.33	0.70	1.00	1.00	21.70	11.44	18.23
15	0.70	1.00	1.00	21.70	11.44	18.23

**Figure 6-3 - External Pressure Coefficients, Cp**

Loads on Main Wind-Force Resisting Systems



Variable	Formula	Value	Units
Kh	$2.01 \cdot (Ht/zg)^{(2/\alpha)}$	0.61	
Kht	Topographic factor (Fig 6-2)	1.00	
Qh	$.00256 \cdot (V)^2 \cdot \text{ImpFac} \cdot Kh \cdot Kht \cdot Kd$	18.85	psf

Wall Pressure Coefficients, Cp	
Surface	Cp
Windward Wall (See Figure 6.5.12.2.1 for Pressures)	0.80

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

Description	Cp	Pressure (psf)	
		+GCpi	-GCpi
Leeward Walls (Wind Dir Parallel to 72 ft wall)	-0.50	-11.45	-4.66
Leeward Walls (Wind Dir Parallel to 54 ft wall)	-0.43	-10.37	-3.59
Side Walls	-0.70	-14.67	-7.88
Roof - Normal to Ridge (Theta ≥ 10)			
Windward - Max Negative	-0.22	-7.01	-0.22
Windward - Max Positive	0.26	0.86	7.65
Leeward Normal to Ridge	-0.60	-13.06	-6.27
Overhang Top	-0.22	-3.61	-3.61
Overhang Bottom	0.80	0.68	0.68
Roof - Parallel to Ridge (All Theta)			
Dist from Windward Edge: 0 ft to 9.165 ft	-0.90	-17.89	-11.11





## ASCE 7-05

Dist from Windward Edge: 9.165 ft to 18.33 ft	-0.90	-17.89	-11.11
Dist from Windward Edge: 18.33 ft to 36.66 ft	-0.50	-11.45	-4.66
Dist from Windward Edge: > 36.66 ft	-0.30	-8.23	-1.44

\* Horizontal distance from windward edge

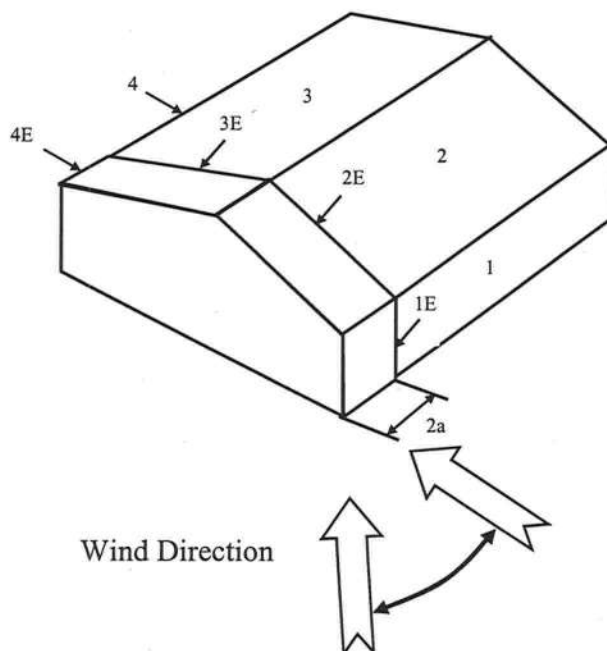
**Figure 6-4 - External Pressure Coefficients, GCpf**

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

$$\begin{aligned}
 K_h &= 2.01 \cdot (H_t/z_g)^{(2/\alpha)} &= & 0.61 \\
 K_{ht} &= \text{Topographic factor (Fig 6-2)} &= & 1.00 \\
 Q_h &= 0.00256 \cdot (V)^2 \cdot \text{ImpFac} \cdot K_h \cdot K_{ht} \cdot K_d &= & 18.85
 \end{aligned}$$

Case A						
Surface	GCpf	+GCpi	-GCpi	qh (psf)	Min P (psf)	Max P (psf)
1	0.55	0.18	-0.18	21.70	8.03	15.84
2	-0.10	0.18	-0.18	21.70	-5.99	1.82
3	-0.45	0.18	-0.18	21.70	-13.61	-5.79
4	-0.39	0.18	-0.18	21.70	-12.38	-4.57
5	0.00	0.18	-0.18	21.70	-3.91	3.91
6	0.00	0.18	-0.18	21.70	-3.91	3.91
1E	0.73	0.18	-0.18	21.70	11.88	19.69
2E	-0.19	0.18	-0.18	21.70	-7.93	-0.12
3E	-0.58	0.18	-0.18	21.70	-16.59	-8.78
4E	-0.53	0.18	-0.18	21.70	-15.50	-7.69
5E	0.00	0.18	-0.18	21.70	-3.91	3.91
6E	0.00	0.18	-0.18	21.70	-3.91	3.91

$$* p = q_h \cdot (GC_{pf} - GC_{pi})$$





## ASCE 7-05

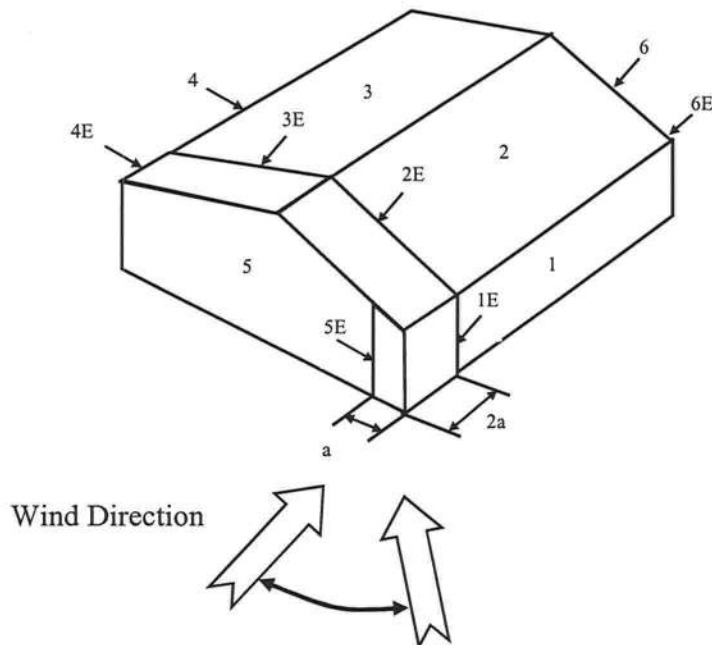
**Figure 6-4 - External Pressure Coefficients, GCpf**

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

$$\begin{aligned}
 K_h &= 2.01(Ht/z_g)^{(2/\alpha)} &= & 0.61 \\
 K_{ht} &= \text{Topographic factor (Fig 6-2)} &= & 1.00 \\
 Q_h &= 0.00256(V)^2 \text{ImpFac} \cdot K_h \cdot K_{ht} \cdot K_d &= & 18.85
 \end{aligned}$$

Case B						
Surface	GCpf	+GCpi	-GCpi	qh (psf)	Min P (psf)	Max P (psf)
1	-0.45	0.18	-0.18	21.70	-13.67	-5.86
2	-0.69	0.18	-0.18	21.70	-18.88	-11.07
3	-0.37	0.18	-0.18	21.70	-11.94	-4.12
4	-0.45	0.18	-0.18	21.70	-13.67	-5.86
5	0.40	0.18	-0.18	21.70	4.77	12.59
6	-0.29	0.18	-0.18	21.70	-10.20	-2.39
1E	-0.48	0.18	-0.18	21.70	-14.32	-6.51
2E	-1.07	0.18	-0.18	21.70	-27.13	-19.31
3E	-0.53	0.18	-0.18	21.70	-15.41	-7.60
4E	-0.48	0.18	-0.18	21.70	-14.32	-6.51
5E	0.61	0.18	-0.18	21.70	9.33	17.14
6E	-0.43	0.18	-0.18	21.70	-13.24	-5.43

$$* p = q_h * (GCpf - GCpi)$$











## ASCE 7-05

Condition	Gcpi	
	Max +	Max -
Open Buildings	0.00	0.00
Partially Enclosed Buildings	0.55	-0.55
Enclosed Buildings	0.18	-0.18
<b>Enclosed Buildings</b>	<b>0.18</b>	<b>-0.18</b>

**Table 6-8 External Pressure Coefficients for Arched Roofs,  $C_p$** 

r (Rise-to-Span Ratio) = 0.3

Condition	Variable	$C_p$		
		Windward Quarter	Center Half	Leeward Quarter
Roof on Elevated Structure	$C_p$	0.13	-1	-0.5
	P (+GCpi) - psf	-1.38	-19.50	-11.45
	P (-GCpi) -psf	5.41	-12.72	-4.66
Roof Springing from Ground	$C_p$	0.42	-1	-0.5
	P (+GCpi) - psf	3.37	-19.50	-11.45
	P (-GCpi) -psf	3.37	-19.50	-11.45

**Table 6-9 Force Coefficients for Monoslope Roofs over Open Buildings,  $C_f$** 

Variable	Description	Value	
L	Roof dimension normal to wind direction	54.00	ft
B	Roof dimension parallel to wind direction	72.00	ft
L/B	Ratio of L to B	0.750	
Theta	Slope of Roof	26.6	Deg
$C_f$	Force Coefficient	1.17	
X	Distance to center of pressure from windward edge	0.42	ft



# Julius Lee



RE: 361993 - O'NEIL CONST. - NELSON RES.

**1109 Coastal Bay Blvd.  
Boynton Beach, FL 33435**

## Site Information:

Project Customer: O'NEIL CONST. Project Name: 361993 Model: NELSON RES.

Lot/Block: Subdivision:

Address: 1136 MARYNIK DR.

City: ALACHUA CTY State: FL

## Name Address and License # of Structural Engineer of Record, If there is one, for the building.

Name: O'NEIL CONST. License #: QB0010656

Address: 110 NE 1ST AVE

City: HIGH SPRINGS, State: FL

## General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):

Design Code: FBC2007/TPI2002

Design Program: MiTek 20/20 7.1

Wind Code: ASCE 7-05 Wind Speed: 110 mph

Floor Load: N/A psf

Roof Load: 32.0 psf

This package includes 32 individual, dated Truss Design Drawings and 0 Additional Drawings. With my seal affixed to this sheet, I hereby certify that I am the Truss Design Engineer and this index sheet conforms to 61G15-31.003, section 5 of the Florida Board of Professional Engineers Rules.

This document processed per section 16G15-23.003 of the Florida Board of Professionals Rules

**In the event of changes from Builder or E.O.R. additional coversheets and drawings may accompany this coversheet. The latest approval dates supersede and replace the previous drawings.**

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I4799420	EJ7	6/24/011	18	I4799437	T08G	6/24/011
2	I4799421	EJ7A	6/24/011	19	I4799438	T09	6/24/011
3	I4799422	PB01	6/24/011	20	I4799439	T09G	6/24/011
4	I4799423	PB02	6/24/011	21	I4799440	T10	6/24/011
5	I4799424	PB02G	6/24/011	22	I4799441	T11	6/24/011
6	I4799425	T01	6/24/011	23	I4799442	T17	6/24/011
7	I4799426	T01G	6/24/011	24	I4799443	T18	6/24/011
8	I4799427	T02	6/24/011	25	I4799444	T19	6/24/011
9	I4799428	T03	6/24/011	26	I4799445	T20	6/24/011
10	I4799429	T04	6/24/011	27	I4799446	T21	6/24/011
11	I4799430	T05	6/24/011	28	I4799447	T22	6/24/011
12	I4799431	T05G	6/24/011	29	I4799448	T23	6/24/011
13	I4799432	T06	6/24/011	30	I4799449	T24	6/24/011
14	I4799433	T06A	6/24/011	31	I4799450	T25	6/24/011
15	I4799434	T07	6/24/011	32	I4799451	T26	6/24/011
16	I4799435	T07G	6/24/011				
17	I4799436	T08	6/24/011				

The truss drawing(s) referenced above have been prepared by MiTek Industries, Inc. under my direct supervision based on the parameters provided by Builders FirstSource (Lake City).

Truss Design Engineer's Name: Julius Lee

My license renewal date for the state of Florida is February 28, 2013.

**NOTE:** The seal on these drawings indicate acceptance of professional engineering responsibility solely for the truss components shown. The suitability and use of this component for any particular building is the responsibility of the building designer, per ANSI/TPI-1 Chapter 2.





Builders FrstSource, Lake City, FL 32055 7,140 s Oct 1 2009 MiTek Industries, Inc. Fri Jun 24 14:58:08 2011 Page 1

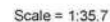


Plate Offsets (X,Y): [1:0-2-1,0-1-0]

<b>LUMBER</b>	<b>BRACING</b>
TOP CHORD 2 X 4 SYP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2 X 4 SYP No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2 X 4 SYP No.3	

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS** (lb/size) 3=103/Mechanical, 4=14/Mechanical, 6=327/0-5-8  
 Max Horz 6=236(LC 6)  
 Max Uplift 3=115(LC 6), 4=63(LC 6), 6=73(LC 6)  
 Max Grav 3=103(LC 1), 4=53(LC 2), 6=327(LC 1)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**WEBS** 2-5=-53/271, 2-6=-281/169

NOTES (8-9)

- 1) Wind: ASCE 7-05; 110mph (3-second gust); TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) zone; cantilever left exposed ; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) All bearings are assumed to be SYP No.2 .
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 115 lb uplift at joint 3, 63 lb uplift at joint 4 and 73 lb uplift at joint 6.
- 7) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
- 8) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
- 9) Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869: Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

LOAD CASE(S) Standard



June 24, 2011

**WARNING** - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MU-7473 BEFORE USE. Design valid for use only with Mitek connectors. This design is based only upon parameters shown, and is for an individual building component. Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to insure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult **ANSI/TPI1 Quality Criteria, DSB-89 and BC511 Building Component Safety Information** available from Truss Plate Institute, 583 D'Oroff Drive, Madison, WI 53719.

Your Company Name



Job	Truss	Truss Type	Qty	Ply	O'NEIL CONST. - NELSON RES.
361993	EJ7A	MONO TRUSS	10	1	14799421

Builders FrstSource, Lake City, FL 32055

Job Reference (optional)

7.140 s Oct 1 2009 MiTek Industries, Inc. Fri Jun 24 14:58:08 2011 Page 1

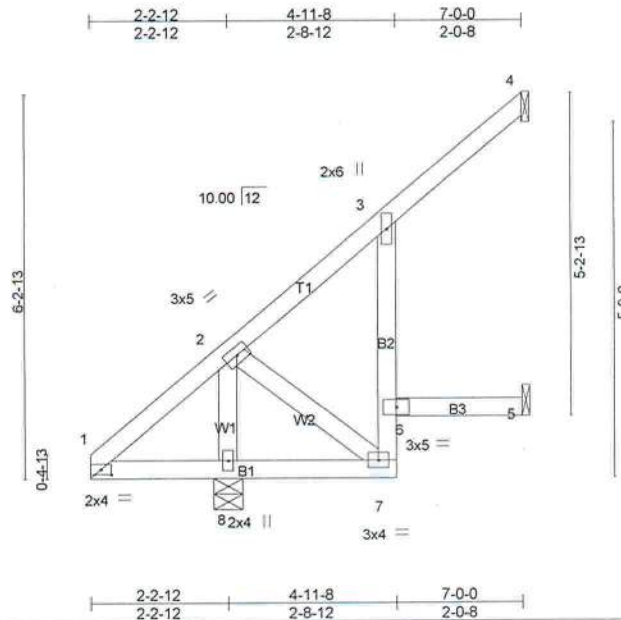


Plate Offsets (X,Y): [1:0-2-1,0-1-0]

LOADING (psf)	SPACING	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plates Increase	1.25	TC 0.24	Vert(LL)	-0.02	6	>999	360	MT20	244/190
TCDL 7.0	Lumber Increase	1.25	BC 0.35	Vert(TL)	-0.03	6	>999	240		
BCLL 0.0	Rep Stress Incr	YES	WB 0.05	Horz(TL)	-0.06	4	n/a	n/a		
BCDL 5.0	Code FBC2007/TPI2002		(Matrix)	Wind(LL)	0.08	6	>696	240		
									Weight: 37 lb	

#### LUMBER

TOP CHORD 2 X 4 SYP No.2  
BOT CHORD 2 X 4 SYP No.2 "Except"  
B2: 2 X 4 SYP No.3  
WEBS 2 X 4 SYP No.3

#### BRACING

TOP CHORD  
BOT CHORD

Structural wood sheathing directly applied or 6-0-0 oc purlins.  
Rigid ceiling directly applied or 6-0-0 oc bracing. Except:  
10-0-0 oc bracing: 5-6.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

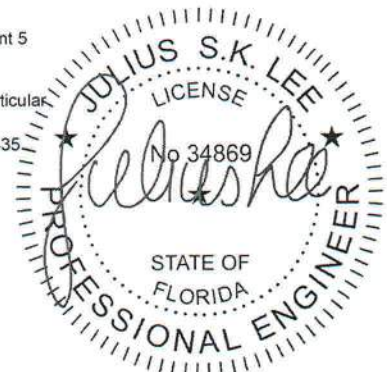
**REACTIONS** (lb/size) 4=77/Mechanical, 5=40/Mechanical, 8=327/0-5-8  
Max Horz 8=236(LC 6)  
Max Uplift 4=-118(LC 6), 5=-59(LC 6), 8=-73(LC 6)  
Max Grav 4=77(LC 1), 5=48(LC 2), 8=327(LC 1)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**WEBS** 2-8=-288/138

#### NOTES (8-9)

- 1) Wind: ASCE 7-05; 110mph (3-second gust); TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) zone; cantilever left exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) All bearings are assumed to be SYP No.2 .
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 118 lb uplift at joint 4, 59 lb uplift at joint 5 and 73 lb uplift at joint 8.
- 7) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
- 8) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
- 9) Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869: Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435.

**LOAD CASE(S)** Standard



June 24, 2011



**WARNING -** Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MI-7473 BEFORE USE.

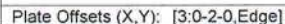
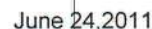
Design valid for use only with MiTek connectors. This design is based only upon parameters shown, and is for an individual building component. Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to insure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult **ANSI/TPI1 Quality Criteria, D58-89 and BCS11 Building Component Safety Information** available from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

Your Company Name





7.140 s Oct 1 2009 MiTek Industries, Inc. Fri Jun 24 14:58:09 2011 Page 1

LOAD CASE(S) Standard

Your Company Name



Plate Offsets (X,Y): [3:0-2-0.Edge]

Weight: 9 lb

## LUMBER

TOP CHORD 2 X 4 SYP No.2  
BOT CHORD 2 X 4 SYP No.2

## BRACING

TOP CHORD  
BOT CHORD

Structural wood sheathing directly applied or 3-1-1 oc purlins.  
Rigid ceiling directly applied or 10-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

## REACTIONS

(lb/size) 1=98/0-3-8, 5=98/0-3-8  
Max Horz 1=-55(LC 4)  
Max Uplift 1=-54(LC 6), 5=-54(LC 7)

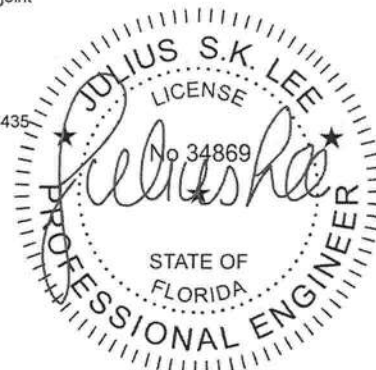
## FORCES

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

## NOTES (10-11)

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-05; 110mph (3-second gust); TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) All bearings are assumed to be SYP No.2.
- 6) Bearing at joint(s) 1, 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 54 lb uplift at joint 1 and 54 lb uplift at joint 5.
- 8) "Semi-rigid pitchbrake including heels" Member end fixity model was used in the analysis and design of this truss.
- 9) See MiTek STANDARD PIGGYBACK TRUSS CONNECTION DETAIL FOR CONNECTION TO BASE TRUSS
- 10) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
- 11) Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869; Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

LOAD CASE(S) Standard



June 24, 2011



**WARNING** - Verify design parameters and READ NOTES ON THIS AND INCLUDED MTEK REFERENCE PAGE MI-7473 BEFORE USE.

Design valid for use only with Mitek connectors. This design is based only upon parameters shown, and is for an individual building component. Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to insure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult **ANSI/TPI1 Quality Criteria, D58-89 and BC311 Building Component Safety Information** available from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

Your Company Name



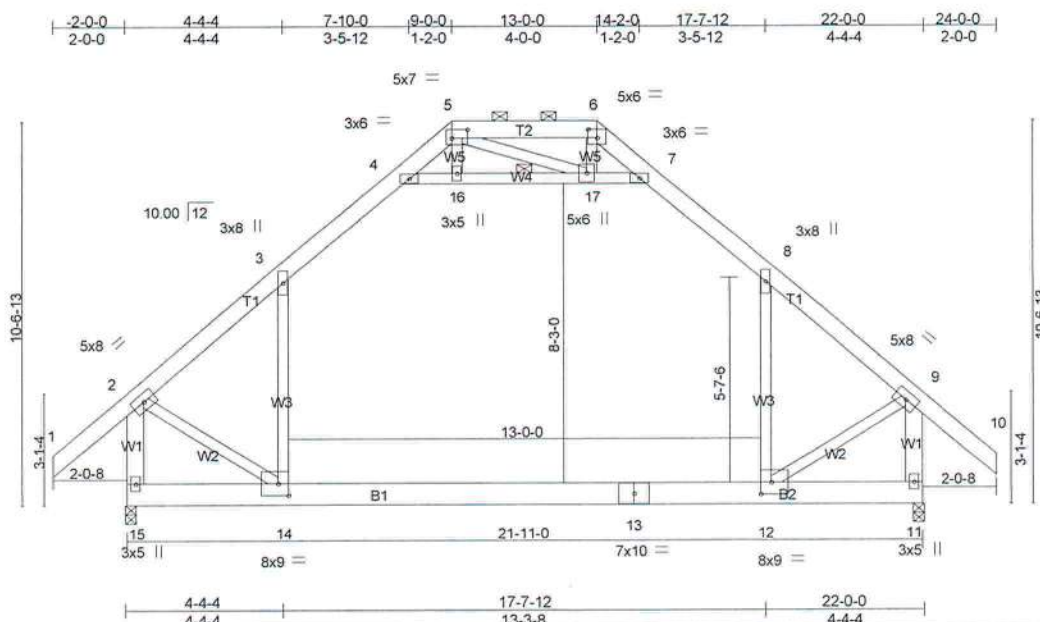
Job	Truss	Truss Type	Qty	Ply	O'NEIL CONST. - NELSON RES.
361993	T01	ATTIC	2	1	

14799425

Builders FirstSource, Lake City, FL 32055

Job Reference (optional)

7,140 s Oct 1 2009 MiTek Industries, Inc. Fri Jun 24 14:58:10 2011 Page 1



Scale = 1:60.7

Plate Offsets (X,Y): [5:0-5-4,0-2-12], [6:0-3-0,0-2-12], [12:0-3-8,0-4-0], [14:0-3-8,0-4-0]

LOADING (psf)	SPACING	2-0-0	CSI	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plates Increase	1.25	TC 0.66	Vert(LL)	-0.33 12-14	>771	360	MT20	244/190
TCDL 7.0	Lumber Increase	1.25	BC 0.41	Vert(TL)	-0.54 12-14	>480	240		
BCLL 0.0	Rep Stress Incr	YES	WB 0.35	Horz(TL)	0.01 11	n/a	n/a		
BCDL 5.0	Code FBC2007/TPI2002		(Matrix)	Wind(LL)	0.10 12-14	>999	240		
								Weight: 204 lb	

**LUMBER**

TOP CHORD 2 X 6 SYP No.1D  
 BOT CHORD 2 X 8 SYP 2400F 2.0E  
 WEBS 2 X 4 SYP No.3 \*Except\*  
 W3: 2 X 4 SYP No.2, W1: 2 X 6 SYP No.1D

**BRACING**

TOP CHORD Structural wood sheathing directly applied or 5-9-0 oc purlins, except end verticals, and 2-0-0 oc purlins (10-0-0 max.): 5-6.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 WEBS 1 Row at midpt 4-7

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS (lb/size) 15=1601/0-3-8, 11=1601/0-3-8  
 Max Horz 15=388(LC 5)  
 Max Uplift 15=134(LC 6), 11=134(LC 7)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 2-3=-1472/264, 3-4=-1005/400, 4-5=0/314, 6-7=0/346, 7-8=-1005/401, 8-9=-1471/263,  
 2-15=-1874/388, 9-11=-1873/387, 5-6=0/524  
 BOT CHORD 14-15=-370/426, 13-14=-50/954, 12-13=-50/954  
 WEBS 4-16=-1297/362, 16-17=-1288/363, 7-17=-1337/377, 3-14=0/656, 8-12=0/654,  
 2-14=-105/1083, 9-12=-108/1084

**NOTES (13-14)**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-05; 110mph (3-second gust); TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Ceiling dead load (5.0 psf) on member(s), 3-4, 7-8, 4-16, 16-17, 7-17; Wall dead load (5.0psf) on member(s), 3-14, 8-12
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room, 12-14
- All bearings are assumed to be SYP No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 134 lb uplift at joint 15 and 134 lb uplift at joint 11.
- "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
- Design assumes 4x2 (flat orientation) purlins at oc spacing indicated, fastened to truss TC w/ 2-10d nails.
- Attic room checked for L/360 deflection.
- This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
- Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869; Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

LOAD CASE(S) Standard

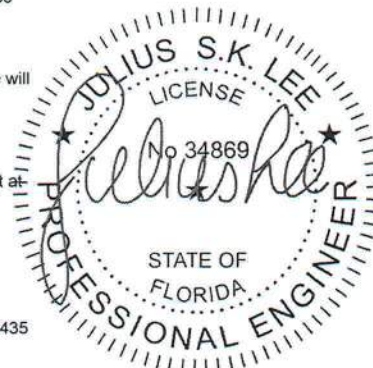
June 24, 2011



**WARNING** - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITTEK REFERENCE PAGE MH-7473 BEFORE USE.

Design valid for use only with MiTek connectors. This design is based only upon parameters shown, and is for an individual building component. Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to insure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult ANSI/TPI1 Quality Criteria, D58-89 and BCS11 Building Component Safety Information available from Truss Plate Institute, 583 D'Oroff Drive, Madison, WI 53719.

Your Company Name

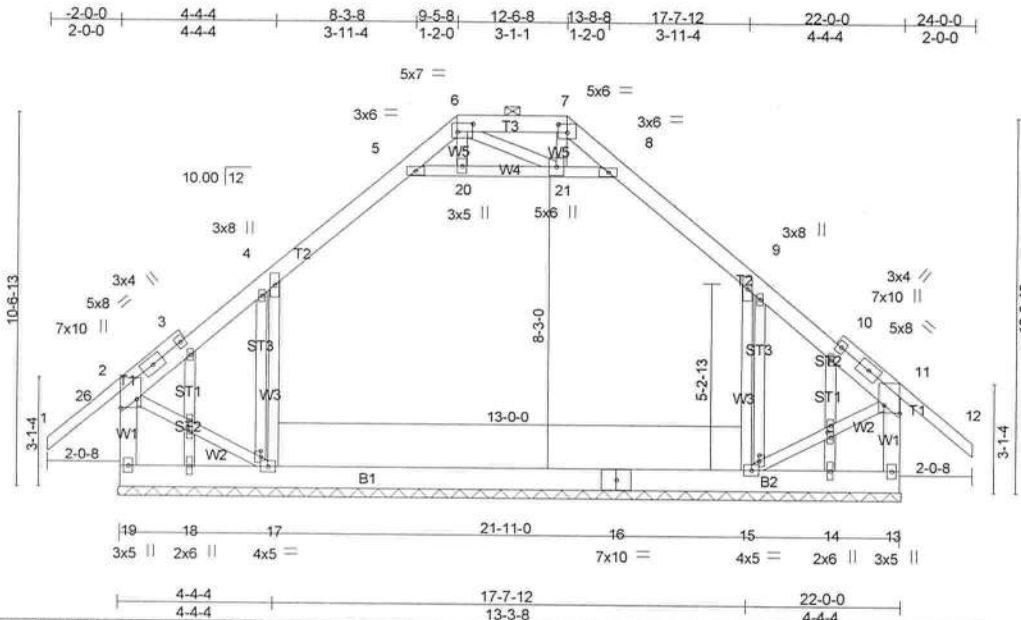


Job	Truss	Truss Type	Qty	Ply	ONEIL CONST. - NELSON RES.	
361993	T01G	GABLE	1	1		I4799426

Builders FrstSource, Lake City, FL 32055

Job Reference (optional)

7.140 s Oct 1 2009 MiTek Industries, Inc. Fri Jun 24 14:58:10 2011 Page 1



Scale = 1:62.1

Plate Offsets (X,Y): [2-Edge, 0-5-8], [6:0-5-4, 0-2-12], [7:0-3-0, 0-2-12], [11:0-2-12, 0-5-4], [15:0-2-0, 0-0-0], [17:0-2-0, 0-0-0], [22:0-1-12, 0-1-0], [24:0-1-12, 0-1-0]

<b>LOADING</b> (psf)	<b>SPACING</b>	<b>CSI</b>	<b>DEFL</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.61	in (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Plates Increase 1.25	BC 0.30	Vert(LL) -0.07 11-12 n/r 120		
BCLL 0.0	Lumber Increase 1.25	WB 0.24	Vert(TL) -0.10 11-12 n/r 90		
BCDL 5.0	Rep Stress Incr NO	(Matrix)	Horz(TL) 0.01 13 n/a n/a		
	Code FBC2007/TPI2002				
				Weight: 224 lb	

#### LUMBER

TOP CHORD 2 X 6 SYP No.1D \*Except\*  
T1: 2 X 4 SYP No.2  
BOT CHORD 2 X 8 SYP No.1D  
WEBS 2 X 4 SYP No.3 \*Except\*  
W3: 2 X 4 SYP No.2, W1: 2 X 6 SYP No.1D  
OTHERS 2 X 4 SYP No.3

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-7.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

#### REACTIONS

All bearings 22-0-0.  
(lb) - Max Horz 19=500(LC 5)  
Max Uplift All uplift 100 lb or less at joint(s) except 19=657(LC 4), 17=374(LC 6), 15=367(LC 7), 13=663(LC 5), 14=500(LC 1), 18=503(LC 1)  
Max Grav All reactions 250 lb or less at joint(s) except 19=1529(LC 1), 17=1006(LC 11), 15=995(LC 12), 13=1558(LC 1)

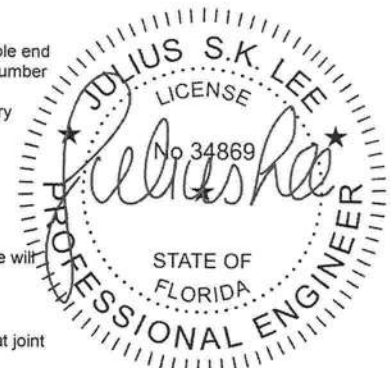
#### FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 2-3=950/483, 3-4=748/442, 4-5=1024/512, 5-6=535/286, 7-8=522/278, 8-9=1024/512, 9-10=751/437, 10-11=954/479, 2-19=1366/645, 11-13=1398/657, 6-7=390/271  
BOT CHORD 18-19=434/457, 17-18=434/457, 16-17=383/646, 15-16=383/646  
WEBS 5-20=266/321, 20-21=262/321, 8-21=280/334, 4-17=640/445, 9-15=634/440, 2-17=404/747, 11-15=411/756

#### NOTES (17-18)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-05; 110mph (3-second gust); TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1-2002.
- Provide adequate drainage to prevent water ponding.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 5.0psf.
- Ceiling dead load (5.0 psf) on member(s). 4-5, 8-9, 5-20, 20-21, 8-21; Wall dead load (5.0psf) on member(s). 4-17, 9-15
- All bearings are assumed to be SYP No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 657 lb uplift at joint 19, 374 lb uplift at joint 17, 367 lb uplift at joint 15, 663 lb uplift at joint 13, 500 lb uplift at joint 14 and 503 lb uplift at joint 18.
- "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.

Continued on page 2



June 24, 2011

Job	Truss	Truss Type	Qty	Ply	O'NEIL CONST. - NELSON RES.	14799426
361993	T01G	GABLE	1	1	Job Reference (optional)	

Builders FrstSource, Lake City, FL 32055

7.140 s Oct 1 2009 MiTek Industries, Inc. Fri Jun 24 14:58:10 2011 Page 2

#### NOTES (17-18)

- 14) Design assumes 4x2 (flat orientation) purlins at oc spacing indicated, fastened to truss TC w/ 2-10d nails.  
 15) Attic room checked for L/360 deflection.  
 16) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).  
 17) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.  
 18) Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869; Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

#### LOAD CASE(S) Standard

- 1) Regular: Lumber Increase=1.25, Plate Increase=1.25

##### Uniform Loads (plf)

Vert: 17-19=-10, 15-17=-50, 13-15=-10, 1-26=-54, 2-26=-114(F=-60), 2-4=-114(F=-60), 4-5=-124(F=-60), 5-6=-114(F=-60), 7-8=-114(F=-60), 8-9=-124(F=-60),  
 9-11=-114(F=-60), 11-12=-114(F=-60), 5-8=-10, 6-7=-114(F=-60)  
 Drag: 4-17=-10, 9-15=-10



**WARNING** - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE M11-7473 BEFORE USE.

Design valid for use only with MiTek connectors. This design is based only upon parameters shown, and is for an individual building component. Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to insure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult **ANSI/TPI1 Quality Criteria, DSB-89 and BCS11 Building Component Safety Information** available from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

Your Company Name



Job 361993	Truss T02	Truss Type ATTIC	Qty 4	Ply 1	O'NEIL CONST. - NELSON RES.	14799427
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Builders FrstSource, Lake City, FL 32055

Job Reference (optional)  
7.140 s Oct 1 2009 MiTek Industries, Inc. Fri Jun 24 14:58:11 2011 Page 1

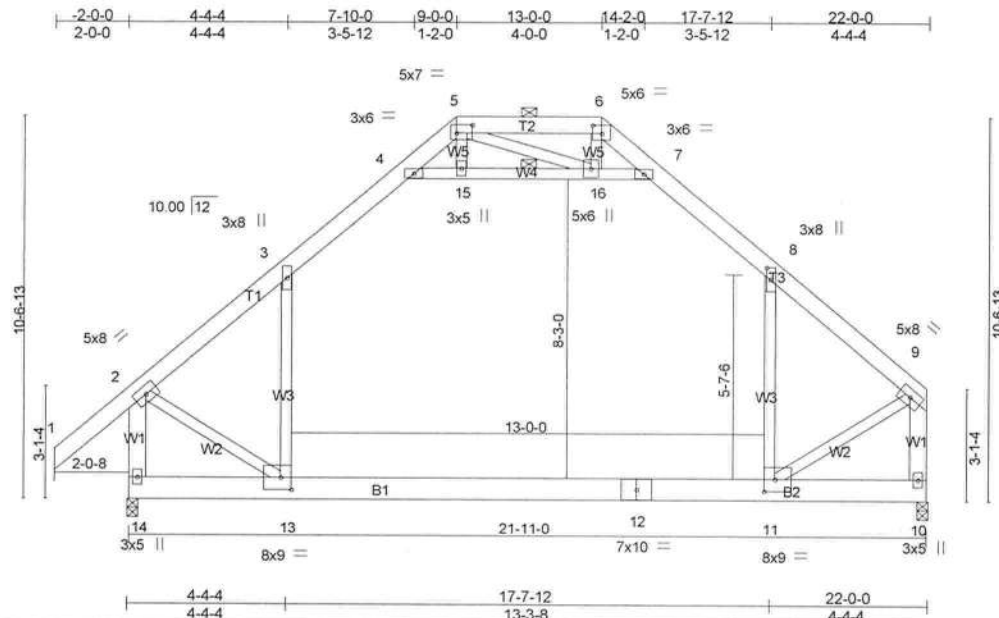


Plate Offsets (X,Y): [5:0-5-4,0-2-12], [6:0-3-0,0-2-12], [8:0-4-0,0-1-3], [11:0-3-8,0-4-0], [13:0-3-8,0-4-0]

LOADING (psf)	SPACING	CSI	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.67	Vert(LL)	-0.34 11-13	>762	360	MT20	244/190
TCDL 7.0	Plates Increase 1.25	BC 0.41	Vert(TL)	-0.54 11-13	>474	240		
BCLL 0.0	Lumber Increase 1.25	WB 0.35	Horz(TL)	0.01 10	n/a	n/a		
BCDL 5.0	Rep Stress Incr YES	(Matrix)	Wind(LL)	0.10 11-13	>999	240		
	Code FBC2007/TPI2002						Weight: 198 lb	

**LUMBER**  
TOP CHORD 2 X 6 SYP No.1D  
BOT CHORD 2 X 8 SYP 2400F 2.0E  
WEBS 2 X 4 SYP No.3 \*Except\*  
W3: 2 X 4 SYP No.2, W1: 2 X 6 SYP No.1D

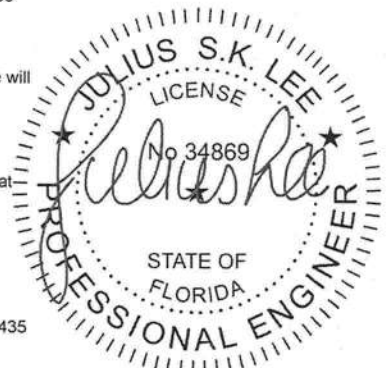
**BRACING**  
TOP CHORD Structural wood sheathing directly applied or 5-8-9 oc purlins, except end verticals, and 2-0-0 oc purlins (10-0-0 max.); 5-6.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
WEBS 1 Row at midpt 4-7

**REACTIONS** (lb/size) 14=1608/0-3-8, 10=1472/0-3-8  
Max Horz 14=437(LC 5)  
Max Uplift 14=133(LC 6), 10=12(LC 7)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1486/258, 3-4=-1012/395, 4-5=0/318, 6-7=0/351, 7-8=-1013/399, 8-9=-1463/221,  
2-14=-1891/382, 9-10=-1730/213, 5-6=0/531  
BOT CHORD 13-14=-419/382, 12-13=-96/963, 11-12=-96/963  
WEBS 4-15=-1322/355, 15-16=-1313/356, 7-16=-1364/381, 3-13=0/660, 8-11=0/636,  
2-13=-102/1096, 9-11=-126/1091

- NOTES** (13-14)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-05; 110mph (3-second gust); TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Ceiling dead load (5.0 psf) on member(s). 3-4, 7-8, 4-15, 15-16, 7-16; Wall dead load (5.0psf) on member(s). 3-13, 8-11
  - Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 11-13
  - All bearings are assumed to be SYP No.2
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 133 lb uplift at joint 14 and 12 lb uplift at joint 10.
  - "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
  - Design assumes 4x2 (flat orientation) purlins at oc spacing indicated, fastened to truss TC w/ 2-10d nails.
  - Attic room checked for L/360 deflection.
  - This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
  - Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869: Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

**LOAD CASE(S)** Standard



June 24, 2011

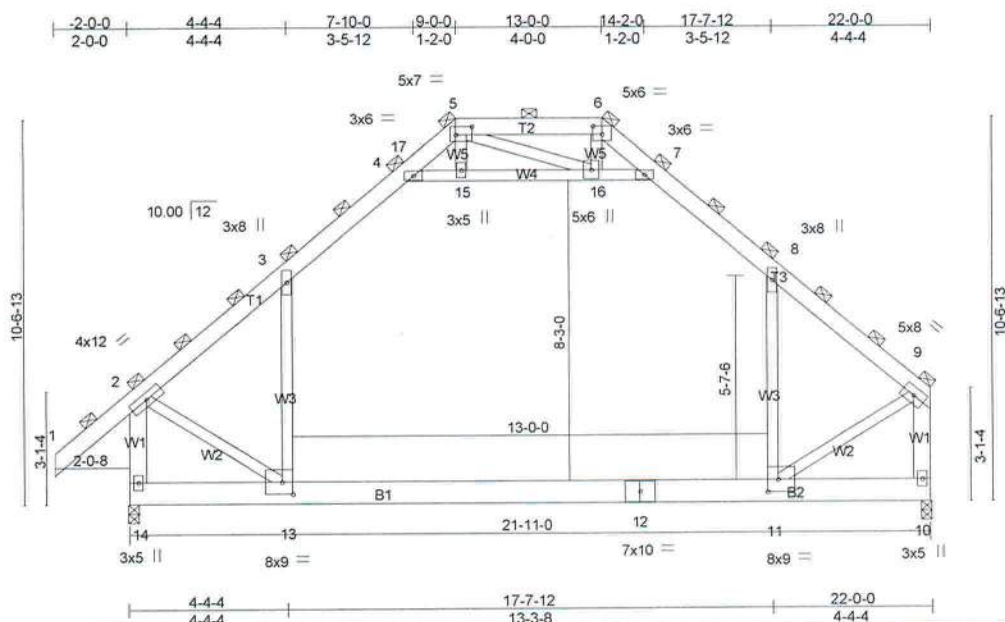


**WARNING** - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITTEK REFERENCE PAGE MH-7473 BEFORE USE.  
Design valid for use only with Mittek connectors. This design is based only upon parameters shown, and is for an individual building component. Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to insure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult ANSI/TPI1 Quality Criteria, D58-89 and BCS11 Building Component Safety Information available from Truss Plate Institute, 583 D'Onotrio Drive, Madison, WI 53719.

Your Company Name

Job 361993	Truss T03	Truss Type ATTIC	Qty 2	Ply 2	O'NEIL CONST. - NELSON RES. Job Reference (optional) 7.140 s Oct 1 2009 Mitek Industries, Inc. Fri Jun 24 14:58:11 2011 Page 1	14799428
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Builders FrstSource, Lake City, FL 32055



Scale = 1:60.2

Plate Offsets (X,Y): [5:0-5-4,0-2-12], [6:0-3-0,0-2-12], [11:0-3-8,0-4-0], [13:0-3-8,0-4-0]

LOADING (psf)	SPACING	4-0-0	CSI	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plates Increase	1.25	TC 0.97	Vert(LL)	-0.38 11-13	>685	360	MT20	244/190
TCDL 7.0	Lumber Increase	1.25	BC 0.53	Vert(TL)	-0.60 11-13	>429	240		
BCLL 0.0	Rep Stress Incr	NO	WB 0.64	Horz(TL)	0.01 10	n/a	n/a		
BCDL 5.0	Code FBC2007/TPI2002		(Matrix)	Wind(LL)	0.17 11-13	>999	240		
								Weight: 395 lb	

#### LUMBER

TOP CHORD 2 X 6 SYP No.1D  
BOT CHORD 2 X 8 SYP 2400F 2.0E  
WEBS 2 X 4 SYP No.3 \*Except\*  
W3: 2 X 4 SYP No.2, W1: 2 X 6 SYP No.1D

#### REACTIONS

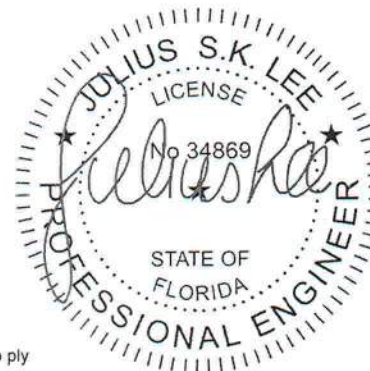
(lb/size) 14=4940/0-3-8, 10=3810/0-3-8  
Max Horz 14=874(LC 4)  
Max Uplift 14=701(LC 5), 10=110(LC 6)

#### FORCES

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-3935/347, 3-4=-2659/447, 4-17=0/754, 5-17=0/786, 6-7=-15/897, 7-8=-2429/418,  
8-9=-3562/240, 2-14=-4894/504, 9-10=-4192/239, 5-6=-105/1351  
BOT CHORD 13-14=-920/681, 12-13=-335/2383, 11-12=-335/2383  
WEBS 4-15=-3288/450, 15-16=-3269/452, 7-16=-3659/584, 3-13=0/1368, 8-11=-35/1609,  
2-13=-278/2474, 9-11=-443/2702, 6-16=-156/334, 5-16=-596/545

#### NOTES

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2 X 6 - 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.
- 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.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-05; 110mph (3-second gust); TCCL=4.2psf; BCCL=3.0psf; h=18ft; Cat. II; Exp C; enclosed; MWFRS (low-rise); end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Ceiling dead load (5.0 psf) on member(s). 3-4, 7-8, 4-15, 15-16, 7-16; Wall dead load (5.0psf) on member(s). 3-13, 8-11
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 11-13
- All bearings are assumed to be SYP No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 701 lb uplift at joint 14 and 110 lb uplift at joint 10.
- "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
- Design assumes 4x2 (flat orientation) purlins at oc spacing indicated, fastened to truss TC w/ 2-10d nails.
- Attic room checked for L/360 deflection.
- This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
- Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869; Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435



June 24, 2011



**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 BEFORE USE.**

Design valid for use only with Mitek connectors. This design is based only upon parameters shown, and is for an individual building component. Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to insure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult **ANSI/TPI1 Quality Criteria, D58-89 and BCS11 Building Component Safety Information** available from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

Your Company Name



Job 361993	Truss T03	Truss Type ATTIC	Qty 2	Ply 2	O'NEIL CONST. - NELSON RES.  Job Reference (optional)	I4799428
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Builders FrstSource, Lake City, FL 32055

7.140 s Oct 1 2009 MiTek Industries, Inc. Fri Jun 24 14:58:11 2011 Page 2

#### LOAD CASE(S) Standard

1) Regular: Lumber Increase=1.25, Plate Increase=1.25

##### Uniform Loads (plf)

Vert: 13-14=-180(F=-160), 11-13=-220, 10-11=-180(F=-160), 1-2=-108, 5-17=-108, 6-7=-108, 7-8=-128, 8-9=-108, 4-7=-20, 5-6=-108

Drag: 3-13=-20, 8-11=-20

##### Trapezoidal Loads (plf)

Vert: 2=-315(F=-207)-to-3=-272(F=-164), 3=-292(F=-164)-to-4=-258(F=-130), 4=-238(F=-130)-to-17=-233(F=-125)



**WARNING** - Verify design parameters and READ NOTES ON THIS AND INCLUDED MYTEK REFERENCE PAGE ML-7473 BEFORE USE.

Design valid for use only with MiTek connectors. This design is based only upon parameters shown, and is for an individual building component. Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to insure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult **ANSI/TPI1 Quality Criteria, D58-89 and BCS11 Building Component Safety Information** available from Truss Plate Institute, 583 D'Oro Drive, Madison, WI 53719.

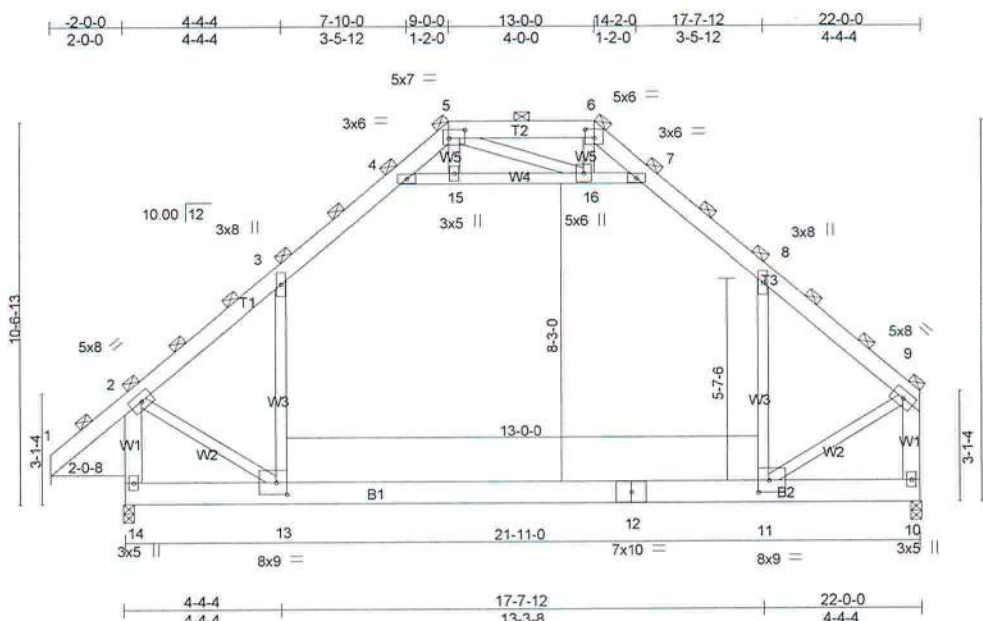
Your Company Name

Job 361993	Truss T04	Truss Type ATTIC	Qty 1	Ply 2	O'NEIL CONST. - NELSON RES.	14799429
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Builders FrstSource, Lake City, FL 32055

Job Reference (optional)

7.140 s Oct 1 2009 MiTek Industries, Inc. Fri Jun 24 14:58:12 2011 Page 1



Scale = 1:60.7

Plate Offsets (X,Y): [5.0-5.4,0-2-12], [6.0-3.0,0-2-12], [11.0-3.8,0-4-0], [13.0-3.8,0-4-0]

LOADING (psf)	SPACING	CSI	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	3-0-0	TC 0.57	Vert(LL)	-0.25 11-13	>999	360	MT20	244/190
TCDL 7.0	Plates Increase 1.25	BC 0.34	Vert(TL)	-0.41 11-13	>632	240		
BCLL 0.0 *	Lumber Increase 1.25	WB 0.26	Horz(TL)	0.01 10	n/a	n/a		
BCDL 5.0	Rep Stress Incr NO	(Matrix)	Wind(LL)	0.08 11-13	>999	240		
	Code FBC2007/TPI2002						Weight: 395 lb	

#### LUMBER

TOP CHORD 2 X 6 SYP No.1D  
BOT CHORD 2 X 8 SYP 2400F 2.0E  
WEBS 2 X 4 SYP No.3 \*Except\*  
W3: 2 X 4 SYP No.2, W1: 2 X 6 SYP No.1D

#### BRACING

TOP CHORD 2-0-0 oc purlins (6-0-0 max.), except end verticals  
(Switched from sheeted: Spacing > 2-0-0).  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
JOINTS 1 Brace at Jt(s): 5, 9, 6, 2

#### REACTIONS

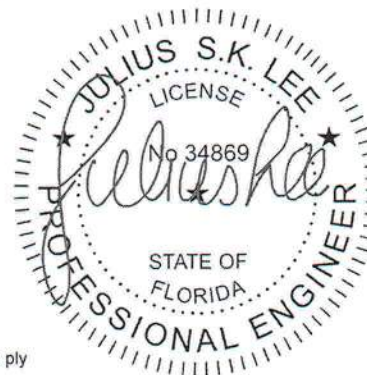
(lb/size) 14=2412/0-3-8, 10=2208/0-3-8  
Max Horz 14=655(LC 4)  
Max Uplift 14=199(LC 5), 10=18(LC 6)

#### FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 2-3=-2229/78, 3-4=-1518/228, 4-5=0/477, 6-7=0/526, 7-8=-1519/233, 8-9=-2195/71,  
2-14=-2836/64, 9-10=-2596/25, 5-6=0/796  
BOT CHORD 13-14=-628/573, 12-13=-144/1445, 11-12=-144/1445  
WEBS 4-15=-1984/250, 15-16=-1970/251, 7-16=-2045/266, 3-13=0/989, 8-11=0/953,  
2-13=-153/1644, 9-11=-189/1636, 5-16=-299/300

#### NOTES (15-16)

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2 X 6 - 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.
- 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.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-05; 110mph (3-second gust); TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; enclosed; MWFRS (low-rise); end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Ceiling dead load (5.0 psf) on member(s). 3-4, 7-8, 4-15, 15-16, 7-16; Wall dead load (5.0psf) on member(s). 3-13, 8-11
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 11-13
- All bearings are assumed to be SYP No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 199 lb uplift at joint 14 and 18 lb uplift at joint 10.
- "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
- Design assumes 4x2 (flat orientation) purlins at oc spacing indicated, fastened to truss TC w/ 2-10d nails.
- Attic room checked for L/360 deflection.
- This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
- Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869; Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435



June 24, 2011

Continued on page 2



**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITTEK REFERENCE PAGE MIT-7473 BEFORE USE.**

Design valid for use only with MiTek connectors. This design is based only upon parameters shown, and is for an individual building component. Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to insure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult **ANSI/TPI1 Quality Criteria, D58-89 and BCS11 Building Component Safety Information** available from Truss Plate Institute, 583 D'Oro Drive, Madison, WI 53719.

Your Company Name

Job 361993	Truss T04	Truss Type ATTIC	Qty 1	Ply 2	O'NEIL CONST. - NELSON RES. Job Reference (optional)	I4799429
Builders FrstSource, Lake City, FL 32055			7.140 s Oct 1 2009 MiTek Industries, Inc. Fri Jun 24 14:58:12 2011 Page 2			
LOAD CASE(S) Standard						



**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-T-473 BEFORE USE.**  
Design valid for use only with MiTek connectors. This design is based only upon parameters shown, and is for an individual building component. Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to insure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult **ANSI/TPI1 Quality Criteria, DSB-89 and BCS11 Building Component Safety Information** available from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

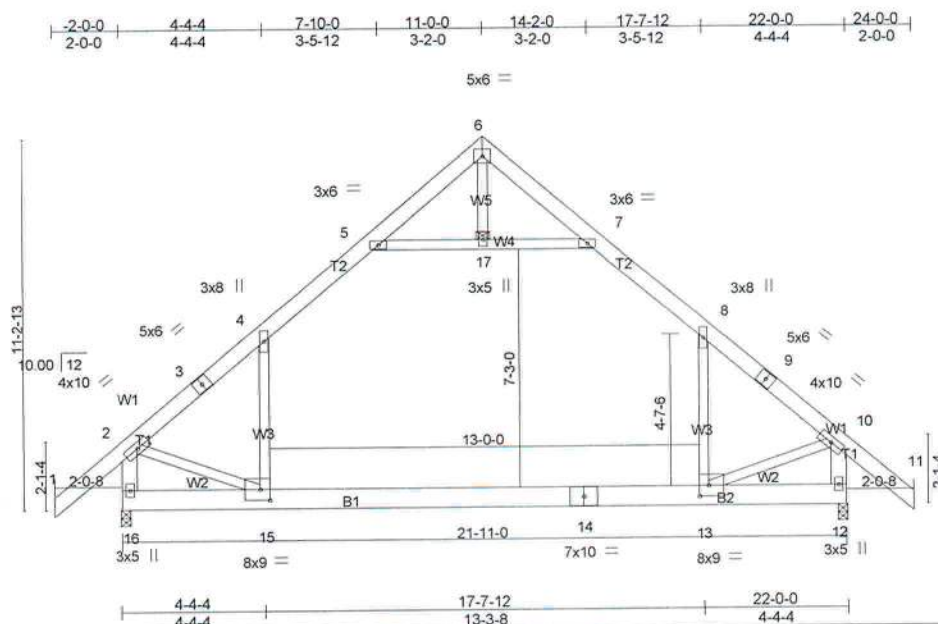
Your Company Name



Job	Truss	Truss Type	Qty	Ply	O'NEIL CONST. - NELSON RES.	14799430
361993	T05	ATTIC	2	1	Job Reference (optional)	

Builders FrstSource, Lake City, FL 32055

7.140 s Oct 1 2009 MiTek Industries, Inc. Fri Jun 24 14:58:12 2011 Page 1



Scale = 1:66.7

Plate Offsets (X,Y): [13:0-3-8,0-4-0], [15:0-3-8,0-4-0]

LOADING (psf)	SPACING	2-0-0	CSI	DEFL	in (loc)	L/defl	L/d	PLATES	GRIP
TCLL 20.0	Plates Increase	1.25	TC 0.76	Vert(LL)	-0.40 13-15	>651	360	MT20	244/190
TCDL 7.0	Lumber Increase	1.25	BC 0.43	Vert(TL)	-0.64 13-15	>402	240		
BCLL 0.0	Rep Stress Incr	YES	WB 0.32	Horz(TL)	0.01 12	n/a	n/a		
BCDL 5.0	Code FBC2007/TPI2002		(Matrix)	Wind(LL)	0.11 13-15	>999	240		Weight: 193 lb

#### LUMBER

TOP CHORD 2 X 6 SYP No.1D  
BOT CHORD 2 X 8 SYP 2400F 2.0E  
WEBS 2 X 4 SYP No.3 \*Except\*  
W3; 2 X 4 SYP No.2, W1: 2 X 6 SYP No.1D

#### BRACING

TOP CHORD  
BOT CHORD  
WEBS

Structural wood sheathing directly applied or 4-11-2 oc purlins, except end verticals.  
Rigid ceiling directly applied or 10-0-0 oc bracing.  
1 Row at midpt 5-7

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS (lb/size) 16=1591/0-3-8, 12=1591/0-3-8  
Max Horz 16=395(LC 5)  
Max Uplift 16=158(LC 6), 12=158(LC 7)

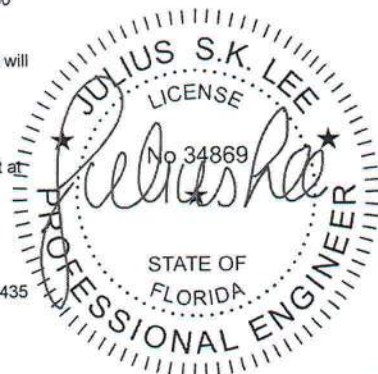
FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 2-3=-1677/195, 3-4=-1550/212, 4-5=-1092/371, 7-8=-1092/371, 8-9=-1550/212,  
9-10=-1677/195, 2-16=-1841/386, 10-12=-1841/386  
BOT CHORD 15-16=-391/490, 14-15=0/1067, 13-14=0/1067  
WEBS 5-17=-1261/388, 7-17=-1261/388, 4-15=-11/840, 8-13=-10/840, 2-15=-92/991,  
10-13=-99/991

#### NOTES (11-12)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-05; 110mph (3-second gust); TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Ceiling dead load (5.0 psf) on member(s). 4-5, 7-8, 5-17, 7-17; Wall dead load (5.0psf) on member(s). 4-15, 8-13
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 13-15
- All bearings are assumed to be SYP No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 158 lb uplift at joint 16 and 158 lb uplift at joint 12.
- "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
- Attic room checked for L/360 deflection.
- This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
- Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869; Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

LOAD CASE(S) Standard



June 24, 2011



**WARNING** - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITTEK REFERENCE PAGE M11-7473 BEFORE USE.

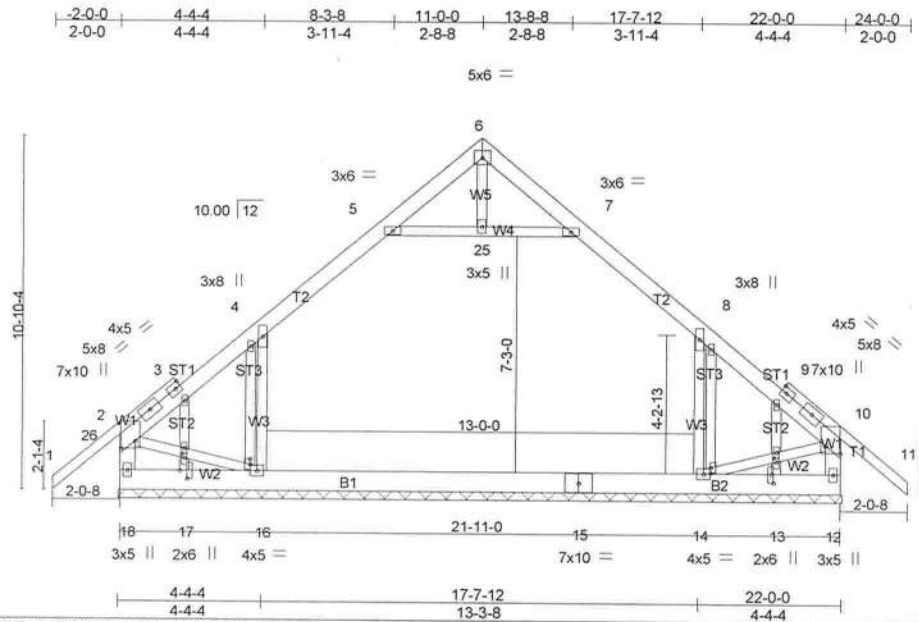
Design valid for use only with MiTek connectors. This design is based only upon parameters shown, and is for an individual building component. Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to insure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult ANSI/TPI1 Quality Criteria, D58-87 and BCS11 Building Component Safety Information available from Truss Plate Institute, 583 D'Oro Drive, Madison, WI 53719.

Your Company Name

Job	Truss	Truss Type	Qty	Ply	O'NEIL CONST. - NELSON RES.	14799431
381993	T05G	GABLE	1	1		

Builders FirstSource, Lake City, FL 32055

Job Reference (optional)  
7.140 s Oct 1 2009 MiTek Industries, Inc. Fri Jun 24 14:58:13 2011 Page 1



Scale = 1:67.2

Plate Offsets (X,Y): [2'-0-2-12,0-5-4], [10'-0-2-12,0-5-4], [13'-0-3-0,0-0-12], [14'-0-2-0,0-0-0], [16'-0-2-0,0-0-0], [17'-0-3-0,0-2-12], [20'-0-1-8,0-1-0], [23'-0-1-8,0-1-0]

LOADING (psf)	SPACING	CSI	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plates Increase 1.25	TC 0.61	Vert(LL)	-0.07 10-11	n/r	120	MT20	244/190
TCDL 7.0	Lumber Increase 1.25	BC 0.30	Vert(TL)	-0.10 10-11	n/r	90		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.21	Horz(TL)	0.01 12	n/a	n/a		
BCDL 5.0	Code FBC2007/TPI2002	(Matrix)						
							Weight: 208 lb	

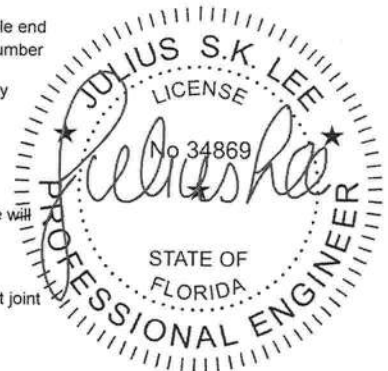
LUMBER	BRACING
TOP CHORD 2 X 6 SYP No.1D *Except* T1: 2 X 4 SYP No.2	TOP CHORD Structural wood sheathing directly applied or 6'-0-0 oc purlins, except end verticals.
BOT CHORD 2 X 8 SYP No.1D	BOT CHORD Rigid ceiling directly applied or 10'-0-0 oc bracing.
WEBS 2 X 4 SYP No.3 *Except* W3: 2 X 4 SYP No.2, W1: 2 X 6 SYP No.1D	
OTHERS 2 X 4 SYP No.3	

REACTIONS	
All bearings 22'-0-0.	
(lb) - Max Horz 18=-491(LC 4)	
Max Uplift All uplift 100 lb or less at joint(s) except 18=-465(LC 7), 16=-338(LC 6), 14=-332(LC 7), 12=-471(LC 6), 13=-524(LC 1), 17=-526(LC 1)	
Max Grav All reactions 250 lb or less at joint(s) except 18=1416(LC 1), 16=1135(LC 11), 14=1123(LC 12), 12=1446(LC 1)	

FORCES	
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD 2-3=-986/341, 3-4=-737/325, 4-5=-1043/485, 5-6=-420/178, 6-7=-420/180, 7-8=-1042/485, 8-9=-740/322, 9-10=-990/338, 2-18=-1230/539, 10-12=-1263/551	
BOT CHORD 17-18=-398/440, 16-17=-398/440, 15-16=-236/670, 14-15=-236/670	
WEBS 5-25=-431/410, 7-25=-431/410, 4-16=-613/454, 8-14=-606/447, 2-16=-174/654, 10-14=-219/669	

- NOTES** (15-16)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-05; 110mph (3-second gust); TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1-2002.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 2'-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3'-6-0 tall by 2'-0-0 wide will fit between the bottom chord and any other members, with BCDL = 5.0psf.
  - Ceiling dead load (5.0 psf) on member(s). 4-5, 7-8, 5-25, 7-25; Wall dead load (5.0psf) on member(s). 4-16, 8-14
  - All bearings are assumed to be SYP No.2.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 465 lb uplift at joint 18, 338 lb uplift at joint 16, 332 lb uplift at joint 14, 471 lb uplift at joint 12, 524 lb uplift at joint 13 and 526 lb uplift at joint 17.
  - "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
  - Attic room checked for L/360 deflection.
  - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

Continued on page 2



June 24, 2011

**WARNING** - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITTEK REFERENCE PAGE M11-7473 BEFORE USE.  
Design valid for use only with MiTek connectors. This design is based only upon parameters shown, and is for an individual building component. Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to insure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult ANSI/TPI1 Quality Criteria, D58-89 and BCS11 Building Component Safety Information available from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

Your Company Name

Job 361993	Truss T05G	Truss Type GABLE	Qty 1	Ply 1	O'NEIL CONST. - NELSON RES.  Job Reference (optional)	I4799431
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Builders FrstSource, Lake City, FL 32055 7.140 s Oct 1 2009 MiTek Industries, Inc. Fri Jun 24 14:58:13 2011 Page 2

15) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

16) Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869: Address: 1109 Coastal Bay Blvd, Boynton Beach, FL 33435

**LOAD CASE(S) Standard**

1) Regular: Lumber Increase=1.25, Plate Increase=1.25

Uniform Loads (plf)

Vert: 16-18=-10, 14-16=-50, 12-14=-10, 1-26=-54, 2-26=-114(F=-60), 2-4=-114(F=-60), 4-5=-124(F=-60), 5-6=-114(F=-60), 6-7=-114(F=-60), 7-8=-124(F=-60), 8-10=-114(F=-60), 10-11=-114(F=-60), 5-7=-10

Drag: 4-16=-10, 8-14=-10

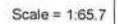


**WARNING** - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MI-7473 BEFORE USE.

Design valid for use only with MiTek connectors. This design is based only upon parameters shown, and is for an individual building component. Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to insure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult **ANSI/TPI1 Quality Criteria, DSB-89 and BCS11 Building Component Safety Information** available from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

Your Company Name





June 24, 2011







Job 381993	Truss T07	Truss Type COMMON	Qty 6	Ply 1	O'NEIL CONST. - NELSON RES.	14799434
Builders FrstSource, Lake City, FL 32055			Job Reference (optional) 7.140 s Oct 1 2009 MiTek Industries, Inc. Fri Jun 24 14:58:15 2011 Page 1			

Plate Offsets (X,Y): [1:0-1-9,0-1-8], [5:0-1-9,0-1-8], [7:0-4-0,0-3-0]							
LOADING (psf)	SPACING	2-0-0	CSI	DEFL	in (loc)	l/defl	L/d
TCLL 20.0	Plates Increase	1.25	TC 0.44	Vert(LL)	-0.13	6-7	>999
TCDL 7.0	Lumber Increase	1.25	BC 0.60	Vert(TL)	-0.22	6-7	>999
BCLL 0.0	Rep Stress Incr	YES	WB 0.52	Horz(TL)	-0.02	6	n/a
BCDL 5.0	Code FBC2007/TPI2002		(Matrix)	Wind(LL)	0.41	6-7	>579
						PLATES	
						MT20	
						GRIP	
						244/190	
						Weight: 137 lb	

<b>LUMBER</b> TOP CHORD 2 X 4 SYP No.2 BOT CHORD 2 X 4 SYP No.2 WEBS 2 X 4 SYP No.3	<b>BRACING</b> TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins. BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. WEBS T-Brace: 2 X 4 SYP No.3 - 3-7 Fasten T and I braces to narrow edge of web with 10d Common wire nails, 9in o.c., with 4in minimum end distance. Brace must cover 90% of web length. <div style="border: 1px solid black; padding: 5px; margin-top: 10px;">           MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.         </div>
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**REACTIONS** (lb/size) 8=768/0-5-8, 6=768/0-5-8  
 Max Horz 8=-352(LC 4)  
 Max Uplift 8=-622(LC 6), 6=-622(LC 7)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-528/928, 3-4=-528/928  
 BOT CHORD 7-8=-484/392, 6-7=-474/392  
 WEBS 3-7=-907/308, 2-8=-797/847, 4-6=-797/847

**NOTES** (9-10)  
 1) Unbalanced roof live loads have been considered for this design.  
 2) Wind: ASCE 7-05; 110mph (3-second gust); TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) zone; cantilever left and right exposed; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60  
 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.  
 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.  
 5) All bearings are assumed to be SYP No.2.  
 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 622 lb uplift at joint 8 and 622 lb uplift at joint 6.  
 7) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.  
 8) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.  
 9) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.  
 10) Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869; Address: 1109 Coastal Bay Blvd, Boynton Beach, FL 33435

**LOAD CASE(S)** Standard



June 24, 2011

**WARNING** - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITTEK REFERENCE PAGE MIT-7473 BEFORE USE.  
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Your Company Name

Job	Truss	Truss Type	Qty	Ply	O'NEIL CONST. - NELSON RES.	i4799435
361993	T07G	GABLE	1	1	Job Reference (optional)	

Builders FirstSource, Lake City, FL 32055

7.140 s Oct 1 2009 MiTek Industries, Inc. Fri Jun 24 14:58:16 2011 Page 1

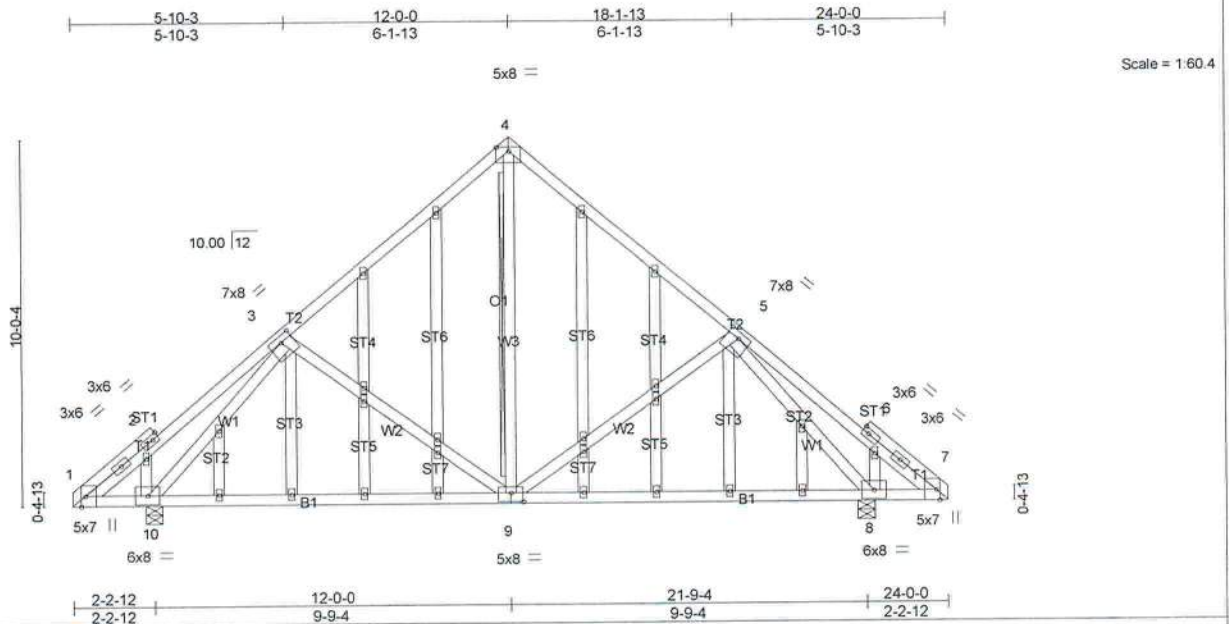


Plate Offsets (X,Y): [1:0-3-8,Edge], [3:0-4-0,0-2-0], [5:0-4-0,0-2-0], [7:0-3-8,Edge], [9:0-4-0,0-3-0]

LOADING (psf)	SPACING	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plates Increase	1.25	TC 1.00	Vert(LL)	-0.13	8-9	>999	360	MT20	244/190
TCDL 7.0	Lumber Increase	1.25	BC 0.73	Vert(TL)	-0.23	8-9	>999	240		
BCLL 0.0	Rep Stress Incr	NO	WB 1.00	Horz(TL)	-0.04	8	n/a	n/a		
BCDL 5.0	Code FBC2007/TPI2002		(Matrix)	Wind(LL)	0.43	8-9	>556	240		
									Weight: 204 lb	

#### LUMBER

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

#### BRACING

TOP CHORD  
BOT CHORD  
WEBS

Structural wood sheathing directly applied or 5-2-10 oc purlins.  
Rigid ceiling directly applied or 5-0-14 oc bracing.  
T-Brace: 2 X 4 SYP No.3 - 4-9  
Fasten T and I braces to narrow edge of web with 10d Common wire nails, 9in o.c., with 4in minimum end distance.  
Brace must cover 90% of web length.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

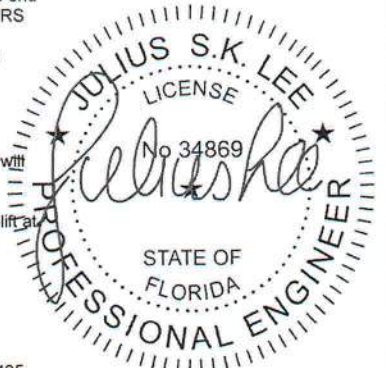
REACTIONS (lb/size) 10=1488/0-5-8, 8=1488/0-5-8  
Max Horz 10=-423(LC 4)  
Max Uplift 10=-1670(LC 6), 8=-1670(LC 7)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 1-2=-234/288, 2-3=-366/539, 3-4=-1066/1768, 4-5=-1066/1768, 5-6=-366/539, 6-7=-234/288  
BOT CHORD 1-10=-236/289, 9-10=-1215/838, 8-9=-1215/838, 7-8=-236/288  
WEBS 4-9=-1176/430, 5-9=-288/503, 3-9=-288/503, 3-10=-1699/2301, 5-8=-1699/2301

#### NOTES (13-14)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-05; 110mph (3-second gust); TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1-2002.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide with fit between the bottom chord and any other members.
- All bearings are assumed to be SYP No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1670 lb uplift at joint 10 and 1670 lb uplift at joint 8.
- "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
- Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
- This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
- Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869: Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33465



June 24, 2011

Continued on page 2  
LOAD CASE(S) Standard



**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITTEK REFERENCE PAGE M1-7473 BEFORE USE.**  
Design valid for use only with MiTek connectors. This design is based only upon parameters shown, and is for an individual building component. Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to insure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult **ANSI/TPI1 Quality Criteria, D58-89 and BCS11 Building Component Safety Information** available from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

Your Company Name

Job 361993	Truss T07G	Truss Type GABLE	Qty 1	Ply 1	O'NEIL CONST. - NELSON RES.	14799435
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Builders FrstSource, Lake City, FL 32055

Job Reference (optional)  
7.140 s Oct 1 2009 MiTek Industries, Inc. Fri Jun 24 14:58:16 2011 Page 2

#### LOAD CASE(S) Standard

1) Regular: Lumber Increase=1.25, Plate Increase=1.25

Uniform Loads (plf)

Vert: 1-4=-114(F=-60), 4-7=-114(F=-60), 1-7=-10



**WARNING** - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 BEFORE USE.

Design valid for use only with MiTek connectors. This design is based only upon parameters shown, and is for an individual building component. Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to insure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult **ANSI/TPI1 Quality Criteria, D58-89 and BCS11 Building Component Safety Information** available from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

Your Company Name



Job 361993	Truss T08	Truss Type COMMON	Qty 2	Ply 1	O'NEIL CONST. - NELSON RES. Job Reference (optional)	i4799436
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Builders FirstSource, Lake City, FL 32055

7,140 s Oct 1 2009 MiTek Industries, Inc. Fri Jun 24 14:58:16 2011 Page 1

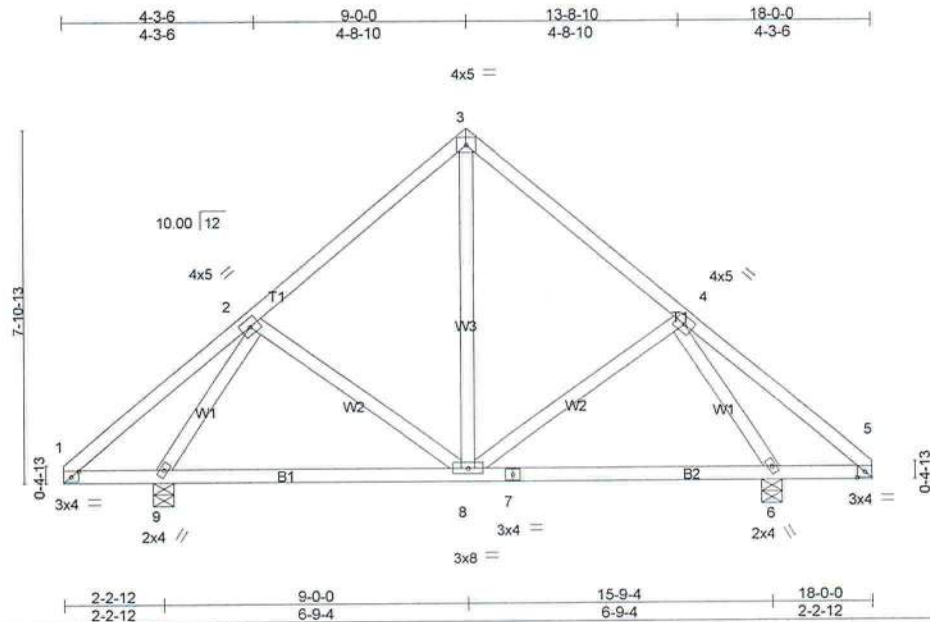


Plate Offsets (X,Y): [1:0-2-1,0-1-8], [5:0-2-1,0-1-8]

LOADING (psf)	SPACING	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plates Increase 1.25	TC 0.22	Vert(LL) -0.03	6-8	>999	360		MT20	244/190
TCDL 7.0	Lumber Increase 1.25	BC 0.19	Vert(TL) -0.05	6-8	>999	240			
BCLL 0.0 *	Rep Stress Incr YES	WB 0.18	Horz(TL) 0.00	6	n/a	n/a			
BCDL 5.0	Code FBC2007/TPI2002	(Matrix)	Wind(LL) 0.01	8	>999	240			
								Weight: 101 lb	

#### LUMBER

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

#### BRACING

TOP CHORD  
BOT CHORD

Structural wood sheathing directly applied or 6-0-0 oc purlins.  
Rigid ceiling directly applied or 6-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS (lb/size) 9=576/0-5-8, 6=576/0-5-8  
Max Horz 9=265(LC 4)  
Max Uplift 9=253(LC 6), 6=253(LC 7)

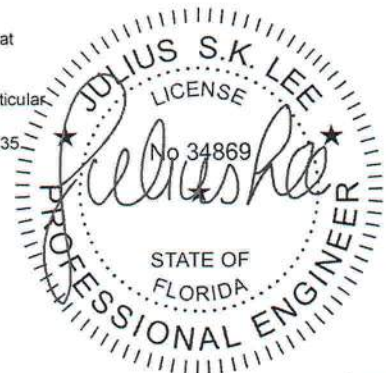
FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 2-3=-342/279, 3-4=-342/279  
BOT CHORD 8-9=-216/258  
WEBS 2-9=-573/509, 4-6=-573/509

#### NOTES (8-9)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-05; 110mph (3-second gust); TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SYP No.2 .
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 253 lb uplift at joint 9 and 253 lb uplift at joint 6.
- "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
- This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
- Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869; Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435.

LOAD CASE(S) Standard



June 24, 2011



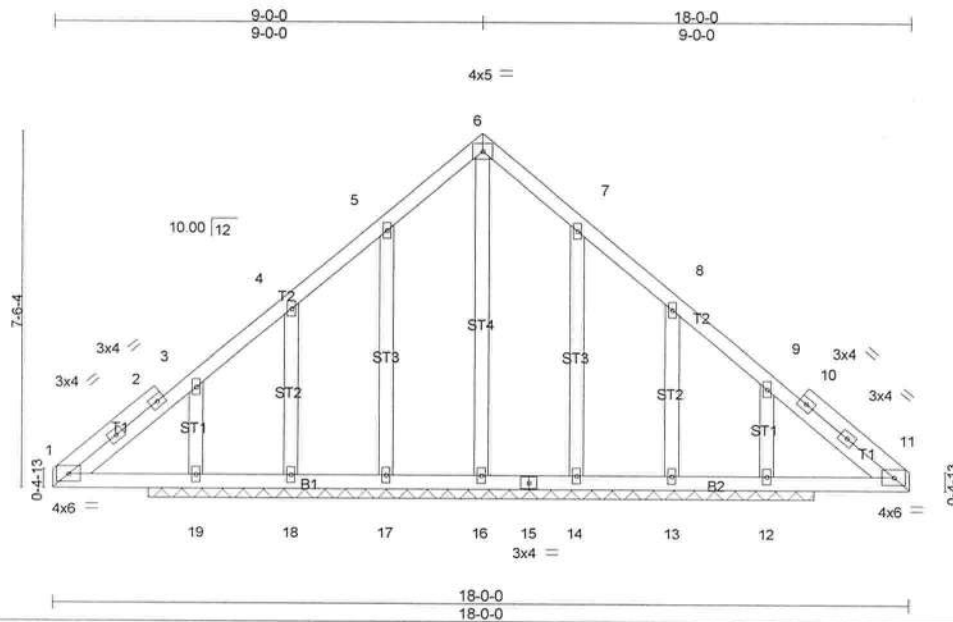
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITTEK REFERENCE PAGE MH-7473 BEFORE USE.**  
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Your Company Name

Job 361993	Truss T08G	Truss Type GABLE	Qty 1	Ply 1	O'NEIL CONST. - NELSON RES.	14799437
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Builders FirstSource, Lake City, FL 32055

Job Reference (optional)  
7.140 s Oct 1 2009 MiTek Industries, Inc. Fri Jun 24 14:58:17 2011 Page 1



Scale = 1:48.5

<b>LOADING</b> (psf)	<b>SPACING</b>	<b>CSI</b>	<b>DEFL</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.26	in (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Plates Increase 1.25	BC 0.31	Vert(LL) n/a - n/a 999		
BCLL 0.0	Lumber Increase 1.25	WB 0.49	Vert(TL) n/a - n/a 999		
BCDL 5.0	Rep Stress Incr NO	(Matrix)	Horz(TL) 0.01 12 n/a n/a		
	Code FBC2007/TPI2002			Weight: 112 lb	

**LUMBER**  
TOP CHORD 2 X 4 SYP No.2  
BOT CHORD 2 X 4 SYP No.2  
OTHERS 2 X 4 SYP No.3

**BRACING**  
TOP CHORD Structural wood sheathing directly applied or 10-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS** All bearings 14-0-0.  
(lb) - Max Horz 19=314(LC 4)  
Max Uplift All uplift 100 lb or less at joint(s) 16 except 17=261(LC 6), 18=360(LC 5), 19=364(LC 4), 14=261(LC 7), 13=354(LC 4), 12=363(LC 7)  
Max Grav All reactions 250 lb or less at joint(s) 18, 13 except 16=553(LC 1), 17=300(LC 10), 19=434(LC 10), 14=300(LC 11), 12=434(LC 11)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=331/256, 2-3=370/380, 3-4=237/333, 4-5=101/353, 5-6=13/333, 6-7=9/333, 7-8=101/353, 8-9=231/333, 9-10=370/380, 10-11=331/256  
BOT CHORD 1-19=210/318, 18-19=210/318, 17-18=210/318, 16-17=210/318, 15-16=210/318, 14-15=210/318, 13-14=210/318, 12-13=210/318, 11-12=210/318  
WEBS 6-16=537/100, 5-17=266/270, 4-18=196/259, 3-19=339/315, 7-14=266/270, 8-13=196/258, 9-12=339/317

- NOTES** (13-14)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-05; 110mph (3-second gust); TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1-2002.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - All bearings are assumed to be SYP No.2.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16 except (jt=lb) 17=261, 18=360, 19=364, 14=261, 13=354, 12=363.
  - Non Standard bearing condition. Review required.
  - "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
  - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
  - This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
  - Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869; Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

Continued on page 2  
LOAD CASE(S) Standard

June 24, 2011



**WARNING** - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITTEK REFERENCE PAGE MII-7473 BEFORE USE.

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Your Company Name

Job	Truss	Truss Type	Qty	Ply	O'NEIL CONST. - NELSON RES.	
361993	T08G	GABLE	1	1		I4799437

Builders FrstSource, Lake City, FL 32055

Job Reference (optional)  
7.140 s Oct 1 2009 MiTek Industries, Inc. Fri Jun 24 14:58:17 2011 Page 2

# LOAD CASE(S) Standard

1) Regular: Lumber Increase=1.25, Plate Increase=1.25

Uniform Loads (plf)

Vert: 1-6=-114(F=-60), 6-11=-114(F=-60), 1-11=-10



**WARNING** - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITTEK REFERENCE PAGE MH-7473 BEFORE USE.

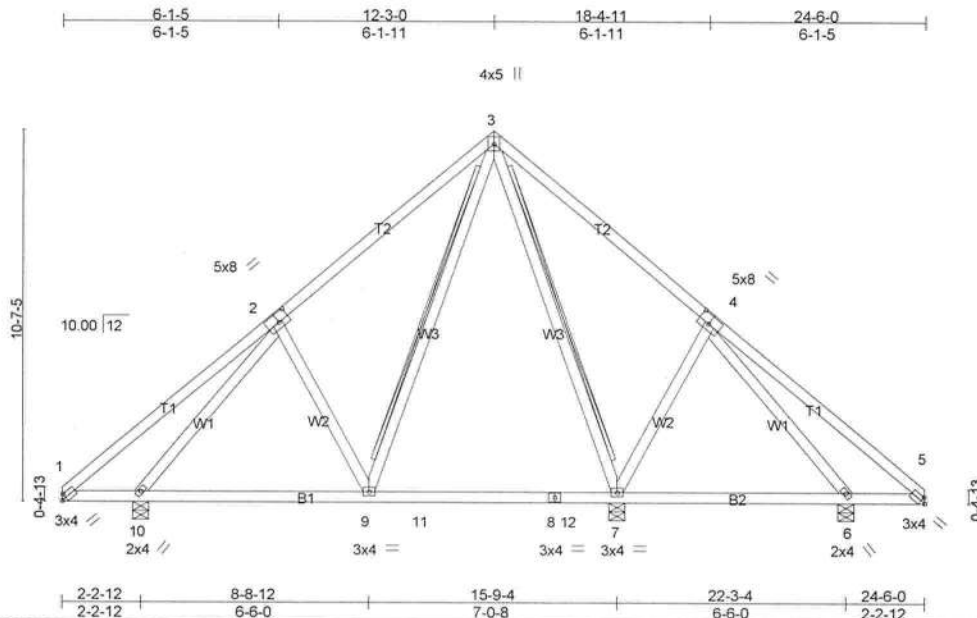
Design valid for use only with MiTek connectors. This design is based only upon parameters shown, and is for an individual building component. Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to insure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult **ANSI/TPI1 Quality Criteria, D58-89 and BCS11 Building Component Safety Information** available from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

Your Company Name

Job 361993	Truss T09	Truss Type COMMON	Qty 2	Ply 1	O'NEIL CONST. - NELSON RES.	14799438
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Builders FirstSource, Lake City, FL 32055

Job Reference (optional)  
7.140 s Oct 1 2009 MiTek Industries, Inc. Fri Jun 24 14:58:17 2011 Page 1



Scale = 1:62.7

Plate Offsets (X,Y): [1:0-1-9,0-1-8], [2:0-3-12,0-3-0], [4:0-3-12,0-3-0], [5:0-1-9,0-1-8]

LOADING (psf)	SPACING	CSI	DEFL	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.42	Vert(LL)	-0.11	7-9	>999	MT20	244/190
TCDL 7.0	Plates Increase 1.25	BC 0.30	Vert(TL)	-0.14	7-9	>999		
BCLL 0.0 *	Lumber Increase 1.25	WB 0.48	Horz(TL)	-0.01	6	n/a		
BCDL 5.0	Rep Stress Incr YES	(Matrix)	Wind(LL)	0.11	7-9	>999		
	Code FBC2007/TPI2002						Weight: 151 lb	

#### LUMBER

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

#### BRACING

TOP CHORD  
BOT CHORD  
WEBS

Structural wood sheathing directly applied or 6-0-0 oc purlins.  
Rigid ceiling directly applied or 6-0-0 oc bracing.  
T-Brace: 2 X 4 SYP No.3 - 3-7, 3-9  
Fasten T and I braces to narrow edge of web with 10d Common wire nails, 9in o.c., with 4in minimum end distance.  
Brace must cover 90% of web length.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS** (lb/size) 7=812/0-5-8, 10=604/0-5-8, 6=322/0-5-8  
Max Horz 10=-359(LC 4)  
Max Uplift 7=-588(LC 7), 10=-451(LC 6), 6=-238(LC 7)  
Max Grav 7=812(LC 1), 10=604(LC 1), 6=324(LC 11)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 1-2=-75/289, 2-3=-400/686, 4-5=-88/298  
BOT CHORD 9-10=-412/283  
WEBS 3-7=-465/402, 4-7=-230/431, 3-9=-722/320, 2-9=-155/319, 2-10=-674/641, 4-6=-333/145

#### NOTES (9-10)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-05; 110mph (3-second gust); TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) zone; cantilever left and right exposed; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 5.0psf.
- All bearings are assumed to be SYP No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=588, 10=451, 6=238.
- "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
- Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.
- This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
- Truss Design Engineer: Julius Lee, PE; Florida P.E. License No. 34869; Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

**LOAD CASE(S)** Standard



June 24, 2011



**WARNING:** Verify design parameters and READ NOTES ON THIS AND INCLUDED MITTEK REFERENCE PAGE MII-7473 BEFORE USE.

Design valid for use only with MiTek connectors. This design is based only upon parameters shown, and is for an individual building component. Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to insure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult **ANSI/TPI1 Quality Criteria, D58-89 and 8CSI1 Building Component Safety Information** available from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

Your Company Name



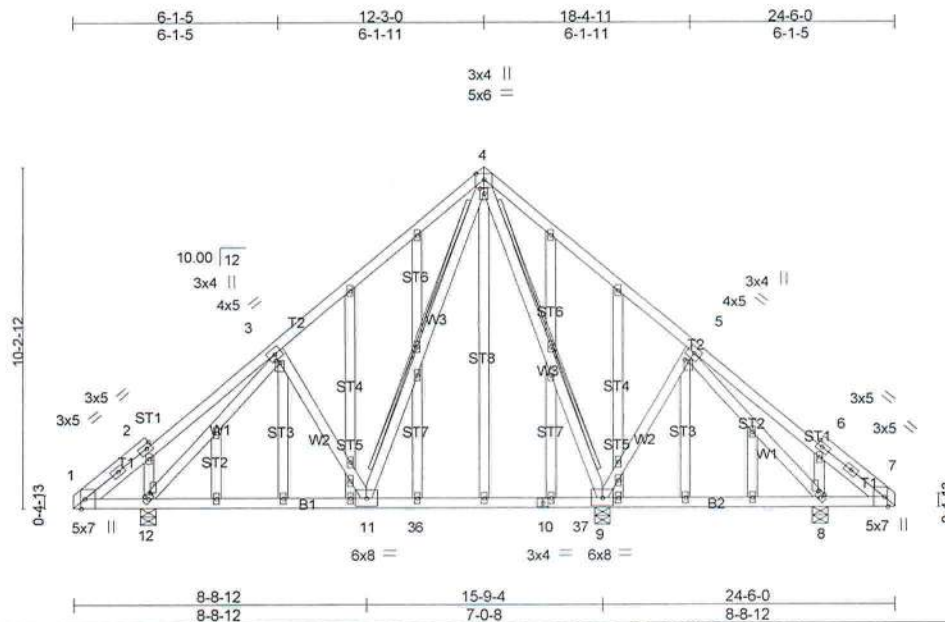
Job	Truss	Truss Type	Qty	Ply	O'NEIL CONST. - NELSON RES.
361993	T09G	GABLE	1	1	

I4799439

Builders FrstSource, Lake City, FL 32055

Job Reference (optional)

7/14/09 Oct 1 2009 MiTek Industries, Inc. Fri Jun 24 14:58:18 2011 Page 1



Scale = 1:65.6

Plate Offsets (X,Y): [1:0-3-8,Edge], [3:0-0-14,0-1-8], [4:0-1-12,0-1-8], [5:0-0-14,0-1-8], [7:0-3-8,Edge], [8:0-1-3,0-2-4], [12:0-1-3,0-2-4]

LOADING (psf)	SPACING	2-0-0	CSI	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plates Increase	1.25	TC 0.76	Vert(LL)	-0.12	9-11	>999	360	MT20
TCDL 7.0	Lumber Increase	1.25	BC 0.37	Vert(TL)	-0.15	9-11	>999	240	244/190
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.85	Horz(TL)	-0.01	8	n/a	n/a	
BCDL 5.0	Code FBC2007/TPI2002		(Matrix)	Wind(LL)	0.12	9-11	>999	240	Weight: 233 lb

**LUMBER**

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

**BRACING**

TOP CHORD  
 BOT CHORD  
 WEBS

Structural wood sheathing directly applied or 6-0-0 oc purlins.  
 Rigid ceiling directly applied or 6-0-0 oc bracing.  
 T-Brace: 2 X 4 SYP No.3 - 4-9, 4-11  
 Fasten T and I braces to narrow edge of web with 10d Common wire nails, 9in o.c., with 4in minimum end distance.  
 Brace must cover 90% of web length.

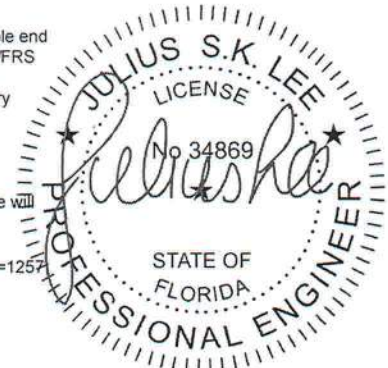
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS** (lb/size) 9=1455/0-5-8, 12=1127/0-5-8, 8=622/0-5-8  
 Max Horz 12=433(LC 5)  
 Max Uplift 9=1257(LC 7), 12=970(LC 6), 8=525(LC 7)  
 Max Grav 9=1455(LC 1), 12=1127(LC 1), 8=627(LC 11)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-255/354, 2-3=-374/618, 3-4=-742/986, 4-5=-131/331, 5-6=-403/640, 6-7=-284/375  
 BOT CHORD 1-12=-291/312, 11-12=-647/555, 11-36=-253/212, 10-36=-253/212, 10-37=-253/212, 9-37=-253/212, 7-8=-307/332  
 WEBS 4-9=-924/880, 5-9=-478/669, 4-11=-903/504, 3-11=-364/529, 3-12=-1318/1290, 5-8=-698/503

**NOTES** (13-14)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-05; 110mph (3-second gust); TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1-2002.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 5.0psf.
- All bearings are assumed to be SYP No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=1257, 12=970, 8=525.
- "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
- Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).



Continued on page 2

June 24, 2011

**WARNING** - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITK REFERENCE PAGE M11-7473 BEFORE USE.

Design valid for use only with MiTek connectors. This design is based only upon parameters shown, and is for an individual building component. Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to insure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult **ANSI/TPI1 Quality Criteria, D58-89 and BCS11 Building Component Safety Information** available from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

Your Company Name



Job	Truss	Truss Type	Qty	Ply	O'NEIL CONST. - NELSON RES.	
361993	T09G	GABLE	1	1		I4799439

Builders FrstSource, Lake City, FL 32055

Job Reference (optional)  
7.140 s Oct 1 2009 MiTek Industries, Inc. Fri Jun 24 14:58:18 2011 Page 2

13) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

14) Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869: Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

#### LOAD CASE(S) Standard

1) Regular: Lumber Increase=1.25, Plate Increase=1.25

Uniform Loads (plf)

Vert: 1-4=-114(F=-60), 4-7=-114(F=-60), 1-36=-10, 36-37=-50, 7-37=-10



**WARNING** - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MIL-7473 BEFORE USE.

Design valid for use only with MiTek connectors. This design is based only upon parameters shown, and is for an individual building component. Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to insure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult **ANSI/TPI1 Quality Criteria, D5B-89 and BCS11 Building Component Safety Information** available from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

Your Company Name

Job 361993	Truss T10	Truss Type COMMON	Qty 1	Ply 1	O'NEIL CONST. - NELSON RES. Job Reference (optional) 7.140 s Oct 1 2009 MiTek Industries, Inc. Fri Jun 24 14:58:19 2011 Page 1	i4799440
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Builders FirstSource, Lake City, FL 32055

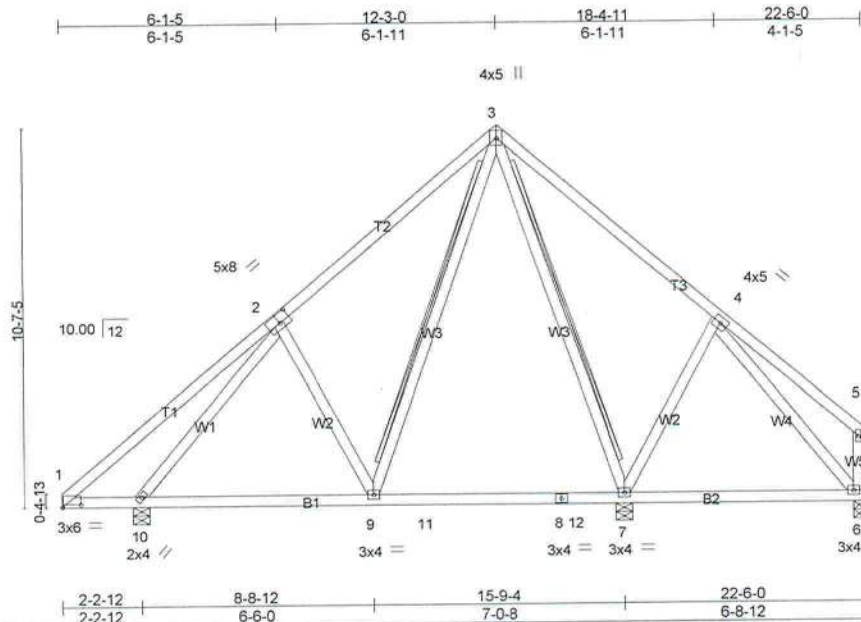


Plate Offsets (X,Y): [1:0-6-3,0-0-14], [2:0-3-12,0-3-0]

LOADING (psf)	SPACING	2-0-0	CSI	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plates Increase	1.25	TC 0.42	Vert(LL)	-0.11	7-9	>999	360	MT20 244/190
TCDL 7.0	Lumber Increase	1.25	BC 0.45	Vert(TL)	-0.14	7-9	>999	240	
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.49	Horz(TL)	-0.01	6	n/a	n/a	
BCDL 5.0	Code FBC2007/TPI2002		(Matrix)	Wind(LL)	0.15	6-7	>516	240	
									Weight: 146 lb

#### LUMBER

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

#### BRACING

TOP CHORD  
BOT CHORD  
WEBS

Structural wood sheathing directly applied or 6-0-0 oc purlins.  
Rigid ceiling directly applied or 6-0-0 oc bracing.  
T-Brace: 2 X 4 SYP No.3 - 3-7, 3-9  
Fasten T and I braces to narrow edge of web with 10d Common wire nails, 9in o.c., with 4in minimum end distance.  
Brace must cover 90% of web length.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS** (lb/size) 7=771/0-5-8, 10=624/0-5-8, 6=206/0-3-8  
Max Horz 10=356(LC 5)  
Max Uplift 7=587(LC 7), 10=447(LC 6), 6=120(LC 6)  
Max Grav 7=771(LC 1), 10=624(LC 1), 6=207(LC 11)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 1-2=-70/289, 2-3=-423/697  
BOT CHORD 9-10=-404/298  
WEBS 3-7=-423/406, 4-7=-227/401, 3-9=-725/318, 2-9=-152/314, 2-10=-698/649

#### NOTES (9-10)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-05; 110mph (3-second gust); TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) zone; cantilever left exposed; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 5.0psf.
- All bearings are assumed to be SYP No.2
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=587 10=447, 6=120.
- "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
- Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.
- This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
- Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869; Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

LOAD CASE(S) Standard



June 24, 2011



**WARNING** - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITTEK REFERENCE PAGE MIT 7473 BEFORE USE.

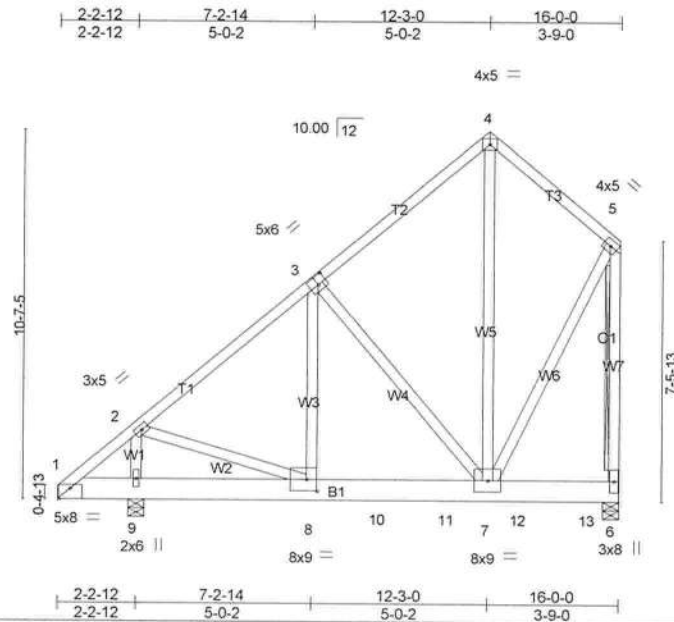
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Your Company Name

Job 361993	Truss T11	Truss Type COMMON	Qty 1	Ply 1	O'NEIL CONST. - NELSON RES.	14799441
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Builders FirstSource, Lake City, FL 32055

Job Reference (optional)  
7.140 s Oct 1 2009 MiTek Industries, Inc. Fri Jun 24 14:58:19 2011 Page 1



Scale = 1:63.0

Plate Offsets (X,Y): [1:0-4-0,Edge], [3:0-3-0,0-3-0], [8:0-3-8,0-4-0]

LOADING (psf)	SPACING	CSI	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plates Increase 1.25	TC 0.64	Vert(LL) -0.05	7-8	>999	360	MT20	244/190
TCDL 7.0	Lumber Increase 1.25	BC 0.29	Vert(TL) -0.08	7-8	>999	240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.81	Horz(TL) -0.00	6	n/a	n/a		
BCDL 5.0	Code FBC2007/TPI2002	(Matrix)	Wind(LL) 0.05	7-8	>999	240		
							Weight: 145 lb	

#### LUMBER

TOP CHORD 2 X 4 SYP No.2  
BOT CHORD 2 X 8 SYP No.1D  
WEBS 2 X 4 SYP No.3 \*Except\*  
W7: 2 X 4 SYP No.2

#### BRACING

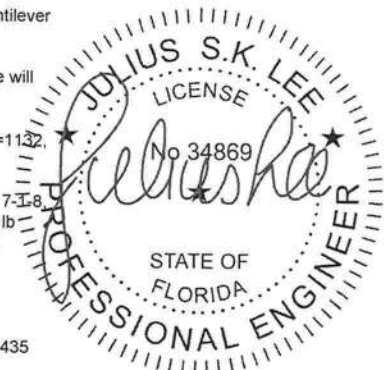
TOP CHORD Structural wood sheathing directly applied or 5-1-2 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
WEBS T-Brace: 2 X 4 SYP No.3 - 5-6  
Fasten T and I braces to narrow edge of web with 10d Common wire nails, 9in o.c., with 4in minimum end distance.  
Brace must cover 90% of web length.

REACTIONS (lb/size) 6=2107/0-5-8, 9=1557/0-5-8  
Max Horz 9=342(LC 4)  
Max Uplift 6=1132(LC 5), 9=858(LC 5)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1477/800, 3-4=-867/463, 4-5=-829/469, 5-6=-1743/944  
BOT CHORD 8-9=-358/101, 8-10=-758/1065, 10-11=-758/1065, 7-11=-758/1065  
WEBS 2-9=-1448/785, 2-8=-568/1086, 3-8=-597/737, 3-7=-744/687, 4-7=-463/805, 5-7=-707/1301

#### NOTES (11-12)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-05; 110mph (3-second gust); TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; enclosed; MWFRS (low-rise); cantilever left exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SYP No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=1132, 9=858.
- "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 595 lb down and 657 lb up at 7-3-8, 541 lb down and 199 lb up at 9-0-12, 554 lb down and 203 lb up at 11-0-12, and 479 lb down and 250 lb up at 13-0-12, and 479 lb down and 250 lb up at 15-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
- This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
- Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869; Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435



LOAD CASE(S) Standard

June 24, 2011



**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 BEFORE USE.**  
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Your Company Name

Job	Truss	Truss Type	Qty	Ply	O'NEIL CONST. - NELSON RES.	14799441
361993	T11	COMMON	1	1	Job Reference (optional)	

Builders FirstSource, Lake City, FL 32055

7.140 s Oct 1 2009 MiTek Industries, Inc. Fri Jun 24 14:58:19 2011 Page 2

#### LOAD CASE(S) Standard

1) Regular: Lumber Increase=1.25, Plate Increase=1.25

Uniform Loads (plf)

Vert: 1-4=-54, 4-5=-54, 1-6=-10

Concentrated Loads (lb)

Vert: 8=-595(F) 10=-541(F) 11=-554(F) 12=-479(F) 13=-479(F)



**WARNING** - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MI-7473 BEFORE USE.

Design valid for use only with MiTek connectors. This design is based only upon parameters shown, and is for an individual building component. Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to insure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult **ANSI/TPI1 Quality Criteria, DSB-89 and BCS11 Building Component Safety Information** available from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

Your Company Name



Job 361993	Truss T17	Truss Type SPECIAL	Qty 1	Ply 1	O'NEIL CONST. - NELSON RES.	14799442
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Builders FirstSource, Lake City, FL 32055

Job Reference (optional)

7.140 s Oct 1 2009 MiTek Industries, Inc. Fri Jun 24 14:58:20 2011 Page 1

2-11-8	6-9-14	12-8-12	18-7-10	22-6-0	25-1-12	29-4-6	34-5-3	39-6-1	43-10-8
2-11-8	3-10-6	5-10-14	5-10-14	3-10-6	2-7-12	4-2-10	5-0-13	5-0-14	4-4-7

Scale = 1:76.6

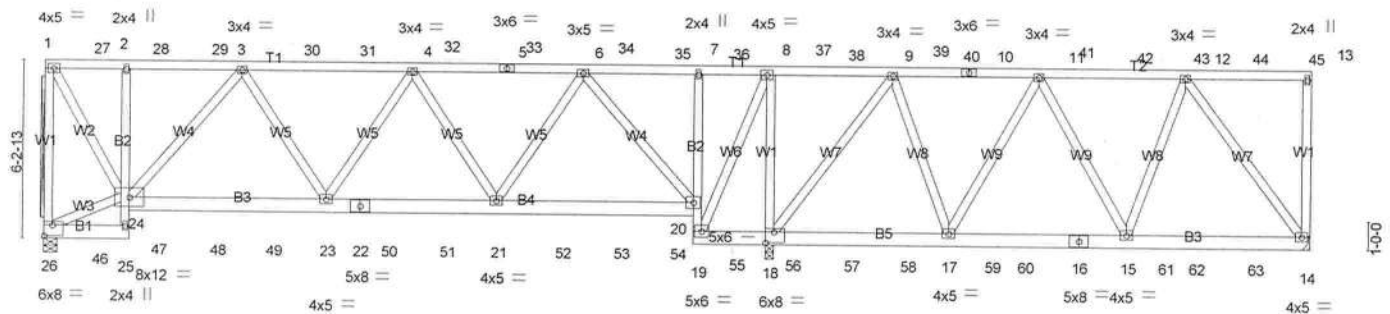


Plate Offsets (X,Y): [18:0-3-8,0-4-8], [26:Edge,0-4-8]

LOADING (psf)	SPACING	CSI	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plates Increase 1.25	TC 0.45	Vert(LL)	-0.04 21-23	>999	360	MT20	244/190
TCDL 7.0	Lumber Increase 1.25	BC 0.63	Vert(TL)	-0.09 23-24	>999	240		
BCLL 0.0	Rep Stress Incr NO	WB 0.93	Horz(TL)	-0.03 14	n/a	n/a		
BCDL 5.0	Code FBC2007/TPI2002	(Matrix)	Wind(LL)	0.10 23-24	>999	240		
							Weight: 334 lb	

#### LUMBER

TOP CHORD 2 X 4 SYP No.2  
BOT CHORD 2 X 6 SYP No.1D \*Except\*  
B2: 2 X 4 SYP No.3  
WEBS 2 X 4 SYP No.3

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 5-10-9 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 5-1-4 oc bracing.  
WEBS T-Brace: 2 X 4 SYP No.3 - 1-26  
Fasten T and I braces to narrow edge of web with 10d Common wire nails, 9in o.c., with 4in minimum end distance.  
Brace must cover 90% of web length.

REACTIONS (lb/size) 26=1070/0-5-8, 14=609/Mechanical, 18=2338/0-3-8  
Max Uplift 26=-1183(LC 3), 14=-650(LC 3), 18=-2628(LC 3)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 1-26=-1039/1102, 1-27=-477/533, 2-27=-477/533, 2-28=-484/542, 28-29=-484/542, 3-29=-484/542, 3-30=-1061/1193, 30-31=-1061/1193, 31-32=-1061/1193, 4-32=-1061/1193, 4-33=-857/964, 5-33=-857/964, 5-34=-857/964, 6-34=-857/964, 8-38=-696/624, 38-39=-696/624, 9-39=-696/624, 11-42=-363/420, 42-43=-363/420, 12-43=-363/420

BOT CHORD 24-47=-1053/934, 47-48=-1053/934, 48-49=-1053/934, 23-49=-1053/934, 22-23=-1220/1082, 22-50=-1220/1082, 50-51=-1220/1082, 21-51=-1220/1082, 21-52=-609/538, 52-53=-609/538, 53-54=-609/538, 20-54=-609/538, 19-20=-1130/1268, 19-55=-624/696, 18-55=-624/696, 17-59=-390/354, 59-60=-390/354, 16-60=-390/354, 15-16=-390/354, 15-61=-373/340, 61-62=-373/340, 62-63=-373/340, 14-63=-373/340, 1-24=-1101/983, 3-24=-707/802, 3-23=-269/253, 4-21=-434/493, 6-21=-682/614, 6-20=-1124/1268, 8-19=-1261/1131, 8-18=-1320/1421, 9-18=-1026/1134, 9-17=-605/486, 11-17=-477/493, 12-14=-571/627

#### NOTES (12-14)

- 1) Wind: ASCE 7-05; 110mph (3-second gust); TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; enclosed; MWFRS (low-rise); Lumber DOL=1.60 plate grip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide with fit between the bottom chord and any other members.
- 5) All bearings are assumed to be SYP No.2.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 26=-1183, 14=-650, 18=-2628.
- 8) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.

Continued on page 2



June 24, 2011

**WARNING** - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE M11-7473 BEFORE USE.  
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Your Company Name

Job	Truss	Truss Type	Qty	Ply	O'NEIL CONST. - NELSON RES.	i4799442
361993	T17	SPECIAL	1	1	Job Reference (optional)	

Builders FirstSource, Lake City, FL 32055

7.140 s Oct 1 2009 MiTek Industries, Inc. Fri Jun 24 14:58:20 2011 Page 2

#### NOTES (12-14)

- 9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 103 lb down and 83 lb up at 0-1-12, 49 lb down and 83 lb up at 1-11-4, 23 lb down and 86 lb up at 3-11-4, 23 lb down and 86 lb up at 5-11-4, 23 lb down and 86 lb up at 7-11-4, 23 lb down and 86 lb up at 9-11-4, 23 lb down and 86 lb up at 11-11-4, 23 lb down and 86 lb up at 13-11-4, 23 lb down and 86 lb up at 15-11-4, 23 lb down and 86 lb up at 17-11-4, 23 lb down and 86 lb up at 19-11-4, 23 lb down and 86 lb up at 21-11-4, 49 lb down and 83 lb up at 23-11-4, 49 lb down and 83 lb up at 25-11-4, 49 lb down and 83 lb up at 27-11-4, 49 lb down and 83 lb up at 29-11-4, 49 lb down and 83 lb up at 31-11-4, 49 lb down and 83 lb up at 33-11-4, 49 lb down and 83 lb up at 35-11-4, 49 lb down and 83 lb up at 37-11-4, and 49 lb down and 83 lb up at 39-11-4, and 49 lb down and 83 lb up at 41-11-4 on top chord, and 53 lb down and 63 lb up at 0-1-12, 23 lb down and 69 lb up at 1-11-4, 30 lb down and 65 lb up at 3-11-4, 30 lb down and 65 lb up at 5-11-4, 30 lb down and 65 lb up at 7-11-4, 30 lb down and 65 lb up at 9-11-4, 30 lb down and 65 lb up at 11-11-4, 30 lb down and 65 lb up at 13-11-4, 30 lb down and 65 lb up at 15-11-4, 30 lb down and 65 lb up at 17-11-4, 30 lb down and 65 lb up at 19-11-4, 30 lb down and 65 lb up at 21-11-4, 23 lb down and 69 lb up at 23-11-4, 23 lb down and 69 lb up at 25-11-4, 23 lb down and 69 lb up at 27-11-4, 23 lb down and 69 lb up at 29-11-4, 23 lb down and 69 lb up at 31-11-4, 23 lb down and 69 lb up at 33-11-4, 23 lb down and 69 lb up at 35-11-4, 23 lb down and 69 lb up at 37-11-4, and 23 lb down and 69 lb up at 39-11-4, and 23 lb down and 69 lb up at 41-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 10) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.
- 11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
- 12) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
- 13) Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869; Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435
- 14) Use Simpson HTU26 to attach Truss to Carrying member

#### LOAD CASE(S) Standard

1) Regular: Lumber Increase=1.25, Plate Increase=1.25

##### Uniform Loads (plf)

Vert: 1-13=-54, 25-26=-10, 20-24=-10, 14-19=-10

##### Concentrated Loads (lb)

Vert: 26=-14(B) 1=-103(B) 5=-23(B) 16=-4(B) 23=-30(B) 21=-30(B) 10=-49(B) 27=-49(B) 28=-23(B) 29=-23(B) 30=-23(B) 31=-23(B) 32=-23(B) 33=-23(B) 34=-23(B) 35=-23(B) 36=-23(B) 37=-49(B) 38=-49(B) 39=-49(B) 40=-49(B) 41=-49(B) 42=-49(B) 43=-49(B) 44=-49(B) 45=-49(B) 46=-4(B) 47=-30(B) 48=-30(B) 49=-30(B) 50=-30(B) 51=-30(B) 52=-30(B) 53=-30(B) 54=-30(B) 55=-4(B) 56=-4(B) 57=-4(B) 58=-4(B) 59=-4(B) 60=-4(B) 61=-4(B) 62=-4(B) 63=-4(B)



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Your Company Name

Job 361993	Truss T18	Truss Type SPECIAL	Qty 1	Ply 1	O'NEIL CONST. - NELSON RES.	14799443
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Builders FrstSource, Lake City, FL 32055

Job Reference (optional)  
7.140 s Oct 1 2009 MiTek Industries, Inc. Fri Jun 24 14:58:21 2011 Page 1

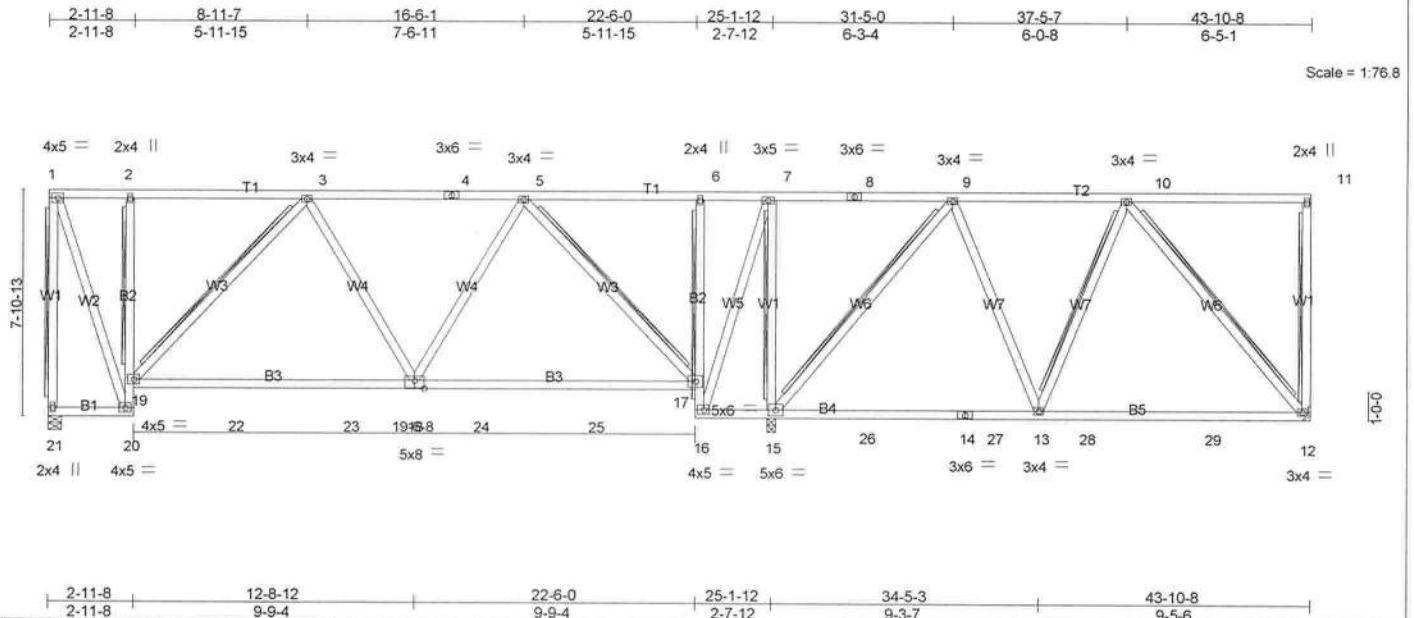


Plate Offsets (X,Y): [18:0-4:0,0-3-4]

LOADING (psf)	SPACING	CSI	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plates Increase 1.25	TC 0.34	Vert(LL) -0.28	18-19	>999	360	MT20	244/190
TCDL 7.0	Lumber Increase 1.25	BC 0.69	Vert(TL) -0.46	18-19	>656	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.63	Horz(TL) 0.11	12	n/a	n/a		
BCDL 5.0	Code FBC2007/TPI2002	(Matrix)	Wind(LL) 0.09	18-19	>999	240		
							Weight: 307 lb	

#### LUMBER

TOP CHORD 2 X 4 SYP No.2  
BOT CHORD 2 X 4 SYP No.2 \*Except\*  
B2: 2 X 4 SYP No.3  
WEBS 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 5-4-10 oc bracing. Except:  
T-Brace: 2 X 4 SYP No.3 - 2-19, 6-17  
T-Brace: 2 X 4 SYP No.3 - 1-21, 11-12, 3-19, 5-17, 7-15, 9-15, 10-13, 10-12  
Fasten T and I braces to narrow edge of web with 10d Common wire nails, 9in o.c. with 4in minimum end distance.  
Brace must cover 90% of web length.

REACTIONS (lb/size) 21=799/0-5-8, 12=558/Mechanical, 15=2105/0-3-8  
Max Uplift 21=-291(LC 4), 12=-195(LC 4), 15=-648(LC 4)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 1-21=-842/528, 1-2=-274/170, 2-3=-312/185, 3-4=-685/379, 4-5=-685/379, 7-8=-197/478, 8-9=-197/478, 9-10=-264/134  
BOT CHORD 19-20=-711/470, 19-22=-436/681, 22-23=-436/681, 18-23=-436/681, 18-24=-360/496, 24-25=-360/496, 17-25=-360/496, 16-17=-994/553, 15-16=-478/197, 13-28=-184/280, 28-29=-184/280, 12-29=-184/280  
WEBS 1-20=-512/827, 3-19=-542/368, 5-18=-39/380, 5-17=-988/555, 7-16=-568/946, 7-15=-1165/785, 9-15=-928/483, 9-13=-63/414, 10-12=-415/283

#### NOTES (10-12)

- Wind: ASCE 7-05; 110mph (3-second gust); TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide with fit between the bottom chord and any other members, with BCDL = 5.0psf.
- All bearings are assumed to be SYP No.2
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 21=291, 12=195, 15=648.
- "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
- Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.
- This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
- Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869: Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435
- Use Simpson HTU26 to attach Truss to Carrying member



June 24, 2011



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Your Company Name

Job	Truss	Truss Type	Qty	Ply	O'NEIL CONST. - NELSON RES.	I4799443
361993	118	SPECIAL	1	1	Job Reference (optional)	

Buildex ProSource Link City FL 32055

7.140 s Oct 1 2009 MiTek Industries, Inc. Fri Jun 24 14:58:21 2011 Page 2

LOAD CASE(S) Standard



**WARNING:** Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 BEFORE USE.

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Your Company Name



Job 361993	Truss T19	Truss Type SPECIAL	Qty 1	Ply 1	O'NEIL CONST. - NELSON RES.	14799444
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Builders FrstSource, Lake City, FL 32055

Job Reference (optional)  
7.140 s Oct 1 2009 MiTek Industries, Inc. Fri Jun 24 14:58:21 2011 Page 1

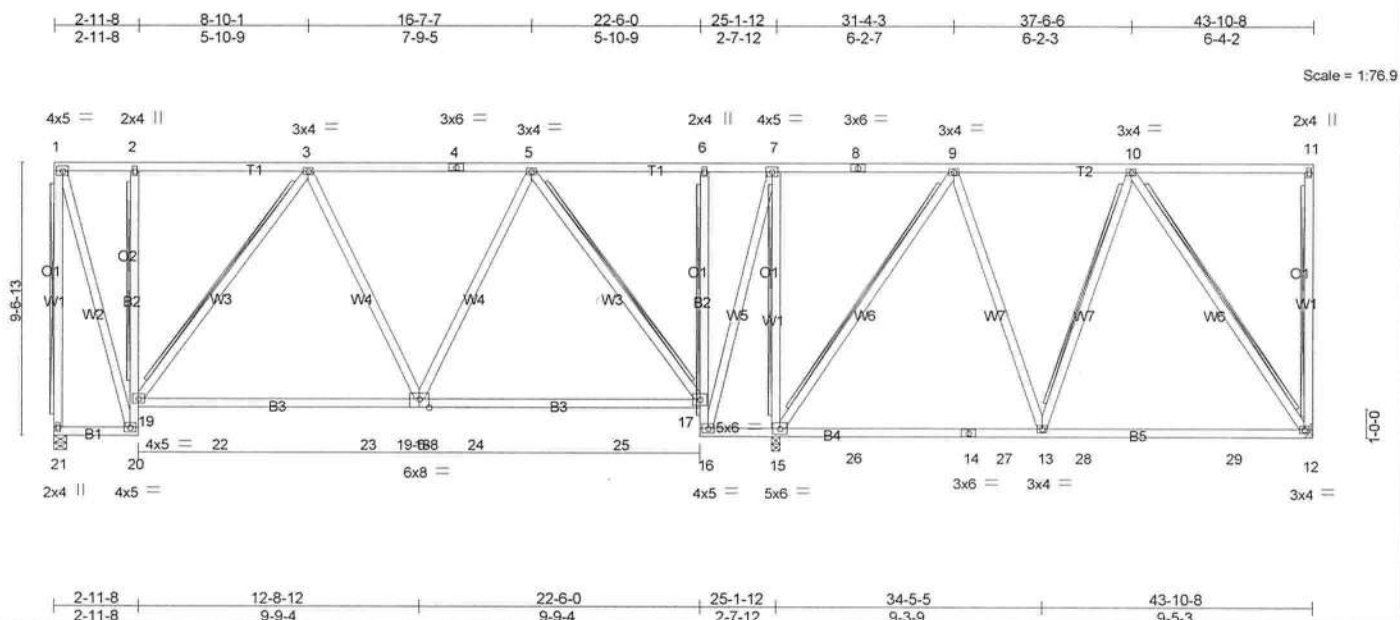


Plate Offsets (X, Y): [18:0-4-0, Edge]

LOADING (psf)	SPACING	2-0-0	CSI	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plates Increase	1.25	TC 0.54	Vert(LL)	-0.33 18-19	>908	360	MT20	244/190
TCDL 7.0	Lumber Increase	1.25	BC 0.66	Vert(TL)	-0.50 18-19	>594	240		
BCLL 0.0	Rep Stress Incr	YES	WB 0.89	Horz(TL)	0.12 12	n/a	n/a		
BCDL 5.0	Code FBC2007/TPI2002		(Matrix)	Wind(LL)	0.08 18-19	>999	240		
								Weight: 341 lb	

#### LUMBER

TOP CHORD 2 X 4 SYP No.2  
BOT CHORD 2 X 4 SYP No.2 "Except"  
B2: 2 X 4 SYP No.3  
WEBS 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 5-2-9 oc bracing. Except:  
T-Brace: 2 X 4 SYP No.3 - 2-19, 6-17  
T-Brace: 2 X 4 SYP No.3 - 1-21, 11-12, 3-19, 5-17, 7-15, 9-15, 10-13, 10-12  
Fasten T and I braces to narrow edge of web with 10d Common wire nails, 9in o.c., with 4in minimum end distance.  
Brace must cover 90% of web length.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS (lb/size) 21=829/0-5-8, 12=569/Mechanical, 15=2224/0-3-8  
Max Uplift 21=-294(LC 4), 12=-199(LC 4), 15=-641(LC 4)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 1-21=-871/528, 2-3=-259/148, 3-4=-569/308, 4-5=-569/308, 7-8=-150/435, 8-9=-150/435  
BOT CHORD 19-20=-740/474, 19-22=-353/561, 22-23=-353/561, 18-23=-353/561, 18-24=-294/393, 24-25=-294/393, 17-25=-294/393, 16-17=-1052/546, 15-16=-435/150  
WEBS 1-20=-502/842, 3-19=-512/347, 5-18=-33/413, 5-17=-960/507, 7-16=-553/983, 7-15=-1218/779, 9-15=-912/445, 9-13=-55/446, 10-12=-386/273

#### NOTES (10-12)

- 1) Wind: ASCE 7-05; 110mph (3-second gust); TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 5.0psf.
- 5) All bearings are assumed to be SYP No.2.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 21=294, 12=199, 15=641.
- 8) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
- 9) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.
- 10) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
- 11) Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869; Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435
- 12) Use Simpson HTU26 to attach Truss to Carrying member



LOAD CASE(S) Standard

June 24, 2011



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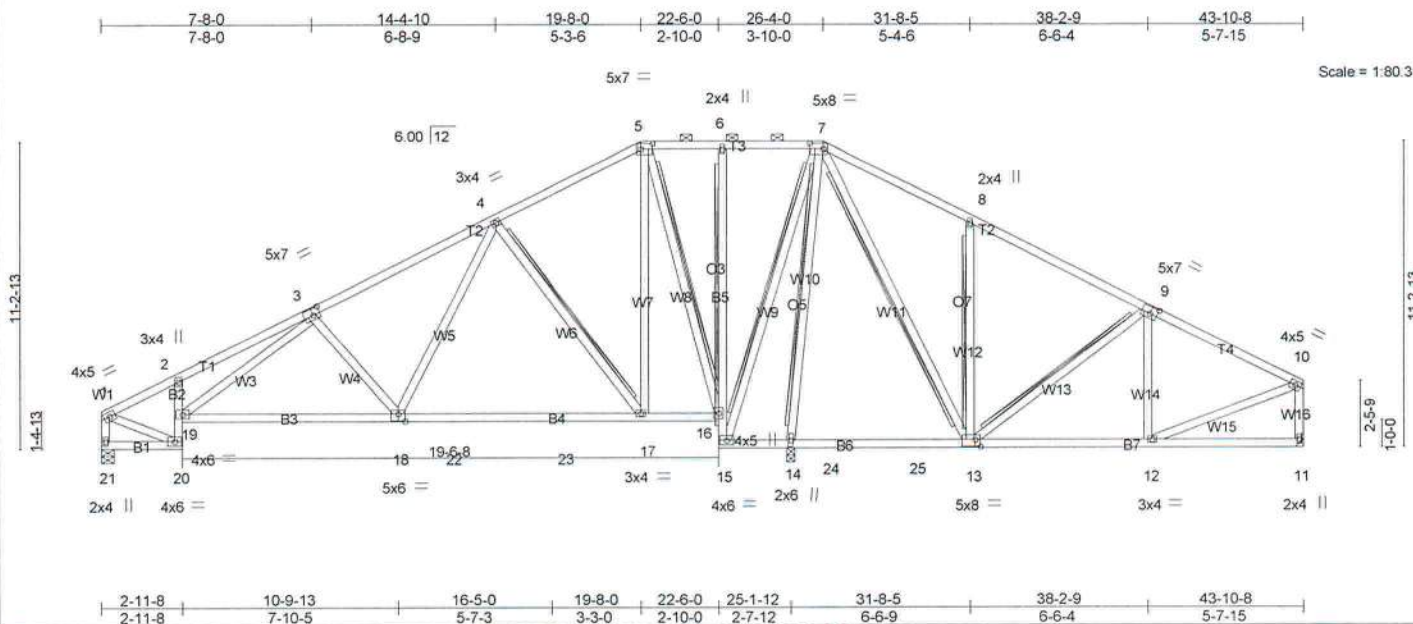
Your Company Name

Job 361993	Truss T20	Truss Type HIP	Qty 2	Ply 1	O'NEIL CONST. - NELSON RES.	14799445
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Builders FirstSource, Lake City, FL 32055

Job Reference (optional)

7.140 s Oct 1 2009 MiTek Industries, Inc. Fri Jun 24 14:58:22 2011 Page 1



LOADING (psf)	SPACING	2-0-0	CSI	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plates Increase	1.25	TC 0.47	Vert(LL)	-0.27 17-18	>999	360	MT20	244/190
TCDL 7.0	Lumber Increase	1.25	BC 1.00	Vert(TL)	-0.40 17-18	>754	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.76	Horz(TL)	0.10 14	n/a	n/a		
BCDL 5.0	Code FBC2007/TPI2002		(Matrix)	Wind(LL)	0.16 18-19	>999	240		Weight: 323 lb

<b>LUMBER</b>	<b>BRACING</b>
TOP CHORD 2 X 4 SYP No.2	TOP CHORD Structural wood sheathing directly applied or 5-4-0 oc purlins, except end verticals, and 2-0-0 oc purlins (10-0-0 max.): 5-7.
BOT CHORD 2 X 4 SYP No.2 *Except* B5: 2 X 4 SYP No.3	BOT CHORD Rigid ceiling directly applied. Except:
WEBS 2 X 4 SYP No.3 *Except* W1,W16: 2 X 4 SYP No.2	T-Brace: 2 X 4 SYP No.3 - 6-16
	T-Brace: 2 X 4 SYP No.3 - 4-17, 5-16, 7-15, 7-13, 8-13, 9-13
	2 X 6 SYP No.2 - 7-14
	Fasten T and I braces to narrow edge of web with 10d Common wire nails, 9in o.c., with 4in minimum end distance.
	Brace must cover 90% of web length.
	MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS** (lb/size) 21=690/0-5-8, 14=2043/0-3-8, 11=380/Mechanical  
 Max Horz 21=172(LC 6)  
 Max Uplift 21=224(LC 6), 14=523(LC 6), 11=247(LC 7)  
 Max Grav 21=699(LC 10), 14=2043(LC 1), 11=493(LC 11)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-802/614, 2-3=-1247/1097, 3-4=-869/759, 4-5=-164/380, 5-6=0/270, 6-7=0/276, 7-8=-286/499, 8-9=-291/272, 9-10=-496/354, 1-21=-741/583, 10-11=-465/359  
 BOT CHORD 2-19=-319/361, 18-19=-683/926, 18-22=-231/469, 22-23=-231/469, 17-23=-231/469, 15-16=-1012/665, 14-15=-484/481, 14-24=-314/349, 24-25=-314/349, 13-25=-314/349, 12-13=-232/394  
 WEBS 3-19=-270/234, 3-18=-353/469, 4-18=-358/538, 4-17=-654/650, 5-17=-424/706, 5-16=-903/478, 7-15=-621/950, 7-14=-1755/1213, 7-13=-683/715, 8-13=-346/463, 9-13=-309/349, 1-20=-505/691, 10-12=-226/397

- NOTES** (12-14)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-05; 110mph (3-second gust); TCCL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 5.0psf.
  - All bearings are assumed to be SYP No.2.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 21=224, 14=523, 11=247.
  - "Semi-rigid pitch breaks including heels" Member end fixity model was used in the analysis and design of this truss.



June 24, 2011

Job 361993	Truss T20	Truss Type HIP	Qty 2	Ply 1	O'NEIL CONST. - NELSON RES.  Job Reference (optional)	I4799445
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Builders FrstSource, Lake City, FL 32055

7.140 s Oct 1 2009 MiTek Industries, Inc. Fri Jun 24 14:58:22 2011 Page 2

#### NOTES (12-14)

- 10) Design assumes 4x2 (flat orientation) purlins at oc spacing indicated, fastened to truss TC w/ 2-10d nails.
- 11) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.
- 12) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
- 13) Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869; Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435
- 14) Use Simpson HTU26 to attach Truss to Carrying member

LOAD CASE(S) Standard

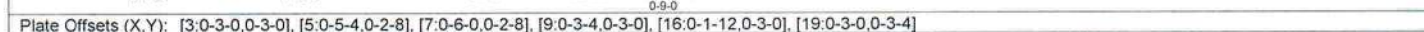


**WARNING** - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 BEFORE USE.

Design valid for use only with MiTek connectors. This design is based only upon parameters shown, and is for an individual building component. Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to insure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult **ANSI/TPI1 Quality Criteria, D58-89 and BCS11 Building Component Safety Information** available from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

Your Company Name





LUMBER		BRACING	
TOP CHORD	2 X 4 SYP No.2	TOP CHORD	Structural wood sheathing directly applied or 5-4-0 oc purlins, except end verticals, and 2-0-0 oc purlins (10-0-0 max.): 5-7.
BOT CHORD	2 X 4 SYP No.2 *Except* B5: 2 X 4 SYP No.3	BOT CHORD	Rigid ceiling directly applied. Except:
WEBS	2 X 4 SYP No.3 *Except* W1,W16: 2 X 4 SYP No.2		T-Brace: 2 X 4 SYP No.3 - 6-17 5-2-0 oc bracing: 16-17
		WEBS	T-Brace: 2 X 4 SYP No.3 - 4-18, 5-17, 7-16, 7-13, 8-13 9-13 2 X 6 SYP No.2 - 7-15
			Fasten T and I braces to narrow edge of web with 10d Common wire nails, 9in o.c., with 4in minimum end distance. Brace must cover 90% of web length.

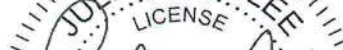
REACTIONS	(lb/size) 22=689/0-5-8, 15=2047/0-3-8, 11=384/0-5-8 Max Horz 22=171(LC 5) Max Uplift 22=-224(LC 6), 15=-522(LC 6), 11=-249(LC 7) Max Grav 22=698(LC 10), 15=2047(LC 1), 11=496(LC 11)
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**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

**TOP CHORD** 1-2=-801/615, 2-3=-1247/1096, 3-4=-868/760, 4-5=-164/382, 5-6=0/272, 6-7=0/277,  
7-8=-287/503, 8-9=-292/276, 9-10=-507/363, 1-22=-741/583, 10-11=-468/364

**BOT CHORD** 2-20=-319/360, 19-20=-680/926, 19-29=-228/469, 29-30=-228/469, 18-30=-228/469,  
16-17=-1012/664, 15-16=-486/483, 15-31=-314/351, 31-32=-314/351, 14-32=-314/351,  
13-14=-314/351, 12-13=-238/402

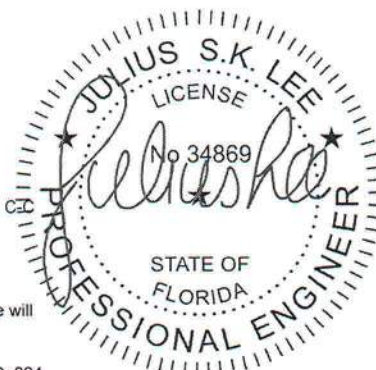
**WEBS** 3-20=-267/234, 3-19=-353/469, 4-19=-357/538, 4-18=-654/650, 5-18=-424/706,  
5-17=-903/476, 7-16=-620/950, 7-15=-1759/1214, 7-13=-687/719, 8-13=-345/461,  
9-13=-317/356, 1-21=-506/691, 10-12=-228/400

A circular stamp with the text "JULIUS S.K. LEE" around the top and "LICENSE" at the bottom. The center of the stamp is partially obscured by the text of the document.

**NOTES (12-13)**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-05; 110mph (3-second gust); TCDF=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 5.0psf.
- 7) All bearings are assumed to be SYP No.2 .
- 8) Provide mechanical connection (bv others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 22=224,

15-522-11-249  
Continued on page 2



Job 361993	Truss T21	Truss Type HIP	Qty 3	Ply 1	O'NEIL CONST. - NELSON RES.  Job Reference (optional)	I4799446
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Builders FrstSource, Lake City, FL 32055

7.140 s Oct 1 2009 MiTek Industries, Inc. Fri Jun 24 14:58:23 2011 Page 2

#### NOTES (12-13)

- 9) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
- 10) Design assumes 4x2 (flat orientation) purlins at oc spacing indicated, fastened to truss TC w/ 2-10d nails.
- 11) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.
- 12) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
- 13) Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869: Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

LOAD CASE(S) Standard



**WARNING** - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE M11.7473 BEFORE USE.

Design valid for use only with MiTek connectors. This design is based only upon parameters shown, and is for an individual building component. Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to insure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult **ANSI/TPI1 Quality Criteria, D58-89 and BCS11 Building Component Safety Information** available from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

Your Company Name



Job	Truss	Truss Type	Qty	Ply	O'NEIL CONST. - NELSON RES.	14799447
361993	T22	HIP	1	1		

Builders FirstSource, Lake City, FL 32055

Job Reference (optional)

7.140 s Oct 1 2009 MiTek Industries, Inc. Fri Jun 24 14:58:24 2011 Page 1

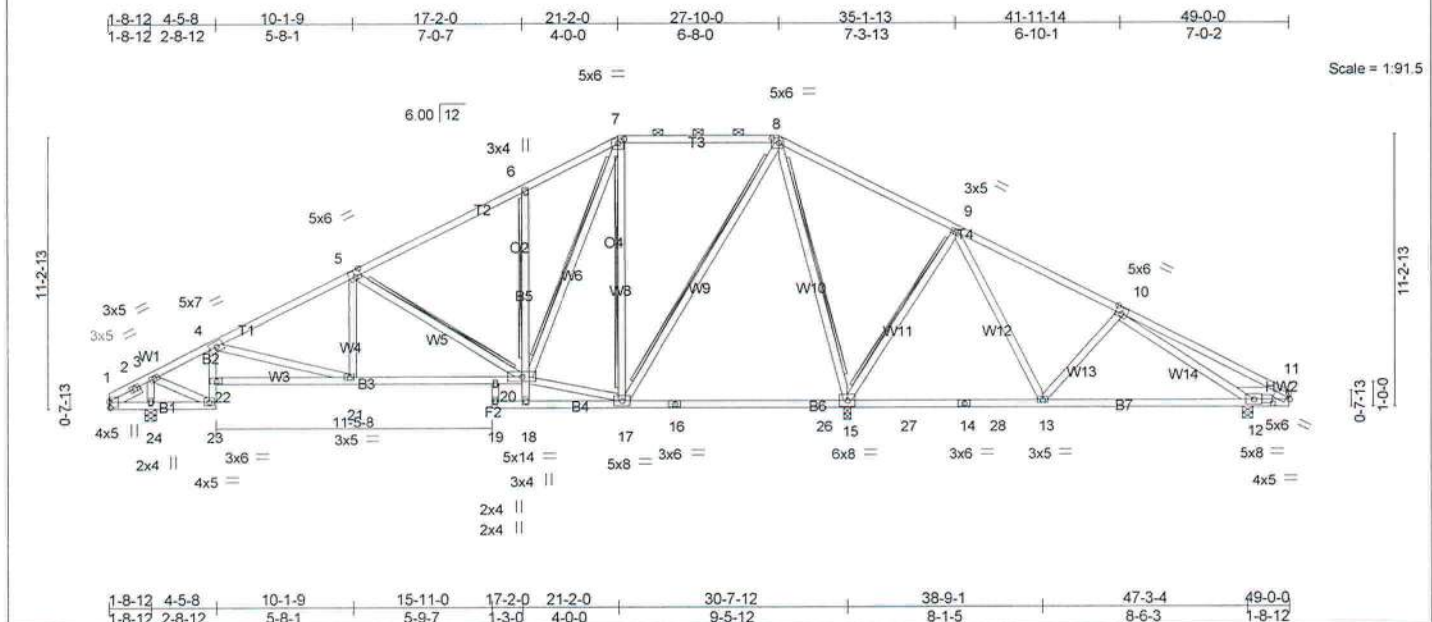


Plate Offsets (X,Y): [1:0-2-14,0-0-8], [5:0-3-0,0-3-4], [7:0-3-0,0-2-0], [8:0-3-8,0-2-4], [10:0-3-0,0-3-4], [11:0-1-10,0-2-6], [11:0-8-5,0-2-0]

LOADING (psf)	SPACING	2-0-0	CSI	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plates Increase	1.25	TC 0.45	Vert(LL)	-0.25 15-17	>999	360	MT20	244/190
TCDL 7.0	Lumber Increase	1.25	BC 0.78	Vert(TL)	-0.36 15-17	>964	240		
BCLL 0.0	Rep Stress Incr	YES	WB 0.73	Horz(TL)	0.12 15	n/a	n/a		
BCDL 5.0	Code FBC2007/TP12002		(Matrix)	Wind(LL)	0.12 21-22	>999	240	Weight: 324 lb	

LUMBER	BRACING
TOP CHORD 2 X 4 SYP No.2	TOP CHORD Structural wood sheathing directly applied or 5-6-14 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 7-8.
BOT CHORD 2 X 4 SYP No.2 *Except* B2: 2 X 4 SYP No.1D, B5: 2 X 4 SYP No.3	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. Except: 7-8-13 oc bracing: 21-22 9-3-13 oc bracing: 20-21 10-0-0 oc bracing: 18-19.
WEBS 2 X 4 SYP No.3 *Except* W9: 2 X 4 SYP No.2	WEBS T-Brace: 2 X 4 SYP No.3 - 6-20 6-0-0 oc bracing: 18-20 2 X 4 SYP No.3 - 5-20, 7-20, 7-17, 8-17, 9-15 2 X 6 SYP No.2 - 8-15
SLIDER Left 2 X 4 SYP No.2 1-5-5, Right 2 X 6 SYP No.1D 2-2-1	Fasten T and I braces to narrow edge of web with 10d Common wire nails, 9in o.c., with 4in minimum end distance. Brace must cover 90% of web length.

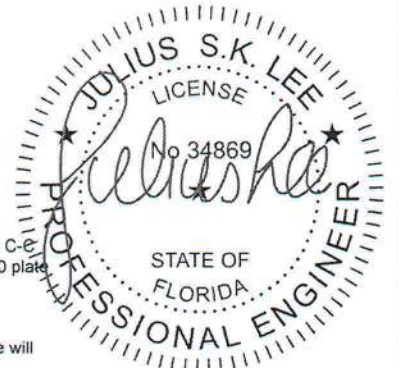
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS** (lb/size) 24=848/0-5-8, 15=2415/0-3-8, 12=278/0-5-8  
Max Horz 24=177(LC 5)  
Max Uplift 24=339(LC 6), 15=596(LC 6), 12=243(LC 7)  
Max Grav 24=877(LC 10), 15=2415(LC 1), 12=434(LC 11)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 3-4=-824/579, 4-5=-1165/798, 5-6=-685/534, 6-7=-639/728, 7-8=-262/455,  
8-9=-278/853, 9-10=-174/374  
BOT CHORD 22-23=-259/214, 21-22=-660/1136, 20-21=-461/986, 6-20=-303/417, 16-17=-290/566,  
16-26=-290/566, 15-26=-290/566, 15-27=-438/475, 14-27=-438/475, 14-28=-438/475,  
13-28=-438/475, 12-13=-226/273, 11-12=-112/314  
WEBS 3-24=-927/724, 3-23=-552/780, 5-21=-14/256, 5-20=-534/541, 17-20=0/325,  
7-20=-642/701, 7-17=-671/515, 8-17=-625/975, 8-15=-1604/1055, 9-15=-626/671,  
9-13=-307/435, 10-13=-330/438, 10-12=-457/339

**NOTES** (11-12)  
1) Unbalanced roof live loads have been considered for this design.  
2) Wind: ASCE 7-05; 110mph (3-second gust); TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-E Exterior(2) zone; cantilever left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60  
3) Provide adequate drainage to prevent water ponding.  
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.  
5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6' tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 5.0psf.

Continued on page 2



June 24, 2011

<p><b>WARNING</b> - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MI-7473 BEFORE USE.</p> <p>Design valid for use only with MiTek connectors. This design is based only upon parameters shown, and is for an individual building component. Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to insure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult <b>ANSI/TPI1 Quality Criteria, D58-89 and BCS11 Building Component Safety Information</b> available from Truss Plate Institute, 583 D'Onefro Drive, Madison, WI 53719.</p>	<p>Your Company Name</p>
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Job	Truss	Truss Type	Qty	Ply	O'NEIL CONST. - NELSON RES.	
361993	T22	HIP	1	1		14799447

Builders FirstSource, Lake City, FL 32055

Job Reference (optional)  
7,140 s Oct 1 2009 MiTek Industries, Inc. Fri Jun 24 14:58:24 2011 Page 2

#### NOTES (11-12)

- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 24=339, 15=596, 12=243.
- 8) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
- 9) Design assumes 4x2 (flat orientation) purlins at oc spacing indicated, fastened to truss TC w/ 2-10d nails.
- 10) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.
- 11) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
- 12) Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869: Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

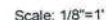
LOAD CASE(S) Standard



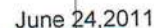
**WARNING** - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITTEK REFERENCE PAGE MIT-7473 BEFORE USE.  
Design valid for use only with Mittek connectors. This design is based only upon parameters shown, and is for an individual building component.  
Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to insure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult **ANSI/TPI1 Quality Criteria, DSB-89 and BCS11 Building Component Safety Information** available from Truss Plate Institute, 583 D'Oonofrio Drive, Madison, WI 53719.

Your Company Name





- 1) Unbalanced roof live loads have been considered.
- 2) Wind: ASCE 7-05; 110mph (3-second gust); TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 5.0psf.
- 6) All bearings are assumed to be SYP No.2 .
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 23=370, 14=593, 11=274.
- 8) "Semi-rigid" plate breaks including heels" Member end fixity model was used in the analysis and design of this truss.



**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE IDS: 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 84**

Your Company Name

Job	Truss	Truss Type	Qty	Ply	O'NEIL CONST. - NELSON RES.	I4799448
361993	T23	HIP	1	1	Job Reference (optional)	

Builders FrstSource, Lake City, FL 32055

7.140 s Oct 1 2009 MiTek Industries, Inc. Fri Jun 24 14:58:25 2011 Page 2

#### NOTES (11-12)

- 9) Design assumes 4x2 (flat orientation) purlins at oc spacing indicated, fastened to truss TC w/ 2-10d nails.  
 10) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.  
 11) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.  
 12) Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869; Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

LOAD CASE(S) Standard



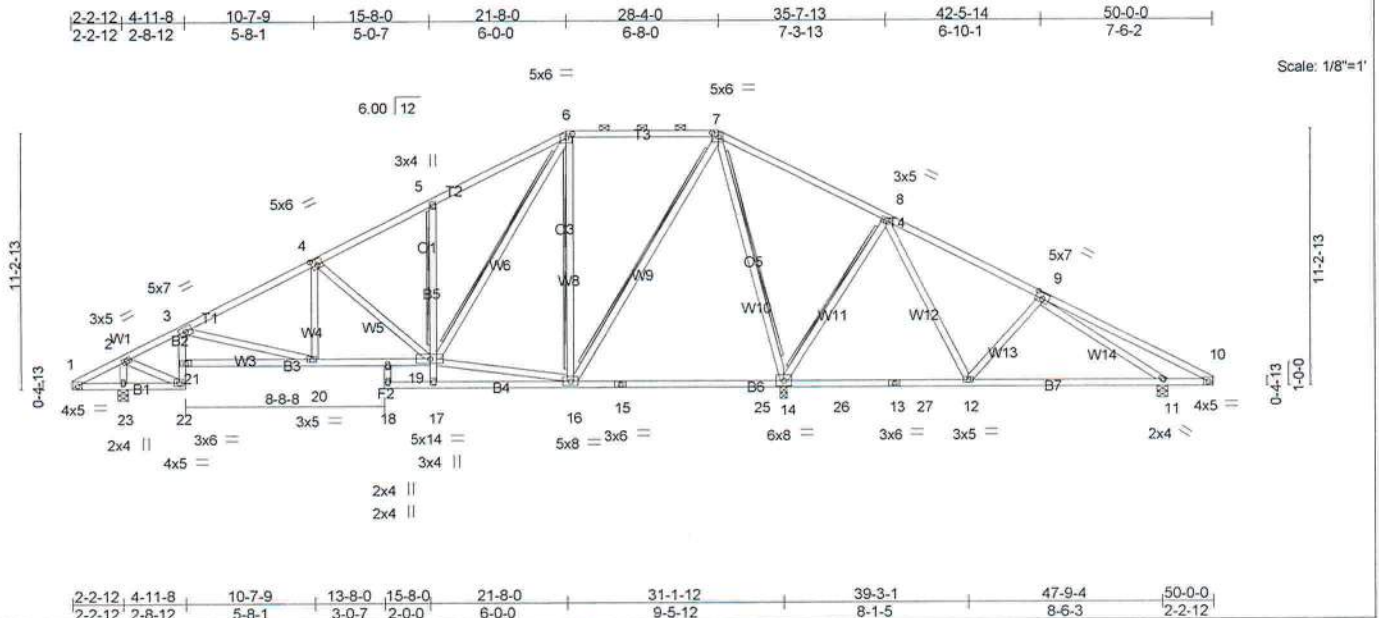
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MIT-7473 BEFORE USE.**

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Your Company Name



Job	Truss	Truss Type	Qty	Ply	O'NEIL CONST. - NELSON RES.	14799449
361993	T24	HIP	3	1	Job Reference (optional)	
Builders FirstSource, Lake City, FL 32055						7.140 s Oct 1 2009 MiTek Industries, Inc. Fri Jun 24 14:58:26 2011 Page 1



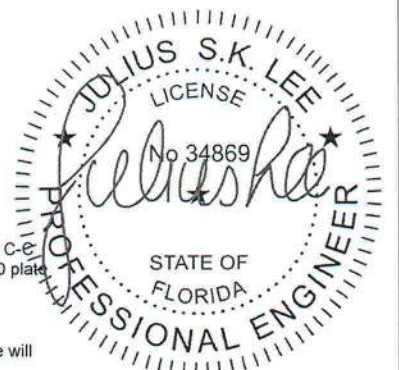
LOADING (psf)	SPACING	2-0-0	CSI	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plates Increase	1.25	TC 0.44	Vert(LL)	-0.27 14-16	>999	360	MT20	244/190
TCDL 7.0	Lumber Increase	1.25	BC 0.78	Vert(TL)	-0.38 14-16	>921	240		
BCLL 0.0	Rep Stress Incr	YES	WB 0.73	Horz(TL)	0.12 14	n/a	n/a		
BCDL 5.0	Code FBC2007/TPI2002		(Matrix)	Wind(LL)	0.13 18	>999	240		Weight: 322 lb

<b>LUMBER</b>	<b>BRACING</b>
TOP CHORD 2 X 4 SYP No.2	TOP CHORD Structural wood sheathing directly applied or 5-7-15 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 6-7.
BOT CHORD 2 X 4 SYP No.2 *Except* B2: 2 X 4 SYP No.1D, B5: 2 X 4 SYP No.3	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing, Except: 7-10-14 oc bracing: 20-21 9-9-2 oc bracing: 19-20 10-0-0 oc bracing: 17-18.
WEBS 2 X 4 SYP No.3 *Except* W9: 2 X 4 SYP No.2	WEBS T-Brace: 2 X 4 SYP No.3 - 5-19 10-0-0 oc bracing: 17-19 2 X 4 SYP No.3 - 6-19, 6-16, 7-16, 8-14 2 X 6 SYP No.2 - 7-14 Fasten T and I braces to narrow edge of web with 10d Common wire nails, 9in o.c., with 4in minimum end distance. Brace must cover 90% of web length.

**REACTIONS** (lb/size) 23=887/0-5-8, 14=2411/0-3-8, 11=313/0-5-8  
Max Horz 23=-177(LC 4)  
Max Uplift 23=-371(LC 6), 14=-582(LC 7), 11=-275(LC 7)  
Max Grav 23=918(LC 10), 14=2411(LC 1), 11=464(LC 11)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-809/543, 3-4=-1155/768, 4-5=-798/619, 5-6=-807/827, 6-7=-266/461,  
7-8=-265/854, 8-9=-163/369, 9-10=-345/324  
BOT CHORD 21-22=-283/244, 3-21=-271/266, 20-21=-632/1135, 19-20=-424/970, 5-19=-302/411,  
15-16=-291/559, 15-25=-291/559, 14-25=-291/559, 14-26=-433/469, 13-26=-433/469,  
13-27=-433/469, 12-27=-433/469, 11-12=-224/264, 10-11=-200/406  
WEBS 2-23=-953/748, 2-22=-600/827, 4-19=-413/408, 16-19=0/315, 6-19=-690/752,  
6-16=-672/545, 7-16=-622/977, 7-14=-1602/1040, 8-14=-620/662, 8-12=-302/434,  
9-12=-332/438, 9-11=-558/439

**NOTES** (11-12)  
1) Unbalanced roof live loads have been considered for this design.  
2) Wind: ASCE 7-05; 110mph (3-second gust); TCCL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) zone; cantilever left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60  
3) Provide adequate drainage to prevent water ponding.  
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.  
5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 5.0psf.  
6) All bearings are assumed to be SYP No.2.



June 24, 2011



Job	Truss	Truss Type	Qty	Ply	O'NEIL CONST. - NELSON RES.	I4799449
361993	T24	HIP	3	1	Job Reference (optional)	

Builders FrstSource, Lake City, FL 32055

7.140 s Oct 1 2009 MiTek Industries, Inc. Fri Jun 24 14:58:26 2011 Page 2

#### NOTES (11-12)

- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 23=371, 14=582, 11=275.
- 8) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
- 9) Design assumes 4x2 (flat orientation) purlins at oc spacing indicated, fastened to truss TC w/ 2-10d nails.
- 10) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.
- 11) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
- 12) Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869; Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

LOAD CASE(S) Standard



**WARNING** - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITTEK REFERENCE PAGE MH-7473 BEFORE USE.

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Your Company Name

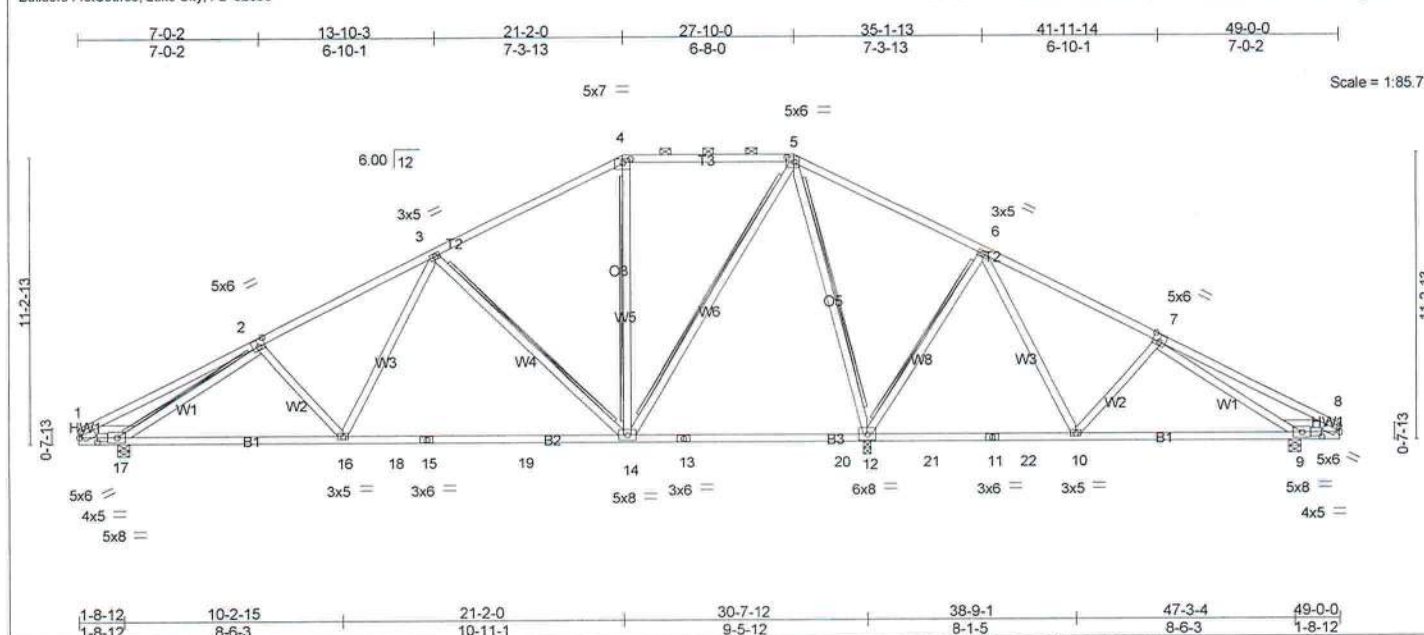


Plate Offsets (X,Y): [1:0-1-10,0-2-6], [1:0-8-5,0-2-0], [2:0-3-0,0-3-4], [4:0-3-8,0-1-12], [5:0-3-8,0-2-4], [7:0-3-0,0-3-4], [8:0-1-10,0-2-6], [8:0-8-5,0-2-0]											
LOADING (psf)		SPACING 2-0-0		CSI		DEFL			PLATES		GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.46	in (loc)	l/defl	L/d	MT20	244/190	
TCDL	7.0	Lumber Increase	1.25	BC	0.48	Vert(LL)	-0.39 14-16	>902			
BCLL	0.0	Rep Stress Incr	YES	WB	0.69	Vert(TL)	-0.58 14-16	>607			
BCDL	5.0	Code FBC2007/TPI2002		(Matrix)		Horz(TL)	0.03 12	n/a			
						Wind(LL)	0.09 14-16	>999			
									Weight: 299 lb		

LUMBER		BRACING	
TOP CHORD	2 X 4 SYP No.2	TOP CHORD	Structural wood sheathing directly applied or 5-2-9 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 4-5.
BOT CHORD	2 X 4 SYP No.1D	BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing. Except: 8-6-11 oc bracing: 16-17 10-0-0 oc bracing: 14-16.
WEBS	2 X 4 SYP No.3 *Except* W6: 2 X 4 SYP No.2	WEBS	T-Brace: 2 X 4 SYP No.3 - 3-14, 4-14, 5-14, 6-12, 2-17 2 X 6 SYP No.2 - 5-12
SLIDER	Left 2 X 6 SYP No.1D 2-2-1, Right 2 X 6 SYP No.1D 2-2-1		Fasten T and I braces to narrow edge of web with 10d Common wire nails, 9in o.c., with 4in minimum end distance. Brace must cover 90% of web length.
			MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS (lb/size) 12=2299/0-3-8, 17=1021/0-5-8, 9=409/0-5-8  
Max Horz 17=177(LC 5)  
Max Uplift 12=-518(LC 7), 17=-369(LC 6), 9=-226(LC 7)  
Max Grav 12=2299(LC 1), 17=1053(LC 10), 9=483(LC 11)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD	2-3=1307/845, 3-4=656/510, 4-5=500/549, 5-6=122/598, 6-7=262/167
BOT CHORD	1-17=131/265, 16-17=602/1172, 16-18=306/939, 15-18=306/939, 15-19=306/939, 14-19=306/939, 13-14=84/456, 13-20=84/456, 12-20=84/456, 12-21=207/342, 11-21=207/342, 11-22=207/342, 10-22=207/342, 9-10=60/343, 8-9=105/304
WEBS	2-16=123/321, 3-16=191/363, 3-14=616/636, 5-14=594/1023, 6-12=613/661, 6-10=287/412, 7-10=295/418, 2-17=1588/1059, 7-9=541/445, 5-12=1519/942

**NOTES (11-12)**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-05; 110mph (3-second gust); TCCL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) zone; cantilever left and right exposed ; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 5.0psf.
- 6) All bearings are assumed to be SYP No.2 .
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 12=518, 17=369, 9=226.
- 8) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
- 9) Design assumes 4x2 (flat orientation) purlins at oc spacing indicated, fastened to truss TC w/ 2-10d nails.

On W/ing: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

June



Job 361993	Truss T25	Truss Type HIP	Qty 1	Ply 1	O'NEIL CONST. - NELSON RES. I4799450
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Builders FrstSource, Lake City, FL 32055

Job Reference (optional)  
7.140 s Oct 1 2009 MiTek Industries, Inc. Fri Jun 24 14:58:26 2011 Page 2

- 11) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
- 12) Truss Design Engineer: Julius Lee, PE; Florida P.E. License No. 34869; Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

LOAD CASE(S) Standard



**WARNING** - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MIL-7473 BEFORE USE.

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Your Company Name



Job 361993	Truss T26	Truss Type KINGPOST	Qty 4	Ply 1	ONEIL CONST. - NELSON RES. Job Reference (optional) 7.140 s Oct 1 2009 MiTek Industries, Inc. Fri Jun 24 14:58:27 2011 Page 1	I4799451
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Builders FirstSource, Lake City, FL 32055

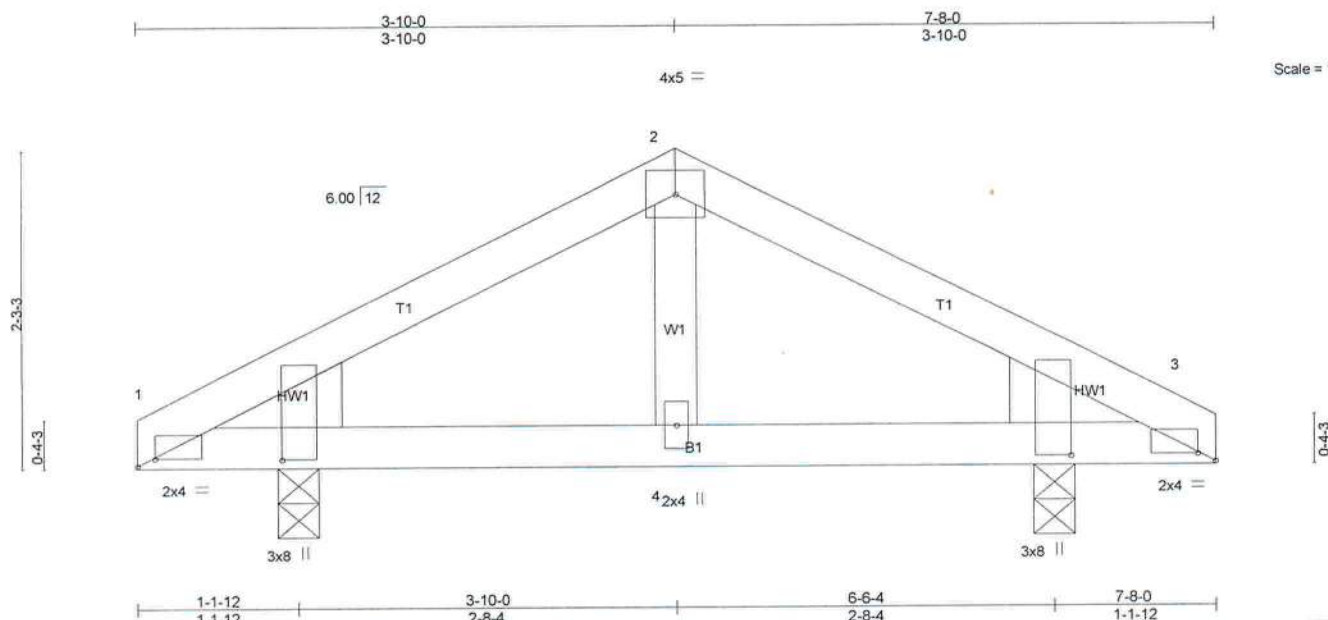


Plate Offsets (X,Y): [1:0-1-8,0-0-10], [1:0-0-8,1-0-5], [3:0-1-8,0-0-10], [3:0-0-8,1-0-5]

LOADING (psf)	SPACING	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCCL 20.0	Plates Increase	1.25	TC 0.55	Vert(LL)	-0.01	3-4	>999	360	MT20	244/190
TCDL 7.0	Lumber Increase	1.25	BC 0.73	Vert(TL)	-0.01	3-4	>999	240		
BCLL 0.0	Rep Stress Incr	YES	WB 0.05	Horz(TL)	-0.01	3	n/a	n/a		
BCDL 5.0	Code FBC2007/TPI2002		(Matrix)	Wind(LL)	0.03	3-4	>999	240		
									Weight: 31 lb	

#### LUMBER

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

Left: 2 X 6 SYP No.1D, Right: 2 X 6 SYP No.1D

REACTIONS (lb/size) 1=236/0-3-8, 3=236/0-3-8  
Max Horz 1=32(LC 4)  
Max Uplift 1=195(LC 6), 3=195(LC 7)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 1-2=332/678, 2-3=332/678  
BOT CHORD 1-4=521/255, 3-4=521/255  
WEBS 2-4=336/133

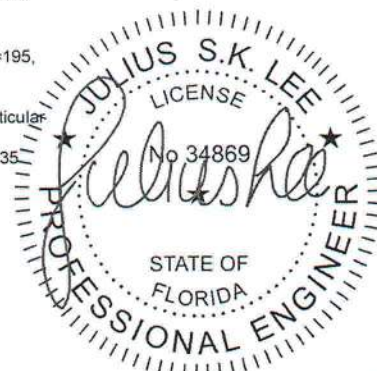
#### NOTES (8-9)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-05; 110mph (3-second gust); TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SYP No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=195, 3=195.
- "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
- This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
- Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869; Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

LOAD CASE(S) Standard

Structural wood sheathing directly applied or 6-0-0 oc purlins.  
Rigid ceiling directly applied or 8-5-7 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.



June 24, 2011

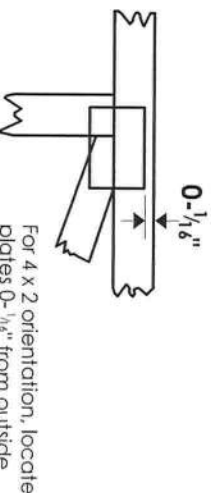
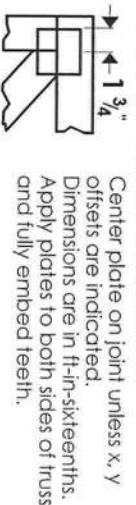


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Your Company Name

# Symbols

## PLATE LOCATION AND ORIENTATION



**\* Plate location details available in Mitek 20/20 software or upon request.**

## PLATE SIZE

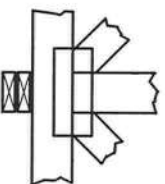
4 X 4

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

## LATERAL BRACING LOCATION



## BEARING



## Industry Standards:

ANSI/FP11:

National Design Specification for Metal Plate Connected Wood Truss Construction.

DSB-89:

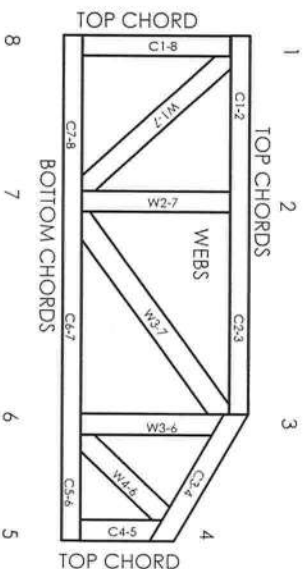
Design Standard for Bracing.

BCS11:

Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate

Connected Wood Trusses.

# Numbering System



**JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.**

**CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.**

## PRODUCT CODE APPROVALS

ICC-ES Reports:

ESR-1311, ESR-1352, ER-5243, 9604B, 9730, 95-43, 96-31, 9667A  
NER-487, NER-561  
95110, 84-32, 96-67, ER-3907, 9432A

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and logo



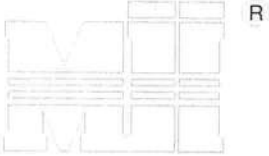
# General Safety Notes

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

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCS11.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative T, I, or Eliminator bracing should be considered.
3. Never exceed the design loading shown and never stock materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/FP 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/FP 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/FP 1 Quality Criteria.







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Note: T-Bracing / I-Bracing to be used when continuous lateral bracing is impractical. T-Brace / I-Brace must cover 90% of web length.

Note: This detail NOT to be used to convert T-Brace / I-Brace webs to continuous lateral braced webs.

## Nailing Pattern

T-Brace size	Nail Size	Nail Spacing
2x4 or 2x6 or 2x8	10d	6" o.c.

Note: Nail along entire length of T-Brace / I-Brace  
(On Two-Ply's Nail to Both Plies)

Brace Size  
for One-Ply TrussSpecified Continuous  
Rows of Lateral Bracing

Web Size	1	2
2x3 or 2x4	2x4 T-Brace	2x4 I-Brace
2x6	2x6 T-Brace	2x6 I-Brace
2x8	2x8 T-Brace	2x8 I-Brace

Brace Size  
for Two-Ply TrussSpecified Continuous  
Rows of Lateral Bracing

Web Size	1	2
2x3 or 2x4	2x4 T-Brace	2x4 I-Brace
2x6	2x6 T-Brace	2x6 I-Brace
2x8	2x8 T-Brace	2x8 I-Brace

T-Brace / I-Brace must be same species  
and grade (or better) as web member.

Nails

SPACING

WEB

T-BRACE

Nails

Section Detail

T-Brace

Web

Nails

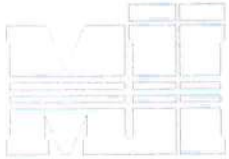
Web

I-Brace

Nails



1109 COASTAL BAY  
BOYNTON BC, FL 33435



MiTek Industries, Inc.

R

## GENERAL SPECIFICATIONS

1. NAIL SIZE = 3" X 0.131" = 10d
2. WOOD SCREW = 3" WS3 USP OR EQUIVALENT  
DO NOT USE DRYWALL OR DECKING TYPE SCREW
3. INSTALL VALLEY TRUSSES (24" O.C. MAXIMUM) AND SECURE PER DETAIL A
4. BRACE VALLEY WEBS IN ACCORDANCE WITH THE INDIVIDUAL DESIGN DRAWINGS.
5. BASE TRUSS SHALL BE DESIGNED WITH A PURLIN SPACING EQUIVALENT TO THE RAKE DIMENSION OF THE VALLEY TRUSS SPACING.
6. NAILING DONE PER NDS - 01
7. VALLEY STUD SPACING NOT TO EXCEED 48" O.C.

GABLE END, COMMON TRUSS  
OR GIRDER TRUSS

VALLEY TRUSS TYPICAL

BASE TRUSSES

VALLEY TRUSS TYPICAL

GABLE END, COMMON TRUSS  
OR GIRDER TRUSS

P 12

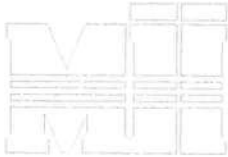
SEE DETAIL  
A BELOW (TYP.)SECURE VALLEY TRUSS  
W/ ONE ROW OF 10d  
NAILS 6" O.C.ATTACH 2x4 CONTINUOUS NO.2 SYP  
TO THE ROOF W/ TWO USP WS3 (1/4" X 3")  
WOOD SCREWS INTO EACH BASE TRUSS.

WIND DESIGN PER ASCE 7-98, ASCE 7-02, ASCE 7-05  
 MAXIMUM WIND SPEED = 146 MPH  
 MAX MEAN ROOF HEIGHT = 30 FEET  
 ROOF PITCH = MINIMUM 3/12 MAXIMUM 6/12  
 CATEGORY II BUILDING  
 EXPOSURE C  
 WIND DURATION OF LOAD INCREASE : 1.60  
 MAX TOP CHORD TOTAL LOAD = 50 PSF  
 MAX SPACING = 24" O.C. (BASE AND VALLEY)  
 MINIMUM REDUCED DEAD LOAD OF 6 PSF  
 ON THE TRUSSES

DETAIL A  
 (NO SHEATHING)  
 N.T.S.



1109 COASTAL BAY  
 BOYNTON BC, FL 33435



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R

## NOTES:

1. TOE-NAILS SHALL BE DRIVEN AT AN ANGLE OF 45 DEGREES WITH THE MEMBER AND MUST HAVE FULL WOOD SUPPORT. (NAIL MUST BE DRIVEN THROUGH AND EXIT AT THE BACK CORNER OF THE MEMBER END AS SHOWN.)
2. THE END DISTANCE, EDGE DISTANCE, AND SPACING OF NAILS SHALL BE SUCH AS TO AVOID UNUSUAL SPLITTING OF THE WOOD.
3. ALLOWABLE VALUE SHALL BE THE LESSER VALUE OF THE TWO SPECIES FOR MEMBERS OF DIFFERENT SPECIES.

TOE-NAIL SINGLE SHEAR VALUES PER NDS 2001 (lb/nail)

	DIAM.	SYP	DF	HF	SPF	SPF-S
3.5" LONG	.131	88.0	80.6	69.9	68.4	59.7
	.135	93.5	85.6	74.2	72.6	63.4
	.162	108.8	99.6	86.4	84.5	73.8
3.25" LONG	.128	74.2	67.9	58.9	57.6	50.3
	.131	75.9	69.5	60.3	59.0	51.1
	.148	81.4	74.5	64.6	63.2	52.5

VALUES SHOWN ARE CAPACITY PER TOE-NAIL.  
APPLICABLE DURATION OF LOAD INCREASES MAY BE APPLIED.

## EXAMPLE:

(3) - 16d NAILS (.162" diam. x 3.5") WITH SPF SPECIES BOTTOM CHORD

For load duration increase of 1.15:

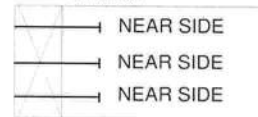
 $3 \text{ (nails)} \times 84.5 \text{ (lb/nail)} \times 1.15 \text{ (DOL)} = 291.5 \text{ lb Maximum Capacity}$ 

THIS DETAIL APPLICABLE TO THE  
THREE END DETAILS SHOWN BELOW

VIEWS SHOWN ARE FOR  
ILLUSTRATION PURPOSES ONLY

SIDE VIEW

3 NAILS



ANGLE MAY  
VARY FROM  
30° TO 60°

45.00°

ANGLE MAY  
VARY FROM  
30° TO 60°

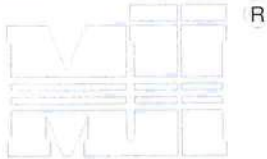
45.00°

ANGLE MAY  
VARY FROM  
30° TO 60°

45.00°



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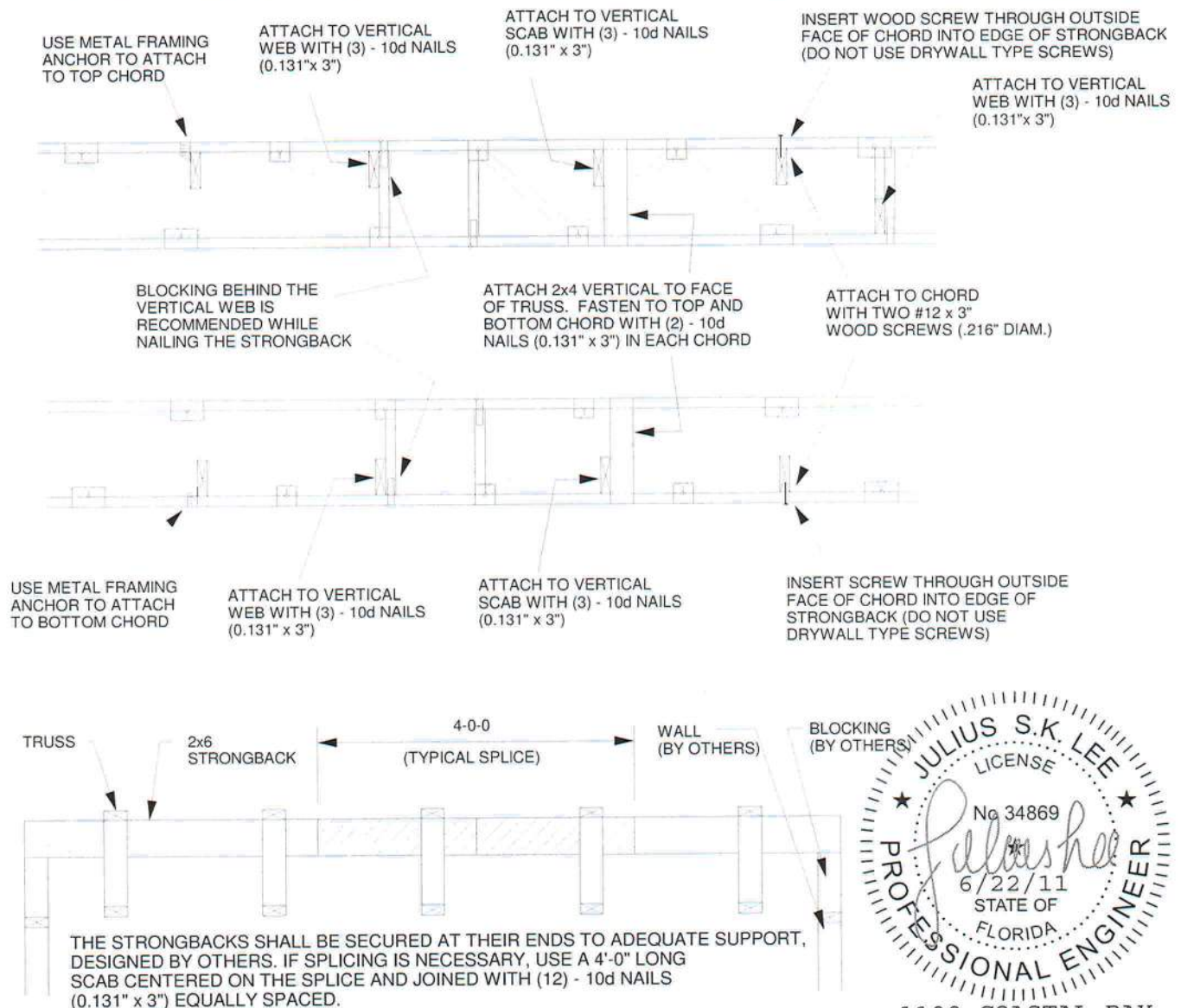


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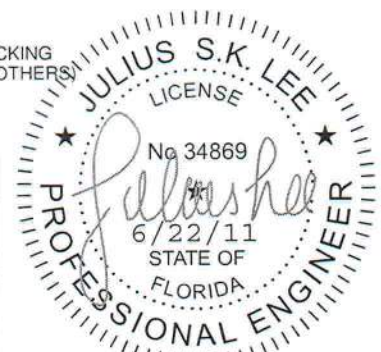
TO MINIMIZE VIBRATION COMMON TO ALL SHALLOW FRAMING SYSTEMS, 2x6 "STRONGBACK" IS RECOMMENDED, LOCATED EVERY 8 TO 10 FEET ALONG A FLOOR TRUSS.

NOTE 1: 2X6 STRONGBACK ORIENTED VERTICALLY MAY BE POSITIONED DIRECTLY UNDER THE TOP CHORD OR DIRECTLY ABOVE THE BOTTOM CHORD. SECURELY FASTENED TO THE TRUSS USING ANY OF THE METHODS ILLUSTRATED BELOW.

NOTE 2: STRONGBACK BRACING ALSO SATISFIES THE LATERAL BRACING REQUIREMENTS FOR THE BOTTOM CHORD OF THE TRUSS WHEN IT IS PLACED ON TOP OF THE BOTTOM CHORD, IS CONTINUOUS FROM END TO END, CONNECTED WITH A METHOD OTHER THAN METAL FRAMING ANCHOR, AND PROPERLY CONNECTED, BY OTHERS, AT THE ENDS.



ALTERNATE METHOD OF SPLICING:  
OVERLAP STRONGBACK MEMBERS A MINIMUM OF 4'-0" AND FASTEN WITH (12) - 10d NAILS (0.131" x 3") STAGGERED AND EQUALLY SPACED.  
(TO BE USED ONLY WHEN STRONGBACK IS NOT ALIGNED WITH A VERTICAL)



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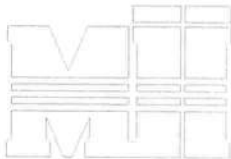


JANUARY 20, 2011

# STANDARD PIGGYBACK TRUSS CONNECTION DETAIL

ST-PIGGY

MiTek Industries, Chesterfield, MO

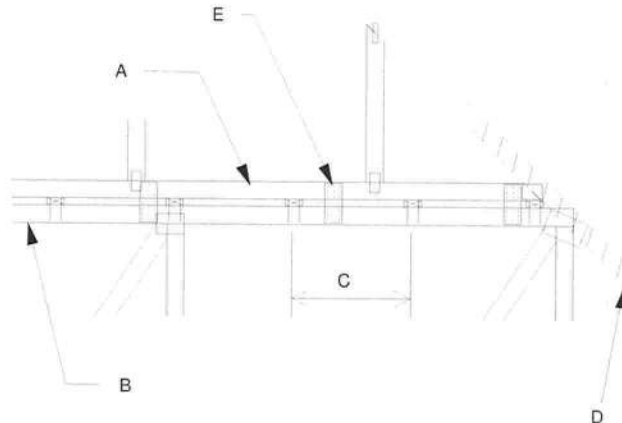


MiTek Industries, Inc.

MAXIMUM WIND SPEED = REFER TO NOTES D AND OR E  
MAX MEAN ROOF HEIGHT = 30 FEET  
MAX TRUSS SPACING = 24" O.C.  
CATEGORY II BUILDING  
EXPOSURE B or C  
ASCE 7-02, ASCE 7-05  
DURATION OF LOAD INCREASE : 1.60

DETAIL IS NOT APPLICABLE FOR TRUSSES  
TRANSFERING DRAG LOADS (SHEAR TRUSSES).  
ADDITIONAL CONSIDERATIONS BY BUILDING  
ENGINEER/DESIGNER ARE REQUIRED.

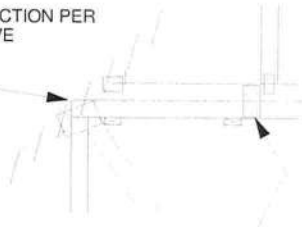
- A - PIGGYBACK TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING.  
SHALL BE CONNECTED TO EACH PURLIN  
WITH (2) 0.131" X 3.5" TOE NAILED.
- B - BASE TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING.
- C - PURLINS AT EACH BASE TRUSS JOINT AND A MAXIMUM 24" O.C.  
UNLESS SPECIFIED CLOSER ON MITEK TRUSS DESIGN DRAWING.  
CONNECT TO BASE TRUSS WITH (2) 0.131" X 3.5" NAILS EACH.
- D - 2 X 4'-0" SCAB, SIZE AND GRADE TO MATCH TOP CHORD OF  
PIGGYBACK TRUSS, ATTACHED TO ONE FACE, CENTERED ON  
INTERSECTION, WITH (2) ROWS OF 0.131" X 3" NAILS @ 4" O.C.  
SCAB MAY BE OMITTED PROVIDED THE TOP CHORD SHEATHING  
IS CONTINUOUS OVER INTERSECTION AT LEAST 1 FT. IN BOTH  
DIRECTIONS AND:  
1. WIND SPEED OF 90 MPH OR LESS FOR ANY PIGGYBACK SPAN, OR  
2. WIND SPEED OF 91 MPH TO 140 MPH WITH A MAXIMUM  
PIGGYBACK SPAN OF 12 ft.
- E - FOR WIND SPEEDS BETWEEN 101 AND 140 MPH, ATTACH  
MITEK 3X8 20 GA Nail-On PLATES TO EACH FACE OF TRUSSES AT  
72" O.C. W/ (4) 0.131" X 1.5" PER MEMBER. STAGGER NAILS FROM  
OPPOSING FACES. ENSURE 0.5" EDGE DISTANCE.  
(MIN. 2 PAIRS OF PLATES REQ. REGARDLESS OF SPAN)



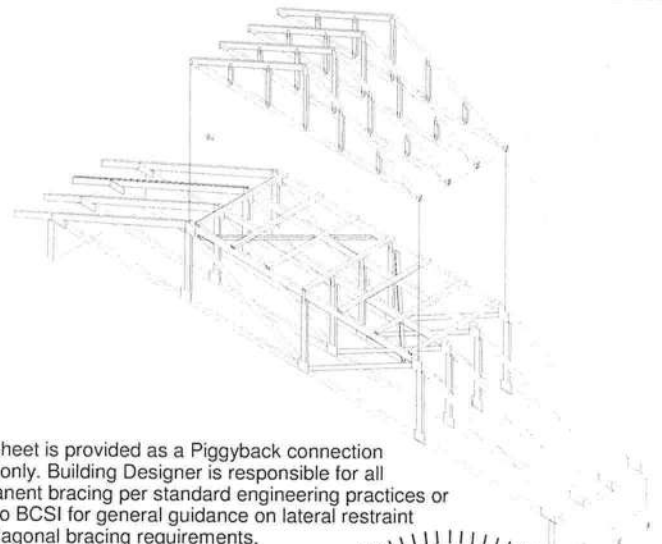
WHEN NO GAP BETWEEN PIGGYBACK AND BASE TRUSS EXISTS:

REPLACE TOE NAILING OF PIGGYBACK TRUSS TO PURLINS WITH Nail-On  
PLATES AS SHOWN, AND INSTALL PURLINS TO BOTTOM EDGE OF BASE  
TRUSS TOP CHORD AT SPECIFIED SPACING SHOWN ON BASE  
TRUSS MITEK DESIGN DRAWING.

SCAB CONNECTION PER  
NOTE D ABOVE

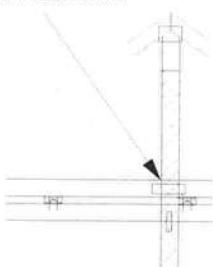


FOR ALL WIND SPEEDS, ATTACH MITEK 3X6 20 GA Nail-On PLATES TO  
EACH FACE OF TRUSSES AT 48" O.C. W/ (4) 0.131" X 1.5" PER MEMBER.  
STAGGER NAILS FROM OPPOSING FACES ENSURE 0.5" EDGE DISTANCE.



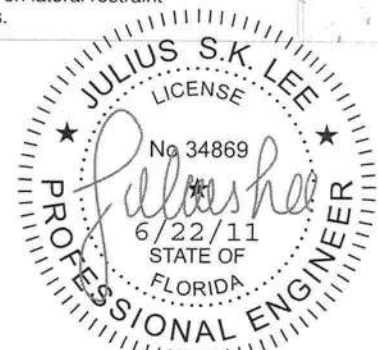
This sheet is provided as a Piggyback connection  
detail only. Building Designer is responsible for all  
permanent bracing per standard engineering practices or  
refer to BCSI for general guidance on lateral restraint  
and diagonal bracing requirements.

VERTICAL WEB TO  
EXTEND THROUGH  
BOTTOM CHORD  
OF PIGGYBACK



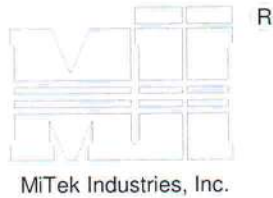
FOR LARGE CONCENTRATED LOADS APPLIED  
TO CAP TRUSS REQUIRING A VERTICAL WEB:

- 1) VERTICAL WEBS OF PIGGYBACK AND BASE TRUSS  
MUST MATCH IN SIZE, GRADE, AND MUST LINE UP  
AS SHOWN IN DETAIL.
- 2) ATTACH 2 x 4'-0" SCAB TO EACH FACE OF  
TRUSS ASSEMBLY WITH 2 ROWS OF 10d (0.131" X 3") NAILS  
SPACED 4" O.C. FROM EACH FACE. (SIZE AND GRADE TO MATCH  
VERTICAL WEBS OF PIGGYBACK AND BASE TRUSS.)  
(MINIMUM 2X4)
- 3) THIS CONNECTION IS ONLY VALID FOR A MAXIMUM  
CONCENTRATED LOAD OF 4000 LBS (@1.15). REVIEW  
BY A QUALIFIED ENGINEER IS REQUIRED FOR LOADS  
GREATER THAN 4000 LBS.
- 4) FOR PIGGYBACK TRUSSES CARRYING GIRDER LOADS,  
NUMBER OF PLYS OF PIGGYBACK TRUSS TO MATCH BASE TRUSS.
- 5) CONCENTRATED LOAD MUST BE APPLIED TO BOTH  
THE PIGGYBACK AND THE BASE TRUSS DESIGN.



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Typical 2x4 L-Brace Nailed To  
2x Verticals W/10d Nails, 6" o.c.

Vertical Stud

SECTION B-B

TRUSS GEOMETRY AND CONDITIONS  
SHOWN ARE FOR ILLUSTRATION ONLY.

12  
Varies to Common Truss

SEE INDIVIDUAL MITEK ENGINEERING  
DRAWINGS FOR DESIGN CRITERIA

3x4 =

\* - Diagonal Bracing  
Refer to Section A-A

\*\* - L-Bracing Refer  
to Section B-B

24" Max

## NOTE:

1. MINIMUM GRADE OF #2 MATERIAL IN THE TOP AND BOTTOM CHORDS.
2. CONNECTION BETWEEN BOTTOM CHORD OF GABLE END TRUSS AND WALL TO BE PROVIDED BY PROJECT ENGINEER OR ARCHITECT.
3. BRACING SHOWN IS FOR INDIVIDUAL TRUSS ONLY. CONSULT BLDG. ARCHITECT OR ENGINEER FOR TEMPORARY AND PERMANENT BRACING OF ROOF SYSTEM.
4. "L" BRACES SPECIFIED ARE TO BE FULL LENGTH. \*GRADES: 1x4 SRB OR 2x4 STUD OR BETTER WITH ONE ROW OF 10d NAILS SPACED 6" O.C.
5. DIAGONAL BRACE TO BE APPROXIMATELY 45 DEGREES TO ROOF DIAPHRAM AT 4'-0" O.C.
6. CONSTRUCT HORIZONTAL BRACE CONNECTING A 2x6 STUD AND A 2x4 STUD AS SHOWN WITH 16d NAILS SPACED 6" O.C. HORIZONTAL BRACE TO BE LOCATED AT THE MIDSPAN OF THE LONGEST STUD. ATTACH TO VERTICAL STUDS WITH (4) 10d NAILS THROUGH 2x4. (REFER TO SECTION A-A)
7. GABLE STUD DEFLECTION MEETS OR EXCEEDS L/240.
8. THIS DETAIL DOES NOT APPLY TO STRUCTURAL GABLES.
9. DO NOT USE FLAT BOTTOM CHORD GABLES NEXT TO SCISSOR TYPE TRUSSES.

Vertical Stud

(4) - 16d Common  
Wire Nails

DIAGONAL  
BRACE

16d Common  
Wire Nails  
Spaced 6" o.c.

(2) - 10d Common  
Wire Nails into 2x6

2x6 Stud or  
2x4 No.2 of better  
Typical Horizontal Brace  
Nailed To 2x Verticals  
w/(4)-10d Common Nails

SECTION A-A

2x4 Stud

PROVIDE 2x4 BLOCKING BETWEEN THE FIRST  
TWO TRUSSES AS NOTED. TOENAIL BLOCKING  
TO TRUSSES WITH (2) - 10d NAILS AT EACH END.  
ATTACH DIAGONAL BRACE TO BLOCKING WITH  
(5) - 10d COMMON WIRE NAILS.

(4) - 8d NAILS MINIMUM, PLYWOOD  
SHEATHING TO 2x4 STD SPF BLOCK

Roof Sheathing

1'-3"  
Max.

(2) - 10d

(2) - 10d NAILS

Trusses @ 24" o.c.

Diag. Brace  
at 1/3 points  
if needed

2x6 DIAGONAL BRACE SPACED 48" O.C.  
ATTACHED TO VERTICAL WITH (4) - 16d  
COMMON WIRE NAILS AND ATTACHED  
TO BLOCKING WITH (5) - 10d COMMONS.

End Wall

HORIZONTAL BRACE  
(SEE SECTION A-A)

Minimum Stud Size Species and Grade	Stud Spacing	Without Brace	1x4 L-Brace	2x4 L-Brace	DIAGONAL BRACE	2 DIAGONAL BRACES AT 1/3 POINTS
Maximum Stud Length						
2x4 SPF Std/Stud	12" O.C.	4-3-2	4-7-6	6-6-5	8-6-3	12-9-6
2x4 SPF Std/Stud	16" O.C.	3-10-7	4-0-0	5-7-13	7-8-14	11-7-5
2x4 SPF Std/Stud	24" O.C.	3-2-0	3-3-2	4-7-6	6-4-0	9-6-0

+ Diagonal braces over 6'-3" require a 2x4 T-Brace attached to one edge. Diagonal braces over 12'-6" require 2x4 I-braces attached to both edges. Fasten T and I braces to narrow edge of web with 10d common wire nails 8in o.c., with 3in minimum end distance. Brace must cover 90% of diagonal length.

MAXIMUM WIND SPEED = 120 MPH  
MAX MEAN ROOF HEIGHT = 30 FEET  
CATEGORY II BUILDING  
EXPOSURE B or C  
ASCE 7-98, ASCE 7-02, ASCE 7-05  
DURATION OF LOAD INCREASE : 1.60

STUD DESIGN IS BASED ON COMPONENTS AND CLADDING.  
CONNECTION OF BRACING IS BASED ON MWFRS.



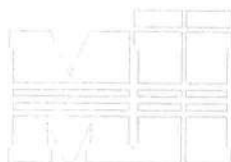
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6/22/11

JANUARY 1, 2009

## Standard Gable End Detail

ST-GE140-001



MiTek Industries, Inc.

R

Typical 1x4 L-Brace Nailed To  
2x Verticals W/10d Nails, 6" o.c.

Vertical Stud

SECTION B-B

TRUSS GEOMETRY AND CONDITIONS  
SHOWN ARE FOR ILLUSTRATION ONLY.

12

Varies to Common Truss

SEE INDIVIDUAL MITEK ENGINEERING  
DRAWINGS FOR DESIGN CRITERIA

3x4 =

24" Max

\* - Diagonal Bracing  
Refer to Section A-A

\*\* - L-Bracing Refer  
to Section B-B

## NOTE:

1. MINIMUM GRADE OF #2 MATERIAL IN THE TOP AND BOTTOM CHORDS.
2. CONNECTION BETWEEN BOTTOM CHORD OF GABLE END TRUSS AND WALL TO BE PROVIDED BY PROJECT ENGINEER OR ARCHITECT.
3. BRACING SHOWN IS FOR INDIVIDUAL TRUSS ONLY. CONSULT BLDG. ARCHITECT OR ENGINEER FOR TEMPORARY AND PERMANENT BRACING OF ROOF SYSTEM.
4. "L" BRACES SPECIFIED ARE TO BE FULL LENGTH. GRADES: 1x4 SRB OR 2x4 STUD OR BETTER WITH ONE ROW OF 10d NAILS SPACED 6" O.C.
5. DIAGONAL BRACE TO BE APPROXIMATELY 45 DEGREES TO ROOF DIAPHRAM AT 4'-0" O.C.
6. CONSTRUCT HORIZONTAL BRACE CONNECTING A 2x6 STUD AND A 2x4 STUD AS SHOWN WITH 16d NAILS SPACED 6" O.C. HORIZONTAL BRACE TO BE LOCATED AT THE MIDSPAN OF THE LONGEST STUD. ATTACH TO VERTICAL STUDS WITH (4) 10d NAILS THROUGH 2x4. (REFER TO SECTION A-A)
7. GABLE STUD DEFLECTION MEETS OR EXCEEDS L/240.
8. THIS DETAIL DOES NOT APPLY TO STRUCTURAL GABLES.
9. DO NOT USE FLAT BOTTOM CHORD GABLES NEXT TO SCISSOR TYPE TRUSSES.

MiTek Industries, Chesterfield, MO

Vertical Stud

(4) - 16d Common  
Wire Nails

DIAGONAL  
BRACE

16d Common  
Wire Nails  
Spaced 6" o.c.

(2) - 10d Common  
Wire Nails into 2x6

Typical Horizontal Brace  
Nailed To 2x Verticals  
w/(4)-10d Common Nails

SECTION A-A

2x4 Stud

PROVIDE 2x4 BLOCKING BETWEEN THE FIRST  
TWO TRUSSES AS NOTED. TOENAIL BLOCKING  
TO TRUSSES WITH (2) - 10d NAILS AT EACH END.  
ATTACH DIAGONAL BRACE TO BLOCKING WITH  
(5) - 10d COMMON WIRE NAILS.

(4) - 8d NAILS MINIMUM, PLYWOOD  
SHEATHING TO 2x4 STD SPF BLOCK

Roof Sheathing

1'-3"  
Max.

(2) - 10d

(2) - 10d NAILS

Trusses @ 24" o.c.

Diag. Brace  
at 1/3 points  
if needed

2x6 DIAGONAL BRACE SPACED 48" O.C.  
ATTACHED TO VERTICAL WITH (4) - 16d  
COMMON WIRE NAILS AND ATTACHED  
TO BLOCKING WITH (5) - 10d COMMONS.

End Wall

HORIZONTAL BRACE  
(SEE SECTION A-A)



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6/22/11

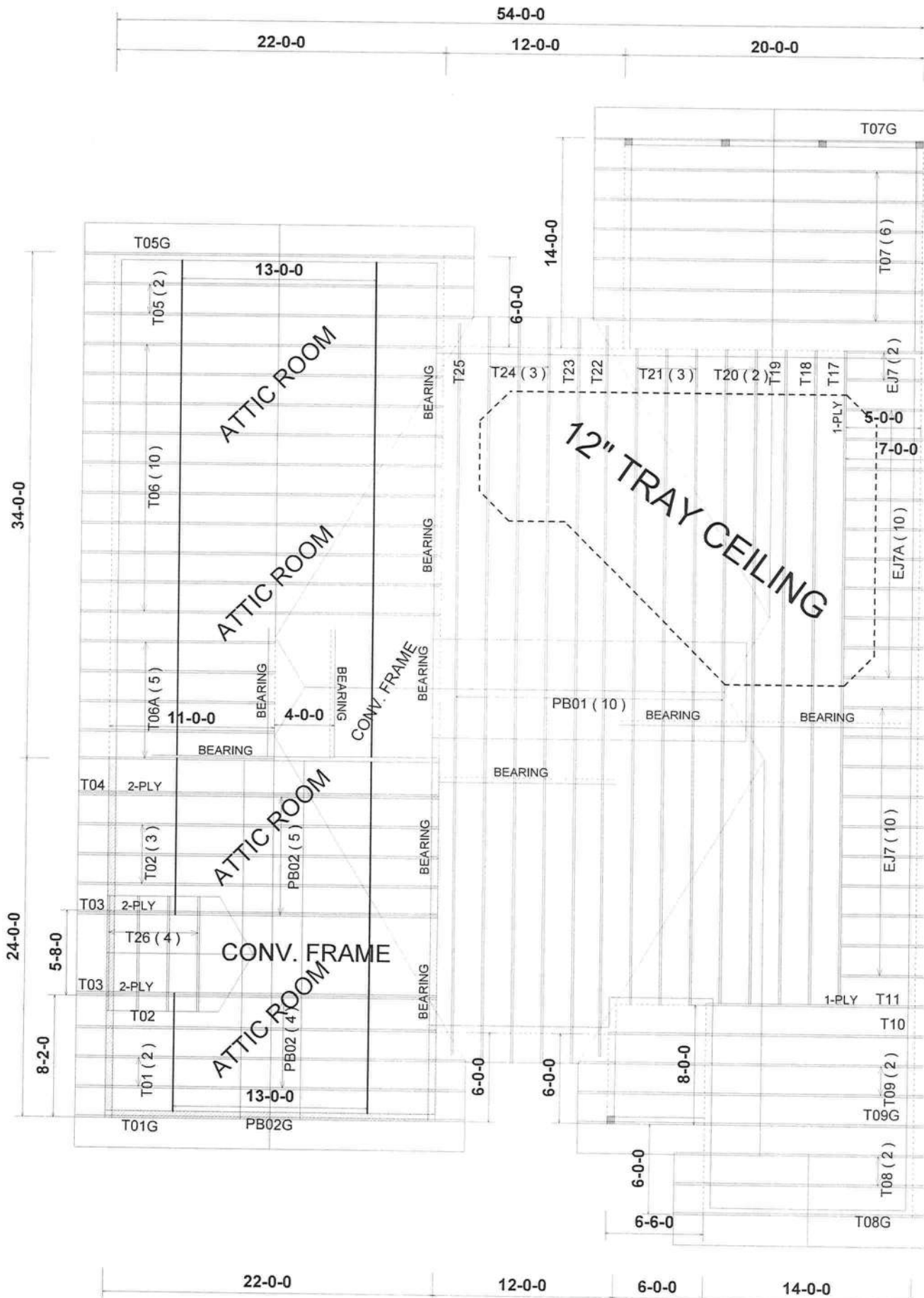
Minimum Stud Size Species and Grade	Stud Spacing	Without Brace	1x4 L-Brace	2x4 L-Brace	DIAGONAL BRACE	2 DIAGONAL BRACES AT 1/3 POINTS
		Maximum Stud Length				
2x4 SPF Std/Stud	12" O.C.	3-10-1	3-11-7	5-7-2	7-8-2	11-6-4
2x4 SPF Std/Stud	16" O.C.	3-3-14	3-5-1	4-10-2	6-7-13	9-11-11
2x4 SPF Std/Stud	24" O.C.	2-8-9	2-9-8	3-11-7	5-5-2	8-1-12

Diagonal braces over 6'-3" require a 2x4 T-Brace attached to one edge. Diagonal braces over 12'-6" require 2x4 I-braces attached to both edges. Fasten T and I braces to narrow edge of web with 10d common wire nails 8in o.c., with 3in minimum end distance. Brace must cover 90% of diagonal length.

MAXIMUM WIND SPEED = 140 MPH  
MAX MEAN ROOF HEIGHT = 30 FEET  
CATEGORY II BUILDING  
EXPOSURE B or C  
ASCE 7-98, ASCE 7-02, ASCE 7-05  
DURATION OF LOAD INCREASE : 1.60

STUD DESIGN IS BASED ON COMPONENTS AND CLADDING.  
CONNECTION OF BRACING IS BASED ON MWFRS.









6/12 - 10/12 PITCH  
24" CANTILEVER

# BEARING HEIGHT SCHEDULE



10'-1 1/8"



9'-1 1/8"

## NOTES:

1. ALL WORK TO BE DONE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE INTERNATIONAL BUILDING CODES AND ALL APPLICABLE LOCAL ORDINANCES.
2. ALL WORK TO BE DONE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE INTERNATIONAL BUILDING CODES AND ALL APPLICABLE LOCAL ORDINANCES.
3. ALL WORK TO BE DONE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE INTERNATIONAL BUILDING CODES AND ALL APPLICABLE LOCAL ORDINANCES.
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9. ALL WORK TO BE DONE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE INTERNATIONAL BUILDING CODES AND ALL APPLICABLE LOCAL ORDINANCES.
10. ALL WORK TO BE DONE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE INTERNATIONAL BUILDING CODES AND ALL APPLICABLE LOCAL ORDINANCES.

## SHOP DRAWING APPROVAL

THESE SHOP DRAWINGS HAVE BEEN REVIEWED AND FOUND TO BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE SPECIFICATIONS AND THE LATEST EDITIONS OF THE INTERNATIONAL BUILDING CODES AND ALL APPLICABLE LOCAL ORDINANCES.

Approved: \_\_\_\_\_ Date: \_\_\_\_\_

Approved by: \_\_\_\_\_



**Builders**  
**FirstSource**

Dunnell

PHONE: 904-461-1541 FAX: 904-461-1542

Jacksonville

PHONE: 904-771-1541 FAX: 904-771-1542

Lake City

PHONE: 850-771-1541 FAX: 850-771-1542

Sanford

PHONE: 407-822-1541 FAX: 407-822-1542

**O'NEIL CONST.**

**NELSON RES.**

CUSTOM

6-23-11

K.L.H.

361993

HIGH SPRINGS, FL

### Project Information

For: O'NEIL CONSTRUCTION  
 HIGH SPRINGS, FL

### Design Information

	Htg	Clg	Infiltration
Outside db (°F)	33	92	Method
Inside db (°F)	70	75	Construction quality
Design TD (°F)	37	17	Fireplaces
Daily range	-	M	Simplified
Inside humidity (%)	30	50	Semi-loose
Moisture difference (gr/lb)	11	52	1 (Semi-tight)

#### HEATING EQUIPMENT

Make Ruud  
 Trade RUUD 13PJL SERIES  
 Model 13PJL48  
 ARI ref no. 3605269

Efficiency 8.5 HSPF

Heating input  
 Heating output 46000 Btuh @ 47°F  
 Temperature rise 27 °F  
 Actual air flow 1550 cfm  
 Air flow factor 0.041 cfm/Btuh  
 Static pressure 0.10 in H2O  
 Space thermostat

#### COOLING EQUIPMENT

Make Ruud  
 Trade RUUD 13PJL SERIES  
 Cond 13PJL48  
 Coil RHSL-HM4821++RCSL-H\*4821  
 ARI ref no. 3605269

Efficiency 10.9 EER, 13 SEER

Sensible cooling 32550 Btuh  
 Latent cooling 13950 Btuh  
 Total cooling 46500 Btuh  
 Actual air flow 1550 cfm  
 Air flow factor 0.056 cfm/Btuh  
 Static pressure 0.10 in H2O  
 Load sensible heat ratio 0.81

ROOM NAME	Area (ft²)	Htg load (Btuh)	Clg load (Btuh)	Htg AVF (cfm)	Clg AVF (cfm)
LAUNDRY	71	313	245	13	14
HALL/STAIRWELL	128	322	346	13	19
MASTER BATH	182	2921	1634	119	91
M/BEDROOM	255	5881	3892	240	217
W.I.CLOSET	105	1825	663	75	37
KITCHEN	250	941	4512	38	252
BREAKFAST AREA	144	2537	1762	104	98
DINING	144	3127	1957	128	109
FOYER	120	1785	1410	73	79
BEDROOM 2	203	6193	3193	253	178
HALL	32	53	76	2	4
BATH 2	57	856	326	35	18
BEDROOM 3	176	2406	1851	98	103
GREAT ROOM	500	8750	5894	358	329

Printout certified by ACCA to meet all requirements of Manual J 8th Ed.





Entire House	2366	37911	27760	1550	1550
Other equip loads		0	0		
Equip. @ 0.97 RSM			26927		
Latent cooling			6719		
TOTALS	2366	37911	33646	1550	1550

Printout certified by ACCA to meet all requirements of Manual J 8th Ed.



Wrightsoft

Right-Suite® Universal 8.0.06 RSU09301

...awna\Documents\Wrightsoft HVAC\O'NEIL - COLACINO RESIDENCE.rup Calc = MJ8 Front Door faces:

2011-Jun-29 14:17:26

Page 2





HIGH SPRINGS, FL

## Project Information

For: O'NEIL CONSTRUCTION  
HIGH SPRINGS, FL

## Design Conditions

### Location:

Gainesville, FL, US  
Elevation: 151 ft  
Latitude: 30°N

### Outdoor:

Dry bulb (°F)  
Daily range (°F)  
Wet bulb (°F)  
Wind speed (mph)

### Heating

33

-

-

15.0

### Cooling

92

19 ( M )

77

7.5

### Indoor:

Indoor temperature (°F)  
Design TD (°F)  
Relative humidity (%)  
Moisture difference (gr/lb)

### Heating

70

37

30

10.6

### Cooling

75

17

50

52.0

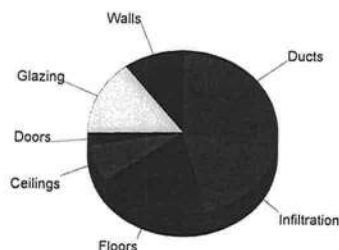
### Infiltration:

Method  
Construction quality  
Fireplaces

Simplified  
Semi-loose  
1 (Semi-tight)

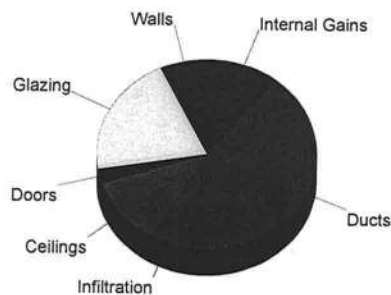
## Heating

Component	Btuh/ft²	Btuh	% of load
Walls	1.1	3970	10.5
Glazing	21.2	5650	14.9
Doors	14.4	909	2.4
Ceilings	1.2	2802	7.4
Floors	3.0	7154	18.9
Infiltration	4.3	6784	17.9
Ducts		10642	28.1
Piping		0	0
Humidification		0	0
Ventilation		0	0
Adjustments		0	0
<b>Total</b>		<b>37911</b>	<b>100.0</b>



## Cooling

Component	Btuh/ft²	Btuh	% of load
Walls	0.5	1979	7.1
Glazing	21.4	5711	20.6
Doors	11.4	716	2.6
Ceilings	1.4	3229	11.6
Floors	0	0	0
Infiltration	0.9	1467	5.3
Ducts		11738	42.3
Ventilation		0	0
Internal gains		2920	10.5
Blower		0	0
Adjustments		0	0
<b>Total</b>		<b>27760</b>	<b>100.0</b>



Latent Cooling Load = 6719 Btuh  
Overall U-value = 0.121 Btuh/ft²·°F

ERROR: negative wall area in GREAT ROOM - check windows.





**Project Summary**  
**Entire House**  
**LARRY RESMONDO AIR CONDITIONING**

Job: NELSON RESIDENCE  
Date: Jun 14, 2011  
By:

HIGH SPRINGS, FL

**Project Information**

For: O'NEIL CONSTRUCTION  
HIGH SPRINGS, FL

Notes:

**Design Information**

Weather: Gainesville, FL, US

**Winter Design Conditions**

Outside db	33 °F
Inside db	70 °F
Design TD	37 °F

**Summer Design Conditions**

Outside db	92 °F
Inside db	75 °F
Design TD	17 °F
Daily range	M
Relative humidity	50 %
Moisture difference	52 gr/lb

**Heating Summary**

Structure	27269 Btuh
Ducts	10642 Btuh
Central vent (0 cfm)	0 Btuh
Humidification	0 Btuh
Piping	0 Btuh
Equipment load	37911 Btuh

**Sensible Cooling Equipment Load Sizing**

Structure	16023 Btuh
Ducts	11738 Btuh
Central vent (0 cfm)	0 Btuh
Blower	0 Btuh
Use manufacturer's data	n
Rate/swing multiplier	0.97
Equipment sensible load	26927 Btuh

**Infiltration**

Method	Simplified
Construction quality	Semi-loose
Fireplaces	1 (Semi-tight)

	Heating	Cooling
Area (ft²)	2366	2366
Volume (ft³)	18930	18930
Air changes/hour	0.53	0.25
Equiv. AVF (cfm)	168	79

**Latent Cooling Equipment Load Sizing**

Structure	3573 Btuh
Ducts	3146 Btuh
Central vent (0 cfm)	0 Btuh
Equipment latent load	6719 Btuh
Equipment total load	33646 Btuh
Req. total capacity at 0.70 SHR	3.2 ton

**Heating Equipment Summary**

Make	Ruud
Trade	RUUD 13PJL SERIES
Model	13PJL48
ARI ref no.	3605269
Efficiency	8.5 HSPF
Heating input	46000 Btuh @ 47°F
Heating output	27 °F
Temperature rise	1550 cfm
Actual air flow	0.041 cfm/Btuh
Air flow factor	0.10 in H2O
Static pressure	
Space thermostat	

**Cooling Equipment Summary**

Make	Ruud
Trade	RUUD 13PJL SERIES
Cond	13PJL48
Coil	RHSL-HM4821++RCSL-H*4821
ARI ref no.	3605269
Efficiency	10.9 EER, 13 SEER
Sensible cooling	32550 Btuh
Latent cooling	13950 Btuh
Total cooling	46500 Btuh
Actual air flow	1550 cfm
Air flow factor	0.056 cfm/Btuh
Static pressure	0.10 in H2O
Load sensible heat ratio	0.81

Printout certified by ACCA to meet all requirements of Manual J 8th Ed.



Wrightsoft

Right-Suite® Universal 8.0.06 RSU09301

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Page 1







# Duct System Summary

## Entire House

LARRY RESMONDO AIR CONDITIONING

Job: NELSON RESIDENCE

Date: Jun 14, 2011

By:

HIGH SPRINGS, FL

### Project Information

For: O'NEIL CONSTRUCTION  
HIGH SPRINGS, FL

	Heating	Cooling
External static pressure	<b>0.10</b> in H2O	<b>0.10</b> in H2O
Pressure losses	0.25 in H2O	0.25 in H2O
Available static pressure	-0.2 in H2O	-0.2 in H2O
Supply / return available pressure	-0.11 / -0.04 in H2O	-0.11 / -0.04 in H2O
Lowest friction rate	<b>0.100</b> in/100ft	<b>0.100</b> in/100ft
Actual air flow	1550 cfm	1550 cfm
Total effective length (TEL)	320 ft	

### Supply Branch Detail Table

Name	Design (Btuh)	Htg (cfm)	Clg (cfm)	Design FR	Diam (in)	H x W (in)	Duct Matl	Actual Ln (ft)	Ftg.Eqv Ln (ft)	Trunk
LAUNDRY	c 245	13	14	0.100	4.0	0x0	VIFx	240.0	0	st1
HALL/STAIRWELL	c 346	13	19	0.100	4.0	0x0	VIFx	240.0	0	st1
MASTER BATH	h 2921	119	91	0.100	7.0	0x0	VIFx	240.0	0	st1
M/BEDROOM	h 5881	240	217	0.100	9.0	0x0	VIFx	240.0	0	st1
W.I.CLOSET	h 1825	75	37	0.100	5.0	0x0	VIFx	240.0	0	st1
KITCHEN-A	c 2256	19	126	0.100	7.0	0x0	VIFx	240.0	0	st1
KITCHEN	c 2256	19	126	0.100	7.0	0x0	VIFx	240.0	0	st1
BREAKFAST AREA	h 2537	104	98	0.100	6.0	0x0	VIFx	240.0	0	st1
DINING	h 3127	128	109	0.100	7.0	0x0	VIFx	240.0	0	st1
FOYER	c 1410	73	79	0.100	6.0	0x0	VIFx	240.0	0	st1
BEDROOM 2	h 6193	253	178	0.100	9.0	0x0	VIFx	240.0	0	st1A
HALL	c 76	2	4	0.100	4.0	0x0	VIFx	240.0	0	st1A
BATH 2	h 856	35	18	0.100	4.0	0x0	VIFx	240.0	0	st1A
BEDROOM 3	c 1851	98	103	0.100	6.0	0x0	VIFx	240.0	0	st1A
GREAT ROOM-A	h 4375	179	165	0.100	8.0	0x0	VIFx	240.0	0	st1B
GREAT ROOM	h 4375	179	165	0.100	8.0	0x0	VIFx	240.0	0	st1B

### Supply Trunk Detail Table

Name	Trunk Type	Htg (cfm)	Clg (cfm)	Design FR	Veloc (fpm)	Diam (in)	H x W (in)	Duct Material	Trunk
st1	Peak AVF	1550	1550	0.100	877	18.0	0 x 0	RectFbg	st1 st1A
st1A	Peak AVF	746	633	0.100	810	13.0	0 x 0	RectFbg	
st1B	Peak AVF	358	329	0.100	455	12.0	0 x 0	RectFbg	

*Bold/italic values have been manually overridden*



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Page 1



## Return Branch Detail Table

Name	Grill Size (in)	Htg (cfm)	Clg (cfm)	TEL (ft)	Design FR	Veloc (fpm)	Diam (in)	H x W (in)	Stud/Joist Opening (in)	Duct Matl	Trunk
rb2	0x0	240	217	80.0	0.100	544	9.0	0x 0		VIFx	
rb3	0x0	253	178	80.0	0.100	573	9.0	0x 0		VIFx	
rb4	0x0	98	103	80.0	0.100	526	6.0	0x 0		VIFx	
rb5	0x0	358	329	80.0	0.100	656	10.0	0x 0		VIFx	





**FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION**

Florida Department of Community Affairs Residential Performance Method A

Project Name: O'NEIL - NELSON RESIDENCE  
 Street:  
 City, State, Zip: , FL ,  
 Owner: NELSON  
 Design Location: FL, Gainesville

Builder Name: O'NEIL CONSTRUCTION  
 Permit Office: COLUMBIA COUNTY  
 Permit Number:  
 Jurisdiction:

1. New construction or existing	New (From Plans)	
2. Single family or multiple family	Single-family	
3. Number of units, if multiple family	1	
4. Number of Bedrooms	3	
5. Is this a worst case?	No	
6. Conditioned floor area (ft <sup>2</sup> )	2366	
7. Windows (231.0 sqft.)	Description	Area
a. U-Factor:	Dbl, default	214.00 ft <sup>2</sup>
SHGC:	Tinted, default	
b. U-Factor:	Gbl, default	17.00 ft <sup>2</sup>
SHGC:	Clear, default	
c. U-Factor:	N/A	ft <sup>2</sup>
SHGC:		
d. U-Factor:	N/A	ft <sup>2</sup>
SHGC:		
e. U-Factor:	N/A	ft <sup>2</sup>
SHGC:		
8. Floor Types (2366.2 sqft.)	Insulation	Area
a. Slab-On-Grade Edge Insulation	R=5.0	2366.20 ft <sup>2</sup>
b. N/A	R=	ft <sup>2</sup>
c. N/A	R=	ft <sup>2</sup>

9. Wall Types (4040.3 sqft.)	Insulation	Area
a. Frame - Wood, Exterior	R=5.0	2132.30 ft <sup>2</sup>
b. Frame - Wood, Exterior	R=19.0	1908.00 ft <sup>2</sup>
c. N/A	R=	ft <sup>2</sup>
d. N/A	R=	ft <sup>2</sup>
10. Ceiling Types (2366.2 sqft.)	Insulation	Area
a. Under Attic (Vented)	R=30.0	2366.20 ft <sup>2</sup>
b. N/A	R=	ft <sup>2</sup>
c. N/A	R=	ft <sup>2</sup>
11. Ducts		
a. Sup: Attic Ret: Attic AH: Garage Sup. R= 6, 280 ft <sup>2</sup>		
12. Cooling systems		
a. Central Unit	Cap: 48.0 kBtu/hr	
	SEER: 13	
13. Heating systems		
a. Electric Heat Pump	Cap: 48.0 kBtu/hr	
	HSPF: 8.5	
14. Hot water systems		
a. Electric	Cap: 40 gallons	
	EF: 0.93	
b. Conservation features		
None		
15. Credits		None

Glass/Floor Area: 0.098

Total As-Built Modified Loads: 50.11

Total Baseline Loads: 58.85

**PASS**

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

PREPARED BY: *Larry Resmondo a/c*  
 DATE: *June 28, 2011*

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

OWNER/AGENT: *Al O'Neil*  
 DATE: *7-20-11*

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: \_\_\_\_\_





## PROJECT

Title: O'NEIL - NELSON RESIDEN	Bedrooms: 3	Address Type: Street Address
Building Type: FLAsBuilt	Conditioned Area: 2366	Lot #
Owner: NELSON	Total Stories: 1	Block/SubDivision:
# of Units: 1	Worst Case: No	PlatBook:
Builder Name: O'NEIL CONSTRUCTION	Rotate Angle: 0	Street:
Permit Office: COLUMBIA COUNTY	Cross Ventilation: No	County: COLUMBIA
Jurisdiction:	Whole House Fan: No	City, State, Zip: , FL ,
Family Type: Single-family		
New/Existing: New (From Plans)		
Comment:		

## CLIMATE

✓	Design Location	TMY Site	IECC Zone	Design Temp 97.5 %	Design Temp 2.5 %	Int Design Temp Winter	Int Design Temp Summer	Heating Degree Days	Design Moisture	Daily Temp Range
_____	FL, Gainesville	FL_GAINESVILLE_REGI	2	32	92	75	70	1305.5	51	Medium

## FLOORS

✓	#	Floor Type	Perimeter	R-Value	Area	Tile	Wood	Carpet
_____	1	Slab-On-Grade Edge Insulatio	195.5 ft	5	2366.2 ft²	0	0	1

## ROOF

✓	#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	Tested	Deck Insul.	Pitch
_____	1	Gable or Shed	Composition shingles	2493 ft²	394 ft²	Medium	0.5	N	0	18.4 deg

## ATTIC

✓	#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC
_____	1	Full attic	Vented	300	2366 ft²	N	N

## CEILING

✓	#	Ceiling Type	R-Value	Area	Framing Frac	Truss Type
_____	1	Under Attic (Vented)	30	2366.2 ft²	0.1	Wood

## WALLS

✓	#	Ornt	Adjacent To	Wall Type	Cavity R-Value	Area	Sheathing R-Value	Framing Fraction	Solar Absor.
_____	1	N	Exterior	Frame - Wood	19	1563.75 ft	0.6	0.25	0.8
_____	2	-	Exterior	Frame - Wood	5	2132.25 ft	0	0.25	0.8
_____	3	-	Exterior	Frame - Wood	19	344.25 ft²	0	0.25	0.8



## DOORS

✓	#	Ornt	Door Type	Storms	U-Value	Area
✓	1	N	Wood	None	0.39	21.11111
✓	2	-	Wood	None	0.39	42 ft²

## WINDOWS

Orientation shown is the entered, asBuilt orientation.

✓	#	Ornt	Frame	Panes	NFRC	U-Factor	SHGC	Storms	Area	Overhang Depth Separation	Int Shade	Screening
✓	1	N	Vinyl	Double (Tinted)	No	0.87	0.55	N	144 ft²	1 ft 6 in 1 ft 0 in	HERS 2006	None
✓	2	N	Vinyl	Double (Tinted)	No	0.87	0.55	N	54 ft²	14 ft 0 in 1 ft 0 in	HERS 2006	None
✓	3	N	Vinyl	Double (Tinted)	No	0.87	0.55	N	16 ft²	8 ft 0 in 1 ft 0 in	HERS 2006	None
✓	4	N	Vinyl	Glazed Block	No	0.6	0.6	N	17 ft²	1 ft 6 in 1 ft 0 in	HERS 2006	None

## INFILTRATION & VENTING

✓	Method	SLA	CFM 50	ACH 50	ELA	EqlA	---- Forced Ventilation ---- Supply CFM Exhaust CFM	Run Time Fraction	Fan Watts
✓	Default	0.00036	2234	7.08	122.7	230.7	0 cfm 0 cfm	0	0

## GARAGE

✓	#	Floor Area	Ceiling Area	Exposed Wall Perimeter	Avg. Wall Height	Exposed Wall Insulation
✓	1	382.8 ft²	382.8 ft²	64 ft	8 ft	1

## COOLING SYSTEM

✓	#	System Type	Subtype	Efficiency	Capacity	Air Flow	SHR	Ducts
✓	1	Central Unit	None	SEER: 13	48 kBtu/hr	1440 cfm	0.8	sys#1

## HEATING SYSTEM

✓	#	System Type	Subtype	Efficiency	Capacity	Ducts
✓	1	Electric Heat Pump	None	HSPF: 8.5	48 kBtu/hr	sys#1

## HOT WATER SYSTEM

✓	#	System Type	EF	Cap	Use	SetPnt	Conservation
✓	1	Electric	0.93	40 gal	60 gal	120 deg	None

## SOLAR HOT WATER SYSTEM

✓	FSEC Cert #	Company Name	System Model #	Collector Model #	Collector Area	Storage Volume	FEF
✓	None	None			ft²		





## DUCTS

✓	#	Location	Supply R-Value	Area	Location	Return Area	Leakage Type	Air Handler	CFM 25	Percent Leakage	QN	RLF
	1	Attic	6	280 ft²	Attic	120 ft²	Default Leakage	Garage	(Default)	(Default) %		

## TEMPERATURES

Programable Thermostat: N

Ceiling Fans:

Cooling	<input checked="" type="checkbox"/> Jan	<input checked="" type="checkbox"/> Feb	<input checked="" type="checkbox"/> Mar	<input checked="" type="checkbox"/> Apr	<input checked="" type="checkbox"/> May	<input checked="" type="checkbox"/> Jun	<input checked="" type="checkbox"/> Jul	<input checked="" type="checkbox"/> Aug	<input checked="" type="checkbox"/> Sep	<input checked="" type="checkbox"/> Oct	<input checked="" type="checkbox"/> Nov	<input checked="" type="checkbox"/> Dec
Heating	<input checked="" type="checkbox"/> Jan	<input checked="" type="checkbox"/> Feb	<input checked="" type="checkbox"/> Mar	<input checked="" type="checkbox"/> Apr	<input checked="" type="checkbox"/> May	<input checked="" type="checkbox"/> Jun	<input checked="" type="checkbox"/> Jul	<input checked="" type="checkbox"/> Aug	<input checked="" type="checkbox"/> Sep	<input checked="" type="checkbox"/> Oct	<input checked="" type="checkbox"/> Nov	<input checked="" type="checkbox"/> Dec
Venting	<input checked="" type="checkbox"/> Jan	<input checked="" type="checkbox"/> Feb	<input checked="" type="checkbox"/> Mar	<input checked="" type="checkbox"/> Apr	<input checked="" type="checkbox"/> May	<input checked="" type="checkbox"/> Jun	<input checked="" type="checkbox"/> Jul	<input checked="" type="checkbox"/> Aug	<input checked="" type="checkbox"/> Sep	<input checked="" type="checkbox"/> Oct	<input checked="" type="checkbox"/> Nov	<input checked="" type="checkbox"/> Dec

Thermostat Schedule: HERS 2006 Reference

Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12
Cooling (WD)	AM	78	78	78	78	78	78	78	78	78	78	78	78
	PM	78	78	78	78	78	78	78	78	78	78	78	78
Cooling (WEH)	AM	78	78	78	78	78	78	78	78	78	78	78	78
	PM	78	78	78	78	78	78	78	78	78	78	78	78
Heating (WD)	AM	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68
Heating (WEH)	AM	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68



# Code Compliance Checklist

## Residential Whole Building Performance Method A - Details

ADDRESS:

, FL,

PERMIT #:

### INFILTRATION REDUCTION COMPLIANCE CHECKLIST

COMPONENTS	SECTION	REQUIREMENTS FOR EACH PRACTICE	CHECK
Exterior Windows & Doors	N1106.AB.1.1	Maximum: .3 cfm/sq.ft. window area; .5 cfm/sq.ft. door area.	
Exterior & Adjacent Walls	N1106.AB.1.2	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	N1106.AB.1.2	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	N1106.AB.1.2	Between walls & ceilings; penetrations of ceiling plane to 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	N1106.AB.1.2	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 with < 2.0 cfm from conditioned space, tested.	
Multi-story Houses	N1106.AB.1.2	Air barrier on perimeter of floor cavity between floors.	
Additional Infiltration reqts	N1106.AB.1.3	Exhaust fans vented to outdoors, dampers; combustion space heaters comply with NFPA, have combustion air.	

### OTHER PRESCRIPTIVE MEASURES (must be met or exceeded by all residences.)

COMPONENTS	SECTION	REQUIREMENTS	CHECK
Water Heaters	N1112.AB.3	Comply with efficiency requirements in Table N1112.ABC.3. Switch or clearly marked circuit breaker (electric) or cutoff (gas) must be provided. External or built-in heat trap required.	
Swimming Pools & Spas	N1112.AB.2.3	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%. Heat pump pool heaters shall have a minimum COP of 4.0.	
Shower heads	N1112.AB.2.4	Water flow must be restricted to no more than 2.5 gallons per minute at 80 PSIG.	
Air Distribution Systems	N1110.AB	All ducts, fittings, mechanical equipment and plenum chambers shall be mechanically attached, sealed, insulated and installed in accordance with the criteria of Section N1110.AB. Ducts in unconditioned attics: R-6 min. insulation.	
HVAC Controls	N1107.AB.2	Separate readily accessible manual or automatic thermostat for each system.	
Insulation	N1104.AB.1 N1102.B.1.1	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 INDEX\* = 85

The lower the EnergyPerformance Index, the more efficient the home.

, , FL,

1. New construction or existing	New (From Plans)		9. Wall Types	Insulation	Area
2. Single family or multiple family	Single-family		a. Frame - Wood, Exterior	R=5.0	2132.30 ft <sup>2</sup>
3. Number of units, if multiple family	1		b. Frame - Wood, Exterior	R=19.0	1908.00 ft <sup>2</sup>
4. Number of Bedrooms	3		c. N/A	R=	ft <sup>2</sup>
5. Is this a worst case?	No		d. N/A	R=	ft <sup>2</sup>
6. Conditioned floor area (ft <sup>2</sup> )	2366		10. Ceiling Types	Insulation	Area
7. Windows**	Description	Area	a. Under Attic (Vented)	R=30.0	2366.20 ft <sup>2</sup>
a. U-Factor:	Dbl, default	214.00 ft <sup>2</sup>	b. N/A	R=	ft <sup>2</sup>
SHGC:	Tinted, default		c. N/A	R=	ft <sup>2</sup>
b. U-Factor:	Gbl, default	17.00 ft <sup>2</sup>	11. Ducts		
SHGC:	Clear, default		a. Sup: Attic Ret: Attic AH: Garage Sup. R= 6, 280 ft <sup>2</sup>		
c. U-Factor:	N/A	ft <sup>2</sup>	12. Cooling systems		
SHGC:			a. Central Unit	Cap: 48.0 kBtu/hr	
d. U-Factor:	N/A	ft <sup>2</sup>		SEER: 13	
SHGC:			13. Heating systems		
e. U-Factor:	N/A	ft <sup>2</sup>	a. Electric Heat Pump	Cap: 48.0 kBtu/hr	
SHGC:				HSPF: 8.5	
8. Floor Types	Insulation	Area	14. Hot water systems		
a. Slab-On-Grade Edge Insulation	R=5.0	2366.20 ft <sup>2</sup>	a. Electric	Cap: 40 gallons	
b. N/A	R=	ft <sup>2</sup>		EF: 0.93	
c. N/A	R=	ft <sup>2</sup>	b. Conservation features		
			None		
			15. Credits		
				None	

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 Index is only available through the EnergyGauge USA - FlaRes2008 computer program. This is not a Building Energy Rating. If your Index is below 100, your home may qualify for 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 [energygauge.com](http://energygauge.com) 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.

\*\*Label required by Section 13-104.4.5 of the Florida Building Code, Building, or Section B2.1.1 of Appendix G of the Florida Building Code, Residential, if not DEFAULT.





