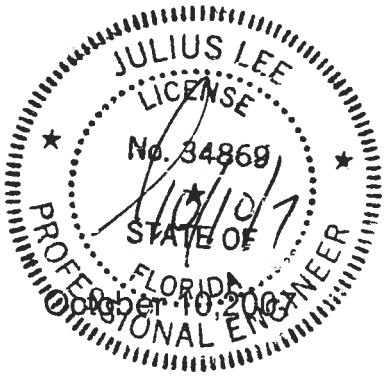
Builders FirstSource



Project Information for: **L255638**

...	...
Lot :	3
Subdivision:	Laurel Lakes
County:	Columbia
Truss Count:	50
Design Program:	MiTek 20/20 6.3
Building Code:	FBC2004/TPI2002

Truss Design Load Information:

Gravity: **Wind:**

Roof (psf): 42.0 Wind Standard: ASCE 7-02 Wind Exposure: B

Floor (psf): N/A Wind Speed (mph): 110

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

Engineer of Record: Unknown at time of Seal Date
Address: Unknown at time of Seal Date

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

Notes:

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

No.	Drwg. #	Truss ID	Seal Date	No.	Drwg. #	Truss ID	Seal Date
1	J1899276	CJ1	10/10/07	29	J1899304	T21	10/10/07
2	J1899277	EJ4	10/10/07	30	J1899305	T22	10/10/07
3	J1899278	EJ4A	10/10/07	31	J1899306	T23	10/10/07
4	J1899279	HJ1	10/10/07	32	J1899307	T24	10/10/07
5	J1899280	PB1	10/10/07	33	J1899308	T25	10/10/07
6	J1899281	PB2	10/10/07	34	J1899309	T26	10/10/07
7	J1899282	PB3	10/10/07	35	J1899310	T27	10/10/07
8	J1899283	T01	10/10/07	36	J1899311	T28	10/10/07
9	J1899284	T01G	10/10/07	37	J1899312	T29	10/10/07
10	J1899285	T02	10/10/07	38	J1899313	T30	10/10/07
11	J1899286	T03	10/10/07	39	J1899314	T30G	10/10/07
12	J1899287	T04	10/10/07	40	J1899315	T31	10/10/07
13	J1899288	T05	10/10/07	41	J1899316	T31G	10/10/07
14	J1899289	T06	10/10/07	42	J1899317	T32	10/10/07
15	J1899290	T07	10/10/07	43	J1899318	T33	10/10/07
16	J1899291	T08	10/10/07	44	J1899319	T34	10/10/07
17	J1899292	T09	10/10/07	45	J1899320	T34G	10/10/07
18	J1899293	T10	10/10/07	46	J1899321	V1	10/10/07
19	J1899294	T11	10/10/07	47	J1899322	V2	10/10/07
20	J1899295	T12	10/10/07	48	J1899323	V3	10/10/07
21	J1899296	T13	10/10/07	49	J1899324	V4	10/10/07
22	J1899297	T14	10/10/07	50	J1899325	V5	10/10/07
23	J1899298	T15	10/10/07				
24	J1899299	T16	10/10/07				
25	J1899300	T17	10/10/07				
26	J1899301	T18	10/10/07				
27	J1899302	T19	10/10/07				
28	J1899303	T20	10/10/07				

Builders FirstSource

Project Information for: L255638

October 10,2007

... ...
Lot : 3
Subdivision: Laurel Lakes
County: Columbia
Truss Count: 50
Design Program: MiTek 20/20 6.3
Building Code: FBC2004/TPI2002

Truss Design Load Information:

Gravity: **Wind:**

Roof (psf): 42.0 Wind Standard: ASCE 7-02 Wind Exposure: B
Floor (psf): N/A Wind Speed (mph): 110

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

Engineer of Record: Unknown at time of Seal Date
Address: Unknown at time of Seal Date

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

Notes:

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

No.	Drwg. #	Truss ID	Seal Date	No.	Drwg. #	Truss ID	Seal Date
1	J1899276	CJ1	10/10/07	29	J1899304	T21	10/10/07
2	J1899277	EJ4	10/10/07	30	J1899305	T22	10/10/07
3	J1899278	EJ4A	10/10/07	31	J1899306	T23	10/10/07
4	J1899279	HJ1	10/10/07	32	J1899307	T24	10/10/07
5	J1899280	PB1	10/10/07	33	J1899308	T25	10/10/07
6	J1899281	PB2	10/10/07	34	J1899309	T26	10/10/07
7	J1899282	PB3	10/10/07	35	J1899310	T27	10/10/07
8	J1899283	T01	10/10/07	36	J1899311	T28	10/10/07
9	J1899284	T01G	10/10/07	37	J1899312	T29	10/10/07
10	J1899285	T02	10/10/07	38	J1899313	T30	10/10/07
11	J1899286	T03	10/10/07	39	J1899314	T30G	10/10/07
12	J1899287	T04	10/10/07	40	J1899315	T31	10/10/07
13	J1899288	T05	10/10/07	41	J1899316	T31G	10/10/07
14	J1899289	T06	10/10/07	42	J1899317	T32	10/10/07
15	J1899290	T07	10/10/07	43	J1899318	T33	10/10/07
16	J1899291	T08	10/10/07	44	J1899319	T34	10/10/07
17	J1899292	T09	10/10/07	45	J1899320	T34G	10/10/07
18	J1899293	T10	10/10/07	46	J1899321	V1	10/10/07
19	J1899294	T11	10/10/07	47	J1899322	V2	10/10/07
20	J1899295	T12	10/10/07	48	J1899323	V3	10/10/07
21	J1899296	T13	10/10/07	49	J1899324	V4	10/10/07
22	J1899297	T14	10/10/07	50	J1899325	V5	10/10/07
23	J1899298	T15	10/10/07				
24	J1899299	T16	10/10/07				
25	J1899300	T17	10/10/07				
26	J1899301	T18	10/10/07				
27	J1899302	T19	10/10/07				
28	J1899303	T20	10/10/07				

Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL	J1899276
L255638	CJ1	JACK	4	1	Job Reference (optional)	

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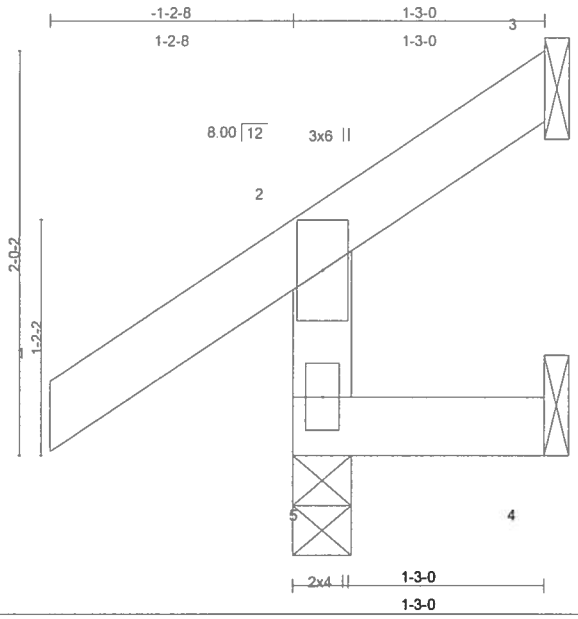

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LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.20	Vert(LL)	0.00	5	>999	360	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.05	Vert(TL)	0.00	5	>999	240		
BCLL	10.0	* Rep Stress Incr	YES	WB	0.00	Horz(TL)	-0.00	3	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 8 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 Structural wood sheathing directly applied or 1-3-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 5=153/0-3-8, 4=-4/Mechanical, 3=-6/Mechanical
Max Horz 5=92(load case 6)
Max Uplift 5=-73(load case 6), 4=-23(load case 6), 3=-21(load case 7)
Max Grav 5=153(load case 1), 4=13(load case 2), 3=13(load case 4)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-5=-138/121, 1-2=0/41, 2-3=-36/7
BOT CHORD 4-5=0/0

JOINT STRESS INDEX
2 = 0.23 and 5 = 0.34

NOTES
1) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
2) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 73 lb uplift at joint 5, 23 lb uplift at joint 4 and 21 lb uplift at joint 3.

Continued on page 2

Julius Lee
Truss Design Engineer
Florida PE No. 31888
1106 Coastal Key Blvd.
Boynton Beach, FL 33436

October 10,2007

Builders FirstSource

Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL
					J1899276
L255638	CJ1	JACK	4	1	Job Reference (optional)

LOAD CASE(S) Standard

Julius Lee
Truss Design Engineer
Florida PE No. 34869
1106 Coastal Bay Blvd
Boynton Beach, FL 33435

October 10,2007

Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL
					J1899277
L255638	EJ4	JACK	15	1	Job Reference (optional)

Builders FirstSource, Lake City, Fl 32055 6.300 s Feb 15 2006 MiTek Industries, Inc. Wed Oct 10 08:56:59 2007 Page 1

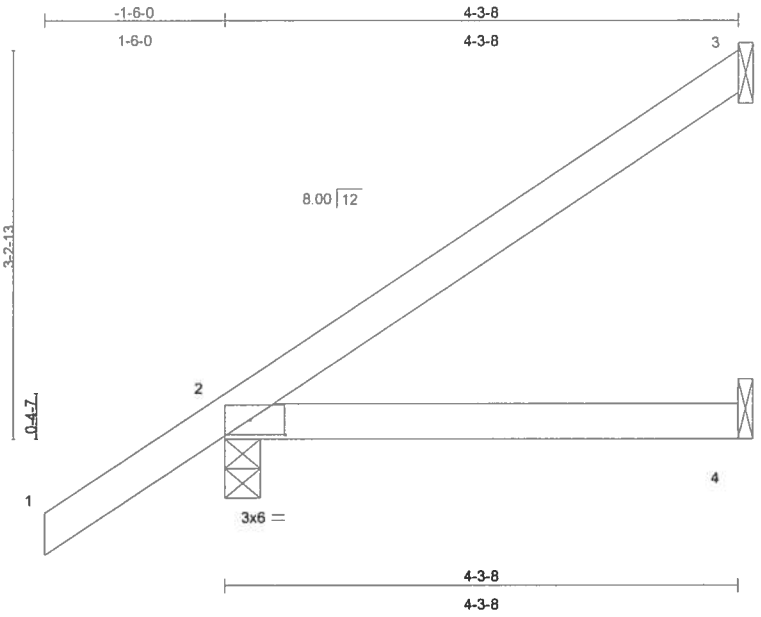

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Plate Offsets (X,Y): [2:0-3-9,0-1-8]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.17	Vert(LL)	-0.01	2-4	>999	360	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.12	Vert(TL)	-0.03	2-4	>999	240		
BCLL	10.0	* Rep Stress Incr	YES	WB	0.00	Horz(TL)	-0.00	3	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 17 lb	

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-3-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 3=92/Mechanical, 2=237/0-3-8, 4=20/Mechanical
Max Horz 2=194(load case 6)
Max Uplift 3=-98(load case 6), 2=-136(load case 6)
Max Grav 3=92(load case 1), 2=237(load case 1), 4=61(load case 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/44, 2-3=-82/40
BOT CHORD 2-4=0/0

JOINT STRESS INDEX
2 = 0.13

NOTES
1) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
2) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi

Julius Lee
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Florida PE No. 34869
1106 Coastal Bay Blvd
Boynton Beach, FL 33436

October 10,2007

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL
					J1899277
L255638	EJ4	JACK	15	1	Job Reference (optional)

NOTES

4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 98 lb uplift at joint 3 and 136 lb uplift at joint 2.

LOAD CASE(S) Standard

Julius Lee
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Boynton Beach, FL 33435

October 10,2007

Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL
L255638	EJ4A	MONO SCISSOR	15	1	J1899278 Job Reference (optional)

Builders FirstSource, Lake City, Fl 32055 6.300 s Feb 15 2006 MiTek Industries, Inc. Wed Oct 10 08:56:59 2007 Page 1

Scale = 1:18.6

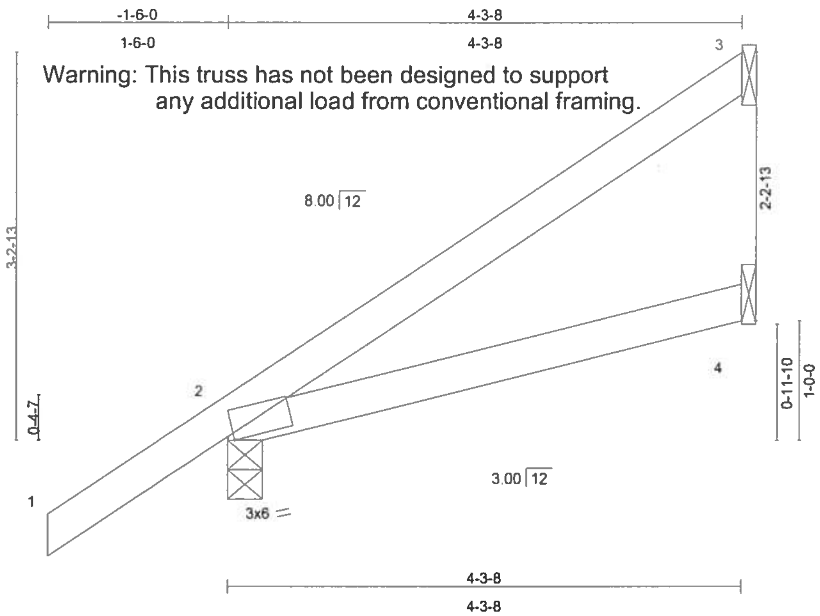


Plate Offsets (X,Y): [2:0-0-10,Edge]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.17	Vert(LL)	-0.02	2-4	>999	360	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.12	Vert(TL)	-0.03	2-4	>999	240		
BCLL	10.0	* Rep Stress Incr	YES	WB	0.00	Horz(TL)	-0.00	3	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 17 lb	

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-3-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 3=92/Mechanical, 2=237/0-3-8, 4=20/Mechanical
Max Horz 2=193(load case 6)
Max Uplift 3=-99(load case 6), 2=-135(load case 6)
Max Grav 3=92(load case 1), 2=237(load case 1), 4=61(load case 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/43, 2-3=-84/41
BOT CHORD 2-4=-12/12

JOINT STRESS INDEX
2 = 0.11

NOTES
1) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
2) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi

Continued on page 2

Julius Lee
Truss Design Engineer
Florida PE No. 34869
1109 Coastal Bay Blvd
Boynton Beach, FL 33435

October 10,2007

Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL
					J1899278
L255638	EJ4A	MONO SCISSOR	15	1	Job Reference (optional)

NOTES

4) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 99 lb uplift at joint 3 and 135 lb uplift at joint 2.

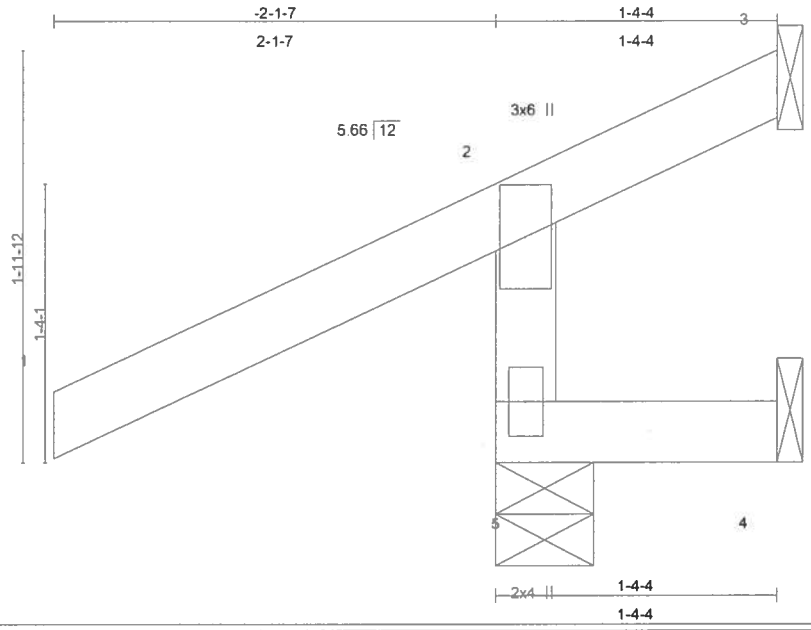
LOAD CASE(S) Standard

Julius Lee
Truss Design Engineer
Florida PE No. 34869
1106 Coastal Bay Blvd
Boynton Beach, FL 33435

October 10,2007

Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL
L255638	HJ1	JACK	2	1	J1899279
					Job Reference (optional)

Builders FirstSource, Lake City, Fl 32055 6.300 s Apr 19 2006 MiTek Industries, Inc. Wed Oct 10 14:19:47 2007 Page 1



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LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.30	Vert(LL)	0.00	5	>999	360	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.06	Vert(TL)	0.00	5	>999	240		
BCLL	10.0 *	Rep Stress Incr	NO	WB	0.00	Horz(TL)	-0.01	3	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 9 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 Structural wood sheathing directly applied or 1-4-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 5=249/0-5-11, 4=-22/Mechanical, 3=-75/Mechanical
Max Horz 5=76(load case 5)
Max Uplift 5=-208(load case 5), 4=-22(load case 1), 3=-75(load case 1)
Max Grav 5=249(load case 1), 4=8(load case 2), 3=75(load case 5)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-5=-223/212, 1-2=0/52, 2-3=-43/32
BOT CHORD 4-5=0/0

JOINT STRESS INDEX
2 = 0.28 and 5 = 0.31

NOTES
1) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone; end vertical left exposed; 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) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 208 lb uplift at joint 5, 22 lb uplift at joint 4 and 75 lb uplift at joint 3.
5) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

Julius Lee
Truss Design Engineer
Florida PE No. 34869
1100 Coastal Bay Blvd
Boynton Beach, FL 33435

October 10,2007

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL J1899279
L255638	HJ1	JACK	2	1	Job Reference (optional)

LOAD CASE(S) Standard

1) Regular: Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (plf)
      Vert: 1-2=-54
   Trapezoidal Loads (plf)
      Vert: 2=-4(F=25, B=25)-to-3=-38(F=8, B=8), 5=0(F=5, B=5)-to-4=-7(F=1, B=1)

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October 10,2007

Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL	J1899280
L255638	PB1	PIGGYBACK	10	1	Job Reference (optional)	

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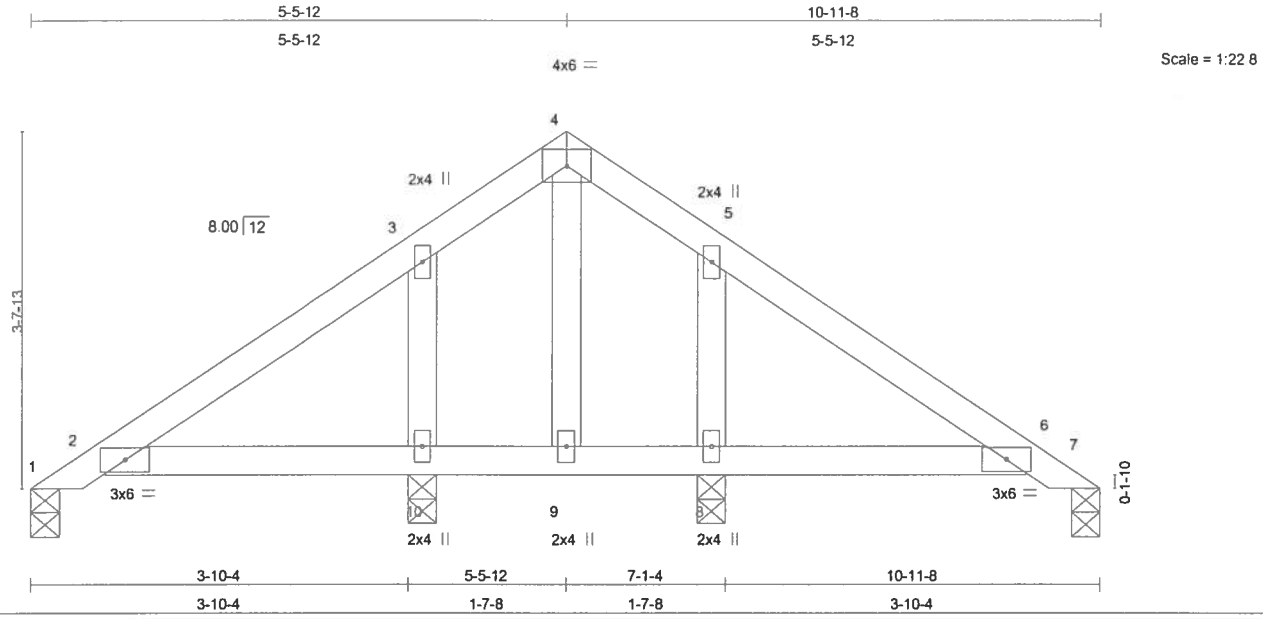

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.11	Vert(LL)	-0.01	2-10	>999	360	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.08	Vert(TL)	-0.01	2-10	>999	240		
BCLL	10.0	* Rep Stress Incr	YES	WB	0.04	Horz(TL)	0.00	7	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 44 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 Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (lb/size) 1=56/0-3-8, 7=56/0-3-8, 10=286/0-3-8, 8=286/0-3-8
Max Horz 1=99(load case 5)
Max Uplift 1=-8(load case 4), 7=-5(load case 4), 10=-109(load case 6), 8=-96(load case 7)
Max Grav 1=70(load case 10), 7=70(load case 11), 10=286(load case 1), 8=286(load case 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-98/94, 2-3=-118/149, 3-4=-11/84, 4-5=-9/84, 5-6=-118/149, 6-7=-33/7
BOT CHORD 2-10=-77/160, 9-10=-77/160, 8-9=-77/160, 6-8=-77/160
WEBS 4-9=-73/17, 3-10=-196/175, 5-8=-196/175

JOINT STRESS INDEX
2 = 0.28, 3 = 0.09, 4 = 0.10, 5 = 0.09, 6 = 0.28, 8 = 0.10, 9 = 0.03 and 10 = 0.10

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
3) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

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October 10,2007

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL
					J1899280
L255638	PB1	PIGGYBACK	10	1	Job Reference (optional)

NOTES

4) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
5) Bearing at joint(s) 1, 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 8 lb uplift at joint 1, 5 lb uplift at joint 7, 109 lb uplift at joint 10 and 96 lb uplift at joint 8.
7) SEE MiTek STANDARD PIGGYBACK TRUSS CONNECTION DETAIL FOR CONNECTION TO BASE TRUSS

LOAD CASE(S) Standard

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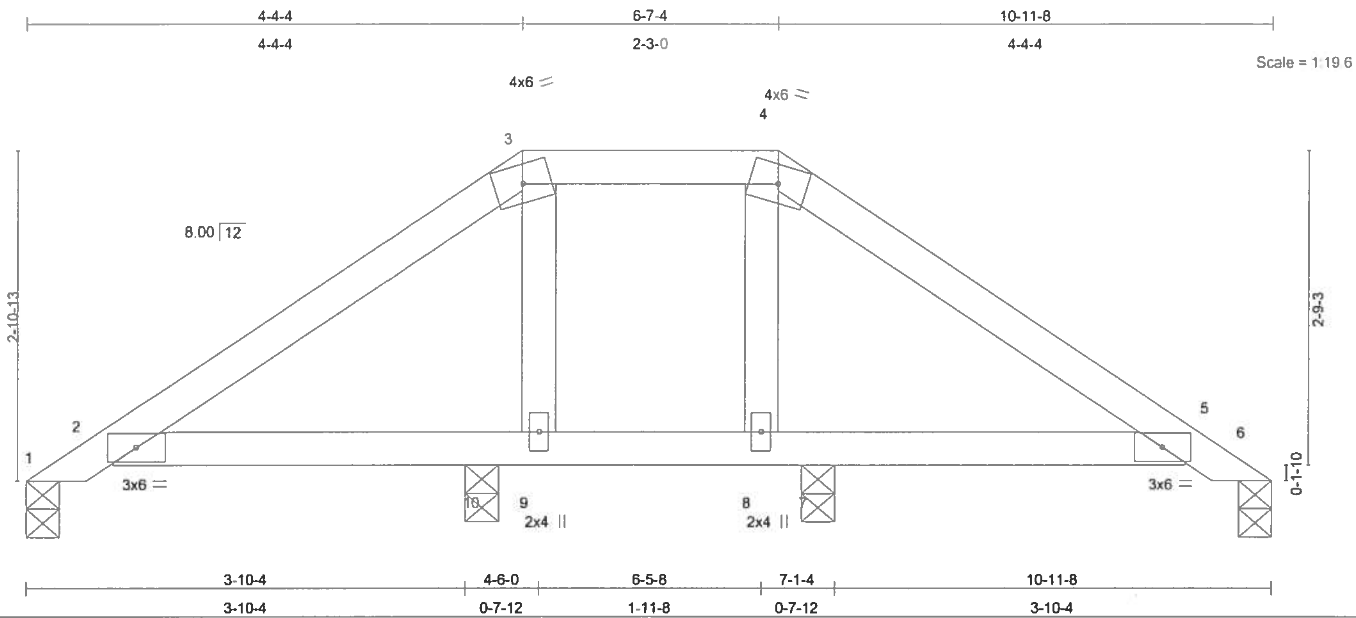
October 10,2007

Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL
L255638	PB2	HIP CAP	2	1	J1899281 Job Reference (optional)

Builders FirstSource, Lake City, Fl 32055 6.300 s Feb 15 2006 MiTek Industries, Inc. Wed Oct 10 08:57:02 2007 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	0.11	Vert(LL)	-0.01	2-10	>999	360	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.14	Vert(TL)	-0.01	2-10	>999	240		
BCLL	10.0	* Rep Stress Incr	YES	WB	0.04	Horz(TL)	0.01	6	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 39 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 Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (lb/size) 1=69/0-3-8, 6=69/0-3-8, 10=273/0-3-8, 7=273/0-3-8
Max Horz 1=-78(load case 4)
Max Uplift 1=-11(load case 4), 6=-27(load case 4), 10=-90(load case 5), 7=-68(load case 7)
Max Grav 1=86(load case 10), 6=86(load case 11), 10=273(load case 1), 7=273(load case 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-68/78, 2-3=-42/123, 4-5=-35/123, 5-6=-41/21, 3-4=0/66
BOT CHORD 2-10=-54/98, 9-10=-54/98, 8-9=-66/106, 7-8=-54/98, 5-7=-54/98
WEBS 3-9=-202/144, 4-8=-202/144

JOINT STRESS INDEX
2 = 0.46, 3 = 0.33, 4 = 0.33, 5 = 0.46, 8 = 0.08 and 9 = 0.08

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
3) Provide adequate drainage to prevent water ponding.

October 10,2007

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL
					J1899281
L255638	PB2	HIP CAP	2	1	Job Reference (optional)

NOTES

4) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
6) Bearing at joint(s) 1, 6 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 11 lb uplift at joint 1, 27 lb uplift at joint 6, 90 lb uplift at joint 10 and 68 lb uplift at joint 7.
8) SEE MiTek STANDARD PIGGYBACK TRUSS CONNECTION DETAIL FOR CONNECTION TO BASE TRUSS

LOAD CASE(S) Standard

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October 10,2007

Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL
L255638	PB3	HIP CAP	2	1	J1899282
					Job Reference (optional)

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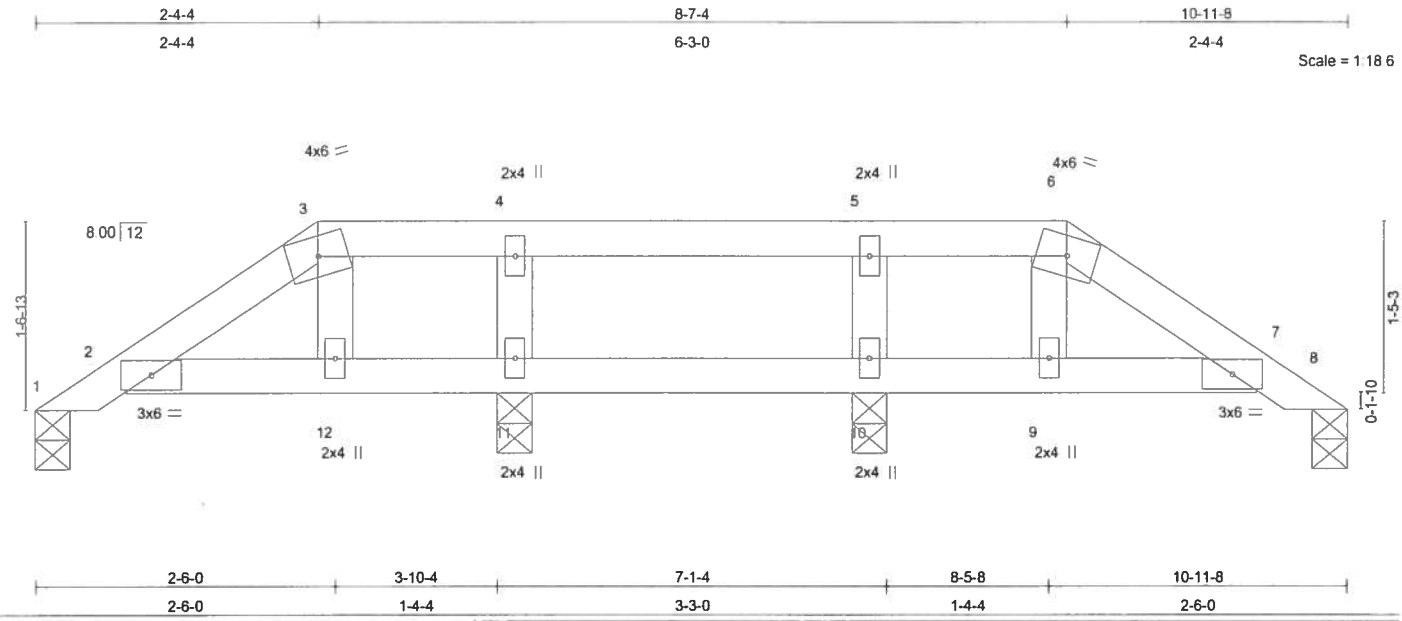

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.12	Vert(LL)	-0.01	7-9	>999	360	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.09	Vert(TL)	-0.01	7-9	>999	240		
BCLL	10.0	* Rep Stress Incr	YES	WB	0.04	Horz(TL)	0.01	8	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 37 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 Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 1=130/0-3-8, 8=130/0-3-8, 11=213/0-3-8, 10=213/0-3-8
Max Horz 1=-41(load case 4)
Max Uplift 1=-28(load case 6), 8=-31(load case 7), 11=-95(load case 5), 10=-88(load case 4)
Max Grav 1=130(load case 1), 8=130(load case 1), 11=230(load case 10), 10=230(load case 11)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-63/42, 2-3=-114/69, 6-7=-114/69, 7-8=-63/42, 3-4=-81/81, 4-5=-81/81, 5-6=-81/81
BOT CHORD 2-12=-18/81, 11-12=-15/81, 10-11=-15/81, 9-10=-15/81, 7-9=-16/81
WEBS 3-12=-11/24, 6-9=-11/24, 4-11=-167/145, 5-10=-167/145

JOINT STRESS INDEX
2 = 0.27, 3 = 0.04, 4 = 0.08, 5 = 0.08, 6 = 0.04, 7 = 0.27, 9 = 0.02, 10 = 0.08, 11 = 0.08 and 12 = 0.02

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
3) Provide adequate drainage to prevent water ponding.

Continued on page 2

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October 10,2007

Builders FirstSource

Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL J1899282
L255638	PB3	HIP CAP	2	1	Job Reference (optional)

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NOTES

4) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
6) Bearing at joint(s) 1, 8 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 28 lb uplift at joint 1, 31 lb uplift at joint 8, 95 lb uplift at joint 11 and 88 lb uplift at joint 10.
8) SEE MiTek STANDARD PIGGYBACK TRUSS CONNECTION DETAIL FOR CONNECTION TO BASE TRUSS

LOAD CASE(S) Standard

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October 10,2007

Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL	J1899283
L255638	T01	COMMON	1	1	Job Reference (optional)	

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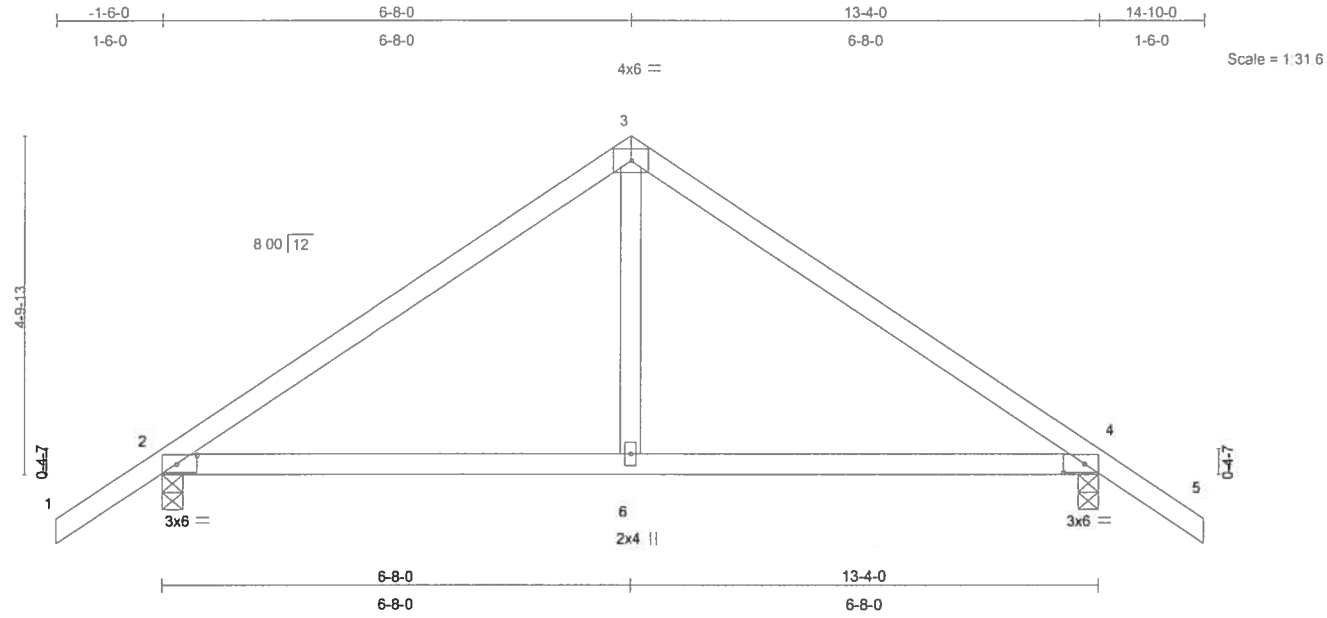

Plate Offsets (X,Y): [2:0-3-9,0-1-8], [4:0-3-9,0-1-8]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.29	Vert(LL)	0.04	2-6	>999	360	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.23	Vert(TL)	-0.07	2-6	>999	240		
BCLL	10.0	* Rep Stress Incr	YES	WB	0.07	Horz(TL)	0.01	4	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 56 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 Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 2=506/0-3-8, 4=506/0-3-8
Max Horz 2=-123(load case 4)
Max Uplift 2=-161(load case 6), 4=-161(load case 7)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/44, 2-3=-519/218, 3-4=-519/218, 4-5=0/44
BOT CHORD 2-6=-23/352, 4-6=-23/352
WEBS 3-6=0/228

JOINT STRESS INDEX
2 = 0.52, 3 = 0.75, 4 = 0.52 and 6 = 0.16

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
3) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi

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October 10,2007

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Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL
					J1899283
L255638	T01	COMMON	1	1	Job Reference (optional)

NOTES

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 161 lb uplift at joint 2 and 161 lb uplift at joint 4.

LOAD CASE(S) Standard

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October 10,2007

Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL
L255638	T01G	GABLE	1	1	J1899284
					Job Reference (optional)

Builders FirstSource, Lake City, Fl 32055 — 6.300 s Feb 15 2006 MiTek Industries, Inc. Wed Oct 10 08:57:05 2007 Page 1

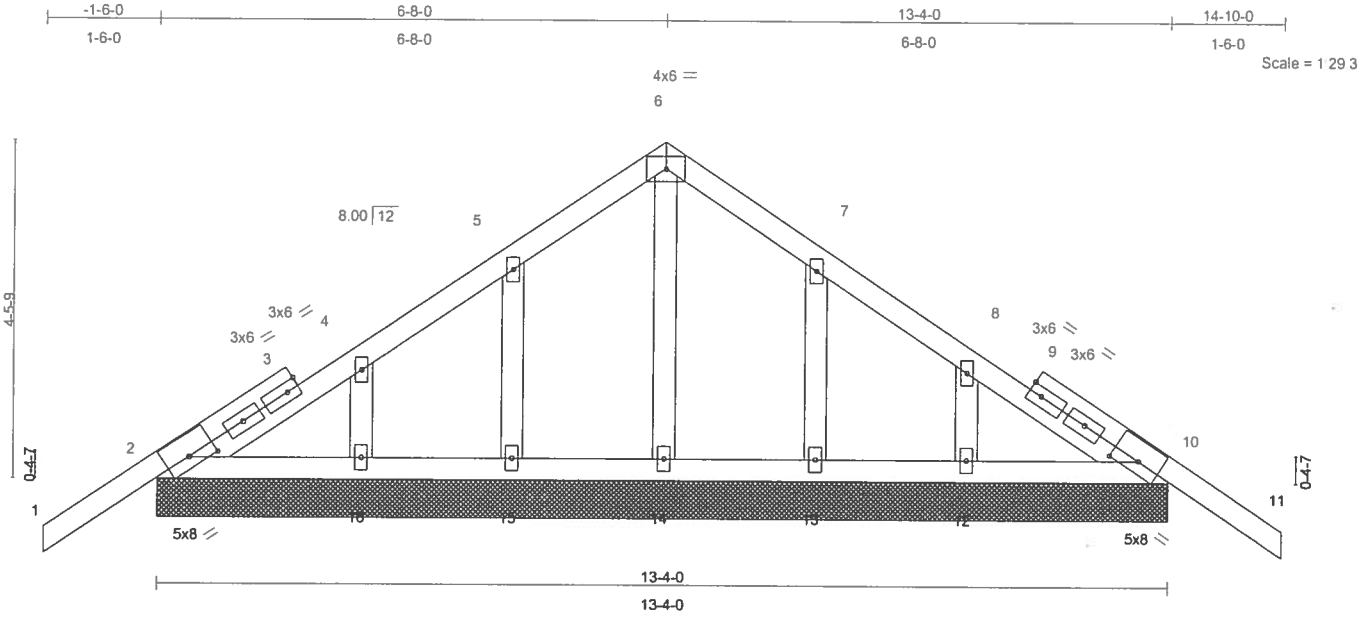

Plate Offsets (X,Y): [2:0-4-5,0-1-12], [10:0-4-5,0-1-12]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.22	Vert(LL)	-0.01	11	n/r	120	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.03	Vert(TL)	-0.02	11	n/r	90		
BCLL	10.0	* Rep Stress Incr	NO	WB	0.05	Horz(TL)	0.00	10	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 71 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 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 2=297/13-4-0, 10=297/13-4-0, 14=164/13-4-0, 15=194/13-4-0, 16=205/13-4-0, 13=194/13-4-0, 12=205/13-4-0
Max Horz 2=-149(load case 4)
Max Uplift 2=-181(load case 6), 10=-198(load case 7), 14=-1(load case 5), 15=-144(load case 6), 16=-106(load case 6), 13=-142(load case 7), 12=-111(load case 7)
Max Grav 2=297(load case 1), 10=297(load case 1), 14=164(load case 1), 15=199(load case 10), 16=205(load case 1), 13=199(load case 11), 12=205(load case 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-6/70, 2-3=-96/97, 3-4=-97/98, 4-5=-75/92, 5-6=-75/141, 6-7=-75/141, 7-8=-75/69, 8-9=-42/43, 9-10=-88/42, 10-11=-6/70
BOT CHORD 2-16=-18/116, 15-16=-18/116, 14-15=-18/116, 13-14=-18/116, 12-13=-18/116, 10-12=-18/116
WEBS 6-14=-144/14, 5-15=-179/152, 4-16=-184/130, 7-13=-179/150, 8-12=-184/134

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JOINT STRESS INDEX
2 = 0.38, 3 = 0.00, 3 = 0.20, 3 = 0.20, 4 = 0.09, 5 = 0.08, 6 = 0.13, 7 = 0.08, 8 = 0.09, 9 = 0.00, 9 = 0.20, 9 = 0.20, 10 = 0.38, 12 = 0.07, 13 = 0.08, 14 = 0.05, 15 = 0.08 and 16 = 0.07

Continued on page 2

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Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL
					J1899284
L255638	T01G	GABLE	1	1	Job Reference (optional)

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see MiTek "Standard Gable End Detail"
4) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 2-0-0 oc.
8) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 181 lb uplift at joint 2, 198 lb uplift at joint 10, 1 lb uplift at joint 14, 144 lb uplift at joint 15, 106 lb uplift at joint 16, 142 lb uplift at joint 13 and 111 lb uplift at joint 12.
10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

1) Regular: Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (plf)
   Vert: 1-6=-87(F=-33), 6-11=-87(F=-33), 2-10=-10

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October 10,2007

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October 10,2007

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

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

Builders FirstSource

Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL J1899285
L255638	T02	COMMON	1	2	Job Reference (optional)

Builders FirstSource, Lake City, Fl 32055 6.300 s Apr 19 2006 MiTek Industries, Inc. Wed Oct 10 14:31:40 2007 Page 1

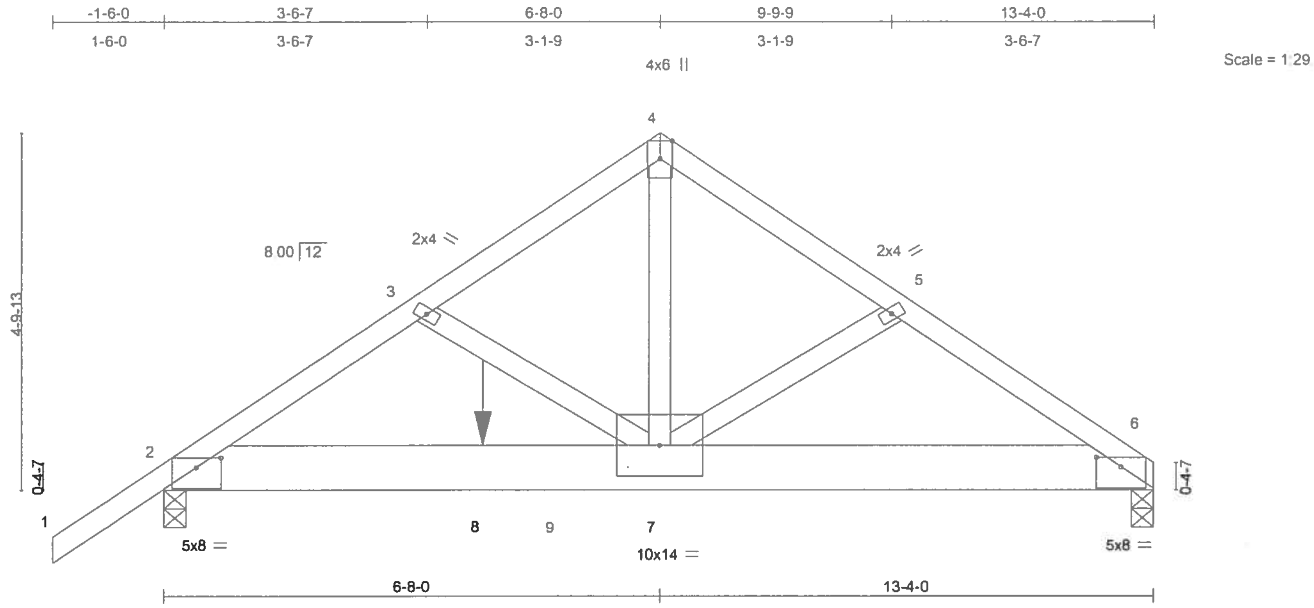

Plate Offsets (X,Y): [2:0-4-0,0-1-9], [6:0-4-0,0-1-9]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.21	Vert(LL)	-0.05	6-7	>999	360	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.39	Vert(TL)	-0.10	6-7	>999	240		
BCLL	10.0	* Rep Stress Incr	NO	WB	0.56	Horz(TL)	0.01	6	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 169 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

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

REACTIONS (lb/size) 6=3198/0-3-8, 2=2414/0-3-8
Max Horz 2=141(load case 4)
Max Uplift 6=-901(load case 6), 2=-709(load case 5)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/50, 2-3=-3531/973, 3-4=-3381/966, 4-5=-3386/956, 5-6=-3559/992
BOT CHORD 2-8=-815/2914, 8-9=-815/2914, 7-9=-815/2914, 6-7=-794/2962
WEBS 3-7=-172/110, 4-7=-995/3509, 5-7=-228/132

JOINT STRESS INDEX
2 = 0.51, 3 = 0.04, 4 = 0.42, 5 = 0.04, 6 = 0.51 and 7 = 0.26

NOTES
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2 X 4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2 X 8 - 2 rows at 0-7-0 oc.
Webs connected as follows: 2 X 4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS; Lumber DOL=1.60 plate grip DOL=1.60.

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October 10,2007

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL
L255638	T02	COMMON	1	**2**	J1899285 Job Reference (optional)

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NOTES

5) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 901 lb uplift at joint 6 and 709 lb uplift at joint 2.
8) Girder carries tie-in span(s): 29-4-0 from 5-3-8 to 13-4-0

LOAD CASE(S) Standard

1) Regular: Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (plf)
      Vert: 1-4=-54, 4-6=-54, 2-9=-10, 6-9=-443(F=-433)
   Concentrated Loads (lb)
      Vert: 8=-1272(F)

[illegible]
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[illegible] Coastal Bay Blvd
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October 10,2007

Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL	J1899286
L255638	T03	SPECIAL	1	1	Job Reference (optional)	

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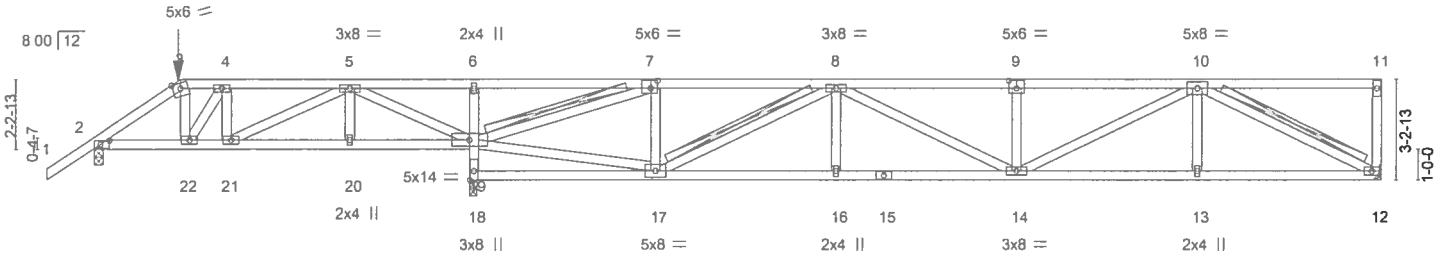
Scale = 1:71.4



Simpson HTU26

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

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.72	Vert(LL)	0.23	14-16	>999	360	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.55	Vert(TL)	-0.42	14-16	>834	240		
BCLL	10.0 *	Rep Stress Incr	NO	WB	0.79	Horz(TL)	0.06	12	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 226 lb	

LUMBER
TOP CHORD 2 X 4 SYP No.2
BOT CHORD 2 X 4 SYP No.2 *Except* 6-18 2 X 4 SYP No.3
WEBS 2 X 4 SYP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-5-10 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 3-3-3 oc bracing.
WEBS T-Brace: 2 X 4 SYP No.3 - 7-19, 8-17, 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) 12=1272/Mechanical, 2=355/0-3-8, 18=2426/0-3-0
Max Horz 2=111(load case 5)
Max Uplift 12=-571(load case 3), 2=-300(load case 5), 18=-1292(load case 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/44, 2-3=-301/289, 3-4=-203/255, 4-5=-204/292, 5-6=-882/1798, 6-7=-852/1739, 7-8=-1257/518, 8-9=-2883/1282, 9-10=-2883/1282, 10-11=-86/39, 11-12=-227/144
BOT CHORD 2-22=-250/202, 21-22=-292/204, 20-21=-442/21, 19-20=-442/21, 18-19=-2375/1313, 6-19=-426/273, 17-18=-46/80, 16-17=-1159/2635, 15-16=-1159/2635, 14-15=-1159/2635, 13-14=-912/2038, 12-13=-912/2038
WEBS 3-22=-116/44, 4-22=-2/118, 4-21=-261/94, 5-21=-347/719, 5-20=-72/136, 5-19=-1510/958, 17-19=-598/1294, 7-19=-3139/1440, 7-17=-166/561, 8-17=-1545/719, 8-16=0/203, 8-14=-138/278, 9-14=-464/301, 10-14=-415/947, 10-13=0/206, 10-12=-2189/979

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JOINT STRESS INDEX
2 = 0.33, 3 = 0.20, 4 = 0.44, 5 = 0.71, 6 = 0.78, 7 = 0.88, 8 = 0.73, 9 = 0.56, 10 = 0.61, 11 = 0.51, 12 = 0.64, 13 = 0.34, 14 = 0.89, 15 = 0.91, 16 = 0.34, 17 = 0.60, 18 = 0.44, 19 = 0.51, 20 = 0.34, 21 = 0.41 and 22 = 0.44

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Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL
					J1899286
L255638	T03	SPECIAL	1	1	Job Reference (optional)

NOTES

1) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS; porch left exposed; 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) All plates are 3x6 MT20 unless otherwise indicated.
5) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 571 lb uplift at joint 12, 300 lb uplift at joint 2 and 1292 lb uplift at joint 18.
7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

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

LOAD CASE(S) Standard

1) Regular: Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (plf)
   Vert: 1-3=-54, 3-11=-82(F=-28), 2-19=-15(F=-5), 12-18=-15(F=-5)
   Concentrated Loads (lb)
   Vert: 3=-70(F)

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Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL	J1899287
L255638	T04	SPECIAL	1	1	Job Reference (optional)	

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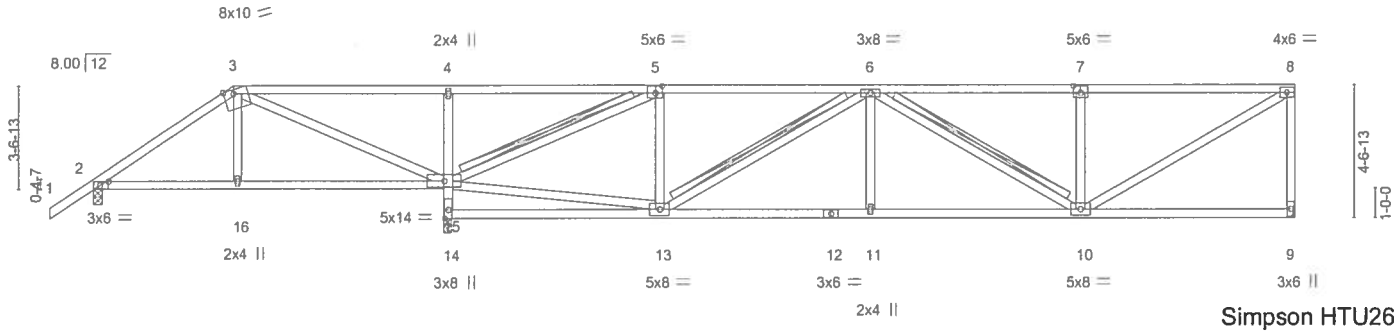
Scale = 1 76 5



Simpson HTU26

Plate Offsets (X,Y): [2:0-3-9,0-1-8], [3:0-4-0,Edge], [5:0-2-12,0-3-0], [7:0-3-0,0-3-0]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.74	Vert(LL)	0.10	10-11	>999	360	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.52	Vert(TL)	-0.18	10-11	>999	240		
BCLL	10.0	* Rep Stress Incr	YES	WB	0.86	Horz(TL)	0.03	9	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 230 lb	

LUMBER
TOP CHORD 2 X 4 SYP No.2
BOT CHORD 2 X 4 SYP No.2 *Except* 4-14 2 X 4 SYP No.3
WEBS 2 X 4 SYP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-7-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 4-5-13 oc bracing.
WEBS T-Brace: 2 X 4 SYP No.3 - 5-15, 6-13, 6-10
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) 9=848/Mechanical, 2=287/0-3-8, 14=1580/0-3-0
Max Horz 2=153(load case 6)
Max Uplift 9=-304(load case 4), 2=-265(load case 6), 14=-738(load case 4)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/44, 2-3=-191/297, 3-4=-313/606, 4-5=-339/625, 5-6=-827/389, 6-7=-1109/557, 7-8=-1109/557, 8-9=-806/442
BOT CHORD 2-16=-312/109, 15-16=-322/111, 14-15=-1541/1107, 4-15=-411/292, 13-14=0/115, 12-13=-679/1366, 11-12=-679/1366, 10-11=-679/1366, 9-10=-27/53
WEBS 3-16=-220/196, 3-15=-784/693, 13-15=-507/791, 5-15=-1589/800, 5-13=-54/361, 6-13=-626/337, 6-11=0/214, 6-10=-298/141, 7-10=-406/294, 8-10=-615/1226

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JOINT STRESS INDEX
2 = 0.42, 3 = 0.51, 4 = 0.38, 5 = 0.73, 6 = 0.56, 7 = 0.56, 8 = 0.58, 9 = 0.28, 10 = 0.55, 11 = 0.33, 12 = 0.44, 13 = 0.35, 14 = 0.38, 15 = 0.29 and 16 = 0.33

October 10,2007

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL
L255638	T04	SPECIAL	1	1	J1899287
					Job Reference (optional)

NOTES

1) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; porch left exposed; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
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) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 304 lb uplift at joint 9, 265 lb uplift at joint 2 and 738 lb uplift at joint 14.

LOAD CASE(S) Standard

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Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL	J1899288
L255638	T05	SPECIAL	1	1	Job Reference (optional)	

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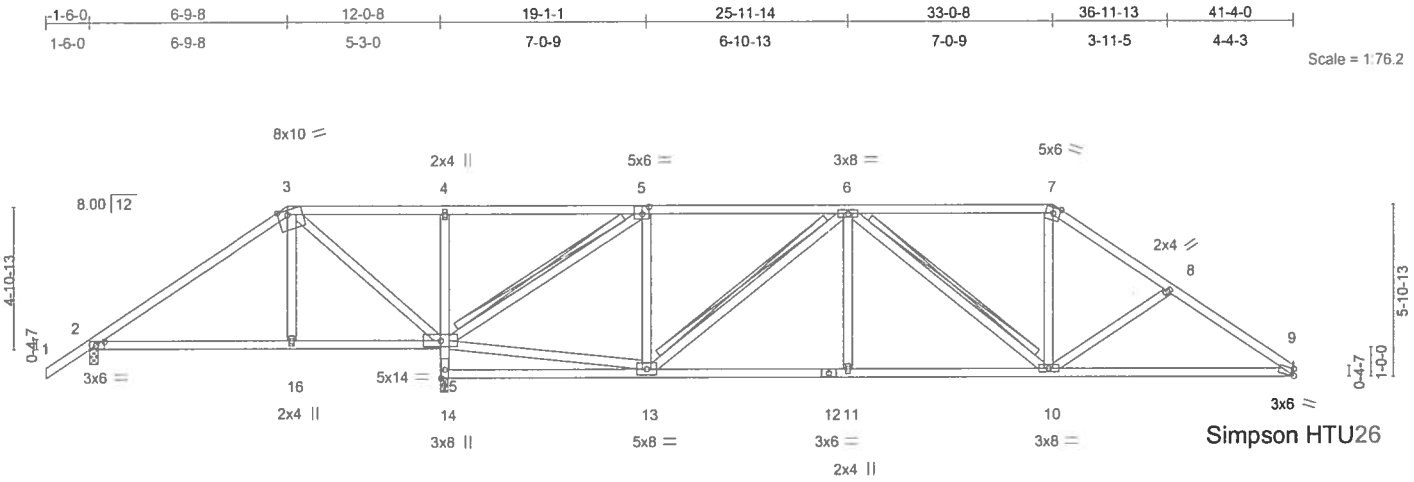

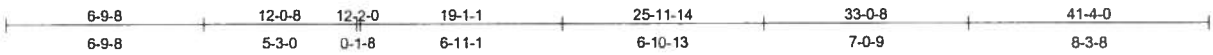

Plate Offsets (X,Y): [2:0-3-9,0-1-8], [3:0-4-0,Edge], [5:0-2-12,0-3-0], [9:Edge,0-2-10]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.43	Vert(LL)	0.13	2-16	>999	360	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.38	Vert(TL)	-0.21	9-10	>999	240		
BCLL	10.0	* Rep Stress Incr	YES	WB	0.57	Horz(TL)	0.04	9	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 233 lb	

LUMBER
TOP CHORD 2 X 4 SYP No.2
BOT CHORD 2 X 4 SYP No.2 *Except* 4-14 2 X 4 SYP No.3
WEBS 2 X 4 SYP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-4-13 oc purlins.
BOT CHORD Rigid ceiling directly applied or 4-5-12 oc bracing.
WEBS T-Brace: 2 X 4 SYP No.3 - 5-15, 6-13, 6-10
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) 9=840/Mechanical, 2=262/0-3-8, 14=1619/0-3-0
Max Horz 2=147(load case 5)
Max Uplift 9=-226(load case 4), 2=-277(load case 6), 14=-711(load case 5)
Max Grav 9=843(load case 11), 2=285(load case 10), 14=1619(load case 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/44, 2-3=-113/198, 3-4=-203/539, 4-5=-192/527, 5-6=-565/380, 6-7=-897/552, 7-8=-1118/590, 8-9=-1296/638
BOT CHORD 2-16=-160/100, 15-16=-165/96, 14-15=-1583/1096, 4-15=-345/212, 13-14=0/75, 12-13=-370/1011, 11-12=-370/1011, 10-11=-370/1011, 9-10=-456/1032
WEBS 3-16=-252/209, 3-15=-683/613, 13-15=-213/532, 5-15=-1299/689, 5-13=-117/410, 6-13=-578/301, 6-11=0/194, 6-10=-241/148, 7-10=-109/340, 8-10=-173/182

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October 10,2007

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Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL J1899288
L255638	T05	SPECIAL	1	1	Job Reference (optional)

JOINT STRESS INDEX

2 = 0.63, 3 = 0.55, 4 = 0.42, 5 = 0.68, 6 = 0.56, 7 = 0.49, 8 = 0.33, 9 = 0.77, 10 = 0.56, 11 = 0.33, 12 = 0.34, 13 = 0.28, 14 = 0.38, 15 = 0.24 and 16 = 0.33

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; porch left exposed; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
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) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 226 lb uplift at joint 9, 277 lb uplift at joint 2 and 711 lb uplift at joint 14.

LOAD CASE(S) Standard

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Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL
L255638	T06	SPECIAL	1	1	J1899289 Job Reference (optional)

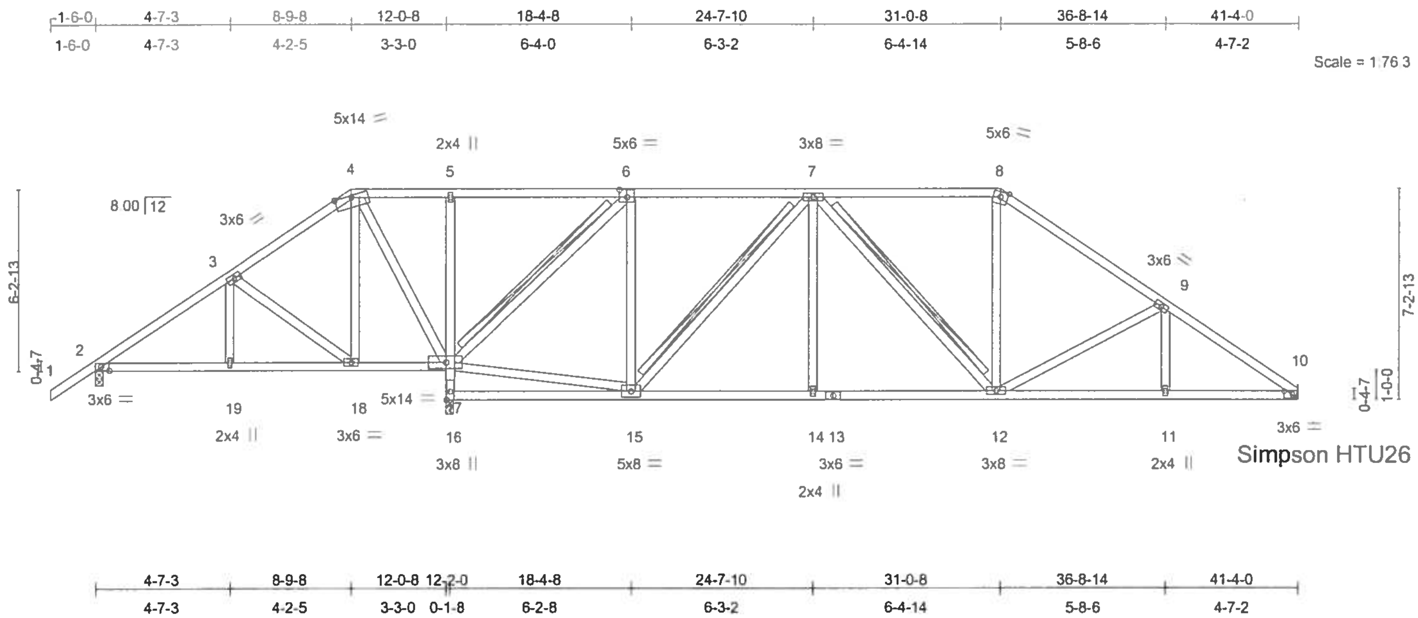

Plate Offsets (X,Y): [2:0-3-9,0-1-8], [6:0-3-0,0-3-0], [10:0-3-9,0-1-8]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.31	Vert(LL)	0.05	12-14	>999	360	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.37	Vert(TL)	-0.10	12-14	>999	240		
BCLL	10.0	* Rep Stress Incr	YES	WB	0.48	Horz(TL)	0.03	10	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 262 lb	

LUMBER
TOP CHORD 2 X 4 SYP No.2
BOT CHORD 2 X 4 SYP No.2 *Except*
5-16 2 X 4 SYP No.3
WEBS 2 X 4 SYP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-4-6 oc purlins.
BOT CHORD Rigid ceiling directly applied or 4-5-10 oc bracing.
WEBS T-Brace: 2 X 4 SYP No.3 - 6-17, 7-15, 7-12
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) 10=829/Mechanical, 2=235/0-3-8, 16=1657/0-3-0
Max Horz 2=184(load case 5)
Max Uplift 10=-212(load case 4), 2=-262(load case 6), 16=-689(load case 5)
Max Grav 10=840(load case 11), 2=274(load case 10), 16=1657(load case 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/44, 2-3=-156/243, 3-4=-11/295, 4-5=-160/476, 5-6=-154/469, 6-7=-379/289, 7-8=-787/516, 8-9=-1021/530, 9-10=-1339/608
BOT CHORD 2-19=-230/141, 18-19=-230/141, 17-18=-230/207, 16-17=-1625/1123, 5-17=-279/185, 15-16=0/60, 14-15=-194/767, 13-14=-194/767, 12-13=-194/767, 11-12=-434/1055, 10-11=-434/1055
WEBS 3-19=-164/146, 3-18=-266/365, 4-18=-339/223, 4-17=-570/511, 15-17=-132/361, 6-17=-1128/616, 6-15=-184/459, 7-15=-593/309, 7-14=0/187, 7-12=-92/109, 8-12=-57/265, 9-12=-309/250, 9-11=0/163

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Boynton Beach, FL 33435

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JOINT STRESS INDEX

2 = 0.32, 3 = 0.41, 4 = 0.44, 5 = 0.33, 6 = 0.66, 7 = 0.56, 8 = 0.56, 9 = 0.41, 10 = 0.62, 11 = 0.33, 12 = 0.56, 13 = 0.26, 14 = 0.33, 15 = 0.29, 16 = 0.39, 17 = 0.26, 18 = 0.34 and 19 = 0.33

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; porch left exposed; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
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) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 212 lb uplift at joint 10, 262 lb uplift at joint 2 and 689 lb uplift at joint 16.

LOAD CASE(S) Standard

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October 10,2007

Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL
L255638	T07	SPECIAL	1	1	J1899290 Job Reference (optional)

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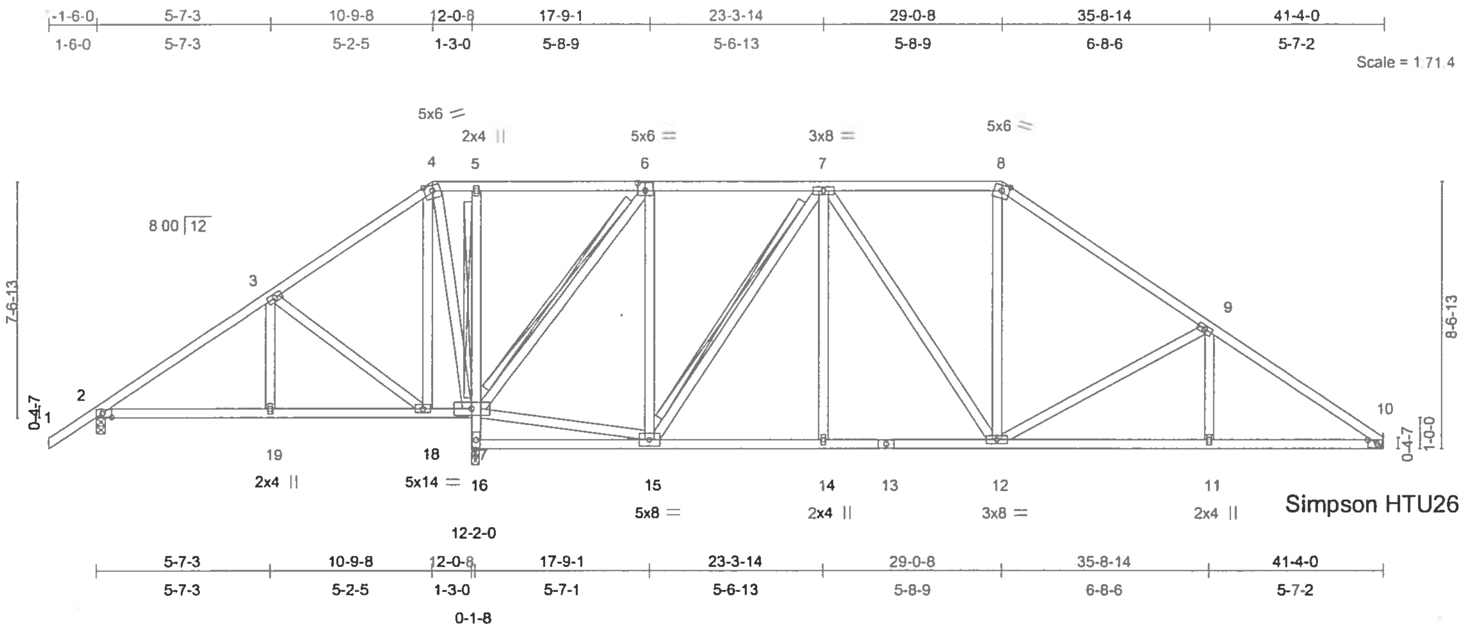

Plate Offsets (X,Y): [2:0-3-9,0-1-8], [6:0-3-0,0-3-0], [10:0-3-9,0-1-8]

LOADING (psf)		**SPACING**	2-0-0	**CSI**		**DEFL**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL	20.0	Plates Increase	1.25	TC	0.30	Vert(LL)	-0.05	11-12	>999	360	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.39	Vert(TL)	-0.11	11-12	>999	240		
BCLL	10.0	* Rep Stress Incr	YES	WB	0.51	Horz(TL)	0.03	10	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 281 lb	

LUMBER
TOP CHORD 2 X 4 SYP No.2
BOT CHORD 2 X 4 SYP No.2 *Except*
5-16 2 X 4 SYP No.3
WEBS 2 X 4 SYP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-3-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 4-5-3 oc bracing. Except:
T-Brace: 2 X 4 SYP No.3 - 5-17
WEBS T-Brace: 2 X 4 SYP No.3 - 6-17, 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) 10=834/Mechanical, 2=247/0-3-8, 16=1640/0-3-0
Max Horz 2=221(load case 5)
Max Uplift 10=-201(load case 4), 2=-259(load case 6), 16=-630(load case 5)
Max Grav 10=847(load case 11), 2=297(load case 10), 16=1640(load case 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/44, 2-3=-174/220, 3-4=-69/388, 4-5=-72/368, 5-6=-70/365, 6-7=-287/275, 7-8=-700/499, 8-9=-939/499, 9-10=-1331/594
BOT CHORD 2-19=-236/166, 18-19=-236/166, 17-18=-267/329, 16-17=-1612/1103, 5-17=-234/146, 15-16=-20/68, 14-15=-120/610, 13-14=-120/610, 12-13=-120/610, 11-12=-408/1041, 10-11=-408/1041
WEBS 3-19=-212/181, 3-18=-336/463, 4-18=-363/231, 4-17=-535/512, 15-17=-108/284, 6-17=-1014/558, 6-15=-221/502, 7-15=-594/304, 7-14=0/158, 7-12=-97/175, 8-12=-28/222, 9-12=-393/309, 9-11=0/204

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October 10,2007

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Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL
L255638	T07	SPECIAL	1	1	J1899290 Job Reference (optional)

JOINT STRESS INDEX

2 = 0.40, 3 = 0.43, 4 = 0.45, 5 = 0.34, 6 = 0.56, 7 = 0.58, 8 = 0.65, 9 = 0.43, 10 = 0.64, 11 = 0.34, 12 = 0.58, 13 = 0.22, 14 = 0.34, 15 = 0.30, 16 = 0.39, 17 = 0.28, 18 = 0.35 and 19 = 0.34

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; porch left exposed; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
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) All plates are 3x6 MT20 unless otherwise indicated.
6) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 201 lb uplift at joint 10, 259 lb uplift at joint 2 and 630 lb uplift at joint 16.

LOAD CASE(S) Standard

Truss Design Engineer

October 10,2007

Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL
					J1899291
L255638	T08	SPECIAL	1	1	Job Reference (optional)

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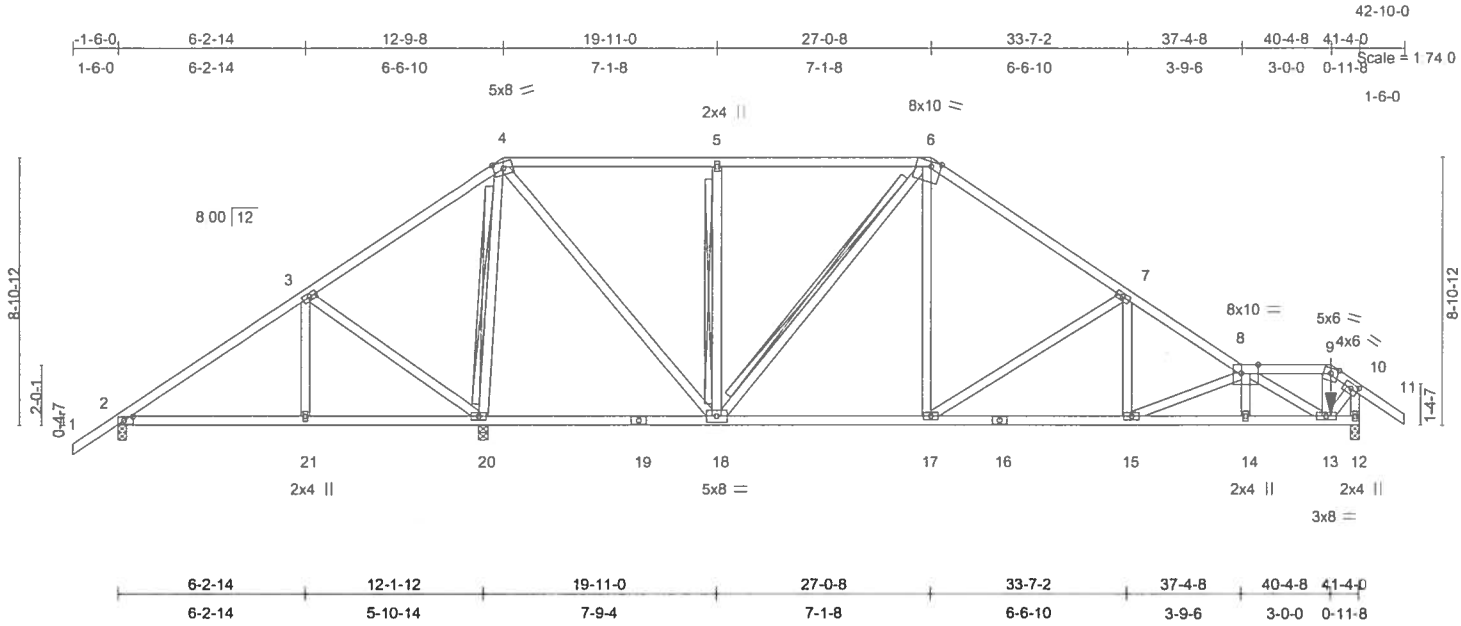

Plate Offsets (X,Y): [2:0-3-9,0-1-8], [6:0-4-0,Edge], [8:0-6-12,Edge], [10:0-2-14,0-2-0]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.42	Vert(LL)	-0.06	18-20	>999	360	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.37	Vert(TL)	-0.14	15-17	>999	240		
BCLL	10.0	* Rep Stress Incr	NO	WB	0.69	Horz(TL)	0.03	12	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 256 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 Structural wood sheathing directly applied or 5-2-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS T-Brace: 2 X 4 SYP No.3 - 4-20, 5-18, 6-18
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) 2=220/0-3-8, 20=1670/0-3-8, 12=919/0-3-8
Max Horz 2=251(load case 4)
Max Uplift 2=-243(load case 5), 20=-573(load case 4), 12=-253(load case 6)
Max Grav 2=307(load case 9), 20=1670(load case 1), 12=933(load case 10)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/44, 2-3=-172/278, 3-4=-125/534, 4-5=-418/233, 5-6=-418/233, 6-7=-878/288, 7-8=-1344/341, 8-9=-447/124, 9-10=-534/146, 10-11=0/49, 10-12=-929/264
BOT CHORD 2-21=-246/181, 20-21=-246/181, 19-20=-256/271, 18-19=-256/271, 17-18=-55/659, 16-17=-190/1101, 15-16=-190/1101, 14-15=-312/1546, 13-14=-310/1546, 12-13=-8/54
WEBS 3-21=-174/183, 3-20=-376/355, 4-20=-1384/342, 4-18=-311/997, 5-18=-405/229, 6-18=-401/134, 6-17=-84/402, 7-17=-529/232, 7-15=-25/316, 8-15=-488/143, 8-14=0/64, 8-13=-1279/289, 9-13=-63/170, 10-13=-122/687

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JOINT STRESS INDEX
2 = 0.40, 3 = 0.43, 4 = 0.56, 5 = 0.34, 6 = 0.65, 7 = 0.43, 8 = 0.34, 9 = 0.19, 10 = 0.45, 12 = 0.34, 13 = 0.70, 14 = 0.34, 15 = 0.35, 16 = 0.40, 17 = 0.35, 18 = 0.48, 19 = 0.23, 20 = 0.47 and 21 = 0.34

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Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL
					J1899291
L255638	T08	SPECIAL	1	1	Job Reference (optional)

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS; end vertical right exposed; porch left exposed; 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) All plates are 3x6 MT20 unless otherwise indicated.
6) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 243 lb uplift at joint 2, 573 lb uplift at joint 20 and 253 lb uplift at joint 12.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

1) Regular: Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (plf)
   Vert: 1-4=-54, 4-6=-54, 6-8=-54, 8-9=-54, 9-10=-54, 10-11=-54, 2-12=-10
   Concentrated Loads (lb)
   Vert: 13=-5(F)

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Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL
L255638	T09	SPECIAL	1	1	J1899292 Job Reference (optional)

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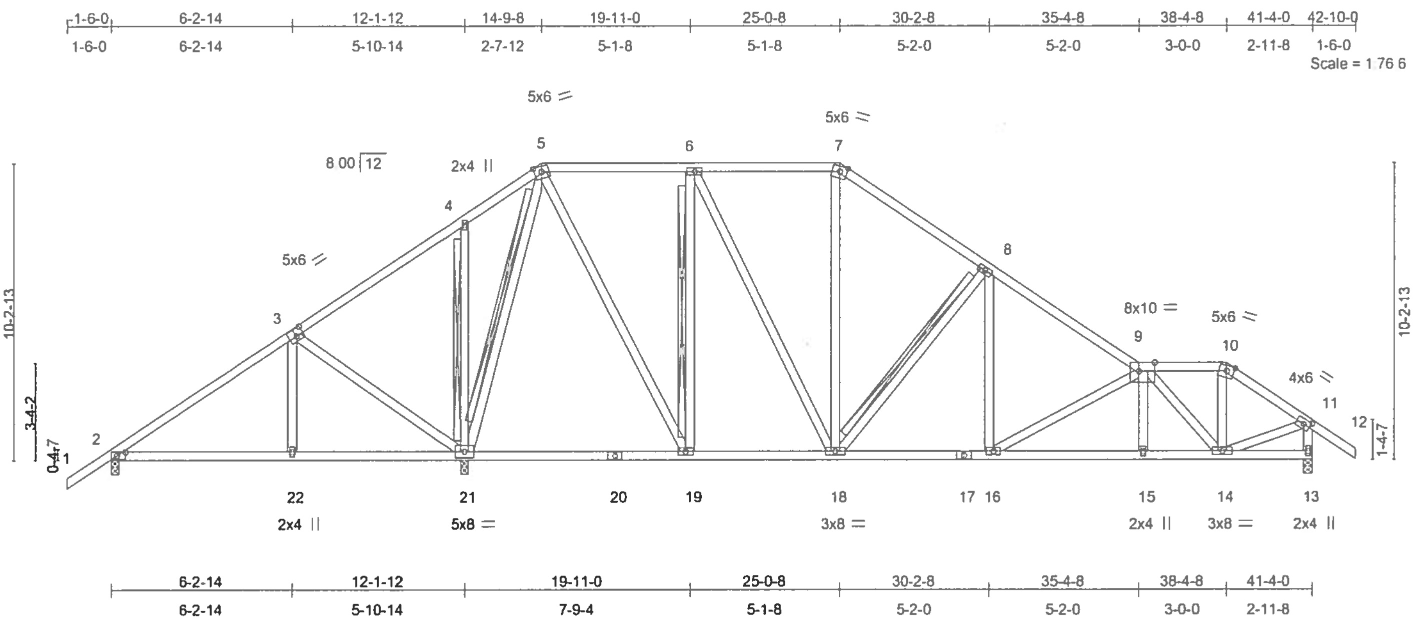

Plate Offsets (X,Y): [2:0-3-9,0-1-8], [3:0-3-0,0-3-0], [9:0-6-8,Edge], [11:0-2-14,0-2-0]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.28	Vert(LL)	-0.07	19-21	>999	360	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.27	Vert(TL)	-0.13	19-21	>999	240		
BCLL	10.0	* Rep Stress Incr	YES	WB	0.84	Horz(TL)	0.03	13	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 290 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 Structural wood sheathing directly applied or 5-9-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS T-Brace: 2 X 4 SYP No.3 - 4-21, 5-21, 6-19, 8-18
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) 2=287/0-3-8, 21=1576/0-3-8, 13=941/0-3-8
Max Horz 2=288(load case 5)
Max Uplift 2=-228(load case 6), 21=-528(load case 5), 13=-260(load case 7)
Max Grav 2=352(load case 10), 21=1576(load case 1), 13=956(load case 11)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/44, 2-3=-249/199, 3-4=-150/397, 4-5=-54/348, 5-6=-408/354, 6-7=-571/450, 7-8=-764/464, 8-9=-1137/545, 9-10=-733/387, 10-11=-913/426, 11-12=0/49, 11-13=-934/490
BOT CHORD 2-22=-261/154, 21-22=-258/156, 20-21=-34/317, 19-20=-34/317, 18-19=-65/408, 17-18=-178/888, 16-17=-178/888, 15-16=-448/1304, 14-15=-447/1305, 13-14=0/67
WEBS 3-22=-250/182, 3-21=-372/536, 4-21=-232/234, 5-21=-1091/460, 5-19=-380/783, 6-19=-628/391, 6-18=-213/380, 7-18=-61/171, 8-18=-502/356, 8-16=-125/339, 9-16=-482/314, 9-15=0/123, 9-14=-835/374, 10-14=-165/355, 11-14=-268/760

Julius Lee
Truss Design Engineer

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Continued on page 2

Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL
					J1899292
L255638	T09	SPECIAL	1	1	Job Reference (optional)

JOINT STRESS INDEX

2 = 0.44, 3 = 0.67, 4 = 0.33, 5 = 0.32, 6 = 0.45, 7 = 0.40, 8 = 0.41, 9 = 0.25, 10 = 0.20, 11 = 0.56, 13 = 0.34, 14 = 0.68, 15 = 0.33, 16 = 0.34, 17 = 0.29, 18 = 0.61, 19 = 0.64, 20 = 0.27, 21 = 0.33 and 22 = 0.33

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; end vertical right exposed; porch left exposed; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
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) All plates are 3x6 MT20 unless otherwise indicated.
6) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 228 lb uplift at joint 2, 528 lb uplift at joint 21 and 260 lb uplift at joint 13.

LOAD CASE(S) Standard

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Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL
L255638	T10	SPECIAL	1	1	J1899293
					Job Reference (optional)

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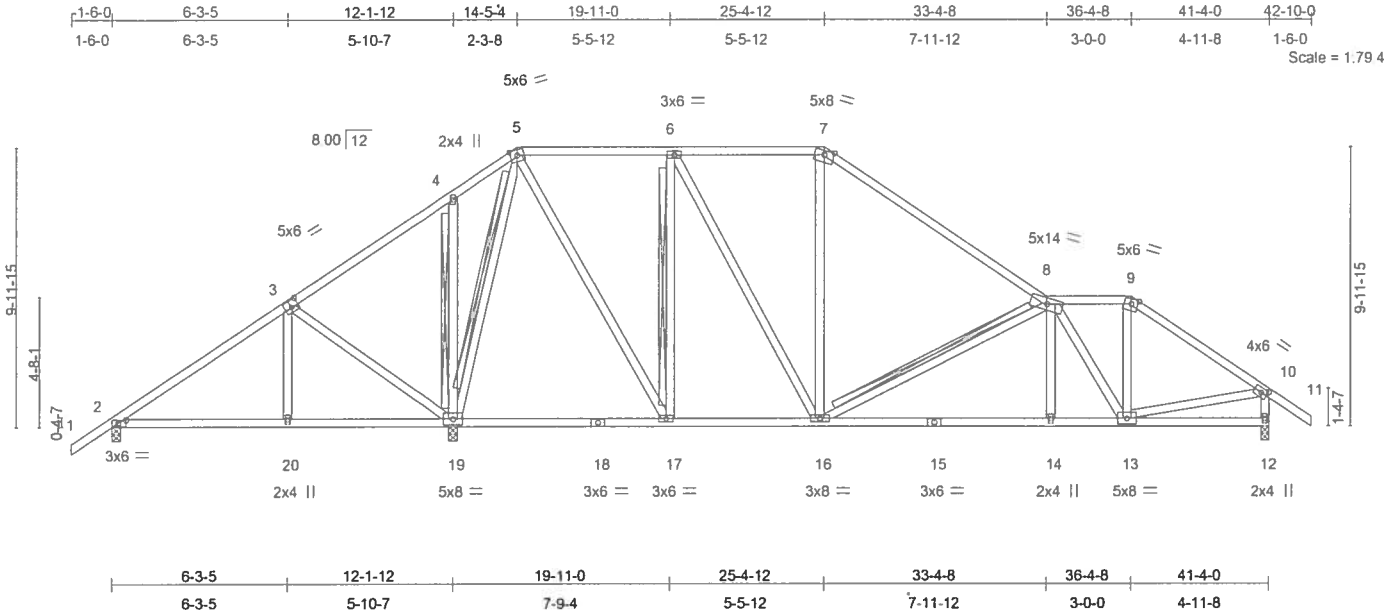

Plate Offsets (X,Y): [2:0-3-9,0-1-8], [3:0-3-0,0-3-0], [10:0-2-14,0-2-0]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.49	Vert(LL)	-0.11	14-16	>999	360	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.39	Vert(TL)	-0.22	14-16	>999	240		
BCLL	10.0	* Rep Stress Incr	YES	WB	0.84	Horz(TL)	0.03	12	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 280 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 Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-7, 8-9.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS T-Brace: 2 X 4 SYP No.3 - 4-19, 5-19, 6-17, 8-16
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) 2=306/0-3-8, 19=1549/0-3-8, 12=949/0-3-8
Max Horz 2=282(load case 5)
Max Uplift 2=-234(load case 6), 19=-553(load case 5), 12=-262(load case 7)
Max Grav 2=359(load case 10), 19=1549(load case 1), 12=965(load case 11)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/44, 2-3=-260/221, 3-4=-154/362, 4-5=-62/314, 5-6=-437/364, 6-7=-624/477, 7-8=-867/453, 8-9=-806/454, 9-10=-1037/477, 10-11=0/49, 10-12=-931/501
BOT CHORD 2-20=-249/141, 19-20=-247/143, 18-19=-26/311, 17-18=-26/311, 16-17=-75/437, 15-16=-371/1164, 14-15=-371/1164, 13-14=-369/1166, 12-13=-17/93
WEBS 3-20=-251/181, 3-19=-371/536, 4-19=-216/215, 5-19=-1074/459, 5-17=-383/792, 6-17=-628/383, 6-16=-235/406, 7-16=-0/161, 8-16=-614/431, 8-14=0/210, 8-13=-658/311, 9-13=-201/403, 10-13=-205/718

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Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL
					J1899293
L255638	T10	SPECIAL	1	1	Job Reference (optional)

JOINT STRESS INDEX

2 = 0.45, 3 = 0.68, 4 = 0.33, 5 = 0.33, 6 = 0.44, 7 = 0.74, 8 = 0.90, 9 = 0.21, 10 = 0.52, 12 = 0.77, 13 = 0.33, 14 = 0.33, 15 = 0.51, 16 = 0.59, 17 = 0.62, 18 = 0.29, 19 = 0.33 and 20 = 0.33

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; end vertical right exposed; porch left exposed; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
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) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 234 lb uplift at joint 2, 553 lb uplift at joint 19 and 262 lb uplift at joint 12.

LOAD CASE(S) Standard

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October 10,2007

Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL J1899294
L255638	T11	SPECIAL	1	1	Job Reference (optional)

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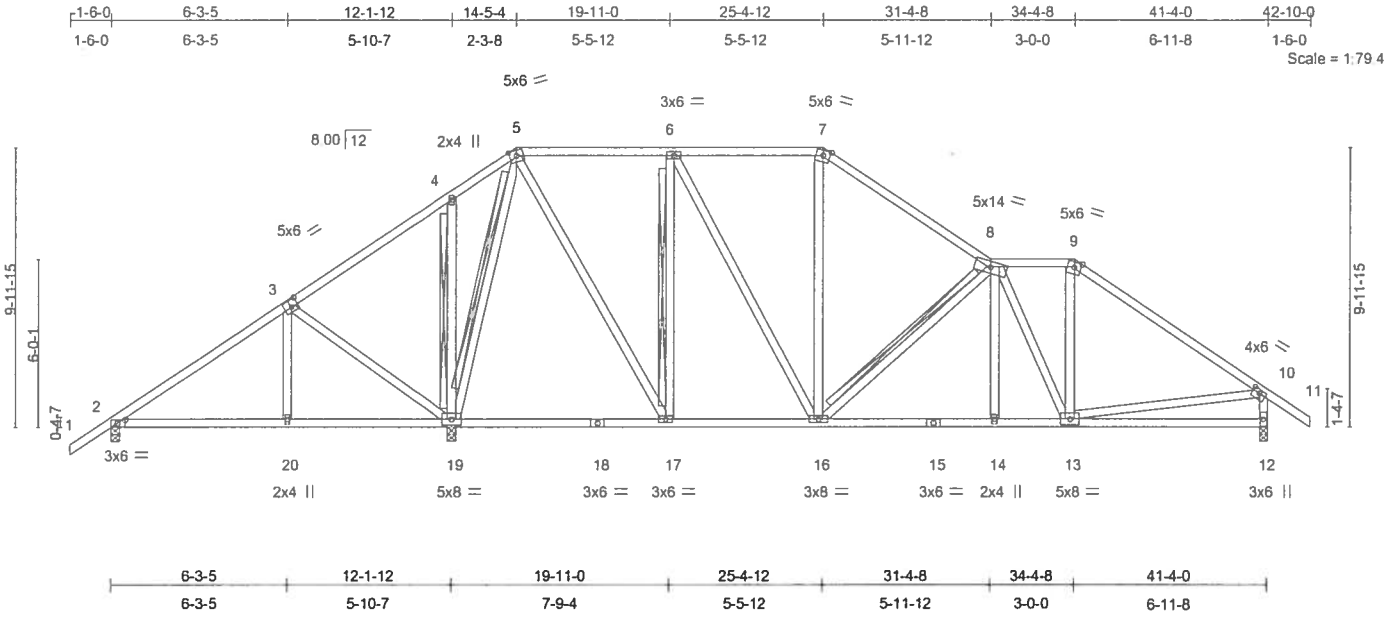

Plate Offsets (X,Y): [2:0-3-9,0-1-8], [3:0-3-0,0-3-0], [10:0-3-0,0-1-8]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.53	Vert(LL)	0.08	2-20	>999	360	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.27	Vert(TL)	-0.13	17-19	>999	240		
BCLL	10.0	* Rep Stress Incr	YES	WB	0.85	Horz(TL)	0.02	12	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 288 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 Structural wood sheathing directly applied or 5-8-13 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-7, 8-9.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS T-Brace: 2 X 4 SYP No.3 - 4-19, 5-19, 6-17, 8-16
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) 2=326/0-3-8, 19=1521/0-3-8, 12=957/0-3-8
Max Horz 2=282(load case 5)
Max Uplift 2=-237(load case 6), 19=-565(load case 5), 12=-264(load case 7)
Max Grav 2=368(load case 10), 19=1521(load case 1), 12=974(load case 11)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/44, 2-3=-275/240, 3-4=-160/328, 4-5=-68/277, 5-6=-458/377, 6-7=-627/478, 7-8=-834/479, 8-9=-821/495, 9-10=-1088/496, 10-11=0/49, 10-12=-932/509
BOT CHORD 2-20=-245/154, 19-20=-242/153, 18-19=-24/299, 17-18=-24/299, 16-17=-78/457, 15-16=-251/989, 14-15=-251/989, 13-14=-250/990, 12-13=-63/191
WEBS 3-20=-251/182, 3-19=-370/536, 4-19=-216/219, 5-19=-1043/439, 5-17=-385/789, 6-17=-621/387, 6-16=-209/369, 7-16=-28/179, 8-16=-497/355, 8-14=0/126, 8-13=-376/152, 9-13=-84/293, 10-13=-118/632

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October 10,2007

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL
					J1899294
L255638	T11	SPECIAL	1	1	Job Reference (optional)

JOINT STRESS INDEX

2 = 0.45, 3 = 0.67, 4 = 0.33, 5 = 0.33, 6 = 0.44, 7 = 0.57, 8 = 0.39, 9 = 0.55, 10 = 0.78, 12 = 0.39, 13 = 0.29, 14 = 0.33, 15 = 0.37, 16 = 0.59, 17 = 0.62, 18 = 0.27, 19 = 0.32 and 20 = 0.33

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; end vertical right exposed; porch left exposed; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
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) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 237 lb uplift at joint 2, 565 lb uplift at joint 19 and 264 lb uplift at joint 12.

LOAD CASE(S) Standard

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October 10,2007

Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL J1899295
L255638	T12	SPECIAL	1	1	Job Reference (optional)

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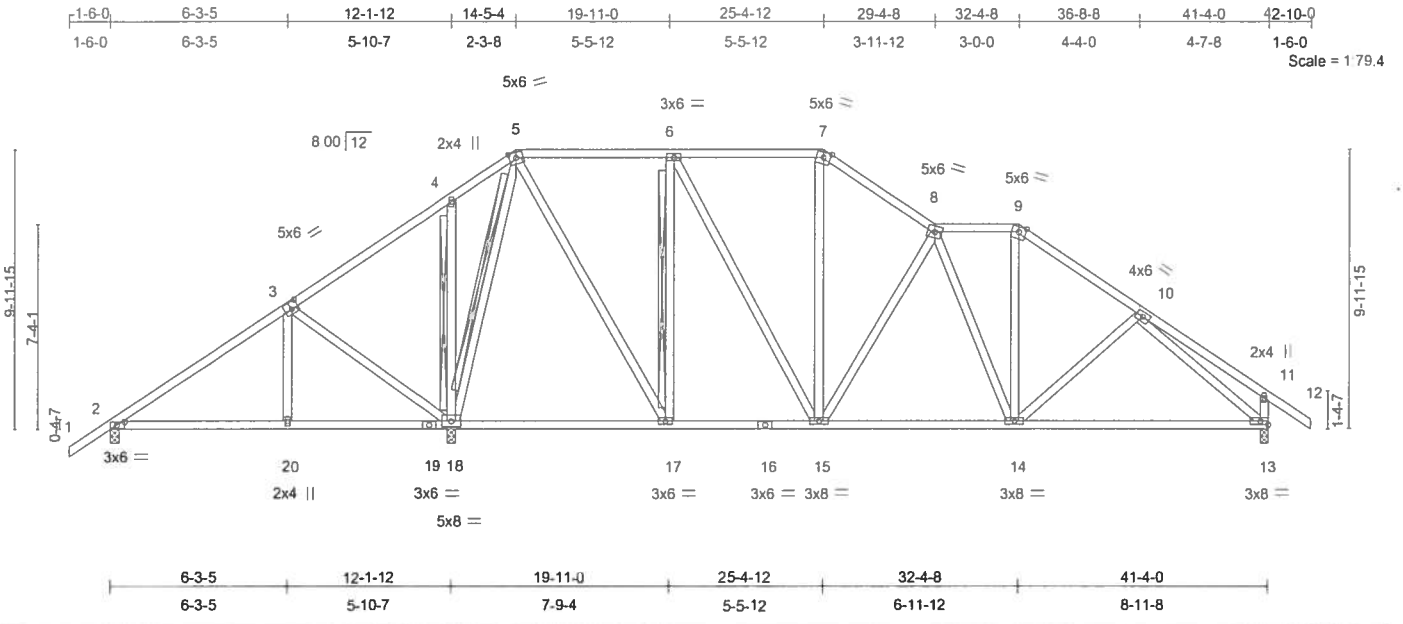

Plate Offsets (X,Y): [2:0-3-9,0-1-8], [3:0-3-0,0-3-0]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.64	Vert(LL)	-0.10	13-14	>999	360	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.34	Vert(TL)	-0.18	13-14	>999	240		
BCLL	10.0	* Rep Stress Incr	YES	WB	0.86	Horz(TL)	0.03	13	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 290 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 Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-7, 8-9.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS T-Brace: 2 X 4 SYP No.3 - 4-18, 5-18, 6-17
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) 2=336/0-3-8, 18=1507/0-3-8, 13=962/0-3-8
Max Horz 2=282(load case 5)
Max Uplift 2=-235(load case 6), 18=-571(load case 5), 13=-264(load case 7)
Max Grav 2=376(load case 10), 18=1507(load case 1), 13=978(load case 11)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/44, 2-3=-290/243, 3-4=-157/309, 4-5=-66/257, 5-6=-469/381, 6-7=-628/474, 7-8=-800/500, 8-9=-774/487, 9-10=-989/517, 10-11=-255/142, 11-12=0/49, 11-13=-289/247
BOT CHORD 2-20=-247/166, 19-20=-244/165, 18-19=-244/165, 17-18=-28/297, 16-17=-85/469, 15-16=-85/469, 14-15=-154/849, 13-14=-221/797
WEBS 3-20=-251/182, 3-18=-370/535, 4-18=-217/222, 5-18=-1026/435, 5-17=-389/788, 6-17=-619/391, 6-15=-194/349, 7-15=-87/196, 8-15=-441/331, 8-14=-200/101, 9-14=-136/292, 10-14=-57/143, 10-13=-942/395

Continued on page 2

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Boynton Beach, FL 33435

October 10,2007

Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL
					J1899295
L255638	T12	SPECIAL	1	1	Job Reference (optional)

JOINT STRESS INDEX

2 = 0.45, 3 = 0.67, 4 = 0.33, 5 = 0.33, 6 = 0.44, 7 = 0.37, 8 = 0.30, 9 = 0.29, 10 = 0.26, 11 = 0.50, 13 = 0.61, 14 = 0.63, 15 = 0.59, 16 = 0.16, 17 = 0.62, 18 = 0.32, 19 = 0.25 and 20 = 0.33

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; end vertical right exposed; porch left exposed; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
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) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 235 lb uplift at joint 2, 571 lb uplift at joint 18 and 264 lb uplift at joint 13.

LOAD CASE(S) Standard

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Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL	J1899296
L255638	T13	SPECIAL	1	1	Job Reference (optional)	

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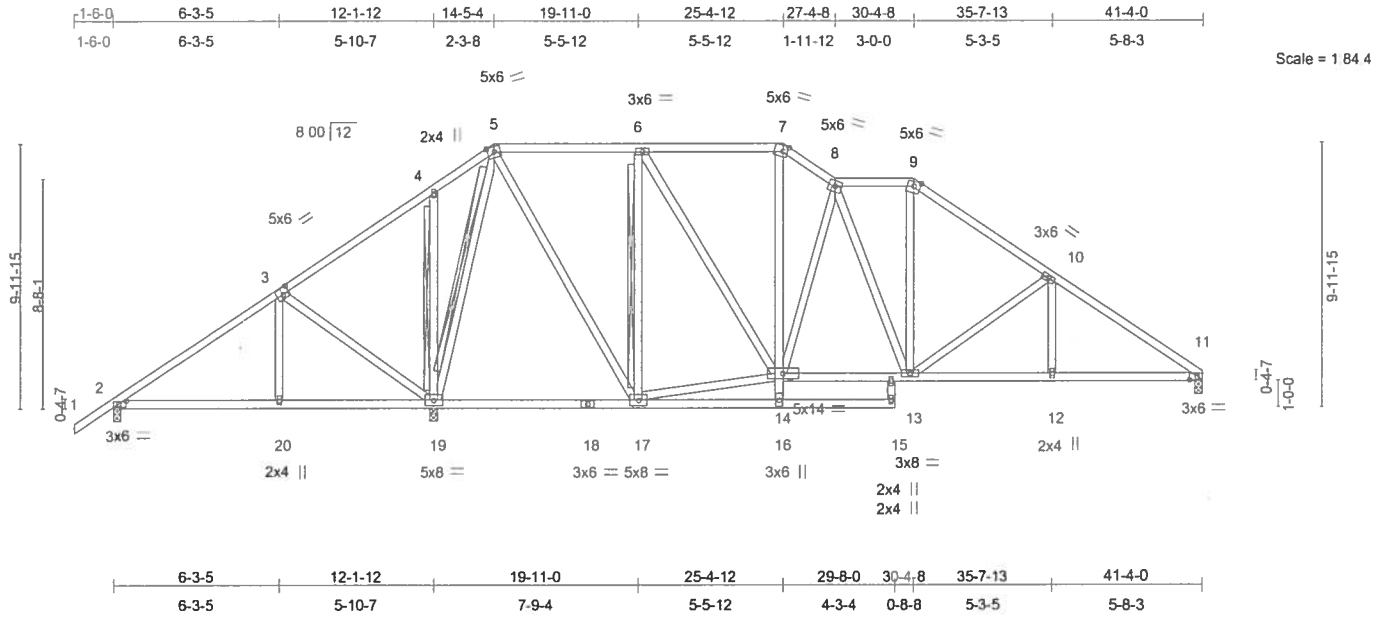

Plate Offsets (X,Y): [2:0-3-9,0-1-8], [3:0-3-0,0-3-0], [7:0-2-0,Edge], [11:0-3-9,0-1-8]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.29	Vert(LL)	-0.29	15	>999	360	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.69	Vert(TL)	-0.54	15	>644	240		
BCLL	10.0	* Rep Stress Incr	YES	WB	0.88	Horz(TL)	0.04	11	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 298 lb	

LUMBER
TOP CHORD 2 X 4 SYP No.2
BOT CHORD 2 X 4 SYP No.2 *Except* 7-16 2 X 4 SYP No.3
WEBS 2 X 4 SYP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-2-5 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 5-7, 8-9.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS T-Brace: 2 X 4 SYP No.3 - 4-19, 5-19, 6-17
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.
JOINTS 1 Brace at Jt(s): 14

REACTIONS (lb/size) 11=868/0-3-8, 2=274/0-3-8, 19=1617/0-3-8
Max Horz 2=286(load case 5)
Max Uplift 11=-170(load case 7), 2=-227(load case 6), 19=-560(load case 5)
Max Grav 11=884(load case 11), 2=338(load case 10), 19=1617(load case 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/44, 2-3=-222/166, 3-4=-162/418, 4-5=-58/366, 5-6=-431/330, 6-7=-696/425, 7-8=-826/453, 8-9=-808/466, 9-10=-1049/485, 10-11=-1375/544
BOT CHORD 2-20=-258/115, 19-20=-255/117, 18-19=-51/246, 17-18=-51/246, 16-17=-220/0, 15-16=0/0, 14-16=0/211, 7-14=-81/267, 13-14=-133/822, 12-13=-359/1067, 11-12=-359/1067
WEBS 3-20=-251/182, 3-19=-371/536, 4-19=-218/223, 5-19=-1137/489, 5-17=-400/844, 6-17=-756/381, 14-17=-32/510, 6-14=-182/518, 8-14=-469/320, 8-13=-111/87,

Continued on page 2

Julius Lee
Truss Design Engineer
Florida PE No. 34869
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Boynton Beach, FL 33435

October 10,2007

Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL J1899296
L255638	T13	SPECIAL	1	1	Job Reference (optional)

JOINT STRESS INDEX

2 = 0.44, 3 = 0.67, 4 = 0.33, 5 = 0.33, 6 = 0.43, 7 = 0.40, 8 = 0.33, 9 = 0.37, 10 = 0.41, 11 = 0.68, 12 = 0.33, 13 = 0.63, 14 = 0.30, 15 = 0.33, 16 = 0.71, 17 = 0.42, 18 = 0.17, 19 = 0.35, 20 = 0.33 and 21 = 0.33

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; porch left exposed; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
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) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 170 lb uplift at joint 11, 227 lb uplift at joint 2 and 560 lb uplift at joint 19.

LOAD CASE(S) Standard

Julius Lee
Truss Design Engineer
Florida PE No. [illegible]
[illegible] Coastal Bay Blvd
Boynton Beach, FL [illegible]

October 10,2007

Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL J1899297
L255638	T14	SPECIAL	2	1	Job Reference (optional)

Builders FirstSource, Lake City, Fl 32055 6.300 s Feb 15 2006 MiTek Industries, Inc. Wed Oct 10 08:57:20 2007 Page 1

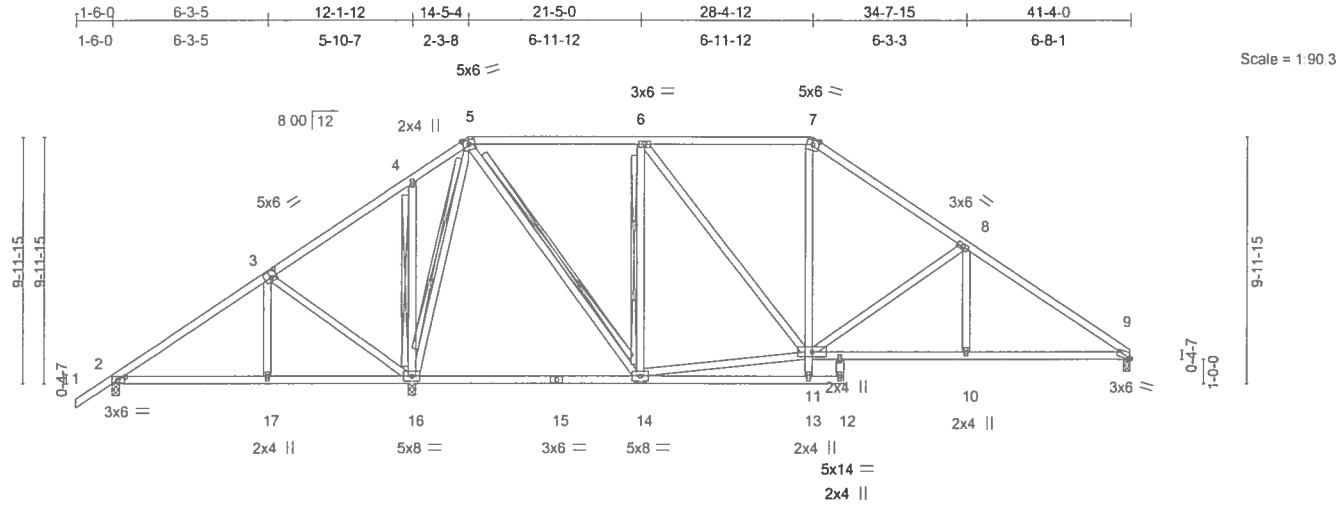

Plate Offsets (X,Y): [2:0-3-9,0-1-8], [3:0-3-0,0-3-0], [9:0-0-12,Edge]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.35	Vert(LL)	-0.13	14-16	>999	360	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.36	Vert(TL)	-0.24	14-16	>999	240		
BCLL	10.0	* Rep Stress Incr	YES	WB	0.62	Horz(TL)	0.03	9	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 268 lb	

LUMBER
TOP CHORD 2 X 4 SYP No.2
BOT CHORD 2 X 4 SYP No.2 *Except* 7-13 2 X 4 SYP No.3
WEBS 2 X 4 SYP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-1-5 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 5-7.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS T-Brace: 2 X 4 SYP No.3 - 4-16, 5-16, 5-14, 6-14
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) 9=869/0-3-8, 2=314/0-3-8, 16=1547/0-3-8
Max Horz 2=286(load case 5)
Max Uplift 9=-192(load case 4), 2=-228(load case 6), 16=-573(load case 5)
Max Grav 9=886(load case 11), 2=355(load case 10), 16=1547(load case 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/44, 2-3=-252/191, 3-4=-145/347, 4-5=-64/314, 5-6=-536/395, 6-7=-720/479, 7-8=-959/486, 8-9=-1355/558
BOT CHORD 2-17=-263/135, 16-17=-260/134, 15-16=-47/219, 14-15=-47/219, 13-14=-30/40, 12-13=0/0, 11-13=0/128, 7-11=-23/237, 10-11=-355/1041, 9-10=-355/1041
WEBS 3-17=-254/171, 3-16=-369/540, 4-16=-184/198, 5-16=-1093/507, 5-14=-403/811, 6-14=-643/388, 11-14=-115/500, 6-11=-137/313, 8-11=-396/311, 8-10=0/221

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October 10,2007

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL J1899297
L255638	T14	SPECIAL	2	1	Job Reference (optional)

JOINT STRESS INDEX

2 = 0.44, 3 = 0.69, 4 = 0.33, 5 = 0.49, 6 = 0.39, 7 = 0.59, 8 = 0.41, 9 = 0.78, 10 = 0.33, 11 = 0.27, 12 = 0.33, 13 = 0.60, 14 = 0.39, 15 = 0.41, 16 = 0.34, 17 = 0.33 and 18 = 0.33

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; porch left exposed; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
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) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 192 lb uplift at joint 9, 228 lb uplift at joint 2 and 573 lb uplift at joint 16.

LOAD CASE(S) Standard

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October 10,2007

Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL
L255638	T15	SPECIAL	1	1	J1899298 Job Reference (optional)

Builders FirstSource, Lake City, Fl 32055 6.300 s Apr 19 2006 MiTek Industries, Inc. Wed Oct 10 14:21:45 2007 Page 1

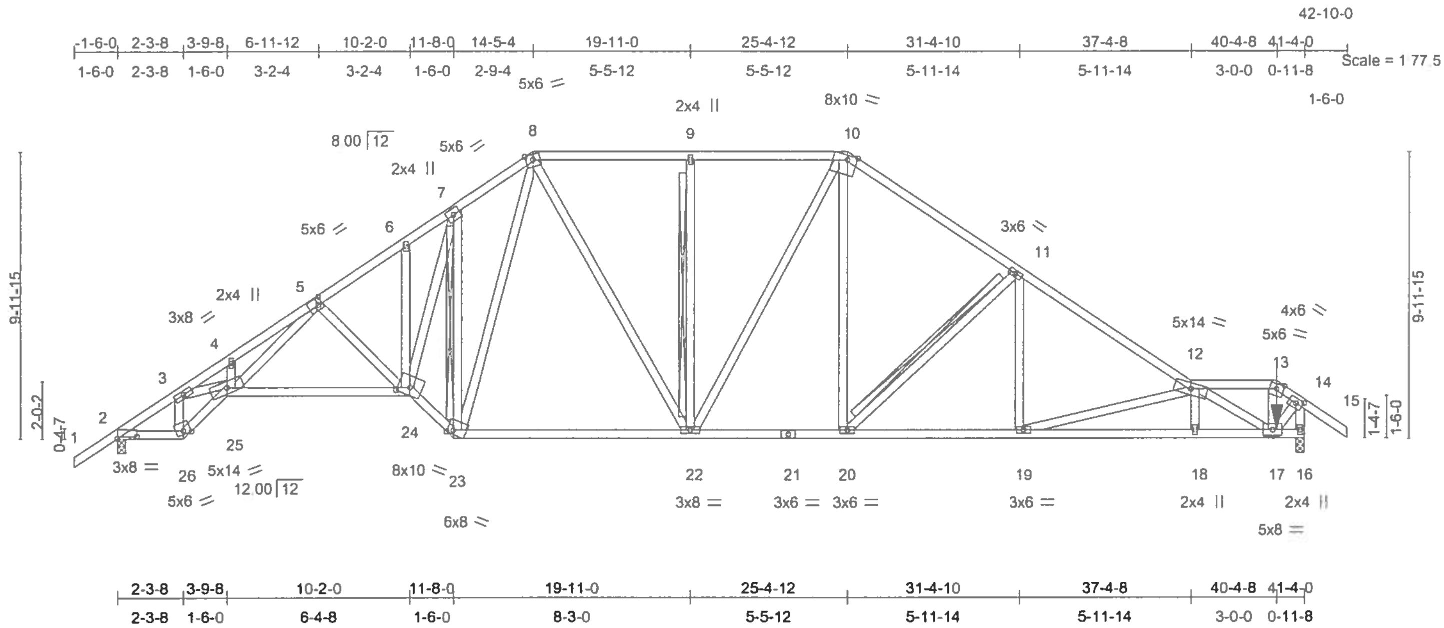

Plate Offsets (X,Y): [2:0-8-3,0-0-14], [5:0-1-12,0-3-0], [10:0-4-0,Edge], [14:0-2-14,0-2-0], [23:0-2-11,Edge], [24:0-5-0,0-3-4]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.49	Vert(LL)	-0.26	24-25	>999	360	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.63	Vert(TL)	-0.51	24-25	>961	240		
BCLL	10.0	* Rep Stress Incr	NO	WB	0.67	Horz(TL)	0.30	16	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 301 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 Structural wood sheathing directly applied or 2-8-3 oc purlins, except end verticals, and 2-0-0 oc purlins (5-2-11 max.): 8-10, 12-13.
BOT CHORD Rigid ceiling directly applied or 7-9-8 oc bracing.
WEBS T-Brace: 2 X 4 SYP No.3 - 7-23, 9-22, 11-20
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) 2=1402/0-3-8, 16=1407/0-3-8
Max Horz 2=282(load case 4)
Max Uplift 2=-318(load case 5), 16=-331(load case 6)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/44, 2-3=-2115/346, 3-4=-4395/990, 4-5=-4333/1022, 5-6=-2308/462, 6-7=-2258/507, 7-8=-1681/436, 8-9=-1397/323, 9-10=-1397/323, 10-11=-1682/363, 11-12=-2182/414, 12-13=-709/151, 13-14=-847/201, 14-15=0/49, 14-16=-1393/347

BOT CHORD 2-26=-501/1662, 25-26=-604/2032, 24-25=-651/2334, 23-24=-464/1802, 22-23=-314/1270, 21-22=-195/1327, 20-21=-195/1327, 19-20=-174/1752, 18-19=-443/2643, 17-18=-439/2643, 16-17=0/49

WEBS 3-26=-1308/389, 3-25=-560/2074, 4-25=-4/82, 5-25=-543/1857, 5-24=-669/231, 6-24=-94/84, 7-24=-536/1849, 7-23=-1544/468, 8-23=-205/456, 8-22=-200/378, 9-22=-305/178, 10-22=-196/296, 10-20=-136/449, 11-20=-588/246, 11-19=-40/381, 12-19=-926/279, 12-18=0/124, 12-17=-2253/452, 13-17=-145/403, 14-17=-136/1030

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Truss Design Engineer
Florida PE No. [illegible]
[illegible] Coastal Bay Blvd
Boynton Beach, FL [illegible]

October 10,2007

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL
					J1899298
L255638	T15	SPECIAL	1	1	Job Reference (optional)

JOINT STRESS INDEX

2 = 0.78, 3 = 0.82, 4 = 0.34, 5 = 0.82, 6 = 0.34, 7 = 0.83, 8 = 0.41, 9 = 0.34, 10 = 0.44, 11 = 0.43, 12 = 0.72, 13 = 0.23, 14 = 0.55, 16 = 0.53, 17 = 0.57, 18 = 0.34, 19 = 0.35, 20 = 0.36, 21 = 0.45, 22 = 0.61, 23 = 0.74, 24 = 0.59, 25 = 0.81 and 26 = 0.63

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS; end vertical right exposed; 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) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 318 lb uplift at joint 2 and 331 lb uplift at joint 16.
7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

1) Regular: Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (plf)
   Vert: 1-8=-54, 8-10=-54, 10-12=-54, 12-13=-54, 13-14=-54, 14-15=-54, 2-26=-10, 25-26=-10, 24-25=-10, 23-24=-10, 16-23=-10
   Concentrated Loads (lb)
   Vert: 17=-5(F)

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October 10,2007

Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL
L255638	T16	SPECIAL	1	1	J1899299
					Job Reference (optional)

Builders FirstSource, Lake City, Fl 32055 — 6.300 s Feb 15 2006 MiTek Industries, Inc. Wed Oct 10 08:57:23 2007 Page 1

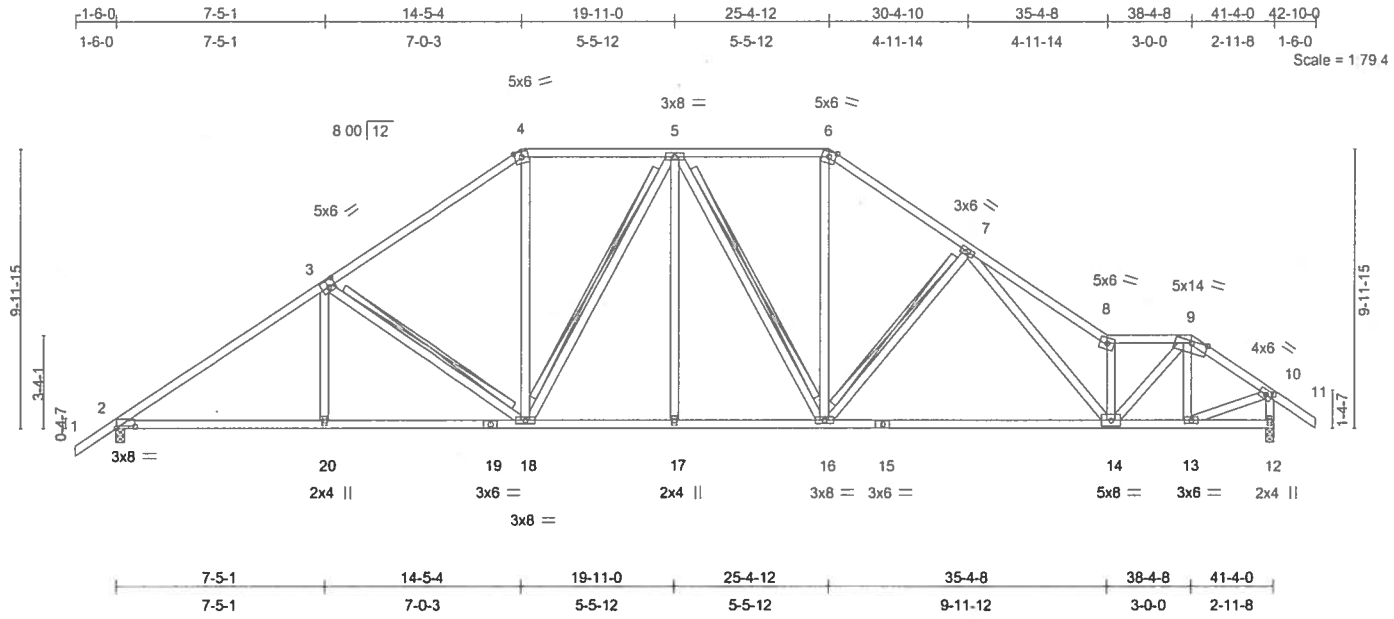

Plate Offsets (X,Y): [2:0-8-3,0-0-14], [3:0-3-0,0-3-0], [10:0-2-14,0-2-0]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.38	Vert(LL)	-0.26	14-16	>999	360	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.58	Vert(TL)	-0.52	14-16	>940	240		
BCLL	10.0	* Rep Stress Incr	YES	WB	0.56	Horz(TL)	0.10	12	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 273 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 Structural wood sheathing directly applied or 3-8-3 oc purlins, except end verticals, and 2-0-0 oc purlins (4-4-1 max.): 4-6, 8-9.
BOT CHORD Rigid ceiling directly applied or 7-11-4 oc bracing.
WEBS T-Brace: 2 X 4 SYP No.3 - 3-18, 5-18, 5-16, 7-16
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) 2=1402/0-3-8, 12=1402/0-3-8
Max Horz 2=282(load case 5)
Max Uplift 2=-318(load case 6), 12=-328(load case 7)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/44, 2-3=-2068/954, 3-4=-1641/890, 4-5=-1281/826, 5-6=-1334/847, 6-7=-1669/939, 7-8=-2693/1409, 8-9=-2111/1055, 9-10=-1420/707, 10-11=0/49, 10-12=-1372/735
BOT CHORD 2-20=-601/1619, 19-20=-602/1618, 18-19=-602/1618, 17-18=-394/1392, 16-17=-394/1392, 15-16=-601/1645, 14-15=-601/1645, 13-14=-409/1117, 12-13=0/65
WEBS 3-20=0/238, 3-18=-427/327, 4-18=-247/511, 5-18=-367/220, 5-17=0/106, 5-16=-271/196, 6-16=-315/598, 7-16=-509/391, 7-14=-479/868, 8-14=-1651/921, 9-14=-656/1451, 9-13=-439/171, 10-13=-517/1195

Continued on page 2

Julius Lee
Truss Design Engineer
Florida PE No. 34869
1100 Coastal Bay Blvd
Boynton Beach, FL 33436

October 10,2007

Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL
					J1899299
L255638	T16	SPECIAL	1	1	Job Reference (optional)

JOINT STRESS INDEX

2 = 0.75, 3 = 0.80, 4 = 0.65, 5 = 0.59, 6 = 0.46, 7 = 0.57, 8 = 0.71, 9 = 0.51, 10 = 0.60, 12 = 0.56, 13 = 0.66, 14 = 0.68, 15 = 0.55, 16 = 0.59, 17 = 0.33, 18 = 0.59, 19 = 0.51 and 20 = 0.33

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; end vertical right exposed; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
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) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 318 lb uplift at joint 2 and 328 lb uplift at joint 12.

LOAD CASE(S) Standard

Julius Lee
Truss Design Engineer
Florida PE No 34869
1106 Coastal Bay Blvd
Boynton Beach, FL 33435

October 10,2007

Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL J1899300
L255638	T17	SPECIAL	1	1	Job Reference (optional)

Builders FirstSource, Lake City, Fl 32055 — 6.300 s Feb 15 2006 MiTek Industries, Inc. Wed Oct 10 08:57:24 2007 Page 1

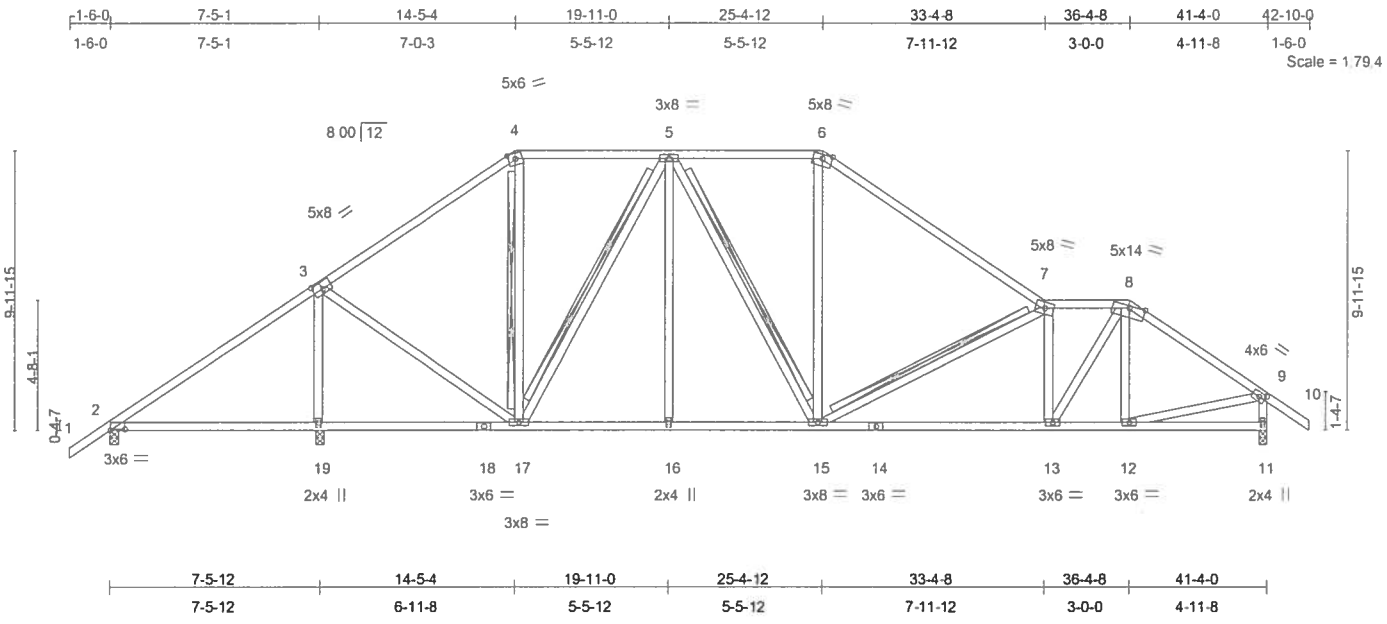

Plate Offsets (X,Y): [2:0-6-3,0-0-6], [3:0-4-0,0-3-0], [9:0-2-14,0-2-0]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.51	Vert(LL)	0.19	2-19	>448	360	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.37	Vert(TL)	-0.23	13-15	>999	240		
BCLL	10.0	* Rep Stress Incr	YES	WB	0.64	Horz(TL)	0.04	11	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 272 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 Structural wood sheathing directly applied or 5-2-6 oc purlins, except end verticals, and 2-0-0 oc purlins (4-8-2 max.): 4-6, 7-8.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS T-Brace: 2 X 4 SYP No.3 - 4-17, 5-17, 5-15, 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) 2=151/0-3-8, 19=1520/0-3-8, 11=1133/0-3-8
Max Horz 2=282(load case 5)
Max Uplift 2=-172(load case 6), 19=-444(load case 5), 11=-296(load case 7)
Max Grav 2=217(load case 10), 19=1520(load case 1), 11=1133(load case 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/44, 2-3=-161/357, 3-4=-760/471, 4-5=-540/471, 5-6=-901/653, 6-7=-1195/661, 7-8=-1439/801, 8-9=-1262/620, 9-10=0/49, 9-11=-1098/607
BOT CHORD 2-19=-229/228, 18-19=-216/218, 17-18=-216/218, 16-17=-187/799, 15-16=-187/799, 14-15=-560/1460, 13-14=-560/1460, 12-13=-308/972, 11-12=-18/100
WEBS 3-19=-1416/724, 3-17=-249/877, 4-17=-68/153, 5-17=-593/267, 5-16=0/130, 5-15=-109/236, 6-15=-70/299, 7-15=-640/449, 7-13=-648/409, 8-13=-436/853, 8-12=-188/86, 9-12=-323/902

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Florida PE No. 34869
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Boynton Beach, FL 33435

October 10,2007

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL
					J1899300
L255638	T17	SPECIAL	1	1	Job Reference (optional)

JOINT STRESS INDEX

2 = 0.60, 3 = 0.63, 4 = 0.60, 5 = 0.59, 6 = 0.76, 7 = 0.81, 8 = 0.40, 9 = 0.52, 11 = 0.81, 12 = 0.48, 13 = 0.66, 14 = 0.50, 15 = 0.59, 16 = 0.33, 17 = 0.82, 18 = 0.15 and 19 = 0.50

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; end vertical right exposed; porch left exposed; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
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) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 172 lb uplift at joint 2, 444 lb uplift at joint 19 and 296 lb uplift at joint 11.

LOAD CASE(S) Standard

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October 10,2007

Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL
L255638	T18	SPECIAL	1	1	J1899301 Job Reference (optional)

Builders FirstSource, Lake City, Fl 32055 6.300 s Feb 15 2006 MiTek Industries, Inc. Wed Oct 10 08:57:26 2007 Page 1

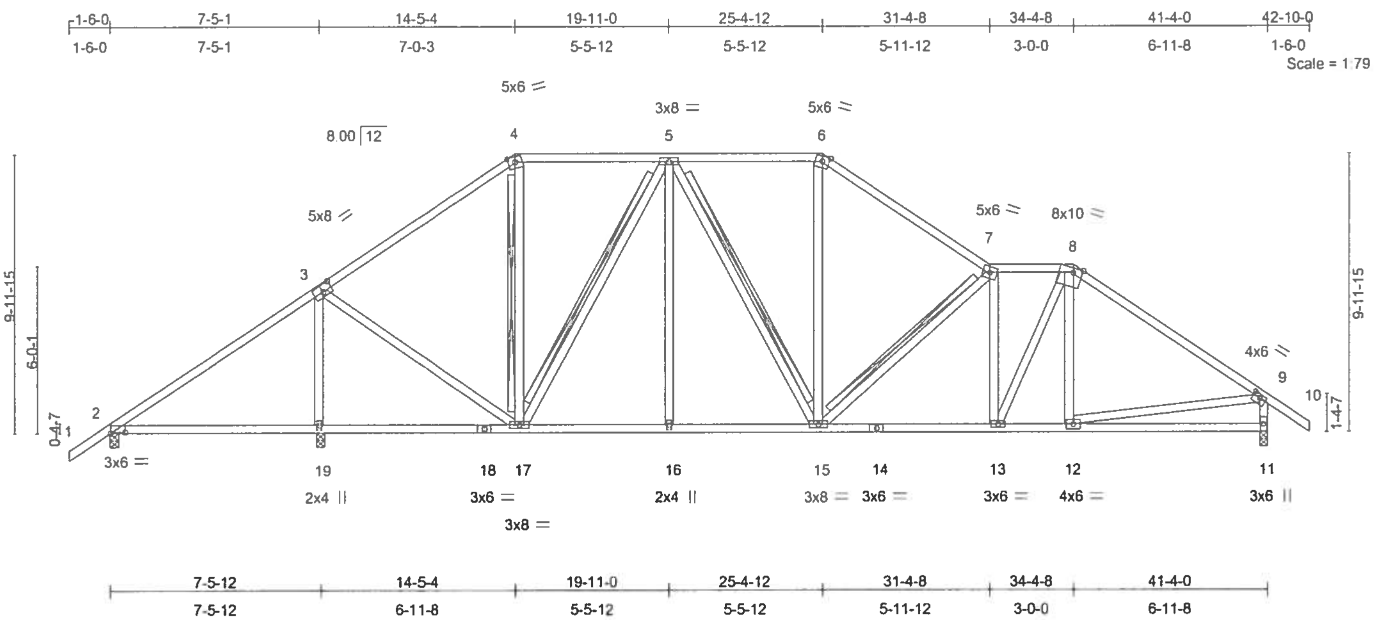

Plate Offsets (X,Y): [2:0-6-3,0-0-6], [3:0-4-0,0-3-0], [8:0-4-0,Edge], [9:0-3-0,0-1-8]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.55	Vert(LL)	0.19	2-19	>449	360	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.28	Vert(TL)	-0.13	13-15	>999	240		
BCLL	10.0	* Rep Stress Incr	YES	WB	0.63	Horz(TL)	0.03	11	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 279 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 Structural wood sheathing directly applied or 5-2-5 oc purlins, except end verticals, and 2-0-0 oc purlins (5-3-4 max.): 4-6, 7-8.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS T-Brace: 2 X 4 SYP No.3 - 4-17, 5-17, 5-15, 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) 2=171/0-3-8, 19=1497/0-3-8, 11=1137/0-3-8
Max Horz 2=282(load case 5)
Max Uplift 2=-175(load case 6), 19=-455(load case 5), 11=-297(load case 7)
Max Grav 2=227(load case 10), 19=1497(load case 1), 11=1137(load case 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/44, 2-3=-168/323, 3-4=-773/479, 4-5=-551/478, 5-6=-897/650, 6-7=-1155/682, 7-8=-1256/735, 8-9=-1324/647, 9-10=0/49, 9-11=-1094/613
BOT CHORD 2-19=-202/212, 18-19=-189/209, 17-18=-189/209, 16-17=-194/811, 15-16=-194/811, 14-15=-430/1268, 13-14=-430/1268, 12-13=-304/1008, 11-12=-67/198
WEBS 3-19=-1393/712, 3-17=-238/856, 4-17=-73/159, 5-17=-595/270, 5-16=0/145, 5-15=-91/204, 6-15=-133/313, 7-15=-513/367, 7-13=-455/262, 8-13=-267/555, 8-12=-93/73, 9-12=-241/824

Julius Lee
Truss Design Engineer
Florida PE No. [illegible]
1109 Coastal Bay Blvd
Boynton Beach, FL [illegible]

October 10,2007

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL
					J1899301
L255638	T18	SPECIAL	1	1	Job Reference (optional)

JOINT STRESS INDEX

2 = 0.60, 3 = 0.63, 4 = 0.59, 5 = 0.59, 6 = 0.61, 7 = 0.48, 8 = 0.44, 9 = 0.79, 11 = 0.41, 12 = 0.34, 13 = 0.47, 14 = 0.44, 15 = 0.59, 16 = 0.33, 17 = 0.80, 18 = 0.15 and 19 = 0.49

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; end vertical right exposed; porch left exposed; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
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) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 175 lb uplift at joint 2, 455 lb uplift at joint 19 and 297 lb uplift at joint 11.

LOAD CASE(S) Standard

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October 10,2007

Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL
L255638	T19	SPECIAL	1	1	J1899302 Job Reference (optional)

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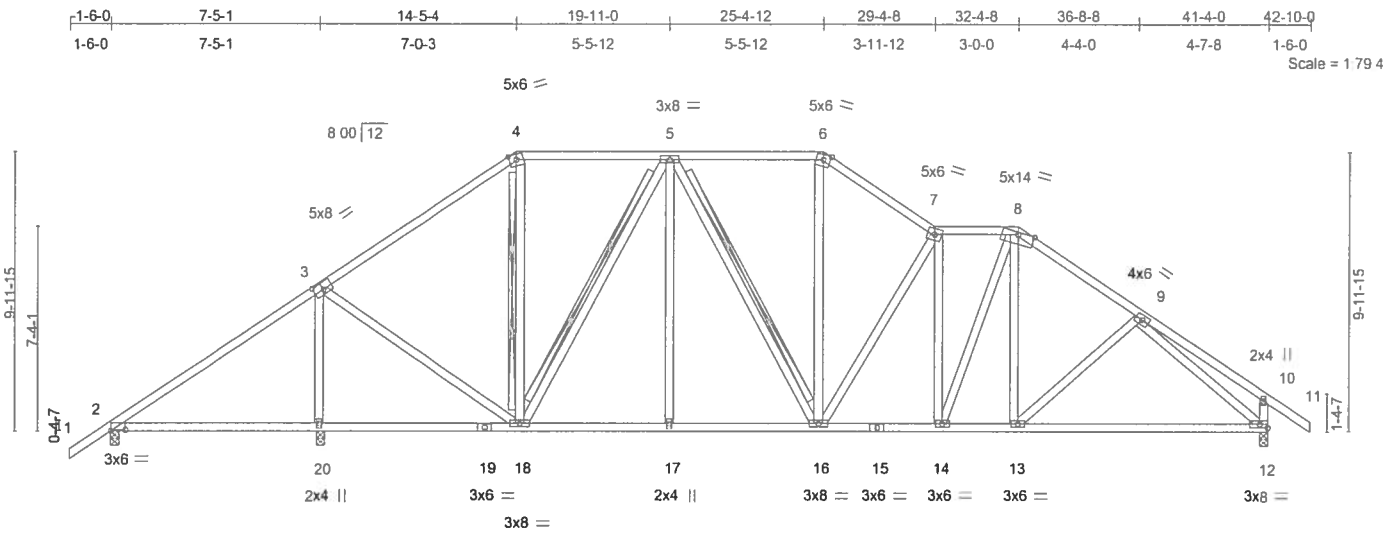

7-5-12	14-5-4	19-11-0	25-4-12	29-4-8	32-4-8	41-4-0
7-5-12	6-11-8	5-5-12	5-5-12	3-11-12	3-0-0	8-11-8

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

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.68	Vert(LL)	0.19	2-20	>449	360	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.41	Vert(TL)	-0.20	12-13	>999	240		
BCLL	10.0	* Rep Stress Incr	YES	WB	0.73	Horz(TL)	0.04	12	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 291 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 Structural wood sheathing directly applied or 5-7-6 oc purlins, except end verticals, and 2-0-0 oc purlins (5-10-2 max.): 4-6, 7-8.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 2-20,18-20.
WEBS T-Brace: 2 X 4 SYP No.3 - 4-18, 5-18, 5-16
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) 2=185/0-3-8, 20=1480/0-3-8, 12=1140/0-3-8
Max Horz 2=282(load case 5)
Max Uplift 2=-175(load case 6), 20=-461(load case 5), 12=-298(load case 7)
Max Grav 2=237(load case 10), 20=1480(load case 1), 12=1140(load case 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/44, 2-3=-166/298, 3-4=-783/483, 4-5=-559/481, 5-6=-896/648, 6-7=-1115/704, 7-8=-1114/695, 8-9=-1232/676, 9-10=-274/149, 10-11=0/49, 10-12=-300/252
BOT CHORD 2-20=-182/208, 19-20=-169/207, 18-19=-169/207, 17-18=-202/819, 16-17=-202/819, 15-16=-328/1121, 14-15=-328/1121, 13-14=-247/972, 12-13=-333/970
WEBS 3-20=-1376/706, 3-18=-232/841, 4-18=-75/166, 5-18=-596/273, 5-17=0/152, 5-16=-81/184, 6-16=-190/326, 7-16=-456/336, 7-14=-340/196, 8-14=-206/379, 8-13=-30/192, 9-13=-71/117, 9-12=-1161/543

Continued on page 2

Julius Lee
Truss Design Engineer
Florida PE No 34869
1106 Coastal Bay Blvd
Boynton Beach, FL 33435

October 10,2007

Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL
					J1899302
L255638	T19	SPECIAL	1	1	Job Reference (optional)

JOINT STRESS INDEX

2 = 0.60, 3 = 0.63, 4 = 0.58, 5 = 0.59, 6 = 0.42, 7 = 0.30, 8 = 0.63, 9 = 0.32, 10 = 0.57, 12 = 0.65, 13 = 0.35, 14 = 0.48, 15 = 0.39, 16 = 0.59, 17 = 0.33, 18 = 0.79, 19 = 0.15 and 20 = 0.49

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; end vertical right exposed; porch left exposed; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
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) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 175 lb uplift at joint 2, 461 lb uplift at joint 20 and 298 lb uplift at joint 12.

LOAD CASE(S) Standard

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Truss Design Engineer
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October 10,2007

Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL	J1899303
L255638	T20	SPECIAL	1	1	Job Reference (optional)	

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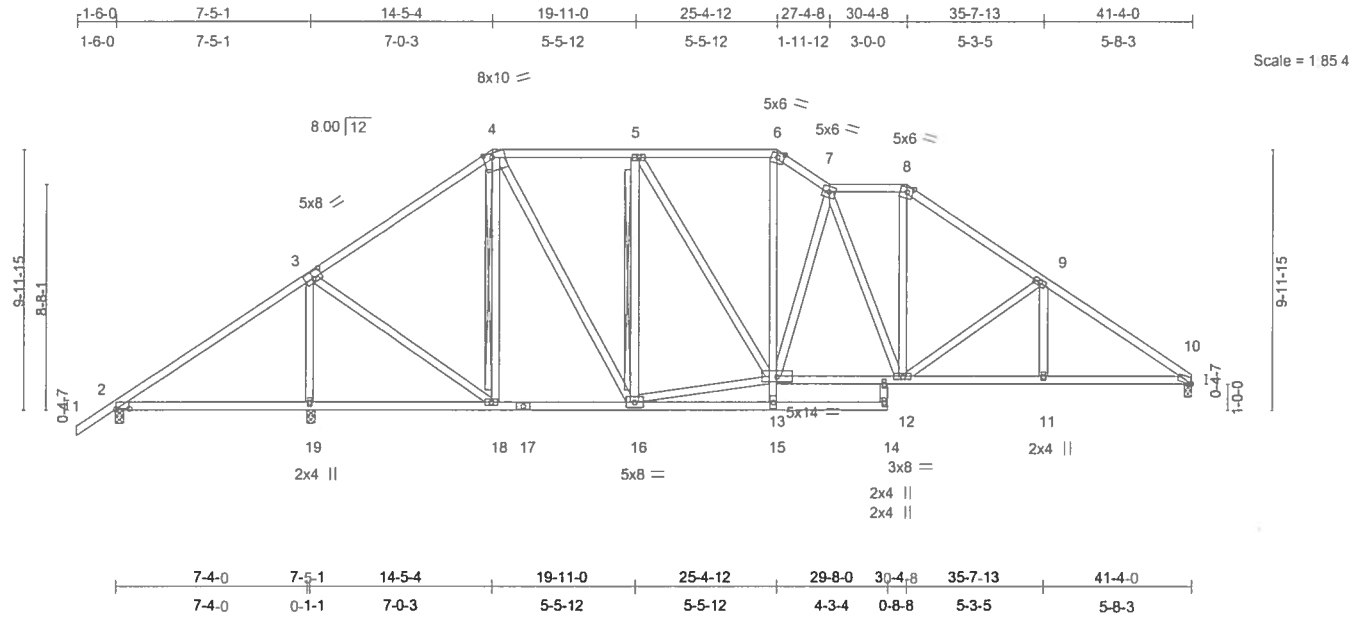

Plate Offsets (X,Y): [2:0-6-3,0-0-6], [3:0-4-0,0-3-0], [4:0-4-0,Edge], [10:0-0-12,Edge]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.40	Vert(LL)	0.19	2-19	>448	360	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.58	Vert(TL)	-0.57	14	>706	240		
BCLL	10.0	* Rep Stress Incr	YES	WB	0.63	Horz(TL)	0.05	10	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 289 lb	

LUMBER
TOP CHORD 2 X 4 SYP No.2
BOT CHORD 2 X 4 SYP No.2 *Except* 6-15 2 X 4 SYP No.3
WEBS 2 X 4 SYP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-7-14 oc purlins, except 2-0-0 oc purlins (5-10-4 max.): 4-6, 7-8.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS T-Brace: 2 X 4 SYP No.3 - 4-18, 5-16
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.
JOINTS 1 Brace at Jt(s): 13

REACTIONS (lb/size) 10=1072/0-3-8, 2=172/0-3-8, 19=1516/0-3-8
Max Horz 2=286(load case 5)
Max Uplift 10=-209(load case 7), 2=-169(load case 6), 19=-443(load case 5)
Max Grav 10=1072(load case 1), 2=230(load case 10), 19=1516(load case 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/44, 2-3=-145/321, 3-4=-792/457, 4-5=-838/588, 5-6=-1041/641, 6-7=-1228/703, 7-8=-1089/642, 8-9=-1382/693, 9-10=-1703/749
BOT CHORD 2-19=-197/162, 18-19=-183/162, 17-18=-178/558, 16-17=-178/558, 15-16=-172/0, 14-15=0/0, 13-15=0/230, 6-13=-203/436, 12-13=-351/1172, 11-12=-527/1337, 10-11=-527/1337
WEBS 3-19=-1413/728, 3-18=-251/873, 4-18=-449/219, 4-16=-269/621, 5-16=-650/280, 13-16=-158/864, 5-13=-101/400, 7-13=-496/334, 7-12=-279/140, 8-12=-193/465,

Continued on page 2

Julius Lee
Truss Design Engineer
Florida PE No. 34-1863
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Boynton Beach, FL 33435

October 10,2007

Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL J1899303
L255638	T20	SPECIAL	1	1	Job Reference (optional)

JOINT STRESS INDEX

2 = 0.60, 3 = 0.63, 4 = 0.51, 5 = 0.43, 6 = 0.39, 7 = 0.33, 8 = 0.40, 9 = 0.41, 10 = 0.71, 11 = 0.33, 12 = 0.63, 13 = 0.36, 14 = 0.33, 15 = 0.59, 16 = 0.39, 17 = 0.18, 18 = 0.50, 19 = 0.50 and 20 = 0.33

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; porch left exposed; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
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) All plates are 3x6 MT20 unless otherwise indicated.
6) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 209 lb uplift at joint 10, 169 lb uplift at joint 2 and 443 lb uplift at joint 19.

LOAD CASE(S) Standard

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Truss Design Engineer
Florida PE No. 34869
1109 Coastal Bay Blvd
Boynton Beach, FL 33435

October 10,2007

Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL	J1899304
L255638	T21	MONO HIP	1	1	Job Reference (optional)	

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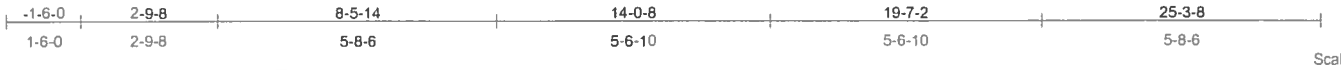

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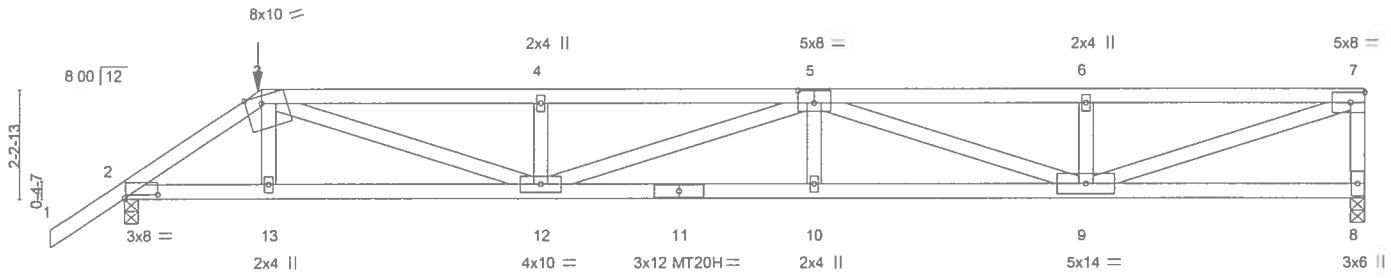

Plate Offsets (X,Y): [2:0-8-3,0-0-14], [3:0-4-0,Edge], [5:0-4-0,0-3-0]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.78	Vert(LL)	0.33	10-12	>898	360	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.85	Vert(TL)	-0.60	10-12	>502	240	MT20H	187/143
BCLL	10.0	* Rep Stress Incr	NO	WB	0.88	Horz(TL)	0.10	8	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 124 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 Structural wood sheathing directly applied or 3-0-7 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 4-9-2 oc bracing.

REACTIONS (lb/size) 8=1201/0-3-8, 2=1287/0-3-8
Max Horz 2=111(load case 5)
Max Uplift 8=-540(load case 3), 2=-462(load case 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/44, 2-3=-1962/807, 3-4=-3539/1571, 4-5=-3539/1572, 5-6=-2759/1238, 6-7=-2759/1238, 7-8=-1139/551
BOT CHORD 2-13=-667/1579, 12-13=-663/1583, 11-12=-1747/3910, 10-11=-1747/3910, 9-10=-1747/3910, 8-9=-70/156
WEBS 3-13=0/165, 3-12=-959/2064, 4-12=-455/301, 5-12=-393/186, 5-10=0/194, 5-9=-1220/540, 6-9=-448/295, 7-9=-1236/2757

JOINT STRESS INDEX
2 = 0.72, 3 = 0.61, 4 = 0.34, 5 = 0.49, 6 = 0.34, 7 = 0.60, 8 = 0.36, 9 = 0.61, 10 = 0.34, 11 = 0.89, 12 = 0.93 and 13 = 0.34

NOTES
1) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS; 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) All plates are MT20 plates unless otherwise indicated.
5) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi

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Truss Design Engineer
Florida PE No. 31988
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Boynton Beach, FL 33435

October 10,2007

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Builders FirstSource

Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL
					J1899304
L255638	T21	MONO HIP	1	1	Job Reference (optional)

NOTES

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 540 lb uplift at joint 8 and 462 lb uplift at joint 2.

7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

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

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-3=-54, 3-7=-81(F=-27), 2-8=-15(F=-5)

Concentrated Loads (lb)

Vert: 3=-70(F)

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October 10,2007

Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL
L255638	T22	MONO HIP	1	1	J1899305
					Job Reference (optional)

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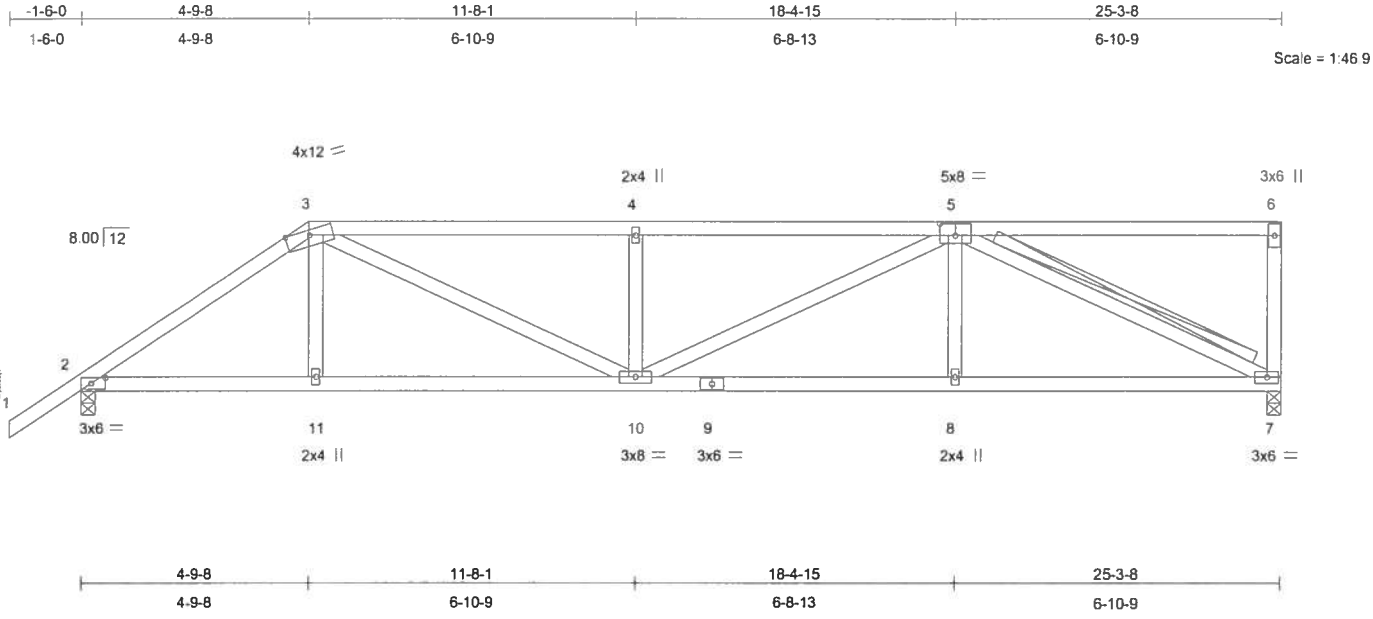

Plate Offsets (X,Y): [2:0-3-9,0-1-8], [5:0-4-0,0-3-0]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.56	Vert(LL)	0.10	8-10	>999	360	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.33	Vert(TL)	-0.18	8-10	>999	240		
BCLL	10.0	* Rep Stress Incr	YES	WB	0.45	Horz(TL)	0.05	7	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 129 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 Structural wood sheathing directly applied or 4-8-14 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 7-9-2 oc bracing.
WEBS T-Brace: 2 X 4 SYP No.3 - 5-7
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.

REACTIONS (lb/size) 7=797/0-3-8, 2=892/0-3-8
Max Horz 2=153(load case 6)
Max Uplift 7=-274(load case 4), 2=-189(load case 6)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/44, 2-3=-1241/568, 3-4=-1578/829, 4-5=-1578/829, 5-6=-65/34, 6-7=-174/123
BOT CHORD 2-11=-531/968, 10-11=-529/971, 9-10=-659/1265, 8-9=-659/1265, 7-8=-659/1265
WEBS 3-11=0/186, 3-10=-332/671, 4-10=-370/264, 5-10=-189/347, 5-8=0/206, 5-7=-1334/696

JOINT STRESS INDEX
2 = 0.62, 3 = 0.85, 4 = 0.33, 5 = 0.37, 6 = 0.42, 7 = 0.42, 8 = 0.33, 9 = 0.43, 10 = 0.61 and 11 = 0.33

Julius Lee
Professional Engineer
Florida PE No. 34869
1106 Coastal Bay Blvd
Boynton Beach, FL 33435

October 10,2007

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL J1899305
L255638	T22	MONO HIP	1	1	Job Reference (optional)

NOTES

1) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
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) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 274 lb uplift at joint 7 and 189 lb uplift at joint 2.

LOAD CASE(S) Standard

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Truss Design Engineer
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October 10,2007

Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL	J1899306
L255638	T23	MONO HIP	1	1	Job Reference (optional)	

Builders FirstSource, Lake City, Fl 32055 6.300 s Feb 15 2006 MiTek Industries, Inc. Wed Oct 10 08:57:31 2007 Page 1

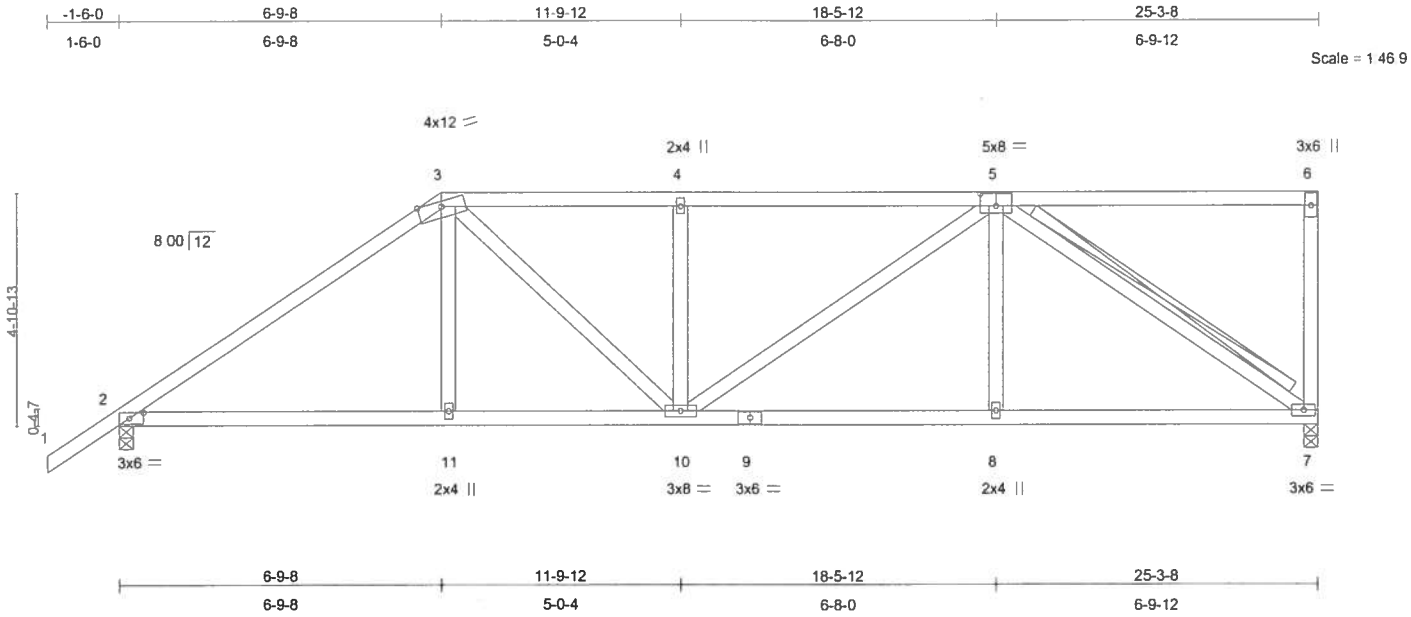

Plate Offsets (X,Y): [2:0-3-9,0-1-8], [5:0-4-0,0-3-0]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.45	Vert(LL)	-0.06	2-11	>999	360	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.30	Vert(TL)	-0.13	2-11	>999	240		
BCLL	10.0	* Rep Stress Incr	YES	WB	0.41	Horz(TL)	0.04	7	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 138 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 Structural wood sheathing directly applied or 5-5-9 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 8-7-5 oc bracing.
WEBS T-Brace: 2 X 4 SYP No.3 - 5-7
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.

REACTIONS (lb/size) 7=797/0-3-8, 2=892/0-3-8
Max Horz 2=196(load case 6)
Max Uplift 7=-256(load case 4), 2=-201(load case 6)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/44, 2-3=-1176/520, 3-4=-1105/600, 4-5=-1104/600, 5-6=-37/19, 6-7=-163/115
BOT CHORD 2-11=-514/887, 10-11=-513/889, 9-10=-481/901, 8-9=-481/901, 7-8=-481/901
WEBS 3-11=0/192, 3-10=-209/291, 4-10=-288/198, 5-10=-145/247, 5-8=0/216, 5-7=-1050/561

JOINT STRESS INDEX
2 = 0.64, 3 = 0.91, 4 = 0.33, 5 = 0.36, 6 = 0.34, 7 = 0.34, 8 = 0.33, 9 = 0.32, 10 = 0.56 and 11 = 0.33

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October 10,2007

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Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL
					J1899306
L255638	T23	MONO HIP	1	1	Job Reference (optional)

NOTES

1) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
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) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 256 lb uplift at joint 7 and 201 lb uplift at joint 2.

LOAD CASE(S) Standard

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October 10,2007

Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL
L255638	T24	SPECIAL	1	1	J1899307 Job Reference (optional)

Builders FirstSource, Lake City, Fl 32055 6.300 s Feb 15 2006 MiTek Industries, Inc. Wed Oct 10 08:57:32 2007 Page 1

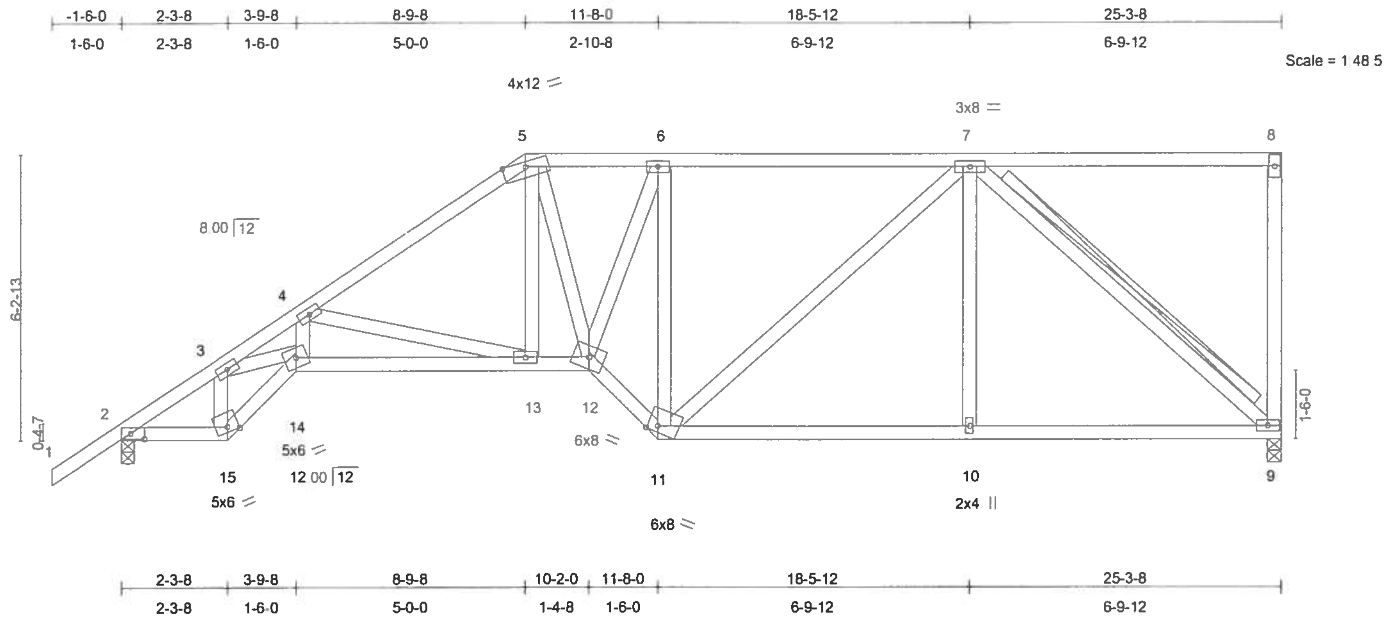

Plate Offsets (X,Y): [2:0-3-9,0-1-8], [11:0-2-11,Edge]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.40	Vert(LL)	0.14	13-14	>999	360	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.51	Vert(TL)	-0.21	13-14	>999	240		
BCLL	10.0	* Rep Stress Incr	YES	WB	0.55	Horz(TL)	0.14	9	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 166 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 Structural wood sheathing directly applied or 3-9-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 5-4-1 oc bracing.
WEBS T-Brace: 2 X 4 SYP No.3 - 7-9
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.

REACTIONS (lb/size) 9=797/0-3-8, 2=892/0-3-8
Max Horz 2=239(load case 6)
Max Uplift 9=-232(load case 4), 2=-208(load case 6)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/44, 2-3=-1238/490, 3-4=-2721/1495, 4-5=-1312/666, 5-6=-1076/632, 6-7=-867/495, 7-8=-26/13, 8-9=-160/113
BOT CHORD 2-15=-592/948, 14-15=-735/1195, 13-14=-1367/2151, 12-13=-623/1046, 11-12=-669/1145, 10-11=-384/700, 9-10=-384/700
WEBS 3-15=-791/515, 3-14=-889/1394, 4-14=-498/882, 4-13=-1146/769, 5-13=-184/389, 5-12=-150/93, 6-12=-434/657, 6-11=-863/576, 7-11=-147/222, 7-10=0/213, 7-9=-902/497

JOINT STRESS INDEX
2 = 0.62, 3 = 0.63, 4 = 0.65, 5 = 0.68, 6 = 0.58, 7 = 0.56, 8 = 0.30, 9 = 0.35, 10 = 0.33, 11 = 0.45, 12 = 0.41, 13 = 0.34, 14 = 0.75 and 15 = 0.35

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October 10,2007

Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL
					J1899307
L255638	T24	SPECIAL	1	1	Job Reference (optional)

NOTES

1) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
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) All plates are 3x6 MT20 unless otherwise indicated.
5) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 232 lb uplift at joint 9 and 208 lb uplift at joint 2.

LOAD CASE(S) Standard

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October 10,2007

Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL	J1899308
L255638	T25	SPECIAL	1	1	Job Reference (optional)	

Builders FirstSource, Lake City, Fl 32055 6.300 s Feb 15 2006 MiTek Industries, Inc. Wed Oct 10 08:57:33 2007 Page 1

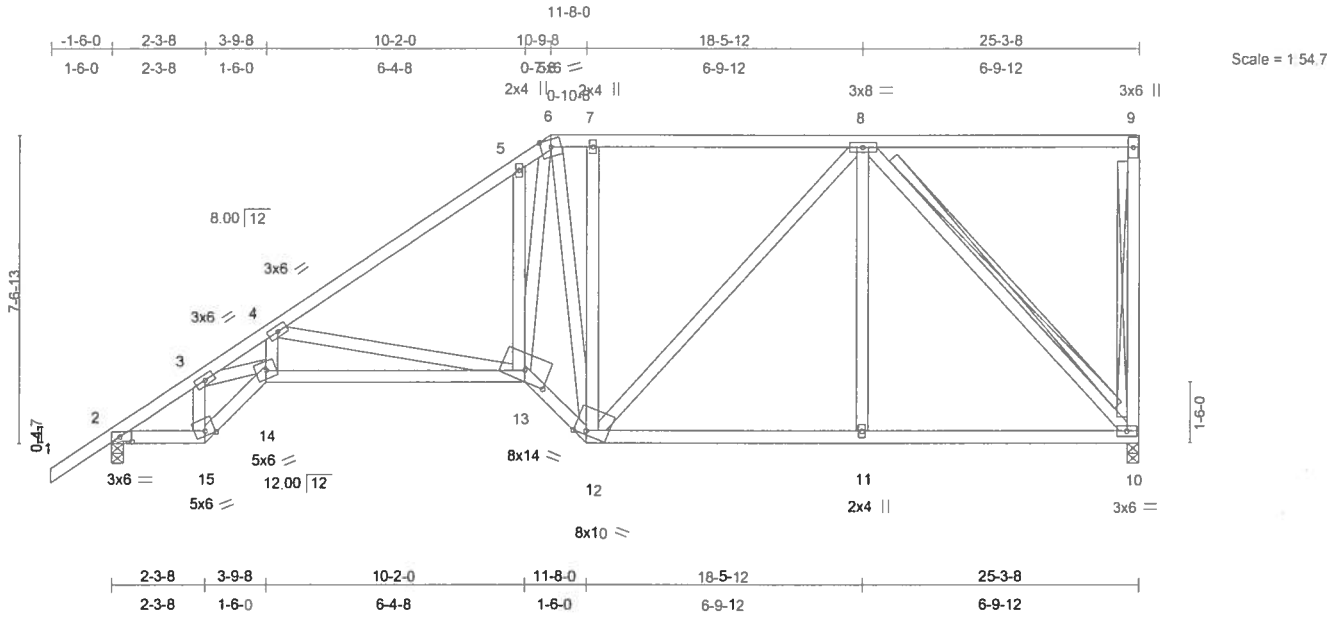

Plate Offsets (X,Y): [2:0-3-9,0-1-8], [12:0-3-11,Edge], [13:0-7-0,0-3-4]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.37	Vert(LL)	0.18	13-14	>999	360	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.51	Vert(TL)	-0.27	13-14	>999	240		
BCLL	10.0	* Rep Stress Incr	YES	WB	0.89	Horz(TL)	0.16	10	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 184 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 Structural wood sheathing directly applied or 3-7-13 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 5-1-7 oc bracing.
WEBS T-Brace: 2 X 4 SYP No.3 - 9-10, 8-10
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) 10=797/0-3-8, 2=892/0-3-8
Max Horz 2=281(load case 6)
Max Uplift 10=-223(load case 5), 2=-211(load case 6)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/44, 2-3=-1228/454, 3-4=-2789/1544, 4-5=-1212/584, 5-6=-1222/787, 6-7=-706/427, 7-8=-706/427, 8-9=-20/10, 9-10=-159/113
BOT CHORD 2-15=-616/936, 14-15=-765/1189, 13-14=-1480/2218, 12-13=-611/1000, 11-12=-325/571, 10-11=-325/571
WEBS 3-15=-797/530, 3-14=-983/1477, 4-14=-522/907, 4-13=-1305/908, 5-13=-341/352, 6-13=-896/1275, 6-12=-445/309, 7-12=-307/212, 8-12=-152/200, 8-11=0/218, 8-10=-816/465

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October 10,2007

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JOINT STRESS INDEX

2 = 0.61, 3 = 0.67, 4 = 0.67, 5 = 0.33, 6 = 0.77, 7 = 0.33, 8 = 0.56, 9 = 0.28, 10 = 0.37, 11 = 0.33, 12 = 0.29, 13 = 0.44, 14 = 0.73 and 15 = 0.34

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
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) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 223 lb uplift at joint 10 and 211 lb uplift at joint 2.

LOAD CASE(S) Standard

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October 10,2007

Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL	J1899309
L255638	T26	SPECIAL	1	1	Job Reference (optional)	

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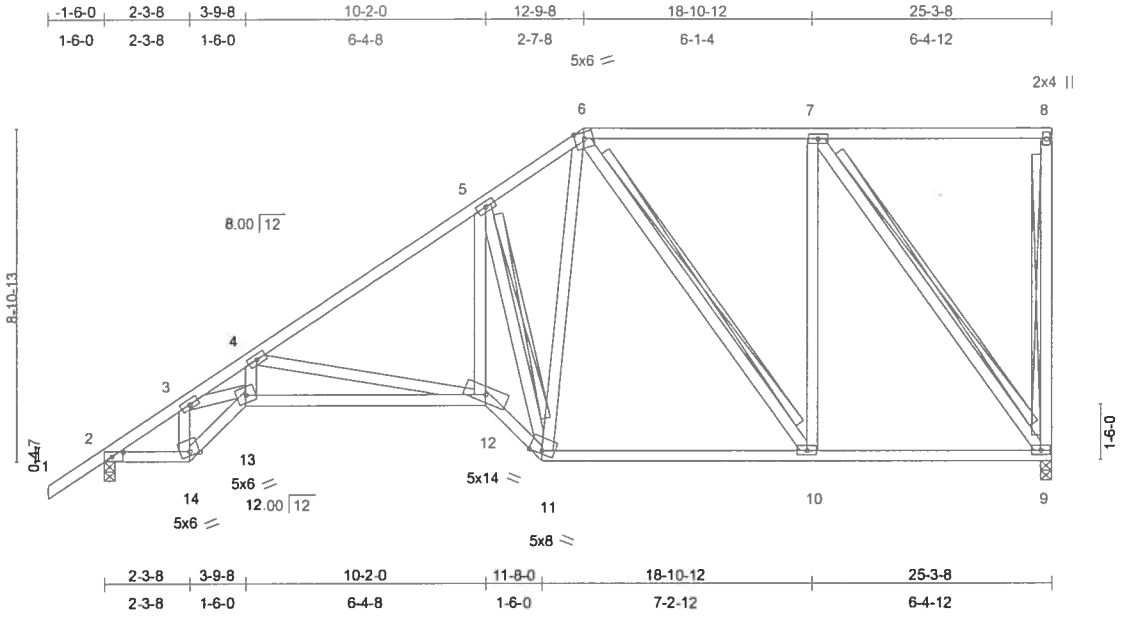

Plate Offsets (X,Y): [2:0-3-9,0-1-8]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.36	Vert(LL)	0.20	12-13	>999	360	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.51	Vert(TL)	-0.30	12-13	>993	240		
BCLL	10.0	* Rep Stress Incr	YES	WB	0.90	Horz(TL)	0.18	9	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 184 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 Structural wood sheathing directly applied or 3-7-11 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 5-0-3 oc bracing.
WEBS T-Brace: 2 X 4 SYP No.3 - 8-9, 5-11, 6-10, 7-9
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.

REACTIONS (lb/size) 9=797/0-3-8, 2=892/0-3-8
Max Horz 2=324(load case 6)
Max Uplift 9=-223(load case 5), 2=-210(load case 6)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/44, 2-3=-1226/417, 3-4=-2800/1555, 4-5=-1203/548, 5-6=-817/462, 6-7=-462/272, 7-8=-13/7, 8-9=-147/104
BOT CHORD 2-14=-644/934, 13-14=-802/1192, 12-13=-1544/2228, 11-12=-863/1298, 10-11=-377/591, 9-10=-272/462
WEBS 3-14=-803/556, 3-13=-1025/1490, 4-13=-545/907, 4-12=-1323/945, 5-12=-733/1155, 5-11=-1264/894, 6-11=-267/405, 6-10=-223/181, 7-10=-94/336, 7-9=-763/451

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JOINT STRESS INDEX
2 = 0.61, 3 = 0.68, 4 = 0.67, 5 = 0.85, 6 = 0.34, 7 = 0.40, 8 = 0.75, 9 = 0.40, 10 = 0.40, 11 = 0.51, 12 = 0.70, 13 = 0.73 and 14 = 0.34

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Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL
					J1899309
L255638	T26	SPECIAL	1	1	Job Reference (optional)

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
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) All plates are 3x6 MT20 unless otherwise indicated.
6) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 223 lb uplift at joint 9 and 210 lb uplift at joint 2.

LOAD CASE(S) Standard

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October 10,2007

Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL	J1899310
L255638	T27	SPECIAL	1	1	Job Reference (optional)	

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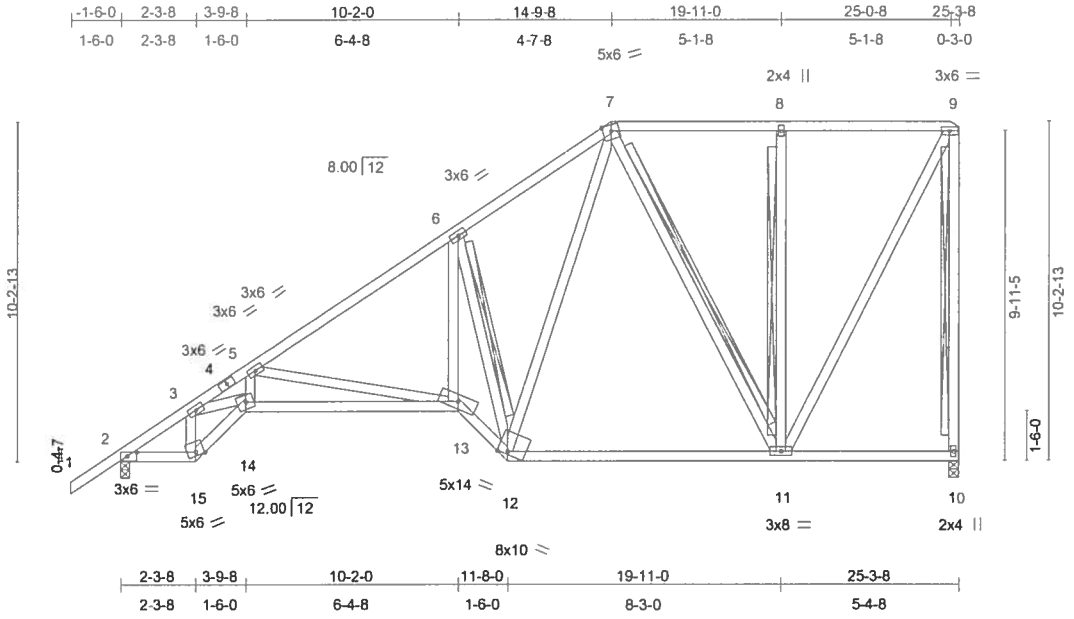

Plate Offsets (X,Y): [2:0-3-9,0-1-8], [12:0-3-11,Edge]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.71	Vert(LL)	0.22	13-14	>999	360	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.52	Vert(TL)	-0.31	13-14	>957	240		
BCLL	10.0	* Rep Stress Incr	YES	WB	0.98	Horz(TL)	0.18	10	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 193 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 Structural wood sheathing directly applied or 3-8-6 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 4-11-6 oc bracing.
WEBS T-Brace: 2 X 4 SYP No.3 - 6-12, 7-11, 8-11, 9-10
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) 2=892/0-3-8, 10=797/0-3-8
Max Horz 2=367(load case 6)
Max Uplift 2=-205(load case 6), 10=-224(load case 5)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/44, 2-3=-1226/377, 3-4=-2798/1539, 4-5=-2750/1546, 5-6=-1203/513, 6-7=-849/450, 7-8=-349/211, 8-9=-348/211, 9-10=-772/481
BOT CHORD 2-15=-671/935, 14-15=-836/1195, 13-14=-1589/2222, 12-13=-938/1331, 11-12=-331/495, 10-11=-5/8
WEBS 3-15=-808/581, 3-14=-1049/1484, 5-14=-571/913, 5-13=-1313/957, 6-13=-809/1194, 6-12=-1357/1013, 7-12=-322/485, 7-11=-319/262, 8-11=-304/216, 9-11=-443/732

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JOINT STRESS INDEX
2 = 0.61, 3 = 0.67, 4 = 0.53, 5 = 0.68, 6 = 0.88, 7 = 0.32, 8 = 0.33, 9 = 0.60, 10 = 0.36, 11 = 0.80, 12 = 0.50, 13 = 0.70, 14 = 0.73 and 15 = 0.35

October 10,2007

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Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL
					J1899310
L255638	T27	SPECIAL	1	1	Job Reference (optional)

NOTES

1) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
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) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 205 lb uplift at joint 2 and 224 lb uplift at joint 10.

LOAD CASE(S) Standard

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October 10,2007

Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL
L255638	T28	SPECIAL	1	1	J1899311 Job Reference (optional)

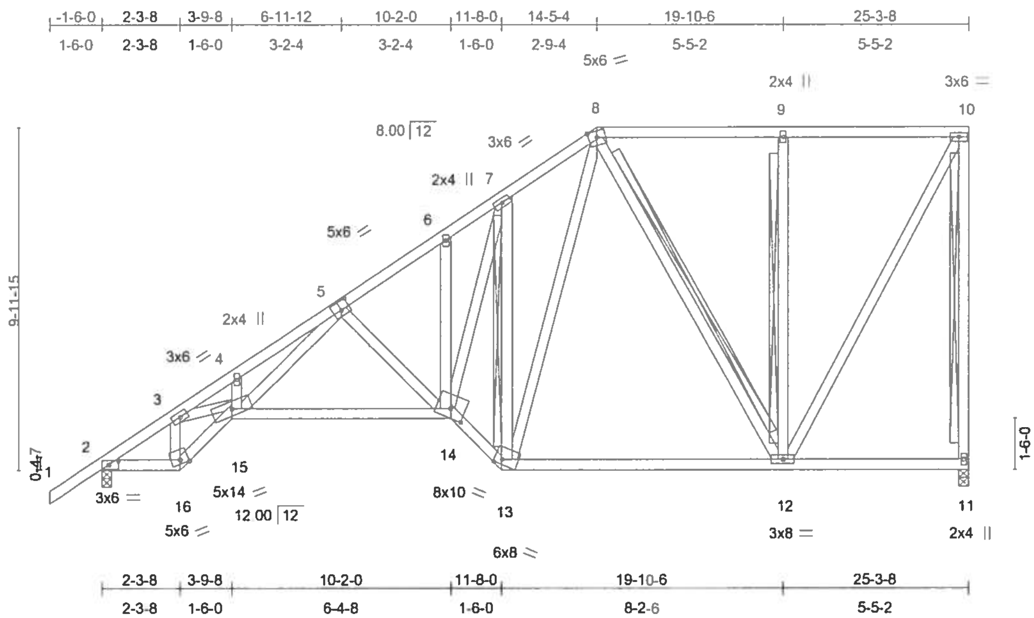

Plate Offsets (X,Y): [2:0-3-9,0-1-8], [5:0-3-0,0-3-0], [13:0-2-11,Edge], [14:0-5-0,0-3-4]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.66	Vert(LL)	0.17	14-15	>999	360	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.37	Vert(TL)	-0.25	14-15	>999	240		
BCLL	10.0	* Rep Stress Incr	YES	WB	0.95	Horz(TL)	0.13	11	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 205 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 Structural wood sheathing directly applied or 3-10-4 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 8-10.
BOT CHORD Rigid ceiling directly applied or 6-8-3 oc bracing.
WEBS T-Brace: 2 X 4 SYP No.3 - 10-11, 7-13, 8-12, 9-12
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.
JOINTS 1 Brace at Jt(s): 10

REACTIONS (lb/size) 11=797/0-3-8, 2=892/0-3-8
Max Horz 2=359(load case 6)
Max Uplift 11=-224(load case 5), 2=-206(load case 6)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/44, 2-3=-1242/395, 3-4=-2508/1344, 4-5=-2473/1403, 5-6=-1150/549, 6-7=-1115/624, 7-8=-776/455, 8-9=-361/217, 9-10=-361/217, 10-11=-772/479
BOT CHORD 2-16=-688/962, 15-16=-830/1183, 14-15=-880/1241, 13-14=-553/816, 12-13=-340/513, 11-12=-5/8
WEBS 3-16=-766/560, 3-15=-808/1166, 4-15=-40/80, 5-15=-818/1183, 5-14=-476/373, 6-14=-114/121, 7-14=-759/1056, 7-13=-909/689, 8-13=-312/460, 8-12=-311/252, 9-12=-313/225, 10-12=-444/738

October 10,2007

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL
					J1899311
L255638	T28	SPECIAL	1	1	Job Reference (optional)

JOINT STRESS INDEX

2 = 0.62, 3 = 0.53, 4 = 0.33, 5 = 0.55, 6 = 0.33, 7 = 0.77, 8 = 0.32, 9 = 0.33, 10 = 0.59, 11 = 0.35, 12 = 0.80, 13 = 0.62, 14 = 0.40, 15 = 0.39 and 16 = 0.35

NOTES

1) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
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) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 224 lb uplift at joint 11 and 206 lb uplift at joint 2.

LOAD CASE(S) Standard

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Truss Design Engineer
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October 10,2007

Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL
L255638	T29	SPECIAL	1	1	J1899312 Job Reference (optional)

Scale = 1:67.8

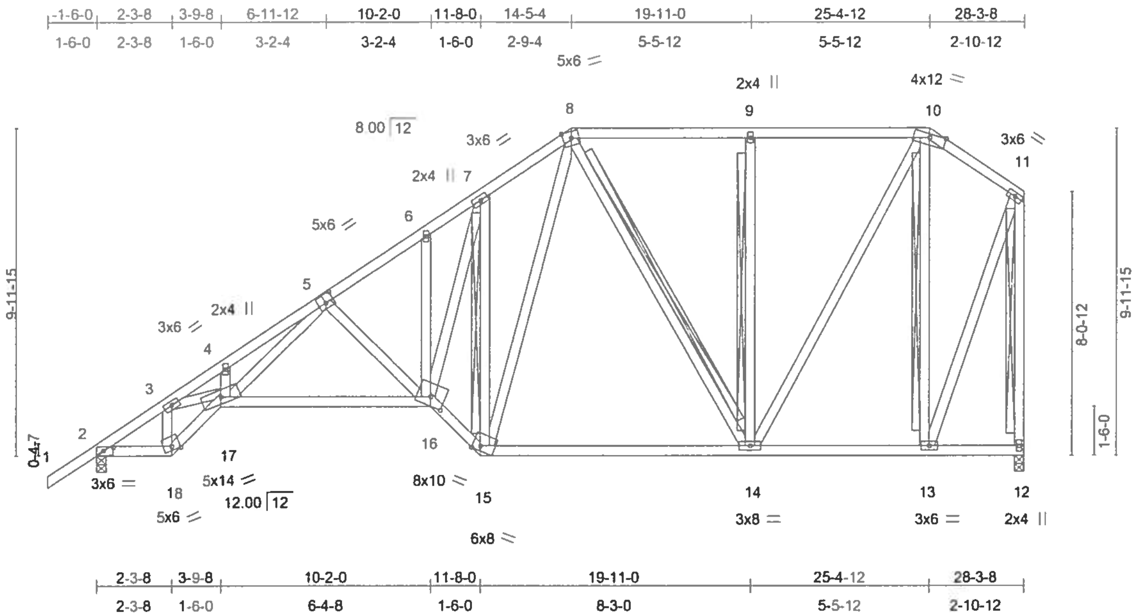

Plate Offsets (X,Y): [2:0-3-9,0-1-8], [5:0-3-0,0-3-0], [15:0-2-11,Edge], [16:0-5-0,0-3-4]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.33	Vert(LL)	0.19	16-17	>999	360	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.40	Vert(TL)	-0.29	16-17	>999	240		
BCLL	10.0	* Rep Stress Incr	YES	WB	0.76	Horz(TL)	0.15	12	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 239 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 Structural wood sheathing directly applied or 3-6-12 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 8-10.
BOT CHORD Rigid ceiling directly applied or 6-5-12 oc bracing.
WEBS T-Brace: 2 X 4 SYP No.3 - 7-15, 8-14, 9-14, 10-13, 11-12
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) 2=987/0-3-8, 12=893/0-3-8
Max Horz 2=321(load case 6)
Max Uplift 2=-238(load case 6), 12=-228(load case 5)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/44, 2-3=-1407/531, 3-4=-2865/1527, 4-5=-2824/1584, 5-6=-1368/704, 6-7=-1329/779, 7-8=-945/597, 8-9=-554/380, 9-10=-554/380, 10-11=-326/198, 11-12=-875/483
BOT CHORD 2-18=-716/1095, 17-18=-864/1344, 16-17=-934/1447, 15-16=-603/1001, 14-15=-379/655, 13-14=-124/239, 12-13=-3/4
WEBS 3-18=-868/582, 3-17=-852/1338, 4-17=-28/75, 5-17=-842/1312, 5-16=-512/381, 6-16=-110/120, 7-16=-799/1206, 7-15=-1028/719, 8-15=-308/458, 8-14=-211/162, 9-14=-313/218, 10-14=-356/647, 10-13=-631/369, 11-13=-366/706

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Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL J1899312
L255638	T29	SPECIAL	1	1	Job Reference (optional)

JOINT STRESS INDEX

2 = 0.69, 3 = 0.61, 4 = 0.33, 5 = 0.62, 6 = 0.33, 7 = 0.88, 8 = 0.34, 9 = 0.33, 10 = 0.78, 11 = 0.54, 12 = 0.33, 13 = 0.64, 14 = 0.70, 15 = 0.64, 16 = 0.40, 17 = 0.46 and 18 = 0.40

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
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) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 238 lb uplift at joint 2 and 228 lb uplift at joint 12.
7) Design assumes 4x2 (flat orientation) purlins at oc spacing indicated, fastened to truss TC w/ 2-10d nails.

LOAD CASE(S) Standard

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Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL	J1899313
L255638	T30	COMMON	1	1	Job Reference (optional)	

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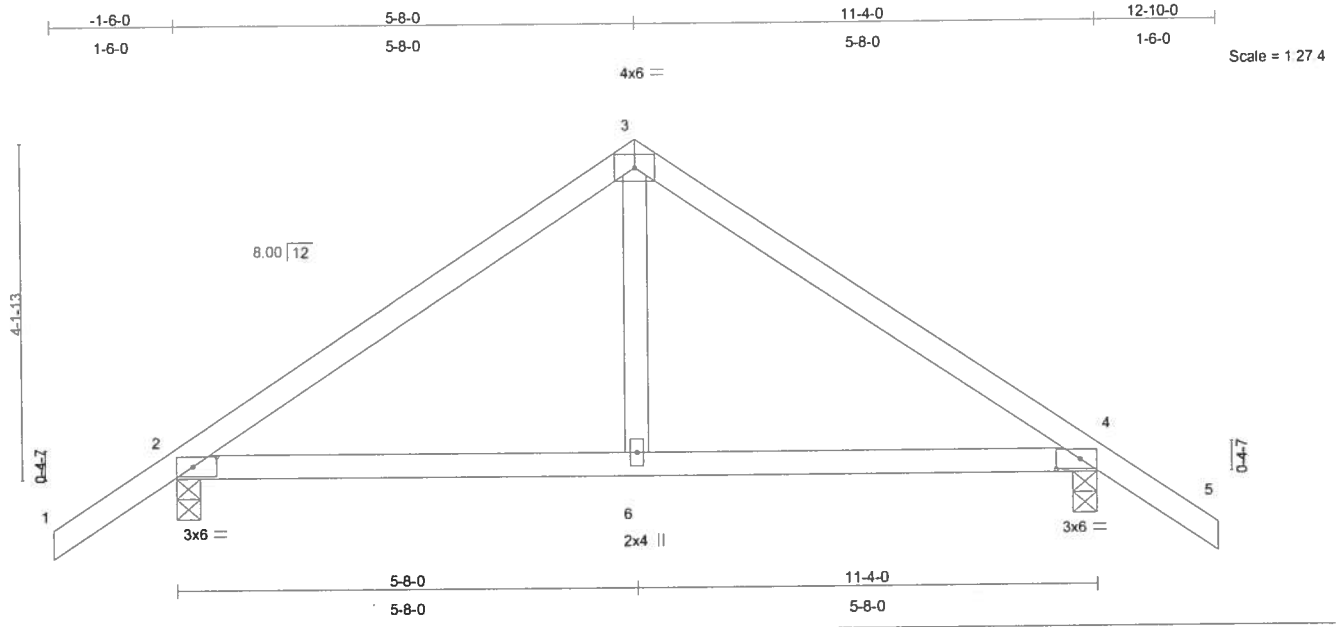

Plate Offsets (X,Y): [2:0-3-9,0-1-8], [4:0-3-9,0-1-8]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.20	Vert(LL)	-0.02	2-6	>999	360	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.17	Vert(TL)	-0.04	2-6	>999	240		
BCLL	10.0	* Rep Stress Incr	YES	WB	0.06	Horz(TL)	0.01	4	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 48 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 Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 2=442/0-3-8, 4=442/0-3-8
Max Horz 2=-105(load case 4)
Max Uplift 2=-149(load case 6), 4=-149(load case 7)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/44, 2-3=-429/177, 3-4=-429/177, 4-5=0/44
BOT CHORD 2-6=-12/288, 4-6=-12/288
WEBS 3-6=0/191

JOINT STRESS INDEX
2 = 0.33, 3 = 0.54, 4 = 0.33 and 6 = 0.14

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
3) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi

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Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL	J1899313
L255638	T30	COMMON	1	1	Job Reference (optional)	

NOTES

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 149 lb uplift at joint 2 and 149 lb uplift at joint 4.

LOAD CASE(S) Standard

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Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL
L255638	T30G	GABLE	1	1	J1899314 Job Reference (optional)

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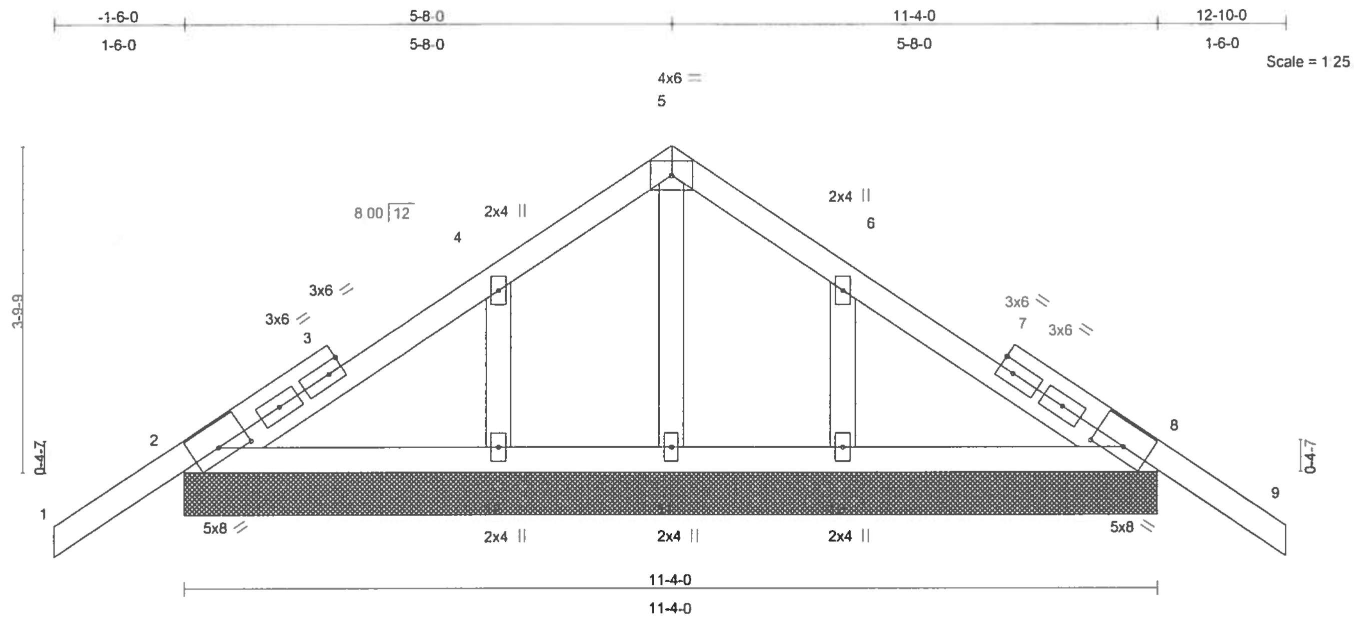

Plate Offsets (X,Y): [2:0-4-5,0-1-12], [8:0-4-5,0-1-12]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.22	Vert(LL)	-0.01	9	n/r	120	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.06	Vert(TL)	-0.01	9	n/r	90		
BCLL	10.0	* Rep Stress Incr	NO	WB	0.05	Horz(TL)	0.00	8	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 58 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 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (lb/size) 2=289/11-4-0, 8=289/11-4-0, 11=176/11-4-0, 12=303/11-4-0, 10=302/11-4-0
Max Horz 2=-126(load case 4)
Max Uplift 2=-184(load case 6), 8=-199(load case 7), 11=-19(load case 6), 12=-179(load case 6), 10=-182(load case 7)
Max Grav 2=294(load case 10), 8=294(load case 11), 11=176(load case 1), 12=305(load case 10), 10=305(load case 11)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-6/70, 2-3=-75/72, 3-4=-74/130, 4-5=-26/86, 5-6=-26/86, 6-7=-36/130, 7-8=-40/45, 8-9=-6/70
BOT CHORD 2-12=-41/140, 11-12=-41/140, 10-11=-41/140, 8-10=-41/140
WEBS 5-11=-174/29, 4-12=-262/196, 6-10=-262/198

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JOINT STRESS INDEX
2 = 0.44, 3 = 0.00, 3 = 0.24, 3 = 0.24, 4 = 0.12, 5 = 0.07, 6 = 0.12, 7 = 0.00, 7 = 0.24, 7 = 0.24, 8 = 0.44, 10 = 0.11, 11 = 0.06 and 12 = 0.11

NOTES
1) Unbalanced roof live loads have been considered for this design.

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Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL
					J1899314
L255638	T30G	GABLE	1	1	Job Reference (optional)

NOTES

2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see MiTek "Standard Gable End Detail"
4) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 184 lb uplift at joint 2, 199 lb uplift at joint 8, 19 lb uplift at joint 11, 179 lb uplift at joint 12 and 182 lb uplift at joint 10.
9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

1) Regular: Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (plf)
   Vert: 1-5=-87(F=-33), 5-9=-87(F=-33), 2-8=-10

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Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL
L255638	T31	COMMON	3	1	J1899315
					Job Reference (optional)

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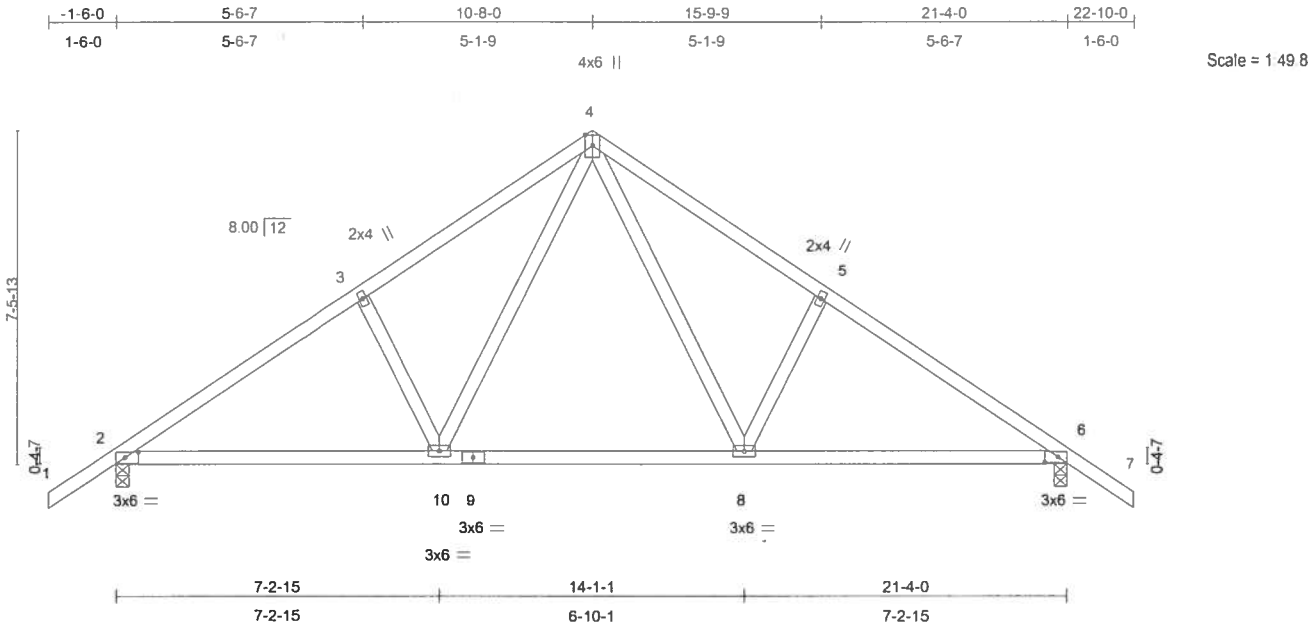

Plate Offsets (X,Y): [2:0-3-9,0-1-8], [6:0-3-9,0-1-8]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.26	Vert(LL)	0.16	8-10	>999	360	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.61	Vert(TL)	-0.29	8-10	>861	240		
BCLL	10.0 *	Rep Stress Incr	NO	WB	0.33	Horz(TL)	0.03	6	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 110 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 Structural wood sheathing directly applied or 5-3-5 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 2=967/0-3-8, 6=967/0-3-8
Max Horz 2=-197(load case 4)
Max Uplift 2=-270(load case 6), 6=-270(load case 7)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/44, 2-3=-1364/599, 3-4=-1232/657, 4-5=-1232/657, 5-6=-1364/599, 6-7=0/44
BOT CHORD 2-10=-335/1053, 9-10=-112/724, 8-9=-112/724, 6-8=-335/1053
WEBS 3-10=-225/223, 4-10=-293/566, 4-8=-293/566, 5-8=-225/223

JOINT STRESS INDEX
2 = 0.70, 3 = 0.34, 4 = 0.54, 5 = 0.34, 6 = 0.70, 8 = 0.48, 9 = 0.32 and 10 = 0.48

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
3) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 270 lb uplift at joint 2 and 270 lb uplift at joint 6.
6) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

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Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL
					J1899315
L255638	T31	COMMON	3	1	Job Reference (optional)

LOAD CASE(S) Standard

1) Regular: Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (plf)
   Vert: 1-4=-54, 4-7=-54, 2-10=-10, 8-10=-70(F=-60), 6-8=-10

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Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL
L255638	T31G	GABLE	1	1	J1899316 Job Reference (optional)

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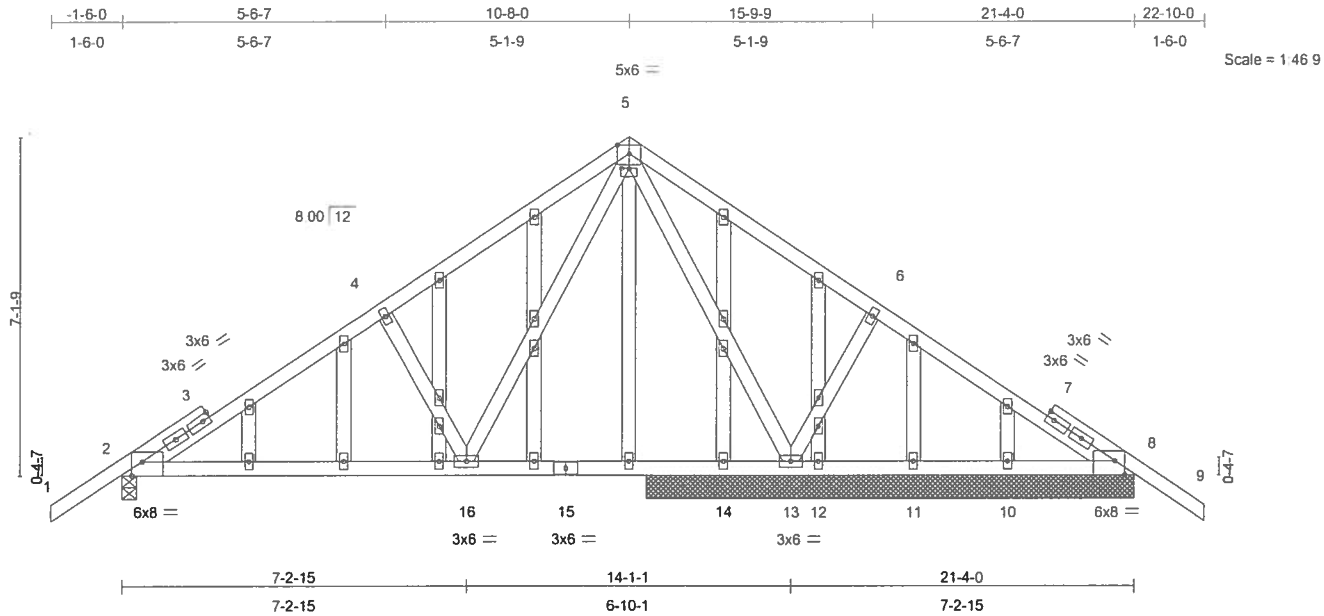

Plate Offsets (X,Y): [2:0-2-9,Edge], [5:0-2-0,0-0-0], [8:0-2-9,Edge], [29:0-0-0,0-0-0], [29:0-0-0,0-0-0], [31:0-0-0,0-0-0], [31:0-0-0,0-0-0]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.36	Vert(LL)	-0.06	2-16	>999	360	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.26	Vert(TL)	-0.12	2-16	>999	240		
BCLL	10.0	* Rep Stress Incr	NO	WB	0.98	Horz(TL)	0.01	13	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 160 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 Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (lb/size) 2=733/0-3-8, 8=262/10-3-8, 13=1143/10-3-8, 14=54/10-3-8, 12=47/10-3-8, 11=-9/10-3-8, 10=98/10-3-8
Max Horz 2=-241(load case 4)
Max Uplift 2=-386(load case 6), 8=-183(load case 7), 13=-604(load case 7), 11=-9(load case 11), 10=-33(load case 7)
Max Grav 2=738(load case 10), 8=295(load case 11), 13=1143(load case 1), 14=139(load case 2), 12=88(load case 2), 11=45(load case 2), 10=103(load case 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-7/72, 2-3=-769/295, 3-4=-677/292, 4-5=-571/312, 5-6=-103/471, 6-7=-103/258, 7-8=-87/99, 8-9=-6/70
BOT CHORD 2-16=-254/563, 15-16=-78/191, 14-15=-78/191, 13-14=-78/191, 12-13=-124/192, 11-12=-124/192, 10-11=-124/192, 8-10=-124/192
WEBS 4-16=-428/335, 5-16=-293/510, 5-13=-942/446, 6-13=-401/330

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Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL
					J1899316
L255638	T31G	GABLE	1	1	Job Reference (optional)

JOINT STRESS INDEX

2 = 0.44, 3 = 0.00, 3 = 0.37, 3 = 0.37, 4 = 0.33, 5 = 0.68, 5 = 0.63, 6 = 0.33, 7 = 0.00, 7 = 0.37, 7 = 0.37, 8 = 0.44, 10 = 0.33, 11 = 0.33, 12 = 0.33, 13 = 0.44, 14 = 0.33, 15 = 0.15, 16 = 0.44, 17 = 0.33, 18 = 0.33, 18 = 0.33, 19 = 0.33, 20 = 0.33, 21 = 0.33, 21 = 0.33, 22 = 0.33, 23 = 0.33, 24 = 0.33, 25 = 0.33, 26 = 0.33, 27 = 0.33, 28 = 0.33, 29 = 0.33, 29 = 0.33, 30 = 0.33, 31 = 0.33, 31 = 0.33, 32 = 0.33 and 33 = 0.33

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see MiTek "Standard Gable End Detail"
4) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable studs spaced at 2-0-0 oc.
7) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 386 lb uplift at joint 2, 183 lb uplift at joint 8, 604 lb uplift at joint 13, 9 lb uplift at joint 11 and 33 lb uplift at joint 10.
9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

1) Regular: Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (plf)
   Vert: 1-5=-87(F=-33), 5-9=-87(F=-33), 2-8=-10

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Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL
L255638	T32	COMMON	6	1	J1899317
					Job Reference (optional)

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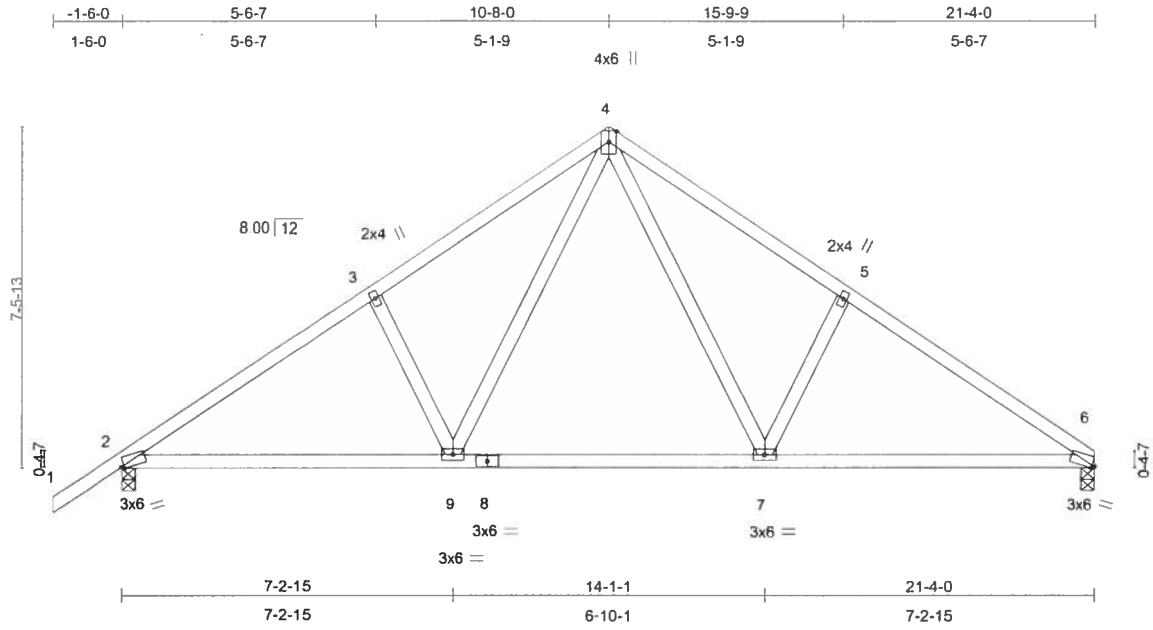

Plate Offsets (X,Y): [2:0-0-12,Edge], [6:0-0-12,Edge]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.26	Vert(LL)	0.16	7-9	>999	360	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.62	Vert(TL)	-0.29	7-9	>873	240		
BCLL	10.0 *	Rep Stress Incr	NO	WB	0.36	Horz(TL)	0.03	6	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 107 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 Structural wood sheathing directly applied or 5-2-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 9-4-14 oc bracing.

REACTIONS (lb/size) 6=875/0-3-8, 2=971/0-3-8
Max Horz 2=217(load case 5)
Max Uplift 6=-197(load case 7), 2=-271(load case 6)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/44, 2-3=-1370/608, 3-4=-1238/665, 4-5=-1249/682, 5-6=-1380/623
BOT CHORD 2-9=-405/1057, 8-9=-183/729, 7-8=-183/729, 6-7=-423/1070
WEBS 3-9=-226/224, 4-9=-290/566, 4-7=-320/585, 5-7=-235/236

JOINT STRESS INDEX
2 = 0.74, 3 = 0.34, 4 = 0.53, 5 = 0.34, 6 = 0.74, 7 = 0.49, 8 = 0.33 and 9 = 0.49

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
3) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 197 lb uplift at joint 6 and 271 lb uplift at joint 2.
6) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

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Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL
					J1899317
L255638	T32	COMMON	6	1	Job Reference (optional)

LOAD CASE(S) Standard

1) Regular: Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (plf)
   Vert: 1-4=-54, 4-6=-54, 2-9=-10, 7-9=-70(F=-60), 6-7=-10

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Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL
L255638	T33	COMMON	2	1	J1899318
					Job Reference (optional)

Builders FirstSource, Lake City, Fl 32055 — 6.300 s Apr 19 2006 MiTek Industries, Inc. Wed Oct 10 14:28:44 2007 Page 1

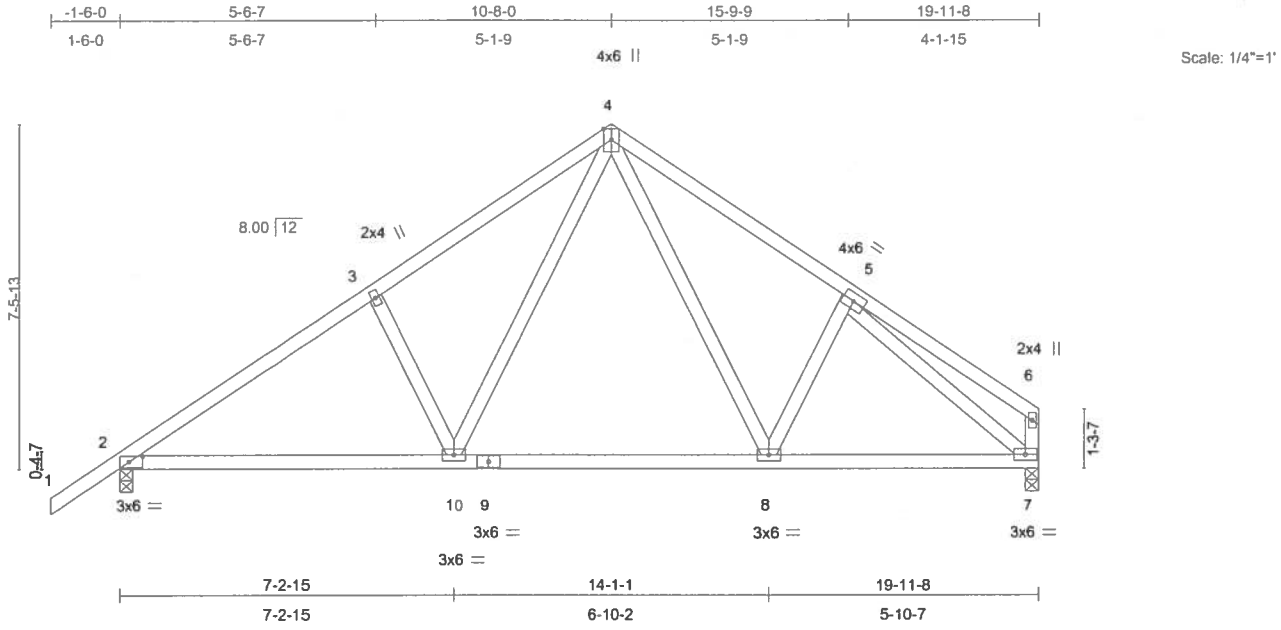

Plate Offsets (X,Y): [2:0-3-9,0-1-8]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.29	Vert(LL)	0.15	8-10	>999	360	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.61	Vert(TL)	-0.28	8-10	>852	240		
BCLL	10.0 *	Rep Stress Incr	NO	WB	0.52	Horz(TL)	0.03	7	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 111 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 Structural wood sheathing directly applied or 5-5-11 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 9-8-1 oc bracing.

REACTIONS (lb/size) 2=913/0-3-8, 7=845/0-3-8
Max Horz 2=215(load case 5)
Max Uplift 2=-259(load case 6), 7=-186(load case 7)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/44, 2-3=-1269/560, 3-4=-1136/617, 4-5=-1035/578, 5-6=-128/101, 6-7=-144/113
BOT CHORD 2-10=-411/974, 9-10=-190/645, 8-9=-190/645, 7-8=-344/814
WEBS 3-10=-226/222, 4-10=-290/567, 4-8=-218/404, 5-8=-68/139, 5-7=-1036/439

JOINT STRESS INDEX
2 = 0.66, 3 = 0.34, 4 = 0.55, 5 = 0.30, 6 = 0.77, 7 = 0.36, 8 = 0.46, 9 = 0.32 and 10 = 0.48

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
3) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 259 lb uplift at joint 2 and 186 lb uplift at joint 7.
6) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

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Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL
L255638	T33	COMMON	2	1	J1899318 Job Reference (optional)

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-4=-54, 4-6=-54, 2-10=-10, 8-10=-70(F=-60), 7-8=-10

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Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL	J1899319
L255638	T34	COMMON	3	1	Job Reference (optional)	

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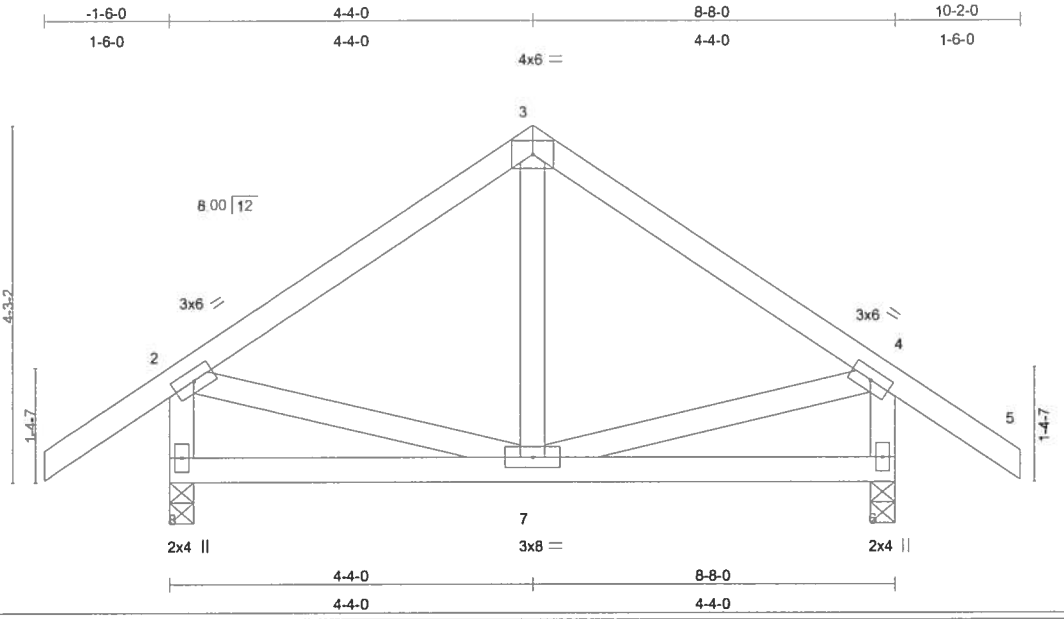

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.24	Vert(LL)	0.02	6-7	>999	360	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.09	Vert(TL)	-0.01	6-7	>999	240		
BCLL	10.0	* Rep Stress Incr	YES	WB	0.06	Horz(TL)	-0.00	6	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 54 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 Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 8=357/0-3-8, 6=357/0-3-8
Max Horz 8=122(load case 5)
Max Uplift 8=-229(load case 6), 6=-229(load case 7)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/49, 2-3=-239/339, 3-4=-239/339, 4-5=0/49, 2-8=-335/392, 4-6=-335/392
BOT CHORD 7-8=-153/126, 6-7=-35/35
WEBS 3-7=-209/91, 2-7=-105/129, 4-7=-109/129

JOINT STRESS INDEX
2 = 0.55, 3 = 0.28, 4 = 0.55, 6 = 0.63, 7 = 0.11 and 8 = 0.63

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; end vertical left and right exposed; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
3) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi

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Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL
					J1899319
L255638	T34	COMMON	3	1	Job Reference (optional)

NOTES

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 229 lb uplift at joint 8 and 229 lb uplift at joint 6.

LOAD CASE(S) Standard

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Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL	J1899320
L255638	T34G	GABLE	1	1	Job Reference (optional)	

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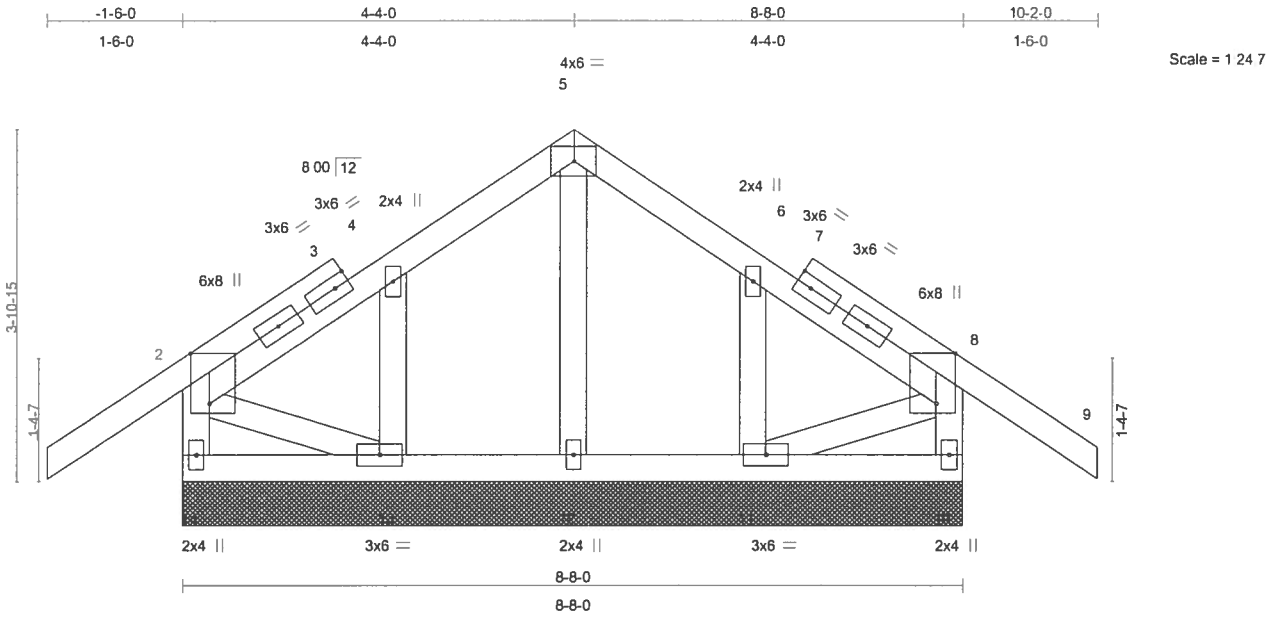

Plate Offsets (X,Y): [2:0-6-12,Edge], [8:0-6-12,Edge]

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.25	Vert(LL)	-0.01	9	n/r	120	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.03	Vert(TL)	-0.02	9	n/r	90		
BCLL	10.0	* Rep Stress Incr	NO	WB	0.05	Horz(TL)	0.00	10	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 59 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	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (lb/size) 14=296/8-8-0, 10=296/8-8-0, 12=197/8-8-0, 13=155/8-8-0, 11=155/8-8-0
Max Horz 14=145(load case 5)
Max Uplift 14=-163(load case 6), 10=-174(load case 7), 12=-25(load case 6), 13=-135(load case 6), 11=-130(load case 7)
Max Grav 14=296(load case 1), 10=296(load case 1), 12=197(load case 1), 13=160(load case 10), 11=160(load case 11)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-7/68, 2-3=-69/59, 3-4=-52/60, 4-5=-52/89, 5-6=-52/89, 6-7=-25/34, 7-8=-69/37, 8-9=-7/68, 2-14=-287/214, 8-10=-287/214
BOT CHORD	13-14=-106/140, 12-13=-32/127, 11-12=-32/127, 10-11=-29/69
WEBS	5-12=-178/39, 4-13=-151/115, 6-11=-151/114, 2-13=-52/80, 8-11=-42/70

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JOINT STRESS INDEX
2 = 0.25, 3 = 0.00, 3 = 0.18, 3 = 0.18, 4 = 0.07, 5 = 0.14, 6 = 0.07, 7 = 0.00, 7 = 0.18, 7 = 0.18, 8 = 0.25, 10 = 0.15, 11 = 0.06, 12 = 0.06, 13 = 0.06 and 14 = 0.15

NOTES
1) Unbalanced roof live loads have been considered for this design.

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Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL
					J1899320
L255638	T34G	GABLE	1	1	Job Reference (optional)

NOTES

2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; end vertical left and right exposed; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see MiTek "Standard Gable End Detail"
4) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Gable requires continuous bottom chord bearing.
6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
7) Gable studs spaced at 2-0-0 oc.
8) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 163 lb uplift at joint 14, 174 lb uplift at joint 10, 25 lb uplift at joint 12, 135 lb uplift at joint 13 and 130 lb uplift at joint 11.
10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

1) Regular: Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-2=-87(F=-33), 2-5=-87(F=-33), 5-8=-87(F=-33), 8-9=-87(F=-33), 10-14=-10

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Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL	J1899321
L255638	V1	GABLE	1	1	Job Reference (optional)	

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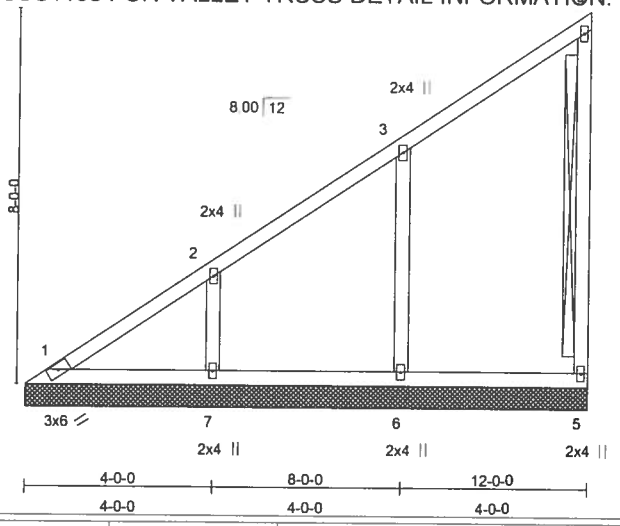
Scale = 1:47.4

REFER TO DRAWING VALTRUSS1103 FOR VALLEY TRUSS DETAIL INFORMATION.



LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.10	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.06	Vert(TL)	n/a	-	n/a	999		
BCLL	10.0	* Rep Stress Incr	YES	WB	0.10	Horz(TL)	0.00	5	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 60 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	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	T-Brace: 2 X 4 SYP No.3 - 4-5 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) 1=90/12-0-0, 5=106/12-0-0, 6=265/12-0-0, 7=266/12-0-0
Max Horz 1=243(load case 6)
Max Uplift 5=-54(load case 6), 6=-131(load case 6), 7=-133(load case 6)
Max Grav 1=117(load case 6), 5=106(load case 1), 6=265(load case 1), 7=266(load case 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-362/54, 2-3=-221/55, 3-4=-72/44, 4-5=-87/93
BOT CHORD	1-7=-5/5, 6-7=-5/5, 5-6=-5/5
WEBS	3-6=-228/246, 2-7=-213/225

JOINT STRESS INDEX

1 = 0.15, 2 = 0.11, 3 = 0.12, 4 = 0.30, 5 = 0.14, 6 = 0.14 and 7 = 0.12

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Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL J1899321
L255638	V1	GABLE	1	1	Job Reference (optional)

NOTES

1) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
2) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 54 lb uplift at joint 5, 131 lb uplift at joint 6 and 133 lb uplift at joint 7.
5) Non Standard bearing condition. Review required.

LOAD CASE(S) Standard

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October 10,2007

Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL	J1899322
L255638	V2	GABLE	1	1	Job Reference (optional)	

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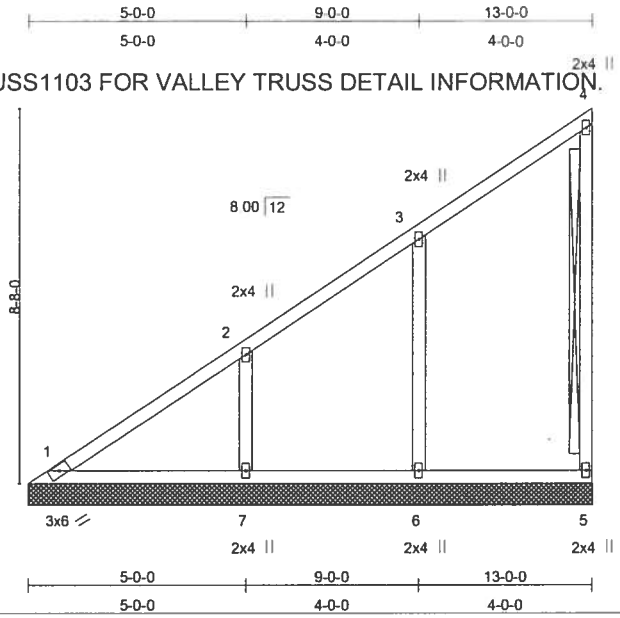

REFER TO DRAWING VALTRUSS1103 FOR VALLEY TRUSS DETAIL INFORMATION.

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.13	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.11	Vert(TL)	n/a	-	n/a	999		
BCLL	10.0	* Rep Stress Incr	YES	WB	0.13	Horz(TL)	0.00	5	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 66 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	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	T-Brace: 2 X 4 SYP No.3 - 4-5 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) 1=120/13-0-0, 5=109/13-0-0, 6=250/13-0-0, 7=313/13-0-0
Max Horz 1=265(load case 6)
Max Uplift 5=-55(load case 6), 6=-124(load case 6), 7=-156(load case 6)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-377/68, 2-3=-215/51, 3-4=-70/45, 4-5=-89/94
BOT CHORD	1-7=-4/5, 6-7=-4/5, 5-6=-4/5
WEBS	3-6=-219/234, 2-7=-246/255

JOINT STRESS INDEX
1 = 0.23, 2 = 0.13, 3 = 0.12, 4 = 0.30, 5 = 0.14, 6 = 0.13 and 7 = 0.14

NOTES
1) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.

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Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL
					J1899322
L255638	V2	GABLE	1	1	Job Reference (optional)

NOTES

2) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 55 lb uplift at joint 5, 124 lb uplift at joint 6 and 156 lb uplift at joint 7.
5) Non Standard bearing condition. Review required.

LOAD CASE(S) Standard

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October 10,2007

Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL
L255638	V3	GABLE	1	1	J1899323
					Job Reference (optional)

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REFER TO DRAWING VALTRUSS1103 FOR VALLEY TRUSS DETAIL INFORMATION.

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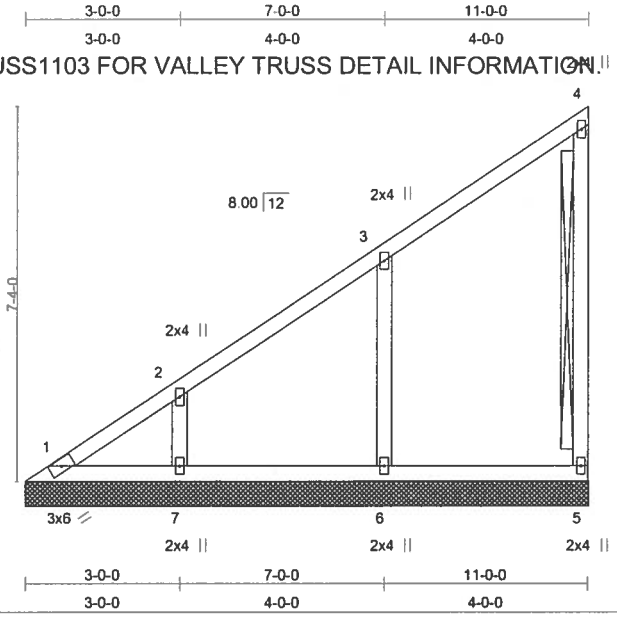

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.11	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.06	Vert(TL)	n/a	-	n/a	999		
BCLL	10.0	* Rep Stress Incr	YES	WB	0.08	Horz(TL)	0.00	5	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 53 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	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	T-Brace: 2 X 4 SYP No.3 - 4-5 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) 1=57/11-0-0, 5=105/11-0-0, 6=273/11-0-0, 7=229/11-0-0
Max Horz 1=222(load case 6)
Max Uplift 5=-53(load case 6), 6=-135(load case 6), 7=-115(load case 6)
Max Grav 1=119(load case 6), 5=105(load case 1), 6=273(load case 1), 7=229(load case 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-349/42, 2-3=-225/57, 3-4=-73/43, 4-5=-86/93
BOT CHORD	1-7=-5/6, 6-7=-5/6, 5-6=-5/6
WEBS	3-6=-233/254, 2-7=-188/203

JOINT STRESS INDEX

1 = 0.12, 2 = 0.10, 3 = 0.13, 4 = 0.31, 5 = 0.14, 6 = 0.14 and 7 = 0.11

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Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL
					J1899323
L255638	V3	GABLE	1	1	Job Reference (optional)

NOTES

1) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
2) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 53 lb uplift at joint 5, 135 lb uplift at joint 6 and 115 lb uplift at joint 7.
5) Non Standard bearing condition. Review required.

LOAD CASE(S) Standard

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Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL	J1899324
L255638	V4	GABLE	1	1	Job Reference (optional)	

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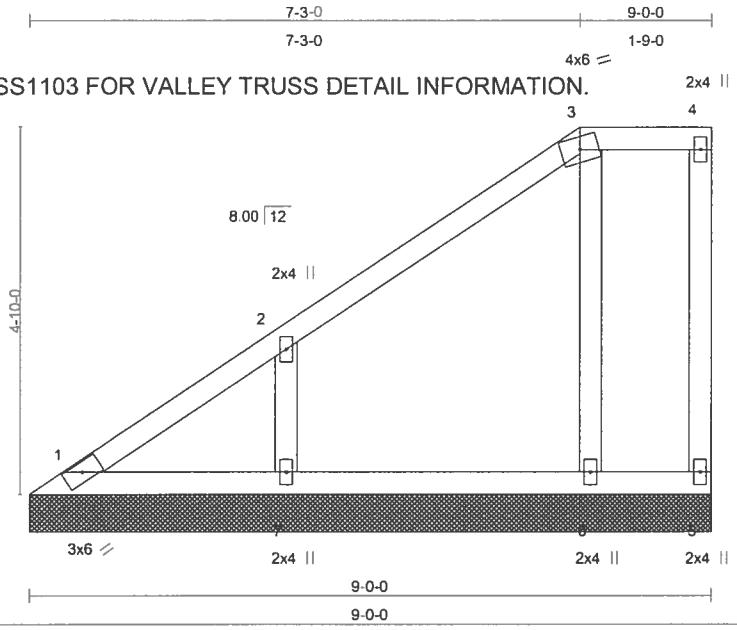

Scale = 1:29.3

REFER TO DRAWING VALTRUSS1103 FOR VALLEY TRUSS DETAIL INFORMATION.

LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.12	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.07	Vert(TL)	n/a	-	n/a	999		
BCLL	10.0 *	Rep Stress Incr	YES	WB	0.07	Horz(TL)	-0.00	5	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 43 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 Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (lb/size) 1=70/9-0-0, 5=10/9-0-0, 6=207/9-0-0, 7=249/9-0-0
Max Horz 1=146(load case 6)
Max Uplift 5=-31(load case 4), 6=-79(load case 6), 7=-124(load case 6)
Max Grav 1=70(load case 1), 5=12(load case 6), 6=207(load case 1), 7=249(load case 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-213/47, 2-3=-75/50, 3-4=-1/1, 4-5=-13/30
BOT CHORD 1-7=-7/6, 6-7=-7/6, 5-6=-1/0
WEBS 3-6=-174/190, 2-7=-203/225

JOINT STRESS INDEX
1 = 0.09, 2 = 0.12, 3 = 0.27, 4 = 0.04, 5 = 0.03, 6 = 0.11 and 7 = 0.13

NOTES
1) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
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) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 31 lb uplift at joint 5, 79 lb uplift at joint 6 and 124 lb uplift at joint 7.

Julius Lee
Truss Design Engineer
Florida PE No 31988
1106 Coastal Bay Blvd
Boynton Beach, FL 33435

October 10,2007

Continued on page 2

Builders FirstSource

Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL
					J1899324
L255638	V4	GABLE	1	1	Job Reference (optional)

NOTES

6) Non Standard bearing condition. Review required.

LOAD CASE(S) Standard

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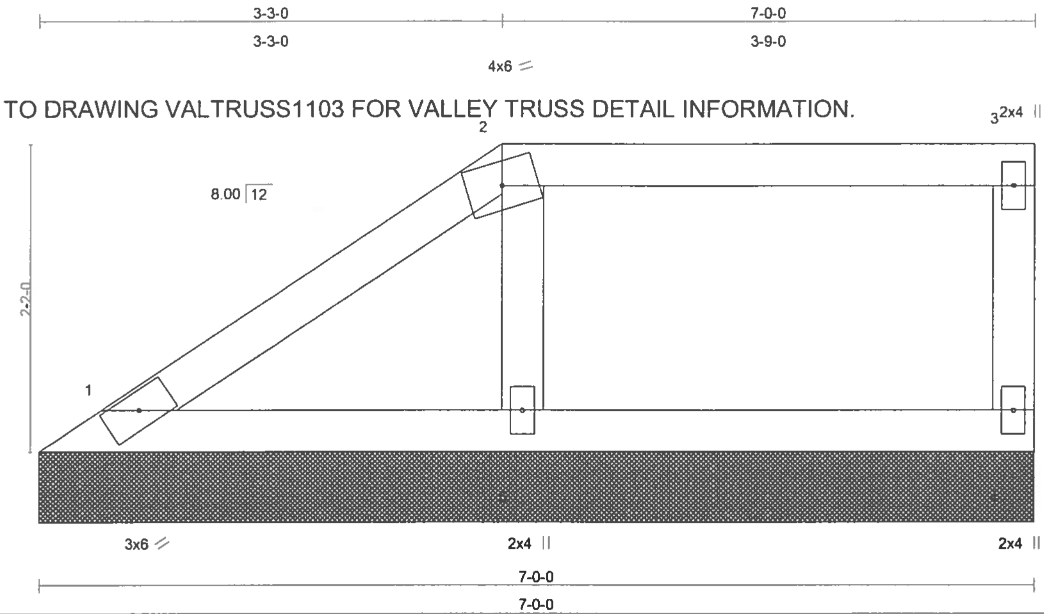
Boynton Beach, FL 33435

October 10,2007

Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL J1899325
L255638	V5	GABLE	1	1	Job Reference (optional)

Builders FirstSource, Lake City, Fl 32055 6.300 s Feb 15 2006 MiTek Industries, Inc. Wed Oct 10 08:57:48 2007 Page 1

REFER TO DRAWING VALTRUSS1103 FOR VALLEY TRUSS DETAIL INFORMATION.



LOADING (psf)		SPACING	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plates Increase	1.25	TC	0.13	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	7.0	Lumber Increase	1.25	BC	0.05	Vert(TL)	n/a	-	n/a	999		
BCLL	10.0	* Rep Stress Incr	YES	WB	0.05	Horz(TL)	0.00	4	n/a	n/a		
BCDL	5.0	Code FBC2004/TPI2002		(Matrix)							Weight: 26 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 Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 1=92/7-0-0, 4=110/7-0-0, 5=206/7-0-0
Max Horz 1=60(load case 6)
Max Uplift 1=-2(load case 6), 4=-49(load case 4), 5=-62(load case 6)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-81/22, 2-3=-28/24, 3-4=-92/100
BOT CHORD 1-5=-39/41, 4-5=-24/27
WEBS 2-5=-167/192

JOINT STRESS INDEX
1 = 0.08, 2 = 0.28, 3 = 0.40, 4 = 0.19 and 5 = 0.11

NOTES
1) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
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) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi

October 10,2007

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	TWENSEY - LOT 3 LL
					J1899325
L255638	V5	GABLE	1	1	Job Reference (optional)

NOTES

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 2 lb uplift at joint 1, 49 lb uplift at joint 4 and 62 lb uplift at joint 5.
6) Non Standard bearing condition. Review required.

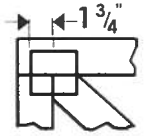
LOAD CASE(S) Standard

Julius Lee
Truss Design Engineer
Florida PE No 34869
1106 Coastal Bay Blvd
Boynton Beach, FL 33435

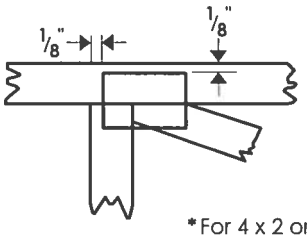
October 10,2007

Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

PLATE SIZE

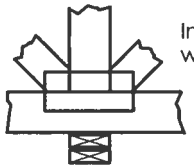
4 x 4

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

LATERAL BRACING

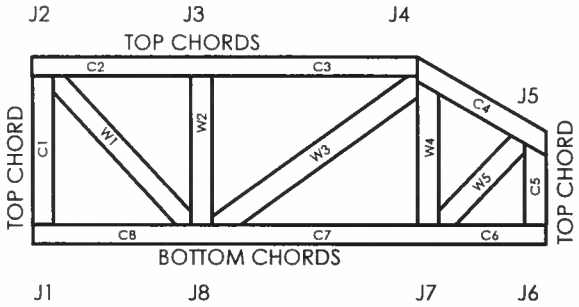
Indicates location of required continuous lateral bracing.

BEARING



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

Numbering System



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

WEBS ARE NUMBERED FROM LEFT TO RIGHT

CONNECTOR PLATE CODE APPROVALS

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

MiTek®

TEE-LOK®

MiTek Engineering Reference Sheet: MII-7473

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
2. Cut members to bear tightly against each other.
3. Place plates on each face of truss at each joint and embed fully. Avoid knots and wane at joint locations.
4. Unless otherwise noted, locate chord splices at ¼ panel length (± 6" from adjacent joint.)
5. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
6. Unless expressly noted, this design is not applicable for use with fire retardant or preservative treated lumber.
7. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
8. Plate type, size and location dimensions shown indicate minimum plating requirements.
9. Lumber shall be of the species and size, and in all respects, equal to or better than the grade specified.
10. Top chords must be sheathed or purlins provided at spacing shown on design.
11. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
12. Anchorage and / or load transferring connections to trusses are the responsibility of others unless shown.
13. Do not overload roof or floor trusses with stacks of construction materials.
14. Do not cut or alter truss member or plate without prior approval of a professional engineer.
15. Care should be exercised in handling, erection and installation of trusses.

ASCE 7-02: 130 MPH WIND SPEED, 15' MEAN HEIGHT, ENCLOSED, I = 1.00, EXPOSURE C

MAX GABLE VERTICAL LENGTH

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

BRACING GROUP SPECIES AND GRADES:

GROUP A:

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

HEM-FIR	
#2	STUD
#3	STANDARD

DOUGLAS FIR-LARCH
#3
STUD
STANDARD

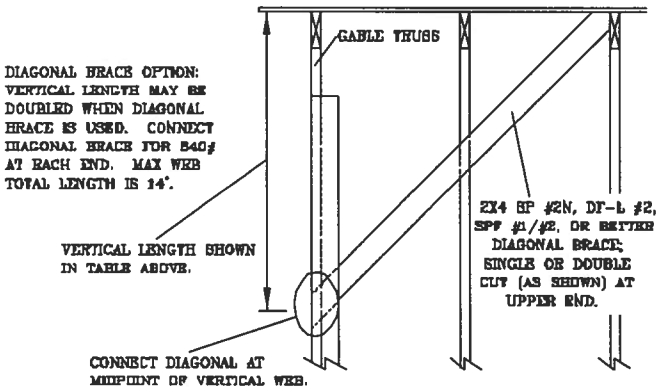
SOUTHERN PINE
#3
STUD
STANDARD

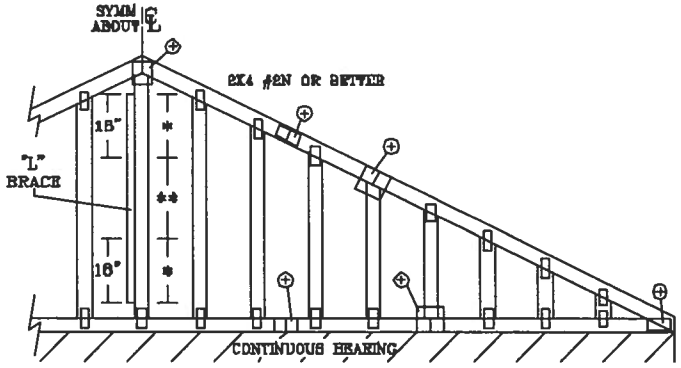
GROUP B:

HEM-FIR
#1 & BTR
#1

SOUTHERN PINE
#1
#2

DOUGLAS FIR-LARCH
#1
#2





REFER TO CHART ABOVE FOR MAX GABLE VERTICAL LENGTH.

GABLE TRUSS DETAIL NOTES:

LIVE LOAD DEFLECTION CRITERIA IS L/240.

PROVIDE UPLIFT CONNECTIONS FOR 136 PLF OVER CONTINUOUS BEARING (6 PSF TC DEAD LOAD).

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

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

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

GABLE VERTICAL PLATE SIZES

VERTICAL LENGTH	NO SPLICE
LESS THAN 4' 0"	1X4 OR 2X3
GREATER THAN 4' 0", BUT LESS THAN 11' 8"	2X4
GREATER THAN 11' 8"	2.5X4

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

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

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

No: 34869
STATE OF FLORIDA

MAX. TOT. LD. 60 PSF

MAX. SPACING 24.0"

REF ASCE7-02-GAB13015
DATE 11/26/03
DRWG MITEK STD GABLE 16 E HT
-ENG

ASCE 7-02: 130 MPH WIND SPEED, 30' MEAN HEIGHT, ENCLOSED, I = 1.00, EXPOSURE C

MAX GABLE VERTICAL LENGTH

2X4 GABLE VERTICAL SPACING	SPECIES	BRACE GRADE	NO BRACES	(1) 1X4 "L" BRACE *		(1) 2X4 "L" BRACE *		(2) 2X4 "L" BRACE **		(1) 2X6 "L" BRACE *		(2) 2X6 "L" BRACE **	
				GROUP A	GROUP B	GROUP A	GROUP B	GROUP A	GROUP B	GROUP A	GROUP B	GROUP A	GROUP B
24" O.C.	SPF HF	#1 / #2	3' 2"	5' 6"	5' 6"	6' 8"	6' 8"	7' 10"	8' 0"	10' 3"	10' 7"	12' 3"	12' 7"
		#3	3' 1"	4' 5"	4' 5"	5' 10"	5' 10"	7' 10"	7' 10"	9' 1"	9' 1"	12' 3"	12' 3"
		STUD	3' 1"	4' 5"	4' 5"	5' 10"	5' 10"	7' 10"	7' 10"	9' 1"	9' 1"	12' 3"	12' 3"
		STANDARD	2' 11"	3' 9"	3' 9"	6' 0"	5' 0"	6' 9"	6' 9"	7' 10"	7' 10"	10' 7"	10' 7"
	SP DFL	#1	3' 8"	5' 8"	5' 11"	6' 8"	7' 0"	7' 10"	8' 5"	10' 3"	11' 1"	12' 3"	13' 2"
		#2	3' 6"	5' 6"	5' 11"	6' 6"	7' 0"	7' 10"	8' 5"	10' 3"	11' 1"	12' 3"	13' 2"
		#3	3' 3"	4' 6"	4' 8"	6' 0"	6' 0"	7' 10"	6' 1"	9' 4"	9' 4"	12' 3"	12' 8"
		STUD	3' 3"	4' 6"	4' 8"	5' 11"	5' 11"	7' 10"	8' 0"	9' 3"	9' 3"	12' 3"	12' 8"
		STANDARD	3' 0"	3' 10"	3' 10"	5' 1"	5' 1"	6' 11"	6' 11"	8' 0"	8' 0"	10' 10"	10' 10"
16" O.C.	SPF HF	#1 / #2	3' 8"	6' 4"	6' 6"	7' 8"	7' 8"	8' 11"	9' 2"	11' 9"	12' 1"	14' 0"	14' 0"
		#3	3' 7"	5' 5"	5' 5"	7' 2"	7' 2"	8' 11"	8' 11"	11' 2"	11' 2"	14' 0"	14' 0"
		STUD	3' 7"	5' 5"	5' 5"	7' 2"	7' 2"	8' 11"	8' 11"	11' 1"	11' 1"	14' 0"	14' 0"
		STANDARD	3' 7"	4' 6"	4' 8"	6' 2"	6' 2"	8' 3"	8' 3"	9' 7"	9' 7"	12' 11"	12' 11"
	SP DFL	#1	4' 0"	8' 4"	8' 10"	7' 8"	8' 1"	8' 11"	8' 7"	11' 9"	12' 8"	14' 0"	14' 0"
		#2	3' 11"	8' 4"	8' 10"	7' 8"	8' 1"	8' 11"	9' 7"	11' 9"	12' 8"	14' 0"	14' 0"
		#3	3' 9"	5' 7"	6' 7"	7' 4"	7' 4"	8' 11"	8' 5"	11' 5"	11' 6"	14' 0"	14' 0"
		STUD	3' 8"	5' 6"	5' 8"	7' 3"	7' 3"	8' 11"	8' 5"	11' 4"	11' 4"	14' 0"	14' 0"
		STANDARD	3' 8"	4' 9"	4' 9"	6' 3"	6' 3"	8' 5"	8' 5"	9' 9"	9' 9"	13' 3"	13' 3"
12" O.C.	SPF HF	#1 / #2	4' 0"	6' 11"	7' 2"	8' 3"	8' 6"	9' 10"	10' 1"	12' 11"	15' 4"	14' 0"	14' 0"
		#3	3' 11"	6' 3"	6' 3"	8' 3"	8' 3"	9' 10"	9' 10"	12' 11"	12' 11"	14' 0"	14' 0"
		STUD	3' 11"	6' 3"	6' 3"	8' 3"	8' 3"	9' 10"	9' 10"	12' 10"	12' 10"	14' 0"	14' 0"
		STANDARD	3' 11"	5' 4"	5' 4"	7' 1"	7' 1"	9' 6"	9' 6"	11' 1"	11' 1"	14' 0"	14' 0"
	SP DFL	#1	4' 5"	6' 11"	7' 6"	8' 3"	8' 11"	9' 10"	10' 7"	12' 11"	13' 11"	14' 0"	14' 0"
		#2	4' 4"	6' 11"	7' 6"	8' 3"	8' 11"	9' 10"	10' 7"	12' 11"	13' 11"	14' 0"	14' 0"
		#3	4' 2"	6' 5"	6' 5"	8' 3"	8' 6"	9' 10"	10' 4"	12' 11"	13' 3"	14' 0"	14' 0"
		STUD	4' 2"	6' 4"	6' 4"	8' 3"	8' 5"	9' 10"	10' 4"	12' 11"	13' 1"	14' 0"	14' 0"
		STANDARD	4' 0"	5' 6"	5' 8"	7' 3"	7' 3"	9' 9"	9' 9"	11' 4"	11' 4"	14' 0"	14' 0"

BRACING GROUP SPECIES AND GRADES:

GROUP A:

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

HEM-FIR	
#2	STUD
#3	STANDARD

DOUGLAS FIR-LARCH: #3, STUD, STANDARD

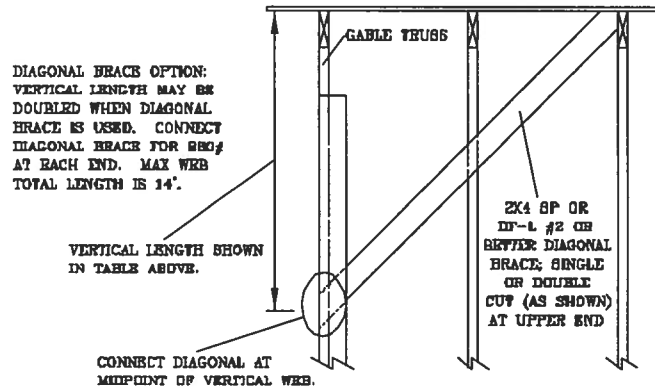
SOUTHERN PINE: #3, STUD, STANDARD

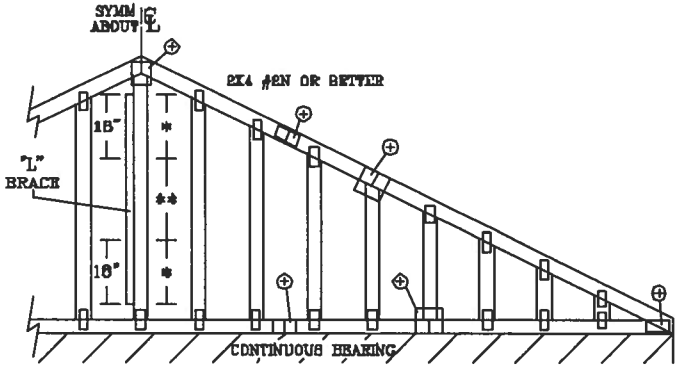
GROUP B:

HEM-FIR: #1 & BTR, #1

SOUTHERN PINE: #3, #2

DOUGLAS FIR-LARCH: #1, #2





REFER TO CHART ABOVE FOR MAX GABLE VERTICAL LENGTH.

GABLE TRUSS DETAIL NOTES:

LIVE LOAD DEFLECTION CRITERIA IS L/240.

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

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

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

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

GABLE VERTICAL PLATE SIZES

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

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

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

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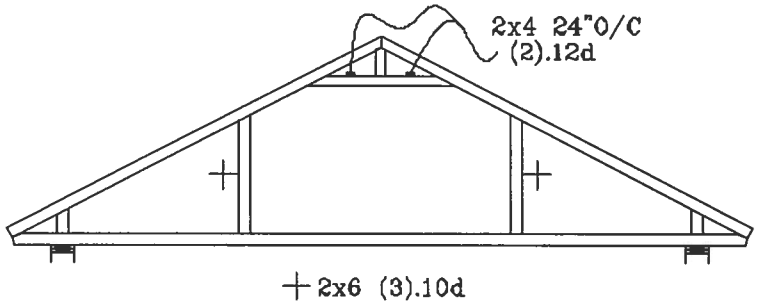
DELRAY BEACH, FL. 33444-2161
No: 34869
STATE OF FLORIDA

MAX. TOT. LD. 60 PSF

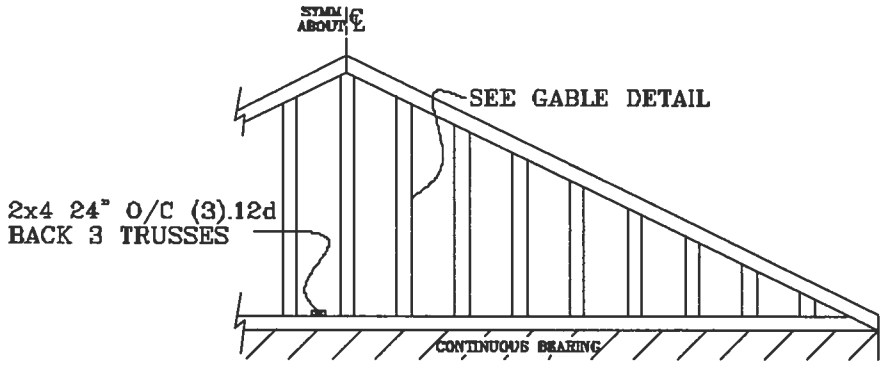
MAX. SPACING 24.0"

REF ASCE7-02-GAB13030
DATE 11/26/03
DWG MYEK STD GABLE 30' E W7
-ENG

TYPICAL ATTIC TRUSS BRACING

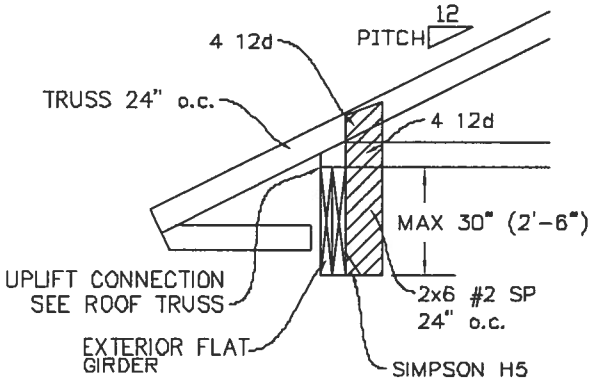


GABLE END TRUSS DETAIL

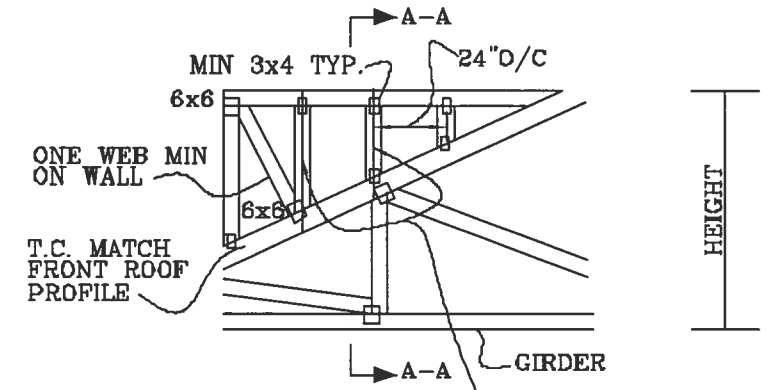


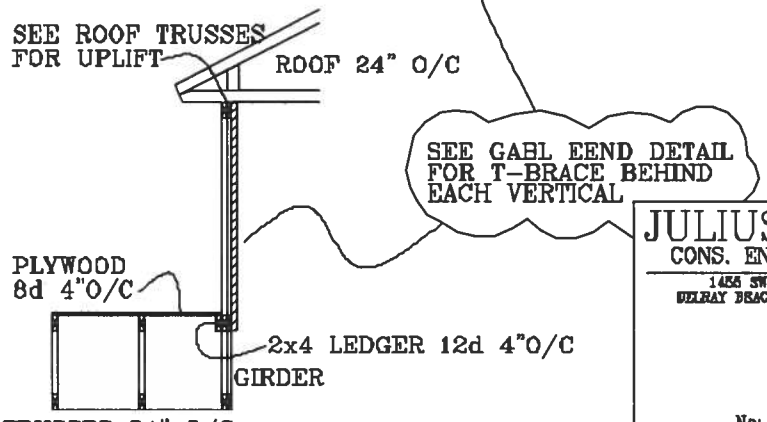
MINIMUM BC BRACING ON GABLE TRUSS. OTHER PERMANENT BRACING DESIGNS BY ARCHITECT OR EOR

TYPICAL ALTERNATE BRACING DETAIL FOR EXTERIOR FLAT GIRDER TRUSS



TYPICAL WALL GIRDER VERTICAL WEB BRACING DETAIL





JULIUS LEE'S
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PIGGYBACK DETAIL

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

REFER TO SEALED DESIGN FOR DASHED PLATES.

SPACE PIGGYBACK VERTICALS AT 4' OC MAX.

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

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

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

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

THIS DETAIL IS APPLICABLE FOR THE FOLLOWING WIND CONDITIONS:

110 MPH WIND, 30' MEAN HGT, ASCE 7-02, CLOSED BLDG, LOCATED ANYWHERE IN ROOF, 1 MI FROM COAST CAT I, EXP C, WIND TC DL=5 PSF, WIND BC DL=5 PSF

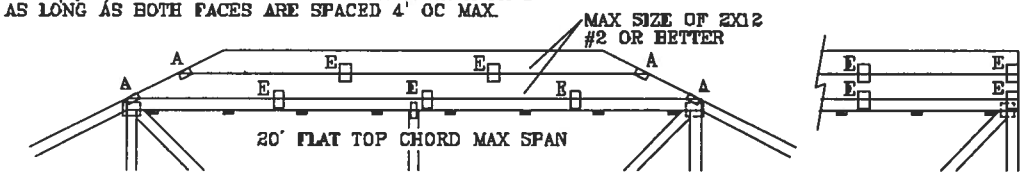
110 MPH WIND, 30' MEAN HGT, FBC ENCLOSED BLDG, LOCATED ANYWHERE IN ROOF WIND TC DL=5 PSF, WIND BC DL=5 PSF

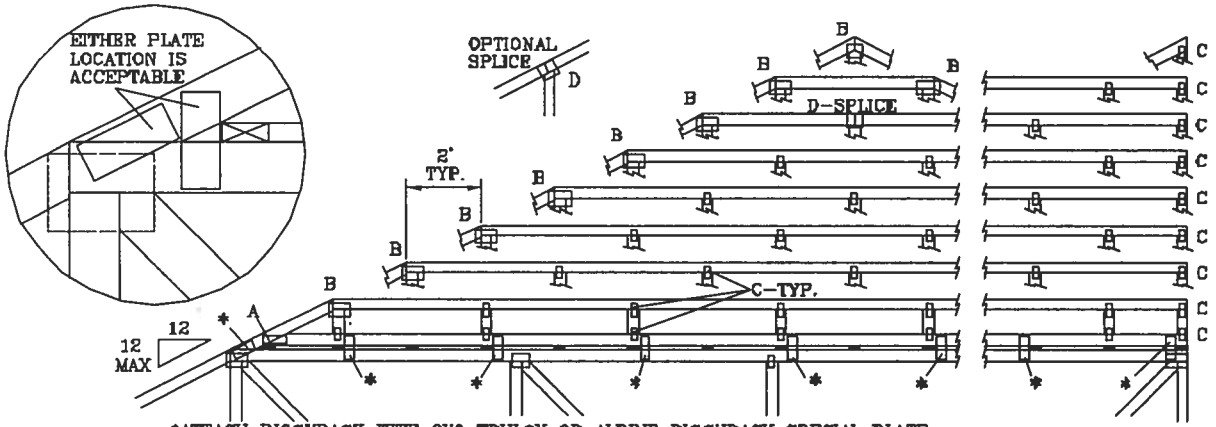
130 MPH WIND, 30' MEAN HGT, ASCE 7-02, CLOSED BLDG, LOCATED ANYWHERE IN ROOF, CAT II, EXP. C, WIND TC DL=5 PSF, WIND BC DL=6 PSF

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

JOINT TYPE	SPANS UP TO			
	30'	34'	38'	52'
A	2X4	2.5X4	2.5X4	3X5
B	4X6	5X6	5X6	5X6
C	1.5X3	1.5X4	1.5X4	1.5X4
D	5X4	5X5	5X5	5X6
E	4X6 OR 3X6 TRULOX AT 4' OC, ROTATED VERTICALLY			

ATTACH TRULOX PLATES WITH (6) 0.120" X 1.375" NAILS, OR EQUAL, PER FACE PER PLY. (4) NAILS IN EACH MEMBER TO BE CONNECTED. REFER TO DRAWING 160 TL FOR TRULOX INFORMATION.



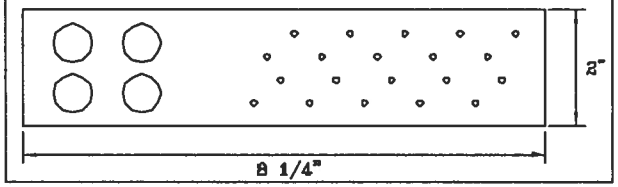


*ATTACH PIGGYBACK WITH 3X8 TRULOX OR ALPINE PIGGYBACK SPECIAL PLATE.

WEB BRACING CHART	
WEB LENGTH	REQUIRED BRACING
0' TO 7'9"	NO BRACING
7'9" TO 10'	1x4 "T" BRACE. SAME GRADE, SPECIES AS WEB MEMBER, OR BETTER, AND 80% LENGTH OF WEB MEMBER. ATTACH WITH 8d NAILS AT 4" OC.
10' TO 14'	2x4 "T" BRACE. SAME GRADE, SPECIES AS WEB MEMBER, OR BETTER, AND 80% LENGTH OF WEB MEMBER. ATTACH WITH 16d NAILS AT 4" OC.

* PIGGYBACK SPECIAL PLATE

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



THIS DRAWING REPLACES DRAWINGS 634,016 634,017 & 847,045

JULIUS LEE'S
CONS. ENGINEERS P.A.
1449 SW 4th AVENUE
DELRAY BEACH, FL. 33444-2161

No: 34868
STATE OF FLORIDA

MAX LOADING
55 PSF AT 1.33 DUR. FAC.
50 PSF AT 1.25 DUR. FAC.
47 PSF AT 1.15 DUR. FAC.
SPACING 24.0"

REF PIGGYBACK
DATE 09/12/07
DRWG MITEK STD PIGGY
-ENG JL

VALLEY TRUSS DETAIL

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

* 2X3 MAY BE RIPPED FROM A 2X6 (PITCHED OR SQUARE).

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

UNLESS SPECIFIED ON ENGINEER'S SEALED DESIGN, APPLY 1X4 "T"-BRACE, 80% LENGTH OF WEB, VALLEY WEB, SAME SPECIES AND GRADE OR BETTER, ATTACHED WITH 8d BOX (0.113" X 2.5") NAILS AT 6" OC, OR CONTINUOUS LATERAL BRACING, EQUALLY SPACED, FOR VERTICAL VALLEY WEBS GREATER THAN 7'9".

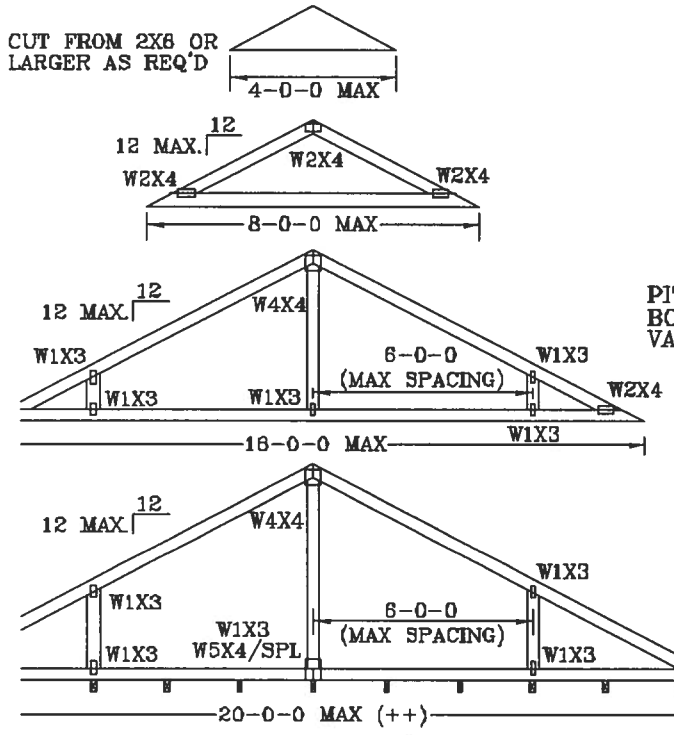
MAXIMUM VALLEY VERTICAL HEIGHT MAY NOT EXCEED 12'0".

TOP CHORD OF TRUSS BENEATH VALLEY SET MUST BE BRACED WITH:
PROPERLY ATTACHED, RATED SHEATHING APPLIED PRIOR TO VALLEY TRUSS INSTALLATION
OR
PURLINS AT 24" OC OR AS OTHERWISE SPECIFIED ON ENGINEERS' SEALED DESIGN
OR
BY VALLEY TRUSSES USED IN LIEU OF PURLIN SPACING AS SPECIFIED ON ENGINEERS' SEALED DESIGN.

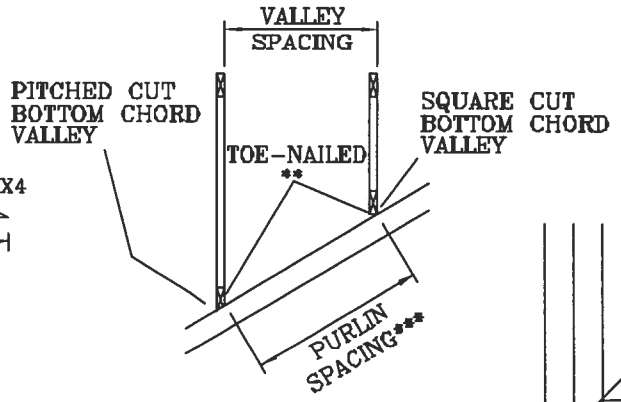
*** NOTE THAT THE PURLIN SPACING FOR BRACING THE TOP CHORD OF THE TRUSS BENEATH THE VALLEY IS MEASURED ALONG THE SLOPE OF THE TOP CHORD.

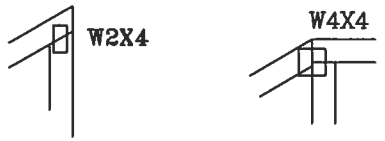
++ LARGER SPANS MAY BE BUILT AS LONG AS THE VERTICAL HEIGHT DOES NOT EXCEED 12'0".

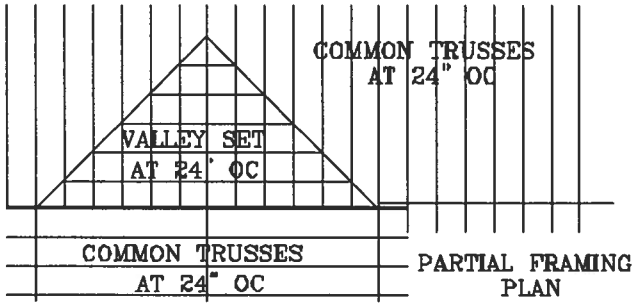
BOTTOM CHORD MAY BE SQUARE OR PITCHED CUT AS SHOWN.



SUPPORTING TRUSSES AT 24" OC MAXIMUM SPACING.







THIS DRAWING REPLACES DRAWING A105

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

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

No: 34869
STATE OF FLORIDA

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

TOE-NAIL DETAIL

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

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

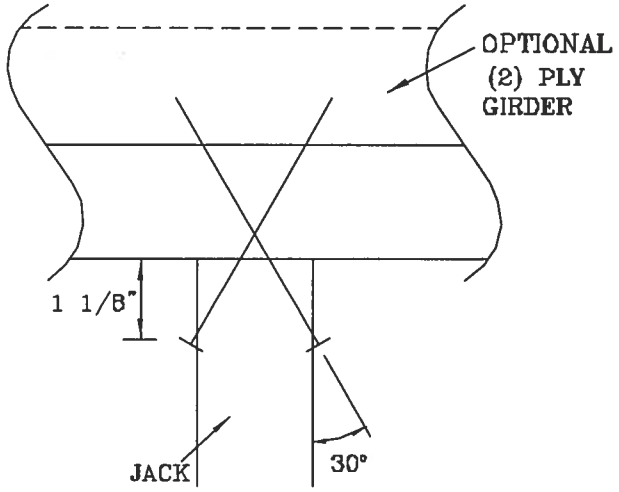
THE NUMBER OF TOE-NAILS TO BE USED IN A SPECIFIC APPLICATION IS DEPENDENT UPON PROPERTIES FOR THE CHORD SIZE, LUMBER SPECIES, AND NAIL TYPE. PROPER CONSTRUCTION PRACTICES AS WELL AS GOOD JUDGEMENT SHOULD DETERMINE THE NUMBER OF NAILS TO BE USED.

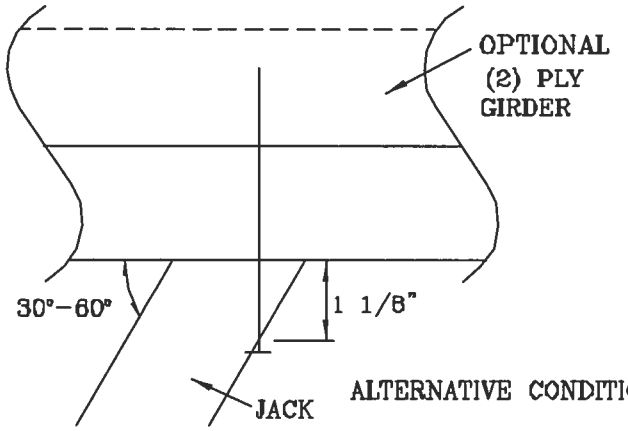
THIS DETAIL DISPLAYS A TOE-NAILED CONNECTION FOR JACK FRAMING INTO A SINGLE OR DOUBLE PLY SUPPORTING GIRDER.

MAXIMUM VERTICAL RESISTANCE OF 16d (0.162"X3.5") COMMON TOE-NAILS

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

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





ALTERNATIVE CONDITION

THIS DRAWING REPLACES DRAWING 784040

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

JULIUS LEE'S
CONS. ENGINEERS P.A.
1450 SW 4th AVENUE
DELRAY BEACH, FL 33444-2161

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STATE OF FLORIDA

TC LL	PSF	REF	TOE-NAIL
TC DL	PSF	DATE	09/12/07
BC DL	PSF	DRWG	CNTONAIL1103
BC LL	PSF	-ENG	JL
TOT. LD.	PSF		
DUR. FAC.	1.00		
SPACING			

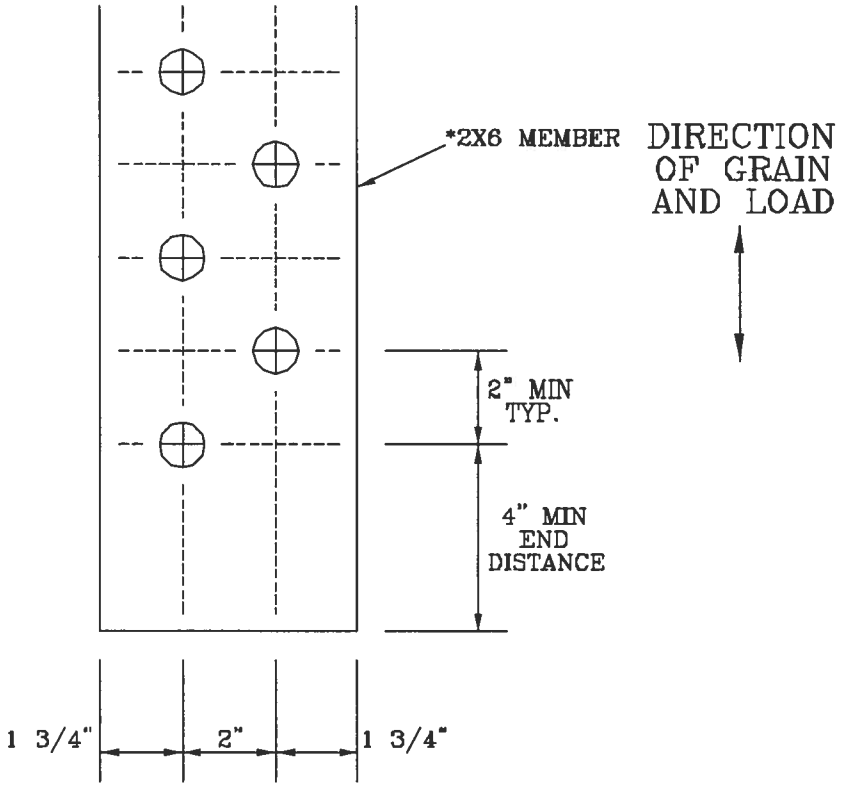
1/2" DIAMETER BOLT SPACING FOR LOAD APPLIED PARALLEL TO GRAIN.

* GRADE AND SPECIES AS SPECIFIED ON THE ALPINE DESIGN.

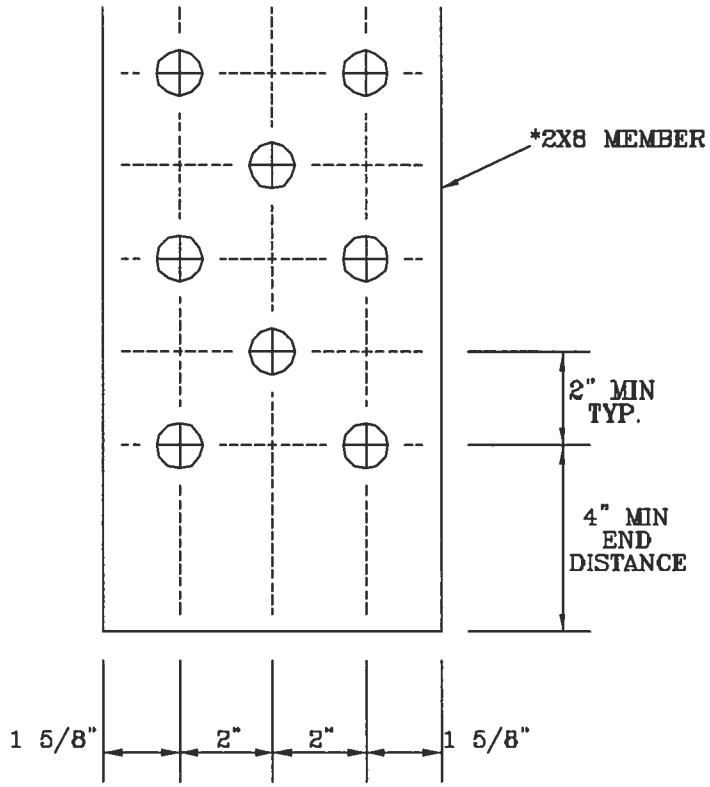
BOLT HOLES SHALL BE A MINIMUM OF 1/32" TO A MAXIMUM OF 1/16" LARGER THAN BOLT DIAMETER.

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

WASHERS REQUIRED UNDER BOLT HEAD AND NUT



2X6 DETAIL



2X8 DETAIL

THIS DRAWING REPLACES DRAWING A628,016

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

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CONS. ENGINEERS P.A.
1455 SW 4th AVENUE
DELRAY BEACH, FL 33444-2161

No: 34869
STATE OF FLORIDA

TC LL	PSF	REF BOLT SPACING
TC DL	PSF	DATE 11/26/03
BC DL	PSF	DRWG CNBOLTSP1103
BC LL	PSF	-ENG JL
TOT. LD.	PSF	
DUR. FAC.		
SPACING		

TRULOX CONNECTION DETAIL

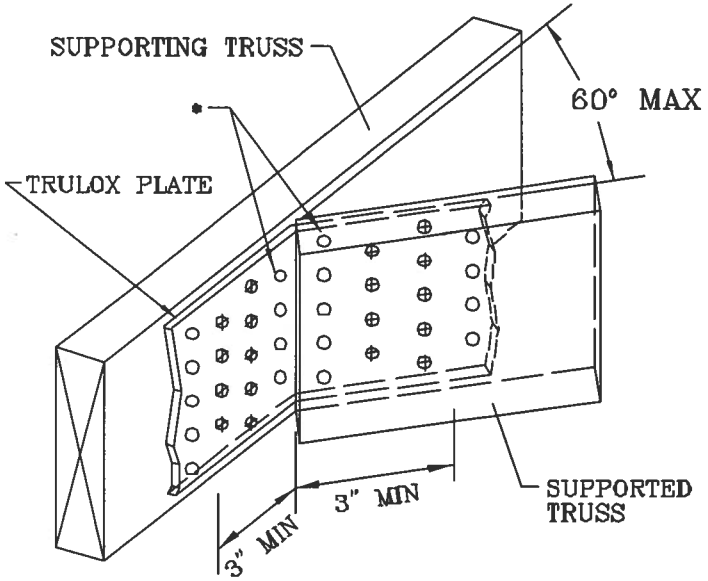
11 GAUGE (0.120" X 1.375") NAILS REQUIRED FOR TRULOX PLATE ATTACHMENT. FILL ROWS COMPLETELY WHERE SHOWN (⊕).

* NAILS MAY BE OMITTED FROM THESE ROWS.

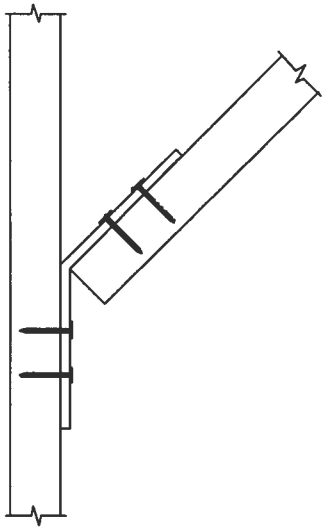
THIS DETAIL MAY BE USED WITH SO. PINE, DOUGLAS-FIR OR HEM-FIR CHORDS WITH A MINIMUM 1.00 DURATION OF LOAD OR SPRUCE-PINE-FIR CHORDS WITH A MINIMUM 1.15 DURATION OF LOAD. CHORD SIZE OF BOTH TRUSSES MUST EXCEED THE TRULOX PLATE WIDTH.

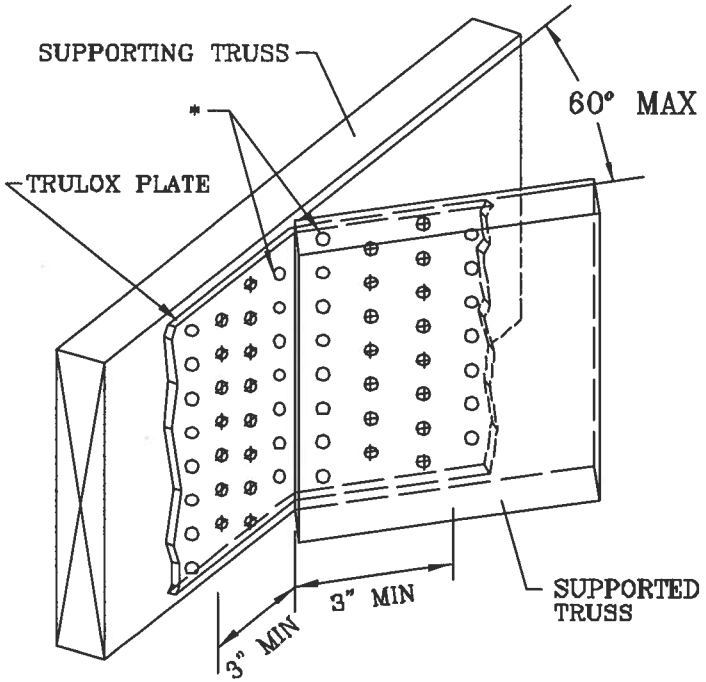
TRULOX PLATE IS CENTERED ON THE CHORDS AND BENT BETWEEN NAIL ROWS.

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



MINIMUM 3X6 TRULOX PLATE





MINIMUM 5X6 TRULOX PLATE

TRULOX PLATE SIZE	REQUIRED NAILS PER TRUSS	MAXIMUM LOAD UP OR DOWN
3X6	9	350#
5X6	15	990#

THIS DRAWING REPLACES DRAWINGS 1,158,989 1,158,989/R 1,154,944 1,152,217 1,152,017 1,159,154 & 1,151,524

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

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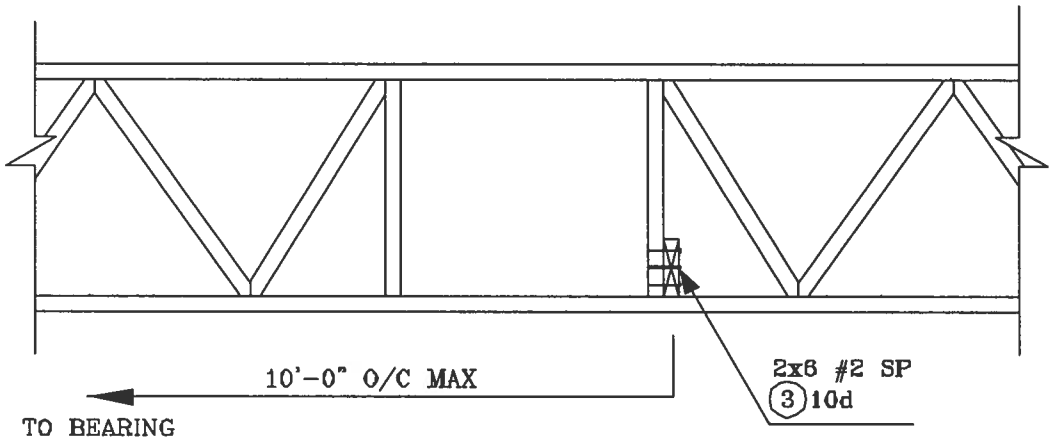
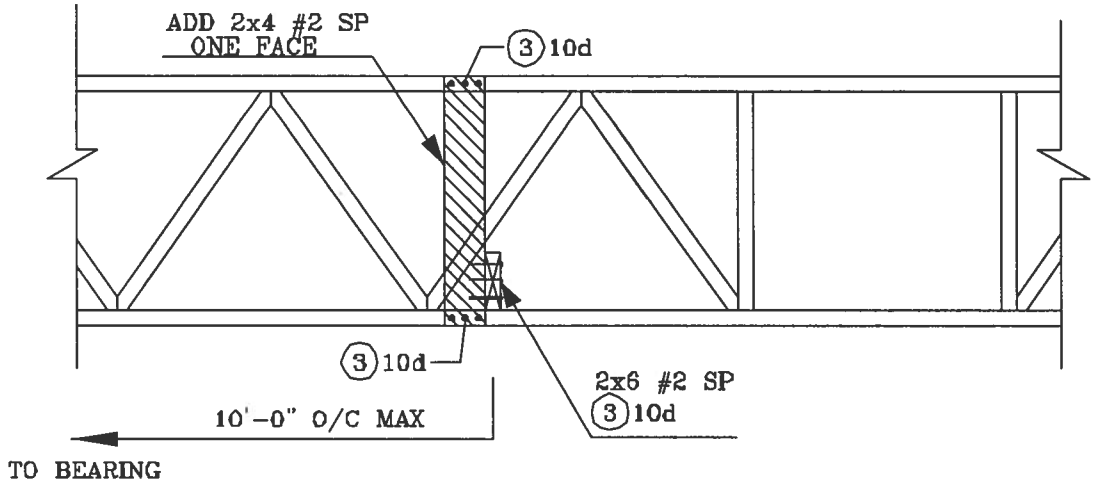
No: 34869
STATE OF FLORIDA

REF	TRULOX
DATE	11/26/03
DRWG	CNTRULOX1103
-ENG	JL

STRONG BACK DETAIL
SYSTEM–42 OR FLAT TRUSS



ALTERNATE DETAIL FOR
STRONG BACK WITH VERTICAL
NOT LINING UP



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