

## Julius Lee Engineering

RE: 308961 - JOHN SMITH - HIP SPEC

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

### Site Information:

Project Customer: JOHN & PAM SMITH - O/B Project Name: HIP Model:  
Lot/Block: Subdivision:  
Address: 224 SW WISE DRIVE  
City: COLUMBIA CTY State: FL

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

Name: License #:  
Address:  
City: State:

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

Design Code: FBC2007/TPI2002 Design Program: MiTek 20/20 7.1  
Wind Code: ASCE 7-05 Wind Speed: 110 mph Floor Load: N/A psf  
Roof Load: 32.0 psf

This package includes 37 individual, dated Truss Design Drawings and 0 Additional Drawings.  
With my seal affixed to this sheet, I hereby certify that I am the Truss Design Engineer and this index sheet conforms to 61G15-31.003, section 5 of the Florida Board of Professional Engineers Rules.

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

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

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I4054383	CJ1	7/10/09	18	I4054400	T02	7/10/09
2	I4054384	CJ3	7/10/09	19	I4054401	T03	7/10/09
3	I4054385	CJ5	7/10/09	20	I4054402	T04	7/10/09
4	I4054386	EJ5	7/10/09	21	I4054403	T05	7/10/09
5	I4054387	EJ7	7/10/09	22	I4054404	T06	7/10/09
6	I4054388	EJ7A	7/10/09	23	I4054405	T07	7/10/09
7	I4054389	EJ7B	7/10/09	24	I4054406	T08	7/10/09
8	I4054390	EJ7C	7/10/09	25	I4054407	T09	7/10/09
9	I4054391	EJ7D	7/10/09	26	I4054408	T10	7/10/09
10	I4054392	EJ7E	7/10/09	27	I4054409	T12	7/10/09
11	I4054393	EJ7F	7/10/09	28	I4054410	T13	7/10/09
12	I4054394	EJ7G	7/10/09	29	I4054411	T14	7/10/09
13	I4054395	EJ7H	7/10/09	30	I4054412	T15	7/10/09
14	I4054396	HJ7	7/10/09	31	I4054413	T16	7/10/09
15	I4054397	HJ9	7/10/09	32	I4054414	T17	7/10/09
16	I4054398	HJ9A	7/10/09	33	I4054415	T18	7/10/09
17	I4054399	T01	7/10/09	34	I4054416	T19	7/10/09

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

Truss Design Engineer's Name: Julius Lee

My license renewal date for the state of Florida is

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



RE: 308961 - JOHN SMITH - HIP SPEC

**Site Information:**

Project Customer: JOHN & PAM SMITH - O/B Project Name: HIP Model:  
Lot/Block: Subdivision:  
Address: 224 SW WISE DRIVE  
City: COLUMBIA CTY State: FL

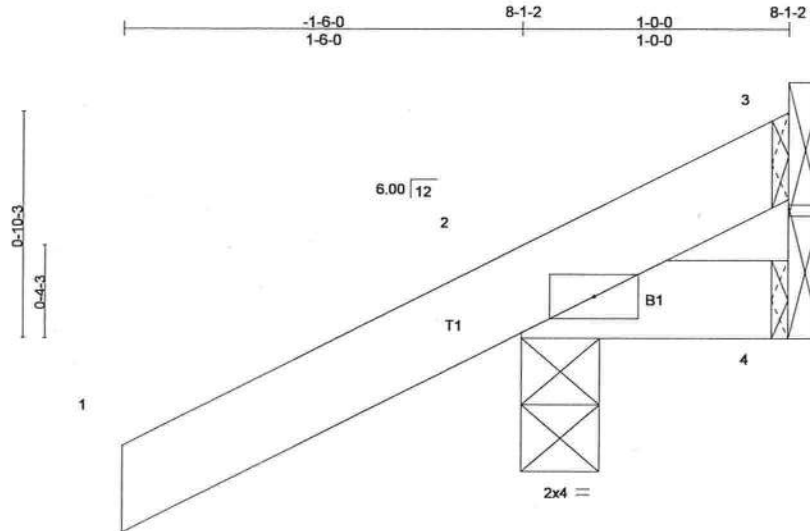
No.	Seal#	Truss Name	Date
35	I4054417	T20	7/10/09
36	I4054418	T21	7/10/09
37	I4054419	T22	7/10/09

Job	Truss	Truss Type	Qty	Ply	JOHN SMITH - HIP SPEC
308961	CJ1	JACK	12	1	Job Reference (Optional)

I4054383

Builders FrstSource, Lake City, FL 32055

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Scale = 1:8.3

LOADING (psf)	SPACING	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plates Increase	1.25	TC 0.19	Vert(LL)	-0.00	2	>999	360	MT20	244/190
TCDL 7.0	Lumber Increase	1.25	BC 0.01	Vert(TL)	-0.00	2	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(TL)	0.00	3	n/a	n/a		
BCDL 5.0	Code FBC2007/TPI2002		(Matrix)	Wind(LL)	0.00	2	****	240		
									Weight: 6 lb	

**LUMBER**

TOP CHORD 2 X 4 SYP No.2

BOT CHORD 2 X 4 SYP No.2

**BRACING**

TOP CHORD

BOT CHORD

Structural wood sheathing directly applied or 1-0-0 oc purlins.  
Rigid ceiling directly applied or 10-0-0 oc bracing.MITek recommends that Stabilizers and required cross bracing  
be installed during truss erection, in accordance with Stabilizer  
Installation guide.**REACTIONS** (lb/size) 2=179/0-3-8, 4=5/Mechanical, 3=40/Mechanical

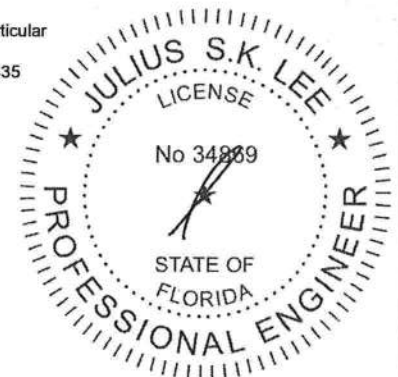
Max Horz 2=87(LC 6)

Max Uplift 2=-228(LC 6), 3=-40(LC 1)

Max Grav 2=179(LC 1), 4=14(LC 2), 3=76(LC 6)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.**NOTES** (8-9)

- 1) Wind: ASCE 7-05; 110mph (3-second gust); TCDL=4.2psf; BCDL=3.0psf; h=16ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) All bearings are assumed to be SYP No.2.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 228 lb uplift at joint 2 and 40 lb uplift at joint 3.
- 7) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
- 8) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
- 9) Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869; Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

**LOAD CASE(S)** Standard

July 10, 2009

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

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

Julius Lee Engineering  
1109 Coastal Bay Blvd.  
Boynton, FL 33435

Job 308961	Truss CJ3	Truss Type JACK	Qty 12	Ply 1	JOHN SMITH - HIP SPEC Job Reference (optional) 7.140 s Jun 24 2009 Mitek Industries, Inc. Fri Jul 10 11:40:01 2009 Page 1	14054384
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Builders FirstSource, Lake City, FL 32055

<b>LOADING (psf)</b> TCLL 20.0 TC DL 7.0 BC LL 0.0 * BC DL 5.0	<b>SPACING</b> 2-0-0 Plates Increase 1.25 Lumber Increase 1.25 Rep Stress Incr YES Code FBC2007/TPI2002	<b>CSI</b> TC 0.21 BC 0.06 WB 0.00 (Matrix)	<b>DEFL</b> in (loc) l/defl L/d Vert(LL) -0.00 2-4 >999 360 Vert(TL) -0.01 2-4 >999 240 Horz(TL) -0.00 3 n/a n/a Wind(LL) 0.00 2 **** 240	<b>PLATES</b> GRIP MT20 244/190  Weight: 12 lb
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**LUMBER**  
 TOP CHORD 2 X 4 SYP No.2  
 BOT CHORD 2 X 4 SYP No.2

**BRACING**  
 TOP CHORD  
 BOT CHORD

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

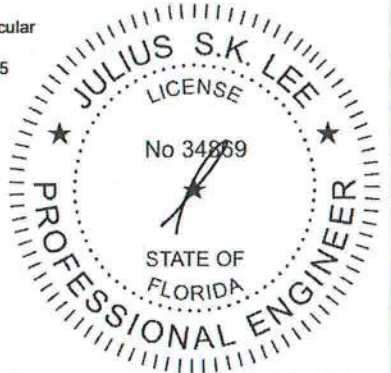
Mitek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS** (lb/size) 3=49/Mechanical, 2=204/0-3-8, 4=14/Mechanical  
 Max Horz 2=142(LC 6)  
 Max Uplift 3=49(LC 6), 2=194(LC 6)  
 Max Grav 3=49(LC 1), 2=204(LC 1), 4=42(LC 2)

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

**NOTES** (8-9)  
 1) Wind: ASCE 7-05; 110mph (3-second gust); TC DL=4.2psf; BC DL=3.0psf; h=16ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60  
 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.  
 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.  
 4) All bearings are assumed to be SYP No.2.  
 5) Refer to girder(s) for truss to truss connections.  
 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 49 lb uplift at joint 3 and 194 lb uplift at joint 2.  
 7) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.  
 8) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.  
 9) Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869; Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

**LOAD CASE(S)** Standard



July 10, 2009

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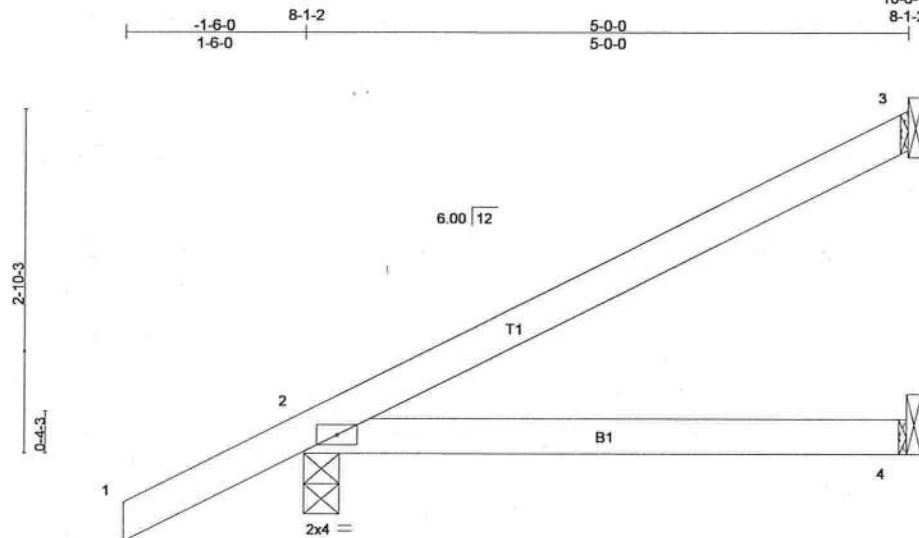
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 1109 Coastal Bay Blvd.  
 Boynton, FL 33435



Job	Truss	Truss Type	Qty	Ply	JOHN SMITH - HIP SPEC	I4054385
308961	CJ5	JACK	8	1	Job Reference (optional)	

Builders FrstSource, Lake City, FL 32055

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Scale = 1:18.4

LOADING (psf)	SPACING	CSI	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.31	Vert(LL)	-0.03	2-4	>999	MT20	244/190
TCDL 7.0	Plates Increase 1.25	BC 0.16	Vert(TL)	-0.05	2-4	>999		
BCLL 0.0 *	Lumber Increase 1.25	WB 0.00	Horz(TL)	-0.00	3	n/a		
BCDL 5.0	Rep Stress Incr YES	(Matrix)	Wind(LL)	0.00	2	****		
	Code FBC2007/TPI2002						Weight: 18 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 5-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

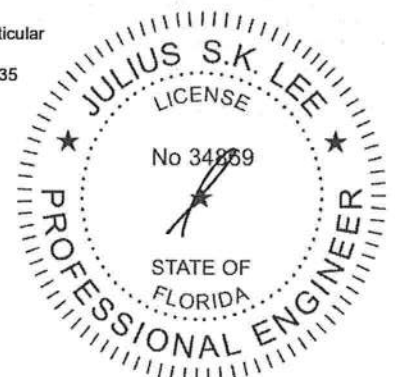
**REACTIONS** (lb/size) 3=114/Mechanical, 2=257/0-3-8, 4=24/Mechanical  
Max Horz 2=198(LC 6)  
Max Uplift 3=128(LC 6), 2=205(LC 6)  
Max Grav 3=114(LC 1), 2=257(LC 1), 4=72(LC 2)

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

#### NOTES (8-9)

- 1) Wind: ASCE 7-05; 110mph (3-second gust); TCDL=4.2psf; BCDL=3.0psf; h=16ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) All bearings are assumed to be SYP No.2.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 128 lb uplift at joint 3 and 205 lb uplift at joint 2.
- 7) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
- 8) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
- 9) Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869: Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

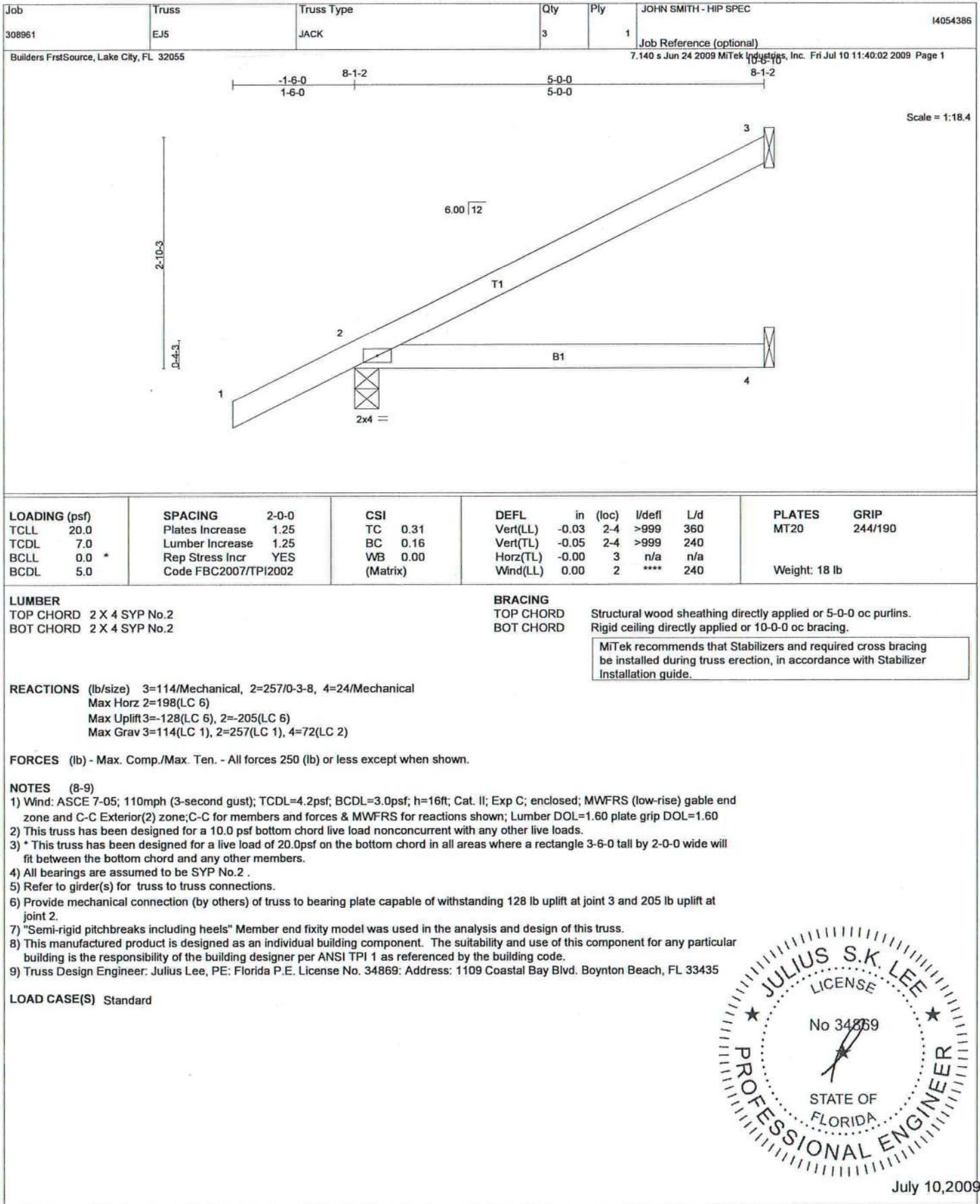
**LOAD CASE(S)** Standard



July 10, 2009

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

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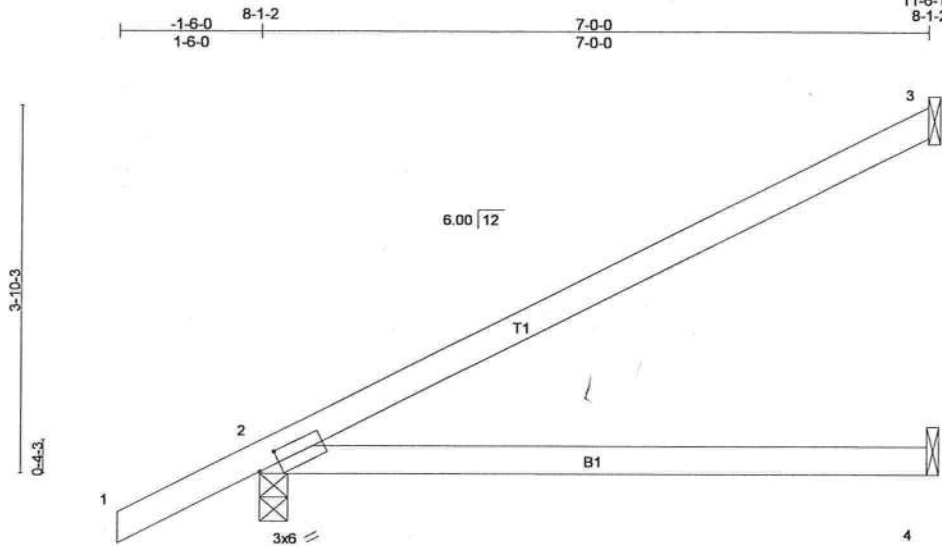
July 10, 2009

Job	Truss	Truss Type	Qty	Ply	JOHN SMITH - HIP SPEC
308961	EJ7	MONO TRUSS	19	1	

I4054387

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Scale = 1:23.2

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

LOADING (psf)	SPACING	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plates Increase	1.25	TC 0.57	Vert(LL)	-0.09	2-4	>921	360	MT20	244/190
TCDL 7.0	Lumber Increase	1.25	BC 0.30	Vert(TL)	-0.18	2-4	>464	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(TL)	-0.00	3	n/a	n/a		
BCDL 5.0	Code FBC2007/TPI2002		(Matrix)	Wind(LL)	0.10	2-4	>818	240		
									Weight: 25 lb	

**LUMBER**

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

**BRACING**

TOP CHORD  
BOT CHORD

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

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

**REACTIONS** (lb/size) 3=162/Mechanical, 2=317/0-3-8, 4=45/Mechanical

Max Horz 2=182(LC 6)

Max Uplift 3=118(LC 6), 2=151(LC 6)

Max Grav 3=162(LC 1), 2=317(LC 1), 4=97(LC 2)

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

**NOTES** (8-9)

- 1) Wind: ASCE 7-05; 110mph (3-second gust); TCDL=4.2psf; BCDL=3.0psf; h=16ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) All bearings are assumed to be SYP No.2.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 118 lb uplift at joint 3 and 151 lb uplift at joint 2.
- 7) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
- 8) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
- 9) Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869; Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

**LOAD CASE(S)** Standard



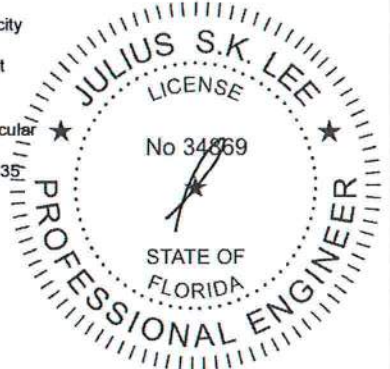
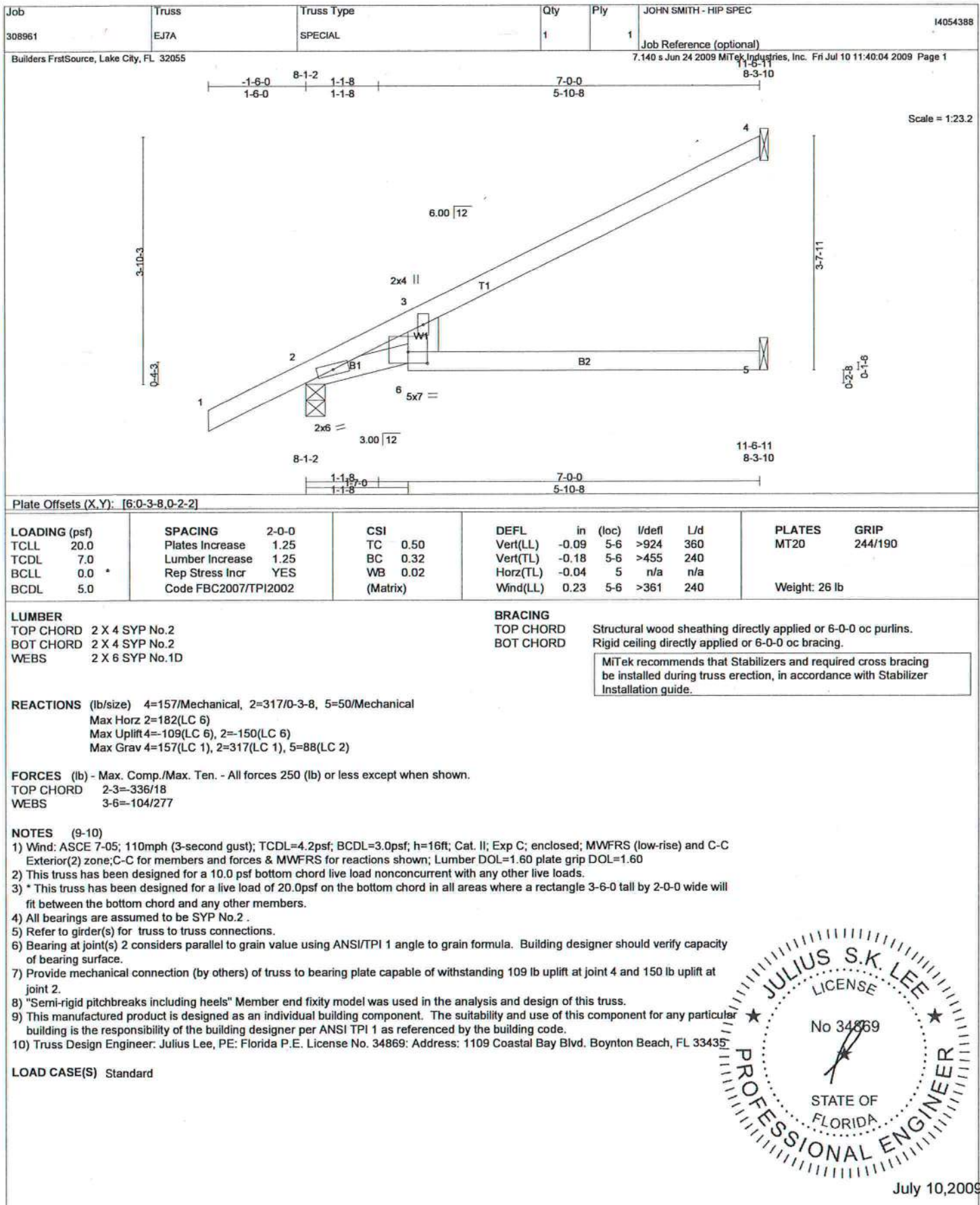
July 10, 2009

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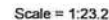


**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MI-7473 BEFORE USE.**  
Design valid for use only with MiTek connectors. This design is based only upon parameters shown, and is for an individual building component. Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to insure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult ANSI/TPI1 Quality Criteria, D58-89 and BC311 Building Component Safety Information available from Truss Plate Institute, 583 D'Oroff Drive, Madison, WI 53719.

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Weight: 31 lb

Structural wood sheathing directly applied or 6-0-0 oc purlins.  
Rigid ceiling directly applied or 8-5-3 oc bracing.

TOP CHORD  
BOT CHORD

A circular professional engineer seal for Julius S.K. Lee. The outer ring contains the text "JULIUS S.K. LEE" at the top and "PROFESSIONAL ENGINEER" at the bottom, separated by two stars. Inside this ring, the word "LICENSE" is at the top and "STATE OF FLORIDA" is at the bottom. In the center, the license number "No 34869" is printed, with a handwritten signature over it. The seal is surrounded by a dotted border.

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MD-7473 BEFORE USE.**  
 Design valid for use only with Mitek connectors. This design is based only upon parameters shown, and is for an individual building component. Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to insure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult **ANSI/TPI Quality Criteria, DSB-89 and BC311 Building Component Safety Information** available from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

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Job 308961	Truss EJTC	Truss Type SPECIAL	Qty 1	Ply 1	JOHN SMITH - HIP SPEC Job Reference (optional) 7.140 s Jun 24 2009 MiTek Industries, Inc. Fri Jul 10 11:40:06 2009 Page 1	I4054390
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Scale = 1:23.2

LOADING (psf) TCLL 20.0 TCDL 7.0 BCLL 0.0 * BCDL 5.0	SPACING 2-0-0 Plates Increase 1.25 Lumber Increase 1.25 Rep Stress Incr YES Code FBC2007/TPI2002	CSI TC 0.22 BC 0.16 WB 0.12 (Matrix)	DEFL in (loc) l/defl L/d Vert(LL) -0.02 2-7 >999 360 Vert(TL) -0.04 2-7 >999 240 Horz(TL) -0.01 5 n/a n/a Wind(LL) 0.02 2-7 >999 240	PLATES MT20 GRIP 244/190  Weight: 30 lb
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**LUMBER**

TOP CHORD 2 X 4 SYP No.2

BOT CHORD 2 X 4 SYP No.2

WEBS 2 X 4 SYP No.3

**REACTIONS** (lb/size) 4=11/Mechanical, 2=317/0-3-8, 5=218/Mechanical

Max Horz 2=182(LC 6)

Max Uplift 4=11(LC 1), 2=150(LC 6), 5=113(LC 6)

Max Grav 4=8(LC 5), 2=317(LC 1), 5=218(LC 1)

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

TOP CHORD 2-3=356/208

BOT CHORD 2-7=364/274, 6-7=335/243

WEBS 3-6=355/490

**NOTES** (9-10)

- 1) Wind: ASCE 7-05; 110mph (3-second gust); TCDL=4.2psf; BCDL=3.0psf; h=16ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) All bearings are assumed to be SYP No.2 .
- 5) Refer to girder(s) for truss to truss connections.
- 6) 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.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 11 lb uplift at joint 4, 150 lb uplift at joint 2 and 113 lb uplift at joint 5.
- 8) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
- 9) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
- 10) Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869: Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

**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.

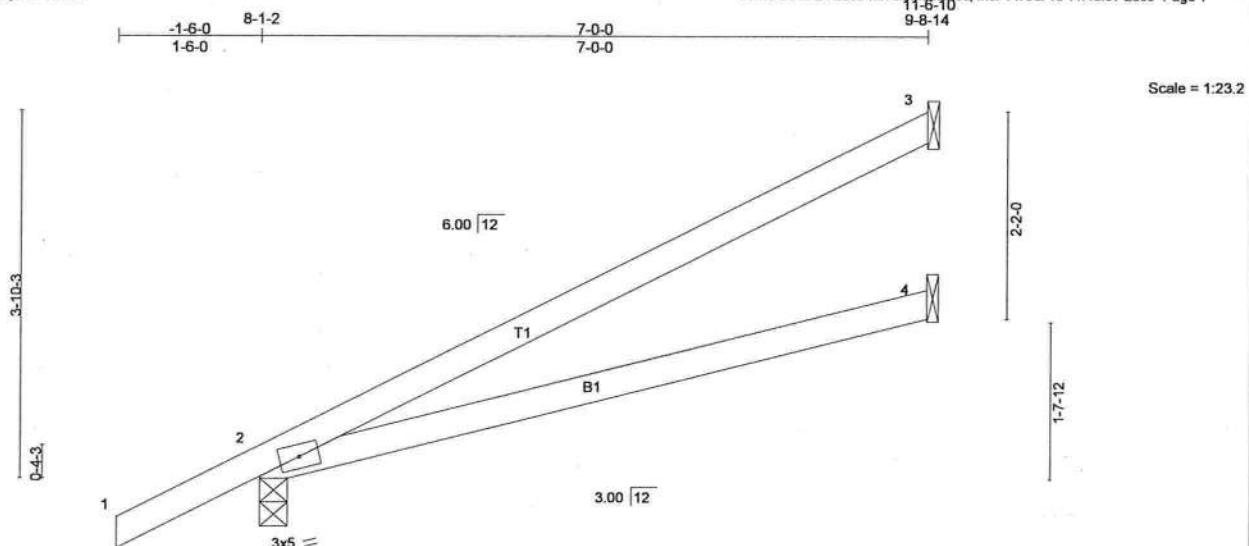
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

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Job	Truss	Truss Type	Qty	Ply	JOHN SMITH - HIP SPEC	14054391
308961	EJ7D	MONO SCISSOR	3	1	Job Reference (optional)	

Builders FirstSource, Lake City, FL 32055

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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 0.58	Vert(LL)	-0.09	2-4	>896	360	MT20	244/190
TCDL 7.0	Lumber Increase	1.25	BC 0.29	Vert(TL)	-0.18	2-4	>452	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(TL)	-0.00	3	n/a	n/a		
BCDL 5.0	Code FBC2007/TPI2002		(Matrix)	Wind(LL)	0.10	2-4	>799	240		
									Weight: 25 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 6-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

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

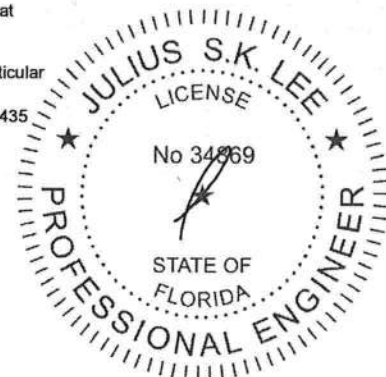
**REACTIONS** (lb/size) 3=162/Mechanical, 2=317/0-3-8, 4=44/Mechanical  
Max Horz 2=182(LC 6)  
Max Uplift 3=118(LC 6), 2=150(LC 6)  
Max Grav 3=162(LC 1), 2=317(LC 1), 4=96(LC 2)

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

#### NOTES (9-10)

- 1) Wind: ASCE 7-05; 110mph (3-second gust); TCDL=4.2psf; BCDL=3.0psf; h=16ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) All bearings are assumed to be SYP No.2.
- 5) Refer to girder(s) for truss to truss connections.
- 6) 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.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 118 lb uplift at joint 3 and 150 lb uplift at joint 2.
- 8) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
- 9) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
- 10) Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869: Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

**LOAD CASE(S)** Standard

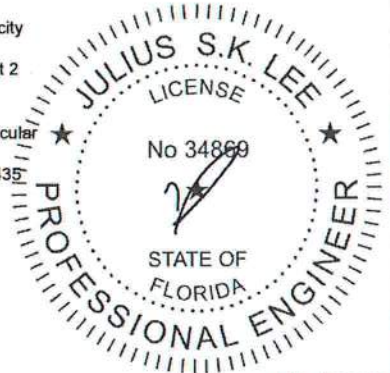
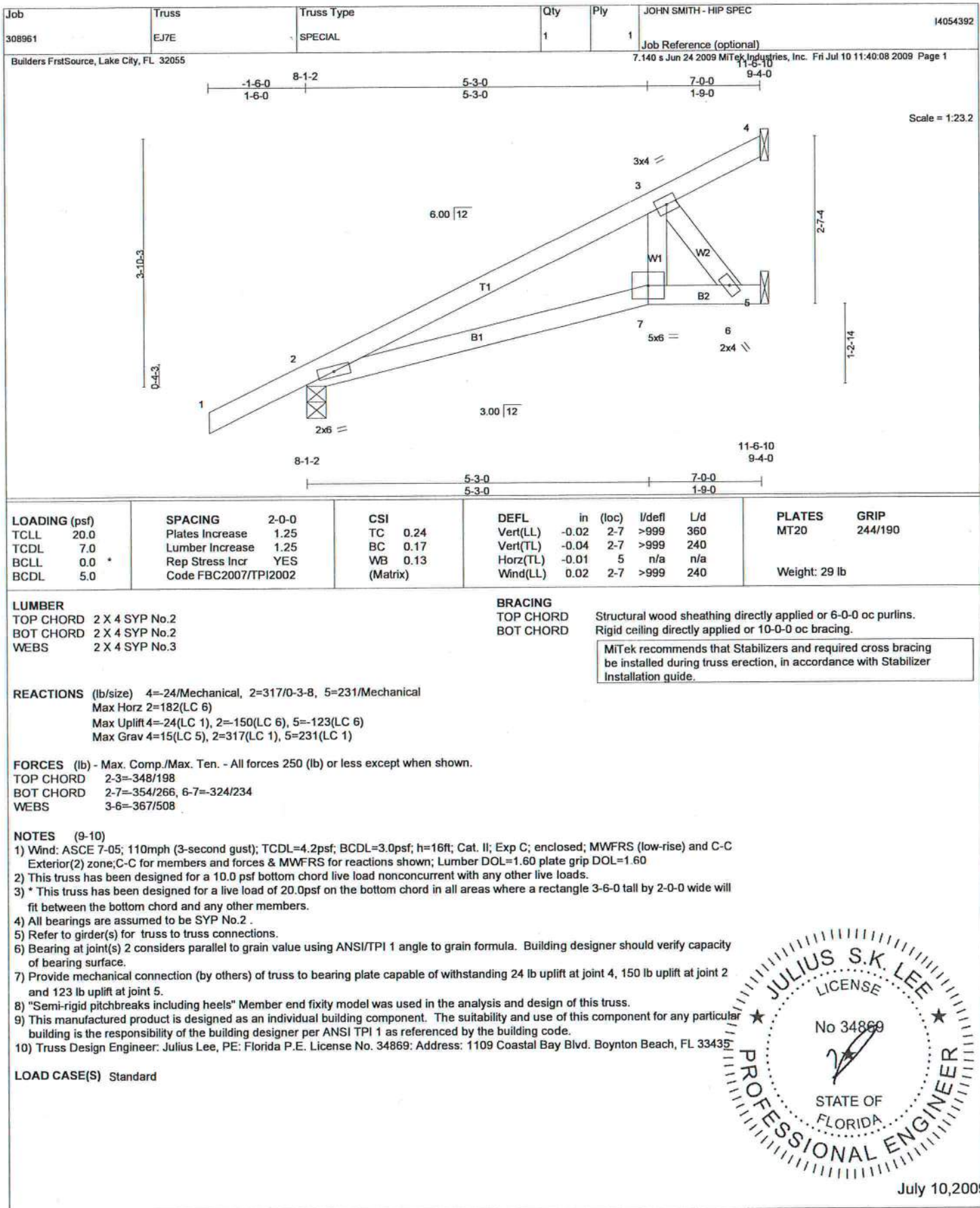


July 10, 2009

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

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1109 Coastal Bay Blvd.  
Boynton, FL 33435





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 Boynton, FL 33435



Scale = 1:23.2

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)	-0.01	6-7	>999	360	MT20	244/190
TCDL 7.0	Lumber Increase	1.25	BC 0.14	Vert(TL)	-0.03	6-7	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.13	Horz(TL)	-0.01	5	n/a	n/a		
BCDL 5.0	Code FBC2007/TPI2002		(Matrix)	Wind(LL)	0.02	7	>999	240	Weight: 31 lb	

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

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 8-6-11 oc bracing.

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

**REACTIONS** (lb/size) 4=83/Mechanical, 2=317/0-3-8, 5=124/Mechanical  
Max Horz 2=182(LC 6)  
Max Uplift 4=62(LC 6), 2=150(LC 6), 5=46(LC 6)

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

TOP CHORD 2-3=490/368  
BOT CHORD 2-7=541/406, 6-7=511/373  
WEBS 3-6=389/534

1) Wind: ASCE 7-05; 110mph (3-second gust); TCDF=4.2psf; BCDL=3.0psf; h=16ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will

fit between the bottom chord and any other members.

4) All bearings are assumed to be SYP No.2.

5) Refer to girder(s) for truss to truss connections.

6) 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.

7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 62 lb uplift at joint 4, 150 lb uplift at joint 2 and 46 lb uplift at joint 5.

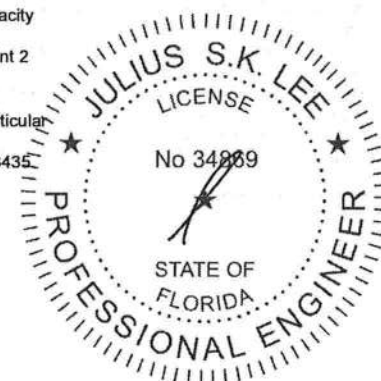
8) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.

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


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

[illegible]

LOAD CASE(S) Standard

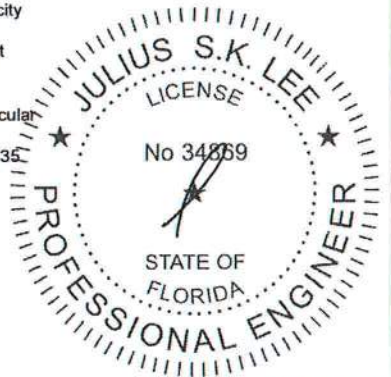
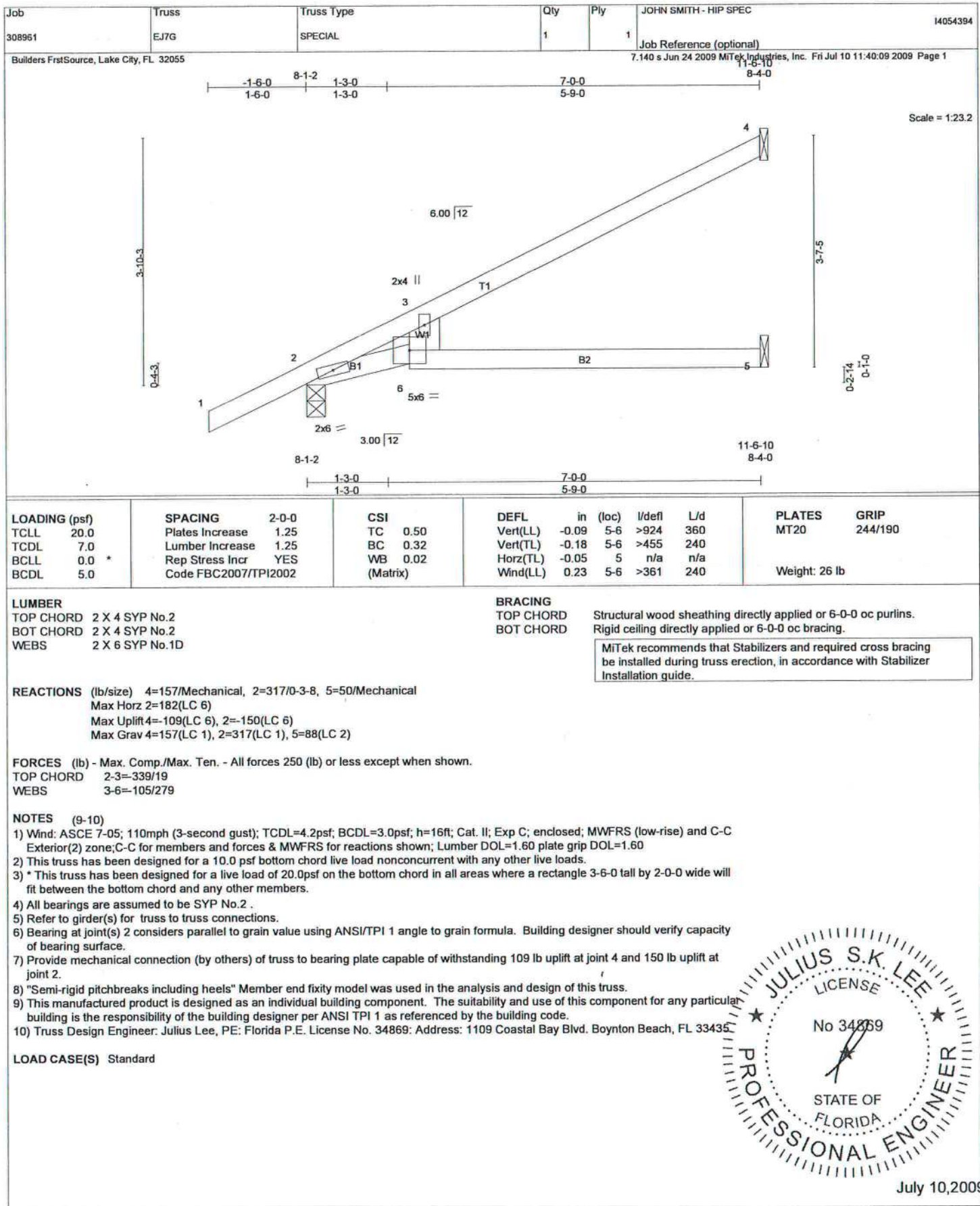


July 10, 2009

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

**WARNING** - verify design parameters and READ NOTES ON THIS AND INCLUDED REFERRED PAGE NO. 1473 BEFORE USE.  
 Design valid for use only with Mitek connectors. This design is based only upon parameters shown, and is for an individual building component. Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to insure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult **ANSI/TPI1 Quality Criteria, DSB-89 and BCSS1 Building Component Safety Information** available from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

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Boynton, FL 33435



July 10, 2009



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 Boynton, FL 33435

Job	Truss	Truss Type	Qty	Ply	JOHN SMITH - HIP SPEC
308961	EJ7H	COMMON	3	1	

I4054395

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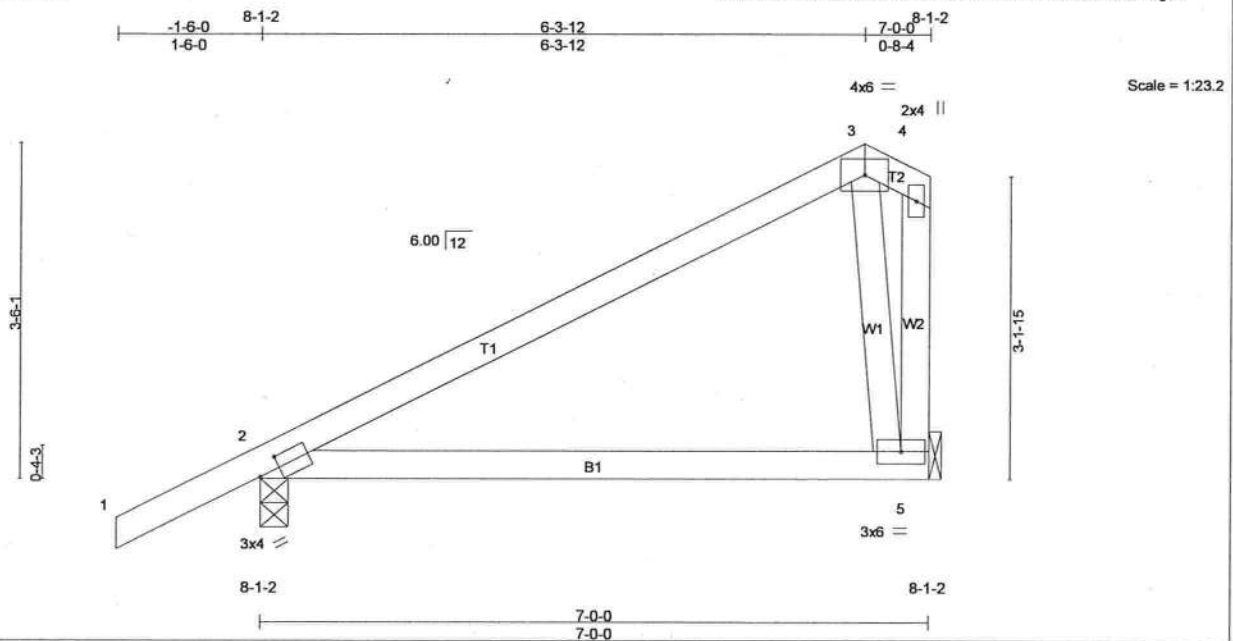


Plate Offsets (X,Y): [2-0-2-10,0-1-8]

LOADING (psf)	SPACING		CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plates Increase	1.25	TC 0.25	Vert(LL)	-0.06	2-5	>999	360	MT20	244/190
TCDL 7.0	Lumber Increase	1.25	BC 0.17	Vert(TL)	-0.12	2-5	>659	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.13	Horz(TL)	-0.00	5	n/a	n/a		
BCDL 5.0	Code FBC2007/TPI2002		(Matrix)	Wind(LL)	0.04	2-5	>999	240		
									Weight: 33 lb	

**LUMBER**

TOP CHORD 2 X 4 SYP No.2  
 BOT CHORD 2 X 4 SYP No.2  
 WEBS 2 X 4 SYP No.2 \*Except\*  
 W1: 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.

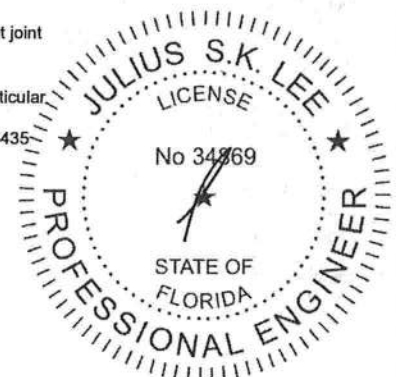
MITek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS** (lb/size) 2=314/0-3-8, 5=204/Mechanical  
 Max Horz 2=163(LC 6)  
 Max Uplift 2=158(LC 6), 5=90(LC 6)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**WEBS** 3-5=305/509

**NOTES** (9-10)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-05; 110mph (3-second gust); TCDL=4.2psf; BCDL=3.0psf; h=16ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SYP No.2.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 158 lb uplift at joint 2 and 90 lb uplift at joint 5.
- "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
- This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
- Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869: Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

**LOAD CASE(S)** Standard

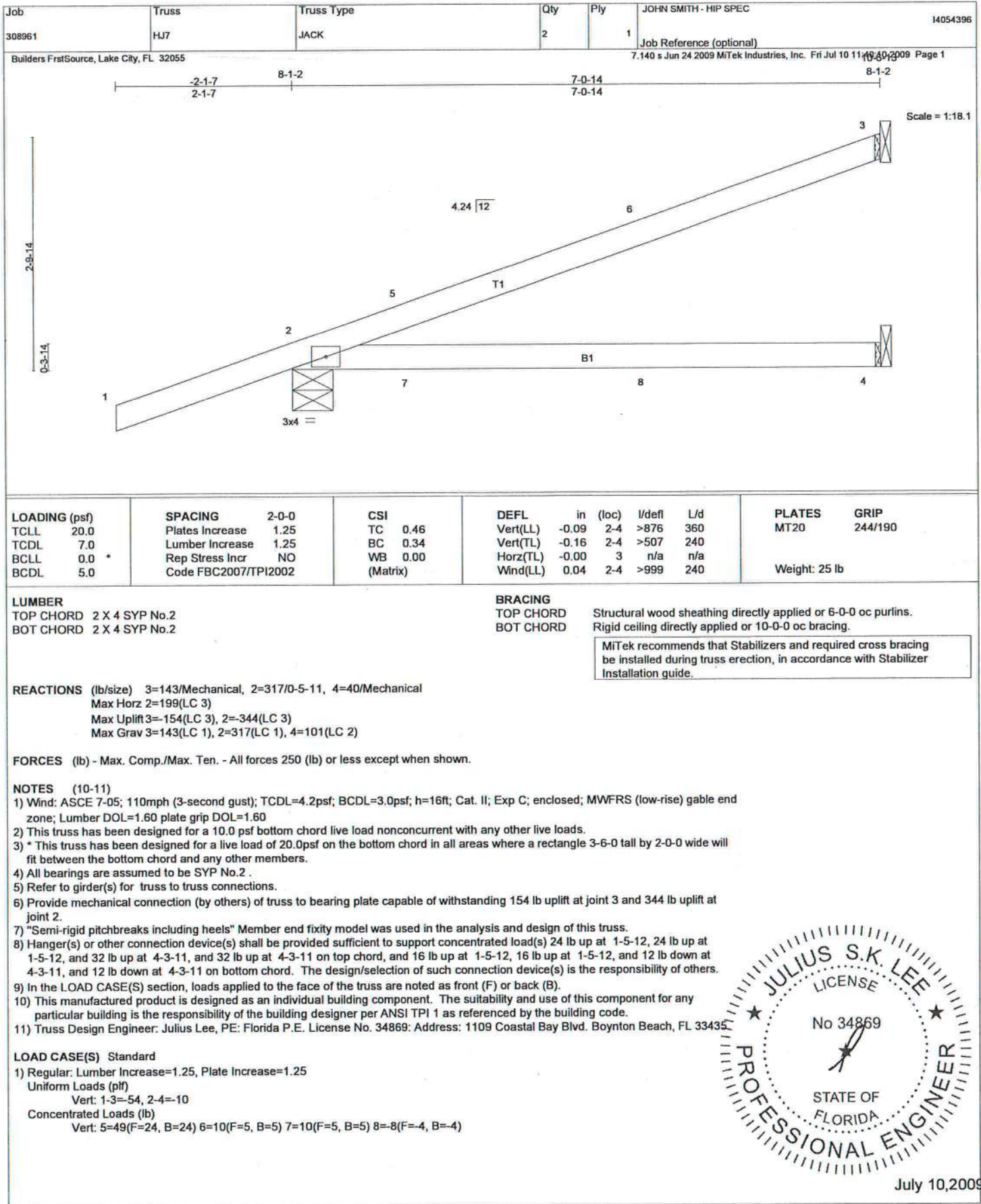
July 10, 2009

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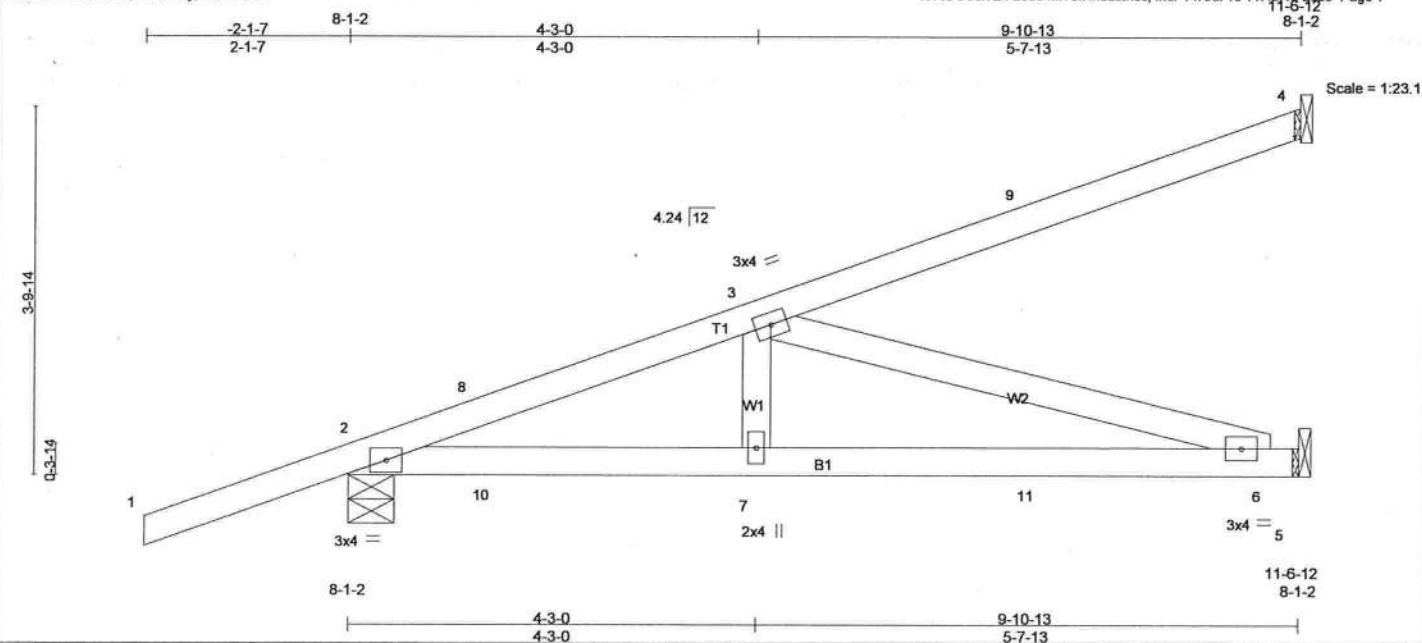




Job	Truss	Truss Type	Qty	Ply	JOHN SMITH - HIP SPEC	I4054397
308961	HJ9	MONO TRUSS	3	1	Job Reference (optional)	

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LOADING (psf)	SPACING	CSI	DEFL	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.60	Vert(LL)	-0.07	6-7	>999	MT20	244/190
TCDL 7.0	Plates Increase 1.25	BC 0.49	Vert(TL)	-0.14	6-7	>827		
BCLL 0.0 *	Lumber Increase 1.25	WB 0.38	Horz(TL)	0.01	5	n/a		
BCDL 5.0	Rep Stress Incr NO	(Matrix)	Wind(LL)	0.05	6-7	>999		
	Code FBC2007/TPI2002						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 8-5-11 oc bracing.

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

**REACTIONS** (lb/size) 4=179/Mechanical, 2=439/0-5-11, 5=211/Mechanical  
Max Horz 2=256(LC 3)  
Max Uplift 4=196(LC 3), 2=426(LC 3), 5=127(LC 3)  
Max Grav 4=179(LC 1), 2=439(LC 1), 5=238(LC 2)

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

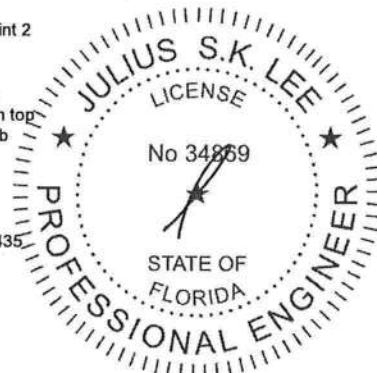
TOP CHORD 2-8=-692/415, 3-8=-640/415  
BOT CHORD 2-10=-525/631, 7-10=-525/631, 7-11=-525/631, 6-11=-525/631  
WEBS 3-7=0/253, 3-6=-656/546

#### NOTES (10-11)

- 1) Wind: ASCE 7-05; 110mph (3-second gust); TCDL=4.2psf; BCDL=3.0psf; h=16ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) All bearings are assumed to be SYP No.2.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 196 lb uplift at joint 4, 426 lb uplift at joint 2 and 127 lb uplift at joint 5.
- 7) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 24 lb up at 1-5-12, 24 lb up at 1-5-12, 32 lb up at 4-3-11, 32 lb up at 4-3-11, and 60 lb down and 112 lb up at 7-1-10, and 60 lb down and 112 lb up at 7-1-10 on top chord, and 16 lb up at 1-5-12, 16 lb up at 1-5-12, 12 lb down at 4-3-11, 12 lb down at 4-3-11, and 42 lb down at 7-1-10, and 42 lb down at 7-1-10 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
- 10) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
- 11) Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869: Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

#### LOAD CASE(S) Standard

- 1) Regular: Lumber Increase=1.25, Plate Increase=1.25  
Uniform Loads (plf)  
Vert: 1-4=-54, 2-5=-10



July 10, 2009

Continued on page 2

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Boynton, FL 33435

Job	Truss	Truss Type	Qty	Ply	JOHN SMITH - HIP SPEC	14054397
308961	HJ9	MONO TRUSS	3	1	Job Reference (optional)	

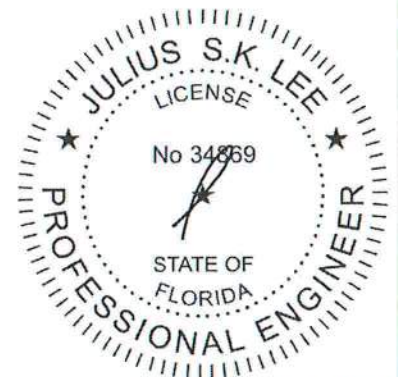
Builders FirstSource, Lake City, FL 32055

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# LOAD CASE(S) Standard

## Concentrated Loads (lb)

Vert: 3=10(F=5, B=5) 7=8(F=4, B=4) 8=49(F=24, B=24) 9=120(F=60, B=60) 10=10(F=5, B=5) 11=28(F=14, B=14)



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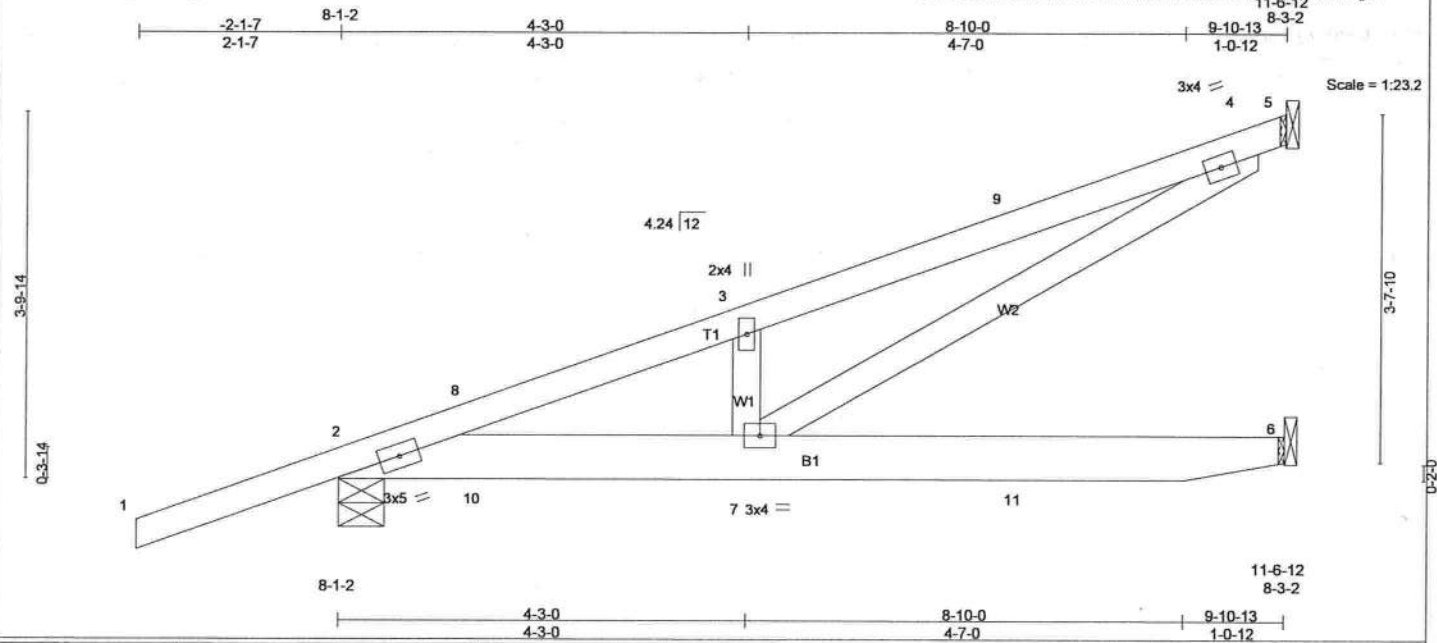
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Boynton, FL 33435

Job	Truss	Truss Type	Qty	Ply	JOHN SMITH - HIP SPEC	14054398
308961	HJ9A	SPECIAL	1	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 0.70	Vert(LL)	-0.03	6-7	>999	360	MT20
TCDL 7.0	Lumber Increase	1.25	BC 0.16	Vert(TL)	-0.06	6-7	>999	240	244/190
BCLL 0.0	Rep Stress Incr	NO	WB 0.46	Horz(TL)	-0.01	5	n/a	n/a	
BCDL 5.0	Code FBC2007/TPI2002		(Matrix)	Wind(LL)	0.06	6-7	>999	240	
								Weight: 53 lb	

#### LUMBER

TOP CHORD 2 X 4 SYP No.2  
BOT CHORD 2 X 6 SYP No.1D  
WEBS 2 X 4 SYP No.3

#### BRACING

TOP CHORD  
BOT CHORD

Structural wood sheathing directly applied or 5-8-7 oc purlins.  
Rigid ceiling directly applied or 10-0-0 oc bracing.

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

**REACTIONS** (lb/size) 5=327/Mechanical, 2=439/0-5-11, 6=63/Mechanical  
Max Horz 2=258(LC 3)  
Max Uplift 5=351(LC 3), 2=458(LC 3), 6=9(LC 3)  
Max Grav 5=327(LC 1), 2=439(LC 1), 6=120(LC 2)

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

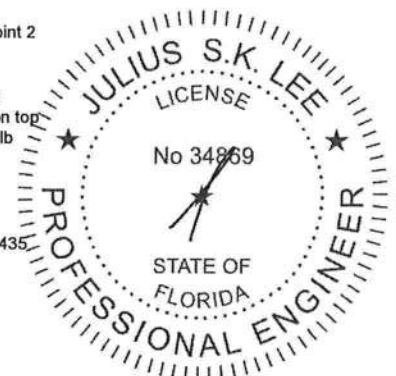
TOP CHORD 2-8=632/436, 3-8=582/435, 3-9=708/583, 4-9=616/523  
BOT CHORD 2-10=558/587, 7-10=558/587  
WEBS 3-7=386/514, 4-7=658/692

#### NOTES (10-11)

- 1) Wind: ASCE 7-05; 110mph (3-second gust); TCDL=4.2psf; BCDL=3.0psf; h=16ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) All bearings are assumed to be SYP No.2.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 351 lb uplift at joint 5, 458 lb uplift at joint 2 and 9 lb uplift at joint 6.
- 7) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 24 lb up at 1-5-12, 24 lb up at 1-5-12, 32 lb up at 4-3-11, 32 lb up at 4-3-11, and 60 lb down and 112 lb up at 7-1-10, and 60 lb down and 112 lb up at 7-1-10 on top chord, and 16 lb up at 1-5-12, 16 lb up at 1-5-12, 12 lb down at 4-3-11, 12 lb down at 4-3-11, and 42 lb down at 7-1-10, and 42 lb down at 7-1-10 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
- 10) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
- 11) Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869: Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

#### LOAD CASE(S) Standard

- 1) Regular: Lumber Increase=1.25, Plate Increase=1.25  
Uniform Loads (plf)  
Vert: 1-5=54, 2-6=10



July 10, 2009

Continued on page 2

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

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1109 Coastal Bay Blvd.  
Boynton, FL 33435

Job	Truss	Truss Type	Qty	Ply	JOHN SMITH - HIP SPEC	14054398
308961	HJ9A	SPECIAL	1	1	Job Reference (optional)	

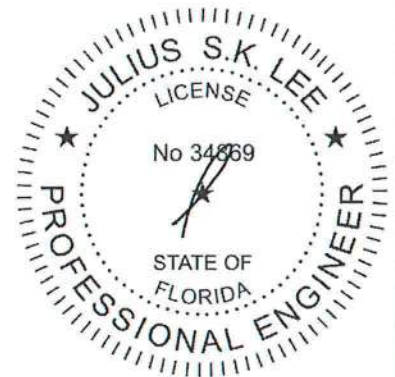
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**LOAD CASE(S)** Standard

Concentrated Loads (lb)

Vert: 3=10(F=5, B=5) 7=-8(F=-4, B=-4) 8=49(F=24, B=24) 9=-120(F=-60, B=-60) 10=10(F=5, B=5) 11=-28(F=-14, B=-14)



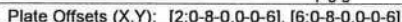
July 10, 2009



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 is for lateral support of individual web members only. Additional temporary bracing to insure stability during construction is the responsibility of the  
 erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding  
 fabrication, quality control, storage, delivery, erection and bracing, consult **ANSI/TPI1 Quality Criteria, D58-89 and BCS11 Building Component**  
**Safety Information** available from Truss Plate Institute, 583 D'Onotrio Drive, Madison, WI 53719.

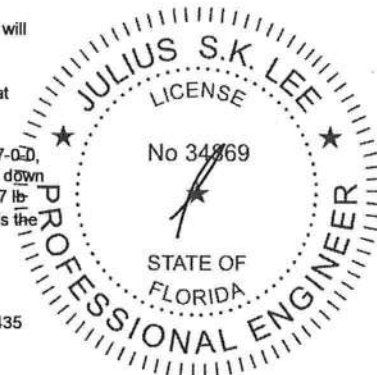
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MITek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

Continued on page 2



July 10, 2009

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

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Job	Truss	Truss Type	Qty	Ply	JOHN SMITH - HIP SPEC	I4054399
308961	T01	HIP	1	1	Job Reference (optional)	

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# LOAD CASE(S) Standard

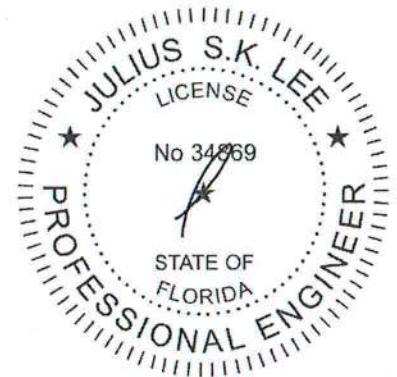
1) Regular: Lumber Increase=1.25, Plate Increase=1.25

Uniform Loads (plf)

Vert: 1-3=-54, 3-5=-54, 5-7=-54, 2-6=-10

Concentrated Loads (lb)

Vert: 3=-233(F) 5=-233(F) 9=-35(F) 10=-236(F) 4=-108(F) 8=-236(F) 11=-108(F) 12=-108(F) 13=-35(F) 14=-35(F)



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Job	Truss	Truss Type	Qty	Ply	JOHN SMITH - HIP SPEC	14054400
308961	T02	HIP	1	1	Job Reference (optional)	

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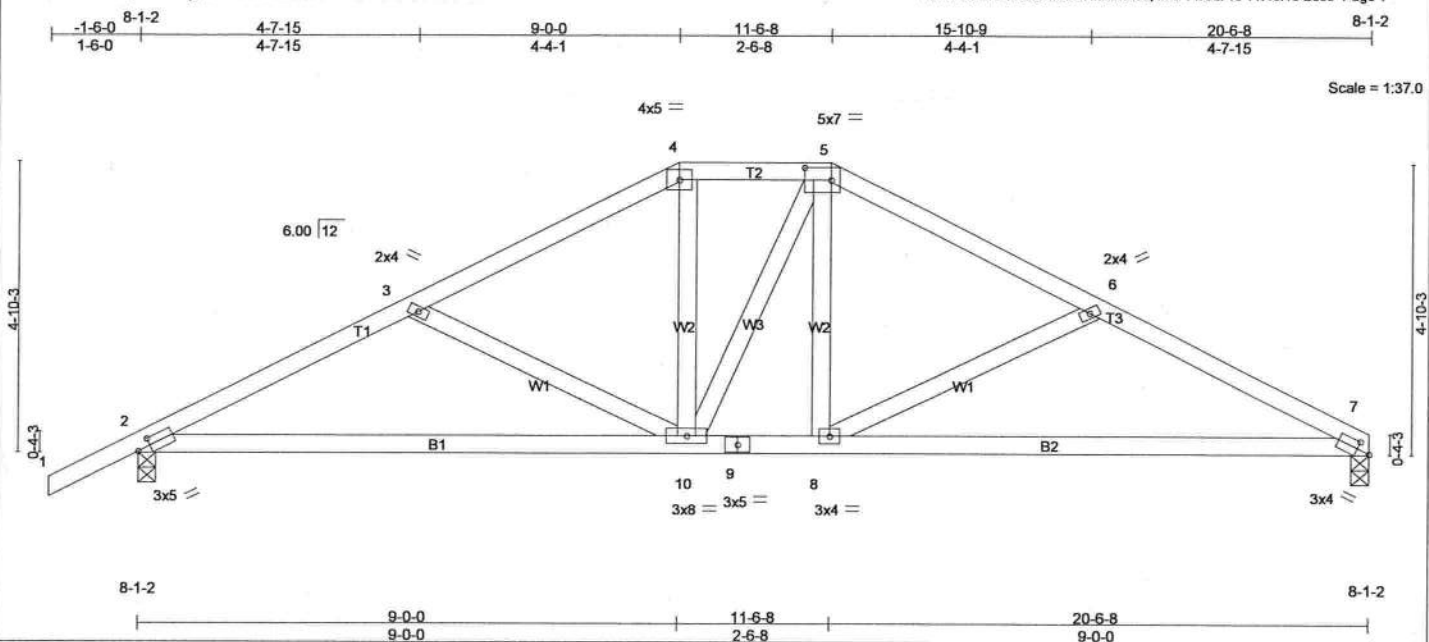


Plate Offsets (X,Y): [2-0-2-10,0-1-8], [5-0-5-4,0-2-8], [7-0-2-10,0-1-8]

LOADING (psf)	SPACING	2-0-0	CSI	DEFL	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plates Increase	1.25	TC 0.28	Vert(LL)	-0.17	7-8	>999	360	MT20
TCDL 7.0	Lumber Increase	1.25	BC 0.45	Vert(TL)	-0.31	7-8	>772	240	244/190
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.14	Horz(TL)	0.03	7	n/a	n/a	
BCDL 5.0	Code FBC2007/TPI2002		(Matrix)	Wind(LL)	0.06	8	>999	240	
									Weight: 101 lb

#### LUMBER

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

#### BRACING

TOP CHORD  
BOT CHORD

Structural wood sheathing directly applied or 5-8-1 oc purlins.  
Rigid ceiling directly applied or 7-6-8 oc bracing.

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

REACTIONS (lb/size) 7=644/0-3-8, 2=740/0-3-8  
Max Horz 2=110(LC 6)  
Max Uplift 7=199(LC 7), 2=292(LC 6)

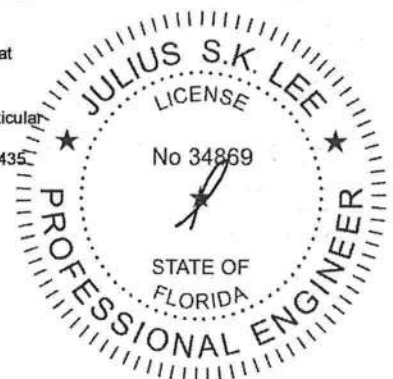
FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 2-3=1133/836, 3-4=862/655, 4-5=723/647, 5-6=867/664, 6-7=1139/873  
BOT CHORD 2-10=657/959, 9-10=368/725, 8-9=368/725, 7-8=703/981  
WEBS 3-10=274/331, 6-8=296/379

#### NOTES (9-10)

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-05; 110mph (3-second gust); TCDL=4.2psf; BCDL=3.0psf; h=16ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) All bearings are assumed to be SYP No.2.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 199 lb uplift at joint 7 and 292 lb uplift at joint 2.
- 8) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
- 9) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
- 10) Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869: Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

LOAD CASE(S) Standard



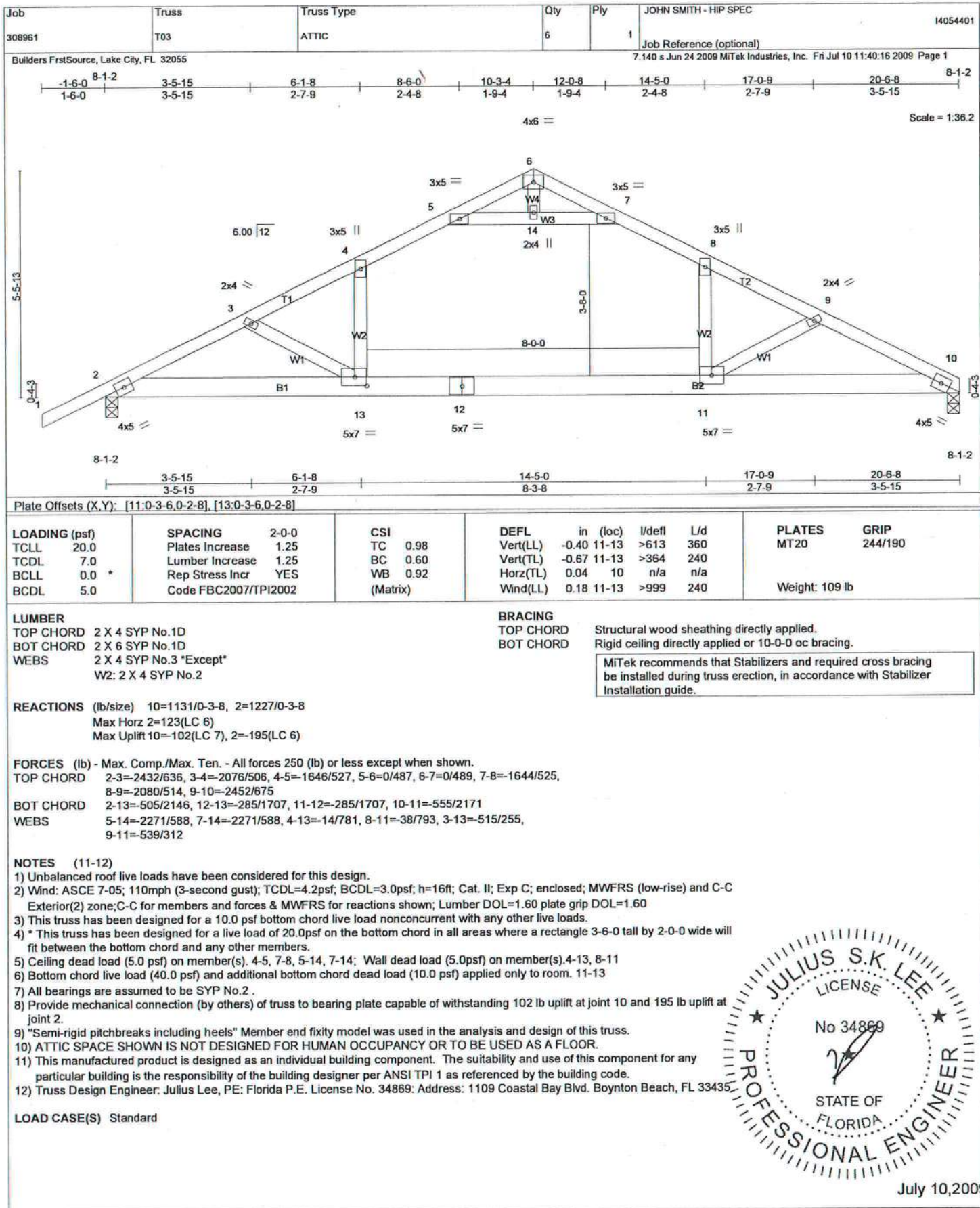
July 10, 2009

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

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

Julius Lee Engineering  
1109 Coastal Bay Blvd.  
Boynton, FL 33435





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Boynton, FL 33435

Job	Truss	Truss Type	Qty	Ply	JOHN SMITH - HIP SPEC	14054402
308961	T04	MONO HIP	1	1	Job Reference (optional)	

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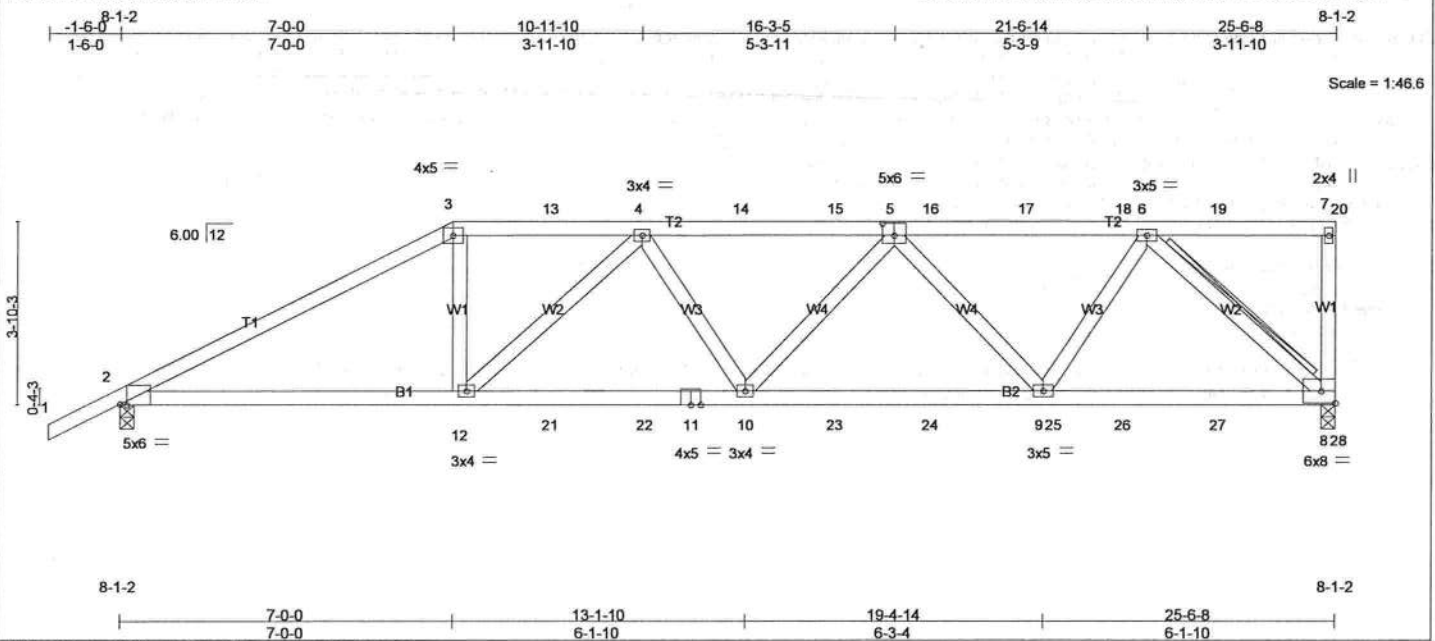


Plate Offsets (X,Y): [2-0-1-11, Edge], [5-0-3-0, 0-3-0]

LOADING (psf)	SPACING	CSI	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plates Increase 1.25	TC 0.64	Vert(LL)	-0.15 10-12	>999	360	MT20	244/190
TCDL 7.0	Lumber Increase 1.25	BC 0.71	Vert(TL)	-0.31 10-12	>964	240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.47	Horz(TL)	0.11 8	n/a	n/a		
BCDL 5.0	Code FBC2007/TPI2002	(Matrix)	Wind(LL)	0.18 10	>999	240		
							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 3-0-1 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 5-0-6 oc bracing.  
WEBS T-Brace: 2 X 4 SYP No.3 - 6-8  
Fasten T and I braces to narrow edge of web with 10d Common wire nails, 9in o.c., with 4in minimum end distance.  
Brace must cover 90% of web length.

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

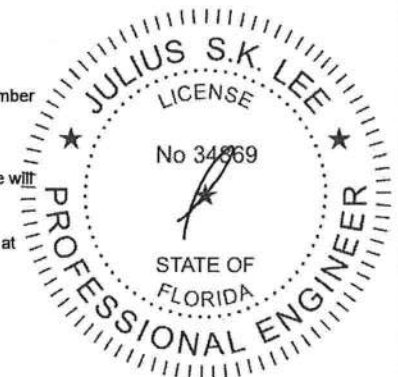
REACTIONS (lb/size) 8=1793/0-3-8, 2=1663/0-3-8  
Max Horz 2=184(LC 5)  
Max Uplift 8=845(LC 4), 2=847(LC 5)

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

TOP CHORD 2-3=3062/1490, 3-13=2675/1373, 4-13=2675/1373, 4-14=3135/1503, 14-15=3135/1503, 5-15=3135/1503, 5-16=2241/1033, 16-17=2241/1033, 17-18=2241/1033, 6-18=2241/1033  
BOT CHORD 2-12=1362/2642, 12-21=1591/3161, 21-22=1591/3161, 11-22=1591/3161, 10-11=1591/3161, 10-23=1448/2951, 23-24=1448/2951, 24-25=1448/2951, 9-25=1448/2951, 9-26=802/1641, 26-27=802/1641, 27-28=802/1641, 8-28=802/1641  
WEBS 3-12=295/812, 4-12=663/349, 5-10=104/359, 5-9=1074/627, 6-9=444/1152, 6-8=2213/1090

#### NOTES (11-12)

- 1) Wind: ASCE 7-05; 110mph (3-second gust); TCDL=4.2psf; BCDL=3.0psf; h=16ft; Cat. II; Exp C; enclosed; MWFRS (low-rise); Lumber DOL=1.60 plate grip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) All bearings are assumed to be SYP No.2.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 845 lb uplift at joint 8 and 847 lb uplift at joint 2.
- 7) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.



July 10, 2009

Continued on page 2

**WARNING** - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITek REFERENCE PAGE MII-T473 BEFORE USE.  
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Boynton, FL 33435



Job	Truss	Truss Type	Qty	Ply	JOHN SMITH - HIP SPEC	I4054402
308961	T04	MONO HIP	1	1	Job Reference (optional)	

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#### NOTES (11-12)

- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 233 lb down and 280 lb up at 7-0-0, 108 lb down and 101 lb up at 9-0-12, 108 lb down and 101 lb up at 11-0-12, 108 lb down and 101 lb up at 13-0-12, 108 lb down and 101 lb up at 15-0-12, 108 lb down and 101 lb up at 17-0-12, 108 lb down and 101 lb up at 19-0-12, 108 lb down and 101 lb up at 21-0-12, and 108 lb down and 101 lb up at 23-0-12, and 108 lb down and 101 lb up at 25-0-12 on top chord, and 275 lb down and 118 lb up at 7-0-0, 67 lb down at 9-0-12, 67 lb down at 11-0-12, 67 lb down at 13-0-12, 67 lb down at 15-0-12, 67 lb down at 17-0-12, 67 lb down at 19-0-12, 67 lb down at 21-0-12, and 67 lb down at 23-0-12, and 67 lb down at 25-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 9) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.
- 10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
- 11) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
- 12) Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869: Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

#### LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-3=54, 3-7=54, 2-8=10

Concentrated Loads (lb)

Vert: 3=233(F) 12=236(F) 4=108(F) 10=35(F) 13=108(F) 14=108(F) 15=108(F) 16=108(F) 17=108(F) 18=108(F) 19=108(F) 20=108(F) 21=35(F) 22=35(F) 23=35(F) 24=35(F) 25=35(F) 26=35(F) 27=35(F) 28=35(F)



July 10, 2009



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Julius Lee Engineering  
1109 Coastal Bay Blvd.  
Boynton, FL 33435



Job	Truss	Truss Type	Qty	Ply	JOHN SMITH - HIP SPEC	14054403
308961	T05	SPECIAL	1	1	Job Reference (optional)	

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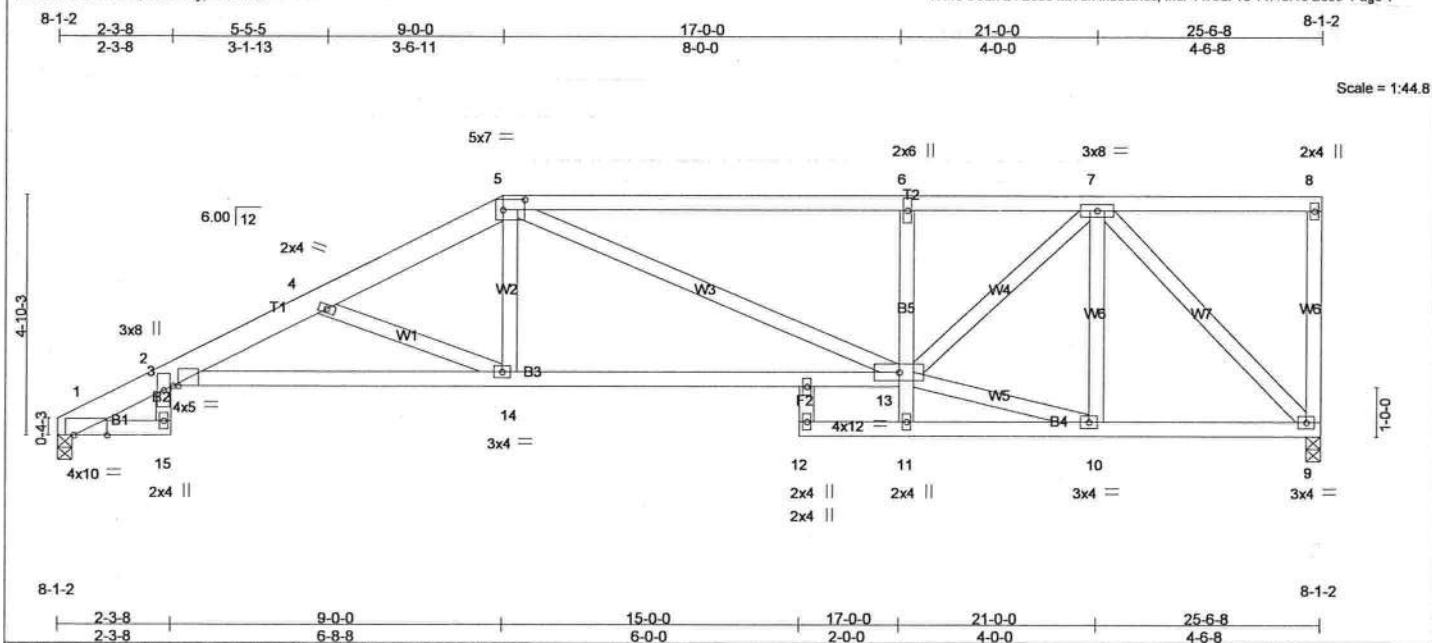


Plate Offsets (X,Y): [1:0-7-15,Edge], [3:0-1-4,0-0-0], [5:0-5-4,0-2-8]

LOADING (psf)	SPACING	2-0-0	CSI	DEFL	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plates Increase	1.25	TC 0.88	Vert(LL)	-0.17	3-14	>999	MT20	244/190
TCDL 7.0	Lumber Increase	1.25	BC 0.77	Vert(TL)	-0.36	3-14	>841		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.65	Horz(TL)	0.22	9	n/a		
BCDL 5.0	Code FBC2007/TPI2002		(Matrix)	Wind(LL)	0.30	3-14	>993		Weight: 155 lb

#### LUMBER

TOP CHORD 2 X 6 SYP No.1D \*Except\*  
T2: 2 X 4 SYP No.2  
BOT CHORD 2 X 4 SYP No.2 \*Except\*  
B2,B5: 2 X 4 SYP No.3  
WEBS 2 X 4 SYP No.3

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. Except:  
4-8-0 oc bracing: 3-14  
10-0-0 oc bracing: 11-13

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

REACTIONS (lb/size) 1=804/0-3-8, 9=811/0-3-8  
Max Horz 1=179(LC 6)  
Max Uplift 1=218(LC 5), 9=300(LC 5)

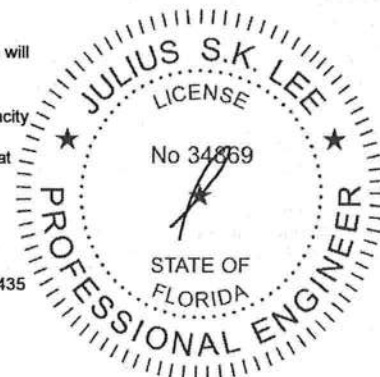
FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 1-2=660/273, 2-3=264/67, 3-4=2124/1578, 4-5=1559/1097, 5-6=1364/965, 6-7=1315/928  
BOT CHORD 1-15=226/251, 3-14=1741/2049, 13-14=1044/1362, 6-13=368/341, 9-10=464/661  
WEBS 4-14=752/756, 5-14=236/435, 10-13=384/618, 7-13=632/890, 7-9=938/658

#### NOTES (10-11)

- 1) Wind: ASCE 7-05; 110mph (3-second gust); TCDL=4.2psf; BCDL=3.0psf; h=16ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) All bearings are assumed to be SYP No.2.
- 6) Bearing at joint(s) 1 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 218 lb uplift at joint 1 and 300 lb uplift at joint 9.
- 8) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
- 9) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
- 10) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
- 11) Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869: Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

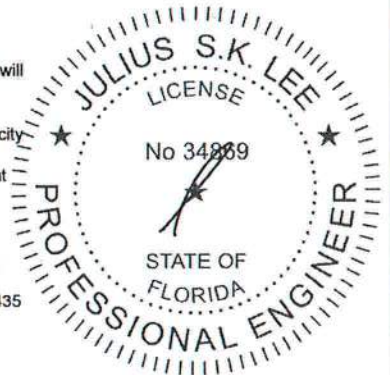
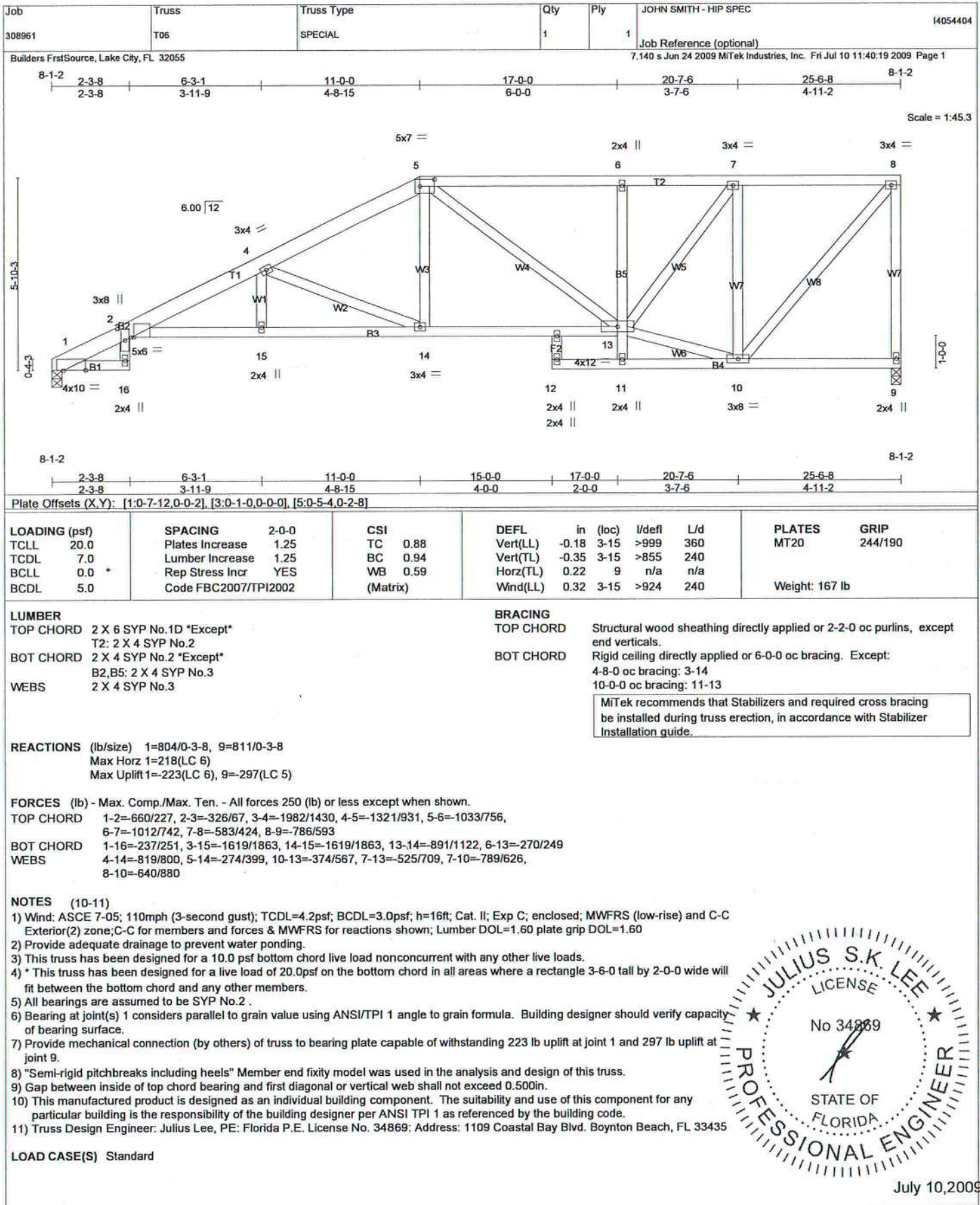
LOAD CASE(S) Standard



July 10,2009

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

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

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 Boynton, FL 33435

Job 308961	Truss T07	Truss Type SPECIAL	Qty 1	Ply 1	JOHN SMITH - HIP SPEC	14054405
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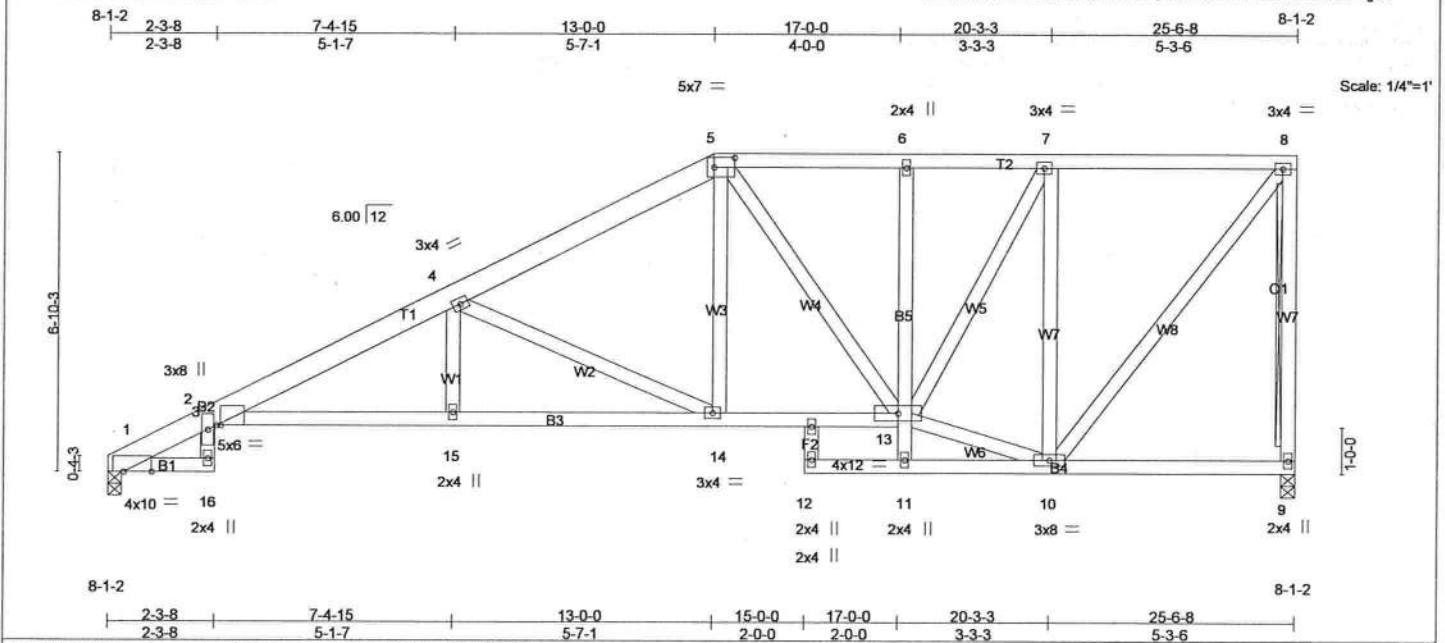


Plate Offsets (X,Y): [1:0-7.5,Edge], [3:0-1-0,0-0-0], [5:0-5-4,0-2-8]							
LOADING (psf)	SPACING	2-0-0	CSI	DEFL	in (loc)	I/defl	L/d
TCLL 20.0	Plates Increase	1.25	TC 0.88	Vert(LL)	-0.21	3-15	>999
TCDL 7.0	Lumber Increase	1.25	BC 0.96	Vert(TL)	-0.41	3-15	>730
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.76	Horz(TL)	0.24	9	n/a
BCDL 5.0	Code FBC2007/TPI2002		(Matrix)	Wind(LL)	0.39	3-15	>770
				Weight: 178 lb		PLATES	GRIP
						MT20	244/190

LUMBER	BRACING
TOP CHORD 2 X 6 SYP No.1D *Except*	TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
T2: 2 X 4 SYP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
BOT CHORD 2 X 4 SYP No.2 *Except*	6-0-0 oc bracing: 10-11.
B2,B5: 2 X 4 SYP No.3	4-10-0 oc bracing: 3-13
WEBS 2 X 4 SYP No.3	10-0-0 oc bracing: 11-13
	WEBS T-Brace: 2 X 4 SYP No.3 - 8-9
	Fasten T and I braces to narrow edge of web with 10d Common wire nails, 9in o.c., with 4in minimum end distance.
	Brace must cover 90% of web length.
	MITek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

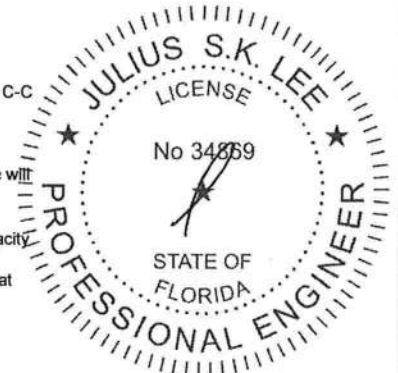
REACTIONS (lb/size) 1=804/0-3-8, 9=811/0-3-8  
Max Horz 1=258(LC 6)  
Max Uplift 1=229(LC 6), 9=294(LC 5)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=660/179, 2-3=387/67, 3-4=1822/1277, 4-5=1130/783, 5-6=827/633,  
6-7=818/628, 7-8=525/398, 8-9=785/614  
BOT CHORD 1-16=247/251, 3-15=1511/1687, 14-15=1511/1687, 13-14=762/932  
WEBS 4-14=844/834, 5-14=313/402, 10-13=368/520, 7-13=470/598, 7-10=782/651,  
8-10=637/840

#### NOTES (11-12)

- 1) Wind: ASCE 7-05; 110mph (3-second gust); TCDL=4.2psf; BCDL=3.0psf; h=16ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) All bearings are assumed to be SYP No.2.
- 6) Bearing at joint(s) 1 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 229 lb uplift at joint 1 and 294 lb uplift at joint 9.
- 8) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
- 9) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
- 10) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

Continued on page 2



July 10, 2009

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Julius Lee Engineering  
1109 Coastal Bay Blvd.  
Boynton, FL 33435



Job	Truss	Truss Type	Qty	Ply	JOHN SMITH - HIP SPEC	14054405
308961	T07	SPECIAL	1	1	Job Reference (optional)	

Builders FrstSource, Lake City, FL 32055

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

LOAD CASE(S) Standard



July 10, 2009

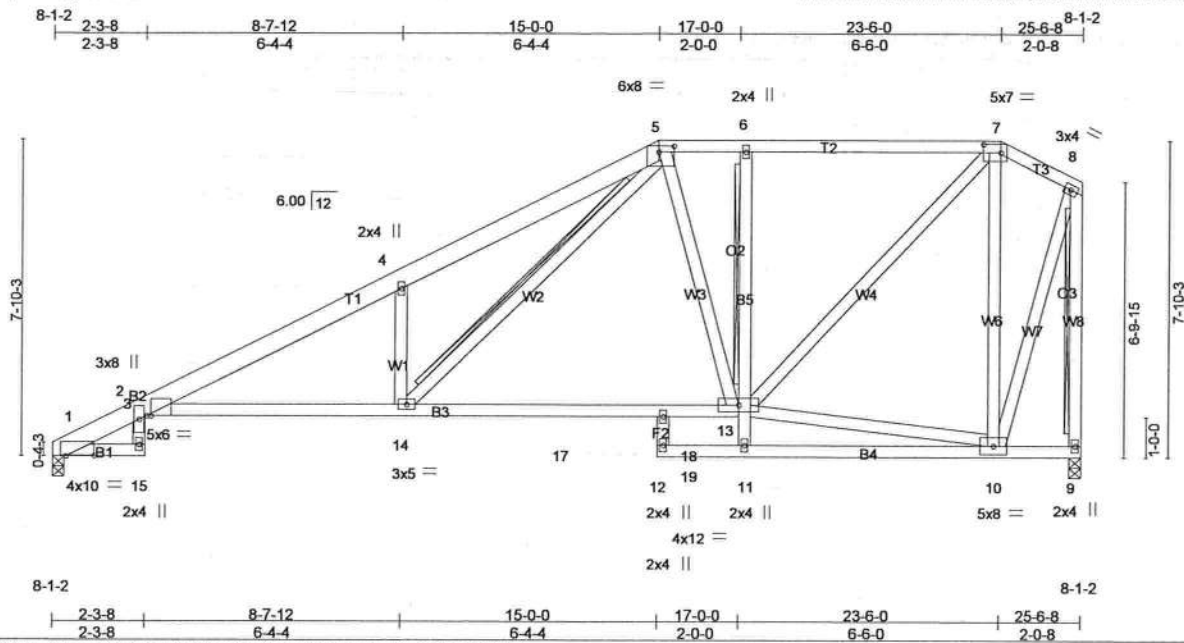
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Job	Truss	Truss Type	Qty	Ply	JOHN SMITH - HIP SPEC	14054406
308961	T08	SPECIAL	1	1	Job Reference (optional)	

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Scale = 1:55.0

Plate Offsets (X,Y): [1:0-8,6,0-0-3], [3:0-1-4,0-0-0], [5:0-4-8,0-1-12], [7:0-5-4,0-2-8]

LOADING (psf)	SPACING	CSI	DEFL	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plates Increase 1.25	TC 0.96	Vert(LL) -0.30	13-14	>988	360	MT20	244/190
TCDL 7.0	Lumber Increase 1.25	BC 0.83	Vert(TL) -0.52	13-14	>579	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.83	Horz(TL) 0.28	9	n/a	n/a		
BCDL 5.0	Code FBC2007/TPI2002	(Matrix)	Wind(LL) 0.48	3-14	>627	240		
							Weight: 188 lb	

#### LUMBER

TOP CHORD 2 X 4 SYP No.2 \*Except\*  
T1: 2 X 6 SYP No.1D  
BOT CHORD 2 X 4 SYP No.2 \*Except\*  
B2,B5: 2 X 4 SYP No.3  
WEBS 2 X 4 SYP No.3 \*Except\*  
W8: 2 X 4 SYP No.2

#### BRACING

TOP CHORD  
BOT CHORD

Structural wood sheathing directly applied, except end verticals.  
Rigid ceiling directly applied or 10-0-0 oc bracing, Except:  
6-0-0 oc bracing: 10-11.

T-Brace: 2 X 4 SYP No.3 - 6-13  
5-0-0 oc bracing: 3-13  
10-0-0 oc bracing: 11-13  
2 X 4 SYP No.3 - 8-9, 5-14

#### WEBS

Fasten T and I braces to narrow edge of web with 10d Common wire nails, 9in o.c., with 4in minimum end distance.  
Brace must cover 90% of web length.

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

REACTIONS (lb/size) 1=873/0-3-8, 9=898/0-3-8  
Max Horz 1=273(LC 6)  
Max Uplift 1=238(LC 6), 9=238(LC 5)

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

TOP CHORD 1-2=-718/181, 2-3=-390/73, 3-4=-1898/1149, 4-5=-2057/1528, 5-6=-849/609,  
6-7=-849/616, 7-8=-272/197, 8-9=-887/608

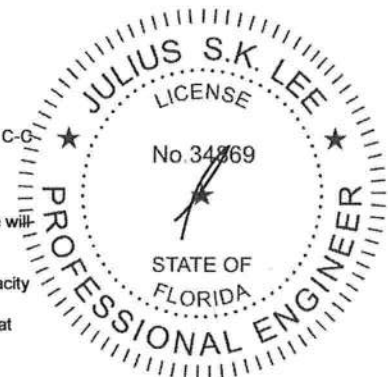
BOT CHORD 1-15=-249/274, 3-14=-1363/1732, 14-17=-615/879, 17-18=-615/879, 13-18=-615/879,  
6-13=-311/268

WEBS 4-14=-689/780, 10-13=-122/326, 7-13=-589/903, 7-10=-770/558, 8-10=-519/786,  
5-14=-1070/1221

#### NOTES (12-13)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-05; 110mph (3-second gust); TCDL=4.2psf; BCDL=3.0psf; h=16ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 5.0psf.
- All bearings are assumed to be SYP No.2.
- Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 238 lb uplift at joint 1 and 238 lb uplift at joint 9.
- "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
- Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.

11) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



July 10, 2009

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Boynton, FL 33435

Job	Truss	Truss Type	Qty	Ply	JOHN SMITH - HIP SPEC	14054406
308961	T08	SPECIAL	1	1	Job Reference (optional)	

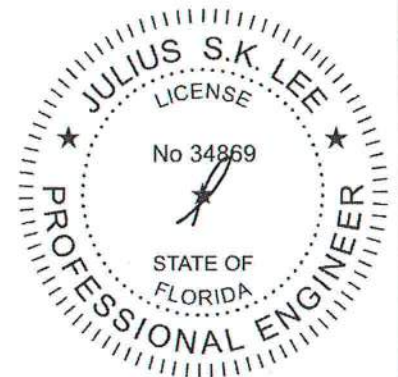
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12) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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

LOAD CASE(S) Standard



July 10, 2009



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Job	Truss	Truss Type	Qty	Ply	JOHN SMITH - HIP SPEC	14054407
308961	T09	SPECIAL	1	1	Job Reference (optional)	

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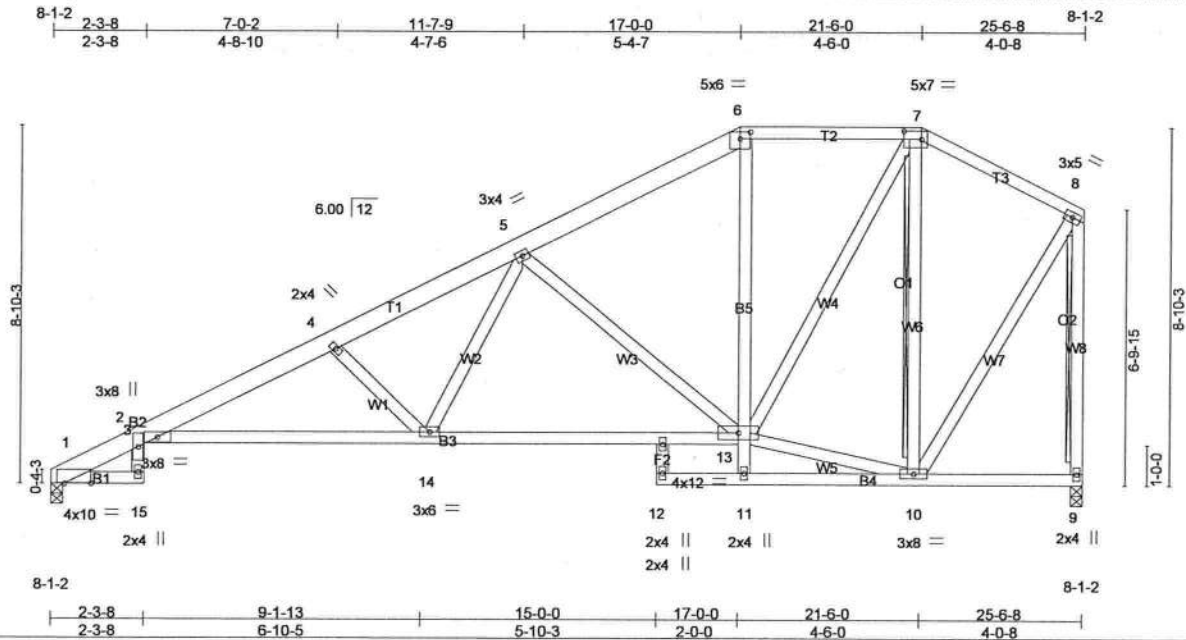


Plate Offsets (X,Y): [1:0-7-14,0-0-2], [6:0-3-0,0-2-0], [7:0-5-4,0-2-8]

LOADING (psf)	SPACING	CSI	DEFL	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.88	Vert(LL)	-0.20	3-14	>999	MT20	244/190
TCDL 7.0	Plates Increase 1.25	BC 0.77	Vert(TL)	-0.41	3-14	>724		
BCLL 0.0	Lumber Increase 1.25	WB 0.60	Horz(TL)	0.23	9	n/a		
BCDL 5.0	Rep Stress Incr YES	(Matrix)	Wind(LL)	0.38	3-14	>790		
	Code FBC2007/TPI2002						Weight: 186 lb	

#### LUMBER

TOP CHORD 2 X 4 SYP No.2 \*Except\*  
T1: 2 X 6 SYP No.1D  
BOT CHORD 2 X 4 SYP No.2 \*Except\*  
B2,B5: 2 X 4 SYP No.3  
WEBS 2 X 4 SYP No.3 \*Except\*  
W8: 2 X 4 SYP No.2

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:  
6-0-0 oc bracing: 10-11.  
4-9-0 oc bracing: 3-13  
10-0-0 oc bracing: 11-13  
WEBS T-Brace: 2 X 4 SYP No.3 - 7-10, 8-9  
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) 1=804/0-3-8, 9=811/0-3-8  
Max Horz 1=287(LC 6)  
Max Uplift 1=245(LC 6), 9=245(LC 6)

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

TOP CHORD 1-2=660/184, 2-3=390/67, 3-4=1864/1360, 4-5=1557/1167, 5-6=752/577,  
6-7=612/587, 7-8=412/344, 8-9=791/638

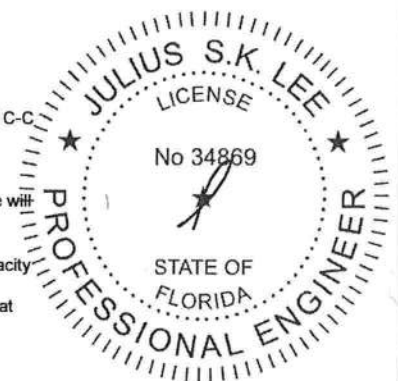
BOT CHORD 1-15=250/251, 3-14=1612/1749, 13-14=932/1060

WEBS 4-14=599/653, 5-14=473/583, 5-13=590/612, 10-13=195/325, 7-13=462/593,  
7-10=565/465, 8-10=455/620

#### NOTES (12-13)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-05; 110mph (3-second gust); TCDL=4.2psf; BCDL=3.0psf; h=16ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SYP No.2.
- Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 245 lb uplift at joint 1 and 245 lb uplift at joint 9.
- "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
- Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
- Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

Continued on page 2



July 10, 2009

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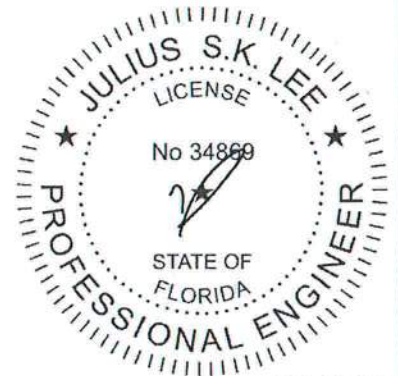
Job 308961	Truss T09	Truss Type SPECIAL	Qty 1	Ply 1	JOHN SMITH - HIP SPEC Job Reference (optional)	14054407
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- 12) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
- 13) Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869; Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

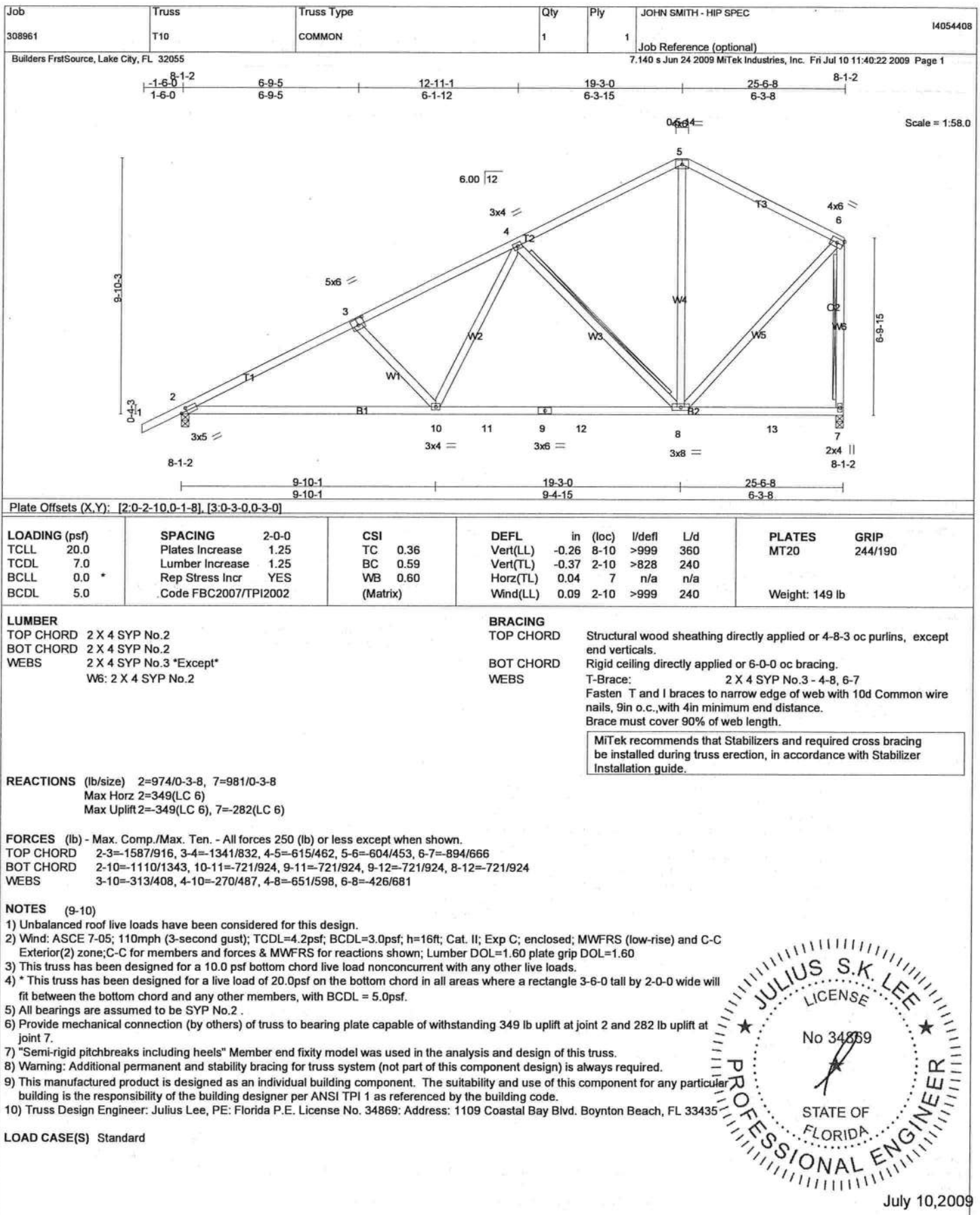
LOAD CASE(S) Standard



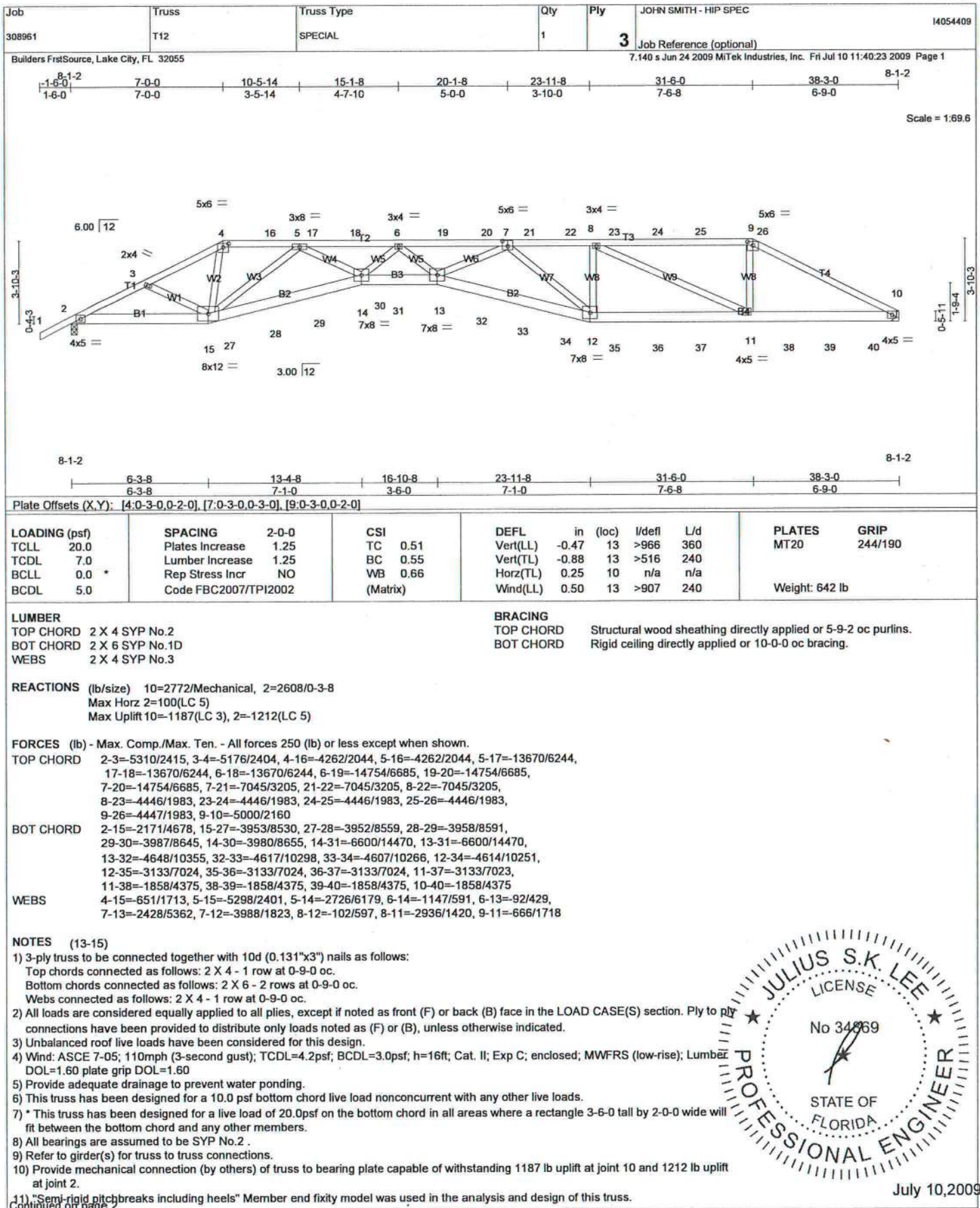
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 Boynton, FL 33435







Job	Truss	Truss Type	Qty	Ply	JOHN SMITH - HIP SPEC	14054409
308961	T12	SPECIAL	1	3	Job Reference (optional)	

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#### NOTES (13-15)

- 12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 375 lb down and 345 lb up at 7-0-0, 32 lb down and 48 lb up at 9-0-12, 28 lb down and 18 lb up at 11-0-12, 108 lb down and 102 lb up at 13-0-12, 108 lb down and 102 lb up at 15-0-12, 108 lb down and 102 lb up at 17-0-12, 29 lb down and 21 lb up at 19-0-12, 29 lb down and 46 lb up at 21-0-12, 103 lb down and 92 lb up at 23-0-12, 108 lb down and 101 lb up at 25-0-12, 108 lb down and 101 lb up at 27-0-12, and 108 lb down and 101 lb up at 29-0-12, and 108 lb down and 101 lb up at 31-0-12 on top chord, and 148 lb down at 7-0-0, 110 lb down and 50 lb up at 9-0-12, 208 lb down and 119 lb up at 11-0-12, 66 lb down at 13-0-12, 66 lb down at 15-0-12, 66 lb down at 16-10-8, 221 lb down and 129 lb up at 19-0-12, 114 lb down and 52 lb up at 21-0-12, 58 lb down at 23-0-12, 67 lb down at 25-0-12, 67 lb down at 27-0-12, 67 lb down at 29-0-12, 67 lb down at 31-0-12, 194 lb down and 96 lb up at 33-0-12, and 194 lb down and 96 lb up at 35-0-12, and 194 lb down and 96 lb up at 37-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 13) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
- 14) Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869: Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435
- 15) Use Simpson HGUS28-3 to attach Truss to Carrying member

#### LOAD CASE(S) Standard

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

##### Uniform Loads (plf)

Vert: 1-4=-54, 4-9=-54, 9-10=-54, 2-15=-10, 14-15=-10, 13-14=-10, 12-13=-10, 10-12=-10

##### Concentrated Loads (lb)

Vert: 4=-375(B) 13=-34(B) 6=-108(B) 11=-35(B) 16=-32(B) 17=18(B) 18=-108(B) 19=-108(B) 20=21(B) 21=-29(B) 22=-103(B) 23=-108(B) 24=-108(B) 25=-108(B) 26=-108(B) 27=-93(B) 28=-110(B) 29=-208(B) 30=-34(B) 31=-34(B) 32=-221(B) 33=-114(B) 34=-40(B) 35=-35(B) 36=-35(B) 37=-35(B) 38=-194(B) 39=-194(B) 40=-194(B)



July 10, 2009

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Julius Lee Engineering  
 1109 Coastal Bay Blvd.  
 Boynton, FL 33435



Job 308961	Truss T13	Truss Type SPECIAL	Qty 1	Ply 1	JOHN SMITH - HIP SPEC Job Reference (optional) 7.140 s Jun 24 2009 MiTek Industries, Inc. Fri Jul 10 11:40:24 2009 Page 1	14054410
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Scale = 1:69.6

Plate Offsets (X,Y): [4:0-8-0,0-2-8], [6:0-3-0,0-3-0], [8:0-3-0,0-2-0]									
LOADING (psf)	SPACING	2-0-0	CSI	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plates Increase	1.25	TC 0.69	Vert(LL)	-0.41 13	>999	360	MT20	244/190
TCDL 7.0	Lumber Increase	1.25	BC 0.42	Vert(TL)	-0.79 12-13	>577	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.90	Horz(TL)	0.25 10	n/a	n/a		
BCDL 5.0	Code FBC2007/TPI2002		(Matrix)	Wind(LL)	0.59 13	>768	240		
								Weight: 225 lb	

**LUMBER**

TOP CHORD 2 X 4 SYP No.2

BOT CHORD 2 X 6 SYP No.1D

WEBS 2 X 4 SYP No.3

**BRACING**

TOP CHORD Structural wood sheathing directly applied or 2-3-12 oc purlins.

BOT CHORD Rigid ceiling directly applied or 5-7-6 oc bracing.

WEBS T-Brace: 2 X 4 SYP No.3 - 4-13

Fasten T and I braces to narrow edge of web with 10d Common wire nails, 9in o.c., with 4in minimum end distance.

Brace must cover 90% of web length.

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

**REACTIONS** (lb/size) 10=1213/Mechanical, 2=1305/0-3-8  
 Max Horz 2=114(LC 6)  
 Max Uplift 10=358(LC 4), 2=400(LC 6)

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

TOP CHORD 2-3=2355/1615, 3-4=2519/1806, 4-5=4851/3355, 5-6=4851/3355, 6-7=2439/1828, 7-8=1844/1415, 8-9=2095/1501, 9-10=2322/1676

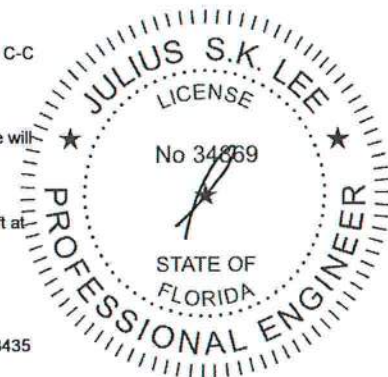
BOT CHORD 2-15=1331/2034, 14-15=1362/2085, 13-14=1404/2280, 12-13=2212/3425, 11-12=1545/2432, 10-11=1408/2005

WEBS 3-15=485/374, 3-14=138/374, 4-13=1824/2810, 5-13=297/280, 6-13=1034/1698, 6-12=1299/879, 7-12=92/256, 7-11=838/538, 8-11=428/658, 9-11=206/316

**NOTES** (11-13)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-05; 110mph (3-second gust); TCDL=4.2psf; BCDL=3.0psf; h=16ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SYP No.2.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 358 lb uplift at joint 10 and 400 lb uplift at joint 2.
- "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
- Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.
- This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
- Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869; Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435
- Use Simpson HTU26 to attach Truss to Carrying member



July 10, 2009

LOAD CASE(S) Standard

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

Julius Lee Engineering  
 1109 Coastal Bay Blvd.  
 Boynton, FL 33435



Job	Truss	Truss Type	Qty	Ply	JOHN SMITH - HIP SPEC	14054411
308951	T14	SPECIAL	1	1	Job Reference (optional)	

Builders FrstSource, Lake City, FL 32055

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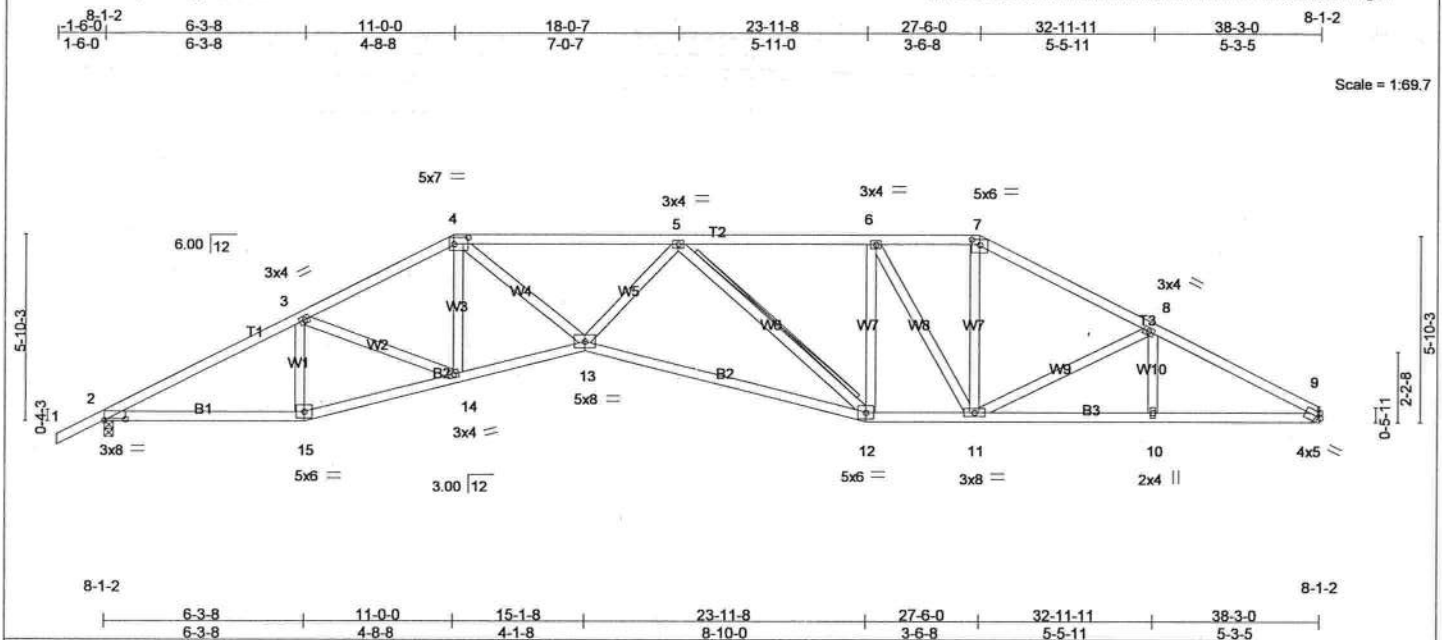


Plate Offsets (X,Y): [2-0-8-0-0-0-6], [4-0-5-4-0-2-8], [7-0-3-0-0-2-0], [9-0-0-15-0-1-12]											
LOADING (psf)		SPACING 2-0-0		CSI	DEFL in (loc)		l/defl	L/d	PLATES	GRIP	
TCLL	20.0	Plates Increase 1.25		TC	0.56	Vert(LL)	-0.32 12-13	>999	360	MT20	244/190
TCDL	7.0	Lumber Increase 1.25		BC	0.63	Vert(TL)	-0.69 12-13	>663	240		
BCLL	0.0 *	Rep Stress Incr YES		WB	0.50	Horz(TL)	0.22 9	n/a	n/a		
BCDL	5.0	Code FBC2007/TPI2002		(Matrix)		Wind(LL)	0.38 13	>999	240	Weight: 202 lb	

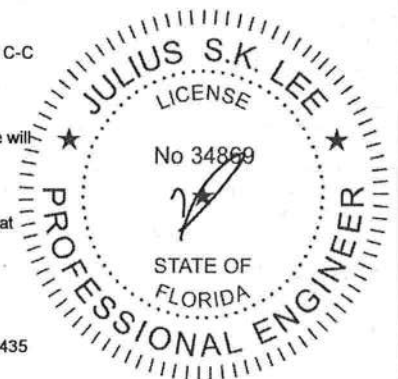
LUMBER	BRACING	
TOP CHORD 2 X 4 SYP No.2	TOP CHORD	Structural wood sheathing directly applied or 2-11-10 oc purlins.
BOT CHORD 2 X 4 SYP No.2	BOT CHORD	Rigid ceiling directly applied or 4-7-8 oc bracing.
WEBS 2 X 4 SYP No.3	WEBS	T-Brace: 2 X 4 SYP No.3 - 5-12
		Fasten T and I braces to narrow edge of web with 10d Common wire nails, 9in o.c., with 4in minimum end distance.
		Brace must cover 90% of web length.
		MITek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS (lb/size) 9=1213/Mechanical, 2=1305/0-3-8  
Max Horz 2=125(LC 6)  
Max Uplift 9=-326(LC 7), 2=-419(LC 6)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-2325/1619, 3-4=-2492/1779, 4-5=-3243/2306, 5-6=-1957/1541, 6-7=-1695/1370, 7-8=-1951/1446, 8-9=-2293/1629  
BOT CHORD 2-15=-1329/2001, 14-15=-1357/2047, 13-14=-1345/2240, 12-13=-1848/2949, 11-12=-1192/1952, 10-11=-1346/1976, 9-10=-1346/1976  
WEBS 3-15=-434/359, 3-14=-117/340, 4-13=-844/1383, 5-13=-262/597, 5-12=-1226/813, 6-12=-70/253, 6-11=-592/334, 7-11=-435/628, 8-11=-340/374

- NOTES (11-13)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-05; 110mph (3-second gust); TCCL=4.2psf; BCDL=3.0psf; h=16ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - All bearings are assumed to be SYP No.2.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 326 lb uplift at joint 9 and 419 lb uplift at joint 2.
  - "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
  - Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.
  - This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
  - Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869: Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435
  - Use Simpson HTU26 to attach Truss to Carrying member

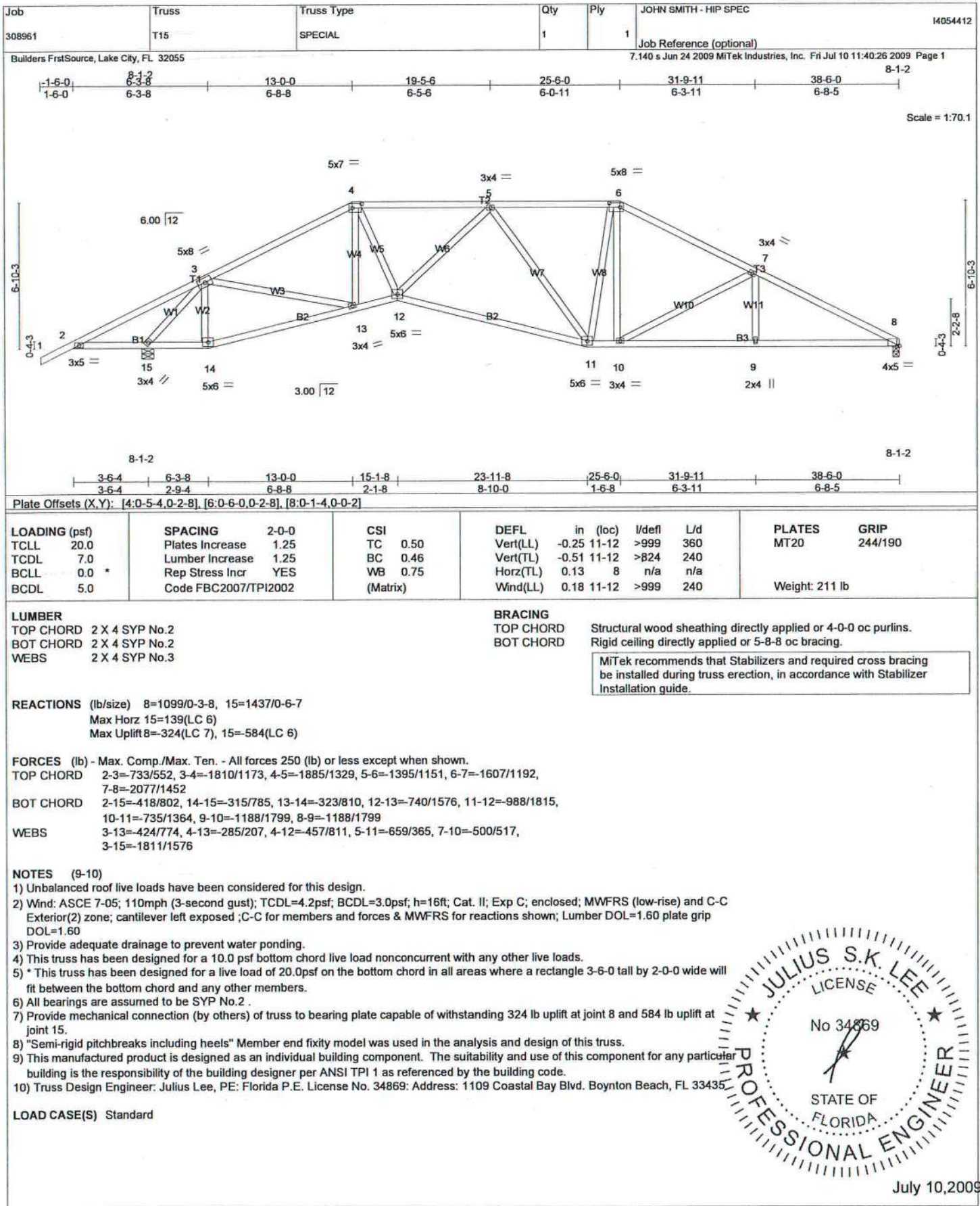
LOAD CASE(S) Standard



July 10, 2009

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Boynton, FL 33435



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Julius Lee Engineering  
1109 Coastal Bay Blvd.  
Boynton, FL 33435

Job	Truss	Truss Type	Qty	Ply	JOHN SMITH - HIP SPEC	14054413
308961	T16	SPECIAL	1	1	Job Reference (optional)	

Builders FrstSource, Lake City, FL 32055

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1-6-0	6-3-8	8-1-2	9-11-0	15-0-0	19-3-0	23-6-0	31-1-8	38-6-0	8-1-2	40-0-0
1-6-0	6-3-8	3-7-8	5-1-0	4-3-0	4-3-0	7-7-8	7-4-8	7-4-8	1-6-0	

Scale = 1:70.5

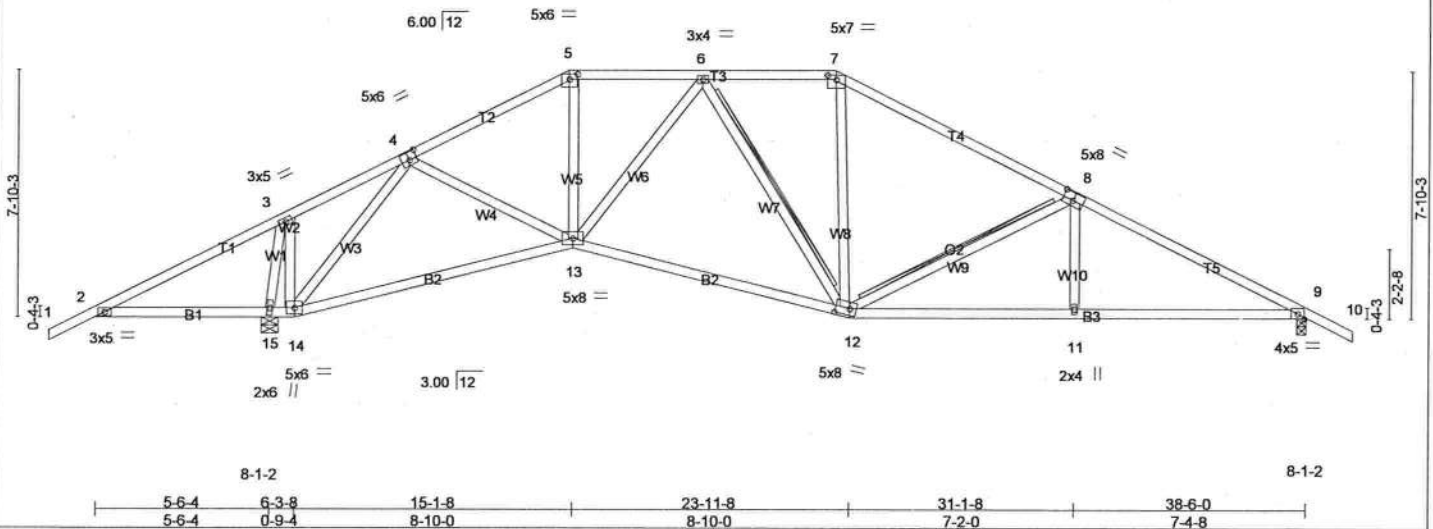


Plate Offsets (X,Y): [4:0-3-0,0-3-0], [5:0-3-0,0-2-0], [7:0-3-8,0-1-12], [8:0-4-0,0-3-0], [12:0-5-8,0-2-8]

LOADING (psf)	SPACING	2-0-0	CSI	DEFL	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plates Increase	1.25	TC 0.56	Vert(LL)	-0.21 12-13	>999	360	MT20	244/190
TCDL 7.0	Lumber Increase	1.25	BC 0.41	Vert(TL)	-0.41 12-13	>952	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.97	Horz(TL)	0.09 9	n/a	n/a		
BCDL 5.0	Code FBC2007/TPI2002		(Matrix)	Wind(LL)	0.12 11-12	>999	240		
								Weight: 209 lb	

#### LUMBER

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

#### BRACING

TOP CHORD  
BOT CHORD  
WEBS

Structural wood sheathing directly applied or 4-3-4 oc purlins.  
Rigid ceiling directly applied or 6-0-0 oc bracing.  
T-Brace: 2 X 4 SYP No.3 - 6-12, 8-12  
Fasten T and I braces to narrow edge of web with 10d Common wire nails, 9in o.c., with 4in minimum end distance.  
Brace must cover 90% of web length.

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

REACTIONS (lb/size) 9=1098/0-3-8, 15=1527/0-6-7  
Max Horz 15=142(LC 6)  
Max Uplift 9=411(LC 7), 15=707(LC 6)

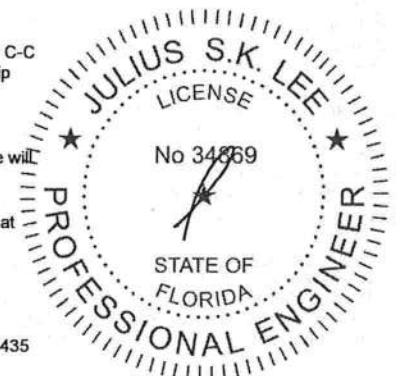
FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 2-3=840/598, 3-4=401/250, 4-5=1352/773, 5-6=1159/762, 6-7=1063/928,  
7-8=1308/941, 8-9=1858/1229  
BOT CHORD 2-15=466/901, 14-15=289/751, 13-14=188/696, 12-13=392/1228, 11-12=903/1583,  
9-11=903/1583  
WEBS 3-15=1397/1078, 3-14=586/941, 4-14=1403/1095, 4-13=289/550, 6-13=103/254,  
6-12=321/160, 7-12=110/303, 8-12=571/577, 5-13=98/373

#### NOTES (10-11)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-05; 110mph (3-second gust); TCDL=4.2psf; BCDL=3.0psf; h=16ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior (2) zone; cantilever left exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SYP No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 411 lb uplift at joint 9 and 707 lb uplift at joint 15.
- "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
- Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.
- This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
- Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869: Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

LOAD CASE(S) Standard



July 10, 2009

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Julius Lee Engineering  
1109 Coastal Bay Blvd.  
Boynton, FL 33435



Job 308961	Truss T17	Truss Type SPECIAL	Qty 1	Ply 1	JOHN SMITH - HIP SPEC Job Reference (optional)	14054414
Builders FirstSource, Lake City, FL 32055					7,140 s Jun 24 2009 Mitek Industries, Inc. Fri Jul 10 11:40:27 2009 Page 1	

Scale = 1:70.5

Plate Offsets (X,Y): [4:0-3-0,0-3-0], [5:0-3-0,0-2-0], [6:0-3-0,0-2-0], [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 0.40	Vert(LL)	-0.20 14-15	>999	360	MT20	244/190
TCDL 7.0	Lumber Increase	1.25	BC 0.40	Vert(TL)	-0.36 14-15	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.56	Horz(TL)	0.08 9	n/a	n/a		
BCDL 5.0	Code FBC2007/TPI2002		(Matrix)	Wind(LL)	0.11 11-12	>999	240		
								Weight: 219 lb	

<b>LUMBER</b> TOP CHORD 2 X 4 SYP No.2 BOT CHORD 2 X 4 SYP No.2 WEBS 2 X 4 SYP No.3	<b>BRACING</b> TOP CHORD BOT CHORD WEBS Structural wood sheathing directly applied or 4-6-5 oc purlins. Rigid ceiling directly applied or 6-0-0 oc bracing. T-Brace: 2 X 4 SYP No.3 - 4-15, 5-13 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.
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Mitek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

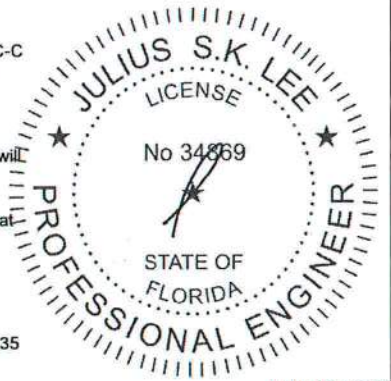
  

**REACTIONS** (lb/size) 15=1565/0-3-8, 9=1060/0-3-8  
 Max Horz 15=156(LC 6)  
 Max Uplift 15=765(LC 6), 9=414(LC 7)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=952/641, 3-4=763/630, 4-5=1141/615, 5-6=922/805, 6-7=1175/933,  
 7-8=1604/1143, 8-9=1793/1191  
 BOT CHORD 2-15=501/998, 14-15=136/613, 13-14=101/938, 12-13=212/955, 11-12=591/1243,  
 9-11=885/1532  
 WEBS 3-15=310/405, 4-15=1710/1355, 4-14=215/462, 5-14=27/262, 6-12=369/225,  
 7-12=476/515, 7-11=209/337, 8-11=237/307

**NOTES** (10-11)  
 1) Unbalanced roof live loads have been considered for this design.  
 2) Wind: ASCE 7-05; 110mph (3-second gust); TCDL=4.2psf; BCDL=3.0psf; h=16ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) zone; cantilever left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip  
 3) Provide adequate drainage to prevent water ponding.  
 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.  
 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.  
 6) All bearings are assumed to be SYP No.2.  
 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 765 lb uplift at joint 15 and 414 lb uplift at joint 9.  
 8) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.  
 9) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.  
 10) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.  
 11) Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869; Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

**LOAD CASE(S)** Standard



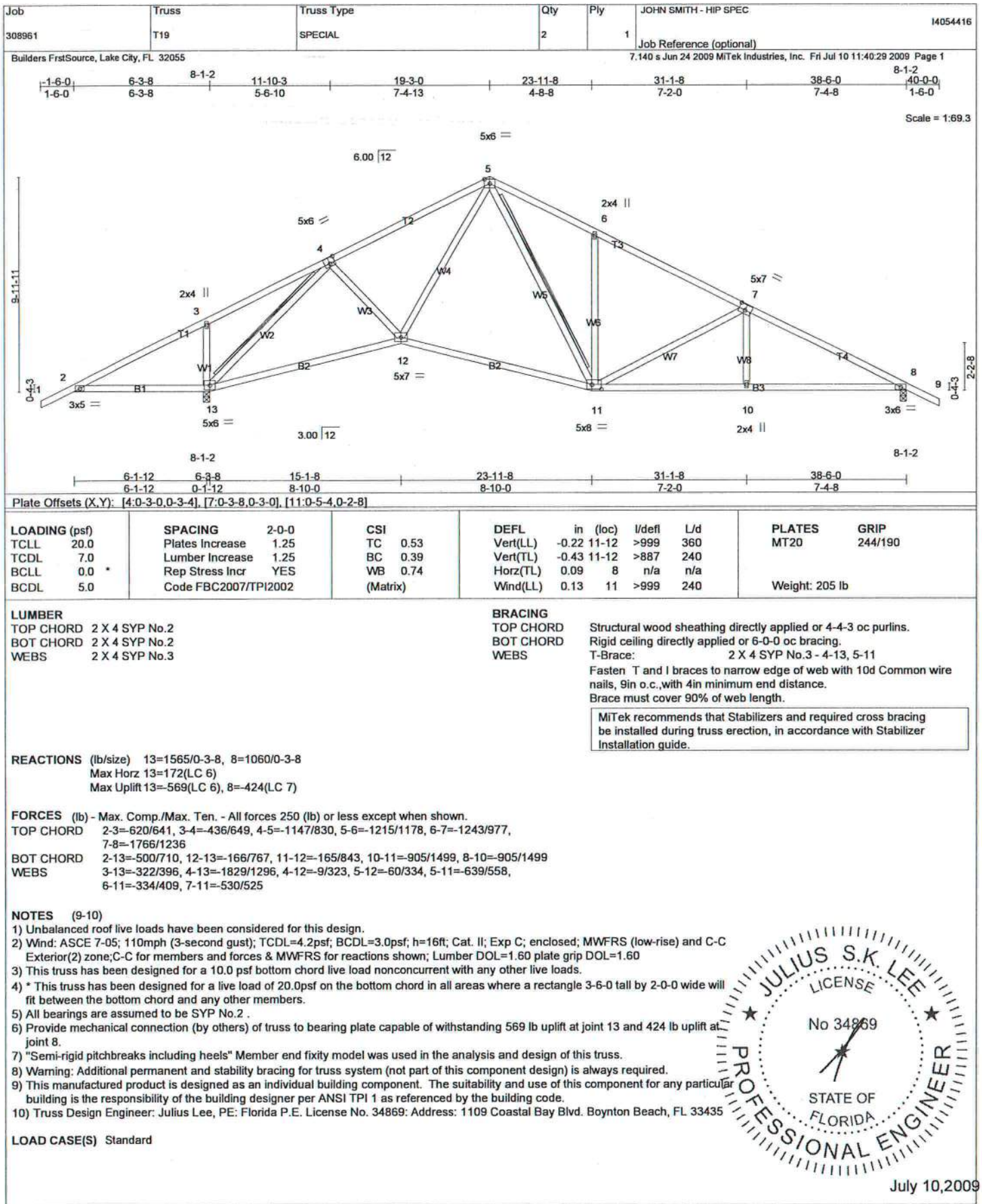
July 10, 2009

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

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Job	Truss	Truss Type	Qty	Ply	JOHN SMITH - HIP SPEC	14054417
308961	T20	SPECIAL	4	1	Job Reference (optional)	

Builders FrstSource, Lake City, FL 32055

7.140 s Jun 24 2009 Mitek Industries, Inc. Fri Jul 10 11:40:30 2009 Page 1

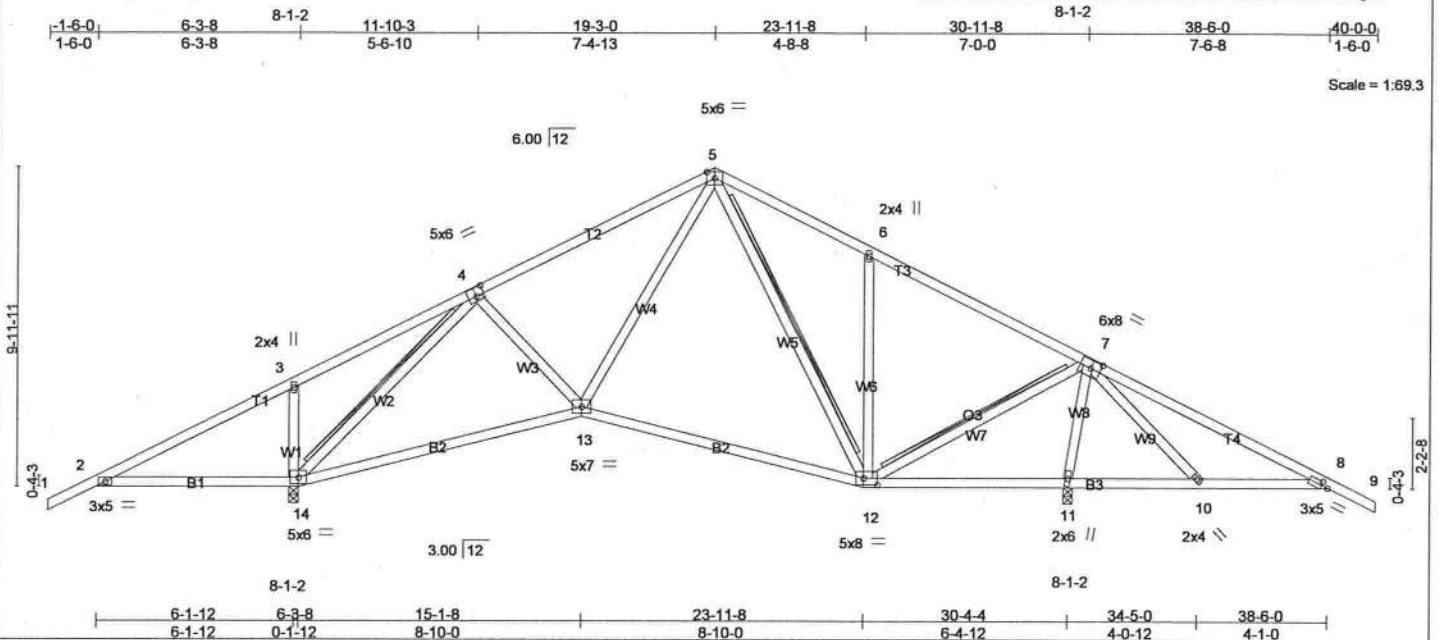


Plate Offsets (X,Y): [4:0-3-0,0-3-4], [7:0-3-12,0-3-0], [8:0-2-10,0-1-8], [12:0-5-4,0-2-8]

LOADING (psf)	SPACING	2-0-0	CSI	DEFL	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plates Increase	1.25	TC 0.53	Vert(LL)	-0.20 12-13	>999	360	MT20	244/190
TCDL 7.0	Lumber Increase	1.25	BC 0.40	Vert(TL)	-0.36 12-13	>803	240		
BCLL 0.0	Rep Stress Incr	YES	WB 0.49	Horz(TL)	0.03 11	n/a	n/a		
BCDL 5.0	Code FBC2007/TPI2002		(Matrix)	Wind(LL)	-0.05 13-14	>999	240		
								Weight: 213 lb	

<b>LUMBER</b>	<b>BRACING</b>
TOP CHORD 2 X 4 SYP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2 X 4 SYP No.2	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2 X 4 SYP No.3	T-Brace: 2 X 4 SYP No.3 - 4-14, 5-12, 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.
	Mitek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS** (lb/size) 14=1210/0-3-8, 11=1416/0-3-8  
Max Horz 14=172(LC 6)  
Max Uplift 14=718(LC 6), 11=854(LC 7)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=951/642, 3-4=758/650, 4-5=499/122, 6-7=269/120, 7-8=805/650  
BOT CHORD 2-14=501/998, 13-14=30/463, 12-13=0/466, 11-12=851/1440, 10-11=563/1117, 8-10=494/886  
WEBS 3-14=318/417, 4-14=1203/846, 5-13=47/283, 6-12=331/403, 7-12=1094/1142, 7-11=1393/1554, 7-10=341/173

- NOTES** (9-10)
- 1) Unbraced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-05; 110mph (3-second gust); TCCL=4.2psf; BCDL=3.0psf; h=16ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 5) All bearings are assumed to be SYP No.2
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 718 lb uplift at joint 14 and 854 lb uplift at joint 11.
  - 7) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
  - 8) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.
  - 9) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
  - 10) Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869: Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

**LOAD CASE(S)** Standard

July 10, 2009

Job 308961	Truss T21	Truss Type HIP	Qty 1	Ply 1	JOHN SMITH - HIP SPEC Job Reference (optional) 7,140 s Jun 24 2009 MITEK Industries, Inc. Fri Jul 10 11:40:31 2009 Page 1	I4054418
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Scale = 1:26.1

Plate Offsets (X,Y): [3-0-5-4-0-2-8]					
LOADING (psf)	SPACING	CSI	DEFL	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.20	in (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Plates Increase 1.25	BC 0.24	Vert(LL) -0.02 2-8 >999 360		
BCLL 0.0 *	Lumber Increase 1.25	WB 0.08	Vert(TL) -0.05 2-8 >999 240		
BCDL 5.0	Rep Stress Incr NO	(Matrix)	Horz(TL) 0.02 5 n/a n/a		
	Code FBC2007/TPI2002		Wind(LL) 0.03 7 >999 240	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

**REACTIONS** (lb/size) 2=713/0-3-8, 5=713/0-3-8

Max Horz 2=69(LC 5)

Max Uplift 2=482(LC 5), 5=482(LC 6)

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

TOP CHORD 2-3=1067/708, 3-9=893/654, 4-9=893/654, 4-5=1067/707

BOT CHORD 2-8=582/887, 8-10=579/893, 7-10=579/893, 5-7=573/888

WEBS 4-7=0/250

**NOTES** (11-12)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-05; 110mph (3-second gust); TCCL=4.2psf; BCDL=3.0psf; h=16ft; Cat. II; Exp C; enclosed; MWFRS (low-rise); Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SYP No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 482 lb uplift at joint 2 and 482 lb uplift at joint 5.
- "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 189 lb down and 250 lb up at 5-0-0 and 60 lb down and 112 lb up at 6-3-12, and 189 lb down and 250 lb up at 7-7-8 on top chord, and 113 lb down at 5-0-0, and 42 lb down at 6-3-12, and 113 lb down at 7-6-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
- This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
- Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869; Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

Vert: 1-3=-54, 3-4=-54, 4-6=-54, 2-5=-10

**BRACING**

TOP CHORD Structural wood sheathing directly applied or 5-11-2 oc purlins.

BOT CHORD Rigid ceiling directly applied or 8-3-12 oc bracing.

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

July 10, 2009

Job	Truss	Truss Type	Qty	Ply	JOHN SMITH - HIP SPEC	I4054418
308961	T21	HIP	1	1	Job Reference (optional)	

Builders FrstSource, Lake City, FL 32055

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# LOAD CASE(S) Standard

Concentrated Loads (lb)

Vert: 3=-149(B) 4=-149(B) 8=-43(B) 7=-43(B) 9=-60(B) 10=-14(B)



July 10, 2009

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 is for lateral support of individual web members only. Additional temporary bracing to insure stability during construction is the responsibility of the  
 erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding  
 fabrication, quality control, storage, delivery, erection and bracing, consult **ANSI/TPI1 Quality Criteria, DSB-89 and BCS11 Building Component**  
**Safety Information** available from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

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Job 308961	Truss T22	Truss Type COMMON	Qty 1	Ply 2	JOHN SMITH - HIP SPEC	14054419
					Job Reference (optional)	
Builders FrstSource, Lake City, FL 32055					7.140 s Jun 24 2009 MiTek Industries, Inc. Fri Jul 10 11:40:32 2009 Page 1	

Scale = 1:23.3

Plate Offsets (X,Y): [2-0-4-0-0-1-15], [6-0-4-0-0-1-15]							
LOADING (psf)	SPACING	2-0-0	CSI	DEFL	in (loc)	l/defl	L/d
TCLL 20.0	Plates Increase	1.25	TC 0.22	Vert(LL)	-0.06	7-8	>999
TCDL 7.0	Lumber Increase	1.25	BC 0.57	Vert(TL)	-0.11	7-8	>999
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.60	Horz(TL)	0.02	6	n/a
BCDL 5.0	Code FBC2007/TPI2002		(Matrix)	Wind(LL)	0.06	7-8	>999
						PLATES MT20	
						GRIP 244/190	
						Weight: 157 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

**REACTIONS** (lb/size) 6=3913/0-3-8, 2=2133/0-3-8

Max Horz 2=98(LC 5)

Max Uplift 6=1367(LC 6), 2=870(LC 5)

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

TOP CHORD 2-3=3987/1483, 3-4=4420/1722, 4-5=4414/1710, 5-6=6794/2478

BOT CHORD 2-9=1321/3543, 8-9=1321/3543, 8-10=2191/6076, 7-10=2191/6076, 7-11=2191/6076, 6-11=2191/6076

WEBS 4-8=1448/3723, 5-8=2460/862, 5-7=662/2079, 3-8=259/556, 3-9=588/284

**NOTES** (11-12)

- 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 0-4-0 oc.  
Webs connected as follows: 2 X 4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-05; 110mph (3-second gust); TCDL=4.2psf; BCDL=3.0psf; h=16ft; Cat. II; Exp C; enclosed; MWFRS (low-rise); Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SYP No.2 .
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1367 lb uplift at joint 6 and 870 lb uplift at joint 2.
- "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 2762 lb down and 1193 lb up at 7-2-4, and 1203 lb down and 364 lb up at 9-0-12, and 1203 lb down and 332 lb up at 11-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.
- Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869: Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

**BRACING**

TOP CHORD Structural wood sheathing directly applied or 5-0-8 oc purlins.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

July 10, 2009

LOAD CASE(S) Standard

Continued on page 2



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Boynton, FL 33435

Job	Truss	Truss Type	Qty	Ply	JOHN SMITH - HIP SPEC	I4054419
308961	T22	COMMON	1	2	Job Reference (optional)	

Builders FrstSource, Lake City, FL 32055

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#### LOAD CASE(S) Standard

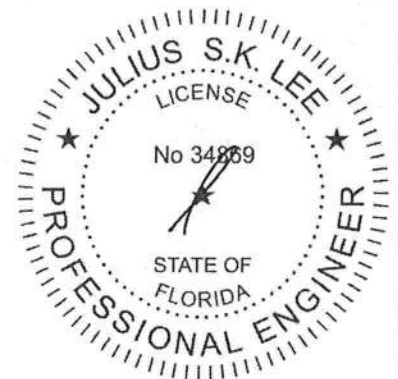
1) Regular: Lumber Increase=1.25, Plate Increase=1.25

Uniform Loads (plf)

Vert: 1-4=-54, 4-6=-54, 2-6=-10

Concentrated Loads (lb)

Vert: 7=-1203(F) 10=-2762(F) 11=-1203(F)



July 10, 2009

#### **WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-T473 BEFORE USE.**

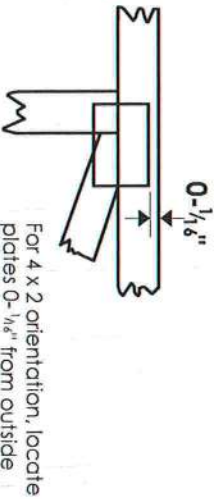
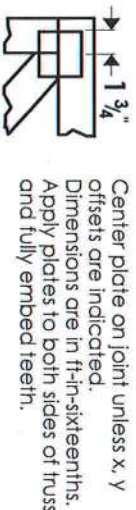
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# Symbols

## PLATE LOCATION AND ORIENTATION



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

## PLATE SIZE

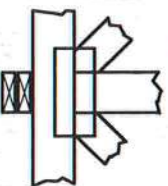
4 X 4

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

## LATERAL BRACING LOCATION



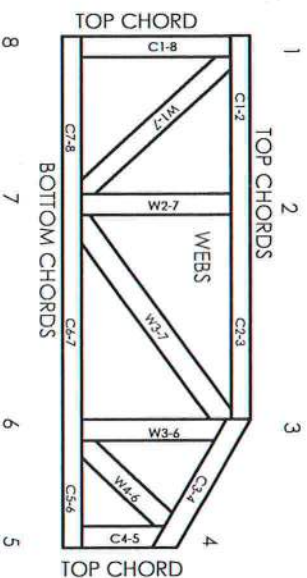
## BEARING



## Industry Standards:

ANSI/TP11: National Design Specification for Metal Plate Connected Wood Truss Construction.  
DSB-89: Design Standard for Bracing.  
BCS11: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

# Numbering System



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

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

## PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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# General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g., diagonal or X-bracing, is always required. See BCS11.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative T, I, or Eliminator bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wave of joint locations are regulated by ANSI/TP11.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP11.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft, spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TP11 Quality Criteria.

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Boynton, FL 33435



TOP	CHORD	2X4	SO.	PINE	#2	or	Better
BOT	CHORD	2X4	SO.	PINE	#2	or	Better
	WEBS	2X4	SO.	PINE	#3	or	Better

120 MPH MAX

### Setback 7' or Less

2' TYP.  
MAX

#2 HIP OR COMMON TRUSS	#1 HIP TRUSS
------------------------	--------------

## #1 HIP TRUSS

PROVIDE UPLIFT CONNECTIONS AT BEARINGS AS INDICATED.

UPLIFT: 400# or Less

UPLIFT BASED ON 7.2 PSF TOTAL DEAD LOAD. WIND  
SPEED=120 "C" MPH. MEAN HGT=28 FT. ENCLOSED. (ASCE 7-02)

CJ's  
2' TYP.  
MAX

1.

PROVIDE UPLIFT CONNECTIONS AT BEARINGS AS INDICATED. THE

UPLIFT: 400# or Less

UPLIFT BASED ON 15.0 PSF TOTAL DEAD LOAD. WIND  
SPEED=120 "C" MPH. MEAN HGT (of jacks)=28 FT. ENCLOSED. (ASCE 7-02)

	#2 HIP OR COMMON TRUSS	
	#1 HIP TRUSS	
	CJ	
	CJ	
	CJ	
	CJ	
	EJ	
	EJ	
	EJ	
	FJ	
HJ		

PROVIDE UPLIFT CONNECTIONS AT BEARINGS AS INDICATED.

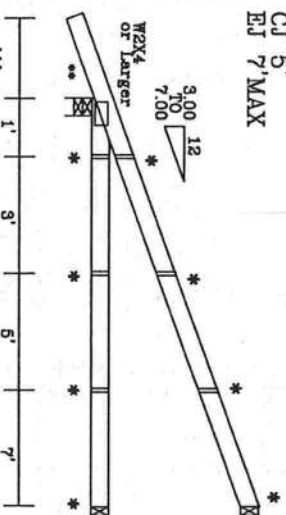
UPLIFT: 400# or Less

UPLIFT BASED ON 7.2 PSF TOTAL DEAD LOAD. WIND  
SPEED=120 "B" MPH. MEAN HGT (of jacks)=28 FT. ENCLOSED. (ASCE 7-02)

2' O.H. 1'  
MAX

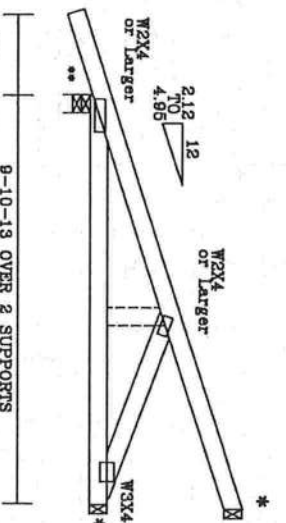
2' TYP.  
MAX

ALL HEELS TO BE STANDEAR WITH NO CANTLEVER



## END AND CORNER JACKS

ALL HEELS TO BE STAND EAR WITH NO CANTIL EVER



HIP JACK

UPLIFT VALUES DO TAKE INTO ACCOUNT PORCHES EXPOSED

BC LIVE LOAD IS NON CONCURRENT 10%

NECESSARY EXTENSIVE CARE IN FABRICATING, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO BC1-1-03 BUILDING COMPONENT SAFETY INFORMATION), PUBLISHED BY THE TRUSS PLATE INSTITUTE, 983 DUNFORD RD., SUITE 200, MADISON, WI 53719, AND A/CIA (WOOD BRASS CLONING OF AMERICA, 6500 ENTERPRISE LN, MADISON, WI 53719) FOR SAFETY PRACTICES PERTAIN 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.

CORNER SET  
SETBACK

7'0" MAX

[illegible]

\* (3) 16d TOENAILS  
\*\* SEE FOR TIE DOWN

-ENG

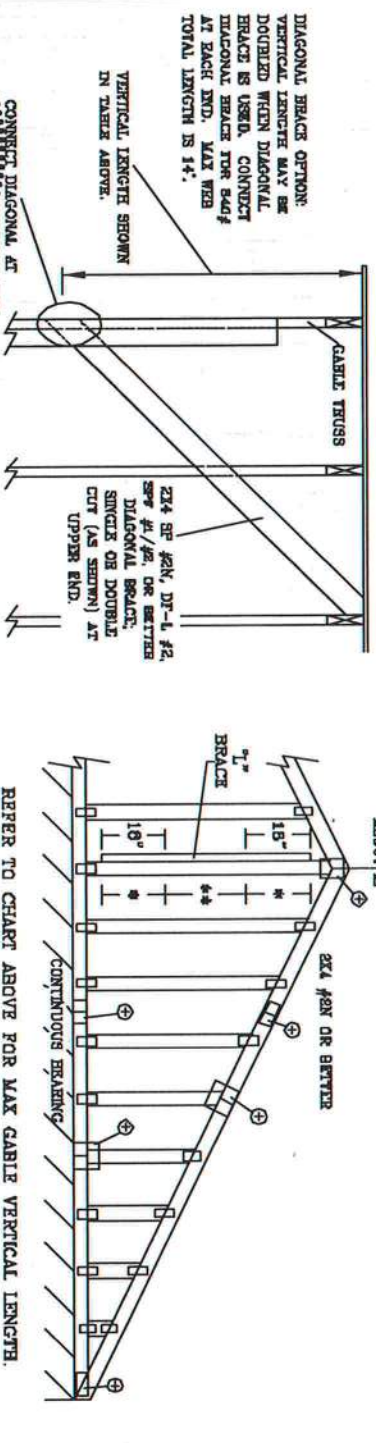
REVIEWED

By Julius Ioo at 10:52 am, Jun 27, 2008

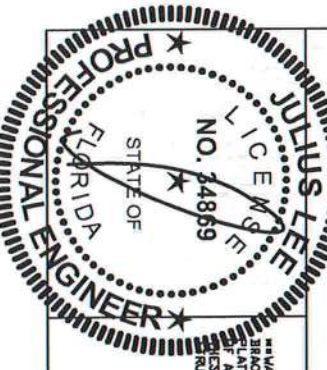


ASCE 7-02: 130 MPH WIND SPEED, 16' MEAN HEIGHT, ENCLOSED, I = 1.00, EXPOSURE C

CABLE TRUSS		BRACE		GROUP A		GROUP B		GROUP A		GROUP B		GROUP A		GROUP B		GROUP A		GROUP B	
SPACING	SPECIES	GRADE	NO	(1) 1X4 "L" BRACE	(1) 2X4 "L" BRACE	(2) 2X4 "L" BRACE	(1) 2X6 "L" BRACE	(2) 2X6 "L" BRACE	(2) 2X8 "L" BRACE	(2) 2X8 "L" BRACE	(2) 2X8 "L" BRACE	(2) 2X8 "L" BRACE	(2) 2X8 "L" BRACE	(2) 2X8 "L" BRACE	(2) 2X8 "L" BRACE	(2) 2X8 "L" BRACE	(2) 2X8 "L" BRACE	(2) 2X8 "L" BRACE	(2) 2X8 "L" BRACE
12" O.C.	SPF	#1 / #2	STUD	3' 4"	6' 10"	6' 0"	6' 11"	7' 1"	8' 3"	8' 6"	10' 10"	11' 2"	12' 11"	13' 3"	12' 11"	12' 11"	12' 11"	12' 11"	12' 11"
				3' 3"	4' 11"	4' 11"	6' 6"	6' 6"	8' 3"	8' 3"	10' 1"	10' 1"	12' 11"	12' 11"	12' 11"	12' 11"	12' 11"	12' 11"	12' 11"
				3' 3"	4' 11"	4' 11"	6' 6"	6' 6"	8' 3"	8' 3"	10' 1"	10' 1"	12' 11"	12' 11"	12' 11"	12' 11"	12' 11"	12' 11"	12' 11"
				3' 3"	4' 11"	4' 11"	6' 6"	6' 6"	8' 3"	8' 3"	10' 1"	10' 1"	12' 11"	12' 11"	12' 11"	12' 11"	12' 11"	12' 11"	12' 11"
16" O.C.	SPF	#1 / #2	STUD	3' 4"	6' 10"	6' 0"	6' 11"	7' 1"	8' 3"	8' 6"	10' 10"	11' 2"	12' 11"	13' 3"	12' 11"	12' 11"	12' 11"	12' 11"	12' 11"
				3' 3"	4' 11"	4' 11"	6' 6"	6' 6"	8' 3"	8' 3"	10' 1"	10' 1"	12' 11"	12' 11"	12' 11"	12' 11"	12' 11"	12' 11"	12' 11"
				3' 3"	4' 11"	4' 11"	6' 6"	6' 6"	8' 3"	8' 3"	10' 1"	10' 1"	12' 11"	12' 11"	12' 11"	12' 11"	12' 11"	12' 11"	12' 11"
				3' 3"	4' 11"	4' 11"	6' 6"	6' 6"	8' 3"	8' 3"	10' 1"	10' 1"	12' 11"	12' 11"	12' 11"	12' 11"	12' 11"	12' 11"	12' 11"
24" O.C.	SPF	#1 / #2	STUD	3' 4"	6' 10"	6' 0"	6' 11"	7' 1"	8' 3"	8' 6"	10' 10"	11' 2"	12' 11"	13' 3"	12' 11"	12' 11"	12' 11"	12' 11"	12' 11"
				3' 3"	4' 11"	4' 11"	6' 6"	6' 6"	8' 3"	8' 3"	10' 1"	10' 1"	12' 11"	12' 11"	12' 11"	12' 11"	12' 11"	12' 11"	12' 11"
				3' 3"	4' 11"	4' 11"	6' 6"	6' 6"	8' 3"	8' 3"	10' 1"	10' 1"	12' 11"	12' 11"	12' 11"	12' 11"	12' 11"	12' 11"	12' 11"
				3' 3"	4' 11"	4' 11"	6' 6"	6' 6"	8' 3"	8' 3"	10' 1"	10' 1"	12' 11"	12' 11"	12' 11"	12' 11"	12' 11"	12' 11"	12' 11"



CABLE TRUSS DETAIL NOTES:	
LIVE LOAD DEFLECTION CRITERIA IS L/240.	
PROVIDE UPLIFT CONNECTIONS FOR 134 PSF OVER CONTINUOUS BEARING (6 PSF TO DEAD LOAD).	
CABLE END SUPPORTS LOAD FROM 4" O" OUTLINE WITH 8" O" OVERHANG, OR 12" PLYWOOD OVERHANG.	
ATTACH EACH "L" BRACE WITH 104 NAILS * FOR (1) "L" BRACE, SPACE NAILS AT 8" 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.	
CABLE VERTICAL PLATE SIZES	
VERTICAL LENGTH	NO SPICE
LESS THAN 11' 0"	1X4 OR 2X3
GREATER THAN 11' 0", BUT LESS THAN 11' 6"	2X4
GREATER THAN 11' 6"	2X6
+ BETTER TO COMBINE TRUSS DESIGN FOR PEAK, SPICE, AND HELL PLATES.	



REVIEWED By Julius Lee at 12:00 pm, Jun 11, 2008

Julius Lee's Cons. Engineers P.A.  
1455 SW 4th Avenue  
DeLand, FL 32744-4161

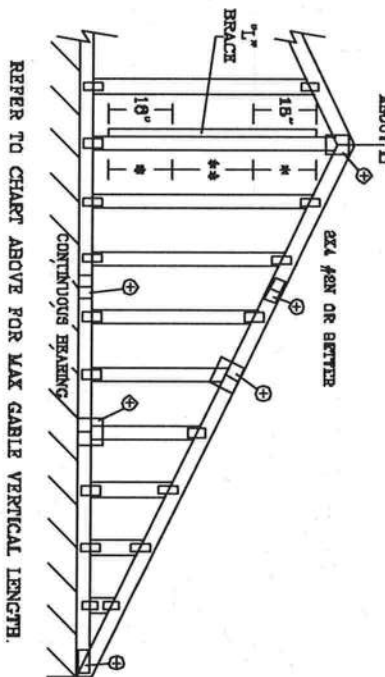
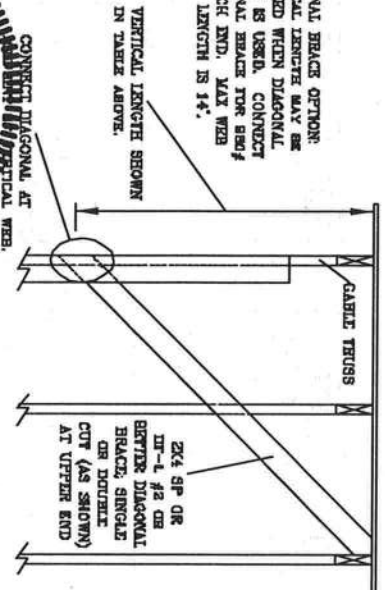
REF ASCE 7-02-CAB13015  
DATE 11/26/03  
DRWG MTRK STD CABLE IS I BT  
-ENG

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



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

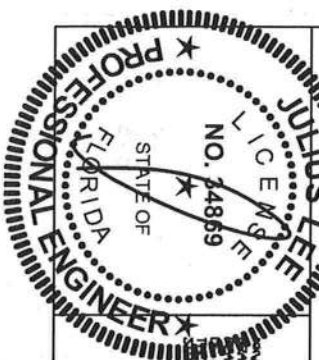
MAX GABLE VERTICAL LENGTH		2x4		BRACE		NO		(1) 1x4 "L" BRACE *		(1) 2x4 "L" BRACE *		(2) 2x4 "L" BRACE **		(1) 2x6 "L" BRACE *		(2) 2x6 "L" BRACE *		(2) 2x8 "L" BRACE **	
CABLE VERTICAL SPACING	SPECIES	GRADE	BRACE	NO	GROUP	A	B	GROUP	A	B	GROUP	A	B	GROUP	A	B	GROUP	A	B
12" O.C.	SPF	#1 / #2	STUD	#1	3' 2"	5' 6"	6' 8"	6' 8"	6' 9"	7' 10"	8' 0"	10' 3"	10' 7"	12' 7"	12' 7"	12' 7"	12' 7"	12' 7"	12' 7"
16" O.C.	SPF	#1 / #2	STUD	#1	3' 2"	5' 6"	6' 8"	6' 8"	6' 9"	7' 10"	8' 0"	10' 3"	10' 7"	12' 7"	12' 7"	12' 7"	12' 7"	12' 7"	12' 7"
24" O.C.	SPF	#1 / #2	STUD	#1	3' 2"	5' 6"	6' 8"	6' 8"	6' 9"	7' 10"	8' 0"	10' 3"	10' 7"	12' 7"	12' 7"	12' 7"	12' 7"	12' 7"	12' 7"



CABLE TRUSS DETAIL NOTES:	
LIVE LOAD DEADLOAD COMBINATION IS 1.2D.	
PROVIDE UPLIFT CONNECTIONS FOR 150 PSF OVER CONTINUOUS BEARING (6 PSF TO DEAD LOAD).	
CABLE END SUPPORTS LOAD FROM 4' 0" OUTLINE WITH 8' 0" OVERHANG, OR 12' PLYWOOD OVERHANG.	
ATTACH EACH "L" BRACE WITH 10d NAILS.	
* FOR (1) "L" BRACE, SPACE NAILS AT 8" O.C.	
BY 16" END ZONES AND 4" O.C. BETWEEN ZONES.	
** FOR (2) "L" BRACES, SPACE NAILS AT 8" O.C.	
BY 16" END ZONES AND 6" O.C. BETWEEN ZONES.	
"L" BRACING MUST BE A MINIMUM OF 80% OF WEB MEMBER LENGTH.	

CABLE VERTICAL PLATE SIZES	
VERTICAL LENGTH	NO SPICE
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 PLATE, SPICE, AND BEEL PLATES.



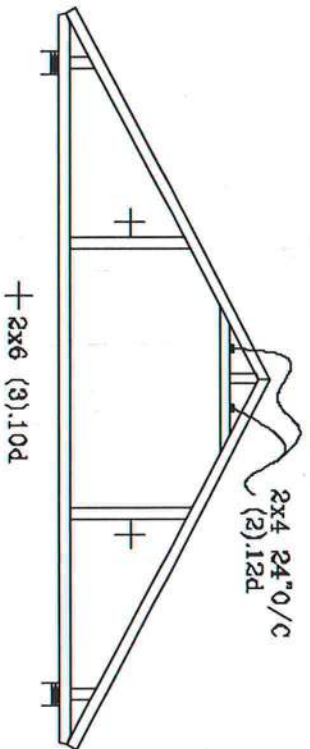
REVIEWED  
By Julius Lee at 12:00 pm, Jun 11, 2008

JULIUS LEE'S  
CONS. ENGINEERS P.A.  
1466 SW 4th AVENUE  
DELMAR BEACH, FL 33444-6161

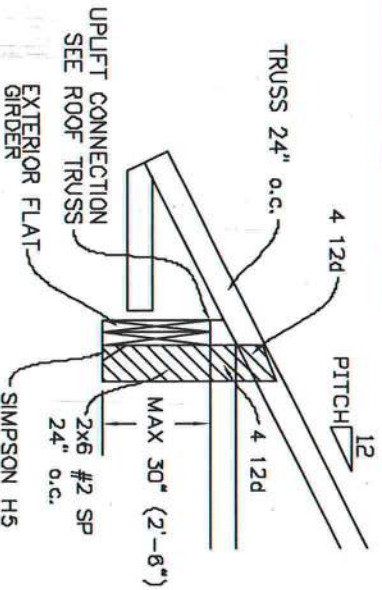
REF	ASCE 7-02-CAB13030
DATE	11/26/03
DWG	WEEK STD GABLE 30' x 17'
ENG	



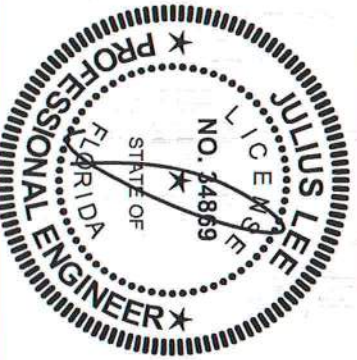
# TYPICAL ATTIC TRUSS BRACING



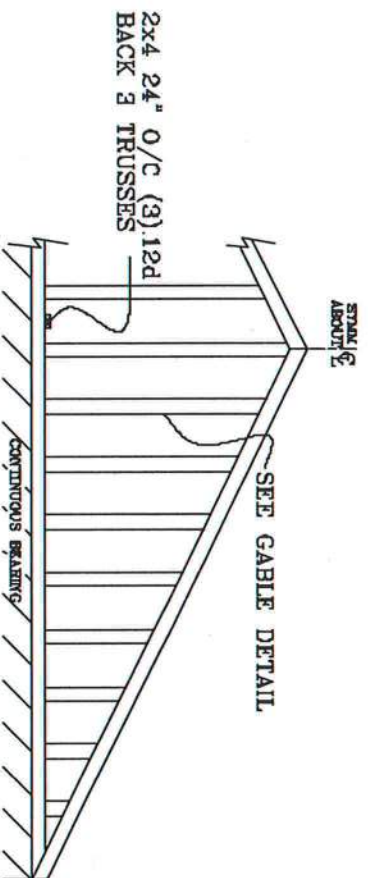
# TYPICAL ALTERNATE BRACING DETAIL FOR EXTERIOR FLAT GIRDER TRUSS



REVIEWED  
By Julius Lee at 11:59 am, Jun 11, 2008

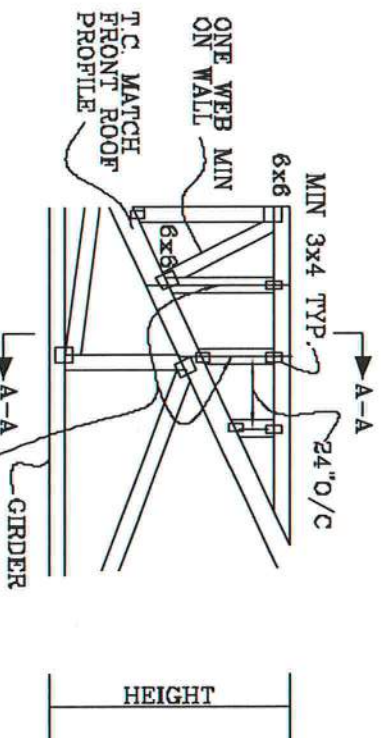


# GABLE END TRUSS DETAIL



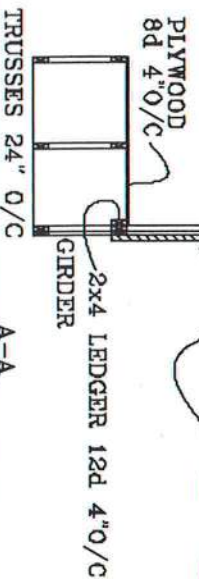
MINIMUM 80% BRACING ON GABLE TRUSS, OTHER PERMANENT BRACING DESIGNS BY ARCHITECT OR EOR

# TYPICAL WALL GIRDER VERTICAL WEB BRACING DETAIL



SEE ROOF TRUSSES FOR UPLIFT  
ROOF 24" o/c

SEE CABLE END DETAIL FOR T-BRACE BEHIND EACH VERTICAL



JULIUS LEE'S  
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1455 SW 4th AVENUE  
DIKALIT BLDG. FL 33444-2661

No. 34869  
STATE OF FLORIDA

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

# PIGGYBACK DETAIL

REFER TO SEALED DESIGN FOR DASHED PLATES.  
SPACE PIGGYBACK VERTICALS AT 4' OC MAX.

TOP AND BOTTOM CHORD SPICES MUST BE STAGGERED SO THAT ONE SPICE 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

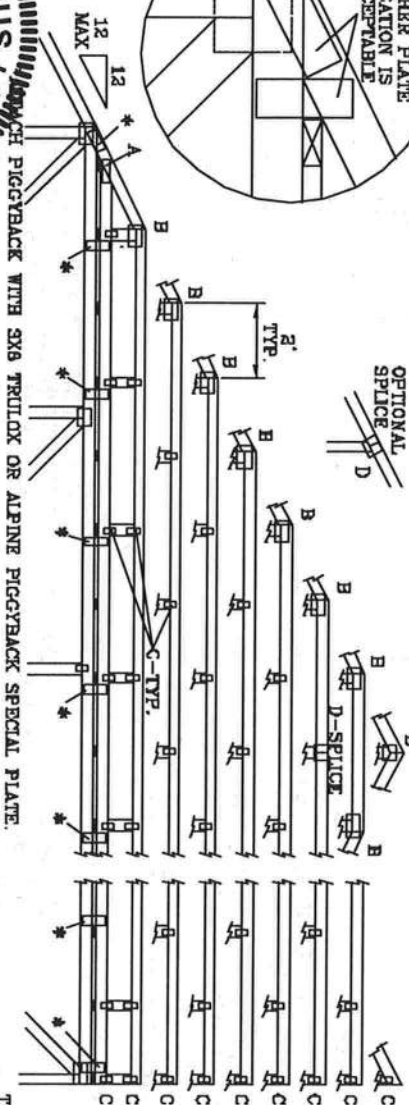
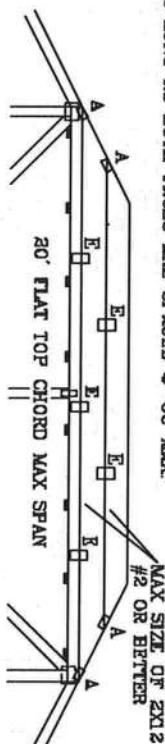
CAT I, EXP C, WIND TC DL=5 PSF, WIND BC DL=5 PSF

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

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

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

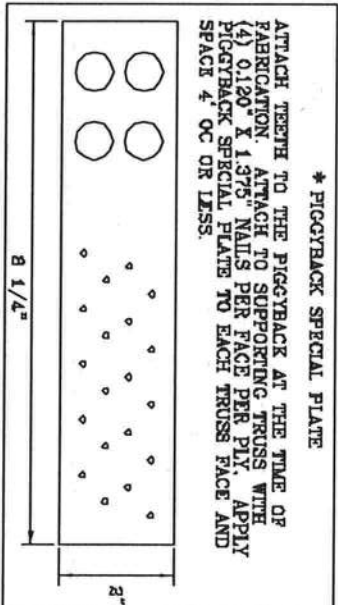
130 MPH WIND, 30' MEAN HGT, ASCE 7-02, CLOSED BLDG, LOCATED ANYWHERE IN ROOF, CAT II, EXP. C, WIND TC DL=6 PSF, WIND BC DL=6 PSF



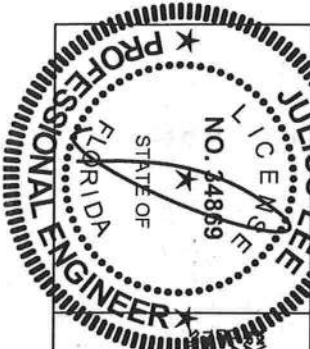
JOINT TYPE	SPANS UP TO			
	30'	34'	38'	62'
A	2X4	2.5X4	2.6X4	3X6
B	4X6	6X6	6X6	5X6
C	1.5X3	1.6X4	1.6X4	1.5X4
D	5X4	6X6	6X6	5X6
E	4X6 OR 3X6 TRUSS AT 4' OC, ROTATED VERTICALLY			

ATTACH TRUSS 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 TRUSS INFORMATION.

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 80X 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 80X LENGTH OF WEB MEMBER. ATTACH WITH 16d NAILS AT 4' OC.



WARNING: TRUSSES REQUIRE EXTREME CARE IN FABRICATING, HANDLING, SHIPPING, INSTALLING AND ERECTING. THE TRUSS MANUFACTURER SHALL BE RESPONSIBLE FOR THE DESIGN, FABRICATION, AND ERECTION OF THE TRUSS. THE TRUSS MANUFACTURER SHALL BE RESPONSIBLE FOR THE DESIGN, FABRICATION, AND ERECTION OF THE TRUSS. THE TRUSS MANUFACTURER SHALL BE RESPONSIBLE FOR THE DESIGN, FABRICATION, AND ERECTION OF THE TRUSS.



**REVIEWED**  
By Julius Lee at 11:59 am, Jun 11, 2008

**JULIUS LEE'S**  
CONS. ENGINEERS P.A.  
1446 SW 4th Avenue  
Ocala, FL 32668-2661

No: 34869  
STATE OF FLORIDA

MAX LOADING		REF	
55 PSF AT	1.33 DUR. FAC.	DATE	09/12/07
50 PSF AT	1.25 DUR. FAC.	DRG/MITEK STD PIGGY	
47 PSF AT	1.15 DUR. FAC.	-ENG JL	
SPACING 24.0"			

THIS DRAWING REPLACES DRAWINGS 634.016 634.017 & 647.045



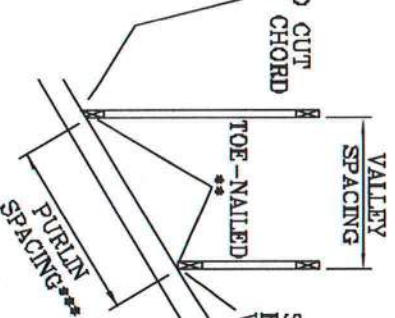
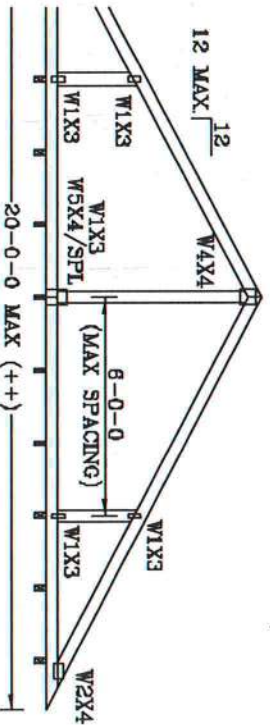
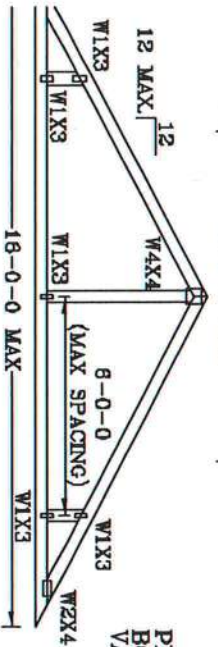
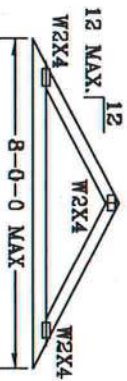
# VALLEY TRUSS DETAIL

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-6 PSF.

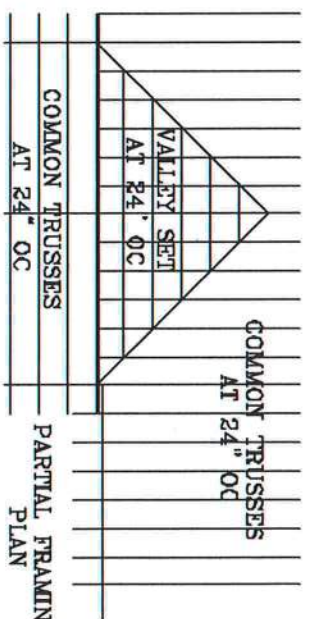


PITCHED CUT  
BOTTOM CHORD  
VALLEY

SQUARE CUT  
BOTTOM CHORD  
VALLEY

OPTIONAL STUB  
END DETAIL

OPTIONAL HIP  
JOINT DETAIL



COMMON TRUSSES  
AT 24" OC

PARTIAL FRAMING  
PLAN

UNLESS SPECIFIED ON ENGINEER'S SEALED DESIGN, APPLY 1X4 "I"-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".

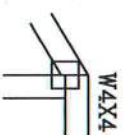
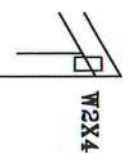
TOP CHORD OF TRUSS BENEATH VALLEY SET MUST BE BRACED WITH:  
PROPERLY ATTACHED, RATED SHEATHING APPLIED PRIOR TO VALLEY TRUSS  
INSTALLATION

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.

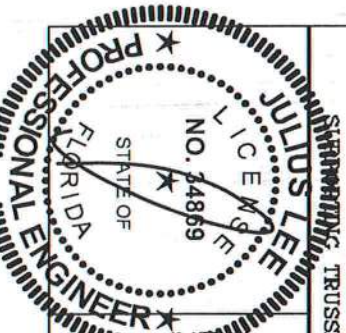


VALLEY TRUSSES AT 24" OC MAXIMUM SPACING.

THIS DRAWING REPLACES DRAWING A105

COMMON TRUSSES  
AT 24" OC

PARTIAL FRAMING  
PLAN



REVIEWED

By Julius Lee at 11:59 am, Jun 11, 2008

No. 34869  
STATE OF FLORIDA

JULIUS LEE'S  
CONS. ENGINEERS P.A.  
1455 SW 4th Avenue  
Miami Beach, FL 33404-0841

TC IL 20 20 PSF REF VALLEY DETAIL  
TC DL 7 15 PSF DATE 11/26/08  
BC DL 5 5 PSF DRWG VALTRUSS1103  
BC IL 0 0 PSF -ENG JL  
TOT. LD. 32 40 PSF  
DUR.FAC. 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."

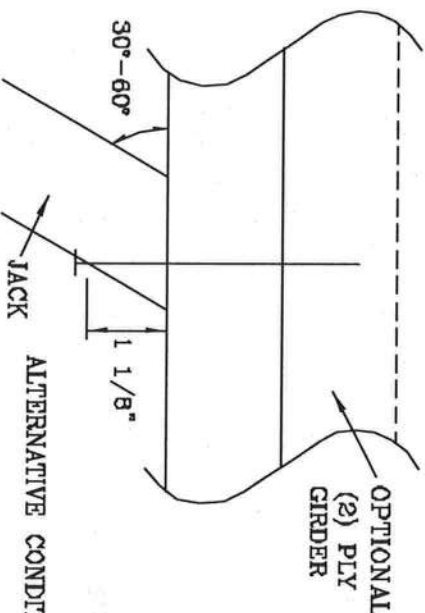
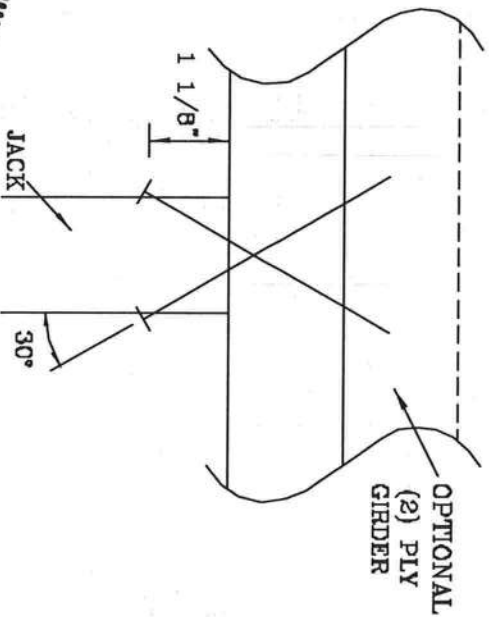
THE NUMBER OF TOE-NAILS TO BE USED IN A SPECIFIC APPLICATION IS DEPENDENT UPON PROPERTIES FOR THE CHORD SIZE, LUMBER SPECIES, AND NAIL TYPE. PROPER CONSTRUCTION PRACTICES AS WELL AS GOOD JUDGEMENT SHOULD DETERMINE THE NUMBER OF NAILS TO BE USED.

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

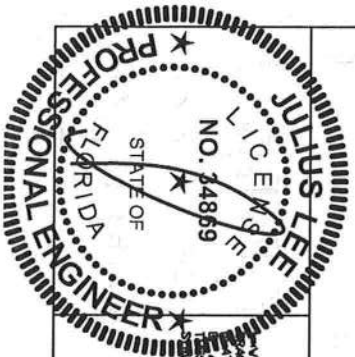
MAXIMUM VERTICAL RESISTANCE OF 16d (0.162"x3.5") COMMON TOE-NAILS

NUMBER OF TOE-NAILS	SOUTHERN PINE		DOUGLAS FIR-LARCH		HEM-FIR		SPRUCE PINE FIR	
	1 PLY	2 PILES	1 PLY	2 PILES	1 PLY	2 PILES	1 PLY	2 PILES
2	187#	256#	181#	234#	156#	203#	154#	189#
3	296#	383#	271#	351#	234#	304#	230#	298#
4	394#	511#	361#	466#	312#	406#	307#	397#
5	493#	639#	452#	585#	390#	507#	384#	496#

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



THIS DRAWING REPLACES DRAWING 784040



WARNING: TRUSSES REQUIRE EXTREME CARE IN FABRICATING, HANDLING, SHIPPING, DETAILING AND ERECTING. REFER TO BEST PRACTICES GUIDING CONCEPT SAFETY INFORMATION, PUBLISHED BY THE TRUSS ASSOCIATION, 6800 ENTERPRISE LN, SUITE 200, NATION, VA 22713 AND VITA (WOOD TRUSS COUNCIL) FOR ADDITIONAL INFORMATION. ALL DIMENSIONS SHOWN ARE APPROXIMATE. ALL DIMENSIONS SHALL BE PROPERLY ATTACHED TO THE TRUSS AND BEING ATTACHED TO THE TRUSS SHALL HAVE A PROPERLY ATTACHED RIGID BEARING.

REVIEWED  
By Julius Lee at 11:59 am, Jun 11, 2008

JULIUS LEE'S  
CONS. ENGINEERS P.A.  
1495 BY 4TH AVENUE  
DELRAY BEACH, FL 33444-2161

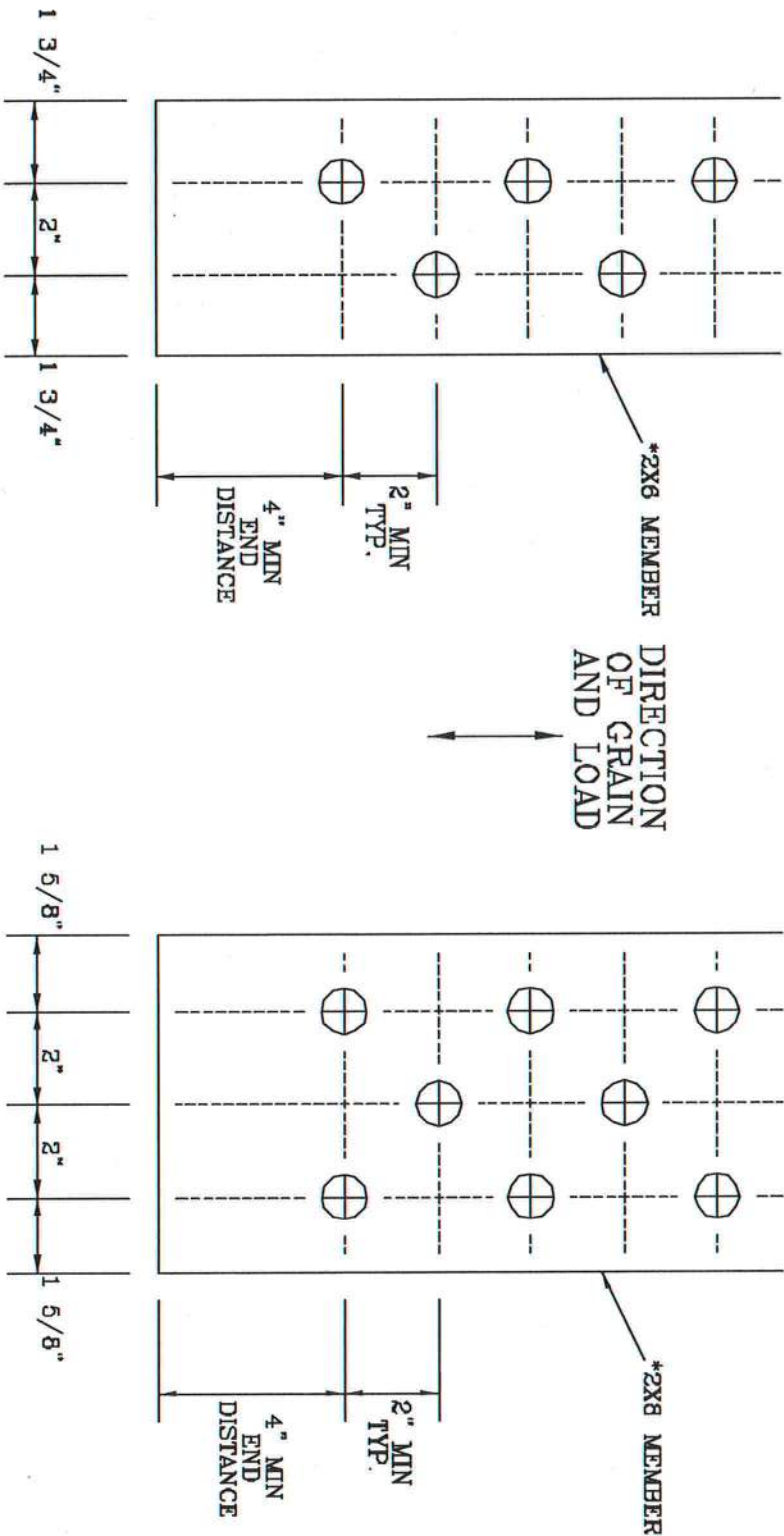
No. 34869  
STATE OF FLORIDA

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.

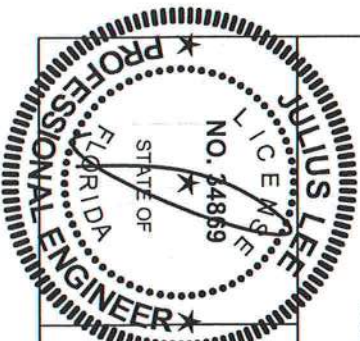
TYPICAL LOCATION OF 1/2" DIAMETER THRU BOLTS. BOLT QUANTITIES AS NOTED ON SEALED DESIGN MUST BE APPLIED IN ONE OF THE PATTERNS SHOWN BELOW.  
WASHERS REQUIRED UNDER BOLT HEAD AND NUT



2X6 DETAIL

2X8 DETAIL

THIS DRAWING REPLACES DRAWING A828.016



WARNING: TRUSSES REQUIRE EXTREME CARE IN FABRICATING, HANDLING, SHIPPING, INSTALLING AND ERECTING. REFER TO BOSS 1-800 QUALITY CONSTRUCTION SAFETY INFORMATION, PUBLISHED BY THE TRUSS BOSS INSTITUTE, 582 DOWNEY DR., SUITE 200, WILMINGTON, VA 22797, AND TO ALL APPLICABLE BUILDING CODES. THESE FINISHES, DIMENSIONS, DETAILS AND/OR SPECIFICATIONS INDICATED ON THIS DRAWING SHALL HAVE PROPERLY ATTACHED STRUCTURAL PANELS AND BOTTOM CHORD SHALL HAVE A PROPERLY ATTACHED RIGID CEILING.

REVIEWED  
By Julius Lee at 11:59 am, Jun 11, 2008

JULIUS LEE'S  
CONS. ENGINEERS P.A.  
1450 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 CNBOLTSPI103	
BC LL	PSF	-ENG JL	
TOT. LD.	PSF		
DUR. FAC.			
SPACING			

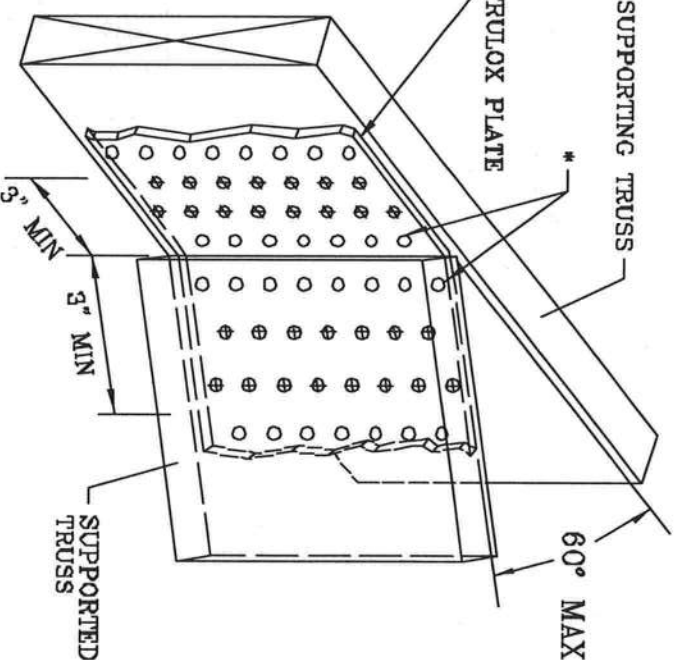
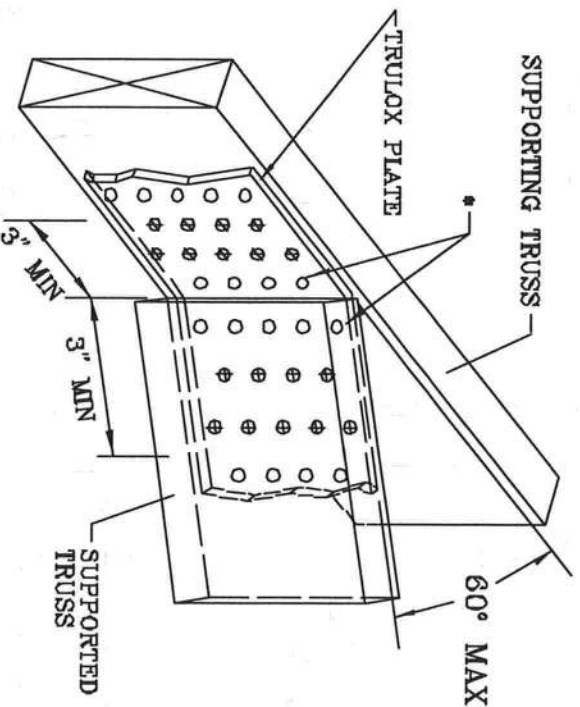
# TRULOX CONNECTION DETAIL

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

\* NAILS MAY BE OMITTED FROM THESE ROWS.

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

TRULOX PLATE IS CENTERED ON THE CHORDS AND BENT BETWEEN NAIL ROWS.  
REFER TO ENGINEER'S SEALED DESIGN REFERENCING THIS DETAIL FOR LUMBER, PLATES, AND OTHER INFORMATION NOT SHOWN.



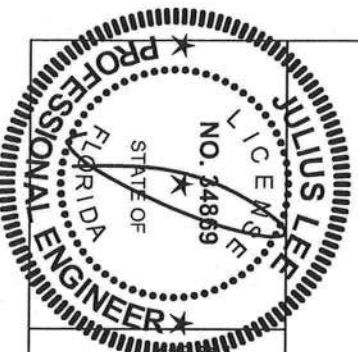
MINIMUM 3X6 TRULOX PLATE

MINIMUM 5X6 TRULOX PLATE

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

THIS DRAWING REPLACES DRAWINGS 1,158,986 1,158,988/R 1,154,844 1,152,217 1,152,017 1,159,154 & 1,151,524

REVIEWED  
By Julius Lee at 11:58 am, Jun 11, 2008



WARNING: TRUSSES REQUIRE EXTREME CARE IN FABRICATING, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO 2031-1-03 (BUILDING DEPARTMENT SAFETY INFORMATION), PUBLISHED BY THE TRUSS BOARD, 6504 ENTERPRISE DR., SUITE 600, WATSON, VA 22093 AND VITA CYCLO TRUSS COUNCIL, 1000 N. 10TH ST., SUITE 100, DENVER, CO 80202 FOR SAFETY PRACTICES PRIOR TO PERFORMING STRUCTURAL PANELS AND SECTION BRIDG SHALL HAVE A PROPERLY ATTACHED RIGID CEILING.

**JULIUS LEE'S**  
CONS. ENGINEERS P.A.

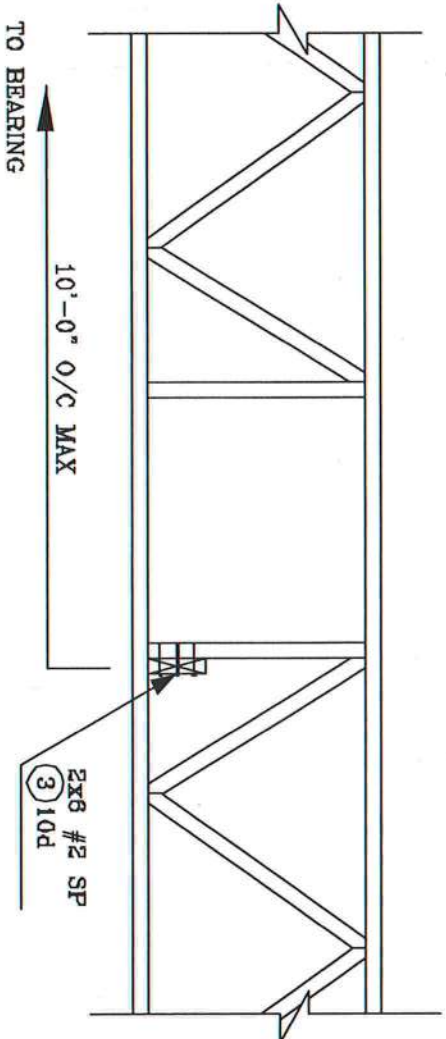
1455 SW 4th AVENUE  
DEALITY BEACH, FL 33444-2101

No: 34869  
STATE OF FLORIDA

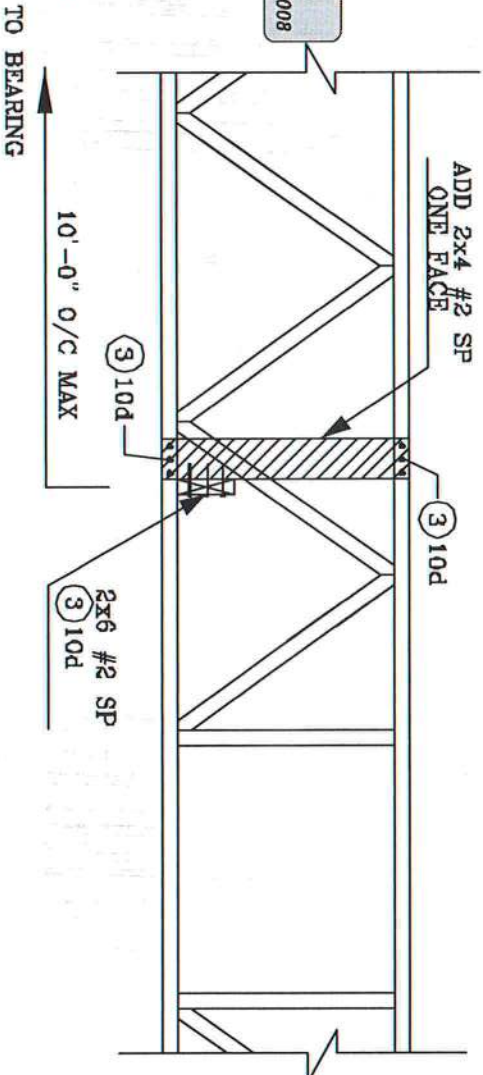
REF	TRULOX
DATE	11/26/03
DRWG	CNTRULOX1103
ENG	JL



# STRONG BACK DETAIL SYSTEM-42 OR FLAT TRUSS

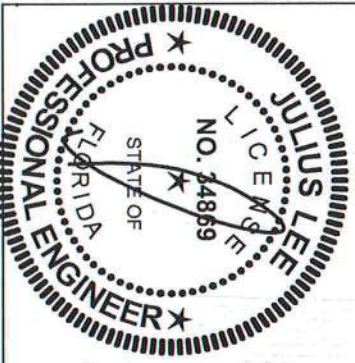


## ALTERNATE DETAIL FOR STRONG BACK WITH VERTICAL NOT LINING UP



### REVIEWED

By Julius Lee at 11:58 am, Jun 11, 2008



**JULIUS LEE'S**  
CONS. ENGINEERS P.A.  
1454 SW 4th AVENUE  
DEPT B300 FL 30444-2001

No: 34869  
STATE OF FLORIDA

# MULTIPLE-MEMBER CONNECTIONS FOR SIDE-LOADED BEAMS

## Maximum Uniform Load Applied to Either Outside Member (PLF)

Connector Type	Number of Rows	Connector On-Center Spacing	Connector Pattern					
			Assembly A	Assembly B	Assembly C	Assembly D	Assembly E	Assembly F
			3 1/2\" 2-ply	5 1/4\" 3-ply	5 1/4\" 2-ply	7\" 3-ply	7\" 2-ply	7\" 4-ply
10d (0.128" x 3") Nail <sup>(1)</sup>	2	12"	370	<b>280</b>	280	<b>245</b>		
	3	12"	555	<b>415</b>	415	<b>370</b>		
1/2" A307 Through Bolts <sup>(2)(4)</sup>	2	24"	505	380	520	465	860	340
		19.2"	635	475	655	580	1,075	425
		16"	760	570	785	695	1,290	505
SDS 1/4" x 3 1/2" <sup>(4)</sup>	2	24"	680	<b>510</b>	510	<b>455</b>		
		19.2"	850	<b>640</b>	640	<b>565</b>		
		16"	1,020	<b>765</b>	765	<b>680</b>		
SDS 1/4" x 6" <sup>(3)(4)</sup>	2	24"				<b>455</b>	<b>465</b>	<b>455</b>
		19.2"				<b>565</b>	<b>580</b>	<b>565</b>
		16"				<b>680</b>	<b>695</b>	<b>680</b>
USP WS35 <sup>(4)</sup>	2	24"	480	<b>360</b>	360	<b>320</b>		
		19.2"	600	<b>450</b>	450	<b>400</b>		
		16"	715	<b>540</b>	540	<b>480</b>		
USP WS6 <sup>(3)(4)</sup>	2	24"				<b>350</b>	<b>525</b>	<b>350</b>
		19.2"				<b>440</b>	<b>660</b>	<b>440</b>
		16"				<b>525</b>	<b>790</b>	<b>525</b>
3 3/4" TrussLok <sup>(4)</sup>	2	24"	635	<b>475</b>	475	<b>425</b>		
		19.2"	795	<b>595</b>	595	<b>530</b>		
		16"	955	<b>715</b>	715	<b>635</b>		
5" TrussLok <sup>(4)</sup>	2	24"		<b>500</b>	500	<b>445</b>	<b>480</b>	<b>445</b>
		19.2"		<b>625</b>	625	<b>555</b>	<b>600</b>	<b>555</b>
		16"		<b>750</b>	750	<b>665</b>	<b>725</b>	<b>665</b>
6 3/4" TrussLok <sup>(4)</sup>	2	24"				445	620	445
		19.2"				555	770	555
		16"				665	925	665

(1) Nailed connection values may be doubled for 6" on-center or tripled for 4" on-center nail spacing.

(2) Washers required. Bolt holes to be 1/16" maximum.

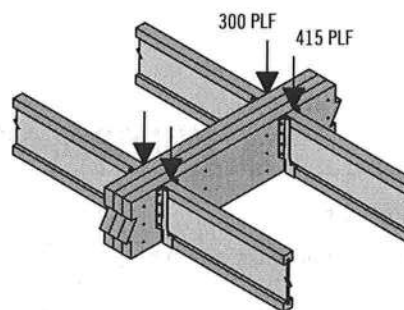
(3) 6" SDS or WS screws can be used with Parallam® PSL and Microllam® LVL, but are not recommended for TimberStrand® LSL.

(4) 24" on-center bolted and screwed connection values may be doubled for 12" on-center spacing.

## General Notes

- Connections are based on NDS® 2005 or manufacturer's code report.
- Use specific gravity of 0.5 when designing lateral connections.
- Values listed are for 100% stress level. Increase 15% for snow-loaded roof conditions or 25% for non-snow roof conditions, where code allows.
- Bold Italic** cells indicate **Connector Pattern** must be installed on both sides. Stagger fasteners on opposite side of beam by 1/2 the required **Connector Spacing**.
- Verify adequacy of beam in allowable load tables on pages 16–33.
- 7" wide beams should be side-loaded only when loads are applied to both sides of the members (to minimize rotation).
- Minimum end distance for bolts and screws is 6".
- Beams wider than 7" require special consideration by the design professional.

## Uniform Load Design Example



First, check the allowable load tables on pages 16–33 to verify that three pieces can carry the total load of 715 plf with proper live load deflection criteria. Maximum load applied to either outside member is 415 plf. For a 3-ply 1 3/4" assembly, two rows of 10d (0.128" x 3") nails at 12" on-center is good for only 280 plf. Therefore, use three rows of 10d (0.128" x 3") nails at 12" on-center (good for 415 plf).

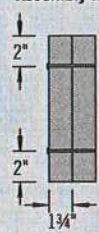
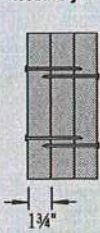
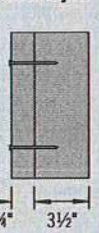


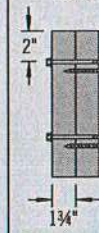
### Alternates:

Two rows of 1/2" bolts or SDS 1/4" x 3 1/2" screws at 19.2" on-center.



# MULTIPLE-MEMBER CONNECTIONS FOR SIDE-LOADED BEAMS

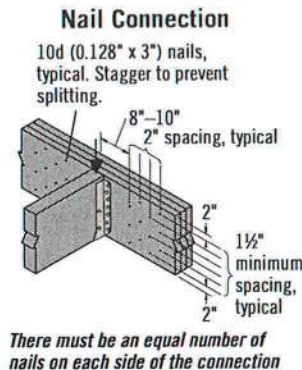
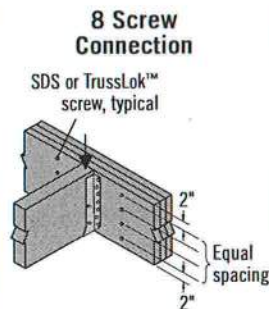
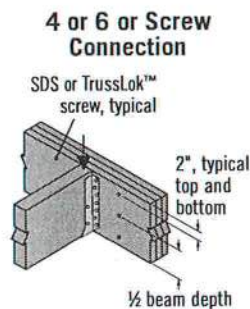
## Point Load—Maximum Point Load Applied to Either Outside Member (lbs)

Connector Type	Number of Connectors	Connector Pattern					
		Assembly A	Assembly B	Assembly C	Assembly D	Assembly E	Assembly F
							
		3 1/2" 2-ply	5 1/4" 3-ply	5 1/4" 2-ply	7" 3-ply	7" 2-ply	7" 4-ply
10d (0.128" x 3") Nail	6	1,110	835	835	740		
	12	2,225	1,670	1,670	1,485		
	18	3,335	2,505	2,505	2,225		
	24	4,450	3,335	3,335	2,965		
SDS Screws 1/4" x 3 1/2" or WS35 1/4" x 6" or WS6 <sup>(1)</sup>	4	1,915	1,435 <sup>(4)</sup>	1,435	1,275	1,860 <sup>(2)</sup>	1,405 <sup>(2)</sup>
	6	2,870	2,150 <sup>(4)</sup>	2,150	1,915	2,785 <sup>(2)</sup>	2,110 <sup>(2)</sup>
	8	3,825	2,870 <sup>(4)</sup>	2,870	2,550	3,715 <sup>(2)</sup>	2,810 <sup>(2)</sup>
3 3/8" or 5" TrussLok™	4	2,545	1,910 <sup>(4)</sup>	1,910	1,695	1,925 <sup>(2)</sup>	1,775 <sup>(2)</sup>
	6	3,815	2,860 <sup>(4)</sup>	2,860	2,545	2,890 <sup>(2)</sup>	2,665 <sup>(2)</sup>
	8	5,090	3,815 <sup>(4)</sup>	3,815	3,390	3,855 <sup>(2)</sup>	3,550 <sup>(2)</sup>

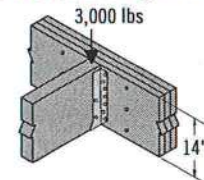
- (1) 6" SDS or WS screws can be used with Parallam® PSL and Microllam® LVL, but are not recommended for TimberStrand® LSL.  
 (2) 6" long screws required.  
 (3) 5" long screws required.  
 (4) 3 1/2" and 3 3/8" long screws must be installed on both sides.

See General Notes on page 38

## Connections



## Point Load Design Example



First, verify that a 3-ply 1 3/4" x 14" beam is capable of supporting the 3,000 lb point load as well as all other loads applied. The 3,000 lb point load is being transferred to the beam with a face mount hanger. For a 3-ply 1 3/4" assembly, eight 3 3/8" TrussLok™ screws are good for 3,815 lbs with a face mount hanger.

# MULTIPLE-MEMBER CONNECTIONS FOR TOP-LOADED BEAMS

## 1 3/4" Wide Pieces

- Minimum of three rows of 10d (0.128" x 3") nails at 12" on-center.
- Minimum of four rows of 10d (0.128" x 3") nails at 12" on-center for 14" or deeper.
- If using 12d-16d (0.148"-0.162" diameter) nails, the number of nailing rows may be reduced by one.
- Minimum of two rows of SDS, WS, or TrussLok™ screws at 16" on-center. Use 3 3/8" minimum length with two or three plies; 5" minimum for 4-ply members. 6" SDS and WS screws are not recommended for use with TimberStrand® LSL. For 3- or 4-ply members, connectors must be installed

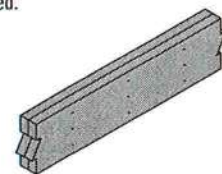
on both sides. Stagger fasteners on opposite side of beam by 1/2 of the required connector spacing.

- Load must be applied evenly across entire beam width. Otherwise, use connections for side-loaded beams.

## 3 1/2" Wide Pieces

- Minimum of two rows of SDS, WS, or TrussLok™ screws, 5" minimum length, at 16" on-center. 6" SDS and WS screws are not recommended for use with TimberStrand® LSL. Connectors must be installed on both sides. Stagger fasteners on opposite side of beam by 1/2 of the required connector spacing.

- Load must be applied evenly across entire beam width. Otherwise, use connections for side-loaded beams.
- Minimum of two rows of 1/2" bolts at 24" on-center staggered.



Multiple pieces can be nailed or bolted together to form a header or beam of the required size, up to a maximum width of 7"

L6



BEARING HEIGHT SCHEDULE

8'-1 1/8"

NOTES:

- 1) REFER TO HB 91 (RECOMMENDATIONS FOR HANGING INSTALLATION AND TEMPORARY BRACING) REFER TO ENGINEERED DRAWINGS FOR PERMANENT BRACING REQUIREMENTS.
- 2) ALL TRUSSES (INCLUDING TRUSSES UNDER VALLEY FRAMING) MUST BE COMPLETEDLY DECKED OR REFER TO DETAIL VOS FOR ALTERNATE BRACING REQUIREMENTS.
- 3) ALL VALLEYS ARE TO BE CONVENTIONALLY FRAMED BY BUILDER.
- 4) ALL TRUSSES ARE DESIGNED FOR 2 o.c. MAXIMUM SPACING, UNLESS OTHERWISE NOTED.
- 5) ALL WALLS SHOWN ON PLACEMENT PLAN ARE CONSIDERED TO BE LOAD BEARING, UNLESS OTHERWISE NOTED.
- 6) 5x42 TRUSSES MUST BE INSTALLED WITH THE TOP BEING UP.
- 7) ALL ROOF TRUSSES HANGERS TO BE SIMPSON HTD26 UNLESS OTHERWISE NOTED. ALL FLOOR TRUSSES HANGERS TO BE SIMPSON TH4422 UNLESS OTHERWISE NOTED.
- 8) BEAM/ADDER, INTEL. (PDR) TO BE FURNISHED BY BUILDER.

SHOP DRAWING APPROVAL

THIS LAYOUT IS THE SOLE SOURCE FOR FABRICATION OF TRUSSES AND VOS. ALL PREVIOUS ARCHITECTURAL OR OTHER TRUSS LAYOUTS, REVIEW AND APPROVAL OF THIS LAYOUT MUST BE RECEIVED BEFORE ANY TRUSSES WILL BE BUILT. VERIFY ALL CONDITIONS TO INSURE AGAINST CHANGES THAT WILL RESULT IN EXTRA CHARGES TO YOU.

Expenditure Sheet: \_\_\_\_\_

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



Bunnell

PHONE: 904-437-3349 FAX: 904-437-3994  
Jacksonville

PHONE: 904-772-6100 FAX: 904-772-1973  
Lake City

PHONE: 386-759-6894 FAX: 386-759-7973  
Sanford

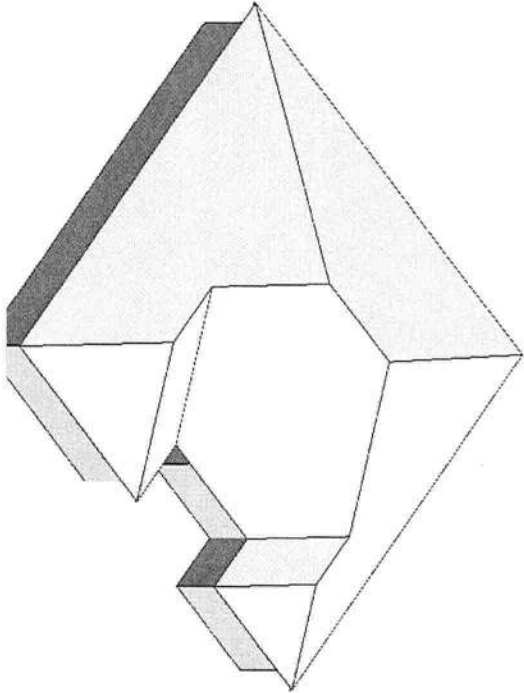
PHONE: 407-322-0099 FAX: 407-322-9593

JOHN & PAM SMITH

HIP SPEC

CUSTOM

DATE: 6-30-09 K.L.H. 308961



6 1/12 PITCH  
1'-6" O/H

