Julius Lee Engineering

RE: 317841 - GIEBEIG HOMES - CAMPBELL RES.

1109 Coastal Bay Blvd. Boynton Beach, FL 33435

Site Information:

Project Customer: GIEBEIG HOMES Project Name: 317841 Model: CAMPBELL RES.

Lot/Block: 5 Subdivision: REDFIELD

Address:

City: COLUMBIA CTY

State: FL

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

Name: BRIAN T. GIEBEIG License #: RR282811523

Address: 462 SW FAIRLINGTON CT

City: LAKE CITY,

State: FL

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

Design Code: FBC2007/TPI2002

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

Design Program: MiTek 20/20 7.1

Floor Load: N/A psf

Roof Load: 40.0 psf

15

16

14137458

14137459

14137460

This package includes 29 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 | 14137444 | CJ1 | 10/22/09 | 18 | 14137461 | T09 | 10/22/09 |
| 2 | 14137445 | CJ3 | 10/22/09 | 19 | 14137462 | T10 | 10/22/09 |
| 3 | 14137446 | CJ5 | 10/22/09 | 20 | 14137463 | T11 | 10/22/09 |
| 4 | 14137447 | EJ4 | 10/22/09 | 21 | 14137464 | T12 | 10/22/09 |
| 5 | 14137448 | EJ7 | 10/22/09 | 22 | 14137465 | T13 | 10/22/09 |
| 6 | 14137449 | HJ6 | 10/22/09 | 23 | 14137466 | T14 | 10/22/09 |
| 7 | 14137450 | HJ9 | 10/22/09 | 24 | 14137467 | T15 | 10/22/09 |
| 8 | 14137451 | HJ9A | 10/22/09 | 25 | 14137468 | T16 | 10/22/09 |
| 9 | 14137452 | PB01 | 10/22/09 | 26 | 14137469 | T17 | 10/22/09 |
| 10 | 14137453 | T01 | 10/22/09 | 27 | 14137470 | T18 | 10/22/09 |
| 11 | 14137454 | T02 | 10/22/09 | 28 | 14137471 | T19 | 10/22/09 |
| 12 | 14137455 | T03 | 10/22/09 | 29 | 14137472 | T20 | 10/22/09 |
| 13 | 14137456 | T04 | 10/22/09 | | | | |
| 14 | 14137457 | T05 | 10/22/09 | | | | |

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).

10/22/09

10/22/09

10/22/09

Truss Design Engineer's Name: Julius Lee

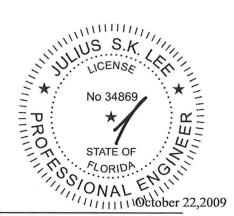
T06

T₀7

T08

My license renewal date for the state of Florida is February 28, 2011.

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.



1 of 1

Julius Lee

8

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Job Truss Qty GIEBEIG HOMES - CAMPBELL RES. 14137444 317841 CJ1 JACK Job Reference (optional)
7.140 s Oct 1 2009 MiTek Industries, Inc. Thu Oct 22 15:31:54 2009 Page 1 Builders FrstSource, Lake City, FL 32055 9-1-2 9-1-2 1-0-0 Scale = 1:11.0 7.00 12 0-4-5 B1 T1

| LOADIN | | SPACING 2-0-0 | CSI | DEFL in | (loc) I/defl | L/d | PLATES GRIP |
|--------|-------|----------------------|----------|----------------|--------------|-----|--------------|
| TCLL | 20.0 | Plates Increase 1.25 | TC 0.27 | Vert(LL) -0.00 | 2 >999 | 360 | MT20 244/190 |
| TCDL | 10.0 | 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 | 10.7 |
| BCDL | 10.0 | Code FBC2007/TPI2002 | (Matrix) | Wind(LL) 0.00 | 2 >999 | 240 | Weight: 7 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=289/0-3-8, 4=10/Mechanical, 3=-100/Mechanical Max Horz 2=101(LC 6)

Max Uplift 2=-295(LC 6), 4=-11(LC 4), 3=-100(LC 1) Max Grav 2=289(LC 1), 4=19(LC 2), 3=136(LC 6)

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

NOTES

- 1) Wind: ASCE 7-05; 110mph (3-second gust); TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; enclosed; MWFRS (low-rise) gable end zone and C-C Exterior(2) zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 295 lb uplift at joint 2, 11 lb uplift at joint 4 and 100 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

No 3

October 22,2009

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 frus 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. AMSI/TH Quality Criteria, DSB-89 and BCSII Building Component Safety Information available from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

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

REACTIONS (lb/size) 3=34/Mechanical, 2=290/0-3-8, 4=28/Mechanical

Max Horz 2=154(LC 6)

Max Uplift 3=-31(LC 7), 2=-235(LC 6), 4=-33(LC 4)

Max Grav 3=34(LC 1), 2=290(LC 1), 4=56(LC 2)

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

- 1) Wind: ASCE 7-05; 110mph (3-second gust); TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; enclosed; MWFRS (low-rise) gable end zone and C-C Exterior(2) zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

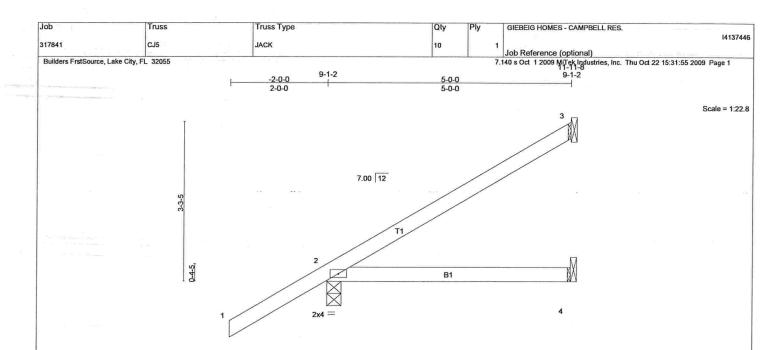
 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) All bearings are assumed to be SYP No.2
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 31 lb uplift at joint 3, 235 lb uplift at joint 2 and 33 lb uplift at joint 4.
- 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

No 3 છે SIONAL October 22,2009

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 paramenters 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/TP1 Quality Criteria, DSB-89 and BCS11 Building Component Safety Information available from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.



| LOADIN | G (psf) | SPACING 2-0-0 | CSI | DEFL in | (loc) | l/defl | L/d | PLATES GRIP | |
|--------|---------|----------------------|----------|----------------|-------|--------|-----|---------------|--|
| TCLL | 20.0 | Plates Increase 1.25 | TC 0.28 | Vert(LL) -0.03 | 2-4 | >999 | 360 | MT20 244/190 | |
| TCDL | 10.0 | Lumber Increase 1.25 | BC 0.24 | Vert(TL) -0.07 | 2-4 | >831 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr YES | WB 0.00 | Horz(TL) -0.00 | 3 | n/a | n/a | 10 | |
| BCDL | 10.0 | Code FBC2007/TPI2002 | (Matrix) | Wind(LL) 0.09 | 2-4 | >663 | 240 | Weight: 20 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 5-0-0 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=115/Mechanical, 2=349/0-3-8, 4=48/Mechanical Max Horz 2=207(LC 6)

Max Uplift 3=-96(LC 6), 2=-251(LC 6), 4=-56(LC 4) Max Grav 3=115(LC 1), 2=349(LC 1), 4=96(LC 2)

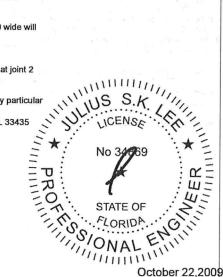
FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES (8-9)

- Wind: ASCE 7-05; 110mph (3-second gust); TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; enclosed; MWFRS (low-rise) gable end zone and C-C Exterior(2) zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 96 lb uplift at joint 3, 251 lb uplift at joint 2 and 56 lb uplift at joint 4.
- and 56 lb uplift at joint 4.

 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

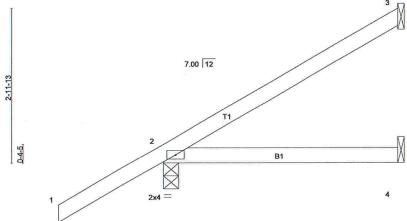


October 22,200

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED WITEK 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 paramenters 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. AMSI/TH Quality Criteria, DSB-89 and BCSI1 Building Component Safety Information available from Truss Plate Institute, 583 D'Onofito Drive, Madison, WI 53719.



| LOADIN | G (psf) | SPACING 2-0-0 | csi | DEFL | in | (loc) | l/defl | L/d | PLATES GRIP |
|--------|---------|----------------------|----------|----------|-------|-------|--------|-----|---------------|
| TCLL | 20.0 | Plates Increase 1.25 | TC 0.28 | Vert(LL) | -0.02 | 2-4 | >999 | 360 | MT20 244/190 |
| CDL | 10.0 | Lumber Increase 1.25 | BC 0.17 | Vert(TL) | -0.04 | 2-4 | >999 | 240 | |
| BCLL | 0.0 * | Rep Stress Incr YES | WB 0.00 | Horz(TL) | -0.00 | 3 | n/a | n/a | |
| BCDL | 10.0 | Code FBC2007/TPI2002 | (Matrix) | Wind(LL) | 0.00 | 2 | **** | 240 | Weight: 18 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 4-6-0 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=97/Mechanical, 2=333/0-3-8, 4=43/Mechanical

Max Horz 2=194(LC 6)

Max Uplift3=-79(LC 6), 2=-191(LC 6)

Max Grav 3=97(LC 1), 2=333(LC 1), 4=86(LC 2)

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

NOTES

- 1) Wind: ASCE 7-05; 110mph (3-second gust); TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; 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 79 lb uplift at joint 3 and 191 lb uplift at joint
- 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

No 34 69

TROMAL

STATE OF

FLORIDA

Octob O October 22,2009

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

Design valid for use only with Milek connectors. This design is based only upon parameters shown, and is for an individual building component.

Applicability of design paramenters 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 flobication, quality control, storage, delivery, erection and bracing, consult. ANSI/TP11 Quality Criteria, DSB-89 and BCS11 Building Component Safely Information available from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

Job Truss Type Qty GIEBEIG HOMES - CAMPBELL RES. Truss Ply 14137448 317841 EJ7 29 Job Reference (optional) Builders FrstSource, Lake City, FL 32055 7.140 s Oct 1 2009 M dries, Inc. Thu Oct 22 15:31:56 2009 Page 1 9-1-2 7-0-0 Scale = 1:28.4

7.00 12 2-4-5 B1 3x4 /

| Plate Of | fsets (. | X,Y |): [2 | 2:0-2 | -4,0-1-8] | | | | | | | | | | |
|----------|----------|-----|-------|-------|-----------------|--------|-------|------|----------|-------|-------|--------|-----|-------------------|---------|
| LOADIN | G (psf |) | | | SPACING | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
| TCLL | 20.0 |) | | | Plates Increase | 1.25 | TC | 0.47 | Vert(LL) | -0.09 | 2-4 | >918 | 360 | MT20 | 244/190 |
| TCDL | 10.0 |) | | | Lumber Increase | 1.25 | BC | 0.44 | Vert(TL) | -0.25 | 2-4 | >331 | 240 | 1.0 0 0 0 0 0 0 0 | |
| BCLL | 0.0 | י כ | | | Rep Stress Incr | YES | WB | 0.00 | Horz(TL) | -0.00 | 3 | n/a | n/a | | |
| BCDL | 10.0 |) | | | Code FBC2007/TF | 212002 | (Matr | rix) | Wind(LL) | 0.32 | 2-4 | >258 | 240 | Weight: 26 lb | |

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=177/Mechanical, 2=421/0-3-8, 4=74/Mechanical

Max Horz 2=188(LC 6) Max Uplift 3=-102(LC 6), 2=-215(LC 6), 4=-67(LC 4) Max Grav 3=177(LC 1), 2=421(LC 1), 4=128(LC 2)

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

- 1) Wind: ASCE 7-05; 110mph (3-second gust); TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; enclosed; MWFRS (low-rise) and C-C Exterior(2) zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip
- 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 102 lb uplift at joint 3, 215 lb uplift at joint 2 and 67 lb uplift at joint 4.
- 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

October 22,2009

MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 BEFORE USE. Design valid for use only with Miles connectors. This design is based only upon parameters shown, and is for an individual building component. Applicability of design paramenters and proper incorporation of component is responsibility of building designer - not trust designer. Bracing shown for lateral support of individual web members only. Additional temporary bracing to invest 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 flobrication, quality control, storage, delivery, erection and bracing, consult ANSI/TPI Quality Carteria, DSB-89 and BCS11 Building Component Safety Information available from Iruss Plate Institute, 583 D'Onotrio Drive, Madison, WI 53719.

Qty GIEBEIG HOMES - CAMPBELL RES. Truss Truss Type Ply Job 14137449 317841 HJ6 JACK Job Reference (optional) 7.140 s Oct 1 2009 MTek Industries, Inc. Thungs 22 15:31:57 2009 Page 1 Builders FrstSource, Lake City, FL 32055 9-1-2 Scale = 1:21.0 4.95 12 0-4-0 **B1** 2×4 LOADING (psf) PLATES GRIP SPACING 2-0-0 CSI DEFL I/defi 1/d 244/190 360 MT20 Vert(LL) -0.07 >999 TCLL 20 0 Plates Increase 1 25 TC 0.60 BC 1.25 0.41 Vert(TL) -0.18 2-4 >403 240 TCDL 10.0 Lumber Increase BCLL 0.0 Rep Stress Incr NO WB 0.00 Horz(TL) -0.00 n/a n/a Code FBC2007/TPI2002 Weight: 24 lb BCDL 10.0 (Matrix) Wind(LL) 0.08 2-4 >901 240

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=79/Mechanical, 2=360/0-5-11, 4=67/Mechanical

Max Horz 2=195(LC 5)

Max Uplift3=-93(LC 6), 2=-377(LC 5), 4=-41(LC 3) Max Grav 3=79(LC 1), 2=360(LC 1), 4=134(LC 2)

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

(10-11)

1) Wind: ASCE 7-05; 110mph (3-second gust); TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; 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 93 lb uplift at joint 3, 377 lb uplift at joint 2 and 41 lb uplift at joint 4.

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) 53 lb up at 1-5-12, 53 lb up at 1-5-12, and 7 lb down and 26 lb up at 4-3-11, and 7 lb down and 26 lb up at 4-3-11 on top chord, and 21 lb up at 1-5-12, 21 lb up at 1-5-12, and 16 lb down and 39 lb up at 4-3-11, and 16 lb down and 39 lb up at 4-3-11 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: 1-3=-60, 2-4=-20

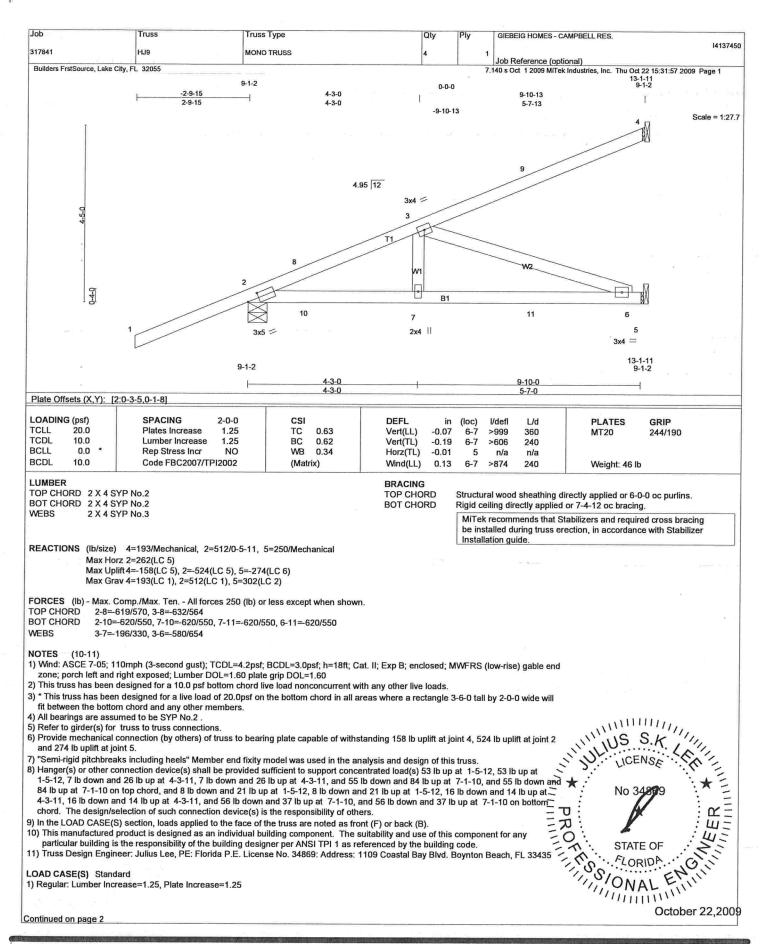
Concentrated Loads (lb)

Vert: 5=107(F=53, B=53) 6=51(F=26, B=26) 7=21(F=10, B=10) 8=-16(F=-8, B=-8)

No 34969 U 10

October 22,2009

MARNING - 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/TP11 Quality Criteria, DSB-89 and BCS11 Building Component Safety Information available from Truss Plate Institute, \$83 D'Onotrio Drive, Madison, WI 53719.



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| Job | Truss | Truss Type | Qty | Ply | GIEBEIG HOMES - CAMPBELL RES. | 14137450 |
|-----------------------------------|---------|------------|-----|-----|--|----------|
| 317841 | H1a | MONO TRUSS | 4 | 1 | Job Reference (optional) | 1 |
| Builders FrstSource, Lake City, F | L 32055 | -1 | | 7 | 1.140 s Oct 1 2009 MiTek Industries, Inc. Thu Oct 22 15:31:57 2009 | Page 2 |

LOAD CASE(S) Standard Uniform Loads (plf)
Vert: 1-4=60, 2-5=-20
Concentrated Loads (lb)

Vert: 3=51(F=26, B=26) 7=-16(F=-8, B=-8) 8=107(F=53, B=53) 9=-110(F=-55, B=-55) 10=21(F=10, B=10) 11=-56(F=-28, B=-28)

No 3469

No 3469

STATE OF

FLORIDA

October 22,200

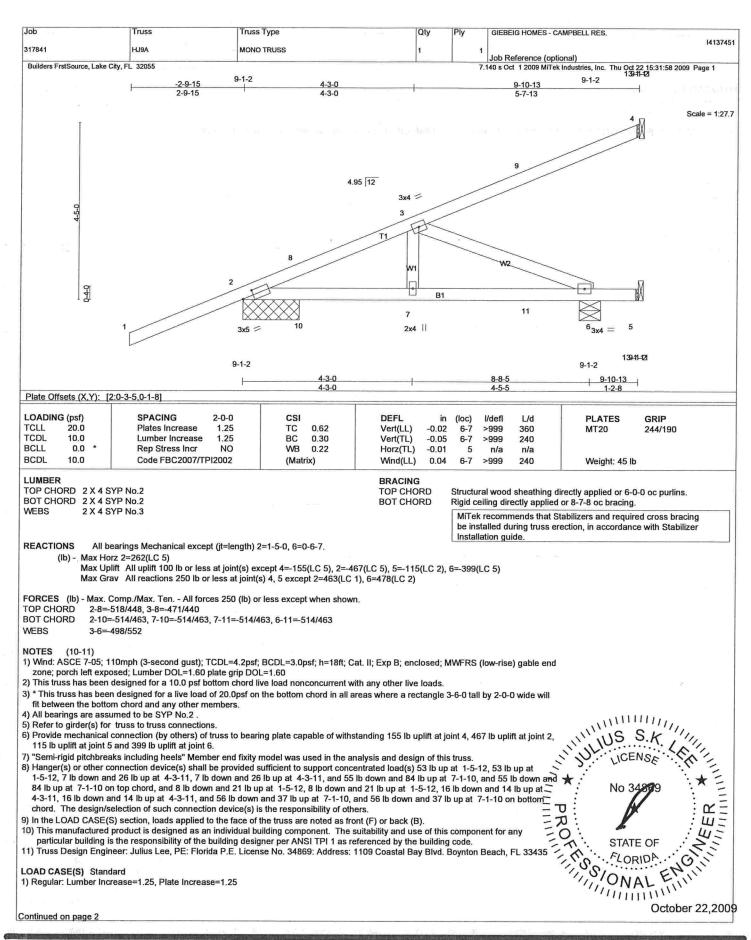
October 22,2009

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

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ANSI/TPI 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 | Truss | Truss Type | Qty | Ply | GIEBEIG HOMES - CAMPBELL RES. | 14137451 |
|-----------------------------------|---------|------------|-----|-----|--|----------|
| 317841 | НЈ9А | MONO TRUSS | 1 | 1 | Job Reference (optional) | |
| Builders FrstSource, Lake City, F | L 32055 | | | 7 | 1.140 s Oct 1 2009 MiTek Industries, Inc. Thu Oct 22 15:31:58 2009 P | age 2 |

LOAD CASE(S) Standard

Uniform Loads (plf) Vert: 1-4=-60, 2-5=-20 Concentrated Loads (lb)

Vert: 3=51(F=26, B=26) 7=-16(F=-8, B=-8) 8=107(F=53, B=53) 9=-110(F=-55, B=-55) 10=21(F=10, B=10) 11=-56(F=-28, B=-28)

No 34899

No 34899

STATE OF

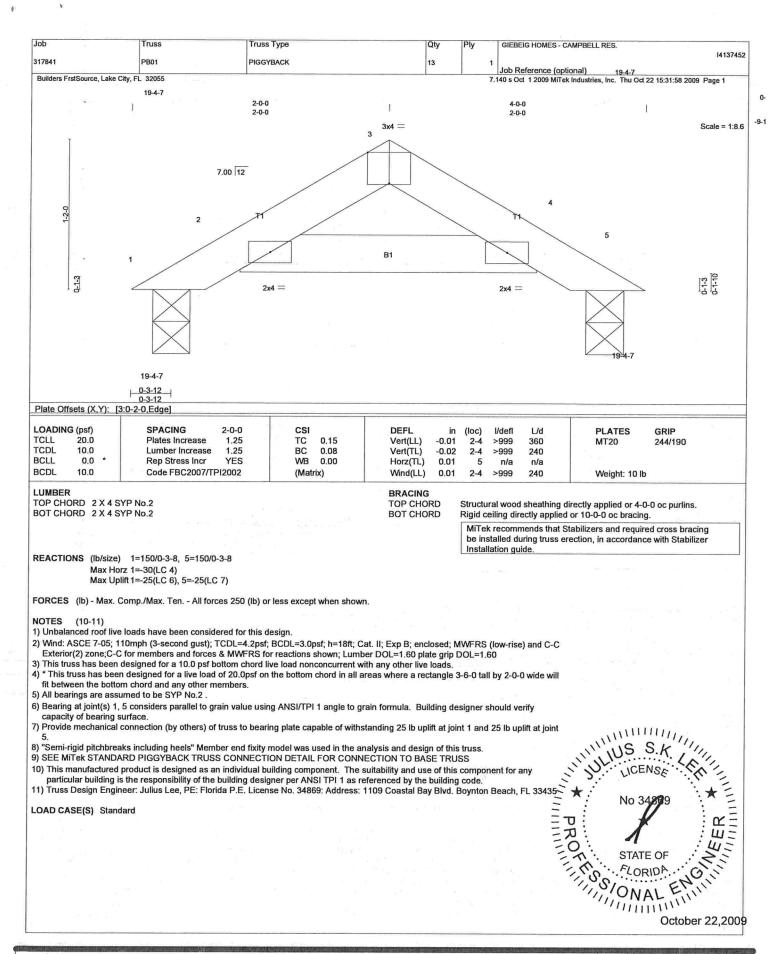
FLORIDA

October 22,200 TILLUS S.K.

October 22,2009

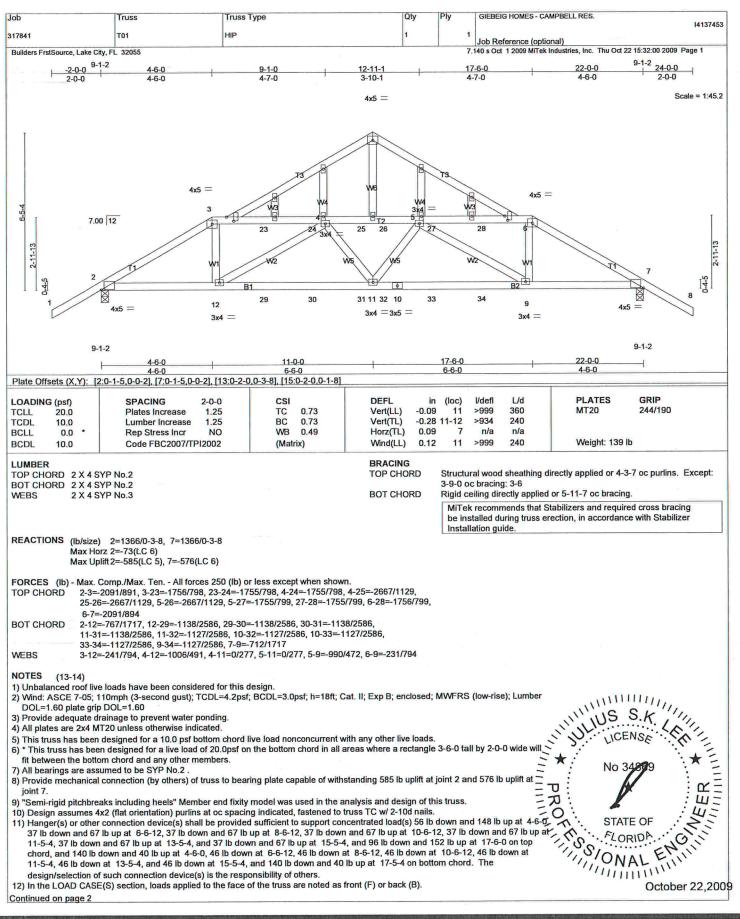
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 BEFORE USE.

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

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| Job | Truss | Truss Type | Qty | Ply | GIEBEIG HOMES - CAMPBELL RES. | |
|--------------------------|-------------------|------------|-----|-----|---|------------|
| 317841 | T01 | HIP | 1 | 1 | | 14137453 |
| | | | | | Job Reference (optional) | |
| Builders FrstSource, Lal | ke City, FL 32055 | | | 7. | 140 s Oct 1 2009 MiTek Industries, Inc. Thu Oct 22 15:32:00 2 | 009 Page 2 |

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

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

LOAD CASE(S) Standard

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

Uniform Loads (plf)

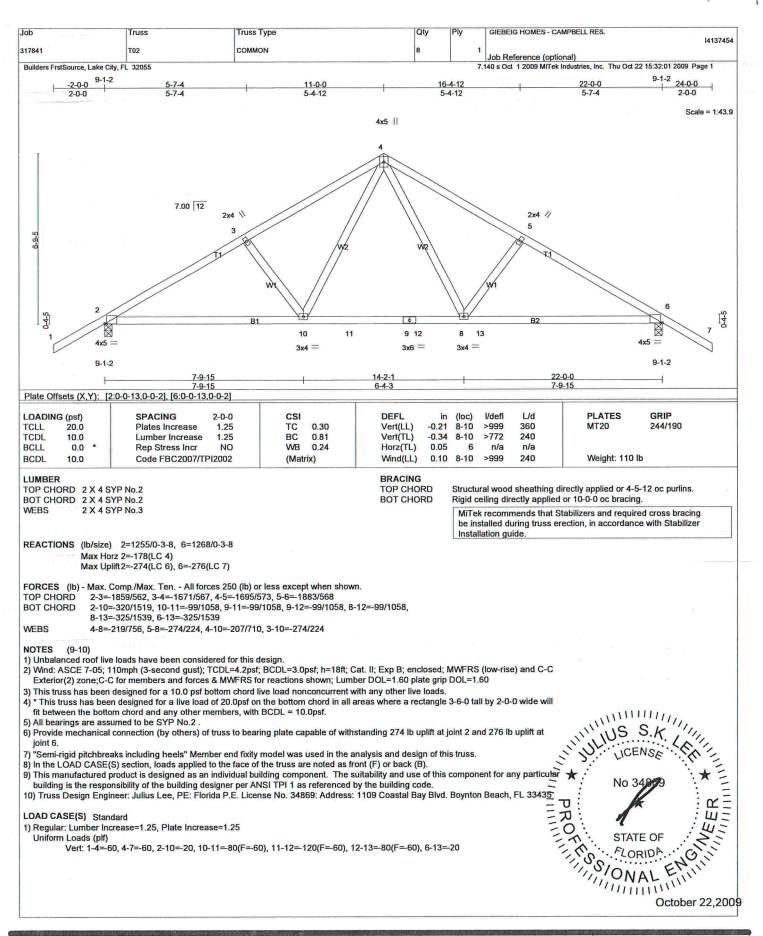
Vert: 1-3=-60, 3-6=-70(F=-10), 6-8=-60, 2-7=-20

Concentrated Loads (lb)

Vert: 3=-56(F) 6=-56(F) 12=-70(F) 9=-70(F) 23=-37(F) 24=-37(F) 25=-37(F) 25=-37(F) 28=-37(F) 29=-23(F) 30=-23(F) 31=-23(F) 32=-23(F) 32= 34=-23(F)

> LICENSE PRON. SI.

October 22,2009



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

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Job Truss Truss Type Qty Ply GIEBEIG HOMES - CAMPBELL RES 14137455 317841 T03 Job Reference (optional) Builders FrstSource, Lake City, FL 32055 7.140 s Oct 1 2009 MiTek Industries, Inc. Thu Oct 22 15:32:02 2009 Page 1 -2-0-0⁹⁻¹⁻² 9-1-2 11-11-0 16-5-12 22-6-5 27-1-0 2-0-0 4-11-0 4-6-12 Scale = 1:58.7 4x6 = 5x6 = 2x6 || 3x4 = 3x4 = 5x6 = 3 T2¹⁸ 826 15 16 4 17 5 19 20 6 22 25 7.00 12 0-4-5 31 32 27 28 13 29 12 30 11 33 34 10 37 14 938 5x8 / 5x6 = 3x4 6x8 3x4 3x8 = 7x8 = 9-1-2 9-1-2 7-0-0 32-0-0 7-0-0 6-2-12 6-3-5 6-3-5 6-2-11 Plate Offsets (X,Y): [2:0-3-15,0-2-8], [3:0-3-8,0-2-0], [6:0-3-0,0-3-0], [9:Edge,0-4-12], [14:0-3-8,0-1-8] LOADING (psf) SPACING 2-0-0 CSI DEFL (loc) I/defl L/d **PLATES** GRIP Plates Increase 1.25 TC 0.92 -0.20 11-13 Vert(LL) >999 360 MT20 244/190 -0.54 11-13 TCDL 10.0 Lumber Increase 1.25 BC 0.62 Vert(TL) >706 240 BCLL 0.0 Rep Stress Incr NO WB 0.92 Horz(TL) 0.13 9 n/a n/a BCDL 10.0 Code FBC2007/TPI2002 (Matrix) Wind(LL) 0.33 11-13 >999 Weight: 197 lb LUMBER BRACING TOP CHORD 2 X 4 SYP No.2 Structural wood sheathing directly applied, except end verticals. TOP CHORD BOT CHORD 2 X 6 SYP No.1D BOT CHORD Rigid ceiling directly applied or 4-9-8 oc bracing. 2 X 4 SYP No.3 WEBS WEBS T-Brace: 2 X 4 SYP No.3 - 4-14, 7-9 Fasten T and I braces to narrow edge of web with 10d Common wire nails, 9in o.c., with 4in minimum end distance. Brace must cover 90% of web length. MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide REACTIONS (lb/size) 9=2841/0-3-8, 2=2585/0-3-8 Max Horz 2=191(LC 5) Max Uplift9=-1706(LC 3), 2=-1444(LC 5) FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 2-3=-4405/2587, 3-15=-3750/2291, 15-16=-3749/2291, 4-16=-3749/2291 4-17=-5113/3041, 17-18=-5113/3041, 5-18=-5113/3041, 5-19=-4925/2884 19-20=-4925/2884, 20-21=-4925/2884, 6-21=-4925/2884, 6-22=-3255/1907, 22-23=-3255/1907, 7-23=-3255/1907, 8-9=-374/216 BOT CHORD 2-14=-2258/3695, 14-27=-2952/4955, 27-28=-2952/4955, 13-28=-2952/4955, 13-29=-3092/5266, 12-29=-3092/5266, 12-30=-3092/5266, 30-31=-3092/5266, NOTES (11-12)

1) Wind: ASCE 7-05; 110mph (3-second gust); TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; 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 in fit between the bottom chord and any office. 11-31=-3092/5266, 11-32=-2548/4367, 32-33=-2548/4367, 33-34=-2548/4367, NONEF 5) All bearings are assumed to be SYP No.2. STATE OF NOS/ONAL 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1706 lb uplift at joint 9 and 1444 lb uplift at FLORIDA 7) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss October 22,2009 Continued on page 2

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

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| Job | Truss | Truss Type | Qty | Ply | GIEBEIG HOMES - CAMPBELL RES. | 14137455 |
|--------|-------|------------|-----|-----|-------------------------------|----------|
| 317841 | T03 | MONO HIP | 1 | 1 | Job Reference (optional) | 14137433 |

Builders FrstSource, Lake City, FL 32055

7.140 s Oct 1 2009 MiTek Industries, Inc. Thu Oct 22 15:32:02 2009 Page 2

NOTES

- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 250 lb down and 237 lb up at 7-0-0, 117 lb down and 90 lb up at 9-0-12, 117 lb down and 90 lb up at 11-0-12, 117 lb down and 90 lb up at 13-0-12, 117 lb down and 90 lb up at 15-0-12, 117 lb down and 19-0-12, 117 lb down and 90 lb up at 21-0-12, 117 lb down and 90 lb up at 23-0-12, 117 lb down and 90 lb up at 25-0-12, 117 lb down and 90 lb up at 27-0-12, 117 lb down and 90 lb up at 29-0-12, and 117 lb down and 90 lb up at 31-0-12, and 117 lb down and 90 lb up at 31-5-4 on top chord, and 351 lb down and 353 lb up at 7-0-0, 88 lb down and 73 lb up at 9-0-12, 88 lb down and 73 lb up at 11-0-12, 88 lb down and 73 lb up at 15-0-12, 88 lb down and 73 lb up at 19-0-12, 88 lb down and 73 lb up at 19-0-12, 88 lb down and 73 lb up at 21-0-12, 88 lb down and 21-0-12, 88 l , 88 lb down and 73 lb up at 29-0-12, and 88 lb down and 73 lb up at 31-0-12, and 88 lb down and 73 lb up at 31-5-4 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

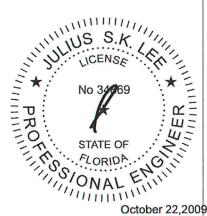
1) Regular: Lumber Increase=1.25, Plate Increase=1.25

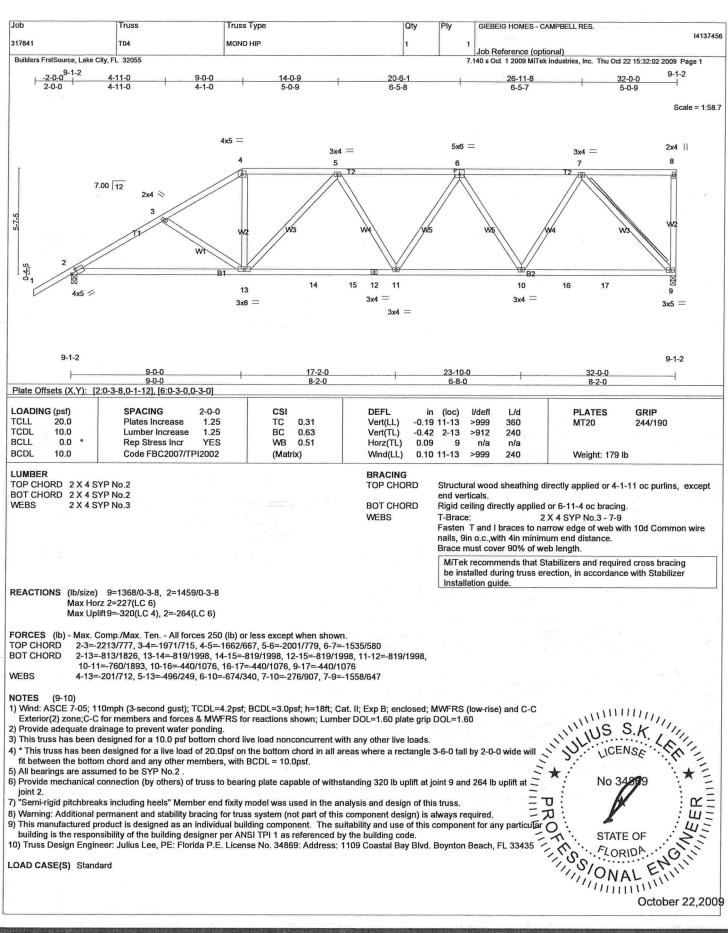
Uniform Loads (plf)

Vert: 1-3=-60, 3-8=-60, 2-9=-20

Concentrated Loads (lb)

unied Loads (in) 4=-284(F) 13=-54(F) 7=-117(F) 15=-117(F) 16=-117(F) 17=-117(F) 18=-117(F) 19=-117(F) 20=-117(F) 21=-117(F) 22=-117(F) 22=-117(F) 23=-117(F) 24=-117(F) 25=-117(F) 25=-117(



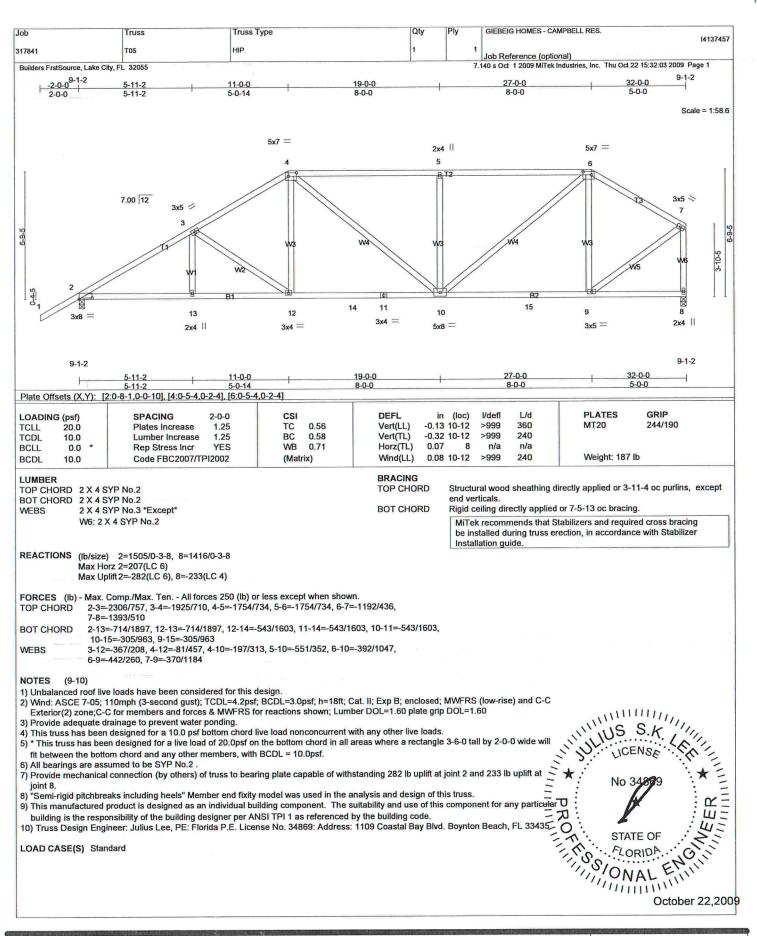


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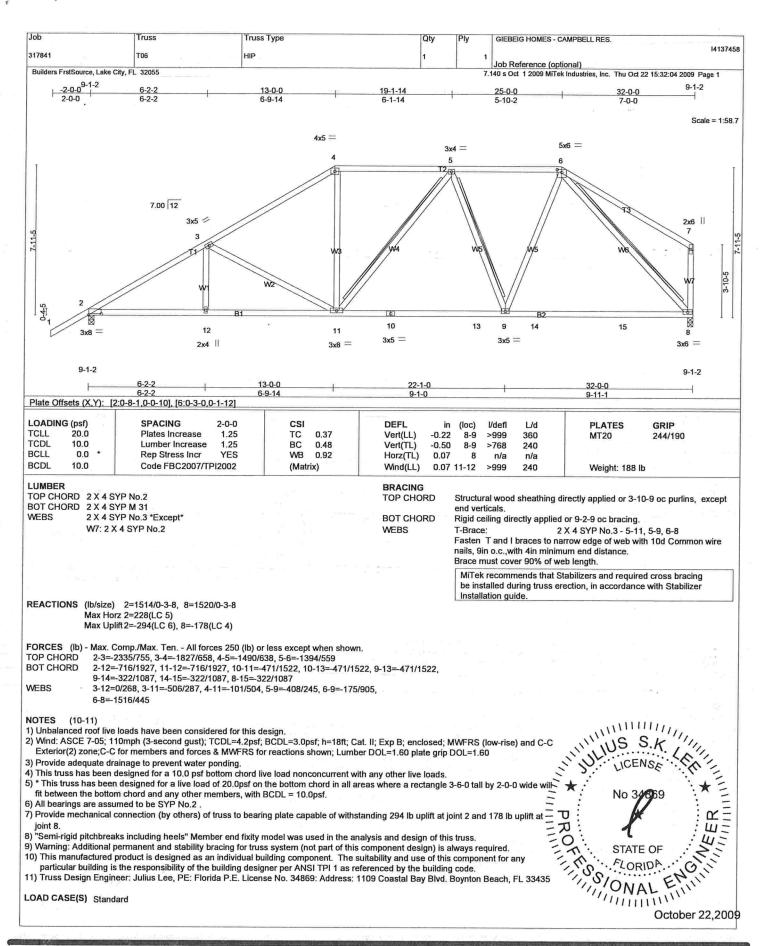
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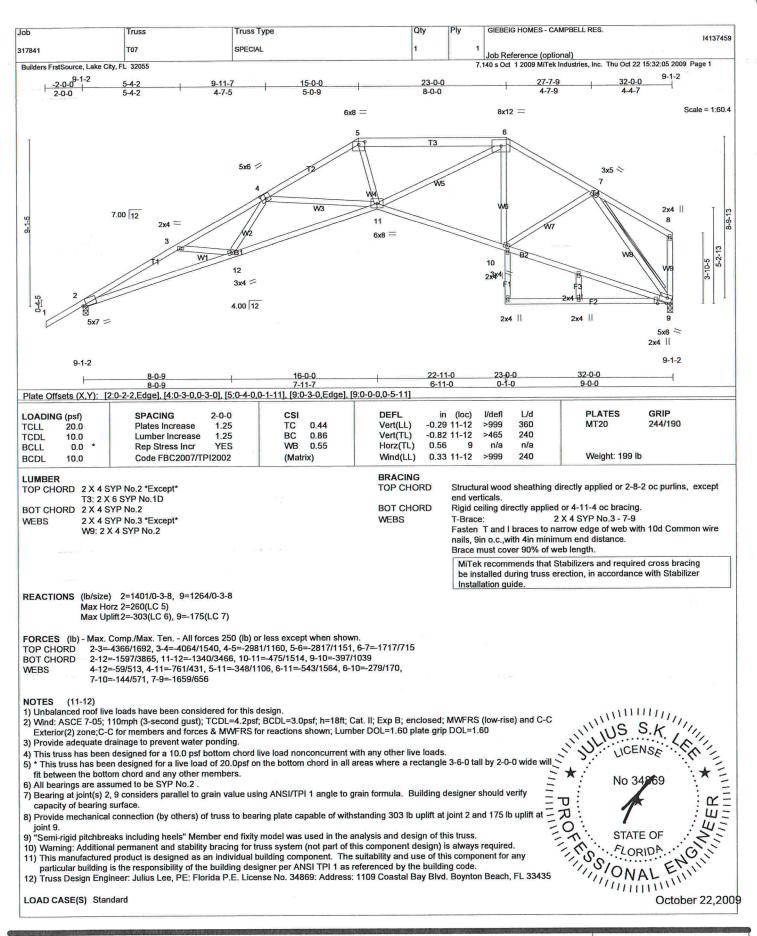


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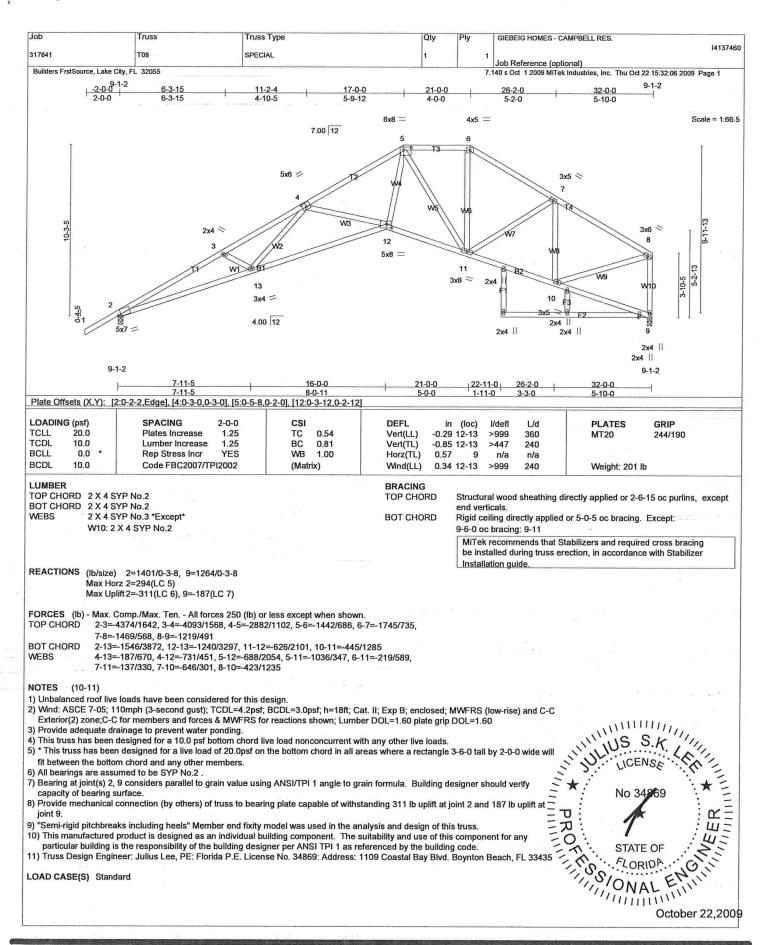
ANSI/TRI Quality Criteria, DSB-89 and BCS11 Building Component Safety Information available from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.



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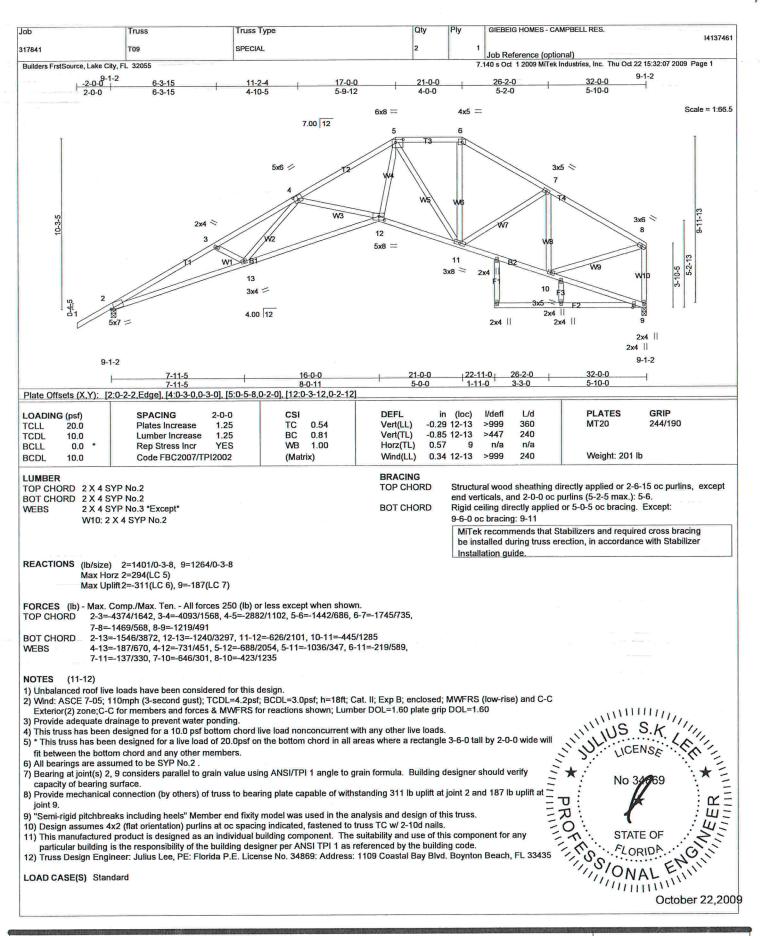


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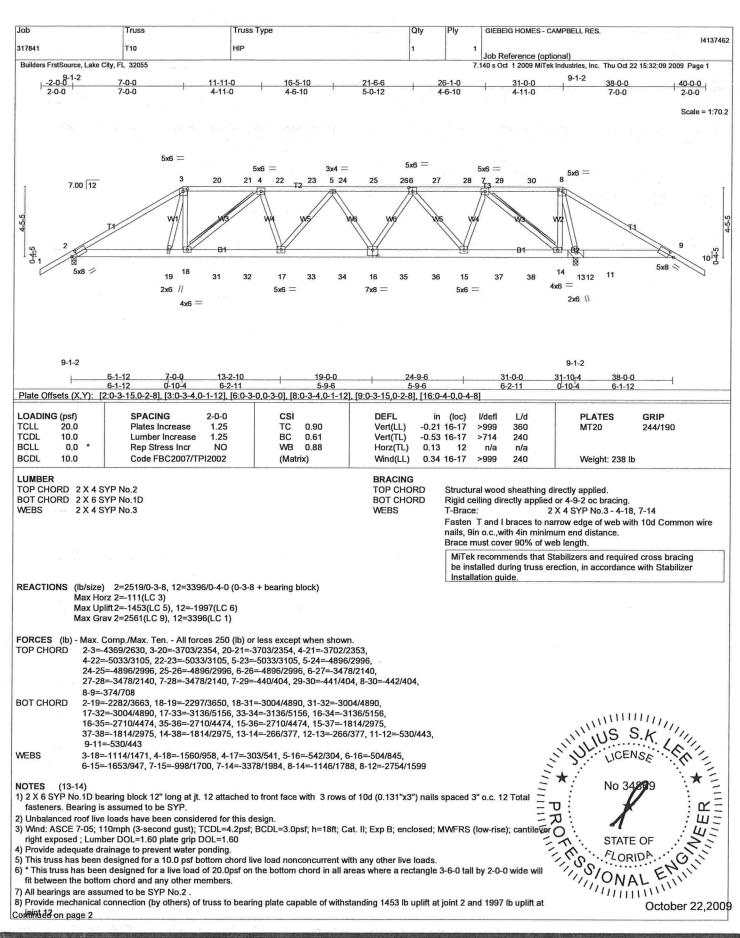
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Safety Information available from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.



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| Job | Truss | Truss Type | Qty | Ply | GIEBEIG HOMES - CAMPBELL RES. | 14137462 |
|--------|-------|------------|-----|-----|--|----------|
| 317841 | T10 | HIP | 1 | - 1 | Job Reference (optional) | |
| | | | | - | The Date of the Control of the Contr | |

NOTES (13-14)

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

10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 250 lb down and 237 lb up at 7-0-0, 117 lb down and 90 lb up at 9-0-12, Transper(s) or other contraction device(s) shall be provided sufficient to support concentrated load(s) 250 lb down and 237 lb up at 7-0-0, 117 lb down and 90 lb up at 9-0-12, 117 lb down and 90 lb up at 11-0-12, 117 lb down and 90 lb up at 15-0-12, 117 lb down and 90 lb up at 15-0-12, 117 lb down and 90 lb up at 15-0-12, 117 lb down and 90 lb up at 15-0-12, 117 lb down and 90 lb up at 20-11-4, 117 lb down and 90 lb up at 22-11-4, 117 lb down and 90 lb up at 24-11-4, 117 lb down and 90 lb up at 26-11-4, and 117 lb down and 90 lb up at 28-11-4, and 287 lb down and 288 lb up at 31-0-0 on top chord, and 351 lb down and 358 lb up at 7-0-0, 88 lb down and 73 lb up at 9-0-12, 88 lb down and 73 lb up at 11-0-12, 88 lb down and 11-0-12, 88 lb down 88 lb down and 73 lb up at 20-11-4, 88 lb down and 73 lb up at 22-11-4, 88 lb down and 73 lb up at 24-11-4, 88 lb down and 73 lb up at 26-11-4, and 88 lb down and 73 lb up at 28-11-4, and 7 lb down and 99 lb up at 30-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

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

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

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

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-3=-60, 3-8=-60, 8-10=-60, 2-9=-20

Concentrated Loads (lb)

Vert: 3=-250(B) 8=-247(B) 16=-54(B) 18=-284(B) 17=-54(B) 15=-54(B) 14=27(B) 20=-117(B) 21=-117(B) 22=-117(B) 23=-117(B) 24=-117(B) 25=-117(B) 26=-117(B) 27=-117(B) 28=-117(B) 29=-117(B) 30=-117(B) 31=-54(B) 32=-54(B) 33=-54(B) 34=-54(B) 35=-54(B) 36=-54(B) 37=-54(B) 38=-54(B)

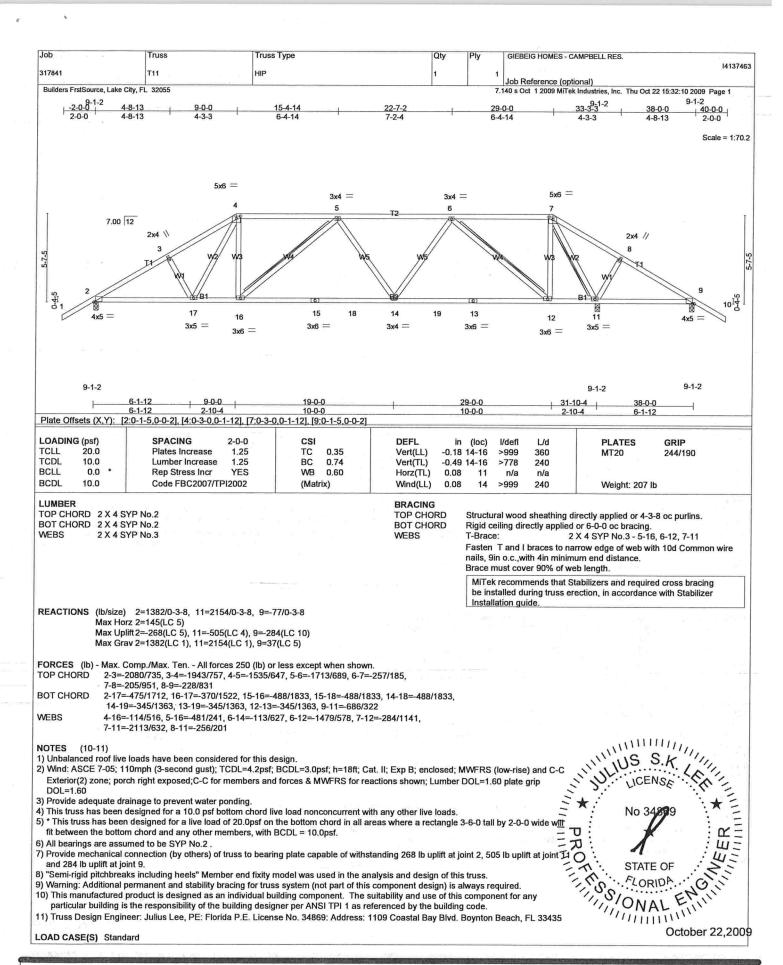
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> STATE OF
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> FLORIDA
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> October ENGIN

October 22,2009

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

Design valid for use only with MiTek connectors. This design is based only upon parameters shown, and is for an individual building component. Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to insure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding labrication, 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.

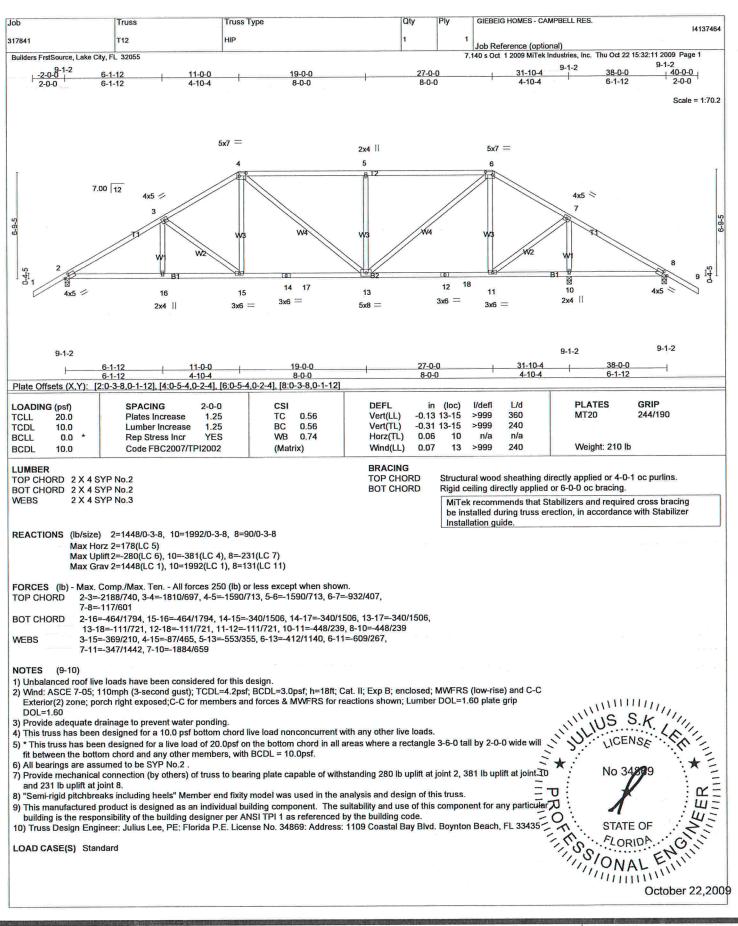


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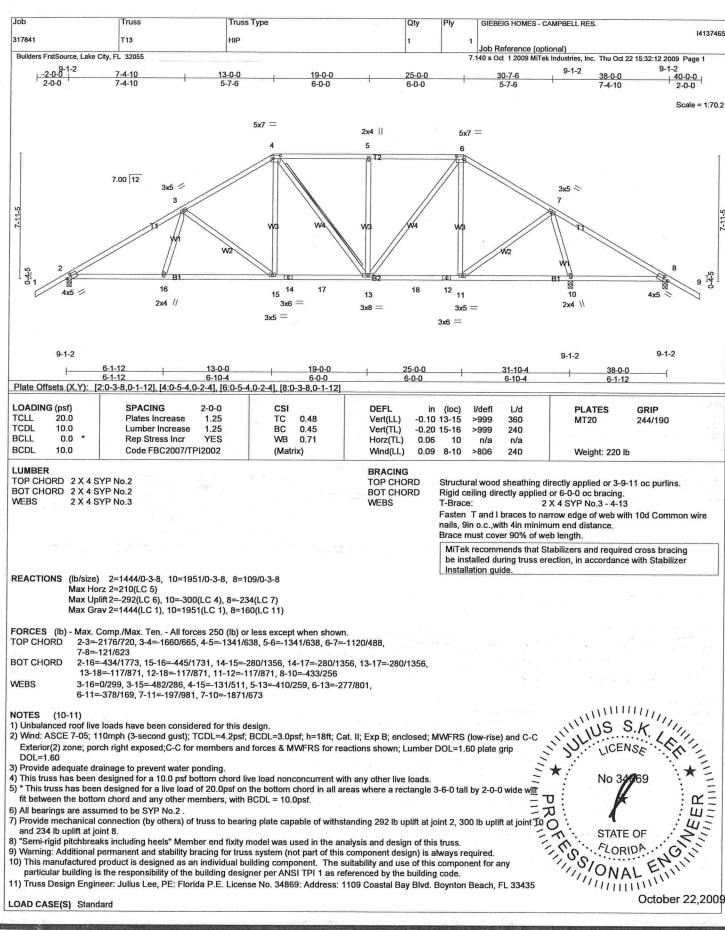
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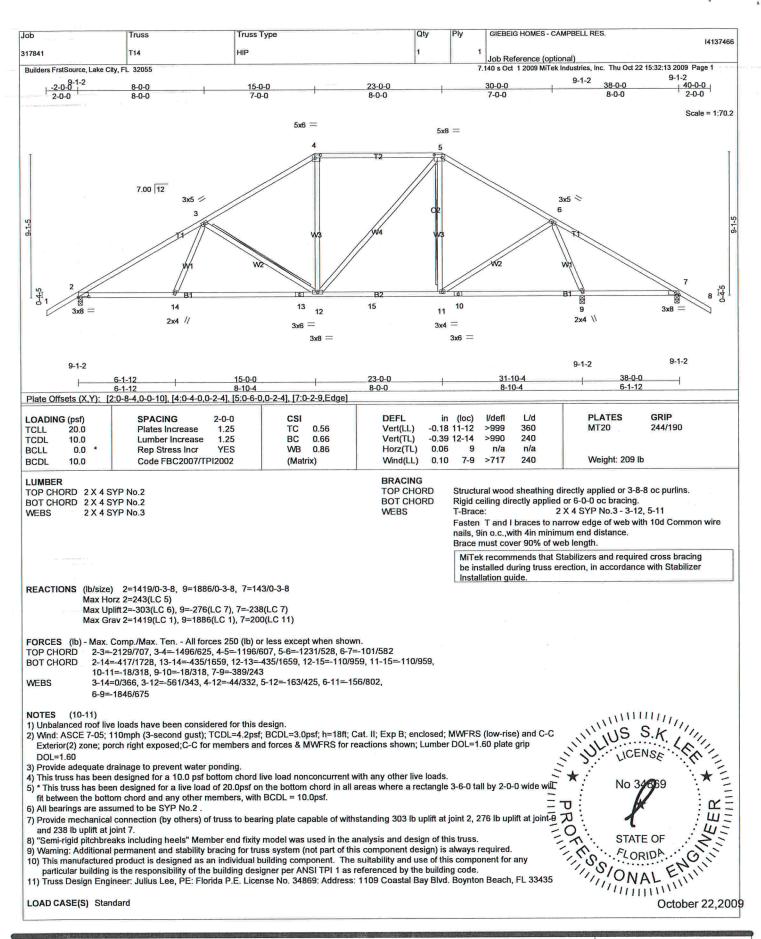
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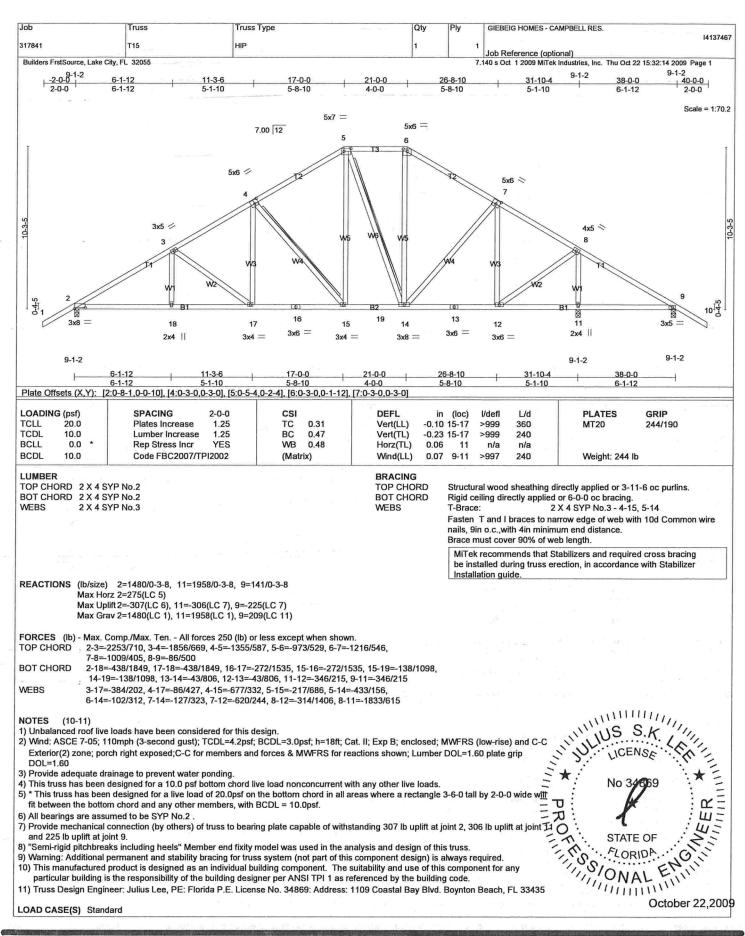
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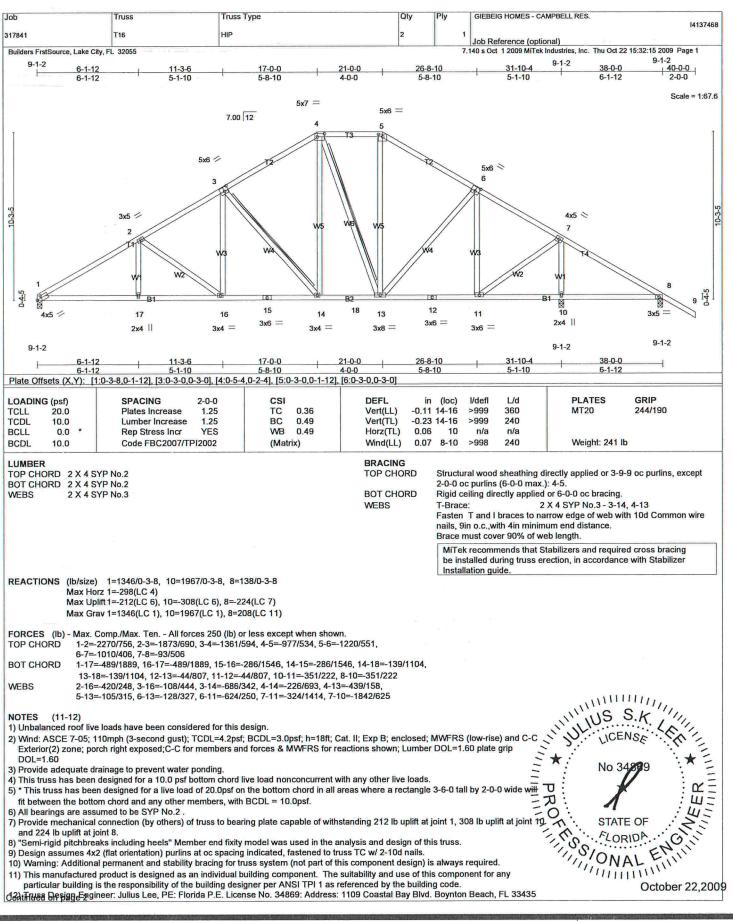
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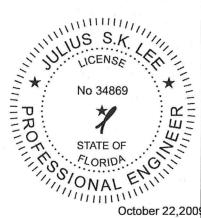


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| Job | Truss | Truss Type | Qty | Ply | GIEBEIG HOMES - CAMPBELL RES. | |
|----------------------|--------------------|------------|-----|-----|---|--------------|
| 317841 | T16 | HIP | 2 | 1 | - 4 | 14137468 |
| | 100 | | | | Job Reference (optional) | |
| Quildare Eret Course | Lake City El 22055 | | | 7 | 110 - O-J 1 0000 NT-11 - 1 - T - O 100 15 | 00 45 0000 5 |

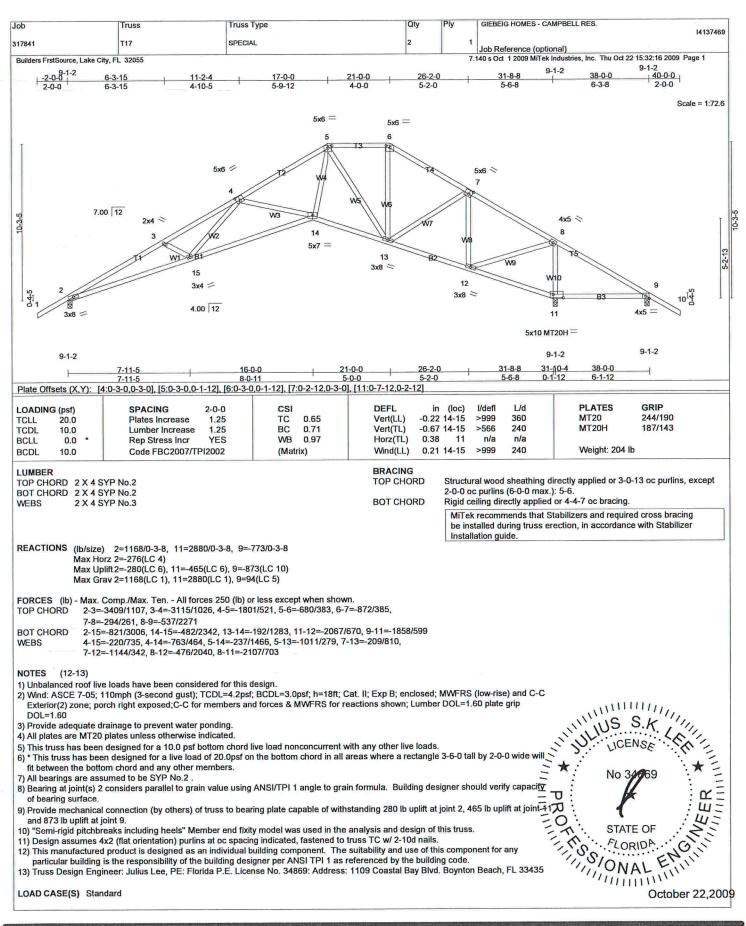
LOAD CASE(S) Standard



October 22,2009

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MIL-1473 BEFORE USE.

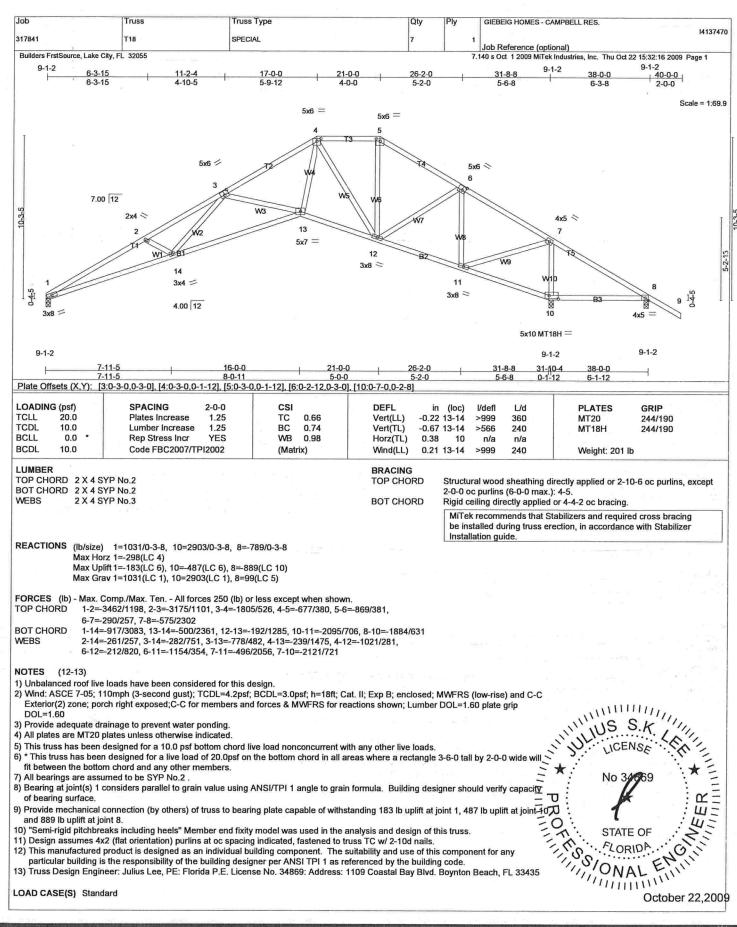
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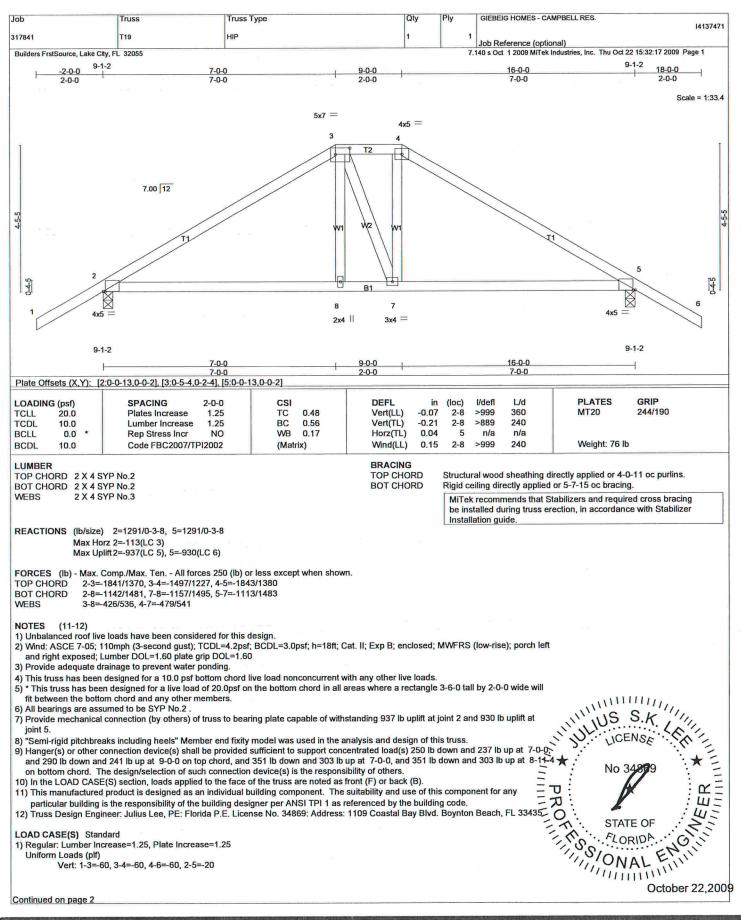
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Job GIEBEIG HOMES - CAMPBELL RES. Truss Truss Type Qty Ply 14137471 Job Reference (optional)
7.140 s Oct 1 2009 MiTek Industries, Inc. Thu Oct 22 15:32:17 2009 Page 2

Builders FrstSource, Lake City, FL 32055

LOAD CASE(S) Standard Concentrated Loads (lb)

Vert: 3=-250(F) 4=-250(F) 8=-284(F) 7=-284(F)

S S.K. LEATT PROTEIN STATE STAT

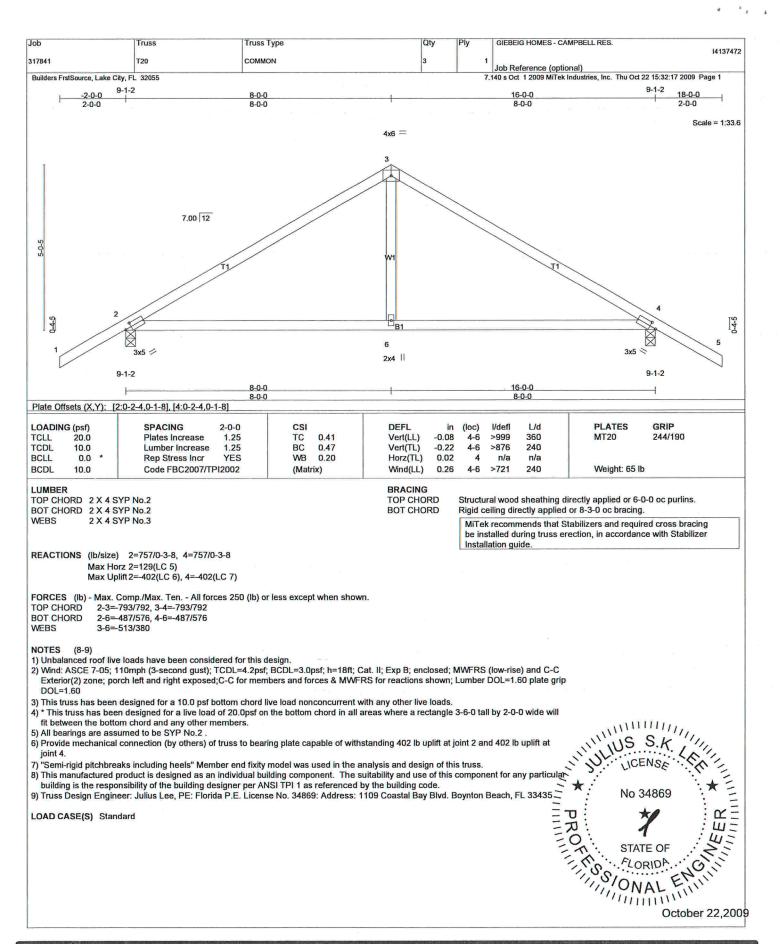
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Julius Lee Engineering 1109 Coastal Bay Blvd. Boynton, FL 33435



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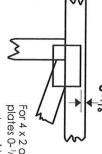
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Symbols

PLATE LOCATION AND ORIENTATION



Center plate on joint unless x, y offsets are indicated.
Dimensions are in ft-in-sixteenths.
Apply plates to both sides of truss and fully embed teeth.



For 4×2 orientation, locate plates $0^{-1}h_{\delta}$ " from outside edge of truss.

TOP CHORD

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

00

BOTTOM CHORDS

0

(n

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

PLATE SIZE



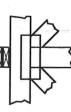
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



Indicated by symbol shown and/or by text in the bracing section of the output. Use T, I or Eliminator bracing if indicated.

BEARING



Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur.

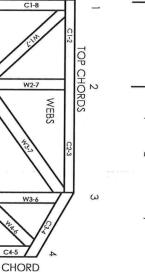
Industry Standards: ANSI/TPI1: National

National Design Specification for Metal Plate Connected Wood Truss Construction. Design Standard for Bracing.
Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

DSB-89

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

CC-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

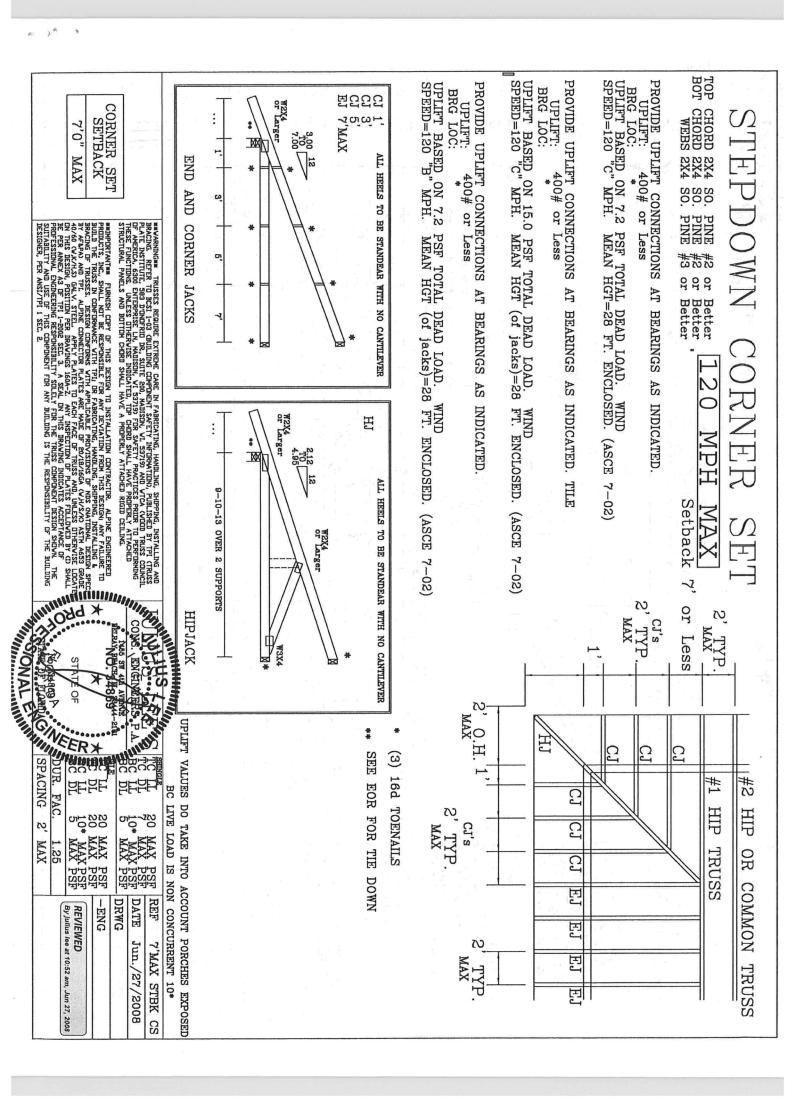
- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSII
- Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative T, I, or Eliminator bracing should be considered.
- Never exceed the design loading shown and never stack materials on inadequately braced trusses.
- Provide copies of this truss design to the building designer, erection supervisor, properly owner and all other interested parties.
- Cut members to bear tightly against each other.

TOP

- Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
- Unless expressly noted, this design is not applicable for use with fire relardant, preservative treated, or green lumber.
- Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
- Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
- Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
- 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.
- Do not cut or after truss member or plate without prior approval of an engineer.
- 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.
- Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
- Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.

+ *, x

v



CE NO. 44869

NO. 44869

STATE OF

WEVIEWED

By julius iee at 12:00 pm, Jun 11, 2008

REFER TO CHART ABOVE

RE DIAGONAL BRACE OPTION:
VERTICAL LENGTH MAY BE
DOUBLED WEIN DIAGONAL
BRACE IS USEED, CONNECT
BRACE IS USEED, CONNECT
BRACE BRACE TOR SADE
AT EACH END, MAX WED
TOTAL LENGTH IS 14*. **GABLE VERTICAL** LENGTH MAX VERTICAL LENGTH SPACING | SPECIES 16" 12" O.C. 24 O.C. 0 GABLE VERTICAL SPF SPF SPF DFL DFL SP SP SP H H H H ASCE NAOHS STANDARD GRADE STANDARD STANDARD STANDARD STANDARD STANDARD STUD STUD STUD CUIS 力器は 古艺 BRACE 7-02: GABIL THUSS BRACES 2 4 2 2 4 130 GROUP A ZX4 SI #ZN, DI-L #Z,
SPF #/#Z, DR SETTER
DIAGONAL BRACE;
SINGLE OR DOUBLE
CUT (AS SELTEN) AT (1) 1X4 "L" BRACE * (1) 2X4 "L" BRACE * 2, 5, 2, 6, 5, 5, 6, ď MPH Ŋ UPPER END. GROUP B WIND , 0, % g 0, √ 6. 2. GROUP A SPEED, GROUP B 8, 2, 10° 8, 2, 10° 15 A LOOGT 18 GROUP A (2) 2X4 "L" BRACE ** MEAN CHART ABOVE FOR MAX GABLE VERTICAL LENGTH NX. CONTINUOUS HEARING GROUP B 10' 2° ō #EN OR BETTIE HEIGHT, **(** (1) 2X6 "L" BRACE * (2) 2XB "L" GROUP A CONS ENGINEERS P.A. 0 12 2 10' 3" 1455 SV 48h AVIANUS DELRAY BEACH, FL 35444-2161 12 No: 34869 STATE OF FLORIDA ENCLOSED, GROUP B 18, 5" ö GROUP A ญี e Q Н XAX MAX GROUP B HRACE 칪 II 13' 7 **ω μ** N. 13′ 3" 12,0 13 **(** 1.00, TOT. SPACING E ATTACH EACH 'L' BRACE WITH 10d NAILS AF FOR (1) 'L' BRACE; SPACE NAILS AF 8' O.C. \$ FOR (2) 'L' BRACES; SPACE NAILS AF 8' O.C. \$ FOR (2) 'L' BRACES; SPACE NAILS AT 3' O.C. DY 18' END ZONES AND 4' O.C. BETTEEN ZONES. CABLE END SUPPORTS LOAD FROM 4' 0" PROVIDE UPLIET CONNECTIONS FOR 136 FLF OVER CONTINUOUS BEARING (6 PSF TC DEAD LOAD). LIVE LOAD DEPLECTION CHATERIA IS L/240. "L" BRACING MUST BE A MINIMUM OF 80% OF WEB MIMBER LENGTH, \$1 / \$2 STANDARD
\$3 STUD DOUGLAS FIR-LARCH BRACING GROUP SPECIES PLYWOOD OVERHANG. EXPOSURE VERTICAL LENGTH

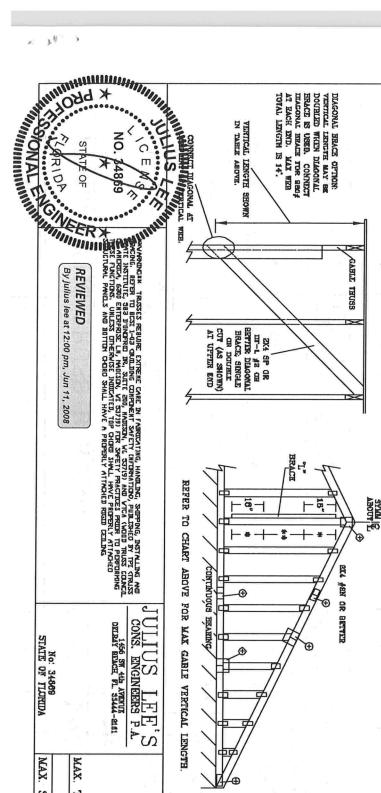
TESS THAN 4. 0° BUT

GREATER THAN 4. 0°, BUT

LESS THAN 11. 0° CABLE TRUSS DETAIL NOTES: SOUTHING YOUR 60 STANDARD CUITS PRAY, SPLICE, AND BEET, PLATES. 24.0 CABLE PSF VERTICAL DRWG REF DATE GROUP GROUP M & BIR HEM-PIR C MITEX STD CABLE 15 E HT PLATE SIZES DOUGLAS FIR-LARCH 11/26/09 Ä SULT NEAR POLE A. ASCR7-02-GAB13015 IXA OR 2X3 AND STANDARD 2.5X4 7 STANDARD GRADES:

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

| | _ | _ | | _ | | | | | | _ | | _ | | | | | | | | | | | | _ | | | _ | | _ |
|--------------------------------------|------------------------------------|---|--|---|---------------------------|----------------|------------|------------|------------|----------|---------------------------------|--------|------------|----------|----------|---------------|--------|----------------|-------------------|-------------|---------------------------------|----------|--------------------|----------|---------|--------|-----------------------------------|-------------------------|---------------------------|
| | | | M | Α | X | | (| i | \] | 3 | | E | | V | E | R | Γ | Ί | C | A | L | 6 | L | F | N | 10 | 7 | H | |
| | | 1 | 2 | 31 | 9 | 0 | .(| Ξ. | | j | 1 | 6 | 3 3 | | 0 | .(| 3 | | | 2 | 4 | 31 | | O | . (| C | | PACING | CARI |
| | | ヒゴニ | 1 1 | 7 | <u>}</u> | 111 | H | מעזי | クロゴ | | | 1 | 77 |) j | TIT | Į. | OL L | ロロコ | | L H L | 1 | 7 | j | TII | I | מלה | בודו | SPACING SPECIES GRADE | CABLE VERTICAL |
| | STANDARD | STUD | #3 | #22 | 11 | STANDARD | STUD | † 3 | 和 / #2 | STANDARD | STUD | ż | #23 | #1 | STANDARD | CUTS | ₽# | 打/#2 | STANDARD | STUD | £4 | #10 | 41 | STANDARD | STUD | #8 | £1 / #2 | GRADE | BRACE |
| | 4. 0. | 4. 10 | 4. | 4' 4" | 4' 5" | 3' 11" | 3' 11" | | 4. 0, | 31 | | | 3' 11" | 4.0" | 3 7 | 3, 2, | 3' 7" | | 3' 0" | | | 3, 6, | | 2' 11." | 3' 1" | 3' 1" | sa aa | BRACES | ž |
| | 5, 6, | | 6 6 | 6' 11° | 8' 11° | 5' 4" | 6 <u>.</u> | 1 | 6' 11" | 4' 9" | | 5 7 | 8' 4" | 8' 4" | | Đ, | | | 3' 10" | | | 5 6, | | | 4' 6" | 4' 5" | 5. 6. | GROUP | (1) 1X4 |
| | 5, 8, | 1 | 6, 2, | 7" 6" | 7' 8" | 5' 4" | 6. 3. | 8, 3, | 7' 2" | 4' 9" | 5' 8" | 6. 4. | 6' 10" | | 4' 8" | 6, 5 <u>*</u> | | | 3' 10" | - | 4, 6, | | | 3′ 9" | 4' 5" | 4, 2, | 6' 8" | A GROUP H | "L" BRACE • |
| | 7' 3" | | e' 3" | 8" 3" | 8,3, | J, 10 | 8º 3" | e' 3" | 8' 3" | 6' 3" | 7' 3" | 7' 4" | 7" 6" | 7° B" | | 7' 2" | ار کر | | 5, 1,, | | | ور ور | 7 | 6, 0, | 5' 10" | 6, 10, | 6, 6, | GROUP | (1) 2X4 · |
| 3 porces | 7. 3. | | 8' 6" | B' 11" | B' 11° | 7' 1" | 8' 3" | | 8. G. | B. 3 | 7' 3" | 7' 4" | 8' 1" | B' 1° | 6. 8. | 7' 2" | 7 20 | 7' 8" | 5 1. | 5' 11" | 6. 0, | 7' 0" | 7' 0° | 5.0 | - 1 | 5' 10° | g. 9, | A GROUP B | (1) 2X4 "L" BRACE * |
| e) | 8. | 9′ 10″ | 9, 10, | 8' 10" | 8, 10 _e | න _. | | 8, 10,, | 9, 10, | B. 2. | a, 11. | B. 11. | 8' 11" | "11 'B | B, 3, | "11 ,B | B' 11" | 11 | e, 11. | 7, 10, | 7' 10" | 7' 10" | 7, 10, | g, 9. | 7' 10" | 7' 10" | 7 10 | GROUP A | (2) 2X4 "L" |
| | 8, 8, | 10′ 4″ | 10′ 4″ | 10' 7" | | හි. | 9' 10" | 8' 10" | 10. 1. | | | 8, 6, | B, 4, | g' 7" | 8. 3. | | 8' 11" | න _් | e, 11, | 8,0 | ο, 1. | - 49 | C, | | 7' 10" | 7' 10" | هر 0 <u>-</u> | GROUP B | BRACE ** |
| | 11' 4" | 12' 11" | 12, 11, | 12' 11" | 12' 11" | | 18. TO. | | 12' 11" | 8, 8, | | | 11' 9° | 11, 8, | 8, 2, | | 11' 2" | 11. 9. | ص 19 | | 9, | - 1 | 10' 3" | 7′ 10″ | 9' 1" | 8 1 1 | 10' 3" | A LINOUS | (1) 2X6 'L' |
| | 11' 4" | 13, 1, | 18' 3' | 13' 11" | 13' 11" | 11' 1" | | 12, 11, | 15' 4" | 8°. | 11' 4" | 11' 6' | 12" 8" | 12' B" | 8. 3. | 11, 1" | 11' 2" | 12' 1" | 8, O _t | 8 | 8. 4. | 11, 1, | 11, 1, | 7' 10" | 9, 1° | 9' 1" | 10′ 7″ | - | - |
| | 14' 0" | 14' O" | 14' 0" | 14' 0" | 14' O" | 14' 0" | 14' 0" | 14. 00 | 14' O" | 13' 3" | 14' O" | 14' O" | 14' 0" | | 18. 11. | 14' O* | 14' 00 | 14' O" | 10' 10" | 12' 3" | 12. | 12' a" | 12, 3, | 10, 2, | eş N | 12, 3, | 12, 3, | A drows | BRACE * (2) ZXB "L" HRACE |
| | 14' 0" | 14' 0" | 14' 0" | 14' 0" | 14.0 | 14' 0" | 14' 0" | 14. | 14 0" | 13' 9" | 14.0 | 14. 0. | 14, 0, | | 12' 11. | 14' 0" | 14' 0" | 14. 0. | 10' 10" | 12' 6" | 12, 8, | 13′ 2° | 13, 5, | 10, 7, | 12′ 3° | 12, 3, | 12' 7" | GROUP B GROUP A GROUP B | HRACE = |
| OULTONGES MISE S, O, OATMANC, OK 12, | CARM I RUN STEROOF IOAN GENY A' O" | CONTINUING BRARING /6 POR TO DEAD TOAD! | THE PERSON NAMED IN COLUMN 19 I | DACA I DI VIDALLACIO MOLENATIZZALIZZALI | GABLE TRUSS DETAIL NOTES: | | | | 182 | _ | SOUTHING PINE DOUGLAS FIR-LARCH | - | AT & BIR | FCEM-PGR | GROUP B: | | | STATIONS | T | _ | DOUGLAS FIR-LARCH SOUTHERN PONE | Γ | # STANDARD #2 STVD | MILW-MI | UP A: | | BRACING GROUP SPECIES AND GRADES: | | |



DIAGONAL BEACE OPTION:
YERTICAL LENGTH MAY BE
DOUBLED WHILN DIAGONAL
BRACE IS USED. CONDECT
IMACONAL BEACE FOR BEGS
AT EACH END. MAY WEB

SEDEL TERRS

| THE |
|--------|
| TRUSS |
| DETAIL |
| NOTES: |

ATTACE EACH 'L' ERACE WITH 104 NAILS.

* FOR (1) 'L' BRACE; SPACE NAILS AT 8" O.C.

* FOR (2) 'L' BRACES; SPACE NAILS AT 3" O.C.

** FOR (2) 'L' BRACES; SPACE NAILS AT 3" O.C.

IN 16" END ZONES AND 6" O.C. BETWEEN ZONES. PLYWOOD OVERHANG. TE END SUPPORTS LOW GARRENC' OF 15, nue uflit connections for 160 flf over dividious bearing (6 per to dead load). LOAD DEPLECTION CRATERIA IS L/240.

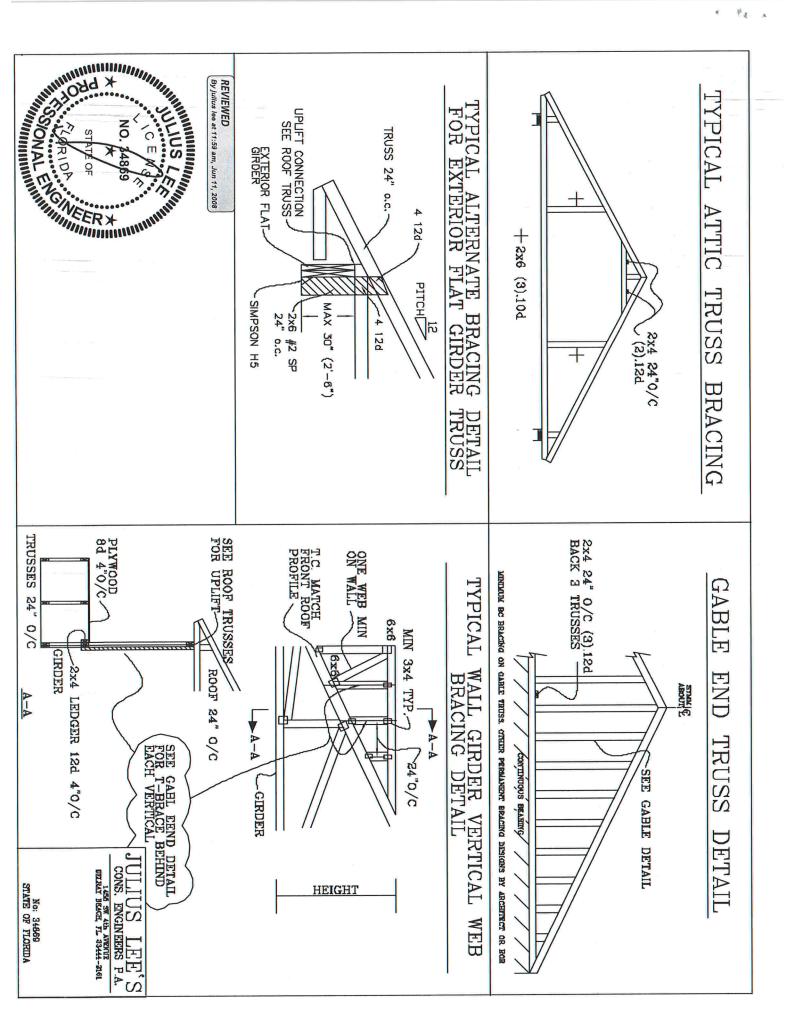
MINDER LENGTH. T" BRACING MUST BE A MINIMUM OF 80% OF WEB

| REFER TO COMMON THUS | GREATER THAN 11' 6" | GREATER THAN 4' D' BUT | IPSS THAN 4' 0" | ARBINCAT TENCIE | CABLE VERTICAL PLA |
|----------------------|---------------------|------------------------|-----------------|-----------------|--------------------|
| FLATES. | 2.5X4 | 234 | 1X4 OR EXT | NO SPLICE | TE SIZES |

| DELBAY BEACH, FL. 33444-2161 | CONS. ENGINEERS P.A. |
|------------------------------|----------------------|
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| | 1 |

No: 34869 STATE OF ILUNDA

MAX MAX. TOT. SPACING Ė 60 PSF 24.0" REF -ENG DATE DWC MARK SAD CYBIE 30, E M. 11/26/03 ASCE7-02-CAB13030



PIGGYBACK DETAIL

TAPE TO LE

SWAGE

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DE.

REFER TO SEALED DESIGN FOR DASHED PLATES.

SPACE PIGGYBACK VERTICALS AT 4' OC MAX.

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

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

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

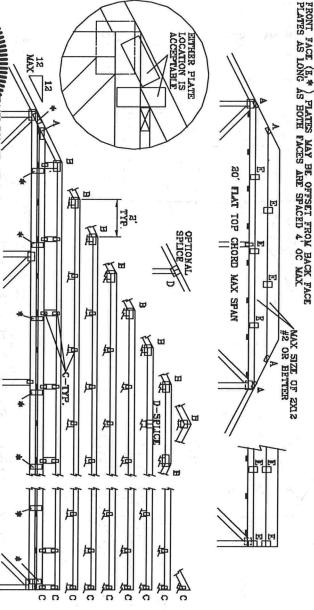
THIS DETAIL IS APPLICABLE FOR THE FOLLOWING WIND CONDITIONS: REFER TO ENGINEER'S SEALED DESIGN FOR REQUIRED FURLIN SPACING.

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

110 MPH WIND, 30' MEAN HGT, FEG ENCLOSED BLDG, LOCATED ANYWHERE IN ROOF WIND TO DL-5 PSF, WIND BC DL-5 PSF

HIND TC DL=6

30' MEAN HGT, ASCE 7-02, ANYWHERE IN ROOF, CAT II, PSF, WIND HC DL=6 PSF EXP. C



SPACE

OC OR LESS

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| Ä | | | - |
|--|-------------|-----|-------|
| THUL | Ħ | ы | C |
| H THULOX PLATES WITH (8) 0.120" X 1.975" NAI | 4X8 0 | 584 | 1.538 |
| e) brin | OR SX6 TH | 9X9 | 1.6X4 |
| 02120 | TRULOX AT A | 5X3 | 1.6X4 |
| X 1.375 | LY DC, | 5X6 | 1.5X4 |
| M | | | |

ш >

4X8 284

9X9

PX5 385

2.5X4

2.6X4 8X6

ATTACH THULOX PLATES WITH (8) 0.120" X 1.375" NAILS, EQUAL, PER FACE PER PLY. (4) NAILS IN EACH MEMBER BE CONNECTED. REFER TO DRAWING 160 TL FOR THULOX INFORMATION. 역

| ע ואי ייי ווי ווי | | l L | = | 4 | 0 | H.M. | П |
|---|---------------------------|---|------------|-------------|------------|------------------|-------------------|
| TTACH TEE ABRICATION 4) 0.120 1 | | × | 10' TO 14' | 7'9" TO 10' | 0' TO 7'9" | WEB LENGTH | |
| ATTACH TEETH TO THE PIGGYBACK AT THE TIME OF FABRICATION. ATTACH TO SUPPORTING TRUSS WITH (4) 0.120° X 1.375" NAILS PER FACE PER PLY. APPLY PIGGYBACK SPECIAL PLATE TO EACH TRUSS FACE AND SPACE A. OF THE TEST OF THE TRUSS FACE AND | * PIGGYBACK SPECIAL PLATE | MEMBERS. ALLEVE WITH 100 NAILS AT 4 OC. | _ 🗖 | 1x4 T | NO BRACING | REQUIRED BRACING | WEB BRACING CHART |
| | | | | | | | |

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|-------------------|
| DRAWING |
| DRAWING REPLACES |
| DRAWINGS |
| 634,016 |
| 634,016 634,017 4 |
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| 847,045 |
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| | | WH. IL. NOVA CHES | NGINEERS P.A. | び, 正 出 び | ATTENDED CITY |
|-----------------------------|-----------------------------|--------------------|---------------|-------------------|---|
| 47 PSF AT 1.15 DUR. FAC. | 50 PSF AT 1.25 DUR. FAC. | 1.33 DUR. FAC. | 55 PSF AT | MAX LOADING | CFO'/25 & JIO'FCD DIO'FCD CANTERVIA CTANTITAL MILIUMIA CTAT |
| | -ENG JL | DRWG MITEK | DATE 09/1 | REF PIGG | 34,010 034,017 |
| | | RWGMITEK STD PIGGY | 09/12/07 | PIGGYBACK | C+0,740 X |

CONS. CONS. EN

3%

MINIMUM X AND THE PROPERTY OF THE PROPERTY OF

STATE OF FLORIDA

SPACING

24.0

VALLEYTRUSS DETAIL

TOP CHORD 2X4 SP #2 OR SPF #1/#2 OR BETTER. 2X3(*) OR 2X4 SP #2N OR SPF #1/#2 OR BETTER. 2X4 SP #3 OR BETTER. $p_{\rm d}$

ZX3 MAY BE RIPPED FROM A ZX6 (PITCHED OR SQUARE).

* ATTACH EACH VALLEY TO EVERY SUPPORTING TRUSS WITH: ASCE 7-02 130 MPH WIND. 15' MEAN HEIGHT, ENCI-BUILDING, EXP. C. RESIDENTIAL, WIND TC DL=5 PSF. FBC 2004 110 MPH, ASCE 7-02 110 NPH WIND ASCE 7-02 130 MPH WIND. 15' MEAN HEICHT, (Z) 18d BOX (0.135" X 3.5") NAILS TOE-NAILED FOR OR (3) 16d FOR ENCLOSED

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

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

ENGINEERS' SEALED DESIGN PURLINS AT 24" OC OR AS OTHERWISE SPECIFIED ON ENGINEERS' SEALED DESIGN BY VALLEY TRUSSES USED IN LIEU OF PURLIN SPACING AS SPECIFIED ON

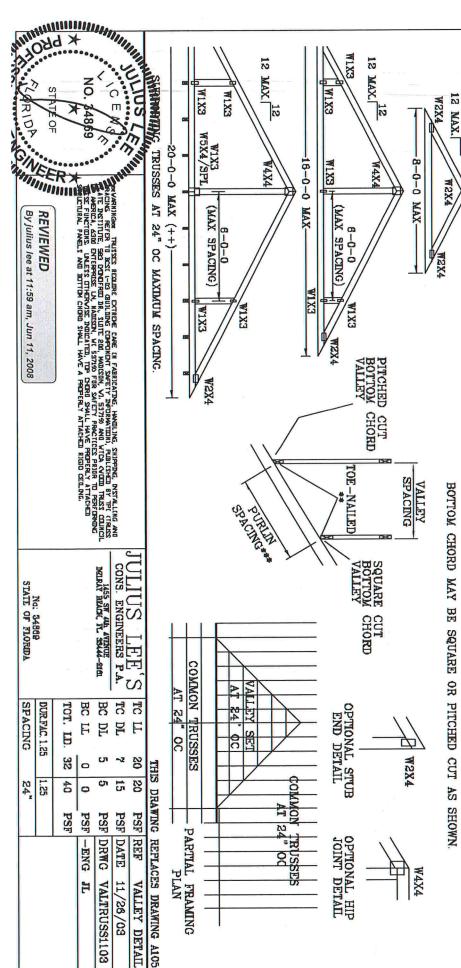
*** NOTE THAT THE PURLIN SPACING FOR BRACING THE TOP CHORD OF THE TRUSS BENEATH THE VALLEY IS MEASURED ALONG THE SLOPE OF THE TOP CHORD.

CUT FROM 2X6 OR LARGER AS REQ'D

4-0-0

MAX

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



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

| ALL VALUE | 5 | 4 | 3 | ผ | TOE-NAILS | NUMBER OF |
|--|------|------|------|------|---------------|-------------------|
| S MAY BI | 493# | 394# | 296# | 187# | 1 PLY | SOUTHE |
| MULTIPLIE | 639# | 511# | 383# | 256# | 2 PLIES 1 PLY | SOUTHERN PINE |
| D BY APP | 452# | 361# | 271# | 181# | | DOUGLAS |
| ROPRIATE | 585# | 468# | 351# | 234# | 2 PLIES | DOUGLAS FIR-LARCH |
| DURATION | 390# | 312# | 234# | 156# | 1 PLY | |
| ALL VALUES MAY BE MULTIPLIED BY APPROPRIATE DURATION OF LOAD FACTOR. | 507# | 406# | 304# | 203# | 2 PLIES | HEM-FIR |
| CTOR | 384# | 307# | 230# | 154# | 1 PLY | SPRUCE |
| | 496# | 397# | 298# | 189# | 2 PLIES | SPRUCE PINE FIR |
| | | | | | | |

NO. 4869

NO. 48 1/8" OPTIONAL GIRDER (2) PLY 30°-60° \JACK ALTERNATIVE CONDITION 1/8"

GIRDER

OPTIONAL (2) PLY

| SIHT |
|----------|
| DRAWING |
| REPLACES |
| DRAWING |
| 784040 |

| × | | | PROPERLY ATTACHED RIGID CELLING | TR. SAFETY PRACTICES PRIER TO PERFORMING THE SAFETY PRACTICES PRIER TO PERFORMING MICHIEL SHALL HAVE PROPERLY ATTACHED | ING, SHIPPING, | |
|------------------|-----------|----------|---------------------------------|--|----------------------|----------------|
| STATE OF FLORIDA | No: 34869 | | | DELPAY SEACH, FL SHAAA-2161 | CONS. ENGINEERS P.A. | S, HET SOITION |
| SPACING | DUR. FAC. | TOT. LD. | BC LL | BC DL | TC DL | TC LL |
| A | 1.00 | PSF | PSF | PSF | PSF | PSF |
| | | | -ENG JL | DRWG | DATE | REF |
| | | | JL . | CNTONAIL1103 | 09/12/07 | TOE-NAIL |

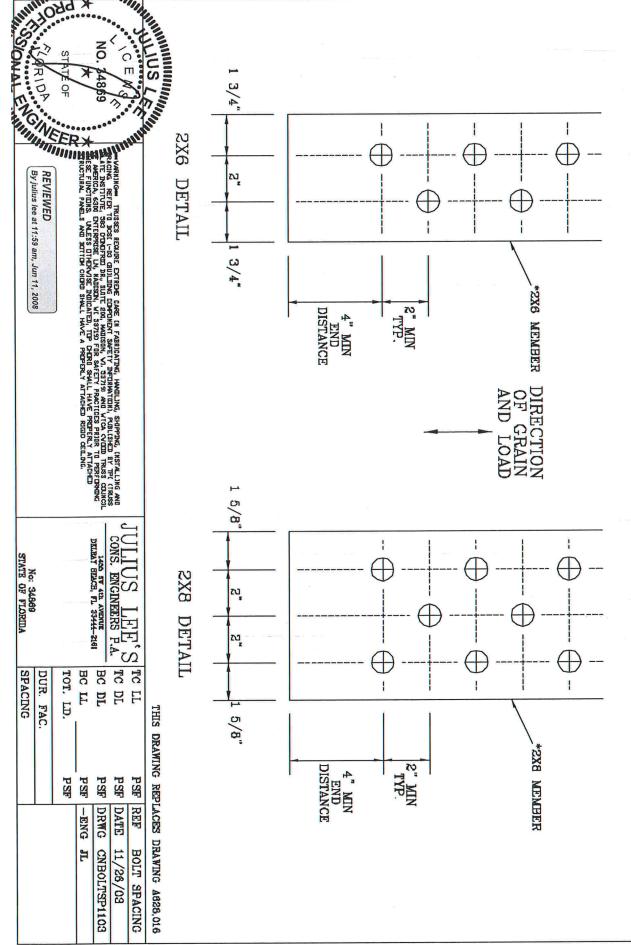
DIAMETER BOLT SPACING FOR LOAD APPLIED PARALLEL TO GRAIN

* GRADE AND SPECIES AS SPECIFIED ON THE ALPINE DESIGN h_{θ}

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

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

WASHERS REQUIRED UNDER BOLT HEAD AND NUT



REVIEWED

By julius lee at 11:59 am, Jun 11, 2008

DELRAY BEACH, FL 33444-2161

BC

BC LL

PSF

-ENG

PSH

DRWG

CNBOLTSP1103

PSF

No: 34869 STATE OF FLORIDA

SPACING

DUR. FAC TOT. LD.

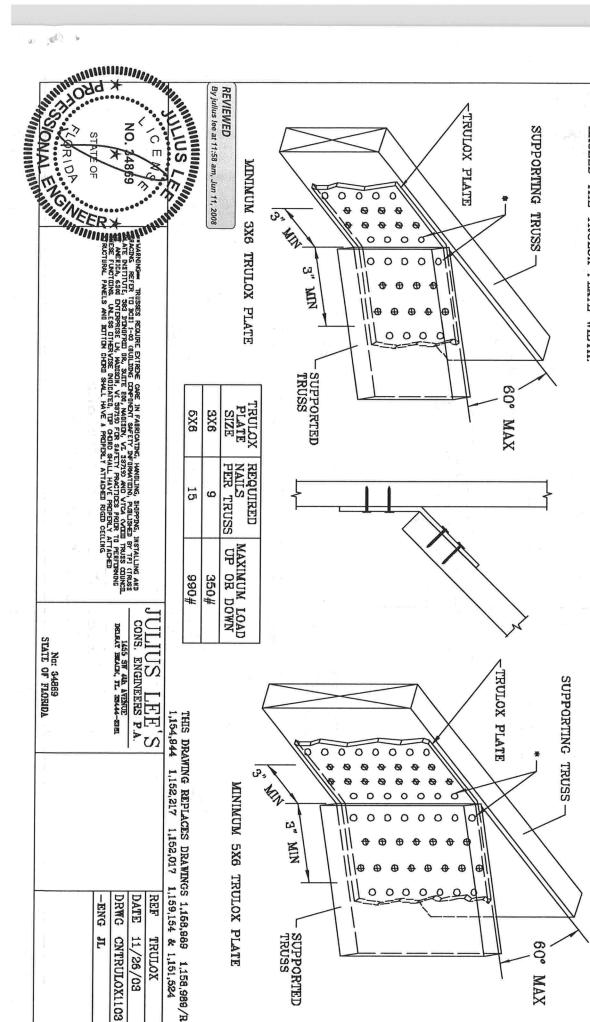
TRULOX CONNECTION DETAIL

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

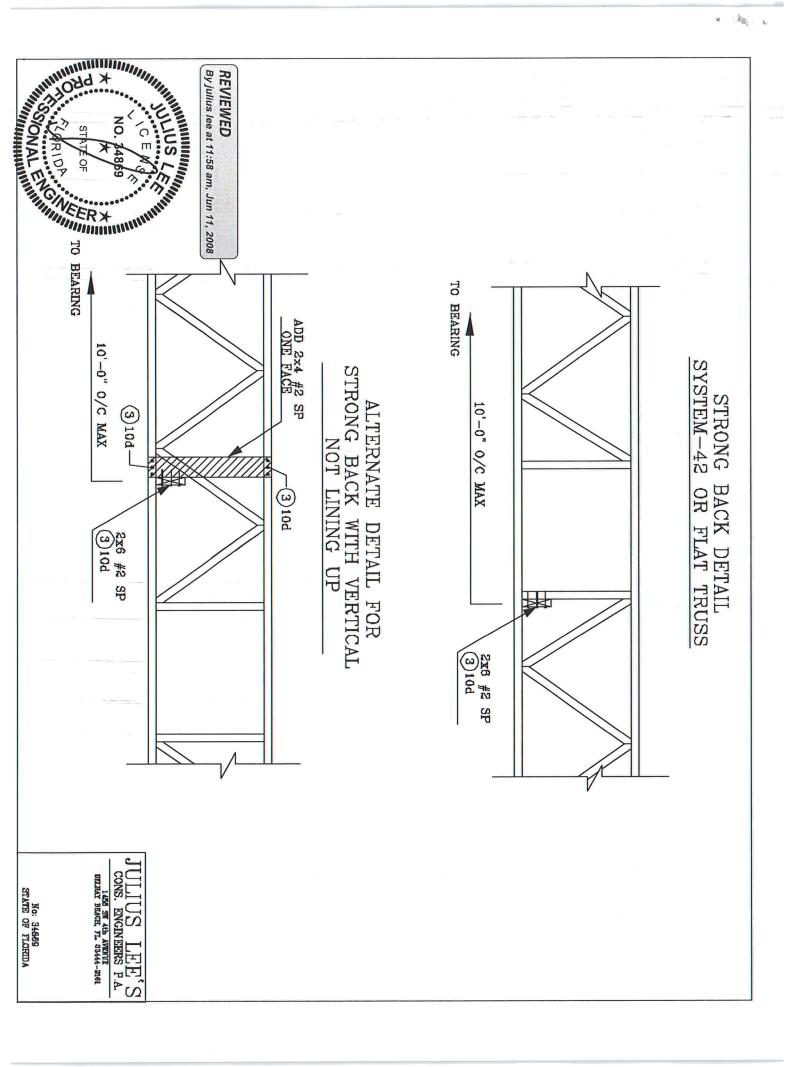
NAILS MAY BE OMITTED FROM THESE ROWS THIS DETAIL MAY BE USED WITH SO. PINE, DOUGLAS-FIR OR HEM-FIR CHORDS WITH A MINIMUM 1.00 DURATION OF LOAD OR SPRUCE-PINE-FIR CHORDS WITH A MINIMUM 1.15 EXCEED THE TRULOX PLATE WIDTH DURATION OF LOAD. CHORD SIZE OF BOTH TRUSSES MUST

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

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



(00)



MULTIPLE-MEMBER CONNECTIONS FOR SIDE-LOADED BEAMS

Maximum Uniform Load Applied to Either Outside Member (PLF)

| | | | Connector Pattern | | | | | | | | | |
|----------------------------------|-------------------|-----------------------------------|----------------------------|----------------|----------------|-------------|---|---------------|--|--|--|--|
| Connector Type | Number of Rows | Connector On-Center Spacing | Assembly A 1 2" 1 2" 134" | Assembly B | Assembly C | Assembly D | Assembly E 2" 1 31/2" | Assembly F | | | | |
| | | | 3½" 2-ply | 51/4" 3-ply | 51/4" 2-ply | 7" 3-ply | 7" 2-ply | 7" 4-ply | | | | |
| 10d (0.128" x 3") | 2 | 12" | 370 | 280 | 280 | 245 | | Taly or 15 | | | | |
| Nail ⁽¹⁾ | 3 | 12" | 555 | 415 | 415 | 370 | | | | | | |
| 1/z" A307 Through Bolts(2)(4) | 2 | 24" | 505 | 380 | 520 | 465 | | 340 | | | | |
| | | 19.2" | 635 | 475 | 655 | 580 | 1,075 | 425 | | | | |
| ili ougii borta | | 16" | 760 | 570 | 785 | 695 | 1,290 | 505 | | | | |
| Day James N. S. | | 24" | 680 | 510 | 510 | 455 | | | | | | |
| SDS 1/4" x 31/2"(4) | 2 | 19.2" | 850 | 640 | 640 | 565 | | of the second | | | | |
| | | 16" | 1,020 | 765 | 765 | 680 | | | | | | |
| | 2 | 24" | | | | 455 | 11/2/11/2 | 455 | | | | |
| SDS 1/4" x 6"(3)(4) | | 19.2" | | | | 565 | | 565 | | | | |
| | | 16" | | 11171 | | 680 | 695 | 680 | | | | |
| | | 24" | 480 | 360 | 360 | 320 | | | | | | |
| USP WS35 (4) | 2 | 19.2" | 600 | 450 | 450 | 400 | | 21 11 | | | | |
| | | 16" | 715 | 540 | 540 | 480 | | | | | | |
| | | 24" | | | | 350 | 3½° 7" 2-ply 860 1,075 1,290 465 580 695 525 660 790 480 600 725 620 770 | 350 | | | | |
| USP WS6 (3)(4) | 2 | 19.2" | | | | 440 | | 440 | | | | |
| | | 16" | | | | 525 | 790 | 525 | | | | |
| 33/8" | | 24" | 635 | 475 | 475 | 425 | | | | | | |
| TrussLok(4) | 2 | 19.2" | 795 | 595 | 595 | 530 | ln l | | | | | |
| | | 16" | 955 | 715 | 715 | 635 | | | | | | |
| 5" | | 24" | | 500 | 500 | 445 | | 445 | | | | |
| TrussLok(4) | 2 | 19.2" | | 625 | 625 | 555 | | 555 | | | | |
| | | 16" | it vi | 750 | 750 | 665 | | 665 | | | | |
| 63/4" | | 24" | | | | 445 | | 445 | | | | |
| TrussLok(4) | 2 | 19.2" | | | | 555 | | 555 | | | | |
| HUSSLOKen | | 16" | | | | 665 | 925 | 665 | | | | |

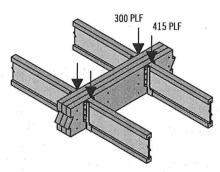
Nailed connection values may be doubled for 6" on-center or tripled for 4" on-center nail spacing.

- (2) Washers required. Bolt holes to be 9/16" 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 ½ 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 $1\frac{3}{4}$ " 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 $\frac{1}{2}$ " bolts or SDS $\frac{1}{4}$ " x $3\frac{1}{2}$ " screws at 19.2" on-center.

MULTIPLE-MEMBER CONNECTIONS FOR SIDE-LOADED BEAMS

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

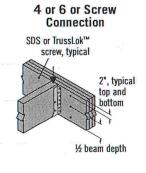
| A The Co | \$52.4X.5 | Connector Pattern | | | | | |
|---|-------------------------|-------------------|----------------|----------------|-----------------|----------------------|-------------|
| | | Assembly A | Assembly B | Assembly C | Assembly D | Assembly E | Assembly F |
| Connector Type | Number of Connectors | 2" 134" | -134" | 134" 31/2" | 134" 31/2" 134" | 1 2" 31/2" | 2" |
| | | 3½" 2-ply | 51/4" 3-ply | 51/4" 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 31/2" or WS35 1/4" x 6" or WS6 ⁽¹⁾ | 4 | 1,915 | 1,435(4) | 1,435 | 1,275 | 1,860(2) | 1,405(2) |
| | 6 | 2,870 | 2,150 (4) | 2,150 | 1,915 | 2,785(2) | 2,110(2) |
| | 8 | 3,825 | 2,870 (4) | 2,870 | 2,550 | 3,715(2) | 2,810(2) |
| 3³/8" or 5" TrussLok™ | 4 | 2,545 | 1,910 (4) | 1,910 | 1,695 | 1,925(3) | 1,775(3) |
| | 6 | 3,815 | 2,860 (4) | 2,860 | 2,545 | 2,890 ⁽³⁾ | 2,665(3) |
| | 8 | 5,090 | 3,815 (4) | 3,815 | 3,390 | 3,855(3) | 3,550(3) |

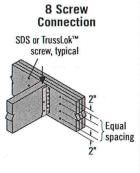
(1) 6" SDS or WS screws can be used with Parallam® PSL and Microllam® LVL, but are not recommended for TimberStrand® LSL.

See General Notes on page 38

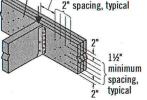
- (2) 6" long screws required.
- (3) 5" long screws required.
- (4) 3½" and 35%" long screws must be installed on both sides.

Connections





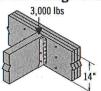
Nail Connection 10d (0.128" x 3") nails. typical. Stagger to prevent splitting. spacing, typical 11/4" typical



There must be an equal number of nails on each side of the connection

Point Load Design Example

n (Rh) a



First, verify that a 3-ply 1¾" 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 134" assembly, eight 33/8" TrussLok™ screws are good for 3,815 lbs with a face mount hanger.

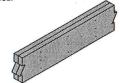
MULTIPLE-MEMBER CONNECTIONS FOR TOP-LOADED BEAMS

13/4" 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 33/8" 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.

31/2" 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 heams
- 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"

