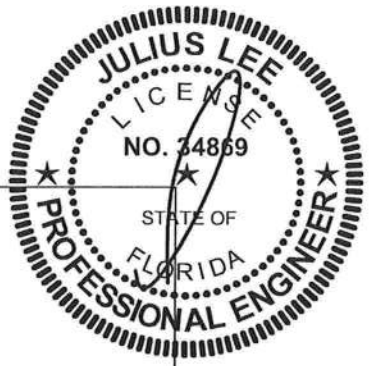
Builders FirstSource

HLAKMF




**Project Information:**

**Builder:** Cash Account
**Model:** CUSTOM
**Builders FirstSource Job #:** 293423
**Street:** 21285 US HWY 441
**City:** High Springs
**County:** COLUMBIA
**Building Code:** FBC2004/TPI2002
**Computer Program Used:** MiTek 6.3

Builders FirstSource
2525 E. Duval St.
Lake City, FL 32055

JULIUS LEE'S CONSULTING ENGR INC
1455 SW 4TH AVE, DELRAY BEACH
FLORIDA ,33444

**Truss Design Information:**

**Gravity Loads**
**Roof:** 32 psf Total
**Floor:** 55 psf Total

**Wind**
**Wind Standard:** ASCE 7-02
**Wind Speed:** 110 mph
**Mean Roof Ht:** 20 ft
**Exposure:** B

**Note:** Refer to individual truss design drawings for special loading conditions, design criteria, truss geometry, lumber, and plate information.

**Design Professional Information:**

**Design Professional Of Record:** MICHEAL J JOHNSON
**License # :** CBC1253055
**Delegated Truss Engineer:** Julius Lee
**License # :** 34869

This truss specification package consists of this index sheet and 24 truss design drawings. This signed and sealed index sheet indicates acceptance of my professional engineering responsibility solely for listed truss design drawings. The suitability and use of each truss component for any particular building is the responsibility of the building designer per TPI.

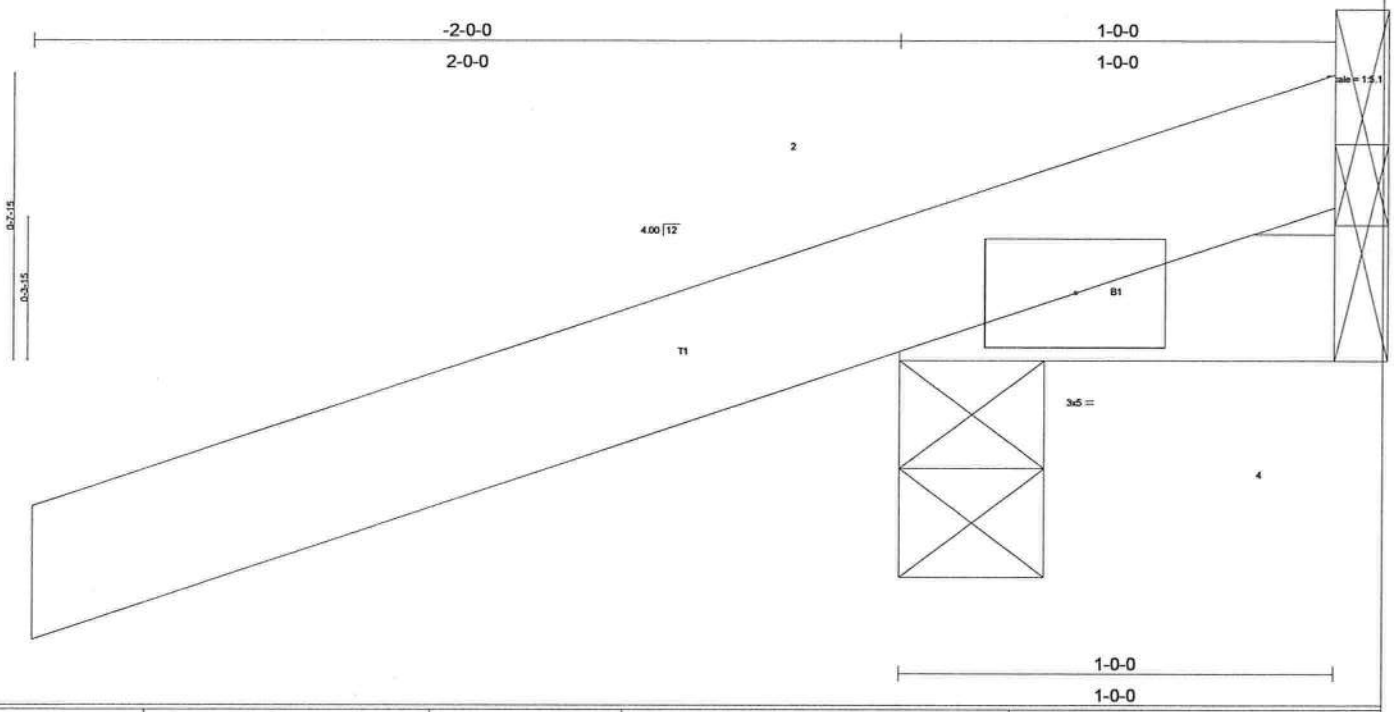
| Truss # | Truss Label | Drawing # | Seal Date |
|---|---|---|---|
| 1 | CJ1 | 293423001 | 11/14/2008 |
| 2 | CJ3 | 293423002 | 11/14/2008 |
| 3 | CJ5 | 293423003 | 11/14/2008 |
| 4 | EJ5 | 293423004 | 11/14/2008 |
| 5 | EJ7 | 293423005 | 11/14/2008 |
| 6 | HJ7 | 293423006 | 11/14/2008 |
| 7 | HJ9 | 293423007 | 11/14/2008 |
| 8 | T01 | 293423008 | 11/14/2008 |
| 9 | T02 | 293423009 | 11/14/2008 |
| 10 | T03 | 293423010 | 11/14/2008 |
| 11 | T04 | 293423011 | 11/14/2008 |
| 12 | T05 | 293423012 | 11/14/2008 |
| 13 | T06 | 293423013 | 11/14/2008 |
| 14 | T07 | 293423014 | 11/14/2008 |
| 15 | T08 | 293423015 | 11/14/2008 |
| 16 | T09 | 293423016 | 11/14/2008 |
| 17 | T10 | 293423017 | 11/14/2008 |
| 18 | T11 | 293423018 | 11/14/2008 |
| 19 | T12 | 293423019 | 11/14/2008 |
| 20 | T13 | 293423020 | 11/14/2008 |
| 21 | T14 | 293423021 | 11/14/2008 |
| 22 | T15 | 293423022 | 11/14/2008 |
| 23 | T16 | 293423023 | 11/14/2008 |
| 24 | T17 | 293423024 | 11/14/2008 |

| Truss # | Truss Label | Drawing # | Seal Date |
|---|---|---|---|

| Truss # | Truss Label | Drawing # | Seal Date |
|---|---|---|---|

| Job | Truss | Truss Type | Qty | Ply | MJ JOHNSON CONST. / RICHARDS RES. |
|---|---|---|---|---|---|
| 293423 | CJ1 | JACK | 14 | 1 | 293423001<br>Job Reference (optional) |

Builders FirstSource, Lake City, Fl 32055 — 6.300 s Apr 19 2006 MiTek Industries, Inc. Fri Nov 14 08:13:50 2008 Page 1




| LOADING (psf) | | SPACING | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plates Increase | 1.25 | TC | 0.24 | 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 | 10.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(TL) | 0.00 | 3 | n/a | n/a | | |
| BCDL | 5.0 | Code FBC2004/TPI2002 | | (Matrix) | | | | | | | Weight: 6 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 1-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (lb/size) 2=257/0-4-0, 4=5/Mechanical, 3=-91/Mechanical
Max Horz 2=58(load case 4)
Max Uplift2=-274(load case 4), 4=-9(load case 4), 3=-91(load case 1)
Max Grav 2=257(load case 1), 4=14(load case 2), 3=114(load case 4)

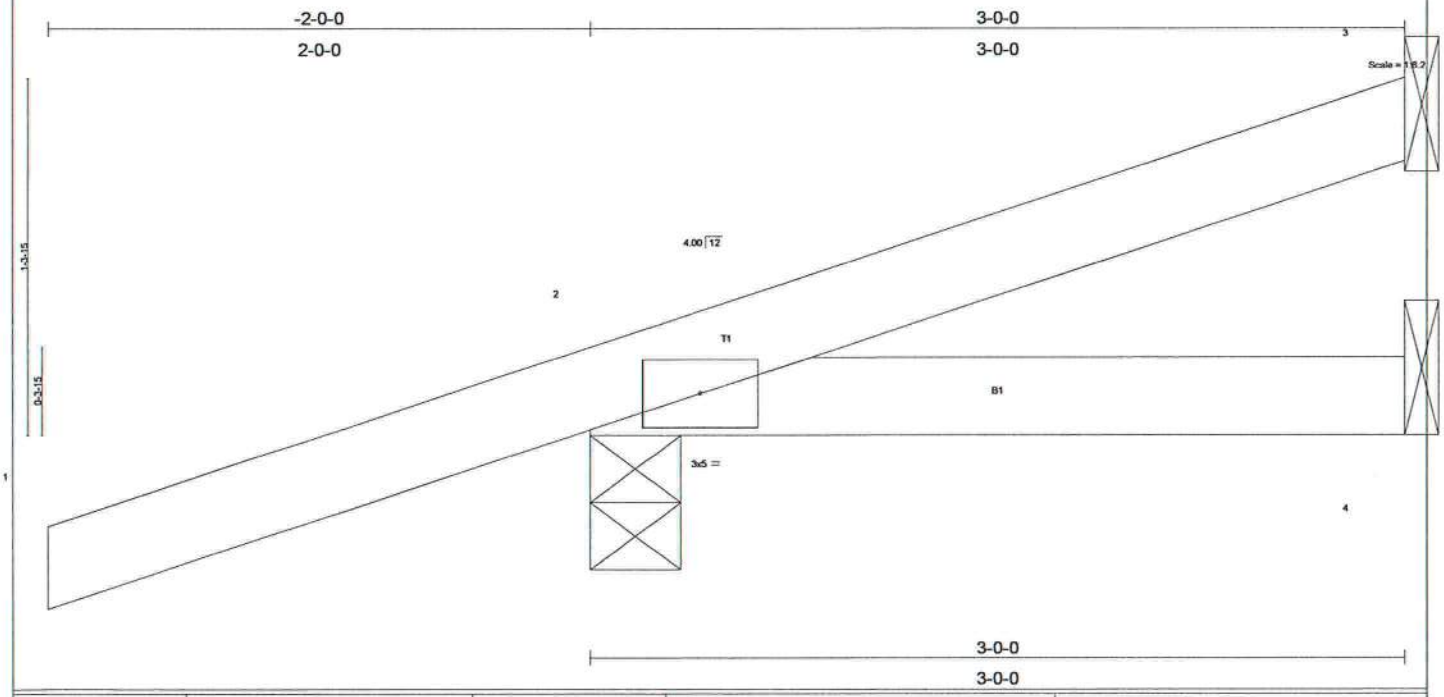
**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/33, 2-3=-50/49
BOT CHORD 2-4=0/0

**NOTES** (5)
1) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
2) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Refer to girder(s) for truss to truss connections.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 274 lb uplift at joint 2, 9 lb uplift at joint 4 and 91 lb uplift at joint 3.
5) 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

| Job | Truss | Truss Type | Qty | Ply | MJ JOHNSON CONST. / RICHARDS RES. |
|---|---|---|---|---|---|
| 293423 | CJ3 | JACK | 14 | 1 | 293423002<br>Job Reference (optional) |

Builders FirstSource, Lake City, Fl 32055 — 6.300 s Apr 19 2006 MiTek Industries, Inc. Fri Nov 14 08:13:50 2008 Page 1




| LOADING (psf) | | | SPACING | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | | Plates Increase | 1.25 | TC | 0.27 | Vert(LL) | 0.01 | 2-4 | >999 | 360 | MT20 | 244/190 |
| TCDL | 7.0 | | Lumber Increase | 1.25 | BC | 0.08 | Vert(TL) | -0.01 | 2-4 | >999 | 240 | | |
| BCLL | 10.0 | * | Rep Stress Incr | YES | WB | 0.00 | Horz(TL) | -0.00 | 3 | n/a | n/a | | |
| BCDL | 5.0 | | Code FBC2004/TPI2002 | | (Matrix) | | | | | | | Weight: 12 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 3-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (lb/size) 3=29/Mechanical, 2=251/0-4-0, 4=14/Mechanical
Max Horz 2=88(load case 4)
Max Uplift3=-22(load case 7), 2=-244(load case 4), 4=-26(load case 4)
Max Grav 3=29(load case 1), 2=251(load case 1), 4=42(load case 2)

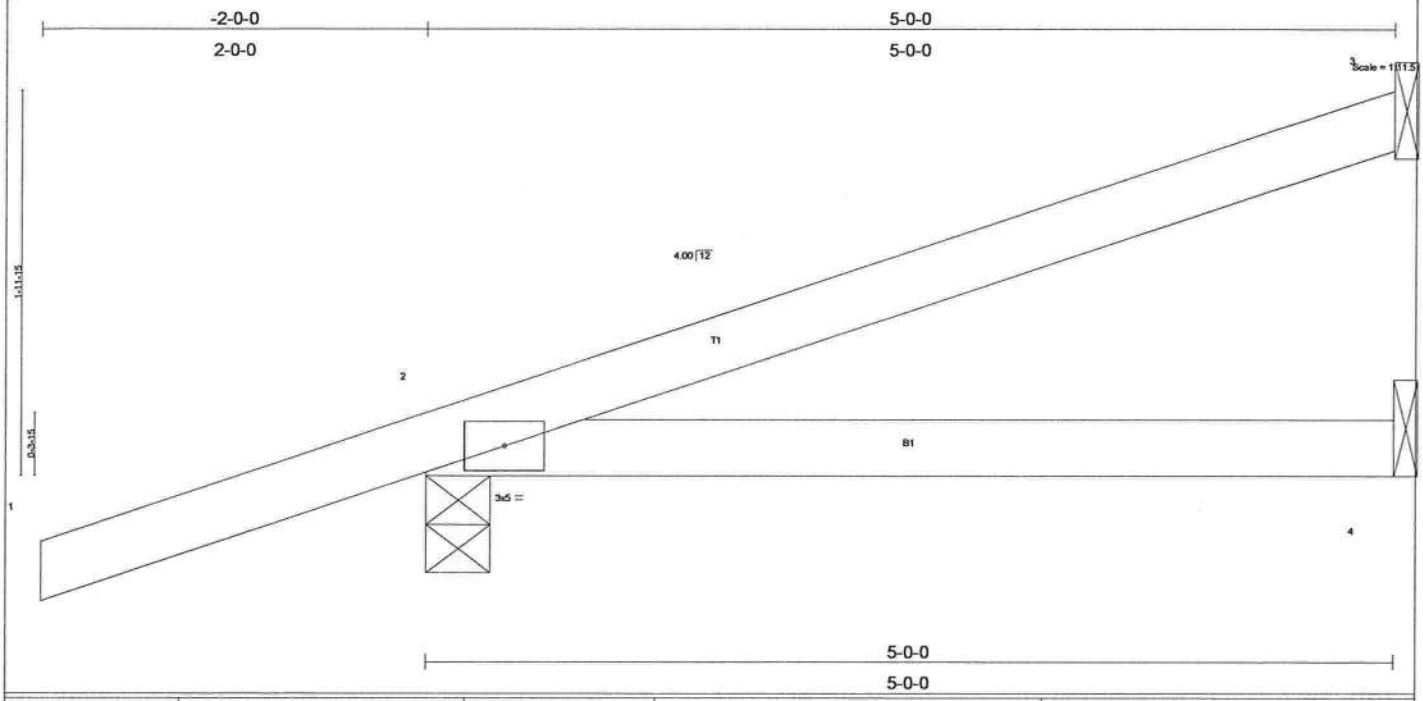
**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/33, 2-3=-41/5
BOT CHORD 2-4=0/0

**NOTES** (5)
1) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
2) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Refer to girder(s) for truss to truss connections.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 22 lb uplift at joint 3, 244 lb uplift at joint 2 and 26 lb uplift at joint 4.
5) 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

| Job | Truss | Truss Type | Qty | Ply | MJ JOHNSON CONST. / RICHARDS RES. |
|---|---|---|---|---|---|
| 293423 | CJ5 | JACK | 10 | 1 | 293423003<br>Job Reference (optional) |

Builders FirstSource, Lake City, Fl 32055 — 6.300 s Apr 19 2006 MiTek Industries, Inc. Fri Nov 14 08:13:51 2008 Page 1




| LOADING (psf) | | SPACING | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plates Increase | 1.25 | TC | 0.27 | Vert(LL) | -0.03 | 2-4 | >999 | 360 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber Increase | 1.25 | BC | 0.16 | Vert(TL) | -0.05 | 2-4 | >999 | 240 | | |
| BCLL | 10.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(TL) | -0.00 | 3 | n/a | n/a | | |
| BCDL | 5.0 | Code FBC2004/TPI2002 | | (Matrix) | | | | | | | Weight: 19 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.

**REACTIONS** (lb/size) 3=102/Mechanical, 2=296/0-4-0, 4=24/Mechanical
Max Horz 2=118(load case 4)
Max Uplift3=-73(load case 4), 2=-214(load case 4)
Max Grav 3=102(load case 1), 2=296(load case 1), 4=72(load case 2)

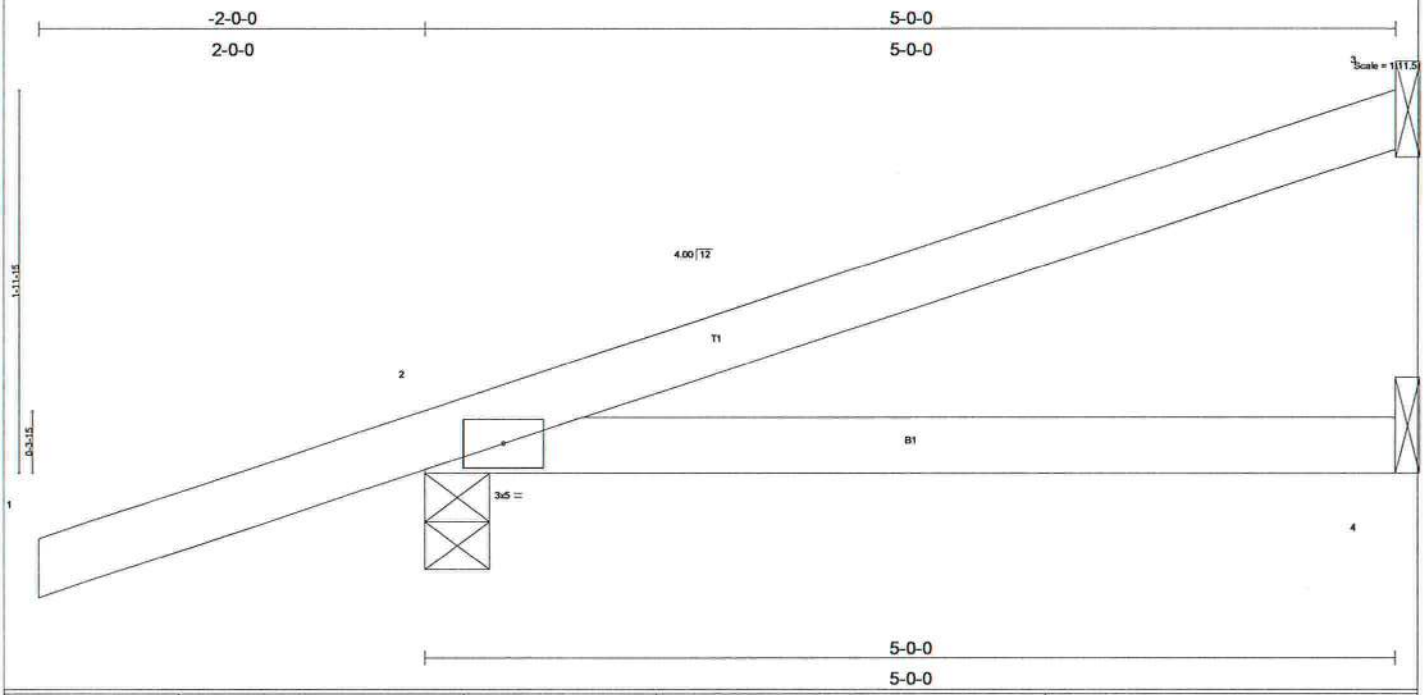
**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/33, 2-3=-55/25
BOT CHORD 2-4=0/0

**NOTES** (5)
1) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
2) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Refer to girder(s) for truss to truss connections.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 73 lb uplift at joint 3 and 214 lb uplift at joint 2.
5) 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

| Job | Truss | Truss Type | Qty | Ply | MJ JOHNSON CONST. / RICHARDS RES. |
|---|---|---|---|---|---|
| 293423 | EJ5 | MONO TRUSS | 2 | 1 | 293423004<br>Job Reference (optional) |

Builders FirstSource, Lake City, Fl 32055 — 6.300 s Apr 19 2006 MiTek Industries, Inc. Fri Nov 14 08:13:52 2008 Page 1




| LOADING (psf) | | SPACING | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plates Increase | 1.25 | TC | 0.27 | Vert(LL) | 0.09 | 2-4 | >672 | 360 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber Increase | 1.25 | BC | 0.24 | Vert(TL) | -0.05 | 2-4 | >999 | 240 | | |
| BCLL | 10.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(TL) | -0.00 | 3 | n/a | n/a | | |
| BCDL | 5.0 | Code FBC2004/TPI2002 | | (Matrix) | | | | | | | Weight: 19 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.

**REACTIONS** (lb/size) 3=102/Mechanical, 2=296/0-4-0, 4=24/Mechanical
Max Horz 2=118(load case 4)
Max Uplift3=-73(load case 4), 2=-274(load case 4), 4=-46(load case 4)
Max Grav 3=102(load case 1), 2=296(load case 1), 4=72(load case 2)

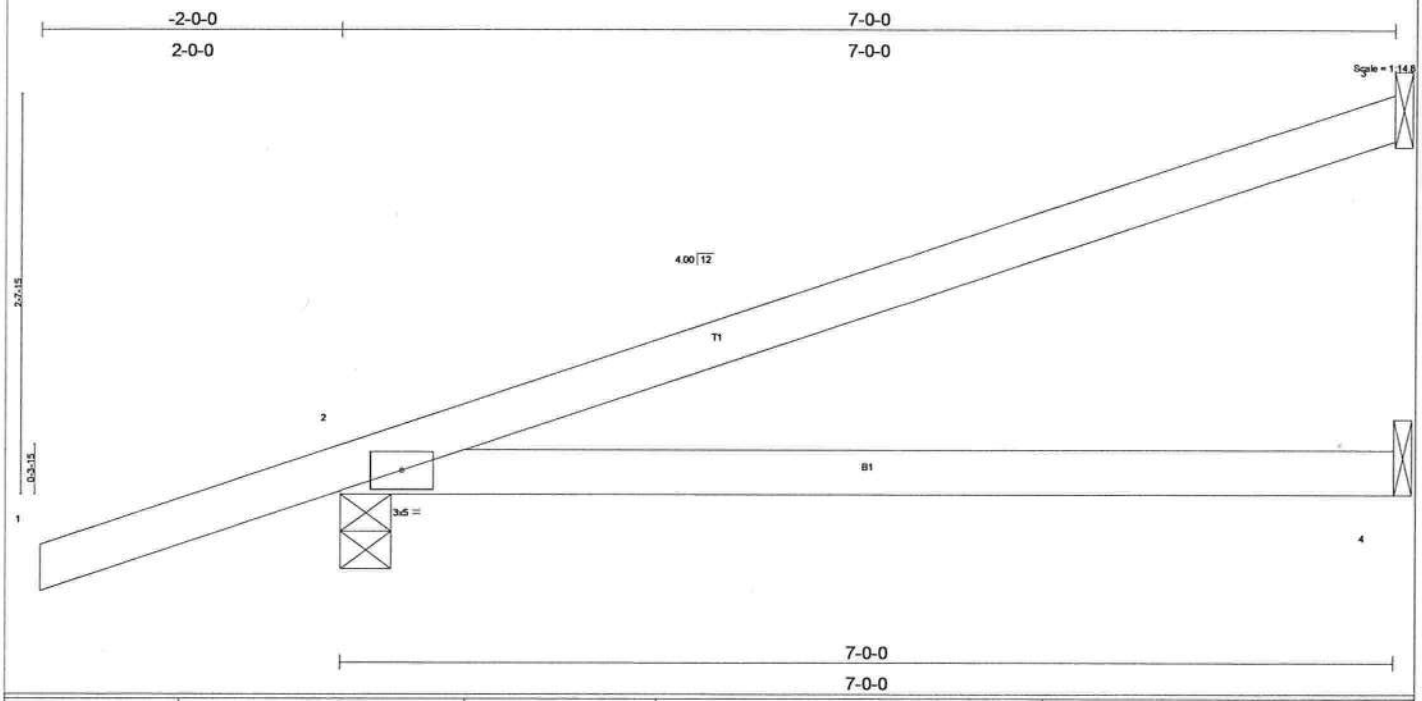
**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/33, 2-3=-55/25
BOT CHORD 2-4=0/0

**NOTES** (5)
1) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
2) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Refer to girder(s) for truss to truss connections.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 73 lb uplift at joint 3, 274 lb uplift at joint 2 and 46 lb uplift at joint 4.
5) 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

| Job | Truss | Truss Type | Qty | Ply | MJ JOHNSON CONST. / RICHARDS RES. |
|---|---|---|---|---|---|
| 293423 | EJ7 | MONO TRUSS | 20 | 1 | 293423005<br>Job Reference (optional) |

Builders FirstSource, Lake City, Fl 32055 — 6.300 s Apr 19 2006 MiTek Industries, Inc. Fri Nov 14 08:13:52 2008 Page 1




| LOADING (psf) | | SPACING | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plates Increase | 1.25 | TC | 0.42 | Vert(LL) | -0.08 | 2-4 | >999 | 360 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber Increase | 1.25 | BC | 0.27 | Vert(TL) | -0.16 | 2-4 | >514 | 240 | | |
| BCLL | 10.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(TL) | -0.00 | 3 | n/a | n/a | | |
| BCDL | 5.0 | Code FBC2004/TPI2002 | | (Matrix) | | | | | | | Weight: 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 10-0-0 oc bracing.

**REACTIONS** (lb/size) 3=154/Mechanical, 2=352/0-4-0, 4=44/Mechanical
Max Horz 2=107(load case 4)
Max Uplift3=-71(load case 4), 2=-154(load case 4)
Max Grav 3=154(load case 1), 2=352(load case 1), 4=93(load case 2)

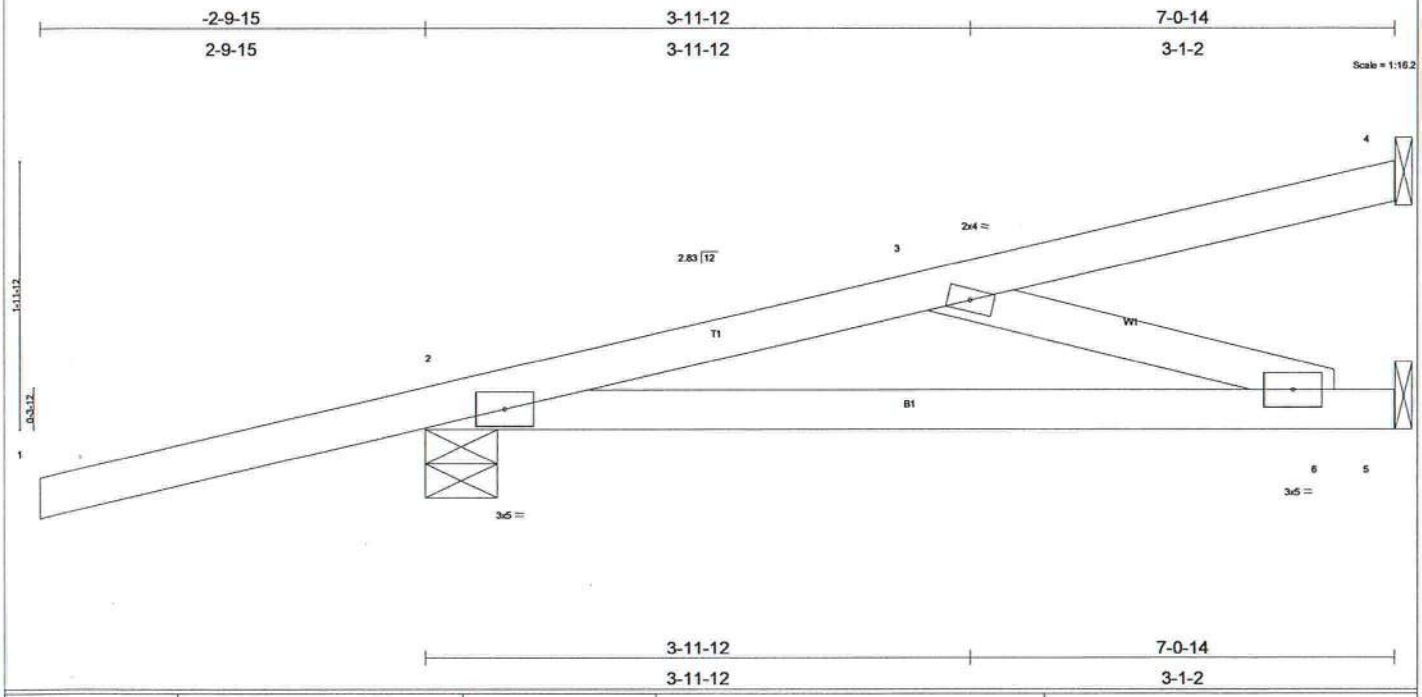
**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/33, 2-3=-76/38
BOT CHORD 2-4=0/0

**NOTES** (5)
1) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
2) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Refer to girder(s) for truss to truss connections.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 71 lb uplift at joint 3 and 154 lb uplift at joint 2.
5) 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

| Job | Truss | Truss Type | Qty | Ply | MJ JOHNSON CONST. / RICHARDS RES. |
|---|---|---|---|---|---|
| 293423 | HJ7 | MONO TRUSS | 2 | 1 | 293423006<br>Job Reference (optional) |

Builders FirstSource, Lake City, Fl 32055 — 6.300 s Apr 19 2006 MiTek Industries, Inc. Fri Nov 14 08:13:54 2008 Page 1




| LOADING (psf) | | | SPACING | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | | Plates Increase | 1.25 | TC | 0.55 | Vert(LL) | 0.08 | 2-6 | >999 | 360 | MT20 | 244/190 |
| TCDL | 7.0 | | Lumber Increase | 1.25 | BC | 0.27 | Vert(TL) | -0.11 | 2-6 | >761 | 240 | | |
| BCLL | 10.0 | * | Rep Stress Incr | NO | WB | 0.05 | Horz(TL) | 0.00 | 5 | n/a | n/a | | |
| BCDL | 5.0 | | Code FBC2004/TPI2002 | | (Matrix) | | | | | | | Weight: 30 lb | |

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

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

**REACTIONS** (lb/size) 4=128/Mechanical, 2=341/0-6-7, 5=92/Mechanical
Max Horz 2=111(load case 3)
Max Uplift4=-99(load case 3), 2=-355(load case 3), 5=-92(load case 6)
Max Grav 4=128(load case 1), 2=341(load case 1), 5=123(load case 2)

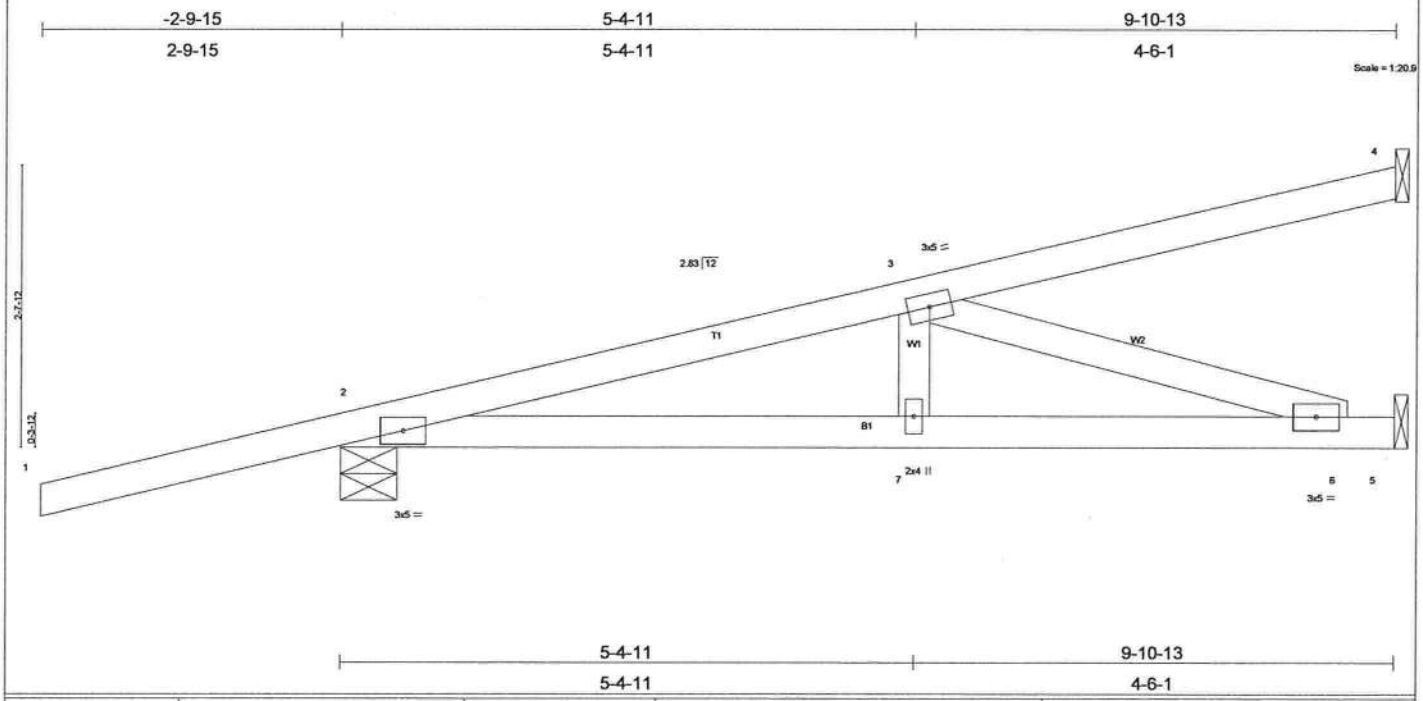
**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/34, 2-3=-271/128, 3-4=-31/22
BOT CHORD 2-6=-176/246, 5-6=0/0
WEBS 3-6=-257/184

**NOTES** (6)
1) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60.
2) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Refer to girder(s) for truss to truss connections.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 99 lb uplift at joint 4, 355 lb uplift at joint 2 and 92 lb uplift at joint 5.
5) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
6) 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: 1-2=-54
Trapezoidal Loads (plf)
Vert: 2=-4(F=25, B=25)-to-4=-95(F=-21, B=-21), 2=-0(F=5, B=5)-to-5=-18(F=-4, B=-4)

| Job | Truss | Truss Type | Qty | Ply | MJ JOHNSON CONST. / RICHARDS RES. |
|---|---|---|---|---|---|
| 293423 | HJ9 | MONO TRUSS | 5 | 1 | 293423007<br>Job Reference (optional) |

Builders FirstSource, Lake City, Fl 32055 — 6.300 s Apr 19 2006 MiTek Industries, Inc. Fri Nov 14 08:13:54 2008 Page 1




| LOADING (psf) | | SPACING | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plates Increase | 1.25 | TC | 0.55 | Vert(LL) | -0.04 | 6-7 | >999 | 360 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber Increase | 1.25 | BC | 0.35 | Vert(TL) | -0.08 | 6-7 | >999 | 240 | | |
| BCLL | 10.0 * | Rep Stress Incr | NO | WB | 0.27 | Horz(TL) | 0.01 | 5 | n/a | n/a | | |
| BCDL | 5.0 | Code FBC2004/TPI2002 | | (Matrix) | | | | | | | Weight: 42 lb | |

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

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

**REACTIONS** (lb/size) 4=225/Mechanical, 2=458/0-6-6, 5=259/Mechanical
Max Horz 2=178(load case 3)
Max Uplift4=-174(load case 3), 2=-313(load case 3), 5=-81(load case 3)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/34, 2-3=-767/222, 3-4=-56/38
BOT CHORD 2-7=-330/726, 6-7=-330/726, 5-6=0/0
WEBS 3-6=-762/346, 3-7=0/189

**NOTES** (6)
1) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone; 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) Refer to girder(s) for truss to truss connections.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 174 lb uplift at joint 4, 313 lb uplift at joint 2 and 81 lb uplift at joint 5.
5) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
6) 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: 1-2=-54
Trapezoidal Loads (plf)
Vert: 2=-4(F=25, B=25)-to-4=-134(F=-40, B=-40), 2=0(F=5, B=5)-to-5=-25(F=-7, B=-7)

| Job | Truss | Truss Type | Qty | Ply | MJ JOHNSON CONST. / RICHARDS RES. |
|---|---|---|---|---|---|
| 293423 | T01 | HIP | 1 | 1 | 293423008<br>Job Reference (optional) |

Builders FirstSource, Lake City, Fl 32055 — 6.300 s Apr 19 2006 MiTek Industries, Inc. Fri Nov 14 08:13:56 2008 Page 1

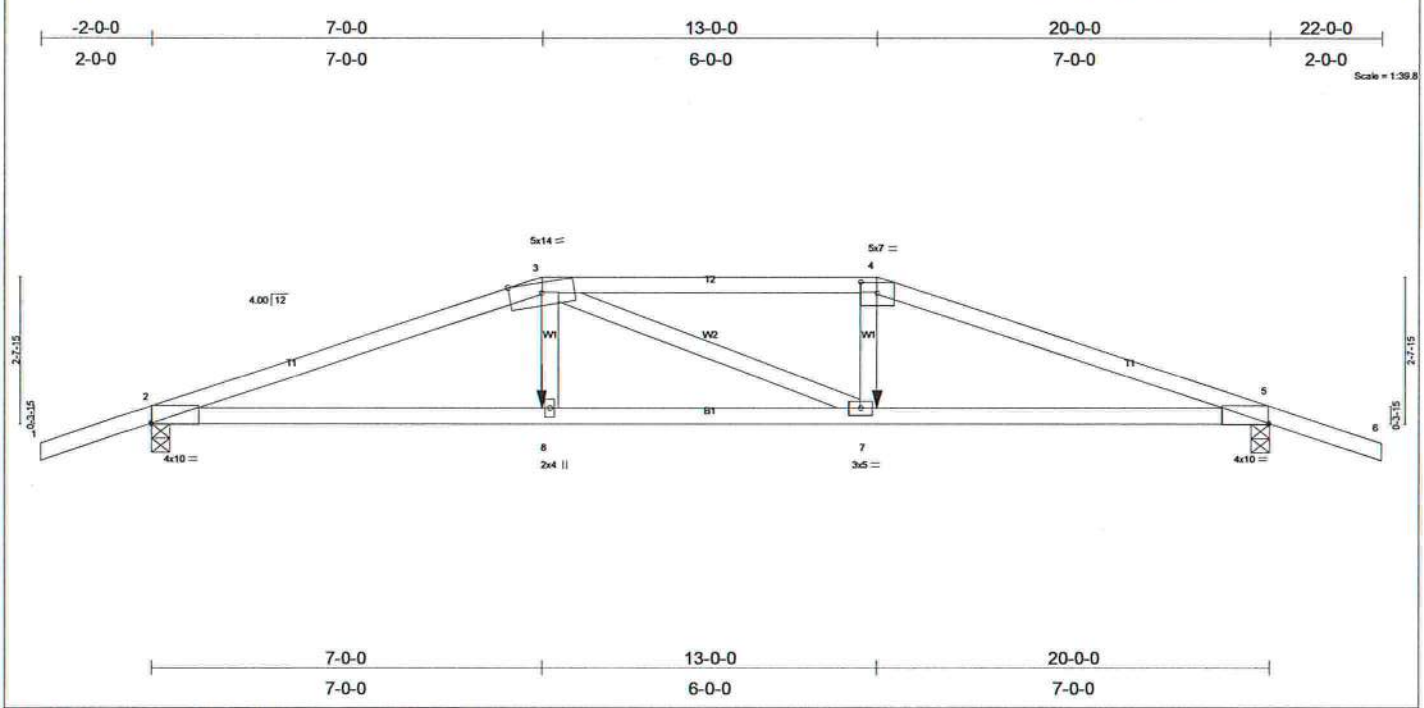



Plate Offsets (X,Y): [2:0-0-3,Edge], [4:0-3-8,0-2-5], [5:0-0-3,Edge]

| LOADING (psf) | | SPACING 2-0-0 | CSI | DEFL in (loc) l/defl L/d | PLATES GRIP |
|---|---|---|---|---|---|
| TCLL 20.0 | | Plates Increase 1.25 | TC 0.65 | Vert(LL) -0.18 7-8 >999 360 | MT20 244/190 |
| TCDL 7.0 | | Lumber Increase 1.25 | BC 0.70 | Vert(TL) -0.38 7-8 >628 240 | |
| BCLL 10.0 | * | Rep Stress Incr NO | WB 0.18 | Horz(TL) 0.10 5 n/a n/a | |
| BCDL 5.0 | | Code FBC2004/TPI2002 | (Matrix) | | Weight: 82 lb |

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

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 2-11-4 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-8-6 oc bracing.

**REACTIONS** (lb/size) 2=1379/0-4-0, 5=1379/0-4-0
Max Horz 2=51(load case 5)
Max Uplift2=-471(load case 3), 5=-471(load case 4)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/33, 2-3=-3316/973, 3-4=-3115/954, 4-5=-3316/973, 5-6=0/33
BOT CHORD 2-8=-882/3083, 7-8=-887/3114, 5-7=-863/3083
WEBS 3-8=-77/513, 3-7=-167/169, 4-7=-91/564

**NOTES** (9)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS; 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 471 lb uplift at joint 2 and 471 lb uplift at joint 5.
6) Girder carries hip end with 7-0-0 end setback.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 411 lb down and 136 lb up at 13-0-0, and 411 lb down and 136 lb up at 7-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
9) Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869: Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

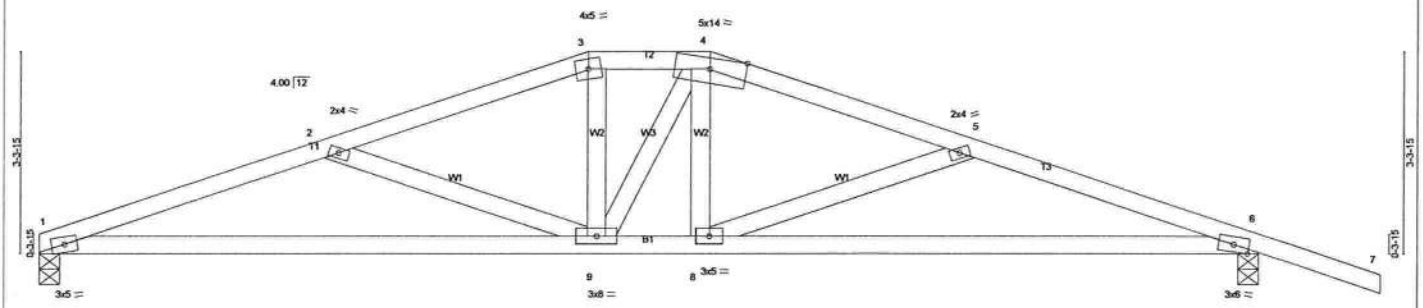
**LOAD CASE(S)** Standard
1) Regular: Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-3=-54, 3-4=-117(F=-63), 4-6=-54, 2-8=-10, 7-8=-22(F=-12), 5-7=-10
Concentrated Loads (lb)
Vert: 8=-411(F) 7=-411(F)

| Job | Truss | Truss Type | Qty | Ply | MJ JOHNSON CONST. / RICHARDS RES. |
|---|---|---|---|---|---|
| 293423 | T02 | HIP | 1 | 1 | 293423009<br>Job Reference (optional) |

Builders FirstSource, Lake City, Fl 32055 — 6.300 s Apr 19 2006 MiTek Industries, Inc. Fri Nov 14 08:13:57 2008 Page 1

| 4-10-14 | 9-0-0 | 11-0-0 | 15-1-2 | 20-0-0 | 22-0-0 |
|---|---|---|---|---|---|
| 4-10-14 | 4-1-2 | 2-0-0 | 4-1-2 | 4-10-14 | 2-0-0 |

Scale = 1:36.5




| 9-0-0 | 11-0-0 | 20-0-0 |
|---|---|---|
| 9-0-0 | 2-0-0 | 9-0-0 |

| LOADING (psf) | | SPACING 2-0-0 | CSI | DEFL in (loc) l/defl L/d | PLATES GRIP |
|---|---|---|---|---|---|
| TCLL 20.0 | | Plates Increase 1.25 | TC 0.28 | Vert(LL) -0.14 6-8 >999 360 | MT20 244/190 |
| TCDL 7.0 | | Lumber Increase 1.25 | BC 0.46 | Vert(TL) -0.28 1-9 >831 240 | |
| BCLL 10.0 | * | Rep Stress Incr YES | WB 0.15 | Horz(TL) 0.04 6 n/a n/a | |
| BCDL 5.0 | | Code FBC2004/TPI2002 | (Matrix) | | Weight: 91 lb |

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

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 4-11-1 oc purlins.
BOT CHORD Rigid ceiling directly applied or 7-5-0 oc bracing.

**REACTIONS** (lb/size) 1=623/0-4-0, 6=753/0-4-0
Max Horz 1=-68(load case 7)
Max Uplift1=-155(load case 4), 6=-253(load case 5)

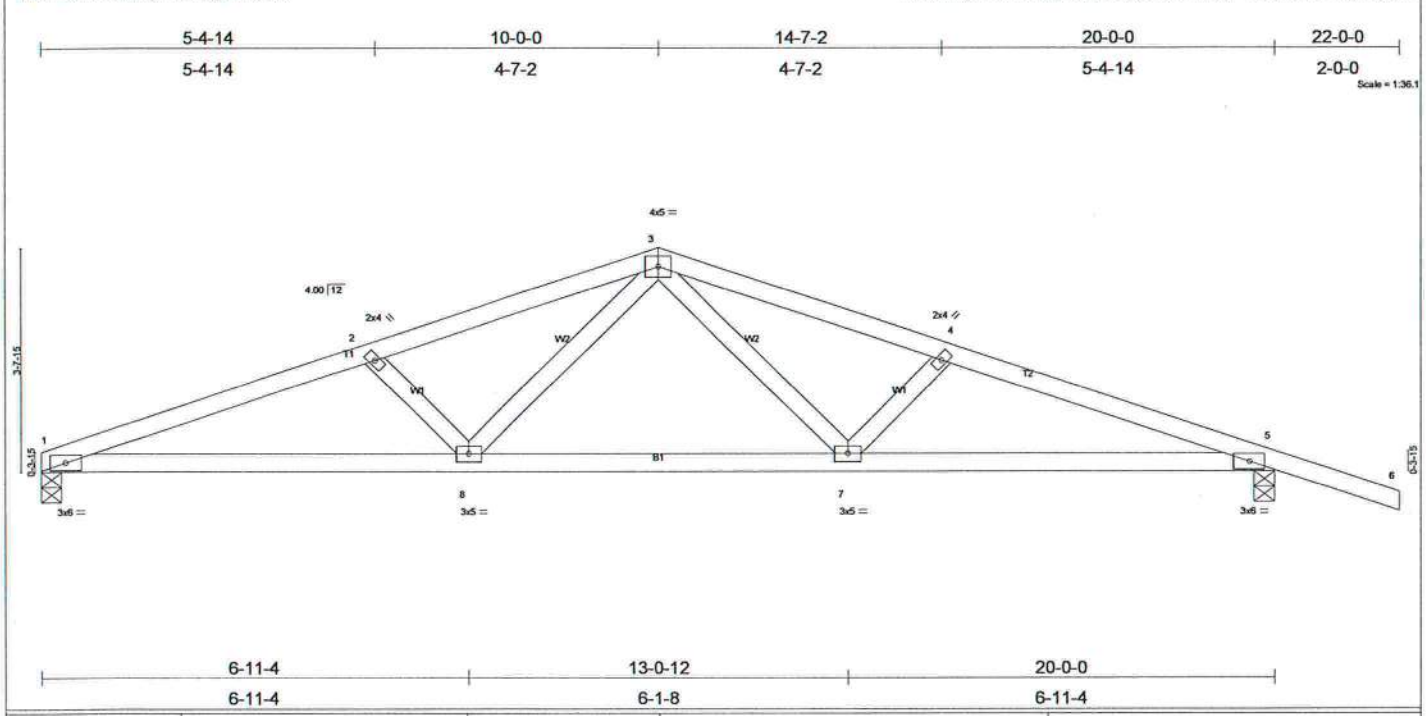
**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-1481/856, 2-3=-1116/620, 3-4=-1030/621, 4-5=-1105/605, 5-6=-1446/792, 6-7=0/33
BOT CHORD 1-9=-710/1373, 8-9=-402/1020, 6-8=-639/1325
WEBS 2-9=-380/317, 3-9=-75/213, 4-9=-107/132, 4-8=-27/205, 5-8=-338/253

**NOTES** (6)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
3) Provide adequate drainage to prevent water ponding.
4) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 155 lb uplift at joint 1 and 253 lb uplift at joint 6.
6) 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

| Job | Truss | Truss Type | Qty | Ply | MJ JOHNSON CONST. / RICHARDS RES. |
|---|---|---|---|---|---|
| 293423 | T03 | COMMON | 5 | 1 | 293423010<br>Job Reference (optional) |

Builders FirstSource, Lake City, Fl 32055 — 6.300 s Apr 19 2006 MiTek Industries, Inc. Fri Nov 14 08:13:57 2008 Page 1




| LOADING (psf) | | SPACING | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL 20.0 | | Plates Increase | 1.25 | TC | 0.38 | Vert(LL) | 0.22 | 7-8 | >999 | 360 | MT20 | 244/190 |
| TCDL 7.0 | | Lumber Increase | 1.25 | BC | 0.66 | Vert(TL) | -0.34 | 7-8 | >698 | 240 | | |
| BCLL 10.0 | * | Rep Stress Incr | NO | WB | 0.21 | Horz(TL) | 0.06 | 5 | n/a | n/a | | |
| BCDL 5.0 | | Code FBC2004/TPI2002 | | (Matrix) | | | | | | | Weight: 84 lb | |

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

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 4-2-12 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-2-6 oc bracing.

**REACTIONS** (lb/size) 1=807/0-4-0, 5=937/0-4-0
Max Horz 1=-72(load case 7)
Max Uplift1=-201(load case 4), 5=-299(load case 5)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-2071/1172, 2-3=-1883/1095, 3-4=-1851/1047, 4-5=-2030/1112, 5-6=0/33
BOT CHORD 1-8=-1001/1912, 7-8=-618/1331, 5-7=-937/1868
WEBS 2-8=-259/223, 3-8=-345/640, 3-7=-280/599, 4-7=-238/193

**NOTES** (6)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
3) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 201 lb uplift at joint 1 and 299 lb uplift at joint 5.
5) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
6) Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869: Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

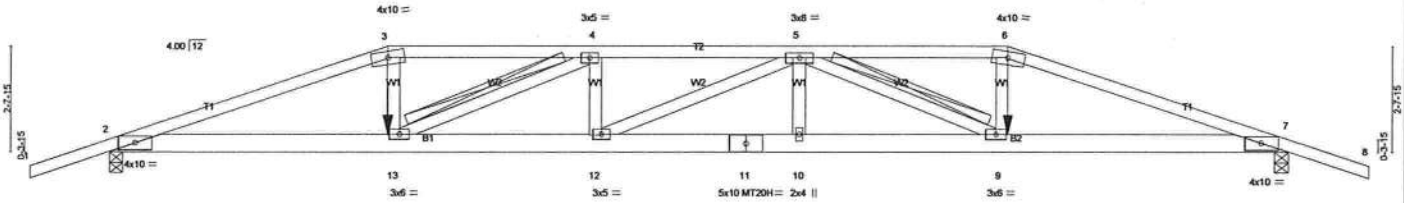
**LOAD CASE(S)** Standard
1) Regular: Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-3=-54, 3-6=-54, 1-8=-10, 7-8=-70(F=-60), 5-7=-10

| Job | Truss | Truss Type | Qty | Ply | MJ JOHNSON CONST. / RICHARDS RES. |
|---|---|---|---|---|---|
| 293423 | T04 | HIP | 1 | 1 | 293423011<br>Job Reference (optional) |

Builders FirstSource, Lake City, Fl 32055 — 6.300 s Apr 19 2006 MiTek Industries, Inc. Fri Nov 14 08:13:59 2008 Page 1

| -2-0-0 | 7-0-0 | 12-2-15 | 17-4-1 | 22-7-0 | 29-7-0 | 31-7-0 |
|---|---|---|---|---|---|---|
| 2-0-0 | 7-0-0 | 5-2-15 | 5-1-3 | 5-2-15 | 7-0-0 | 2-0-0 |

Scale = 1:55.7




| 7-0-0 | 12-2-15 | 17-4-1 | 22-7-0 | 29-7-0 |
|---|---|---|---|---|
| 7-0-0 | 5-2-15 | 5-1-3 | 5-2-15 | 7-0-0 |

| LOADING (psf) | | SPACING | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plates Increase | 1.25 | TC | 0.85 | Vert(LL) | -0.50 | 10-12 | >706 | 360 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber Increase | 1.25 | BC | 0.84 | Vert(TL) | -0.95 | 10-12 | >370 | 240 | MT20H | 187/143 |
| BCLL | 10.0 * | Rep Stress Incr | NO | WB | 0.43 | Horz(TL) | 0.17 | 7 | n/a | n/a | | |
| BCDL | 5.0 | Code FBC2004/TPI2002 | | (Matrix) | | | | | | | Weight: 155 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 1-10-2 oc purlins.
BOT CHORD Rigid ceiling directly applied or 5-11-0 oc bracing.
WEBS T-Brace: 2 X 4 SYP No.3 - 4-13, 5-9
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) 2=2044/0-4-0, 7=2044/0-4-0
Max Horz 2=-54(load case 6)
Max Uplift2=-677(load case 3), 7=-677(load case 4)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/37, 2-3=-5415/1618, 3-4=-5159/1581, 4-5=-6754/2072, 5-6=-5151/1578, 6-7=-5407/1615, 7-8=0/37
BOT CHORD 2-13=-1495/5082, 12-13=-2004/6754, 11-12=-2009/6795, 10-11=-2009/6795, 9-10=-2009/6795, 7-9=-1462/5074
WEBS 3-13=-304/1241, 4-13=-1874/561, 4-12=0/205, 5-12=-99/28, 5-10=0/220, 5-9=-1926/579, 6-9=-305/1243

**NOTES** (10)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS; Lumber DOL=1.60 plate grip DOL=1.60.
3) Provide adequate drainage to prevent water ponding.
4) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) All plates are MT20 plates unless otherwise indicated.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 677 lb uplift at joint 2 and 677 lb uplift at joint 7.
7) Girder carries hip end with 7-0-0 end setback.
8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 411 lb down and 136 lb up at 22-7-0, and 411 lb down and 136 lb up at 7-0-0 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) Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869: Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

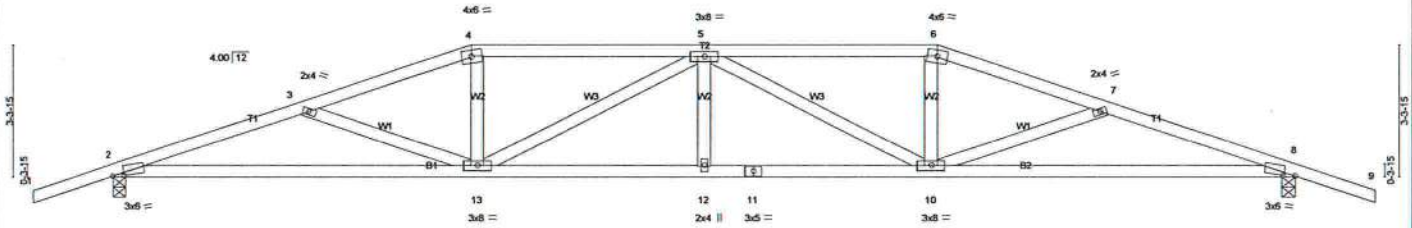
**LOAD CASE(S)** Standard
1) Regular: Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-3=-54, 3-6=-117(F=-63), 6-8=-54, 2-13=-10, 9-13=-22(F=-12), 7-9=-10
Concentrated Loads (lb)
Vert: 13=-411(F) 9=-411(F)

| Job | Truss | Truss Type | Qty | Ply | MJ JOHNSON CONST. / RICHARDS RES. |
|---|---|---|---|---|---|
| 293423 | T05 | HIP | 1 | 1 | 293423012<br>Job Reference (optional) |

Builders FirstSource, Lake City, Fl 32055 — 6.300 s Apr 19 2006 MiTek Industries, Inc. Fri Nov 14 08:14:00 2008 Page 1

| -2-0-0 | 4-10-14 | 9-0-0 | 14-9-8 | 20-7-0 | 24-8-2 | 29-7-0 | 31-7-0 |
|---|---|---|---|---|---|---|---|
| 2-0-0 | 4-10-14 | 4-1-2 | 5-9-8 | 5-9-8 | 4-1-2 | 4-10-14 | 2-0-0 |

Scale = 1:55.7




| 9-0-0 | 14-9-8 | 20-7-0 | 29-7-0 |
|---|---|---|---|
| 9-0-0 | 5-9-8 | 5-9-8 | 9-0-0 |

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

| LOADING (psf) | | SPACING | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plates Increase | 1.25 | TC | 0.35 | Vert(LL) | 0.23 | 12 | >999 | 360 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber Increase | 1.25 | BC | 0.58 | Vert(TL) | -0.37 | 12 | >952 | 240 | | |
| BCLL | 10.0 * | Rep Stress Incr | YES | WB | 0.35 | Horz(TL) | 0.11 | 8 | n/a | n/a | | |
| BCDL | 5.0 | Code FBC2004/TPI2002 | | (Matrix) | | | | | | | Weight: 140 lb | |

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

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 4-0-6 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-1-10 oc bracing.

**REACTIONS** (lb/size) 2=1053/0-4-0, 8=1053/0-4-0
Max Horz 2=-59(load case 7)
Max Uplift2=-341(load case 4), 8=-341(load case 5)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/33, 2-3=-2326/1224, 3-4=-2045/1071, 4-5=-1927/1058, 5-6=-1927/1058, 6-7=-2045/1071, 7-8=-2326/1224, 8-9=0/33
BOT CHORD 2-13=-1045/2152, 12-13=-1044/2259, 11-12=-1044/2259, 10-11=-1044/2259, 8-10=-1045/2152
WEBS 3-13=-264/210, 4-13=-115/381, 5-13=-495/218, 5-12=0/116, 5-10=-495/218, 6-10=-115/381, 7-10=-264/210

**NOTES** (6)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
3) Provide adequate drainage to prevent water ponding.
4) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 341 lb uplift at joint 2 and 341 lb uplift at joint 8.
6) Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869: Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

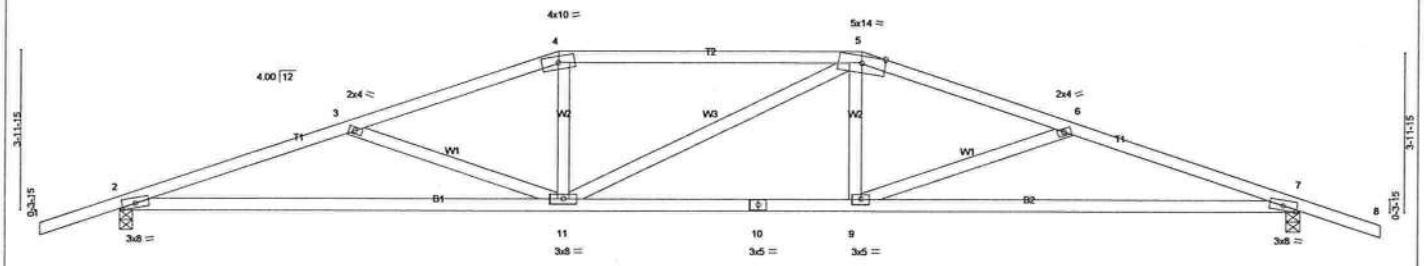
**LOAD CASE(S)** Standard

| Job | Truss | Truss Type | Qty | Ply | MJ JOHNSON CONST. / RICHARDS RES. |
|---|---|---|---|---|---|
| 293423 | T06 | HIP | 1 | 1 | 293423013<br>Job Reference (optional) |

Builders FirstSource, Lake City, Fl 32055 — 6.300 s Apr 19 2006 MiTek Industries, Inc. Fri Nov 14 08:14:01 2008 Page 1

| -2-0-0 | 5-10-14 | 11-0-0 | 18-7-0 | 23-8-2 | 29-7-0 | 31-7-0 |
|---|---|---|---|---|---|---|
| 2-0-0 | 5-10-14 | 5-1-2 | 7-7-0 | 5-1-2 | 5-10-14 | 2-0-0 |

Scale = 1:55.7




| 11-0-0 | 18-7-0 | 29-7-0 |
|---|---|---|
| 11-0-0 | 7-7-0 | 11-0-0 |

| LOADING (psf) | | SPACING | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plates Increase | 1.25 | TC | 0.43 | Vert(LL) | -0.32 | 7-9 | >999 | 360 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber Increase | 1.25 | BC | 0.49 | Vert(TL) | -0.61 | 7-9 | >575 | 240 | | |
| BCLL | 10.0 * | Rep Stress Incr | YES | WB | 0.22 | Horz(TL) | 0.09 | 7 | n/a | n/a | | |
| BCDL | 5.0 | Code FBC2004/TPI2002 | | (Matrix) | | | | | | | Weight: 135 lb | |

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

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 3-11-10 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-5-15 oc bracing.

**REACTIONS** (lb/size) 2=1053/0-4-0, 7=1053/0-4-0
Max Horz 2=-67(load case 7)
Max Uplift2=-335(load case 4), 7=-335(load case 5)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/33, 2-3=-2285/1246, 3-4=-1895/1022, 4-5=-1770/1015, 5-6=-1895/1022, 6-7=-2285/1246, 7-8=0/33
BOT CHORD 2-11=-1060/2112, 10-11=-776/1770, 9-10=-776/1770, 7-9=-1060/2112
WEBS 3-11=-374/304, 4-11=-44/328, 5-11=-188/187, 5-9=-43/328, 6-9=-374/303

**NOTES** (6)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
3) Provide adequate drainage to prevent water ponding.
4) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 335 lb uplift at joint 2 and 335 lb uplift at joint 7.
6) Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869: Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

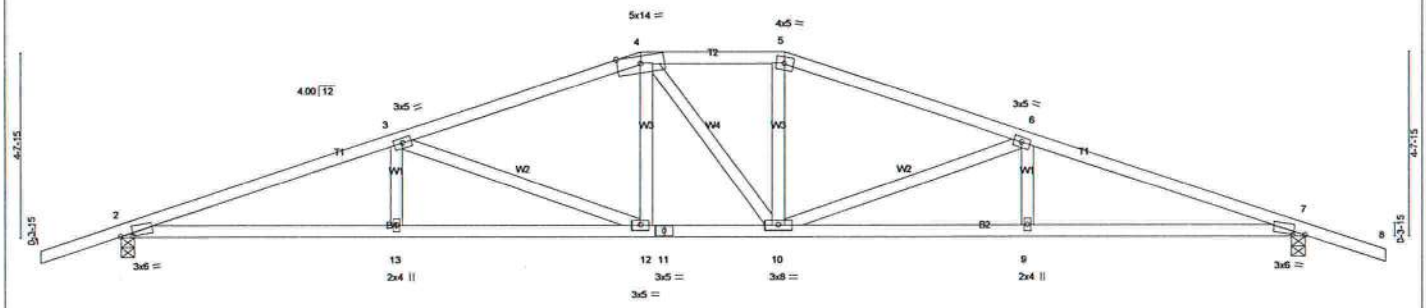
**LOAD CASE(S)** Standard

| Job | Truss | Truss Type | Qty | Ply | MJ JOHNSON CONST. / RICHARDS RES. |
|---|---|---|---|---|---|
| 293423 | T07 | HIP | 1 | 1 | 293423014<br>Job Reference (optional) |

Builders FirstSource, Lake City, Fl 32055 — 6.300 s Apr 19 2006 MiTek Industries, Inc. Fri Nov 14 08:14:02 2008 Page 1

| -2-0-0 | 6-10-14 | 13-0-0 | 16-7-0 | 22-8-2 | 29-7-0 | 31-7-0 |
|---|---|---|---|---|---|---|
| 2-0-0 | 6-10-14 | 6-1-2 | 3-7-0 | 6-1-2 | 6-10-14 | 2-0-0 |

Scale = 1:55.7




| 6-10-14 | 13-0-0 | 16-7-0 | 22-8-2 | 29-7-0 |
|---|---|---|---|---|
| 6-10-14 | 6-1-2 | 3-7-0 | 6-1-2 | 6-10-14 |

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

| LOADING (psf) | | SPACING 2-0-0 | CSI | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|
| TCLL 20.0 | | Plates Increase 1.25 | TC 0.35 | Vert(LL) | 0.19 | 12-13 | >999 | 360 | MT20 | 244/190 |
| TCDL 7.0 | | Lumber Increase 1.25 | BC 0.47 | Vert(TL) | -0.32 | 12-13 | >999 | 240 | | |
| BCLL 10.0 | * | Rep Stress Incr YES | WB 0.48 | Horz(TL) | 0.10 | 7 | n/a | n/a | | |
| BCDL 5.0 | | Code FBC2004/TPI2002 | (Matrix) | | | | | | Weight: 141 lb | |

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

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 3-10-9 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-2-10 oc bracing.

**REACTIONS** (lb/size) 2=1053/0-4-0, 7=1053/0-4-0
Max Horz 2=75(load case 6)
Max Uplift2=-327(load case 4), 7=-327(load case 5)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/33, 2-3=-2295/1215, 3-4=-1676/954, 4-5=-1546/949, 5-6=-1677/954, 6-7=-2295/1215, 7-8=0/33
BOT CHORD 2-13=-1027/2115, 12-13=-1027/2115, 11-12=-675/1545, 10-11=-675/1545, 9-10=-1027/2114, 7-9=-1027/2114
WEBS 3-13=0/212, 3-12=-623/380, 4-12=-110/291, 4-10=-169/171, 5-10=-110/291, 6-10=-622/379, 6-9=0/211

**NOTES** (6)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
3) Provide adequate drainage to prevent water ponding.
4) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 327 lb uplift at joint 2 and 327 lb uplift at joint 7.
6) Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869: Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

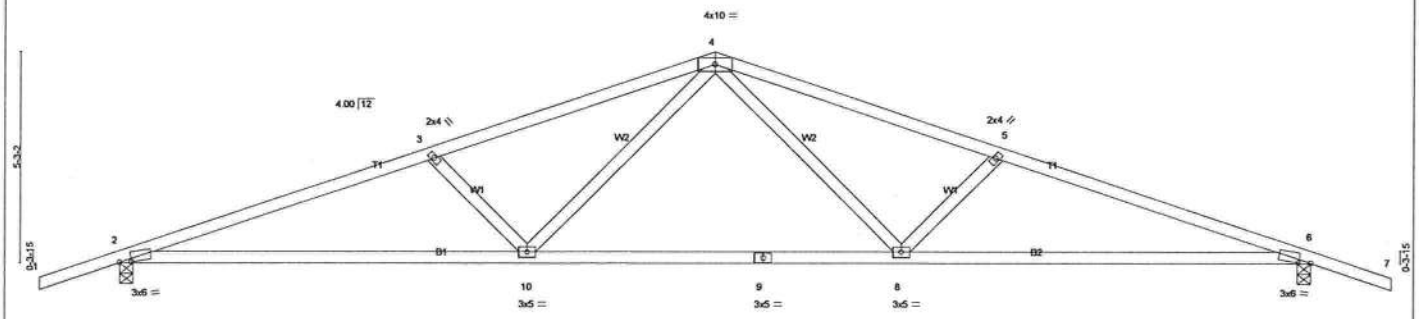
**LOAD CASE(S)** Standard

| Job | Truss | Truss Type | Qty | Ply | MJ JOHNSON CONST. / RICHARDS RES. |
|---|---|---|---|---|---|
| 293423 | T08 | COMMON | 3 | 1 | 293423015<br>Job Reference (optional) |

Builders FirstSource, Lake City, Fl 32055 — 6.300 s Apr 19 2006 MiTek Industries, Inc. Fri Nov 14 08:14:03 2008 Page 1

| -2-0-0 | 7-9-10 | 14-9-8 | 21-9-6 | 29-7-0 | 31-7-0 |
|---|---|---|---|---|---|
| 2-0-0 | 7-9-10 | 6-11-14 | 6-11-14 | 7-9-10 | 2-0-0 |

Scale = 1:55.1




| 10-1-9 | 19-5-7 | 29-7-0 |
|---|---|---|
| 10-1-9 | 9-3-13 | 10-1-9 |

Plate Offsets (X,Y): [2:0-3-9,0-0-7], [6:0-3-9,0-0-7]

| 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) | -0.23 | 2-10 | >999 | 360 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber Increase | 1.25 | BC | 0.56 | Vert(TL) | -0.48 | 2-10 | >728 | 240 | | |
| BCLL | 10.0 * | Rep Stress Incr | YES | WB | 0.22 | Horz(TL) | 0.09 | 6 | n/a | n/a | | |
| BCDL | 5.0 | Code FBC2004/TPI2002 | | (Matrix) | | | | | | | Weight: 127 lb | |

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

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 3-9-5 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-2-10 oc bracing.

**REACTIONS** (lb/size) 2=1053/0-4-0, 6=1053/0-4-0
Max Horz 2=-82(load case 7)
Max Uplift2=-320(load case 4), 6=-320(load case 5)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/33, 2-3=-2231/1235, 3-4=-1929/1109, 4-5=-1929/1109, 5-6=-2231/1235, 6-7=0/33
BOT CHORD 2-10=-1038/2051, 9-10=-615/1392, 8-9=-615/1392, 6-8=-1038/2051
WEBS 3-10=-433/349, 4-10=-269/579, 4-8=-269/579, 5-8=-433/349

**NOTES** (5)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
3) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 320 lb uplift at joint 2 and 320 lb uplift at joint 6.
5) Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869: Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

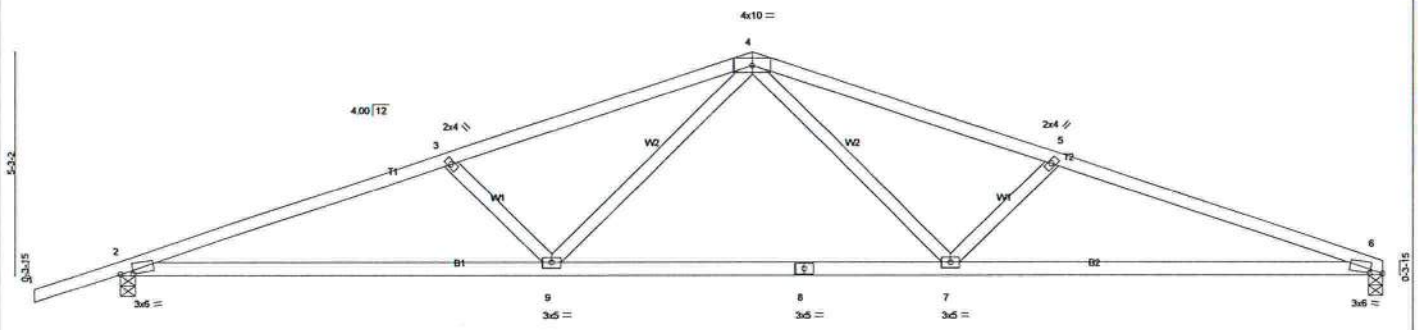
**LOAD CASE(S)** Standard

| Job | Truss | Truss Type | Qty | Ply | MJ JOHNSON CONST. / RICHARDS RES. |
|---|---|---|---|---|---|
| 293423 | T09 | COMMON | 6 | 1 | 293423016<br>Job Reference (optional) |

Builders FirstSource, Lake City, Fl 32055 — 6.300 s Apr 19 2006 MiTek Industries, Inc. Fri Nov 14 08:14:04 2008 Page 1

| -2-0-0 | 7-9-10 | 14-9-8 | 21-9-6 | 29-7-0 |
|---|---|---|---|---|
| 2-0-0 | 7-9-10 | 6-11-14 | 6-11-14 | 7-9-10 |

Scale = 1:52.1




| 10-1-9 | 19-5-7 | 29-7-0 |
|---|---|---|
| 10-1-9 | 9-3-13 | 10-1-9 |

Plate Offsets (X,Y): [2:0-3-9,0-0-7], [6:0-3-9,0-0-7]

| LOADING (psf) | | SPACING | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plates Increase | 1.25 | TC | 0.44 | Vert(LL) | 0.24 | 6-7 | >999 | 360 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber Increase | 1.25 | BC | 0.59 | Vert(TL) | -0.50 | 6-7 | >699 | 240 | | |
| BCLL | 10.0 * | Rep Stress Incr | YES | WB | 0.26 | Horz(TL) | 0.09 | 6 | n/a | n/a | | |
| BCDL | 5.0 | Code FBC2004/TPI2002 | | (Matrix) | | | | | | | Weight: 123 lb | |

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

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 3-7-11 oc purlins.
BOT CHORD Rigid ceiling directly applied or 5-7-5 oc bracing.

**REACTIONS** (lb/size) 6=932/0-4-0, 2=1057/0-4-0
Max Horz 2=91(load case 6)
Max Uplift6=-225(load case 5), 2=-321(load case 4)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/33, 2-3=-2244/1254, 3-4=-1941/1126, 4-5=-1964/1160, 5-6=-2273/1296
BOT CHORD 2-9=-1108/2063, 8-9=-686/1405, 7-8=-686/1405, 6-7=-1153/2094
WEBS 3-9=-434/351, 4-9=-265/578, 4-7=-310/607, 5-7=-449/372

**NOTES** (5)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
3) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 225 lb uplift at joint 6 and 321 lb uplift at joint 2.
5) 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

| Job | Truss | Truss Type | Qty | Ply | MJ JOHNSON CONST. / RICHARDS RES. |
|---|---|---|---|---|---|
| 293423 | T10 | COMMON | 1 | 1 | 293423017<br>Job Reference (optional) |

Builders FirstSource, Lake City, Fl 32055 — 6.300 s Apr 19 2006 MiTek Industries, Inc. Fri Nov 14 08:14:05 2008 Page 1

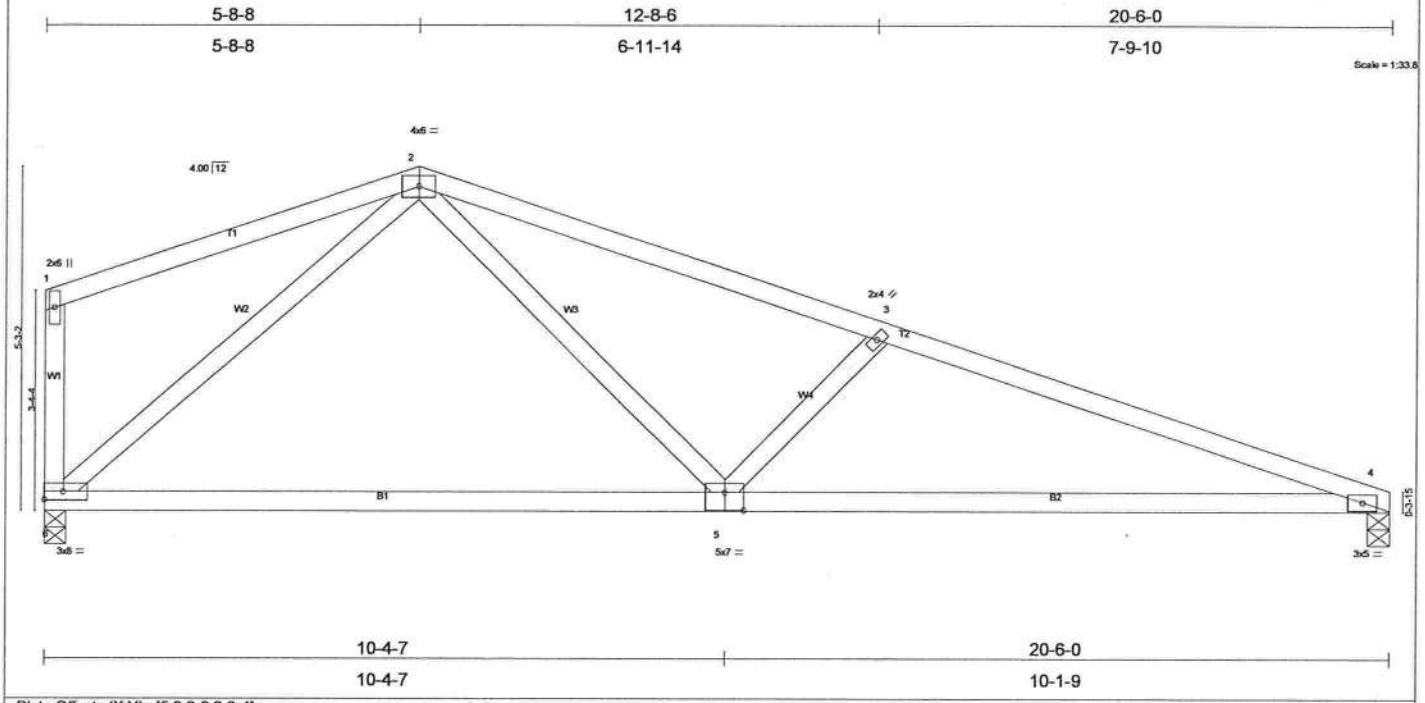



Plate Offsets (X,Y): [5:0-3-8,0-3-4]

| LOADING (psf) | | SPACING | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plates Increase | 1.25 | TC | 0.71 | Vert(LL) | -0.18 | 4-5 | >999 | 360 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber Increase | 1.25 | BC | 0.55 | Vert(TL) | -0.37 | 4-5 | >652 | 240 | | |
| BCLL | 10.0 * | Rep Stress Incr | YES | WB | 0.66 | Horz(TL) | 0.03 | 4 | n/a | n/a | | |
| BCDL | 5.0 | Code FBC2004/TPI2002 | | (Matrix) | | | | | | | Weight: 93 lb | |

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

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 4-9-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 7-5-6 oc bracing.

**REACTIONS** (lb/size) 4=646/0-4-0, 6=646/0-4-0
Max Horz 6=-122(load case 7)
Max Uplift4=-162(load case 5), 6=-150(load case 5)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-114/60, 2-3=-1091/630, 3-4=-1407/772, 1-6=-175/117
BOT CHORD 5-6=-180/554, 4-5=-659/1277
WEBS 2-5=-313/628, 3-5=-456/386, 2-6=-673/441

**NOTES** (5)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
3) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 162 lb uplift at joint 4 and 150 lb uplift at joint 6.
5) 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

| Job | Truss | Truss Type | Qty | Ply | MJ JOHNSON CONST. / RICHARDS RES. |
|---|---|---|---|---|---|
| 293423 | T11 | MONO HIP | 1 | 1 | 293423018<br>Job Reference (optional) |

Builders FirstSource, Lake City, Fl 32055 — 6.300 s Apr 19 2006 MiTek Industries, Inc. Fri Nov 14 08:14:06 2008 Page 1

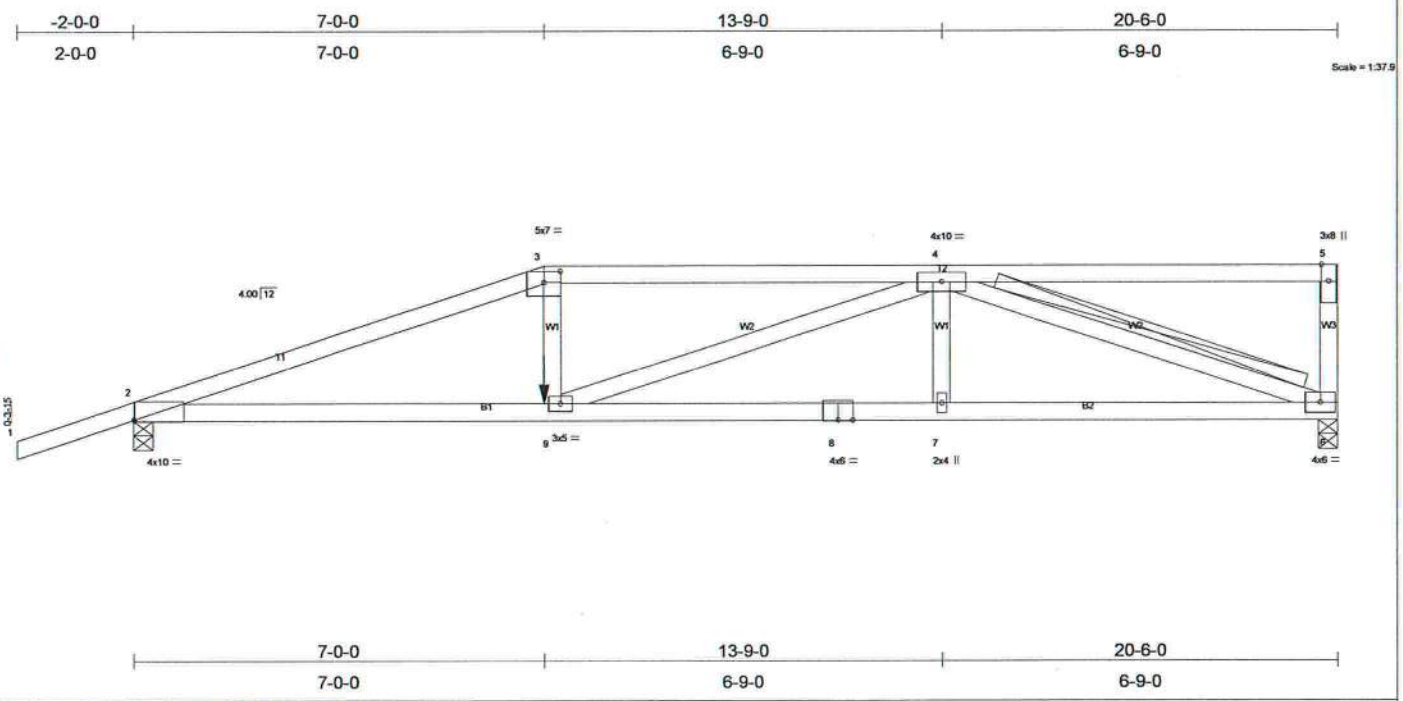



Plate Offsets (X,Y): [2:0-0-3,Edge], [3:0-3-8,0-2-5]

| LOADING (psf) | | SPACING 2-0-0 | CSI | DEFL in (loc) l/defl L/d | PLATES GRIP |
|---|---|---|---|---|---|
| TCLL 20.0 | | Plates Increase 1.25 | TC 0.75 | Vert(LL) -0.20 7-9 >999 360 | MT20 244/190 |
| TCDL 7.0 | | Lumber Increase 1.25 | BC 0.85 | Vert(TL) -0.41 7-9 >589 240 | |
| BCLL 10.0 | * | Rep Stress Incr NO | WB 0.90 | Horz(TL) 0.10 6 n/a n/a | |
| BCDL 5.0 | | Code FBC2004/TPI2002 | (Matrix) | | Weight: 94 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 *Except*
W3 2 X 4 SYP No.2

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

**REACTIONS** (lb/size) 6=1448/0-4-0, 2=1367/0-4-0
Max Horz 2=108(load case 3)
Max Uplift6=-447(load case 3), 2=-470(load case 3)

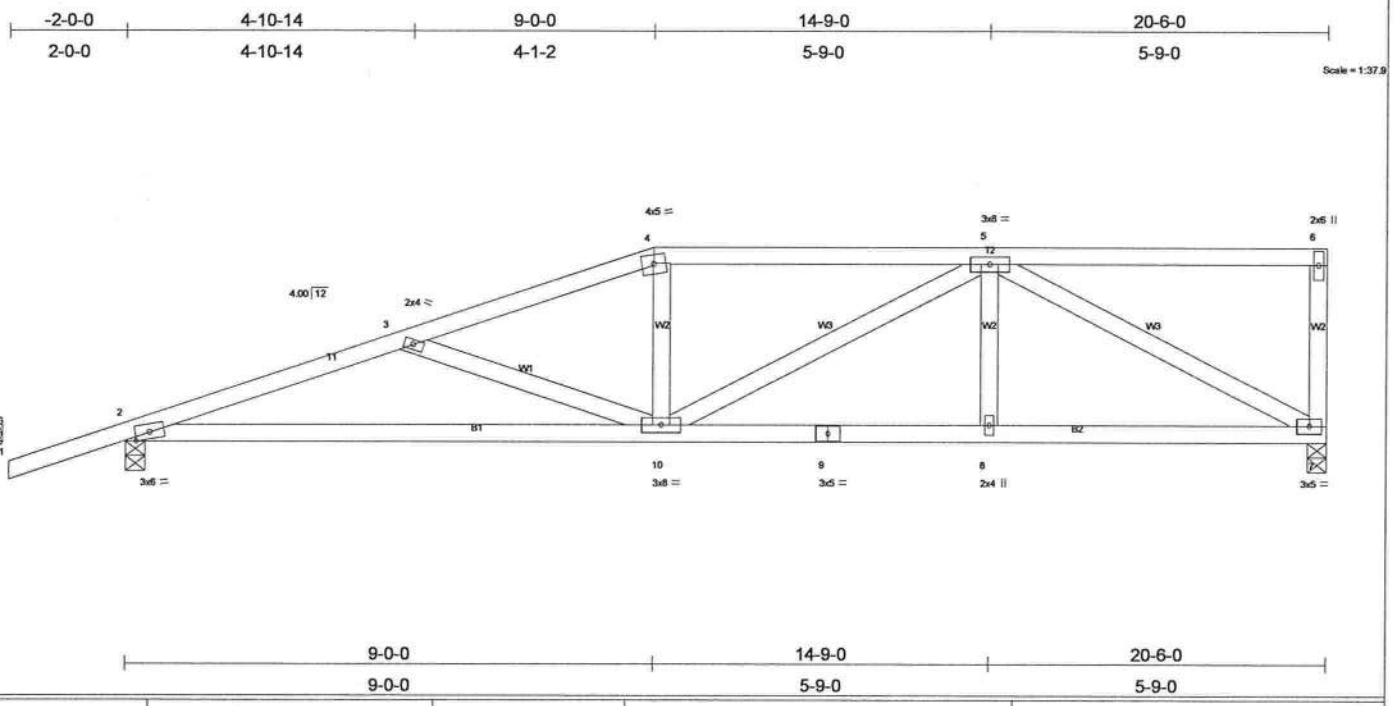
**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/33, 2-3=-3295/975, 3-4=-3095/956, 4-5=-208/63, 5-6=-371/172
BOT CHORD 2-9=-953/3065, 8-9=-919/2962, 7-8=-919/2962, 6-7=-919/2962
WEBS 3-9=-67/476, 4-9=-88/141, 4-7=0/274, 4-6=-2926/909

**NOTES** (8)
1) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS; Lumber DOL=1.60 plate grip DOL=1.60.
2) Provide adequate drainage to prevent water ponding.
3) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 447 lb uplift at joint 6 and 470 lb uplift at joint 2.
5) Girder carries hip end with 0-0-0 right side setback, 7-0-0 left side setback, and 7-0-0 end setback.
6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 411 lb down and 136 lb up at 7-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
8) 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, 3-5=-117(F=-63), 2-9=-10, 6-9=-22(F=-12)
Concentrated Loads (lb)
Vert: 9=-411(F)

| Job | Truss | Truss Type | Qty | Ply | MJ JOHNSON CONST. / RICHARDS RES. |
|---|---|---|---|---|---|
| 293423 | T12 | MONO HIP | 1 | 1 | 293423019<br>Job Reference (optional) |

Builders FirstSource, Lake City, Fl 32055 — 6.300 s Apr 19 2006 MiTek Industries, Inc. Fri Nov 14 08:14:06 2008 Page 1




| LOADING (psf) | | SPACING | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plates Increase | 1.25 | TC | 0.37 | Vert(LL) | -0.14 | 2-10 | >999 | 360 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber Increase | 1.25 | BC | 0.42 | Vert(TL) | -0.27 | 2-10 | >884 | 240 | | |
| BCLL | 10.0 * | Rep Stress Incr | YES | WB | 0.68 | Horz(TL) | 0.04 | 7 | n/a | n/a | | |
| BCDL | 5.0 | Code FBC2004/TPI2002 | | (Matrix) | | | | | | | Weight: 102 lb | |

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

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 5-0-15 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 7-0-2 oc bracing.

**REACTIONS** (lb/size) 7=640/0-4-0, 2=769/0-4-0
Max Horz 2=130(load case 4)
Max Uplift7=-181(load case 4), 2=-268(load case 4)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/33, 2-3=-1486/754, 3-4=-1173/586, 4-5=-1086/590, 5-6=-48/23, 6-7=-142/101
BOT CHORD 2-10=-809/1362, 9-10=-490/902, 8-9=-490/902, 7-8=-490/902
WEBS 3-10=-296/230, 4-10=0/193, 5-10=-115/210, 5-8=0/144, 5-7=-971/530

**NOTES** (5)
1) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
2) Provide adequate drainage to prevent water ponding.
3) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 181 lb uplift at joint 7 and 268 lb uplift at joint 2.
5) 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

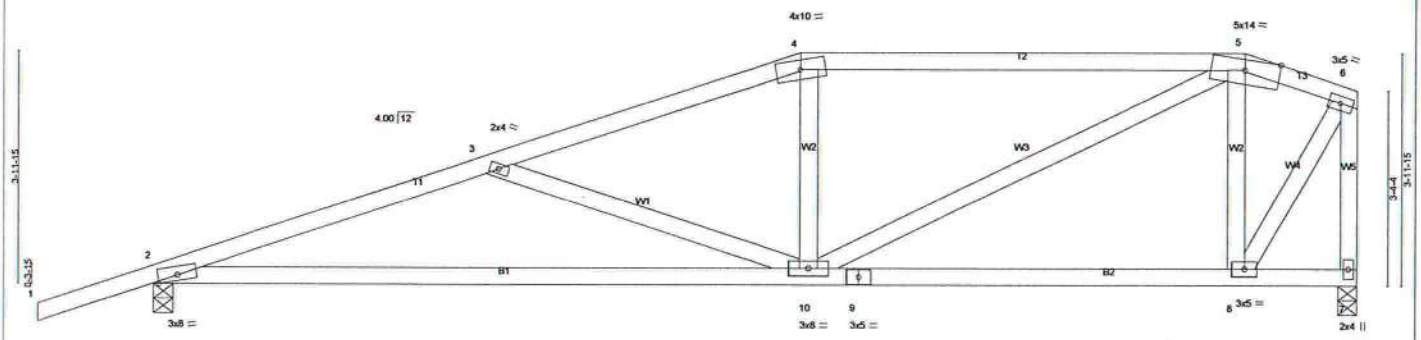
| Job | Truss | Truss Type | Qty | Ply | MJ JOHNSON CONST. / RICHARDS RES. |
|---|---|---|---|---|---|
| 293423 | T13 | HIP | 1 | 1 | 293423020 |
| | | | | | Job Reference (optional) |

Builders FirstSource, Lake City, Fl 32055 — 6.300 s Apr 19 2006 MiTek Industries, Inc. Fri Nov 14 08:14:07 2008 Page 1

-2-0-0 | 5-10-14 | 11-0-0 | 18-7-0 | 20-6-0

2-0-0 | 5-10-14 | 5-1-2 | 7-7-0 | 1-11-0

Scale = 1:37.9




11-0-0 | 18-7-0 | 20-6-0

11-0-0 | 7-7-0 | 1-11-0

| LOADING (psf) | | SPACING | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plates Increase | 1.25 | TC | 0.45 | Vert(LL) | -0.29 | 2-10 | >844 | 360 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber Increase | 1.25 | BC | 0.55 | Vert(TL) | -0.53 | 2-10 | >457 | 240 | | |
| BCLL | 10.0 * | Rep Stress Incr | YES | WB | 0.40 | Horz(TL) | 0.03 | 7 | n/a | n/a | | |
| BCDL | 5.0 | Code FBC2004/TPI2002 | | (Matrix) | | | | | | | Weight: 105 lb | |

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

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 5-0-9 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

**REACTIONS** (lb/size) 2=769/0-4-0, 7=640/0-4-0
Max Horz 2=139(load case 6)
Max Uplift2=-266(load case 4), 7=-168(load case 4)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/33, 2-3=-1435/755, 3-4=-1022/520, 4-5=-930/533, 5-6=-360/204, 6-7=-637/352
BOT CHORD 2-10=-806/1311, 9-10=-191/347, 8-9=-191/347, 7-8=-8/3
WEBS 3-10=-401/317, 4-10=-58/144, 5-10=-349/659, 5-8=-562/362, 6-8=-396/711

**NOTES** (6)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
3) Provide adequate drainage to prevent water ponding.
4) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 266 lb uplift at joint 2 and 168 lb uplift at joint 7.
6) Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869: Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

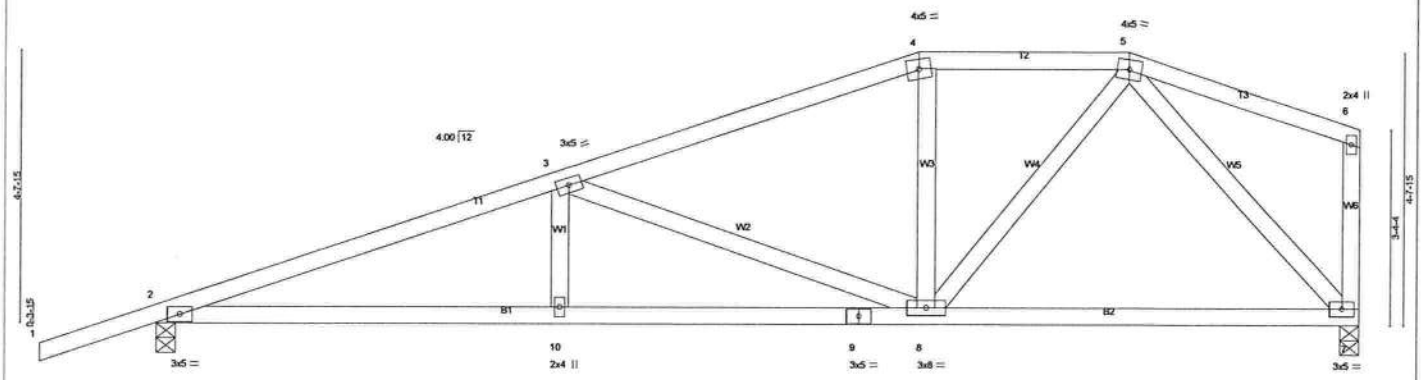
**LOAD CASE(S)** Standard

| Job | Truss | Truss Type | Qty | Ply | MJ JOHNSON CONST. / RICHARDS RES. |
|---|---|---|---|---|---|
| 293423 | T14 | HIP | 1 | 1 | 293423021<br>Job Reference (optional) |

Builders FirstSource, Lake City, Fl 32055 — 6.300 s Apr 19 2006 MiTek Industries, Inc. Fri Nov 14 08:14:08 2008 Page 1

| -2-0-0 | 6-10-14 | 13-0-0 | 16-7-0 | 20-6-0 |
|---|---|---|---|---|
| 2-0-0 | 6-10-14 | 6-1-2 | 3-7-0 | 3-11-0 |

Scale = 1:37.9




| 6-10-14 | 13-0-0 | 20-6-0 |
|---|---|---|
| 6-10-14 | 6-1-2 | 7-6-0 |

| LOADING (psf) | | SPACING | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plates Increase | 1.25 | TC | 0.37 | Vert(LL) | 0.08 | 8-10 | >999 | 360 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber Increase | 1.25 | BC | 0.33 | Vert(TL) | -0.14 | 2-10 | >999 | 240 | | |
| BCLL | 10.0 * | Rep Stress Incr | YES | WB | 0.49 | Horz(TL) | 0.03 | 7 | n/a | n/a | | |
| BCDL | 5.0 | Code FBC2004/TPI2002 | | (Matrix) | | | | | | | Weight: 104 lb | |

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

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 4-11-11 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 7-2-11 oc bracing.

**REACTIONS** (lb/size) 2=769/0-4-0, 7=640/0-4-0
Max Horz 2=147(load case 6)
Max Uplift2=-263(load case 4), 7=-155(load case 4)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/33, 2-3=-1435/714, 3-4=-803/439, 4-5=-707/456, 5-6=-66/47, 6-7=-115/93
BOT CHORD 2-10=-764/1302, 9-10=-764/1302, 8-9=-764/1302, 7-8=-257/453
WEBS 3-10=0/199, 3-8=-633/395, 4-8=-58/96, 5-8=-217/443, 5-7=-645/381

**NOTES** (6)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
3) Provide adequate drainage to prevent water ponding.
4) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 263 lb uplift at joint 2 and 155 lb uplift at joint 7.
6) 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

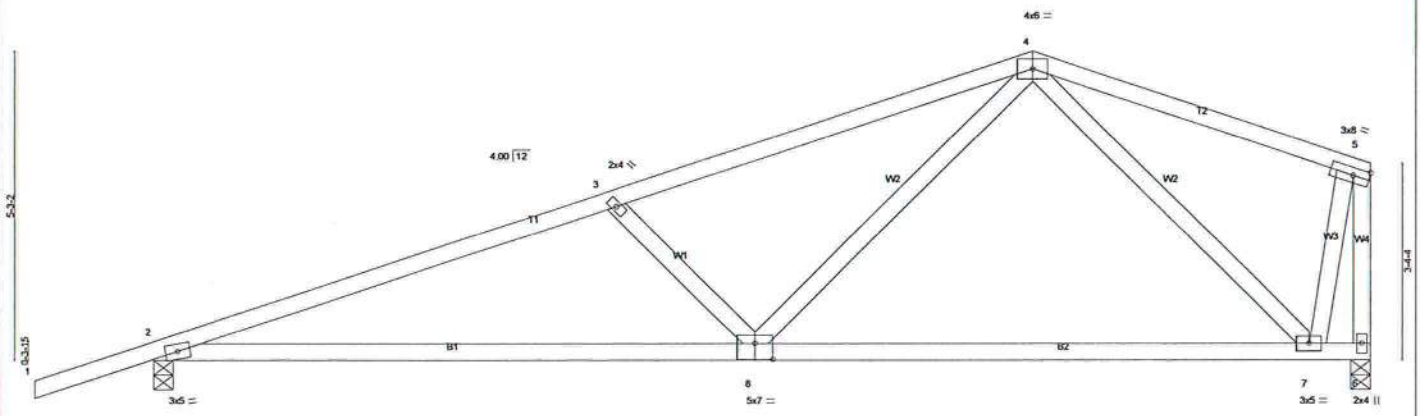
| Job | Truss | Truss Type | Qty | Ply | MJ JOHNSON CONST. / RICHARDS RES. |
|---|---|---|---|---|---|
| 293423 | T15 | COMMON | 3 | 1 | 293423022<br>Job Reference (optional) |

Builders FirstSource, Lake City, Fl 32055 — 6.300 s Apr 19 2006 MiTek Industries, Inc. Fri Nov 14 08:14:09 2008 Page 1

-2-0-0 | 7-9-10 | 14-9-8 | 20-6-0

2-0-0 | 7-9-10 | 6-11-14 | 5-8-8

Scale = 1:37.5




10-1-9 | 19-5-7 | 20-6-0

10-1-9 | 9-3-14 | 1-0-9

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

| LOADING (psf) | | SPACING | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plates Increase | 1.25 | TC | 0.42 | Vert(LL) | -0.19 | 2-8 | >999 | 360 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber Increase | 1.25 | BC | 0.50 | Vert(TL) | -0.38 | 2-8 | >641 | 240 | | |
| BCLL | 10.0 * | Rep Stress Incr | YES | WB | 0.47 | Horz(TL) | 0.03 | 6 | n/a | n/a | | |
| BCDL | 5.0 | Code FBC2004/TPI2002 | | (Matrix) | | | | | | | Weight: 99 lb | |

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

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 4-11-5 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 7-2-12 oc bracing.

**REACTIONS** (lb/size) 2=769/0-4-0, 6=640/0-4-0
Max Horz 2=154(load case 6)
Max Uplift2=-258(load case 4), 6=-145(load case 4)

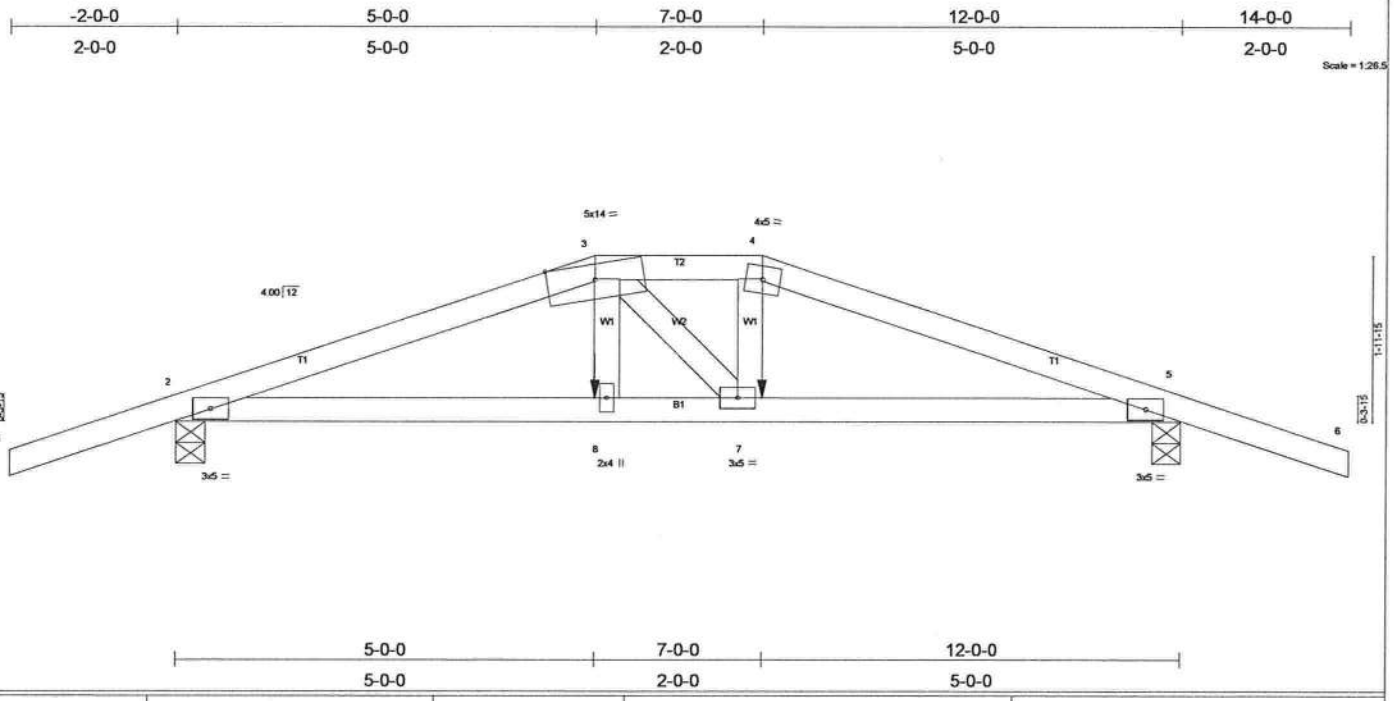
**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/33, 2-3=-1371/723, 3-4=-1061/590, 4-5=-217/130, 5-6=-629/280
BOT CHORD 2-8=-764/1239, 7-8=-324/548, 6-7=-36/53
WEBS 3-8=-440/363, 4-8=-279/593, 4-7=-555/362, 5-7=-145/535

**NOTES** (5)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
3) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 258 lb uplift at joint 2 and 145 lb uplift at joint 6.
5) 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

| Job | Truss | Truss Type | Qty | Ply | MJ JOHNSON CONST. / RICHARDS RES. |
|---|---|---|---|---|---|
| 293423 | T16 | HIP | 1 | 1 | 293423023<br>Job Reference (optional) |

Builders FirstSource, Lake City, Fl 32055 — 6.300 s Apr 19 2006 MiTek Industries, Inc. Fri Nov 14 08:14:10 2008 Page 1




| LOADING (psf) | | SPACING 2-0-0 | CSI | DEFL in (loc) l/defl L/d | PLATES GRIP |
|---|---|---|---|---|---|
| TCLL 20.0 | | Plates Increase 1.25 | TC 0.27 | Vert(LL) 0.05 5-7 >999 360 | MT20 244/190 |
| TCDL 7.0 | | Lumber Increase 1.25 | BC 0.29 | Vert(TL) -0.08 8 >999 240 | |
| BCLL 10.0 | * | Rep Stress Incr NO | WB 0.09 | Horz(TL) 0.02 5 n/a n/a | |
| BCDL 5.0 | | Code FBC2004/TPI2002 | (Matrix) | | Weight: 50 lb |

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

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 5-3-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 8-4-8 oc bracing.

**REACTIONS** (lb/size) 2=719/0-4-0, 5=719/0-4-0
Max Horz 2=44(load case 5)
Max Uplift2=-416(load case 3), 5=-416(load case 4)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/33, 2-3=-1341/636, 3-4=-1241/626, 4-5=-1343/636, 5-6=0/33
BOT CHORD 2-8=-558/1220, 7-8=-568/1239, 5-7=-564/1222
WEBS 3-8=-133/225, 3-7=-83/88, 4-7=-134/283

**NOTES** (9)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60.
3) Provide adequate drainage to prevent water ponding.
4) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 416 lb uplift at joint 2 and 416 lb uplift at joint 5.
6) Girder carries hip end with 5-0-0 end setback.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 187 lb down and 62 lb up at 7-0-0, and 187 lb down and 62 lb up at 5-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
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
1) Regular: Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-3=-54, 3-4=-90(F=-36), 4-6=-54, 2-8=-10, 7-8=-17(F=-7), 5-7=-10
Concentrated Loads (lb)
Vert: 8=-187(F) 7=-187(F)

| Job | Truss | Truss Type | Qty | Ply | MJ JOHNSON CONST. / RICHARDS RES. |
|---|---|---|---|---|---|
| 293423 | T17 | COMMON | 2 | 1 | 293423024<br>Job Reference (optional) |

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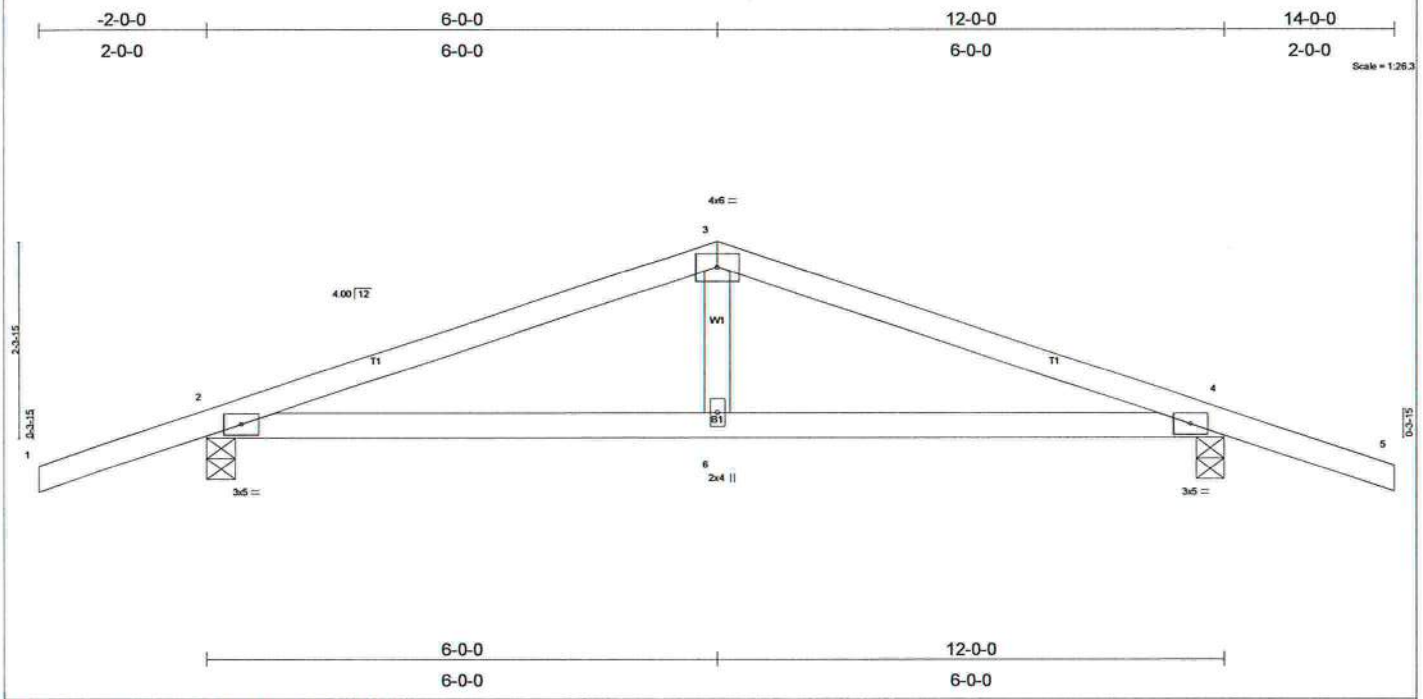



Plate Offsets (X,Y): [2:0-0-0,0-0-0], [3:0-0-0,0-0-0], [4:0-0-0,0-0-0]

| LOADING (psf) | | SPACING | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plates Increase | 1.25 | TC | 0.30 | Vert(LL) | 0.09 | 4-6 | >999 | 360 | MT20 | 244/190 |
| TCDL | 7.0 | Lumber Increase | 1.25 | BC | 0.21 | Vert(TL) | -0.05 | 4-6 | >999 | 240 | | |
| BCLL | 10.0 * | Rep Stress Incr | YES | WB | 0.06 | Horz(TL) | -0.02 | 4 | n/a | n/a | | |
| BCDL | 5.0 | Code FBC2004/TPI2002 | | (Matrix) | | | | | | | Weight: 46 lb | |

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

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-9-6 oc bracing.

**REACTIONS** (lb/size) 2=490/0-4-0, 4=490/0-4-0
Max Horz 2=-47(load case 7)
Max Uplift2=-335(load case 4), 4=-335(load case 5)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/33, 2-3=-648/991, 3-4=-648/991, 4-5=0/33
BOT CHORD 2-6=-823/565, 4-6=-823/565
WEBS 3-6=-341/195

**NOTES** (5)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS and C-C Exterior(2) zone; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
3) *This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 335 lb uplift at joint 2 and 335 lb uplift at joint 4.
5) Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869: Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

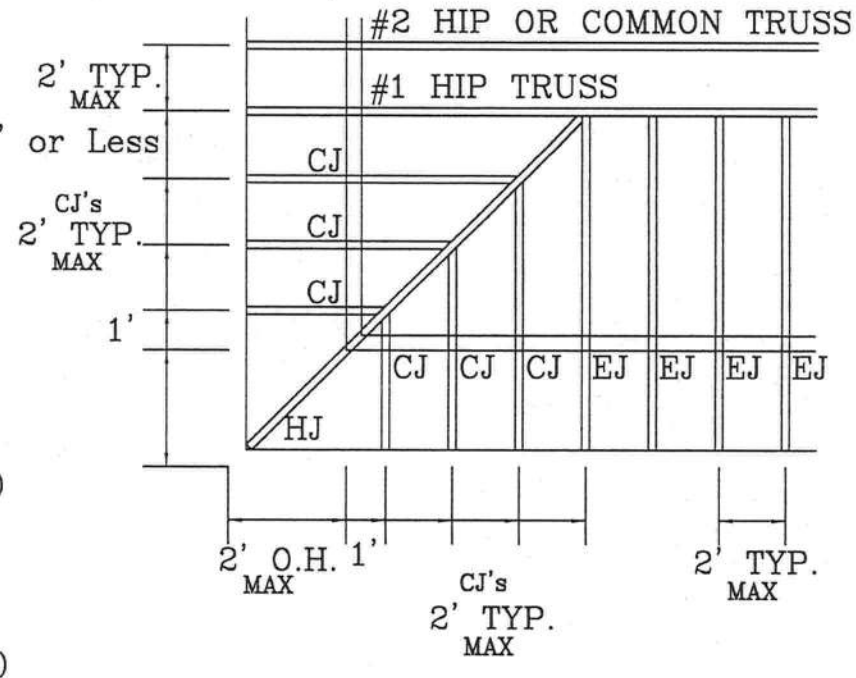
**LOAD CASE(S)** Standard

# STEPDOWN CORNER SET

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**

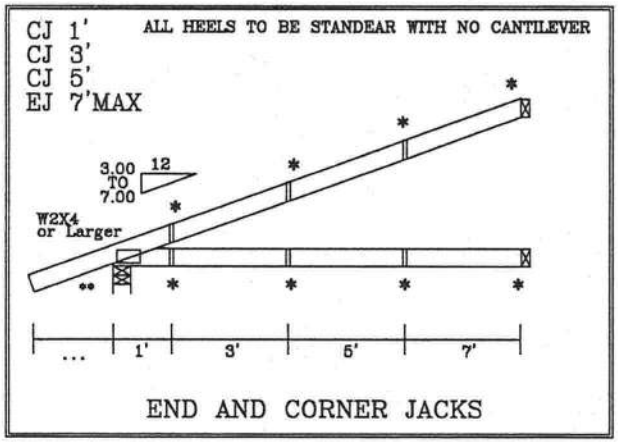
Setback 7' or Less



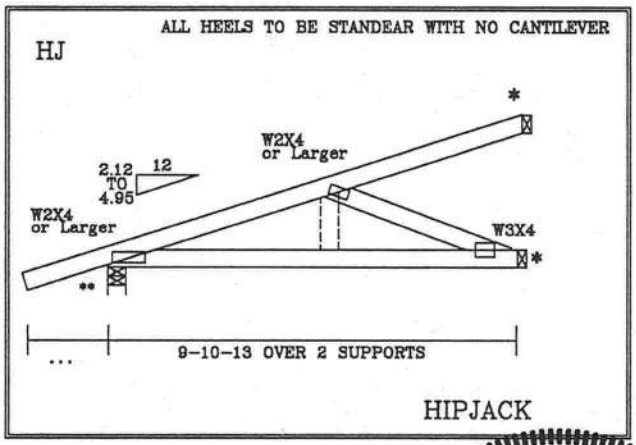

PROVIDE UPLIFT CONNECTIONS AT BEARINGS AS INDICATED.
UPLIFT: 400# or Less
BRG LOC: *
UPLIFT BASED ON 7.2 PSF TOTAL DEAD LOAD. WIND SPEED=120 "C" MPH. MEAN HGT=28 FT. ENCLOSED. (ASCE 7-02)

PROVIDE UPLIFT CONNECTIONS AT BEARINGS AS INDICATED. TILE
UPLIFT: 400# or Less
BRG LOC: *
UPLIFT BASED ON 15.0 PSF TOTAL DEAD LOAD. WIND SPEED=120 "C" MPH. MEAN HGT (of jacks)=28 FT. ENCLOSED. (ASCE 7-02)

PROVIDE UPLIFT CONNECTIONS AT BEARINGS AS INDICATED.
UPLIFT: 400# or Less
BRG LOC: *
UPLIFT BASED ON 7.2 PSF TOTAL DEAD LOAD. WIND SPEED=120 "B" MPH. MEAN HGT (of jacks)=28 FT. ENCLOSED. (ASCE 7-02)




END AND CORNER JACKS




HIPJACK

* (3) 16d TOENAILS

** SEE EOR FOR TIE DOWN

UPLIFT VALUES DO TAKE INTO ACCOUNT PORCHES EXPOSED
BC LIVE LOAD IS NON CONCURRENT 10*

| CORNER SET SETBACK |
|---|
| 7'0" MAX |

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

**IMPORTANT** FURNISH COPY OF THIS DESIGN TO INSTALLATION CONTRACTOR. ALPINE ENGINEERED PRODUCTS, INC., SHALL NOT BE RESPONSIBLE FOR ANY DEVIATION FROM THIS DESIGN; ANY FAILURE TO BUILD THE TRUSS IN CONFORMANCE WITH TPI; OR FABRICATING, HANDLING, SHIPPING, INSTALLING & BRACING OF TRUSSES. DESIGN CONFORMS WITH APPLICABLE PROVISIONS OF NDS (NATIONAL DESIGN SPEC BY AF&PA) AND TPI. ALPINE CONNECTOR PLATES ARE MADE OF 20/18/16GA (W,H/S/K) ASTM A653 GRADE 40/60 (W,K/H,S) GALV. STEEL. APPLY PLATES TO EACH FACE OF TRUSS AND, UNLESS OTHERWISE LOCATED ON THIS DESIGN, POSITION PER DRAWINGS 160A-Z. ANY INSPECTION OF PLATES FOLLOWED BY (I) SHALL BE PER ANNEX A3 OF TPI 1-2002 SEC. 3. A SEAL ON THIS DRAWING INDICATES ACCEPTANCE OF PROFESSIONAL ENGINEERING RESPONSIBILITY SOLELY FOR THE TRUSS COMPONENT DESIGN SHOWN. THE SUITABILITY AND USE OF THIS COMPONENT FOR ANY BUILDING IS THE RESPONSIBILITY OF THE BUILDING DESIGNER, PER ANSI/TPI 1 SEC. 2.


JULIUS LEE
CONS. ENGINEERS, P.A.
1485 SW 4th AVENUE
DELRAY BEACH, FL 33444-2101


NO. 54869

STATE OF FLORIDA

PROFESSIONAL ENGINEER

| | | | |
|---|---|---|---|
| SHINGLE | | | |
| TC | LL | 20 | MAX PSF |
| TC | DL | 7 | MAX PSF |
| BC | LL | 10* | MAX PSF |
| BC | DL | 5 | MAX PSF |
| TILE | | | |
| TC | LL | 20 | MAX PSF |
| TC | DL | 20 | MAX PSF |
| BC | LL | 10* | MAX PSF |
| BC | DL | 5 | MAX PSF |
| DUR. FAC. | | 1.25 | |
| SPACING | | 2' | MAX |

| | |
|---|---|
| REF | 7'MAX STBK CS |
| DATE | Jun./27/2008 |
| DRWG | |
| -ENG | |

REVIEWED
By julius lee at 10:52 am, Jun 27, 2008

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

MAX GABLE VERTICAL LENGTH

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

BRACING GROUP SPECIES AND GRADES:

GROUP A:

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

| HEM-FIR | |
|---|---|
| #2 | STUD |
| #3 | STANDARD |

| DOUGLAS FIR-LARCH |
|---|
| #3 |
| STUD |
| STANDARD |

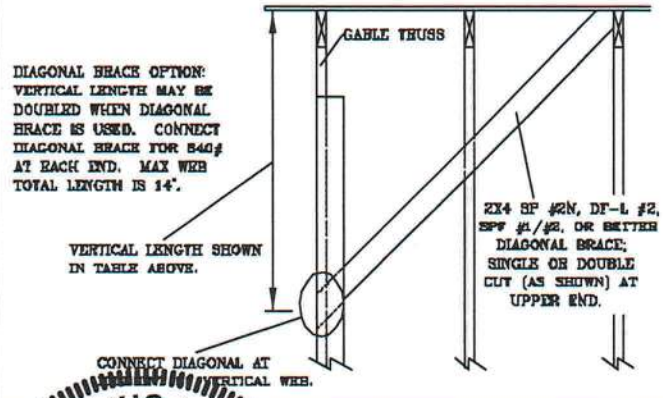
| SOUTHERN PINE |
|---|
| #3 |
| STUD |
| STANDARD |

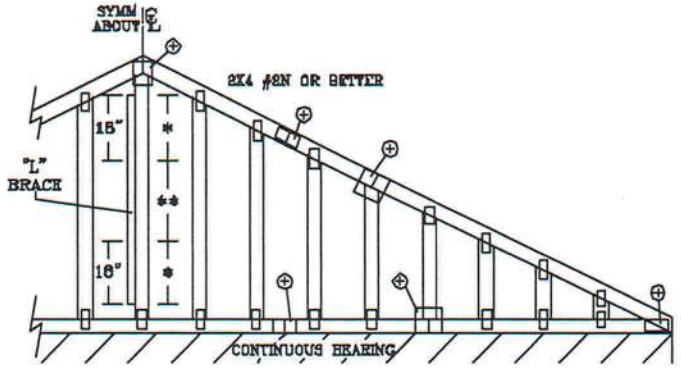
GROUP B:

| HEM-FIR |
|---|
| #1 & BTR |
| #1 |

| SOUTHERN PINE |
|---|
| #1 |
| #2 |

| DOUGLAS FIR-LARCH |
|---|
| #1 |
| #2 |




REFER TO CHART ABOVE FOR MAX GABLE VERTICAL LENGTH.

GABLE TRUSS DETAIL NOTES:

LIVE LOAD DEFLECTION CRITERIA IS L/240.

PROVIDE UPLIFT CONNECTIONS FOR 136 PLF OVER CONTINUOUS BEARING (5 PSF TC DEAD LOAD).

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

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

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

GABLE VERTICAL PLATE SIZES

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

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

JULIUS LEE LICENSE NO. 34869 STATE OF FLORIDA PROFESSIONAL ENGINEER

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

REVIEWED
By julius lee at 12:00 pm, Jun 11, 2008


JULIUS LEE'S CONS. ENGINEERS P.A.
1455 SW 4th AVENUE
DELRAY BEACH, FL 33444-2161
No: 34869
STATE OF FLORIDA


MAX. TOT. LD. 60 PSF

MAX. SPACING 24.0"

| | |
|---|---|
| REF | ASCE7-02-GAB13015 |
| DATE | 11/26/03 |
| DRWG | MITEK STD GABLE 15 E HT |
| | -ENG |

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

MAX GABLE VERTICAL LENGTH

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

BRACING GROUP SPECIES AND GRADES:

GROUP A:

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

| HEM-FIR | |
|---|---|
| #2 | STUD |
| #3 | STANDARD |

| DOUGLAS FIR-LARCH |
|---|
| #3 |
| STUD |
| STANDARD |

| SOUTHERN PINE |
|---|
| #3 |
| STUD |
| STANDARD |

GROUP B:

| HEM-FIR |
|---|
| #1 & BTR |
| #1 |

| SOUTHERN PINE |
|---|
| #1 |
| #2 |

| DOUGLAS FIR-LARCH |
|---|
| #1 |
| #2 |

GABLE TRUSS DETAIL NOTES:

LIVE LOAD DEFLECTION CRITERIA IS L/240.

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

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

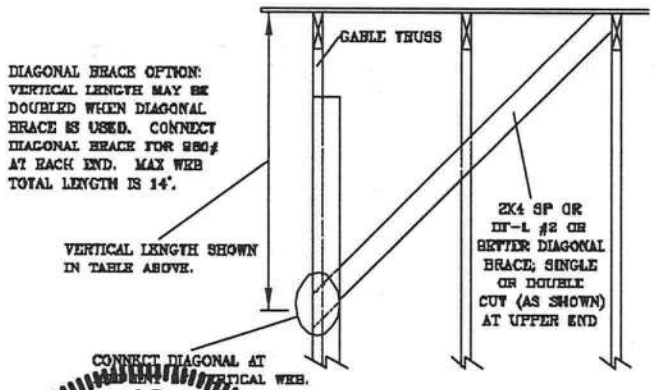
ATTACH EACH "L" BRACE WITH 10d NAILS.
* FOR (1) "L" BRACE: SPACE NAILS AT 2" O.C. IN 18" END ZONES AND 4" O.C. BETWEEN ZONES.
** FOR (2) "L" BRACES: SPACE NAILS AT 3" O.C. IN 18" END ZONES AND 6" O.C. BETWEEN ZONES.

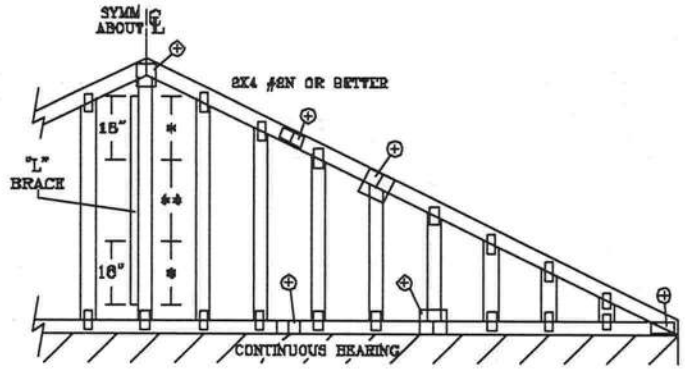
"L" BRACING MUST BE A MINIMUM OF 80% OF WEB MEMBER LENGTH.

GABLE VERTICAL PLATE SIZES

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

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




REFER TO CHART ABOVE FOR MAX GABLE VERTICAL LENGTH.

JULIUS LEE LICENSE NO. 34869 STATE OF FLORIDA PROFESSIONAL ENGINEER

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

REVIEWED
By julius lee at 12:00 pm, Jun 11, 2008

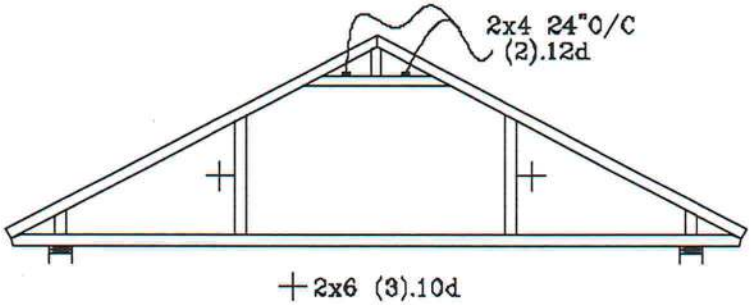

JULIUS LEE'S CONS. ENGINEERS P.A.
1456 SW 4th AVENUE
DELRAY BEACH, FL. 33444-2161
No: 34869
STATE OF FLORIDA


MAX. TOT. LD. 60 PSF

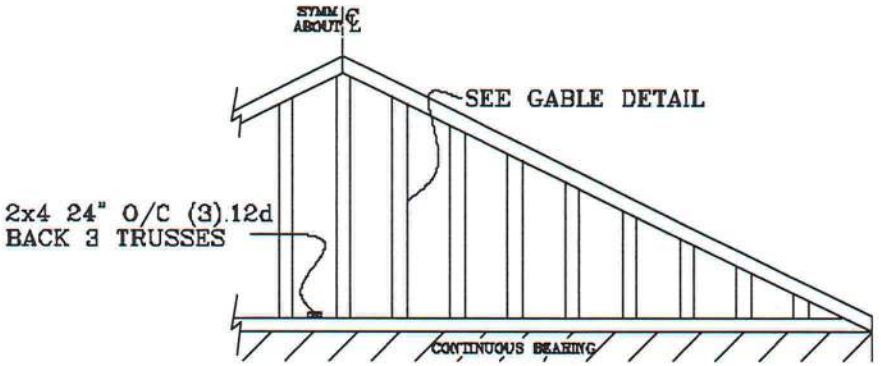
MAX. SPACING 24.0"

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

# TYPICAL ATTIC TRUSS BRACING

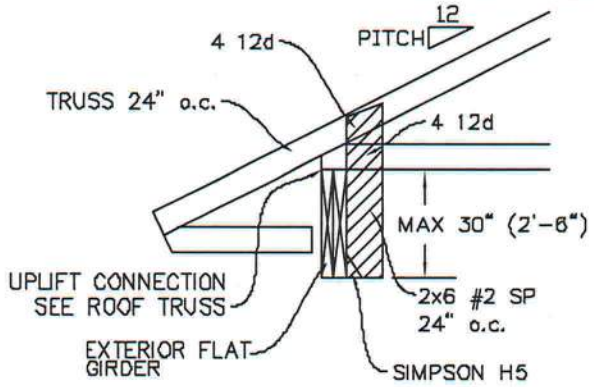



# GABLE END TRUSS DETAIL

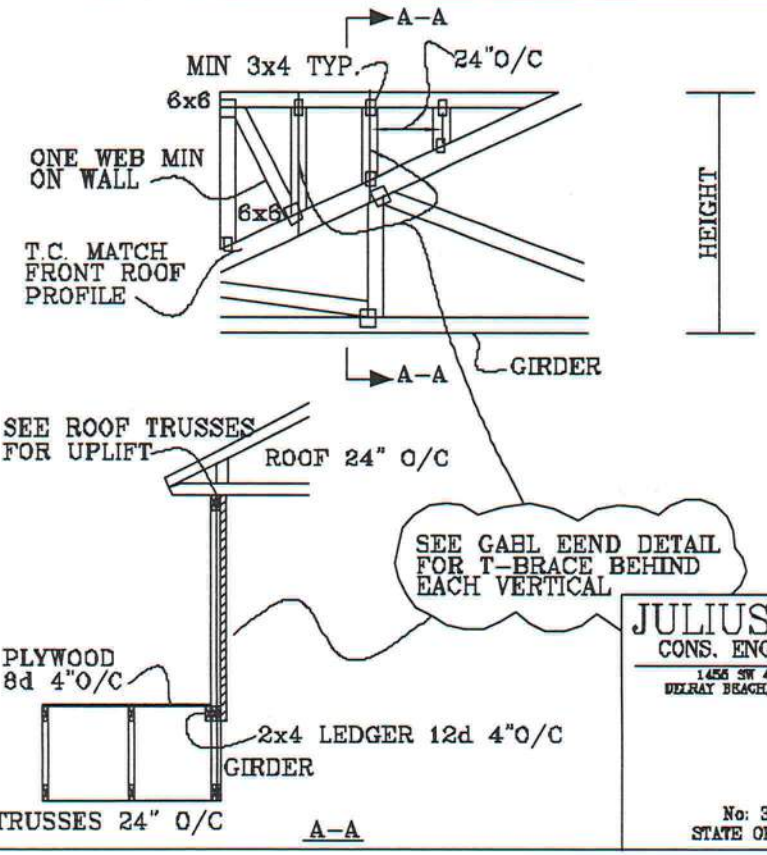



MINIMUM BC BRACING ON GABLE TRUSS. OTHER PERMANENT BRACING DESIGNS BY ARCHITECT OR EOR

# TYPICAL ALTERNATE BRACING DETAIL FOR EXTERIOR FLAT GIRDER TRUSS




# TYPICAL WALL GIRDER VERTICAL WEB BRACING DETAIL




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

JULIUS LEE
LICENSE
NO. 34869
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

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

No: 34869
STATE OF FLORIDA

# PIGGYBACK DETAIL

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

REFER TO SEALED DESIGN FOR DASHED PLATES.

SPACE PIGGYBACK VERTICALS AT 4' OC MAX.

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

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

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

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

THIS DETAIL IS APPLICABLE FOR THE FOLLOWING WIND CONDITIONS:

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

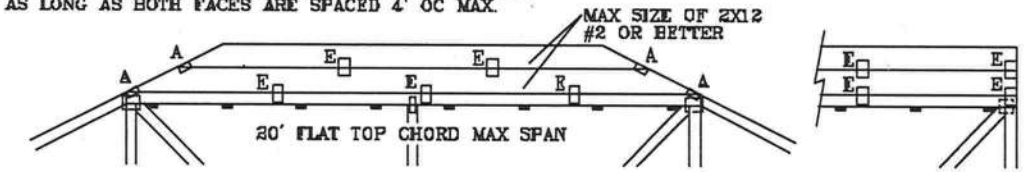
110 MPH WIND, 30' MEAN HGT, FBC ENCLOSED BLDG, LOCATED ANYWHERE IN ROOF WIND TC DL=5 PSF, WIND BC DL=5 PSF

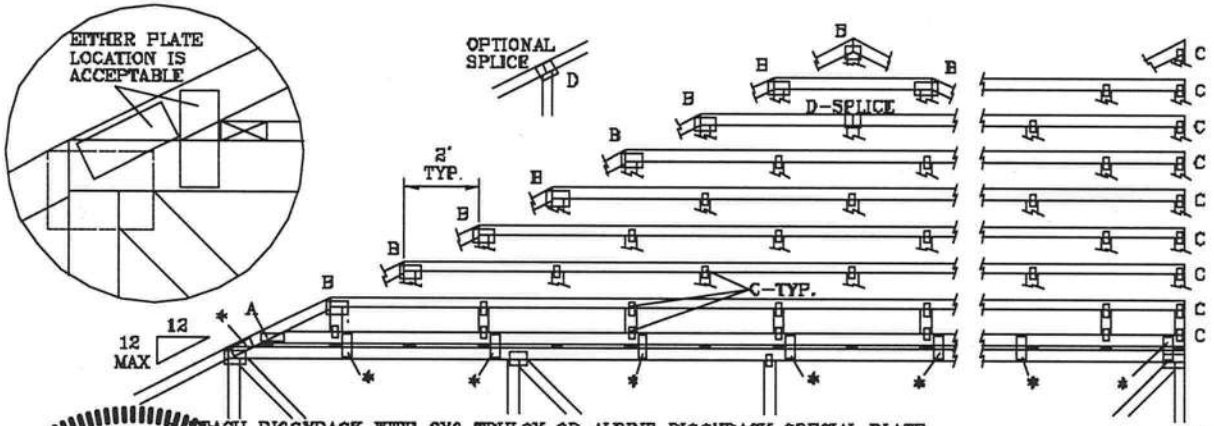
130 MPH WIND, 30' MEAN HGT, ASCE 7-02, CLOSED BLDG, LOCATED ANYWHERE IN ROOF, CAT II, EXP. C, WIND TC DL=6 PSF, WIND BC DL=6 PSF

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

| JOINT TYPE | SPANS UP TO | | | |
|---|---|---|---|---|
| | 30' | 34' | 38' | 52' |
| A | 2X4 | 2.5X4 | 2.5X4 | 3X5 |
| B | 4X8 | 5X8 | 5X8 | 5X8 |
| C | 1.5X3 | 1.5X4 | 1.5X4 | 1.5X4 |
| D | 5X4 | 5X5 | 5X5 | 5X6 |
| E | 4X8 OR 3X8 TRULOX AT 4' OC, ROTATED VERTICALLY | | | |

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



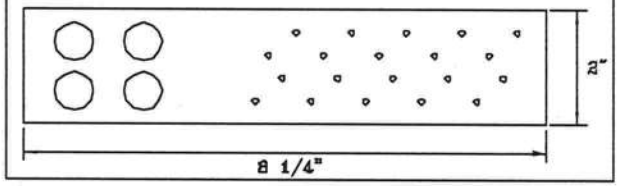




ATTACH PIGGYBACK WITH 3X8 TRULOX OR ALPINE PIGGYBACK SPECIAL PLATE.

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

* PIGGYBACK SPECIAL PLATE

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




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

JULIUS LEE LICENSE NO. 34869 STATE OF FLORIDA PROFESSIONAL ENGINEER

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


JULIUS LEE'S CONS. ENGINEERS P.A.
1460 SW 4th AVENUE
DELRAY BEACH, FL. 33444-2161

No: 34869
STATE OF FLORIDA


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

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

# VALLEY TRUSS DETAIL

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

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

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

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

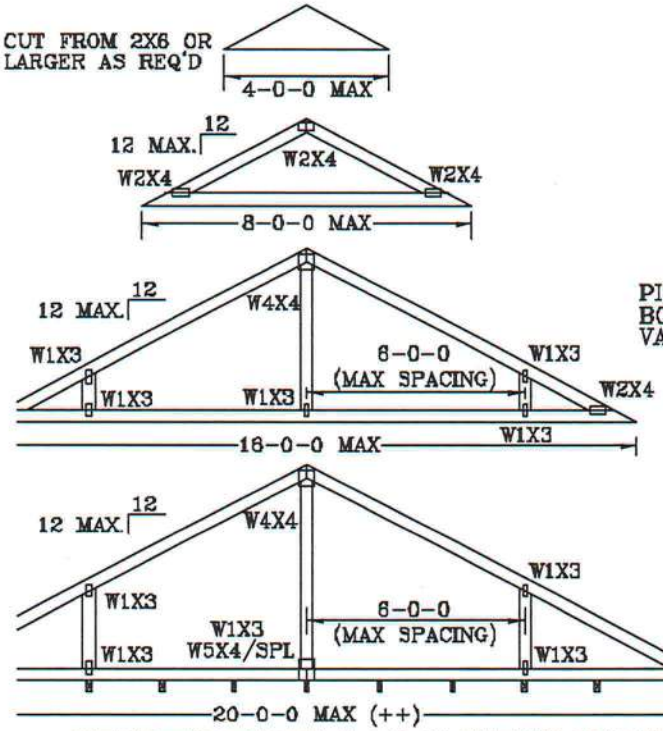
MAXIMUM VALLEY VERTICAL HEIGHT MAY NOT EXCEED 12'0".

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

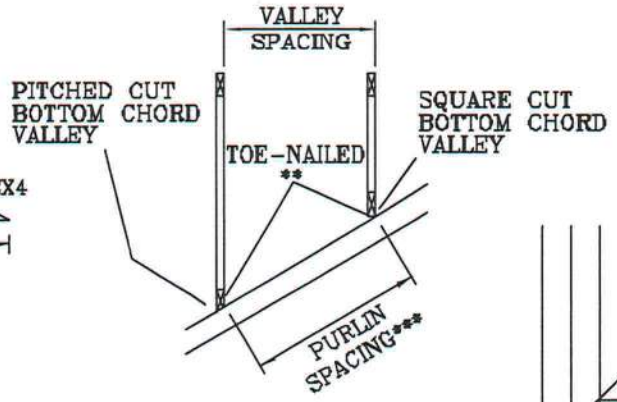
*** NOTE THAT THE PURLIN SPACING FOR BRACING THE TOP CHORD OF THE TRUSS BENEATH THE VALLEY IS MEASURED ALONG THE SLOPE OF THE TOP CHORD.

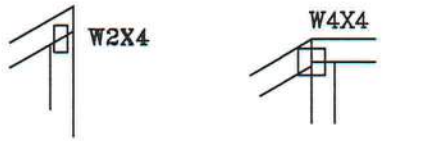
++ LARGER SPANS MAY BE BUILT AS LONG AS THE VERTICAL HEIGHT DOES NOT EXCEED 12'0".

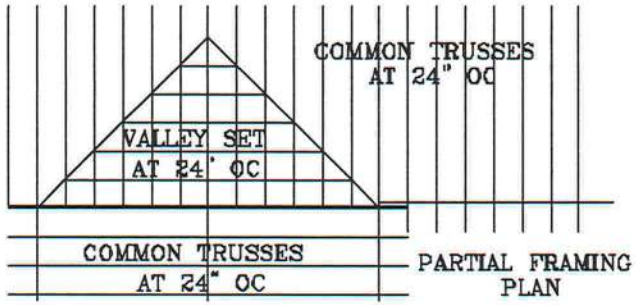
BOTTOM CHORD MAY BE SQUARE OR PITCHED CUT AS SHOWN.




SUPPORTING TRUSSES AT 24" OC MAXIMUM SPACING.




THIS DRAWING REPLACES DRAWING A105

JULIUS LEE LICENSE NO. 34869 STATE OF FLORIDA PROFESSIONAL ENGINEER

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




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

No: 34869
STATE OF FLORIDA


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

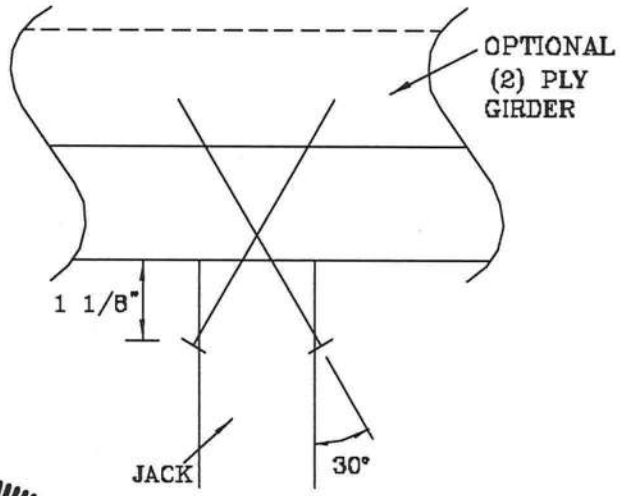
THE NUMBER OF TOE-NAILS TO BE USED IN A SPECIFIC APPLICATION IS DEPENDENT UPON PROPERTIES FOR THE CHORD SIZE, LUMBER SPECIES, AND NAIL TYPE. PROPER CONSTRUCTION PRACTICES AS WELL AS GOOD JUDGEMENT SHOULD DETERMINE THE NUMBER OF NAILS TO BE USED.

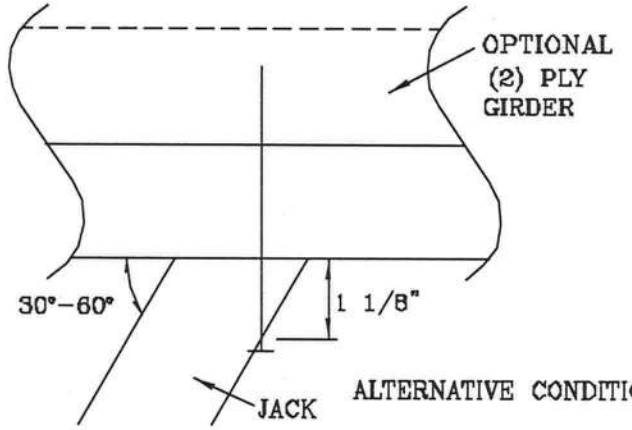
THIS DETAIL DISPLAYS A TOE-NAILED CONNECTION FOR JACK FRAMING INTO A SINGLE OR DOUBLE PLY SUPPORTING GIRDER.

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 PLIES | 1 PLY | 2 PLIES | 1 PLY | 2 PLIES | 1 PLY | 2 PLIES |
| 2 | 197# | 256# | 181# | 234# | 156# | 203# | 154# | 199# |
| 3 | 296# | 383# | 271# | 351# | 234# | 304# | 230# | 298# |
| 4 | 394# | 511# | 361# | 468# | 312# | 406# | 307# | 397# |
| 5 | 493# | 639# | 452# | 585# | 390# | 507# | 384# | 496# |

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




ALTERNATIVE CONDITION

THIS DRAWING REPLACES DRAWING 784040

JULIUS LEE LICENSE NO. 34869 STATE OF FLORIDA PROFESSIONAL ENGINEER

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

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


JULIUS LEE'S
CONS. ENGINEERS P.A.
1455 SW 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 | | | |

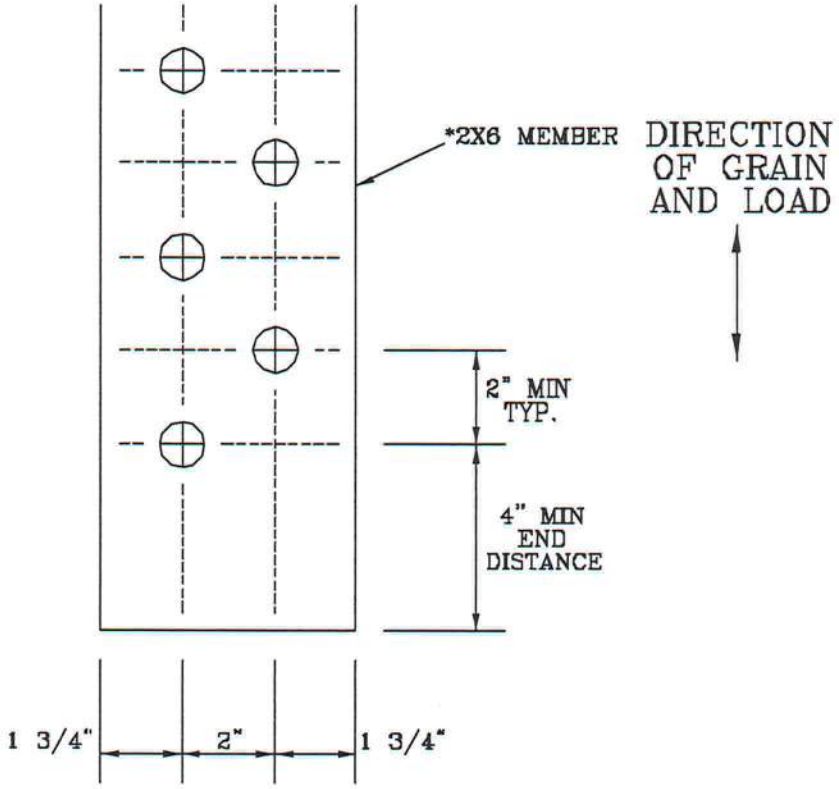
# 1/2" DIAMETER BOLT SPACING FOR LOAD APPLIED PARALLEL TO GRAIN.

* GRADE AND SPECIES AS SPECIFIED ON THE ALPINE DESIGN.

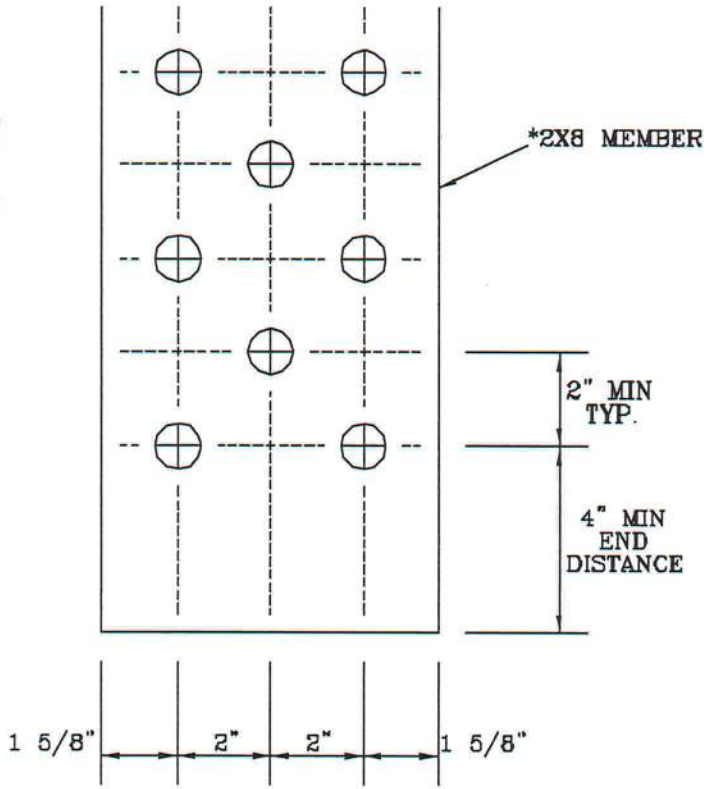
BOLT HOLES SHALL BE A MINIMUM OF 1/32" TO A MAXIMUM OF 1/16" LARGER THAN BOLT DIAMETER.

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 A628.016

JULIUS LEE LICENSE NO. 34869 STATE OF FLORIDA PROFESSIONAL ENGINEER

"WARNING" TRUSSES REQUIRE EXTREME CARE IN FABRICATING, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO BCSI 1-03 (BUILDING COMPONENT SAFETY INFORMATION), PUBLISHED BY TPI (TRUSS PLATE INSTITUTE, 583 D'ONOFRIO DR., SUITE 200, MADISON, WI. 53719) AND WTCA (WOOD TRUSS COUNCIL OF AMERICA, 6300 ENTERPRISE LN, MADISON, WI 53719) FOR SAFETY PRACTICES PRIOR TO PERFORMING THESE FUNCTIONS. UNLESS OTHERVISE INDICATED, TOP CHORD 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 | CNBOLTSP1103 |
| BC LL | PSF | -ENG | JL |
| TOT. LD. | PSF | | |
| DUR. FAC. | | | |
| SPACING | | | |

# TRULOX CONNECTION DETAIL

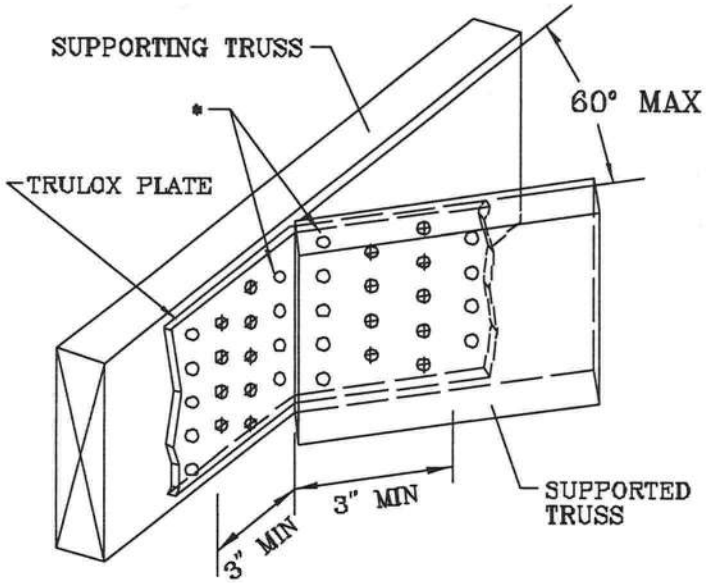
11 GAUGE (0.120" X 1.375") NAILS REQUIRED FOR TRULOX PLATE ATTACHMENT. FILL ROWS COMPLETELY WHERE SHOWN (⊕).

* NAILS MAY BE OMITTED FROM THESE ROWS.

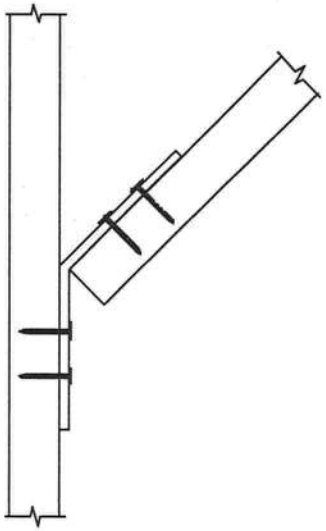
THIS DETAIL MAY BE USED WITH SO. PINE, DOUGLAS-FIR OR HEM-FIR CHORDS WITH A MINIMUM 1.00 DURATION OF LOAD OR SPRUCE-PINE-FIR CHORDS WITH A MINIMUM 1.15 DURATION OF LOAD. CHORD SIZE OF BOTH TRUSSES MUST EXCEED THE TRULOX PLATE WIDTH.

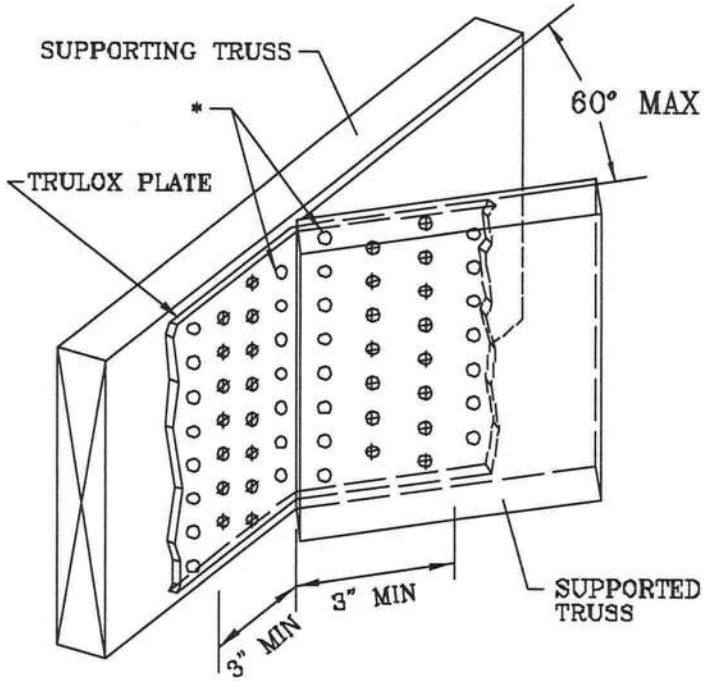
TRULOX PLATE IS CENTERED ON THE CHORDS AND BENT BETWEEN NAIL ROWS.

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




MINIMUM 3X6 TRULOX PLATE






MINIMUM 5X6 TRULOX PLATE

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

REVIEWED
By julius lee at 11:58 am, Jun 11, 2008

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

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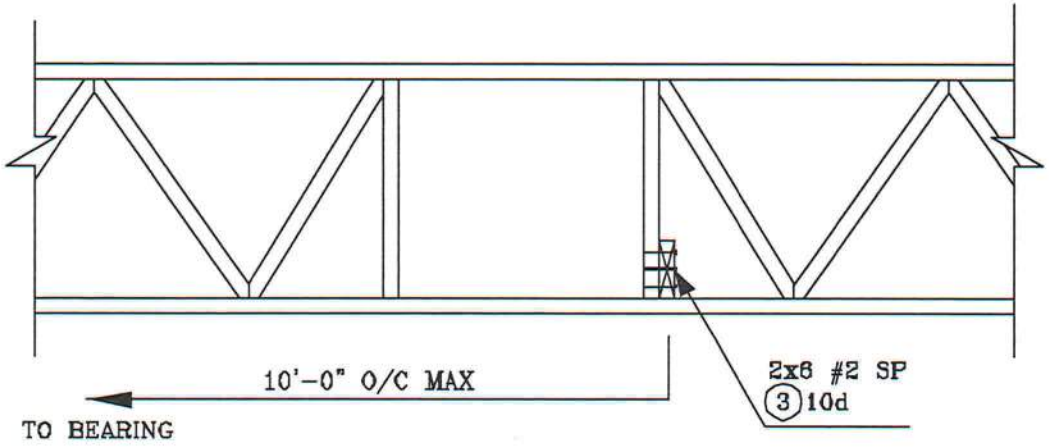
JULIUS LEE'S
CONS. ENGINEERS P.A.
1455 SW 4th AVENUE
DELRAY BEACH, FL. 33444-2161

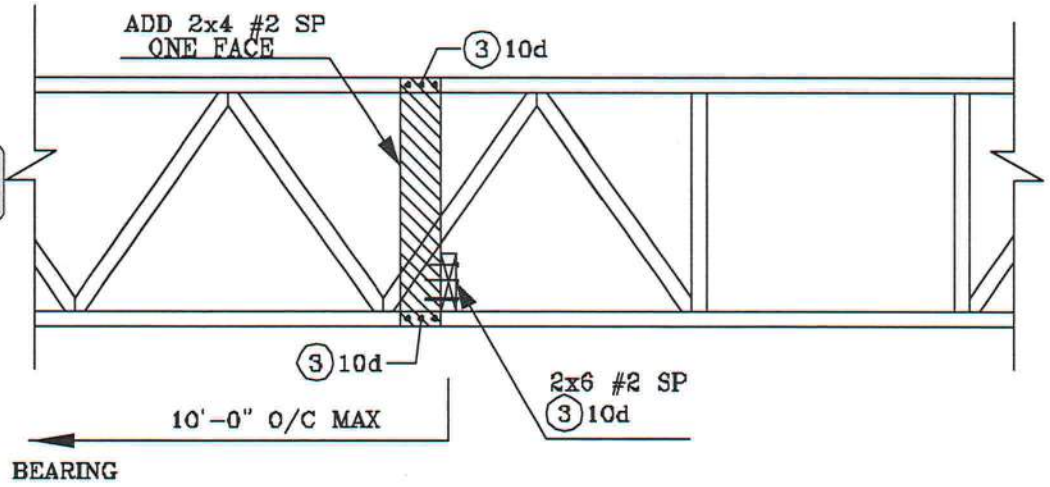
No: 34869
STATE OF FLORIDA


| | |
|---|---|
| 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

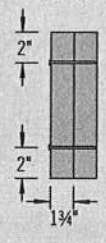
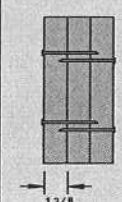
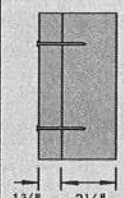
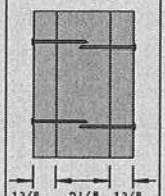
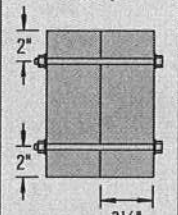
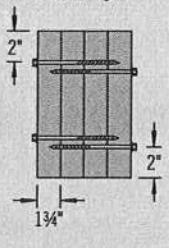
JULIUS LEE
LICENSE
NO. 34869
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

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

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  |
| | | | 3½" 2-ply | 5¼" 3-ply | 5¼" 2-ply | 7" 3-ply | 7" 2-ply | 7" 4-ply |
| 10d (0.128" x 3") Nail[1] | 2 | 12" | 370 | ***280*** | 280 | ***245*** | | |
| | 3 | 12" | 555 | ***415*** | 415 | ***370*** | | |
| ½" A307 Through Bolts[2][4] | 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 ¼" x 3½"[4] | 2 | 24" | 680 | ***510*** | 510 | ***455*** | | |
| | | 19.2" | 850 | ***640*** | 640 | ***565*** | | |
| | | 16" | 1,020 | ***765*** | 765 | ***680*** | | |
| SDS ¼" x 6"[3][4] | 2 | 24" | | | | ***455*** | ***465*** | ***455*** |
| | | 19.2" | | | | ***565*** | ***580*** | ***565*** |
| | | 16" | | | | ***680*** | ***695*** | ***680*** |
| USP WS35 [4] | 2 | 24" | 480 | ***360*** | 360 | ***320*** | | |
| | | 19.2" | 600 | ***450*** | 450 | ***400*** | | |
| | | 16" | 715 | ***540*** | 540 | ***480*** | | |
| USP WS6 [3][4] | 2 | 24" | | | | ***350*** | ***525*** | ***350*** |
| | | 19.2" | | | | ***440*** | ***660*** | ***440*** |
| | | 16" | | | | ***525*** | ***790*** | ***525*** |
| 3⅜" TrussLok[4] | 2 | 24" | 635 | ***475*** | 475 | ***425*** | | |
| | | 19.2" | 795 | ***595*** | 595 | ***530*** | | |
| | | 16" | 955 | ***715*** | 715 | ***635*** | | |
| 5" TrussLok[4] | 2 | 24" | | ***500*** | 500 | ***445*** | ***480*** | ***445*** |
| | | 19.2" | | ***625*** | 625 | ***555*** | ***600*** | ***555*** |
| | | 16" | | ***750*** | 750 | ***665*** | ***725*** | ***665*** |
| 6¾" TrussLok[4] | 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 9⁄16" maximum.

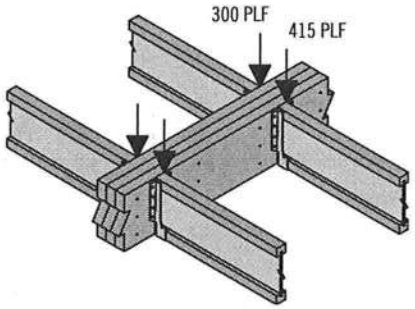
(3) 6" SDS or WS screws can be used with Parallam® PSL and Microllam® LVL, but are not recommended for TimberStrand® LSL.

(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

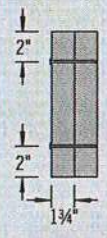
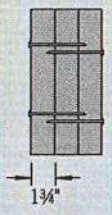
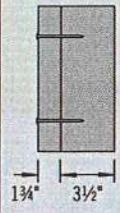
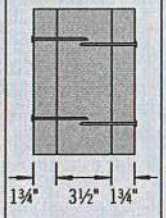
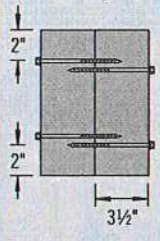
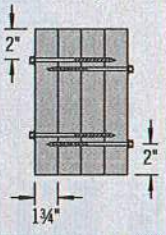



First, check the allowable load tables on pages 16–33 to verify that three pieces can carry the total load of 715 plf with proper live load deflection criteria. Maximum load applied to either outside member is 415 plf. For a 3-ply 1¾" assembly, two rows of 10d (0.128" x 3") nails at 12" on-center is 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 ½" bolts or SDS ¼" x 3½" 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 |
|---|---|---|---|---|---|---|---|
| | |  |  |  |  |  |  |
| | | 3½" 2-ply | 5¼" 3-ply | 5¼" 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 ¼" x 3½" or WS35 ¼" 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)*** |
| 3⅜" 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*

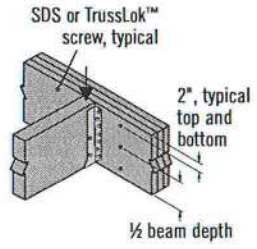
(2) 6" long screws required.

(3) 5" long screws required.

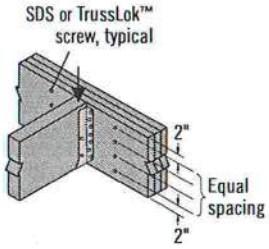
(4) 3½" and 3⅜" long screws must be installed on both sides.

## Connections

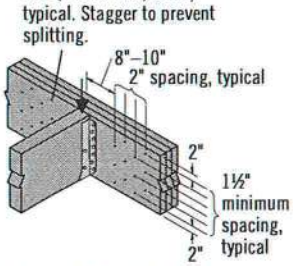
### 4 or 6 or Screw Connection




### 8 Screw Connection

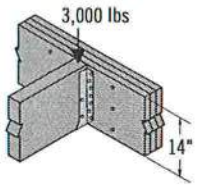



### Nail Connection




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

### Point Load Design Example




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 1¾" assembly, eight 3⅜" TrussLok™ screws are good for 3,815 lbs with a face mount hanger.

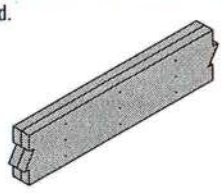
# MULTIPLE-MEMBER CONNECTIONS FOR TOP-LOADED BEAMS

## 1¾" 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 3⅜" 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 ½ of the required connector spacing.
- Load must be applied evenly across entire beam width. Otherwise, use connections for side-loaded beams.

## 3½" 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 ½ 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 ½" 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"***