

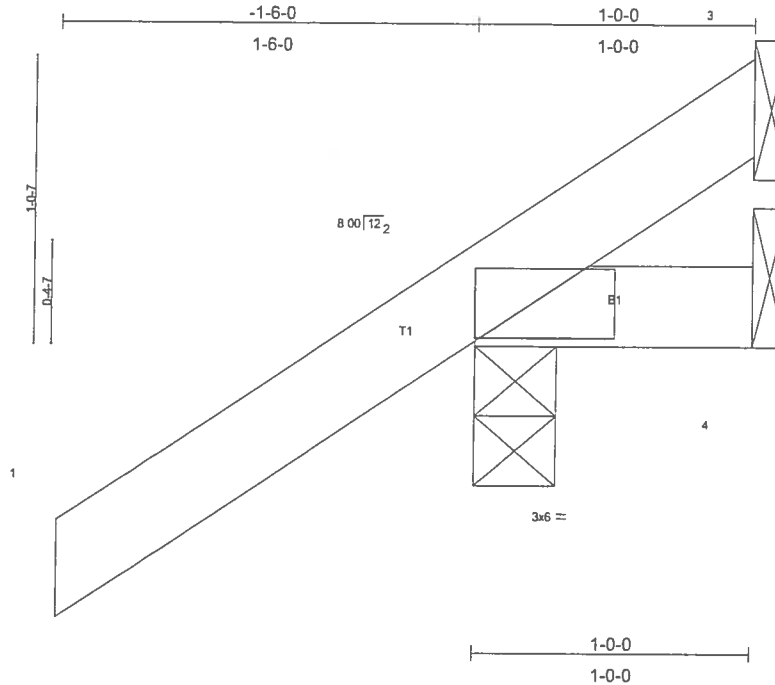
|                                                                                                                                                                                                                               |                                                                 |                       |                               |    |          |            |           |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|-----------------------|-------------------------------|----|----------|------------|-----------|
| <b>Project Information for:</b>                                                                                                                                                                                               |                                                                 | L207902               |                               |    |          |            |           |
| Builder:                                                                                                                                                                                                                      | CALVIN TWENSEY – O/B                                            | Date:                 | 9/14/2006                     |    |          |            |           |
| Lot:                                                                                                                                                                                                                          | N/A                                                             | Start Number:         | 1102                          |    |          |            |           |
| Subdivision:                                                                                                                                                                                                                  | 201 SW PAUL ALLISON CT                                          | SEI Ref:              | L207902                       |    |          |            |           |
| County or City:                                                                                                                                                                                                               | COLUMBIA COUNTY                                                 |                       |                               |    |          |            |           |
| Truss Page Count:                                                                                                                                                                                                             | 47                                                              |                       |                               |    |          |            |           |
| <b>Truss Design Load Information (UNO)</b>                                                                                                                                                                                    |                                                                 | Design Program: MiTek |                               |    |          |            |           |
| <b>Gravity</b>                                                                                                                                                                                                                |                                                                 | <b>Wind</b>           | <b>Building Code:</b> FBC2004 |    |          |            |           |
| Roof (psf): 42                                                                                                                                                                                                                | Wind Standard: ASCE 7-02                                        |                       |                               |    |          |            |           |
| Floor (psf): 55                                                                                                                                                                                                               | Wind Speed (mph): 110                                           |                       |                               |    |          |            |           |
| Note: See individual truss drawings for special loading conditions                                                                                                                                                            |                                                                 |                       |                               |    |          |            |           |
| <b>Building Designer, responsible for Structural Engineering: (See attached)</b>                                                                                                                                              |                                                                 |                       |                               |    |          |            |           |
| Owner Builder                                                                                                                                                                                                                 |                                                                 |                       |                               |    |          |            |           |
| Address: N/A                                                                                                                                                                                                                  |                                                                 |                       |                               |    |          |            |           |
| N/A                                                                                                                                                                                                                           | Designer:                                                       | 116                   |                               |    |          |            |           |
| <b>Truss Design Engineer:</b> Thomas, E. Miller, P.E., 56877 - Byron K. Anderson, PE FL 60987                                                                                                                                 |                                                                 |                       |                               |    |          |            |           |
| Company:                                                                                                                                                                                                                      | Structural Engineering and Inspections, Inc. EB 9196            |                       |                               |    |          |            |           |
| Address                                                                                                                                                                                                                       | 16105 N. Florida Ave, Ste B, Lutz, FL 33549 Phone: 813-849-5769 |                       |                               |    |          |            |           |
| Notes:                                                                                                                                                                                                                        |                                                                 |                       |                               |    |          |            |           |
| 1. Truss Design Engineer is responsible for the individual trusses as components only.                                                                                                                                        |                                                                 |                       |                               |    |          |            |           |
| 2. Determination as to the suitability and use of these truss components for the structure is the responsibility of the Building Designer of Record, as defined in ANSI/TPI                                                   |                                                                 |                       |                               |    |          |            |           |
| 3. The seal date shown on the individual truss component drawings must match the seal date on this index sheet.                                                                                                               |                                                                 |                       |                               |    |          |            |           |
| 4. Trusses designed for vertical loads only, unless noted otherwise.                                                                                                                                                          |                                                                 |                       |                               |    |          |            |           |
| 5. Where hangers are shown, Carried Member hanger capacity per Simpson C-2006 (SYP/Full Nailing Value) as an individual component. Building Designer shall verify the suitability and use of Carrying Member hanger capacity. |                                                                 |                       |                               |    |          |            |           |
| #                                                                                                                                                                                                                             | Truss ID                                                        | Dwg. #                | Seal Date                     | #  | Truss ID | Dwg. #     | Seal Date |
| 1                                                                                                                                                                                                                             | CJ1                                                             | 0914061102            | 9/14/2006                     | 41 | T24      | 0914061142 | 9/14/2006 |
| 2                                                                                                                                                                                                                             | CJ3                                                             | 0914061103            | 9/14/2006                     | 42 | T25G     | 0914061143 | 9/14/2006 |
| 3                                                                                                                                                                                                                             | CJ3A                                                            | 0914061104            | 9/14/2006                     | 43 | T26      | 0914061144 | 9/14/2006 |
| 4                                                                                                                                                                                                                             | CJ5A                                                            | 0914061105            | 9/14/2006                     | 44 | T26G     | 0914061145 | 9/14/2006 |
| 5                                                                                                                                                                                                                             | EJ2                                                             | 0914061106            | 9/14/2006                     | 45 | T27      | 0914061146 | 9/14/2006 |
| 6                                                                                                                                                                                                                             | EJ5                                                             | 0914061107            | 9/14/2006                     | 46 | T28      | 0914061147 | 9/14/2006 |
| 7                                                                                                                                                                                                                             | EJ5A                                                            | 0914061108            | 9/14/2006                     | 47 | T29      | 0914061148 | 9/14/2006 |
| 8                                                                                                                                                                                                                             | EJ7                                                             | 0914061109            | 9/14/2006                     |    |          |            |           |
| 9                                                                                                                                                                                                                             | EJ7A                                                            | 0914061110            | 9/14/2006                     |    |          |            |           |
| 10                                                                                                                                                                                                                            | EJ7B                                                            | 0914061111            | 9/14/2006                     |    |          |            |           |
| 11                                                                                                                                                                                                                            | EJ7C                                                            | 0914061112            | 9/14/2006                     |    |          |            |           |
| 12                                                                                                                                                                                                                            | HJ4                                                             | 0914061113            | 9/14/2006                     |    |          |            |           |
| 13                                                                                                                                                                                                                            | HJ7                                                             | 0914061114            | 9/14/2006                     |    |          |            |           |
| 14                                                                                                                                                                                                                            | HJ9                                                             | 0914061115            | 9/14/2006                     |    |          |            |           |
| 15                                                                                                                                                                                                                            | PB01                                                            | 0914061116            | 9/14/2006                     |    |          |            |           |
| 16                                                                                                                                                                                                                            | PB02                                                            | 0914061117            | 9/14/2006                     |    |          |            |           |
| 17                                                                                                                                                                                                                            | PB03                                                            | 0914061118            | 9/14/2006                     |    |          |            |           |
| 18                                                                                                                                                                                                                            | PB04                                                            | 0914061119            | 9/14/2006                     |    |          |            |           |
| 19                                                                                                                                                                                                                            | T01G                                                            | 0914061120            | 9/14/2006                     |    |          |            |           |
| 20                                                                                                                                                                                                                            | T02                                                             | 0914061121            | 9/14/2006                     |    |          |            |           |
| 21                                                                                                                                                                                                                            | T02G                                                            | 0914061122            | 9/14/2006                     |    |          |            |           |
| 22                                                                                                                                                                                                                            | T03                                                             | 0914061123            | 9/14/2006                     |    |          |            |           |
| 23                                                                                                                                                                                                                            | T04                                                             | 0914061124            | 9/14/2006                     |    |          |            |           |
| 24                                                                                                                                                                                                                            | T05                                                             | 0914061125            | 9/14/2006                     |    |          |            |           |
| 25                                                                                                                                                                                                                            | T06                                                             | 0914061126            | 9/14/2006                     |    |          |            |           |
| 26                                                                                                                                                                                                                            | T07                                                             | 0914061127            | 9/14/2006                     |    |          |            |           |
| 27                                                                                                                                                                                                                            | T08                                                             | 0914061128            | 9/14/2006                     |    |          |            |           |
| 28                                                                                                                                                                                                                            | T09                                                             | 0914061129            | 9/14/2006                     |    |          |            |           |
| 29                                                                                                                                                                                                                            | T10                                                             | 0914061130            | 9/14/2006                     |    |          |            |           |
| 30                                                                                                                                                                                                                            | T11                                                             | 0914061131            | 9/14/2006                     |    |          |            |           |
| 31                                                                                                                                                                                                                            | T12                                                             | 0914061132            | 9/14/2006                     |    |          |            |           |
| 32                                                                                                                                                                                                                            | T13                                                             | 0914061133            | 9/14/2006                     |    |          |            |           |
| 33                                                                                                                                                                                                                            | T16                                                             | 0914061134            | 9/14/2006                     |    |          |            |           |
| 34                                                                                                                                                                                                                            | T17                                                             | 0914061135            | 9/14/2006                     |    |          |            |           |
| 35                                                                                                                                                                                                                            | T18                                                             | 0914061136            | 9/14/2006                     |    |          |            |           |
| 36                                                                                                                                                                                                                            | T19                                                             | 0914061137            | 9/14/2006                     |    |          |            |           |
| 37                                                                                                                                                                                                                            | T20                                                             | 0914061138            | 9/14/2006                     |    |          |            |           |
| 38                                                                                                                                                                                                                            | T21                                                             | 0914061139            | 9/14/2006                     |    |          |            |           |
| 39                                                                                                                                                                                                                            | T22                                                             | 0914061140            | 9/14/2006                     |    |          |            |           |
| 40                                                                                                                                                                                                                            | T23                                                             | 0914061141            | 9/14/2006                     |    |          |            |           |

SEP 14 2006

|         |       |            |     |     |              |
|---------|-------|------------|-----|-----|--------------|
| Job     | Truss | Truss Type | Qty | Ply | TWENSEY RES. |
| L207902 | CJ1   | JACK       | 6   | 1   |              |

Builders FirstSource, Lake City, FL 32055

6/20/05 s Jul 13 2005 MiTek Industries, Inc. Thu Aug 24 16:34:55 2006 Page 1



Scale = 1/8" = 1'-0"

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

| LOADING (psf) | SPACING              | CSI      | DEFL     | in    | (loc) | l/defl | L/d | PLATES       | GRIP    |
|---------------|----------------------|----------|----------|-------|-------|--------|-----|--------------|---------|
| TCLL 20.0     | 2-0-0                | TC 0.16  | Vert(LL) | -0.00 | 2     | >999   | 240 | MT20         | 244/190 |
| TCDL 7.0      | Plates Increase 1.25 | BC 0.01  | Vert(TL) | -0.00 | 2     | >999   | 180 |              |         |
| BCCL 10.0     | Lumber Increase 1.25 | WB 0.00  | Horz(TL) | 0.00  | 3     | n/a    | n/a |              |         |
| BCDL 5.0      | Rep Stress Incr YES  | (Matrix) |          |       |       |        |     |              |         |
|               | Code FBC2004/TPI2002 |          |          |       |       |        |     |              |         |
|               |                      |          |          |       |       |        |     | 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 1-0-0 oc bracing.

**REACTIONS**

(lb/size) 2=189/0-3-8, 4=14/Mechanical, 3=40/Mechanical  
 Max Horz 2=94(load case 5)  
 Max Uplift 2=188(load case 5), 3=40(load case 1)  
 Max Grav 2=189(load case 1), 4=14(load case 1), 3=69(load case 5)

**FORCES**

(lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=0/44, 2-3=55/48  
 BOT CHORD 2-4=0/0

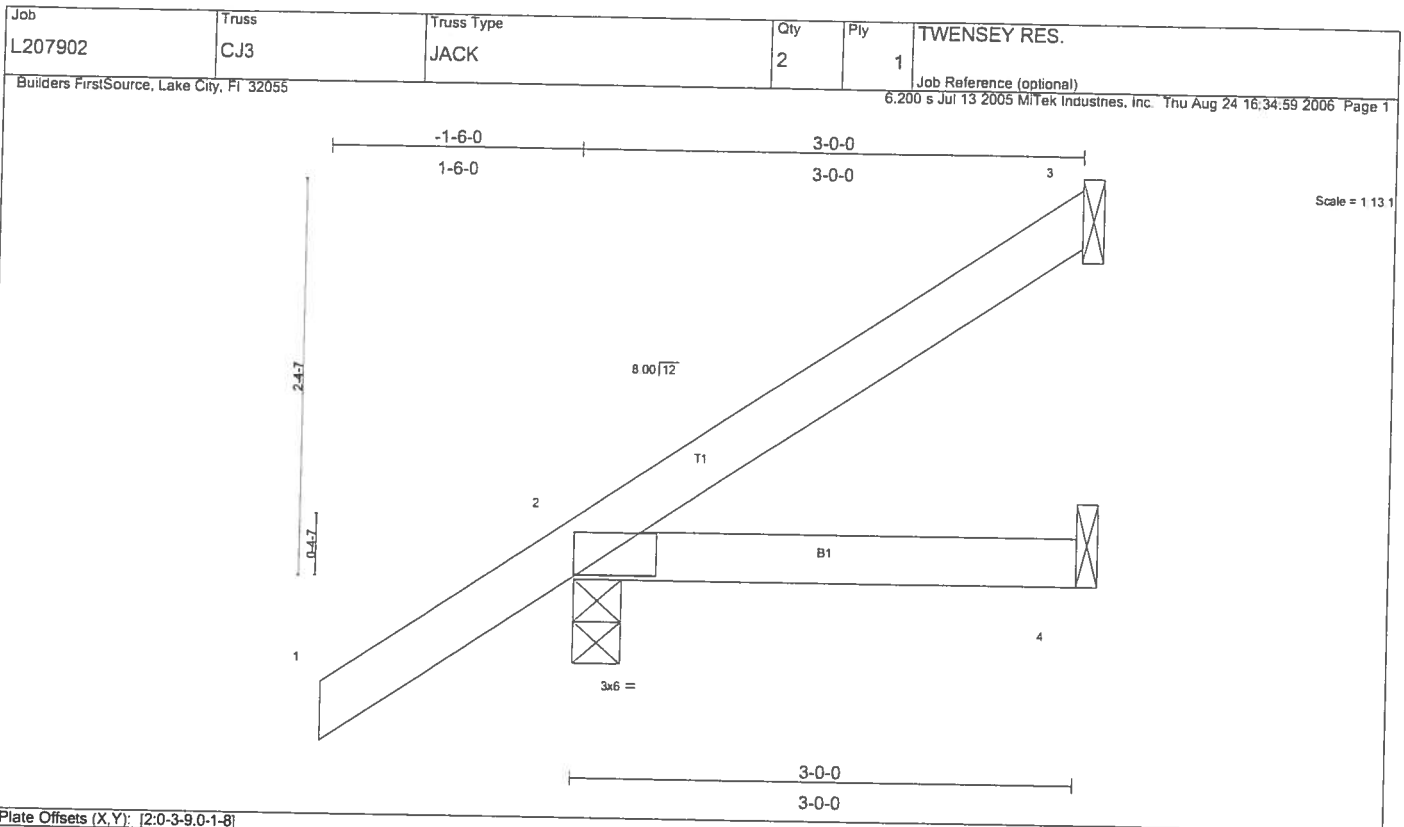
**JOINT STRESS INDEX**

2 = 0.12

**NOTES**

- Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCCL=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.
- All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 188 lb uplift at joint 2 and 40 lb uplift at joint 3.

LOAD CASE(S) Standard



| LOADING (psf) |      | SPACING              |      | 2-0-0    |      | CSI      |       | DEFL   |      |     |  | PLATES |         | GRIP |  |
|---------------|------|----------------------|------|----------|------|----------|-------|--------|------|-----|--|--------|---------|------|--|
| TCLL          | 20.0 | Plates Increase      | 1.25 | TC       | 0.17 | in       | (loc) | l/defl | L/d  |     |  | MT20   | 244/190 |      |  |
| TCDL          | 7.0  | Lumber Increase      | 1.25 | BC       | 0.06 | Vert(LL) | -0.00 | 2-4    | >999 | 240 |  |        |         |      |  |
| BCLL          | 10.0 | Rep Stress Incr      | YES  | WB       | 0.00 | Vert(TL) | -0.01 | 2-4    | >999 | 180 |  |        |         |      |  |
| BCDL          | 5.0  | Code FBC2004/TPI2002 |      | (Matrix) |      | Horz(TL) | -0.00 | 3      | n/a  | n/a |  |        |         |      |  |
| Weight: 13 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=49/Mechanical, 2=232/0-3-8, 4=42/Mechanical  
Max Horz 2=154(load case 5)  
Max Uplift 3=48(load case 5), 2=141(load case 5)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=0/44, 2-3=-59/20  
BOT CHORD 2-4=0/0

**JOINT STRESS INDEX**  
2 = 0.12

#### NOTES

- 1) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCCL=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) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- 3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 48 lb uplift at joint 3 and 141 lb uplift at joint 2.

**LOAD CASE(S)** Standard

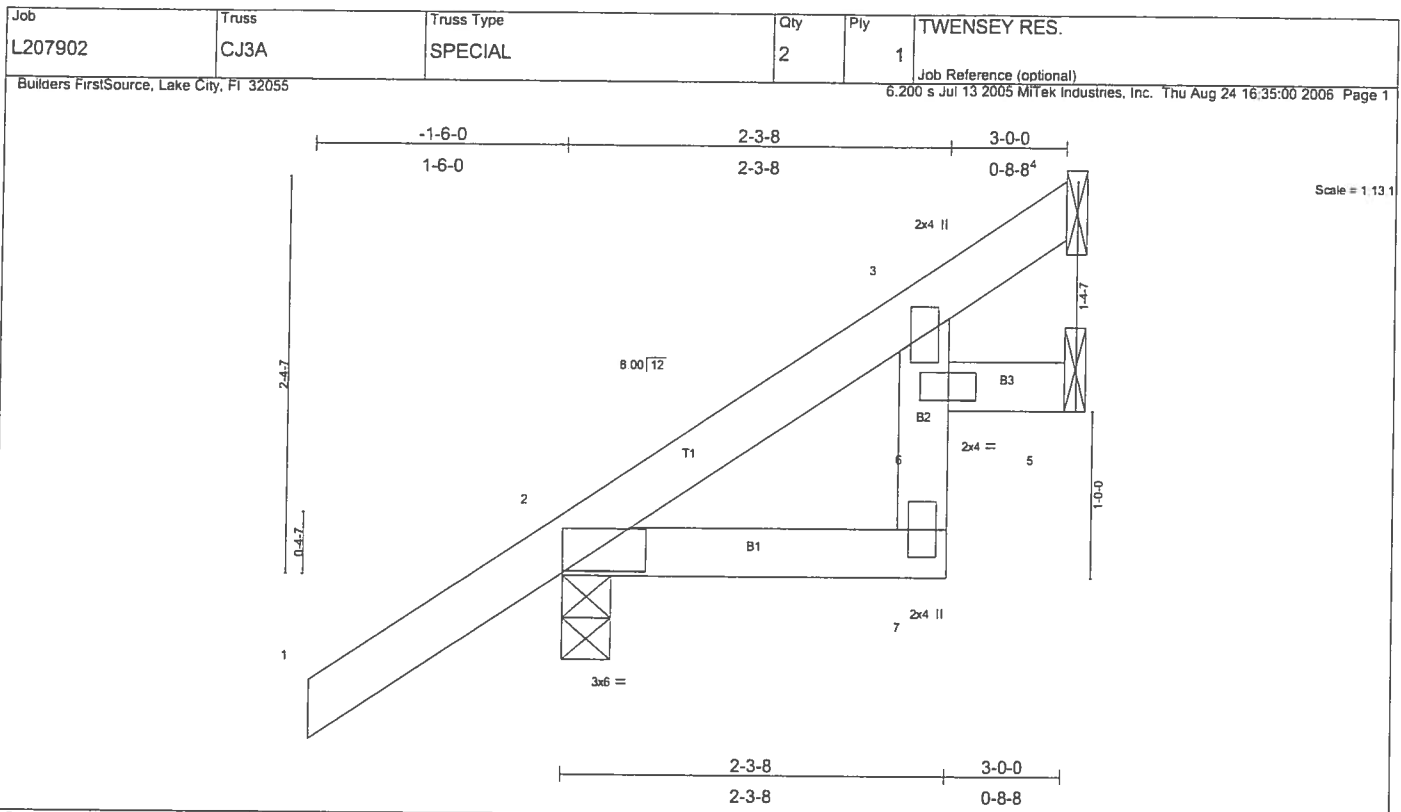


Plate Offsets (X,Y): [2-0-3-9,0-1-8]

| LOADING (psf) | SPACING              | 2-0-0 | CSI      | DEFL     | in    | (loc) | l/defl | L/d | PLATES        | GRIP    |
|---------------|----------------------|-------|----------|----------|-------|-------|--------|-----|---------------|---------|
| TCLL 20.0     | Plates Increase      | 1.25  | TC 0.17  | Vert(LL) | -0.00 | 7     | >999   | 240 | MT20          | 244/190 |
| TCDL 7.0      | Lumber Increase      | 1.25  | BC 0.09  | Vert(TL) | -0.00 | 7     | >999   | 180 |               |         |
| BCLL 10.0     | Rep Stress Incr      | YES   | WB 0.00  | Horz(TL) | 0.00  | 5     | n/a    | n/a |               |         |
| BCDL 5.0      | Code FBC2004/TPI2002 |       | (Matrix) |          |       |       |        |     |               |         |
|               |                      |       |          |          |       |       |        |     | Weight: 15 lb |         |

**LUMBER**

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

**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) 4=42/Mechanical, 2=232/0-3-8, 5=49/Mechanical

Max Horz 2=154(load case 5)

Max Uplift 4=-29(load case 5), 2=-141(load case 5), 5=-15(load case 6)

**FORCES** (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/44, 2-3=-86/0, 3-4=-21/21

BOT CHORD 2-7=-13/32, 6-7=0/36, 3-6=-7/52, 5-6=0/0

**JOINT STRESS INDEX**

2 = 0.41, 3 = 0.12, 6 = 0.36 and 7 = 0.12

**NOTES**

- 1) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCCL=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) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- 3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 29 lb uplift at joint 4, 141 lb uplift at joint 2 and 15 lb uplift at joint 5.

LOAD CASE(S) Standard

|                                           |               |                       |                                                                                                        |          |              |
|-------------------------------------------|---------------|-----------------------|--------------------------------------------------------------------------------------------------------|----------|--------------|
| Job<br>L207902                            | Truss<br>CJ5A | Truss Type<br>SPECIAL | Qty<br>2                                                                                               | Ply<br>1 | TWENSEY RES. |
| Builders FirstSource, Lake City, FL 32055 |               |                       | Job Reference (optional)<br>6.200 s Jul 13 2005 MiTek Industries, Inc. Thu Aug 24 16:35:02 2006 Page 1 |          |              |

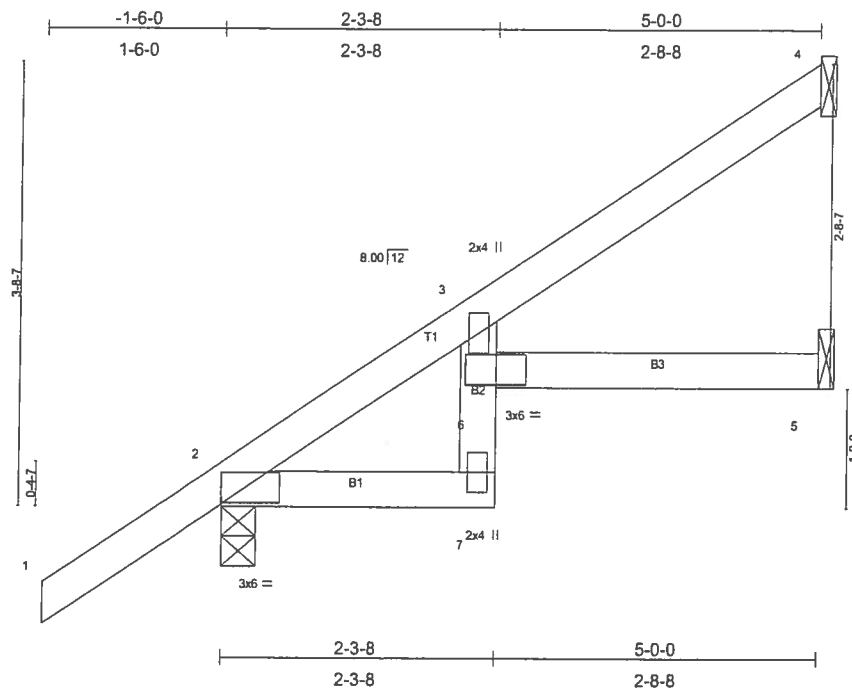


Plate Offsets (X,Y): [2:0-3-9:0-1-8]

| LOADING (psf) | SPACING              | CSI      | DEFL     | in    | (loc) | l/defl | L/d | PLATES | GRIP          |
|---------------|----------------------|----------|----------|-------|-------|--------|-----|--------|---------------|
| TCLL 20.0     | Plates Increase 1.25 | TC 0.17  | Vert(LL) | 0.03  | 5-6   | >999   | 240 | MT20   | 244/190       |
| TCDL 7.0      | Lumber Increase 1.25 | BC 0.34  | Vert(TL) | -0.05 | 5-6   | >999   | 180 |        |               |
| BCLL 10.0     | Rep Stress Incr YES  | WB 0.00  | Horz(TL) | 0.02  | 5     | n/a    | n/a |        |               |
| BCDL 5.0      | Code FBC2004/TPI2002 | (Matrix) |          |       |       |        |     |        |               |
|               |                      |          |          |       |       |        |     |        | Weight: 21 lb |

**LUMBER**

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

**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) 4=101/Mechanical, 2=305/0-3-8, 5=85/Mechanical  
 Max Horz 2=215(load case 5)  
 Max Uplift 4=86(load case 5), 2=-137(load case 5), 5=-21(load case 5)

**FORCES** (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/44, 2-3=-214/0, 3-4=-65/47  
 BOT CHORD 2-7=-64/125, 6-7=0/35, 3-6=0/67, 5-6=0/0

**JOINT STRESS INDEX**

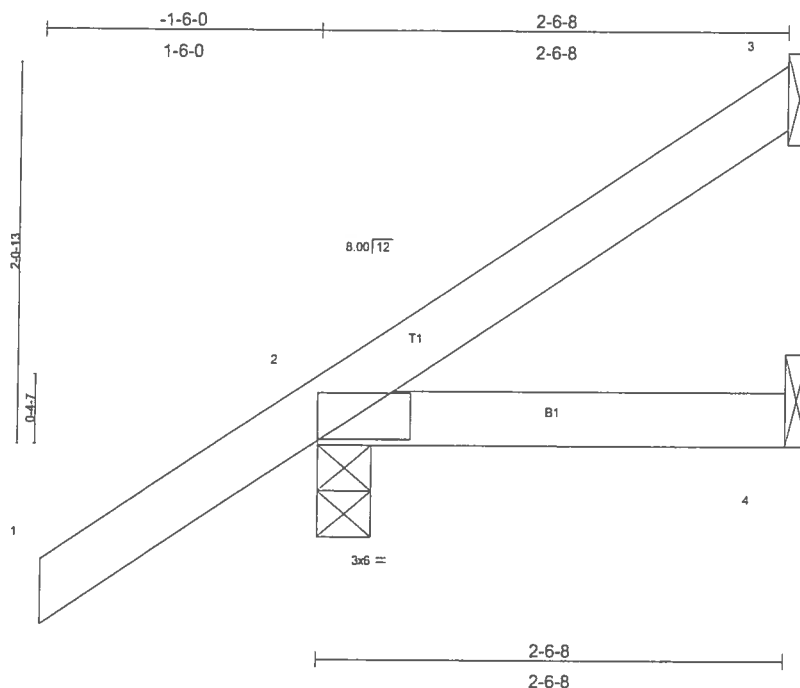
2 = 0.37, 3 = 0.55, 6 = 0.43 and 7 = 0.37

**NOTES**

- 1) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
- 2) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- 3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 86 lb uplift at joint 4, 137 lb uplift at joint 2 and 21 lb uplift at joint 5.

**LOAD CASE(S)** Standard

6.200 s Jul 13 2005 MiTek Industries, Inc. Thu Aug 24 16:35:04 2006 Page 1



Scale: 1"=1'

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

|                      |                      |            |                                 |               |             |
|----------------------|----------------------|------------|---------------------------------|---------------|-------------|
| <b>LOADING</b> (psf) | <b>SPACING</b> 2-0-0 | <b>CSI</b> | <b>DEFL</b> in (loc) l/defl L/d | <b>PLATES</b> | <b>GRIP</b> |
| TCLL 20.0            | Plates Increase 1.25 | TC 0.17    | Vert(LL) -0.00 2-4 >999 240     | MIT20         | 244/190     |
| TCDL 7.0             | Lumber Increase 1.25 | BC 0.04    | Vert(TL) -0.00 2-4 >999 180     |               |             |
| BCLL 10.0            | Rep Stress Incr YES  | WB 0.00    | Horz(TL) -0.00 3 n/a n/a        |               |             |
| BCDL 5.0             | Code FBC2004/TP12002 | (Matrix)   |                                 | Weight: 11 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 2-6-8 oc purlins. |
| BOT CHORD | Rigid ceiling directly applied or 10-0-0 oc bracing.            |

## REACTIONS

(lb/size) 3=32/Mechanical, 2=218/0-3-8, 4=35/Mechanical  
Max Horz 2=140(load case 5)  
Max Uplift 3=-33(load case 6), 2=-146(load case 5)

## FORCES

**FORCES (lb) - Maximum Compression/Maximum Tension**  
**TOP CHORD** 1-2=0/44, 2-3=-56/14  
**BOT CHORD** 2-4=0/0

### JOINT STRESS INDEX

 $2 = 0.12$ 

## NOTES

- 1) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDF=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) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- 3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 33 lb uplift at joint 3 and 146 lb uplift at joint 2.

LOAD CASE(S) Standard

**SEPTEMBER 14, 2006 TRUSS DESIGN ENGINEER:  
THOMAS E. MILLER PE 56877, BYRON K. ANDERSON PE 60987  
STRUCTURAL ENGINEERING AND INSPECTIONS, INC. EB 9196  
16105 N. FLORIDA AVE. STE B, LUTZ, FL 33549**



|                                           |               |                        |                          |          |              |
|-------------------------------------------|---------------|------------------------|--------------------------|----------|--------------|
| Job<br>L207902                            | Truss<br>EJ5A | Truss Type<br>MONO HIP | Qty<br>1                 | Ply<br>1 | TWENSEY RES. |
| Builders FirstSource, Lake City, FL 32055 |               |                        | Job Reference (optional) |          |              |

4x10 @ 6.200 s Jul 13 2005 Mitek Industries, Inc. Thu Aug 24 16:35:07 2006 Page 1

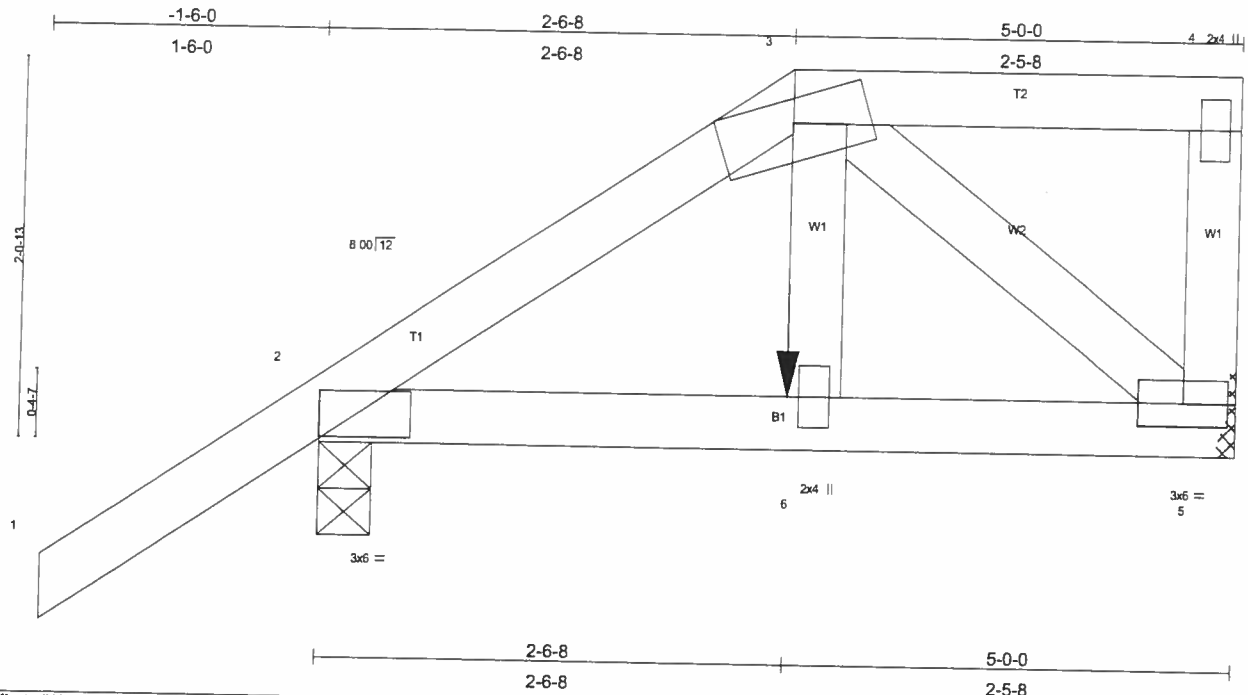


Plate Offsets (X,Y): [2-0-3-9,0-1-8]

| LOADING (psf) | SPACING               | CSI      | DEFL                        | PLATES | GRIP    |
|---------------|-----------------------|----------|-----------------------------|--------|---------|
| TCLL 20.0     | Plates Increase 2-0-0 | TC 0.17  | in (loc) l/defl L/d         | MT20   | 244/190 |
| TCDL 7.0      | Lumber Increase 1.25  | BC 0.06  | Vert(LL) -0.00 6 >999 240   |        |         |
| BCLL 10.0     | Rep Stress Incr NO    | WB 0.04  | Vert(TL) -0.00 2-6 >999 180 |        |         |
| BCDL 5.0      | Code FBC2004/TPI2002  | (Matrix) | Horz(TL) 0.00 5 n/a n/a     |        |         |
| Weight: 27 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 5-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (lb/size) 5=217/Mechanical, 2=324/0-3-8  
 Max Horz 2=143(load case 4)  
 Max Uplift 5=93(load case 3), 2=183(load case 4)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=0/44, 2-3=-238/54, 3-4=-1/0, 4-5=-69/61  
 BOT CHORD 2-6=-59/147, 5-6=-60/157  
 WEBS 3-6=-9/124, 3-5=-197/75

**JOINT STRESS INDEX**

2 = 0.18, 3 = 0.22, 4 = 0.04, 5 = 0.07 and 6 = 0.09

**NOTES**

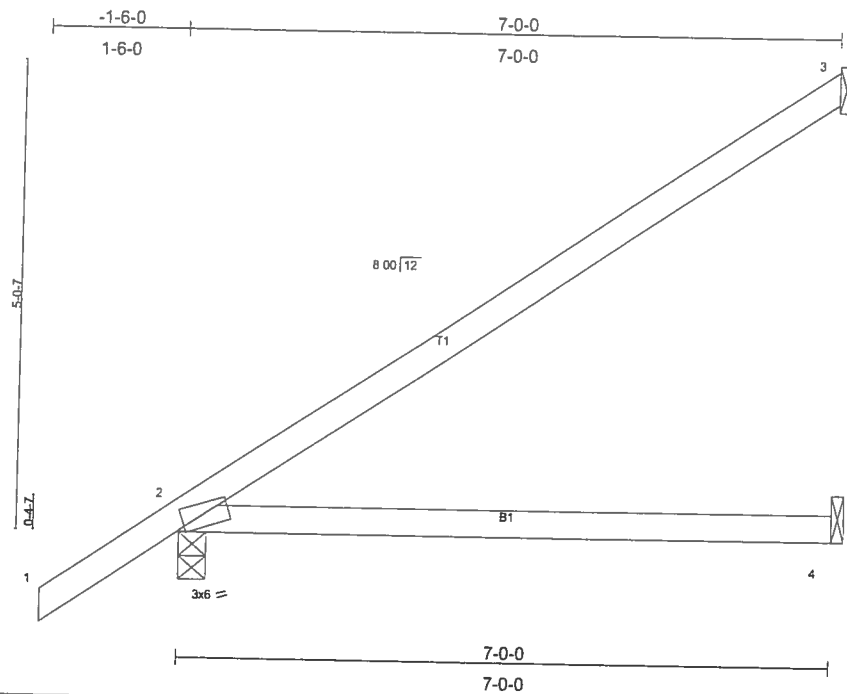
- 1) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCCL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone; Lumber DOL=1.60 plate grip DOL=1.60.
- 2) Provide adequate drainage to prevent water ponding.
- 3) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 93 lb uplift at joint 5 and 183 lb uplift at joint 2.
- 5) Girder carries hip end with 0-0-0 right side setback, 2-6-8 left side setback, and 2-6-8 end setback.
- 6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 37 lb down and 28 lb up at 2-6-8 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).

**LOAD CASE(S)** Standard

- 1) Regular: Lumber Increase=1.25, Plate Increase=1.25  
 Uniform Loads (plf)  
 Vert: 1-3=-54, 3-4=-60(F=6), 2-6=-30, 5-6=-33(F=-3)  
 Concentrated Loads (lb)  
 Vert: 6=-37(F)



|                                                                            |       |            |     |     |                          |
|----------------------------------------------------------------------------|-------|------------|-----|-----|--------------------------|
| Job                                                                        | Truss | Truss Type | Qty | Ply | TWENSEY RES.             |
| L207902                                                                    | EJ7   | MONO TRUSS | 21  | 1   |                          |
| Builders FirstSource, Lake City, FL 32055                                  |       |            |     |     | Job Reference (optional) |
| 6.200 s Jul 13 2005 MiTek Industries, Inc. Thu Aug 24 16:35:09 2006 Page 1 |       |            |     |     |                          |



Scale = 1/2\"/&gt;

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

| LOADING (psf) | SPACING              | CSI      | DEFL                        | PLATES        | GRIP    |
|---------------|----------------------|----------|-----------------------------|---------------|---------|
| TCLL 20.0     | 2-0-0                | TC 0.46  | in (loc) l/defl L/d         | MT20          | 244/190 |
| TCDL 7.0      | Plates Increase 1.25 | BC 0.38  | Vert(LL) -0.14 2-4 >592 240 |               |         |
| BCLL 10.0     | Lumber Increase 1.25 | WB 0.00  | Vert(TL) -0.23 2-4 >357 180 |               |         |
| BCDL 5.0      | Rep Stress Incr YES  | (Matrix) | Horz(TL) -0.00 3 n/a n/a    |               |         |
|               | Code FBC2004/TPI2002 |          |                             |               |         |
|               |                      |          |                             | Weight: 26 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=165/Mechanical, 2=385/0-3-8, 4=110/Mechanical  
Max Horz 2=277(load case 5)  
Max Uplift 3=165(load case 5), 2=141(load case 5), 4=1(load case 5)

**FORCES**

(lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=0/44, 2-3=-133/73  
BOT CHORD 2-4=0/0

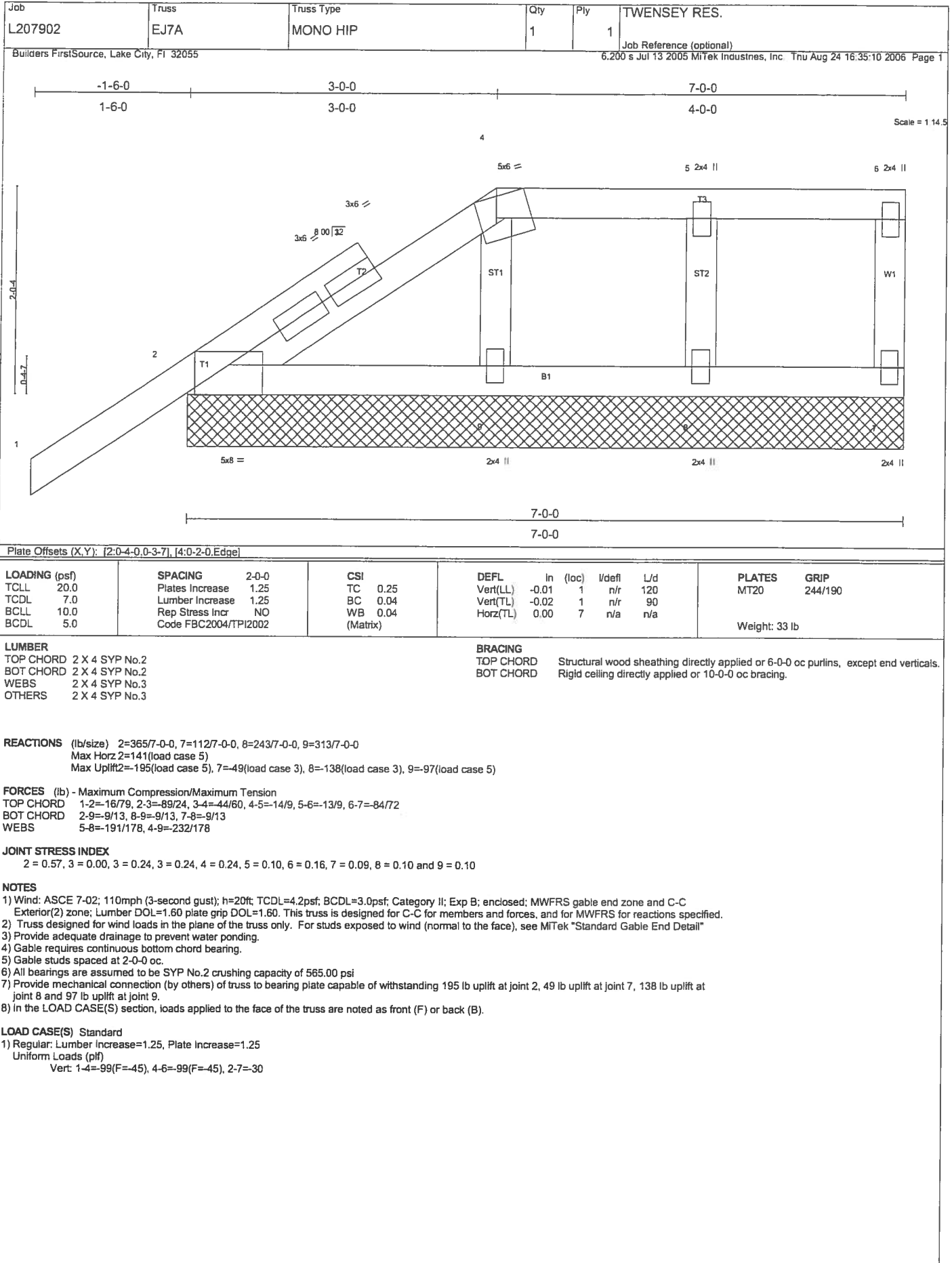
**JOINT STRESS INDEX**

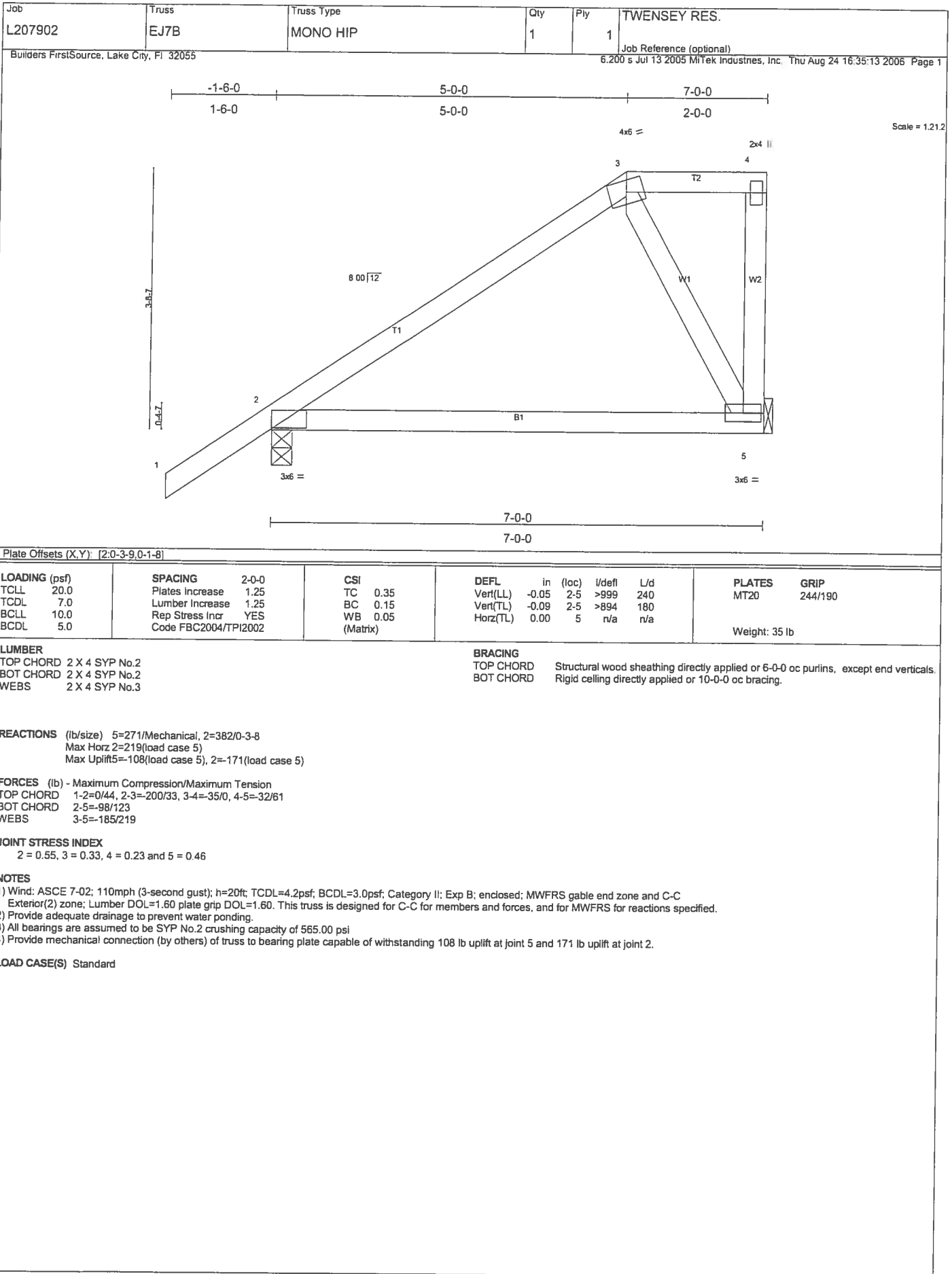
2 = 0.80

**NOTES**

- 1) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCCL=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) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- 3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 165 lb uplift at joint 3, 141 lb uplift at joint 2 and 1 lb uplift at joint 4.

**LOAD CASE(S)** Standard

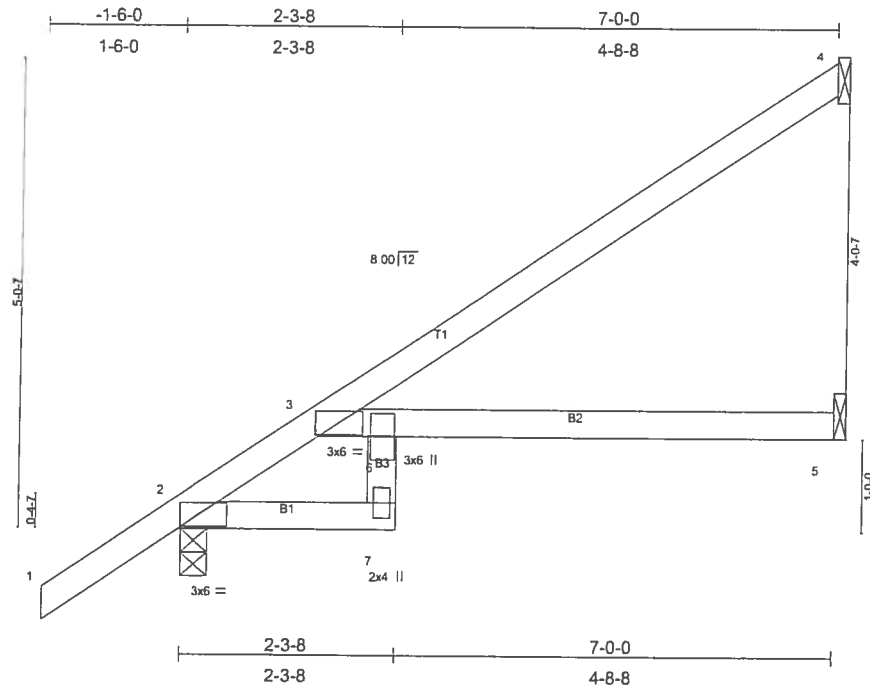




|         |       |            |     |     |                          |
|---------|-------|------------|-----|-----|--------------------------|
| Job     | Truss | Truss Type | Qty | Ply | TWENSEY RES.             |
| L207902 | EJ7C  | SPECIAL    | 3   | 1   | Job Reference (optional) |

Builders FirstSource, Lake City, FL 32055

6.200 s Jul 13 2005 MiTek Industries, Inc. Thu Aug 24 16:35:14 2006 Page 1



Scale = 1.236

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

|                      |                      |            |                                 |               |               |
|----------------------|----------------------|------------|---------------------------------|---------------|---------------|
| <b>LOADING</b> (psf) | <b>SPACING</b> 2-0-0 | <b>CSI</b> | <b>DEFL</b> in (loc) l/defl L/d | <b>PLATES</b> | <b>GRIP</b>   |
| TCLL 20.0            | Plates Increase 1.25 | TC 0.40    | Vert(LL) -0.16 5-6 >517 240     | MT20          | 244/190       |
| TCDL 7.0             | Lumber Increase 1.25 | BC 0.59    | Vert(TL) -0.26 5-6 >317 180     |               |               |
| BCLL 10.0            | Rep Stress Incr YES  | WB 0.00    | Horz(TL) 0.10 5 n/a n/a         |               |               |
| BCDL 5.0             | Code FBC2004/TPI2002 | (Matrix)   |                                 |               | Weight: 28 lb |

## LUMBER

TOP CHORD 2 X 4 SYP No.2  
BOT CHORD 2 X 4 SYP No.2 \*Except\*  
B3 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=154/Mechanical, 2=400/0-3-8, 5=126/Mechanical  
Max Horz 2=277(load case 5)  
Max Uplift 4=143(load case 5), 2=138(load case 5), 5=23(load case 5)

**FORCES** (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/44, 2-3=-356/0, 3-4=-112/69  
BOT CHORD 2-7=-143/216, 6-7=-4/53, 3-6=-216/143, 5-6=0/0

### JOINT STRESS INDEX

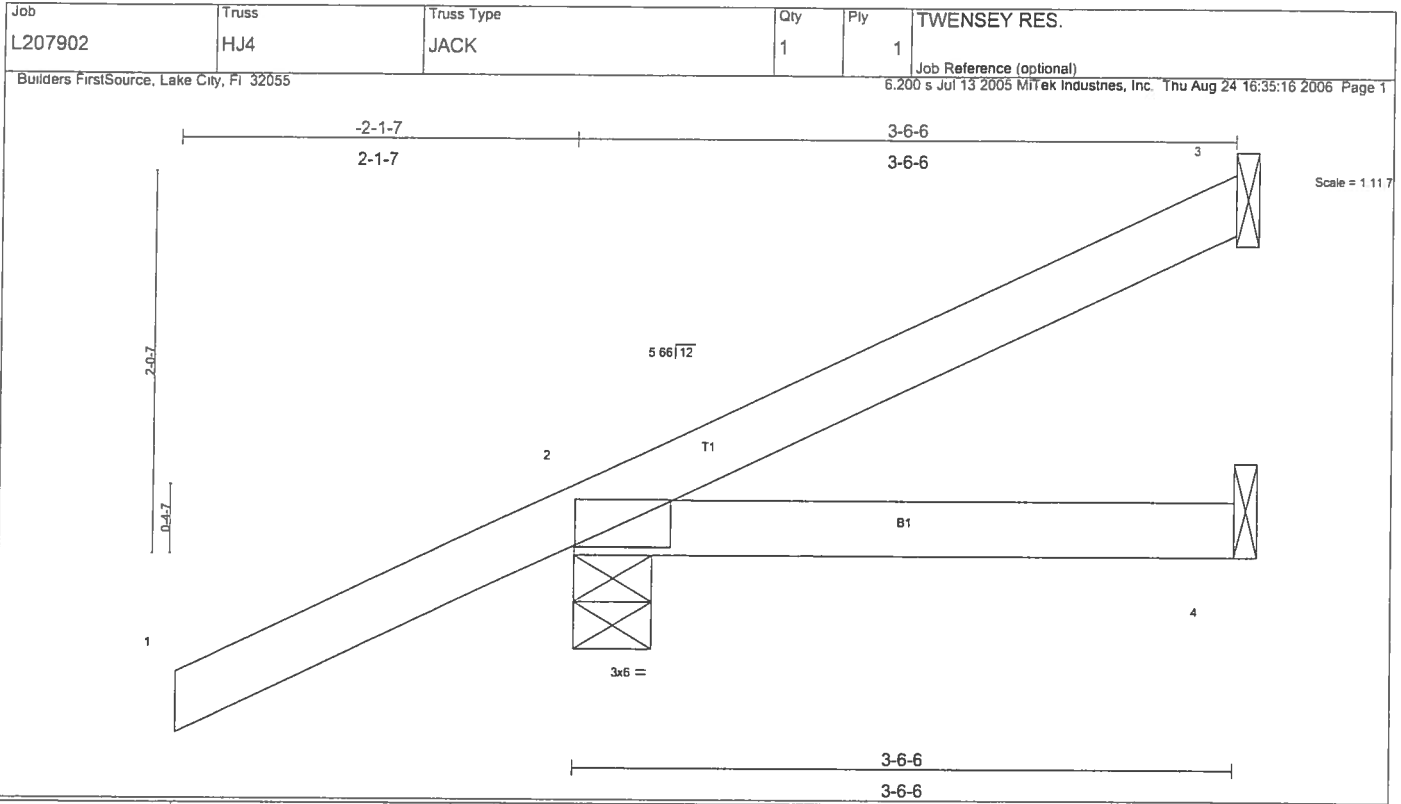
2 = 0.31, 3 = 0.62, 6 = 0.64 and 7 = 0.63

## NOTES

- 1) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDF=4.2psf; BCDF=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) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- 3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 143 lb uplift at joint 4, 138 lb uplift at joint 2 and 23 lb uplift at joint 5.

LOAD CASE(S) Standard

SEPTEMBER 14, 2006 TRUSS DESIGN ENGINEER:  
THOMAS E. MILLER PE 56877, BYRON K. ANDERSON PE 60987  
STRUCTURAL ENGINEERING AND INSPECTIONS, INC. EB 9196  
16105 N. FLORIDA AVE. STE B, LUTZ, FL 33549



| LOADING (psf) | SPACING              | 2-0-0 | CSI      | DEFL     | in    | (loc) | l/defl | L/d | PLATES        | GRIP    |
|---------------|----------------------|-------|----------|----------|-------|-------|--------|-----|---------------|---------|
| TCCL 20.0     | Plates Increase      | 1.25  | TC 0.31  | Vert(LL) | -0.00 | 2-4   | >999   | 240 | MT20          | 244/190 |
| TCCL 7.0      | Lumber Increase      | 1.25  | BC 0.04  | Vert(TL) | -0.00 | 2-4   | >999   | 180 |               |         |
| BCCL 10.0     | Rep Stress Incr      | NO    | WB 0.00  | Horz(TL) | -0.00 | 3     | n/a    | n/a |               |         |
| BCCL 5.0      | Code FBC2004/TPI2002 |       | (Matrix) |          |       |       |        |     |               |         |
|               |                      |       |          |          |       |       |        |     | Weight: 15 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 3-6-6 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (lb/size) 3=9/Mechanical, 2=214/0-4-15, 4=29/Mechanical  
 Max Horz 2=88(load case 4)  
 Max Uplift 2=181(load case 4)  
 Max Grav 3=43(load case 2), 2=214(load case 1), 4=29(load case 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=0/47, 2-3=-34/19  
 BOT CHORD 2-4=0/0

**JOINT STRESS INDEX**  
 2 = 0.09

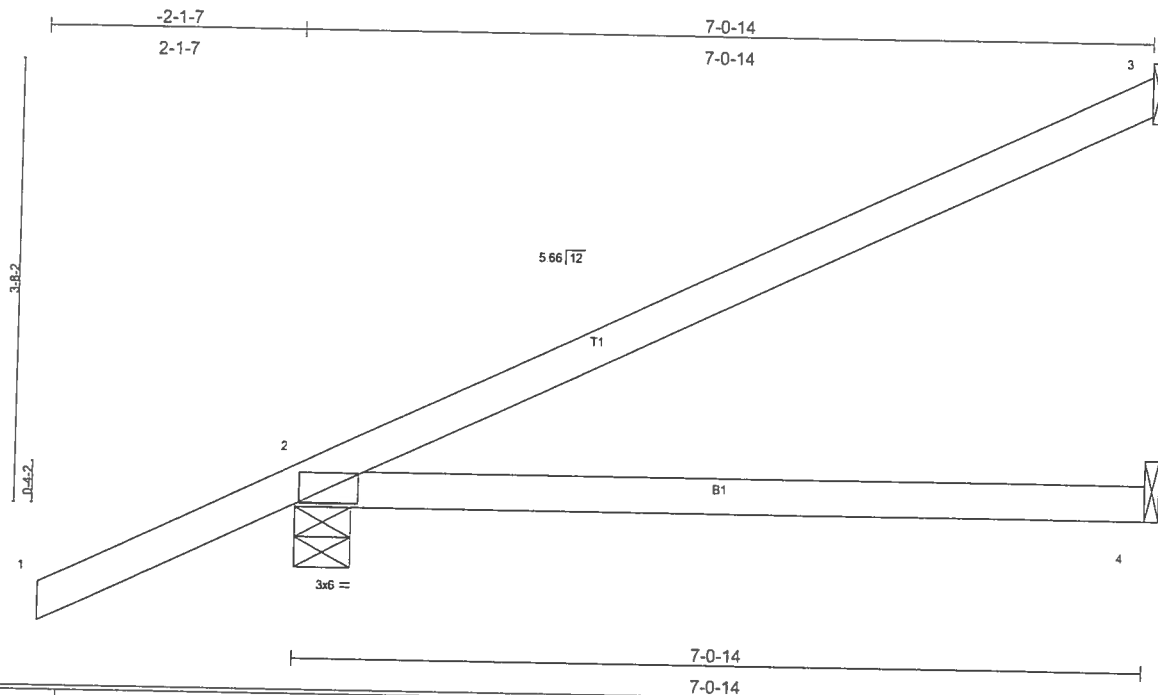
#### NOTES

- 1) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCCL=4.2psf; BCCL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone; Lumber DOL=1.60 plate grip DOL=1.60.
- 2) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- 3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 181 lb uplift at joint 2.
- 4) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

#### LOAD CASE(S) Standard

- 1) Regular: Lumber Increase=1.25, Plate Increase=1.25  
 Uniform Loads (plf)  
 Vert: 1-2=-54  
 Trapezoidal Loads (plf)  
 Vert: 2=-3(F=26, B=26)-to-3=-48(F=3, B=3), 2=-0(F=15, B=15)-to-4=-26(F=2, B=2)

|                                                                            |              |                    |                          |          |              |
|----------------------------------------------------------------------------|--------------|--------------------|--------------------------|----------|--------------|
| Job<br>L207902                                                             | Truss<br>HJ7 | Truss Type<br>JACK | Qty<br>1                 | Ply<br>1 | TWENSEY RES. |
| Builders FirstSource, Lake City, FL 32055                                  |              |                    | Job Reference (optional) |          |              |
| 6.200 s Jul 13 2005 Mitek Industries, Inc. Thu Aug 24 16:35:17 2006 Page 1 |              |                    |                          |          |              |



Scale = 1/8"

| LOADING (psf) | SPACING              | CSI      | DEFL                        | PLATES        | GRIP    |
|---------------|----------------------|----------|-----------------------------|---------------|---------|
| TCLL 20.0     | 2-0-0                | TC 0.48  | in (loc) l/defl L/d         | MT20          | 244/190 |
| TCOL 7.0      | Plates Increase 1.25 | BC 0.32  | Vert(LL) -0.10 2-4 >830 240 |               |         |
| BCLL 10.0     | Lumber Increase 1.25 | WB 0.00  | Vert(TL) -0.17 2-4 >491 180 |               |         |
| BCDL 5.0      | Rep Stress Incr NO   | (Matrix) | Horz(TL) -0.00 3 n/a n/a    |               |         |
|               | Code FBC2004/TPI2002 |          |                             | Weight: 26 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 7-0-14 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (lb/size) 3=198/Mechanical, 2=324/0-5-11, 4=119/Mechanical  
 Max Horz 2=200(load case 4)  
 Max Uplift 3=174(load case 4), 2=168(load case 4)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=0/48, 2-3=100/60  
 BOT CHORD 2-4=0/0

**JOINT STRESS INDEX**  
 2 = 0.27

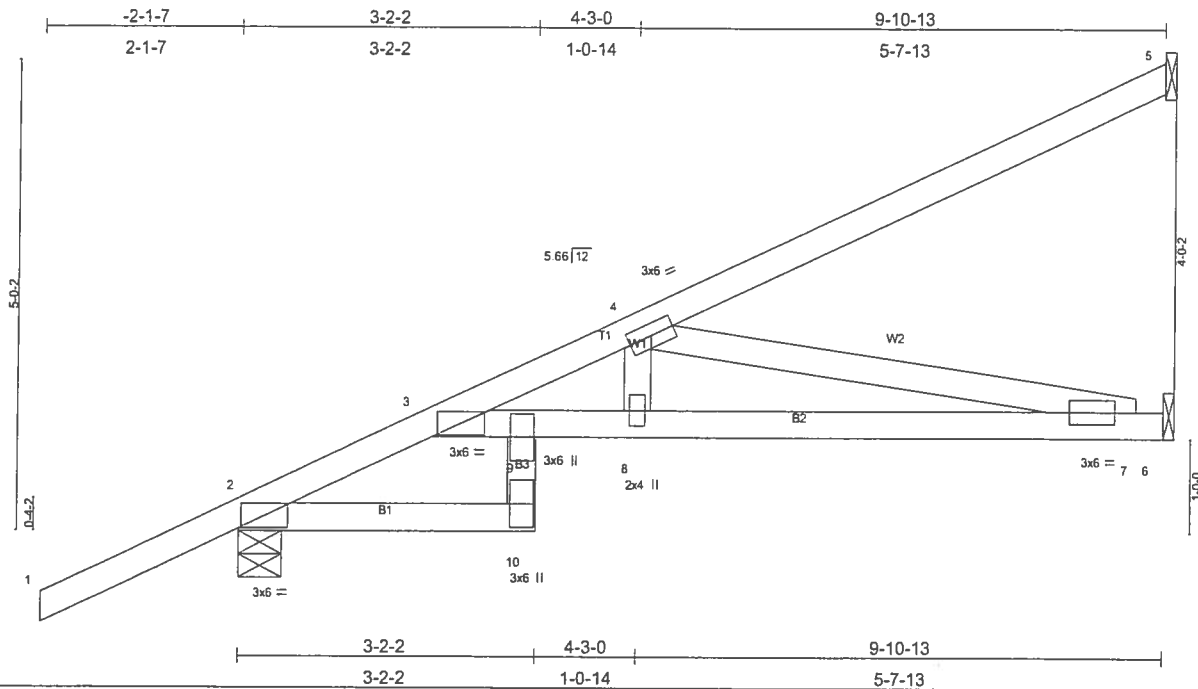
**NOTES**

- 1) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCCL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone; Lumber DOL=1.60 plate grip DOL=1.60.
- 2) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- 3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 174 lb uplift at joint 3 and 168 lb uplift at joint 2.
- 4) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard

- 1) Regular: Lumber Increase=1.25, Plate Increase=1.25  
 Uniform Loads (plf)  
 Vert: 1-2=-54  
 Trapezoidal Loads (plf)  
 Vert: 2=-3(F=25, B=25)-to-3=-95(F=-21, B=-21), 2=-0(F=15, B=15)-to-4=-53(F=-12, B=-12)

|                                           |              |                       |                                                                                                        |          |              |
|-------------------------------------------|--------------|-----------------------|--------------------------------------------------------------------------------------------------------|----------|--------------|
| Job<br>L207902                            | Truss<br>HJ9 | Truss Type<br>SPECIAL | Qty<br>1                                                                                               | Ply<br>1 | TWENSEY RES. |
| Builders FirstSource, Lake City, FL 32055 |              |                       | Job Reference (optional)<br>6.200 s Jul 13 2005 MiTek Industries, Inc. Thu Aug 24 16:35:19 2006 Page 1 |          |              |



Scale = 1/23.5

| LOADING (psf) | SPACING              | CSI      | DEFL                        | PLATES        | GRIP    |
|---------------|----------------------|----------|-----------------------------|---------------|---------|
| TCLL 20.0     | 2-0-0                | TC 0.58  | in (loc) l/defl L/d         | MT20          | 244/190 |
| TCDL 7.0      | Plates Increase 1.25 | BC 0.86  | Vert(LL) -0.11 7-8 >999 240 |               |         |
| BCLL 10.0     | Lumber Increase 1.25 | WB 0.75  | Vert(TL) -0.18 7-8 >631 180 |               |         |
| BCDL 5.0      | Rep Stress Incr NO   | (Matrix) | Horz(TL) 0.06 6 n/a n/a     |               |         |
|               | Code FBC2004/TPI2002 |          |                             | Weight: 46 lb |         |

**LUMBER**

TOP CHORD 2 X 4 SYP No.2  
 BOT CHORD 2 X 4 SYP No.2 \*Except\*  
 B3 2 X 4 SYP No.3  
 WEBS 2 X 4 SYP No.3

**BRACING**

TOP CHORD Structural wood sheathing directly applied or 4-8-9 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 7-5-4 oc bracing.

**REACTIONS** (lb/size) 5=262/Mechanical, 2=477/0-5-11, 6=390/Mechanical  
 Max Horz 2=340(load case 4)  
 Max Uplift 5=258(load case 4), 2=-186(load case 4), 6=-104(load case 4)

**FORCES** (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/48, 2-3=-437/0, 3-4=-1418/419, 4-5=-146/81  
 BOT CHORD 2-10=91/297, 9-10=-4/49, 3-9=-609/1029, 8-9=-699/1326, 7-8=-699/1326, 6-7=0/0  
 WEBS 4-8=0/405, 4-7=-1351/712

**JOINT STRESS INDEX**

2 = 0.27, 3 = 0.59, 4 = 0.37, 7 = 0.39, 8 = 0.30, 9 = 0.87 and 10 = 0.28

**NOTES**

- 1) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone; Lumber DOL=1.60 plate grip DOL=1.60.
- 2) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- 3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 258 lb uplift at joint 5, 186 lb uplift at joint 2 and 104 lb uplift at joint 6.
- 4) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard

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

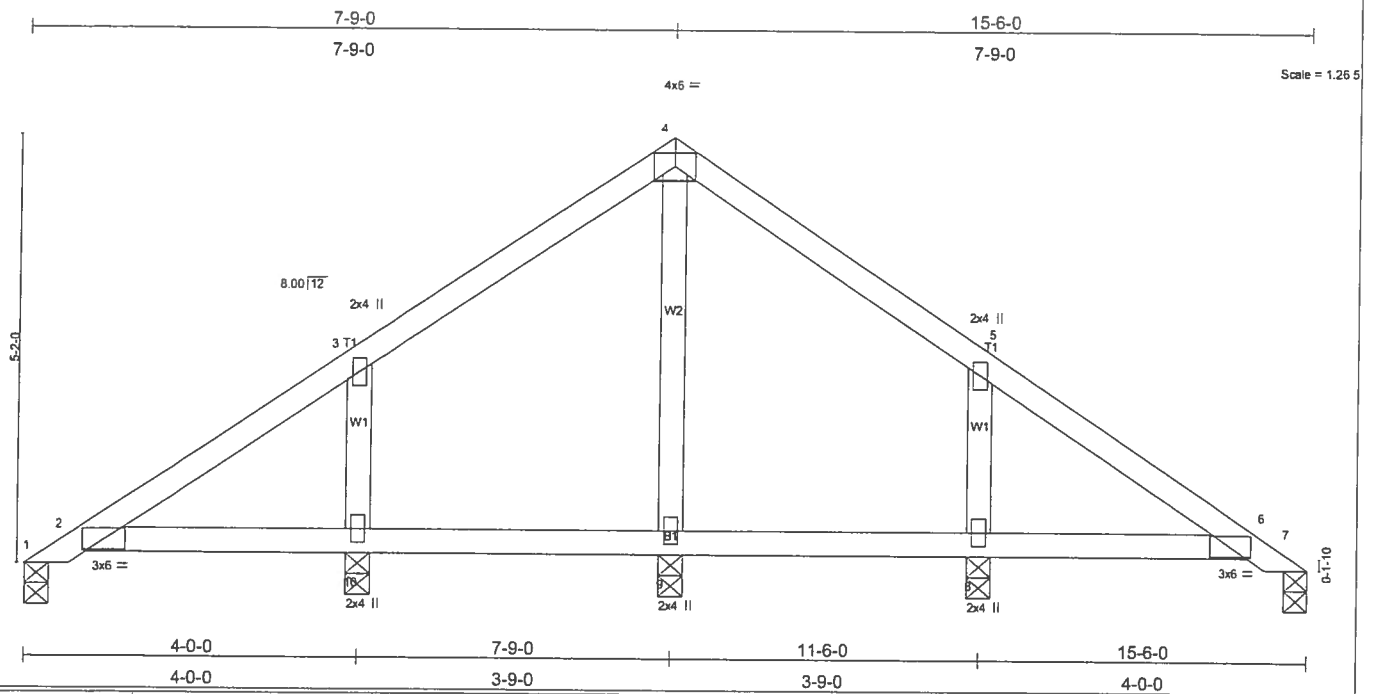
## Uniform Loads (plf)

Vert: 1-2=-54

## Trapezoidal Loads (plf)

Vert: 2=3(F=25, B=25)-to-5=-134(F=-40, B=-40), 2=0(F=15, B=15)-to-10=-22(F=4, B=4), 3=16(F=8, B=8)-to-9=8(F=4, B=4), 9=-22(F=-4, B=-4)-to-6=-74(F=-22, B=-22)

|                                           |               |                         |                                                                                                        |          |              |
|-------------------------------------------|---------------|-------------------------|--------------------------------------------------------------------------------------------------------|----------|--------------|
| Job<br>L207902                            | Truss<br>PB01 | Truss Type<br>PIGGYBACK | Qty<br>5                                                                                               | Ply<br>1 | TWENSEY RES. |
| Builders FirstSource, Lake City, FL 32055 |               |                         | Job Reference (optional)<br>6.200 s Jul 13 2005 MiTek Industries, Inc. Thu Aug 24 16:35:20 2006 Page 1 |          |              |



|                      |                      |            |                              |               |             |
|----------------------|----------------------|------------|------------------------------|---------------|-------------|
| <b>LOADING</b> (psf) | <b>SPACING</b>       | <b>CSI</b> | <b>DEFL</b>                  | <b>PLATES</b> | <b>GRIP</b> |
| TCLL 20.0            | 2-0-0                | TC 0.17    | in (loc) l/defl L/d          | MT20          | 244/190     |
| TCDL 7.0             | Plates Increase 1.25 | BC 0.11    | Vert(LL) 0.01 2-10 >999 240  |               |             |
| BCLL 10.0            | Lumber Increase 1.25 | WB 0.12    | Vert(TL) -0.01 2-10 >999 180 |               |             |
| BCDL 5.0             | Rep Stress Incr YES  | (Matrix)   | Horz(TL) 0.01 7 n/a n/a      |               |             |
|                      | Code FBC2004/TPI2002 |            |                              | Weight: 61 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. Except:  
 1 Row at midpt 8-10

**REACTIONS** (lb/size) 1=73/0-3-8, 7=73/0-3-8, 9=404/0-3-8, 10=353/0-3-8, 8=353/0-3-8  
 Max Horz 1=176(load case 4)  
 Max Uplift 1=49(load case 3), 7=14(load case 6), 9=43(load case 5), 10=218(load case 5), 8=212(load case 6)  
 Max Grav 1=81(load case 9), 7=81(load case 10), 9=404(load case 1), 10=363(load case 9), 8=363(load case 10)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=-182/180, 2-3=-148/161, 3-4=-47/152, 4-5=-6/152, 5-6=-76/161, 6-7=-41/12  
 BOT CHORD 2-10=-82/118, 9-10=-82/118, 8-9=-82/118, 6-8=-82/118  
 WEBS 4-9=-303/72, 3-10=-228/224, 5-8=-228/221

**JOINT STRESS INDEX**  
 2 = 0.21, 3 = 0.12, 4 = 0.26, 5 = 0.12, 6 = 0.21, 8 = 0.13, 9 = 0.11 and 10 = 0.13

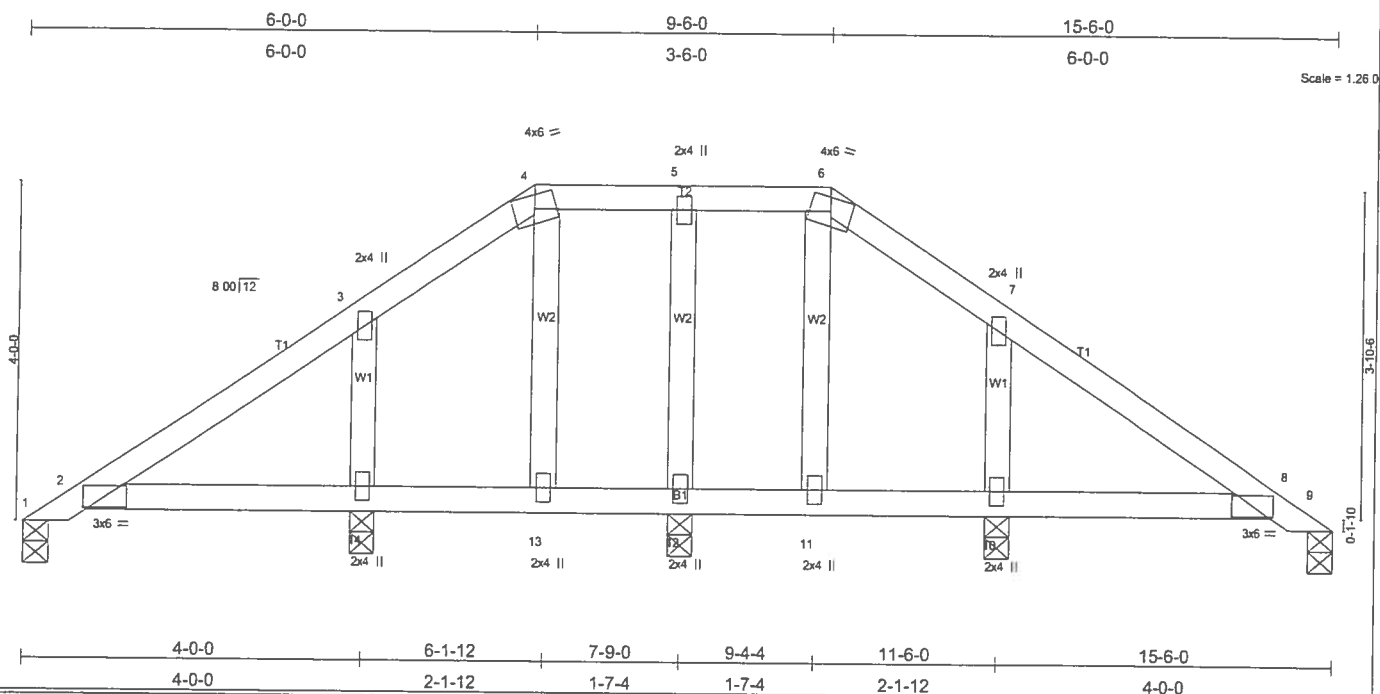
#### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCCL=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.
- All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- Bearing at joint(s) 1, 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 49 lb uplift at joint 1, 14 lb uplift at joint 7, 43 lb uplift at joint 9, 218 lb uplift at joint 10 and 212 lb uplift at joint 8.
- SEE MiTek STANDARD PIGGYBACK TRUSS CONNECTION DETAIL FOR CONNECTION TO BASE TRUSS

**LOAD CASE(S)** Standard



|                                           |               |                             |                                                                                                        |          |              |
|-------------------------------------------|---------------|-----------------------------|--------------------------------------------------------------------------------------------------------|----------|--------------|
| Job<br>L207902                            | Truss<br>PB02 | Truss Type<br>HIP PIGGYBACK | Qty<br>2                                                                                               | Ply<br>1 | TWENSEY RES. |
| Builders FirstSource, Lake City, FL 32055 |               |                             | Job Reference (optional)<br>6.200 s Jul 13 2005 MiTek Industries, Inc. Thu Aug 24 16:35:23 2006 Page 1 |          |              |



|                      |                      |            |                              |               |             |
|----------------------|----------------------|------------|------------------------------|---------------|-------------|
| <b>LOADING (psf)</b> | <b>SPACING</b>       | <b>CSI</b> | <b>DEFL</b>                  | <b>PLATES</b> | <b>GRIP</b> |
| TCLL 20.0            | 2-0-0                | TC 0.14    | in (loc) l/def L/d           | MT20          | 244/190     |
| TCCL 7.0             | Plates Increase 1.25 | BC 0.13    | Vert(LL) 0.01 2-14 >999 240  |               |             |
| BCCL 10.0            | Lumber Increase 1.25 | WB 0.05    | Vert(TL) -0.01 2-14 >999 180 |               |             |
| BCDL 5.0             | Rep Stress Incr YES  | (Matrix)   | Horz(TL) 0.01 9 n/a n/a      |               |             |
|                      | Code FBC2004/TPI2002 |            |                              | Weight: 68 lb |             |

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

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

**REACTIONS** (lb/size) 1=93/0-3-8, 9=93/0-3-8, 14=367/0-3-8, 10=367/0-3-8, 12=336/0-3-8  
 Max Horz 1=136(load case 4)  
 Max Uplift 1=31(load case 3), 9=18(load case 3), 14=194(load case 5), 10=183(load case 6), 12=113(load case 4)  
 Max Grav 1=104(load case 9), 9=104(load case 10), 14=367(load case 1), 10=367(load case 1), 12=336(load case 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=131/137, 2-3=103/115, 3-4=25/80, 4-5=0/68, 5-6=0/68, 6-7=25/69, 7-8=75/115, 8-9=53/14  
 BOT CHORD 2-14=44/122, 13-14=44/122, 12-13=46/122, 11-12=46/122, 10-11=44/121, 8-10=44/121  
 WEBS 4-13=44/37, 6-11=44/29, 3-14=209/185, 7-10=209/180, 5-12=177/102

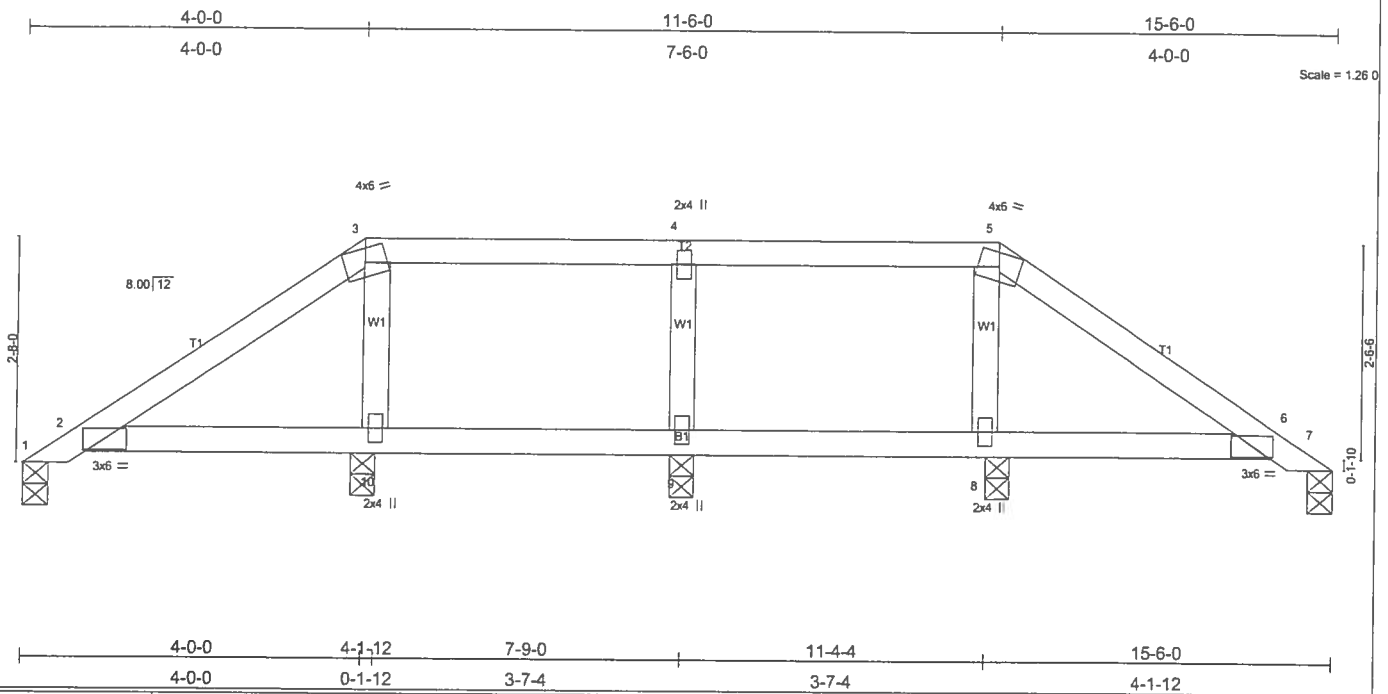
**JOINT STRESS INDEX**  
 2 = 0.30, 3 = 0.10, 4 = 0.12, 5 = 0.06, 6 = 0.12, 7 = 0.10, 8 = 0.30, 10 = 0.11, 11 = 0.02, 12 = 0.06, 13 = 0.02 and 14 = 0.11

#### NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCCL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
- 3) Provide adequate drainage to prevent water ponding.
- 4) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- 5) Bearing at joint(s) 1, 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 31 lb uplift at joint 1, 18 lb uplift at joint 9, 194 lb uplift at joint 14, 183 lb uplift at joint 10 and 113 lb uplift at joint 12.
- 7) SEE MiTek STANDARD PIGGYBACK TRUSS CONNECTION DETAIL FOR CONNECTION TO BASE TRUSS

**LOAD CASE(S)** Standard

|                                           |               |                             |                                                                                                        |          |              |
|-------------------------------------------|---------------|-----------------------------|--------------------------------------------------------------------------------------------------------|----------|--------------|
| Job<br>L207902                            | Truss<br>PB03 | Truss Type<br>HIP PIGGYBACK | Qty<br>2                                                                                               | Ply<br>1 | TWENSEY RES. |
| Builders FirstSource, Lake City, FL 32055 |               |                             | Job Reference (optional)<br>6.200 s Jul 13 2005 MiTek Industries, Inc. Thu Aug 24 16:35:25 2006 Page 1 |          |              |



|                      |                      |            |                              |               |             |
|----------------------|----------------------|------------|------------------------------|---------------|-------------|
| <b>LOADING (psf)</b> | <b>SPACING</b>       | <b>CSI</b> | <b>DEFL</b>                  | <b>PLATES</b> | <b>GRIP</b> |
| TCLL 20.0            | 2-0-0                | TC 0.15    | in (loc) l/defl L/d          | MT20          | 244/190     |
| TCDL 7.0             | Plates Increase 1.25 | BC 0.11    | Vert(LL) 0.01 2-10 >999 240  |               |             |
| BCLL 10.0            | Lumber Increase 1.25 | WB 0.05    | Vert(TL) -0.01 2-10 >999 180 |               |             |
| BCDL 5.0             | Rep Stress Incr YES  | (Matrix)   | Horz(TL) 0.00 7 n/a n/a      |               |             |
|                      | Code FBC2004/TPI2002 |            |                              | Weight: 55 lb |             |

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

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

**REACTIONS** (lb/size) 1=58/0-3-8, 7=58/0-3-8, 10=424/0-3-8, 8=424/0-3-8, 9=292/0-3-8  
 Max Horz 1=90(load case 4)  
 Max Uplift 1=-18(load case 6), 7=-37(load case 3), 10=-153(load case 5), 8=-137(load case 6), 9=-170(load case 3)  
 Max Grav 1=79(load case 9), 7=79(load case 10), 10=424(load case 1), 8=424(load case 1), 9=307(load case 9)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=-77/86, 2-3=-74/199, 3-4=-11/133, 4-5=-11/133, 5-6=-57/199, 6-7=-39/24  
 BOT CHORD 2-10=-114/102, 9-10=-133/114, 8-9=-133/114, 6-8=-114/102  
 WEBS 3-10=-291/179, 5-8=-291/179, 4-9=-208/190

**JOINT STRESS INDEX**  
 2 = 0.23, 3 = 0.43, 4 = 0.11, 5 = 0.43, 6 = 0.23, 8 = 0.11, 9 = 0.11 and 10 = 0.11

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-02; 110mph (3-second gust); h=20ft TCCL=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.
- Provide adequate drainage to prevent water ponding.
- All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- Bearing at joint(s) 1, 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 18 lb uplift at joint 1, 37 lb uplift at joint 7, 153 lb uplift at joint 10, 137 lb uplift at joint 8 and 170 lb uplift at joint 9.
- SEE MiTek STANDARD PIGGYBACK TRUSS CONNECTION DETAIL FOR CONNECTION TO BASE TRUSS

**LOAD CASE(S)** Standard

Job

L207902

Truss

BP04

Truss Type

HIP PIGGYBACK

Qty

2

Ply

1

TWENSEY RES.

Job Reference (optional)

Builders FirstSource, Lake City, FL 32055

6.200 s Jul 13 2005 MiTek Industries, Inc. Thu Aug 24 16:35:26 2006 Page 1

2-0-0

13-6-0

15-6-0

2-0-0

11-6-0

2-0-0

Scale = 1:25.0

|        |        |       |        |        |        |
|--------|--------|-------|--------|--------|--------|
| 2-1-12 | 4-0-0  | 7-9-0 | 11-6-0 | 13-4-4 | 15-6-0 |
| 2-1-12 | 1-10-4 | 3-9-0 | 3-9-0  | 1-10-4 | 2-1-12 |

|               |                      |          |                            |               |         |
|---------------|----------------------|----------|----------------------------|---------------|---------|
| LOADING (psf) | SPACING              | CSI      | DEFL                       | PLATES        | GRIP    |
| TCLL 20.0     | 2-0-0                | TC 0.13  | in (loc) l/defl L/d        | MT20          | 244/190 |
| TCDL 7.0      | Plates Increase 1.25 | BC 0.11  | Vert(LL) 0.01 14 >999 240  |               |         |
| BCLL 10.0     | Lumber Increase 1.25 | WB 0.05  | Vert(TL) -0.01 14 >999 180 |               |         |
| BCDL 5.0      | Rep Stress Incr YES  | (Matrix) | Horz(TL) 0.01 9 n/a n/a    |               |         |
|               | Code FBC2004/TPI2002 |          |                            | 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 6-0-0 oc purlins.

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

REACTIONS (lb/size)

1=144/0-3-8, 9=144/0-3-8, 12=300/0-3-8, 13=334/0-3-8, 11=334/0-3-8

Max Horz 1=43(load case 4)

Max Uplift 1=50(load case 5), 9=53(load case 6), 12=156(load case 3), 13=158(load case 4), 11=149(load case 3)

Max Grav 1=144(load case 1), 9=144(load case 1), 12=306(load case 9), 13=337(load case 9), 11=337(load case 10)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=74/41, 2-3=125/57, 3-4=97/64, 4-5=97/64, 5-6=97/64, 6-7=97/64, 7-8=125/57, 8-9=74/36

BOT CHORD 2-14=30/95, 13-14=26/97, 12-13=26/97, 11-12=26/97, 10-11=26/97, 8-10=27/95

WEBS 3-14=0/22, 7-10=0/20, 5-12=202/182, 4-13=202/159, 6-11=202/154

JOINT STRESS INDEX

2 = 0.27, 3 = 0.07, 4 = 0.09, 5 = 0.10, 6 = 0.09, 7 = 0.07, 8 = 0.27, 10 = 0.01, 11 = 0.09, 12 = 0.10, 13 = 0.09 and 14 = 0.01

NOTES

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

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

3) Provide adequate drainage to prevent water ponding.

4) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi

5) Bearing at joint(s) 1, 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 50 lb uplift at joint 1, 53 lb uplift at joint 9, 156 lb uplift at joint 12, 158 lb uplift at joint 13 and 149 lb uplift at joint 11.

7) SEE MiTek STANDARD PIGGYBACK TRUSS CONNECTION DETAIL FOR CONNECTION TO BASE TRUSS

LOAD CASE(S) Standard

|                                           |               |                        |                                                                                                        |          |              |
|-------------------------------------------|---------------|------------------------|--------------------------------------------------------------------------------------------------------|----------|--------------|
| Job<br>L207902                            | Truss<br>T01G | Truss Type<br>KINGPOST | Qty<br>1                                                                                               | Ply<br>1 | TWENSEY RES. |
| Builders FirstSource, Lake City, FL 32055 |               |                        | Job Reference (optional)<br>6.200 s Jul 13 2005 MiTek Industries, Inc. Thu Aug 24 16:35:29 2006 Page 1 |          |              |

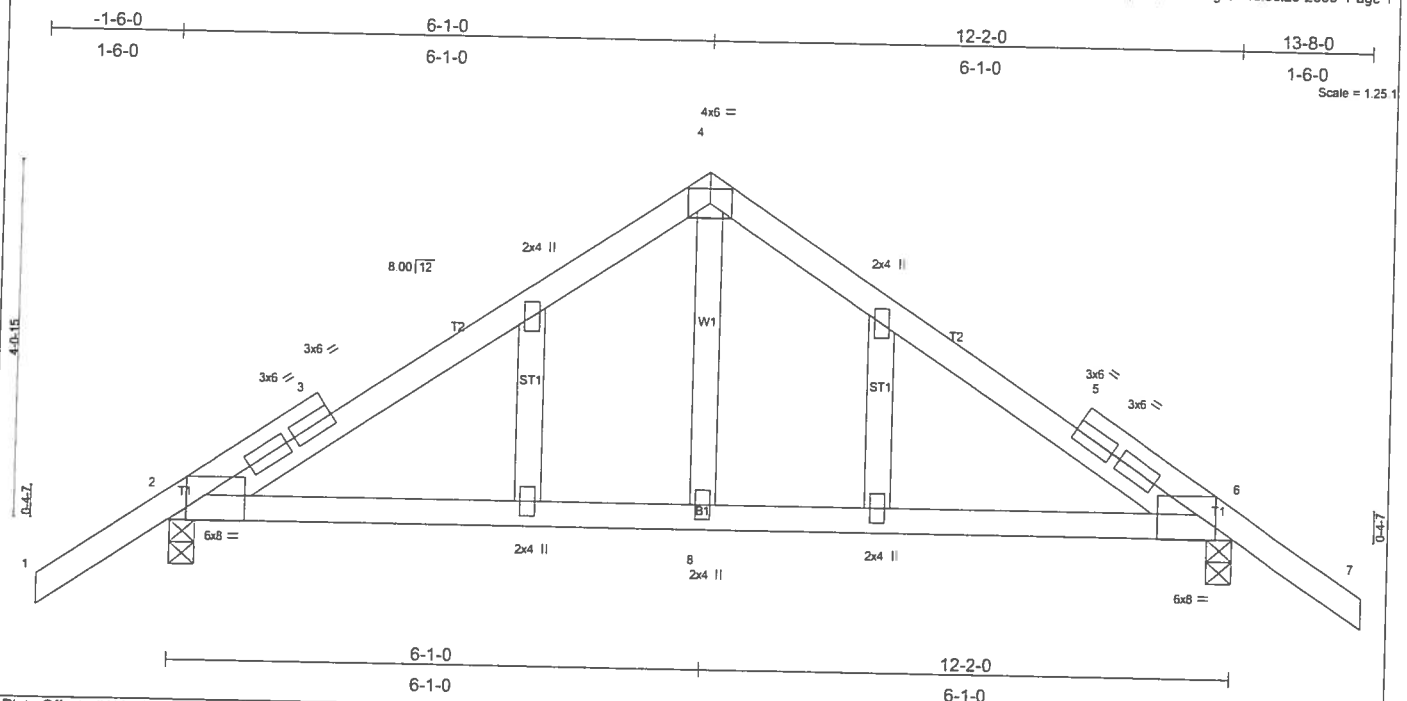


Plate Offsets (X,Y): [2-0-2-9,Edge], [6-0-2-9,Edge]

| LOADING (psf) | SPACING              | 2-0-0 | CSI      | DEFL     | in    | (loc) | l/defl | L/d | PLATES | GRIP          |
|---------------|----------------------|-------|----------|----------|-------|-------|--------|-----|--------|---------------|
| TCLL 20.0     | Plates Increase      | 1.25  | TC 0.56  | Vert(LL) | -0.07 | 6-8   | >999   | 240 | MT20   | 244/190       |
| BCDL 7.0      | Lumber Increase      | 1.25  | BC 0.46  | Vert(TL) | -0.11 | 6-8   | >999   | 180 |        |               |
| BCLL 10.0     | Rep Stress Incr      | NO    | WB 0.08  | Horz(TL) | 0.01  | 6     | n/a    | n/a |        |               |
| BCDL 5.0      | Code FBC2004/TPI2002 |       | (Matrix) |          |       |       |        |     |        |               |
|               |                      |       |          |          |       |       |        |     |        | Weight: 62 lb |

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

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

**REACTIONS** (lb/size) 2=929/0-3-8, 6=929/0-3-8  
 Max Horz 2=-135(load case 3)  
 Max Uplift 2=-386(load case 5), 6=-386(load case 6)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=-7/81, 2-3=-968/302, 3-4=-853/297, 4-5=-853/297, 5-6=-968/302, 6-7=-7/81  
 BOT CHORD 2-8=-157/710, 6-8=-157/710  
 WEBS 4-8=0/259

**JOINT STRESS INDEX**  
 2 = 0.60, 3 = 0.00, 3 = 0.48, 3 = 0.48, 4 = 0.96, 5 = 0.00, 5 = 0.48, 5 = 0.48, 6 = 0.60, 8 = 0.19, 9 = 0.00, 10 = 0.00, 11 = 0.00 and 12 = 0.00

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- 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.
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see MiTek "Standard Gable End Detail"
- Gable studs spaced at 2-0-0 oc.
- All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 386 lb uplift at joint 2 and 386 lb uplift at joint 6.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

#### LOAD CASE(S) Standard

- Regular: Lumber Increase=1.25, Plate Increase=1.25  
 Uniform Loads (plf)  
 Vert: 2-6=-30, 1-4=-99(F=-45), 4-7=-99(F=-45)

|                                           |              |                      |          |          |                          |
|-------------------------------------------|--------------|----------------------|----------|----------|--------------------------|
| Job<br>L207902                            | Truss<br>T02 | Truss Type<br>COMMON | Qty<br>8 | Ply<br>1 | TWENSEY RES.             |
| Builders FirstSource, Lake City, FL 32055 |              |                      |          |          | Job Reference (optional) |

6.200 s Jul 13 2005 MiTek Industries, Inc. Thu Aug 24 16:35:31 2006 Page 1

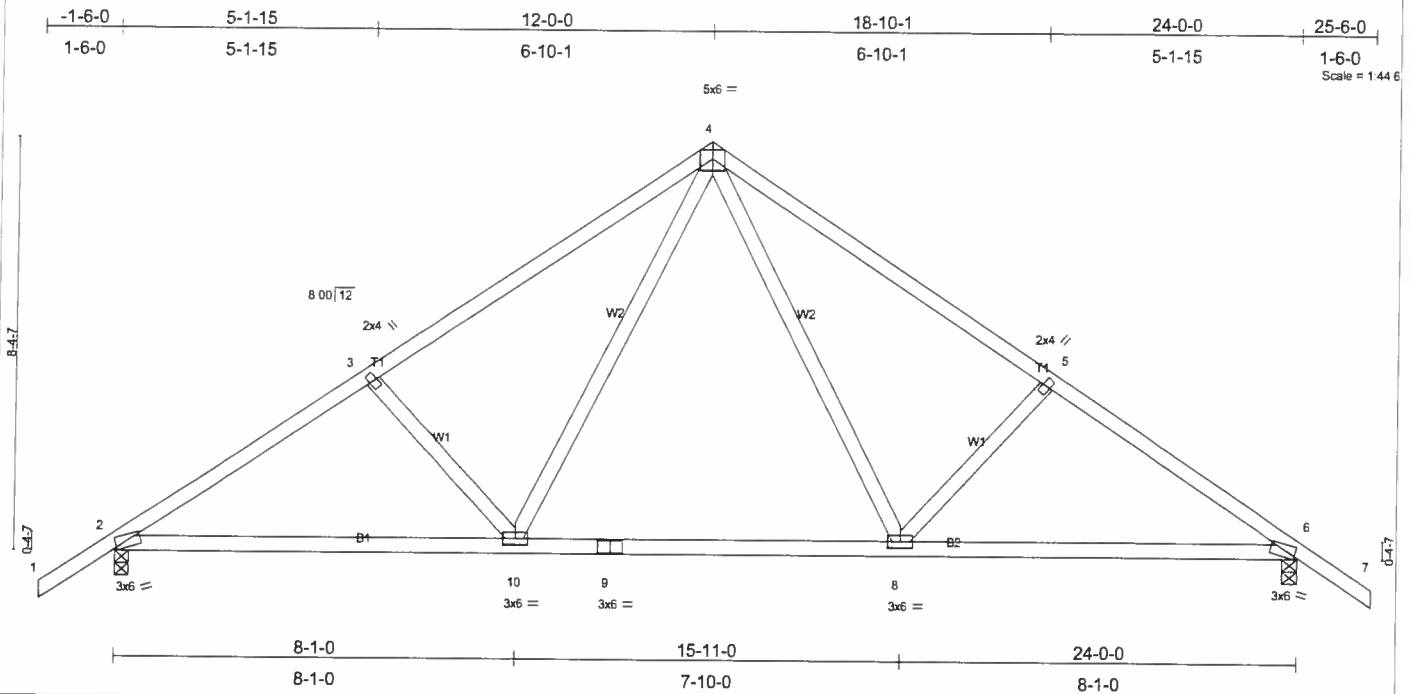


Plate Offsets (X,Y): [2:0-0-12:Edge], [6:0-0-12:Edge]

| LOADING (psf) | SPACING              | CSI      | DEFL                         | PLATES         | GRIP    |
|---------------|----------------------|----------|------------------------------|----------------|---------|
| TCLL 20.0     | 2-0-0                | TC 0.42  | in (loc) l/defl L/d          | MT20           | 244/190 |
| TCDL 7.0      | Plates Increase 1.25 | BC 0.94  | Vert(LL) -0.28 8-10 >999 240 |                |         |
| BCLL 10.0     | Lumber Increase 1.25 | WB 0.39  | Vert(TL) -0.45 8-10 >638 180 |                |         |
| BCDL 5.0      | Rep Stress Incr NO   | (Matrix) | Horz(TL) 0.05 6 n/a n/a      |                |         |
|               | Code FBC2004/TP12002 |          |                              |                |         |
|               |                      |          |                              | 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 4-6-7 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 8-9-11 oc bracing.

**REACTIONS** (lb/size) 2=1280/0-3-8, 6=1280/0-3-8  
 Max Horz 2=-284(load case 3)  
 Max Uplift 2=485(load case 5), 6=485(load case 6)

**FORCES** (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/44, 2-3=-1813/640, 3-4=-1631/641, 4-5=-1631/641, 5-6=-1813/640, 6-7=0/44  
 BOT CHORD 2-10=-497/1438, 9-10=-191/959, 8-9=-191/959, 6-8=-380/1438  
 WEBS 3-10=-269/283, 4-10=-271/743, 4-8=-271/743, 5-8=-269/283

**JOINT STRESS INDEX**

2 = 0.78, 3 = 0.34, 4 = 0.69, 5 = 0.34, 6 = 0.78, 8 = 0.62, 9 = 0.60 and 10 = 0.62

**NOTES**

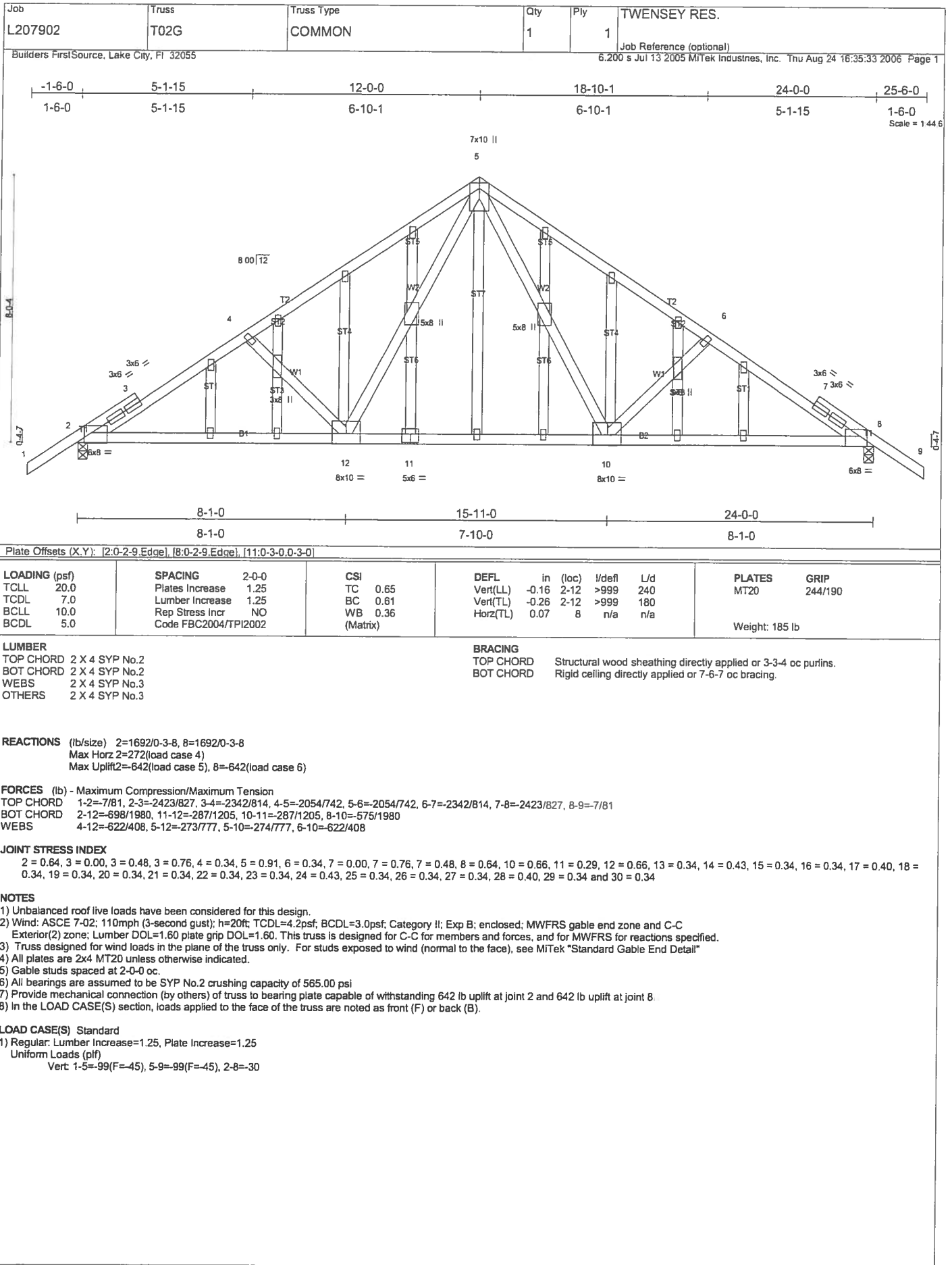
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCCL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
- All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 485 lb uplift at joint 2 and 485 lb uplift at joint 6.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard

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

## Uniform Loads (plf)

Vert: 1-4=-54, 4-7=-54, 2-10=-30, 8-10=-80(F=-50), 6-8=-30



|                                           |              |                      |                                                                                                        |          |              |
|-------------------------------------------|--------------|----------------------|--------------------------------------------------------------------------------------------------------|----------|--------------|
| Job<br>L207902                            | Truss<br>T03 | Truss Type<br>COMMON | Qty<br>2                                                                                               | Ply<br>1 | TWENSEY RES. |
| Builders FirstSource, Lake City, FL 32055 |              |                      | Job Reference (optional)<br>6.200 s Jul 13 2005 Mitek Industries, Inc. Thu Aug 24 16:35:35 2006 Page 1 |          |              |

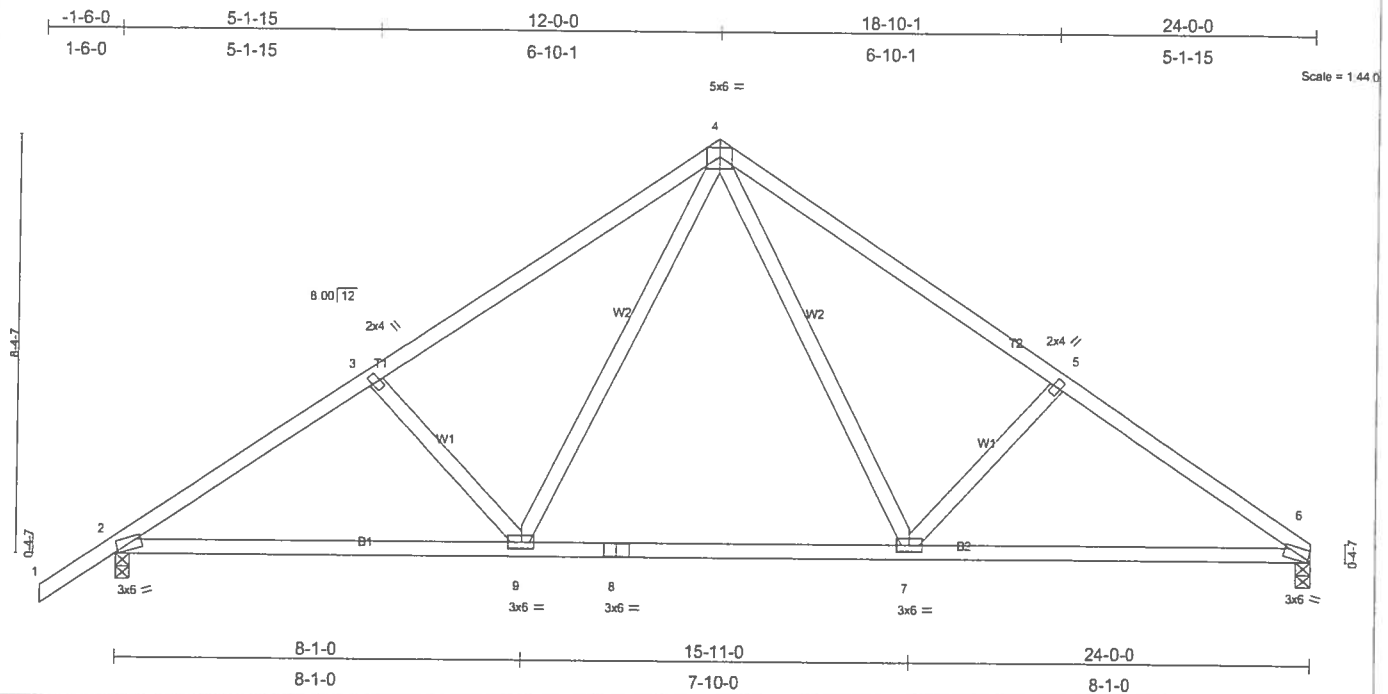


Plate Offsets (X,Y): [2:0-0-12,Edge], [6:0-0-12,Edge]

| LOADING (psf) | SPACING              | CSI      | DEFL                        | PLATES         | GRIP    |
|---------------|----------------------|----------|-----------------------------|----------------|---------|
| TCLL 20.0     | 2-0-0                | TC 0.44  | in (loc) l/defl L/d         | MT20           | 244/190 |
| TCDL 7.0      | Plates Increase 1.25 | BC 0.96  | Vert(LL) -0.27 7-9 >999 240 |                |         |
| BCLL 10.0     | Lumber Increase 1.25 | WB 0.42  | Vert(TL) -0.44 7-9 >644 180 |                |         |
| BCDL 5.0      | Rep Stress Incr NO   | (Matrix) | Horz(TL) 0.05 6 n/a n/a     |                |         |
|               | Code FBC2004/TPI2002 |          |                             | Weight: 120 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 4-5-3 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 8-7-3 oc bracing.

#### REACTIONS

(lb/size) 6=1189/0-3-8, 2=1284/0-3-8  
Max Horz 2=301(load case 4)  
Max Uplift 6=388(load case 6), 2=486(load case 5)

#### FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/44, 2-3=-1819/648, 3-4=-1636/648, 4-5=-1646/662, 5-6=-1814/663  
BOT CHORD 2-9=-523/1443, 8-9=-217/964, 7-8=-217/964, 6-7=-469/1456  
WEBS 3-9=-269/283, 4-9=-270/743, 4-7=-293/758, 5-7=-279/297

#### JOINT STRESS INDEX

2 = 0.79, 3 = 0.34, 4 = 0.68, 5 = 0.34, 6 = 0.79, 7 = 0.64, 8 = 0.60 and 9 = 0.64

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-02: 110mph (3-second gust); h=20ft; TCCL=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.
- All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 388 lb uplift at joint 6 and 486 lb uplift at joint 2.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

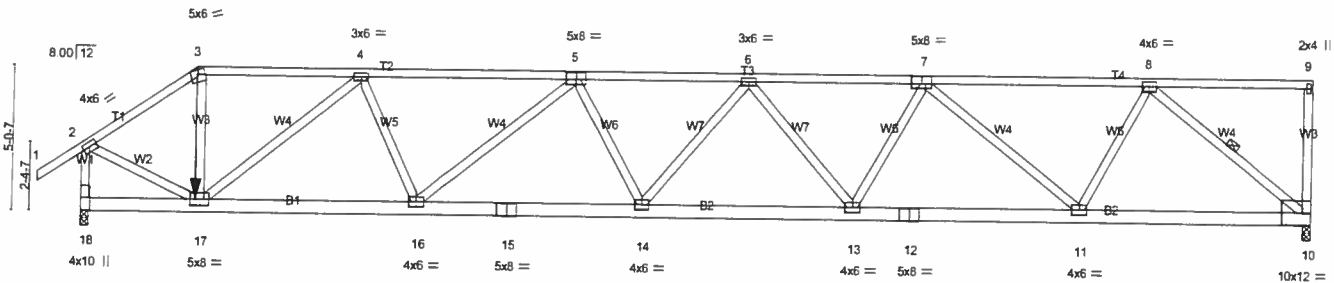
#### LOAD CASE(S) Standard

- Regular: Lumber Increase=1.25, Plate increase=1.25  
Uniform Loads (plf)  
Vert: 1-4=-54, 4-6=-54, 2-9=-30, 7-9=-80(F=-50), 6-7=-30

|                                           |              |                        |                                                                            |          |                                          |
|-------------------------------------------|--------------|------------------------|----------------------------------------------------------------------------|----------|------------------------------------------|
| Job<br>L207902                            | Truss<br>T04 | Truss Type<br>MONO HIP | Qty<br>1                                                                   | Ply<br>2 | TWENSEY RES.<br>Job Reference (optional) |
| Builders FirstSource, Lake City, FL 32055 |              |                        | 6.200 s Jul 13 2005 MiTek Industries, Inc. Thu Aug 24 16:35:37 2006 Page 1 |          |                                          |

|       |       |        |         |        |        |        |         |
|-------|-------|--------|---------|--------|--------|--------|---------|
| 1-6-0 | 4-0-0 | 9-8-10 | 17-1-10 | 23-2-9 | 29-3-8 | 37-1-7 | 42-10-0 |
| 1-6-0 | 4-0-0 | 5-8-10 | 7-4-15  | 6-0-15 | 6-0-15 | 7-9-15 | 5-8-9   |

Scale = 1:76.2



|       |        |        |          |        |         |
|-------|--------|--------|----------|--------|---------|
| 4-0-0 | 11-8-8 | 19-6-8 | 26-10-10 | 34-8-9 | 42-10-0 |
| 4-0-0 | 7-8-8  | 7-10-0 | 7-4-2    | 7-10-0 | 8-1-6   |

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

| LOADING (psf) | SPACING              | CSI      | DEFL                          | PLATES         | GRIP    |
|---------------|----------------------|----------|-------------------------------|----------------|---------|
| TCLL 20.0     | 2-0-0                | TC 0.70  | in (loc) l/defl L/d           | MT20           | 244/190 |
| TCOL 7.0      | Plates Increase 1.25 | BC 0.52  | Vert(LL) 0.40 13-14 >999 240  |                |         |
| BCCL 10.0     | Lumber Increase 1.25 | WB 0.84  | Vert(TL) -0.58 13-14 >879 180 |                |         |
| BCDL 5.0      | Rep Stress Incr NO   | (Matrix) | Horz(TL) 0.13 10 n/a n/a      |                |         |
|               | Code FBC2004/TPI2002 |          |                               |                |         |
|               |                      |          |                               | Weight: 553 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 4-0-10 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 7-8-10 oc bracing.  
 WEBS 1 Row at midpt 8-10

**REACTIONS**

(lb/size) 10=3919/0-3-8, 18=4291/0-3-8  
 Max Horz 18=240(load case 4)  
 Max Uplift 10=2456(load case 2), 18=2378(load case 2)

**FORCES** (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/49, 2-3=4010/2333, 3-4=3351/1979, 4-5=7233/4403, 5-6=8963/5521, 6-7=8403/5192, 7-8=5463/3324, 8-9=77/43,  
 9-10=267/279, 2-18=4045/2264  
 BOT CHORD 17-18=222/61, 16-17=4051/6468, 15-16=5498/8727, 14-15=5498/8727, 13-14=5632/8936, 12-13=4952/7807, 11-12=4952/7807,  
 10-11=2673/4146  
 WEBS 3-17=981/1787, 4-17=4066/2700, 4-16=898/1950, 5-16=1970/1444, 5-14=48/515, 6-14=0/181, 6-13=861/711, 7-13=524/1300,  
 7-11=3090/2147, 8-11=1422/2878, 8-10=5306/3430, 2-17=2205/3638

**JOINT STRESS INDEX**

2 = 0.76, 3 = 0.52, 4 = 0.84, 5 = 0.82, 6 = 0.39, 7 = 0.98, 8 = 0.81, 9 = 0.87, 10 = 0.45, 11 = 0.81, 12 = 0.82, 13 = 0.36, 14 = 0.31, 15 = 0.95, 16 = 0.58, 17 = 0.83 and 18 = 0.33

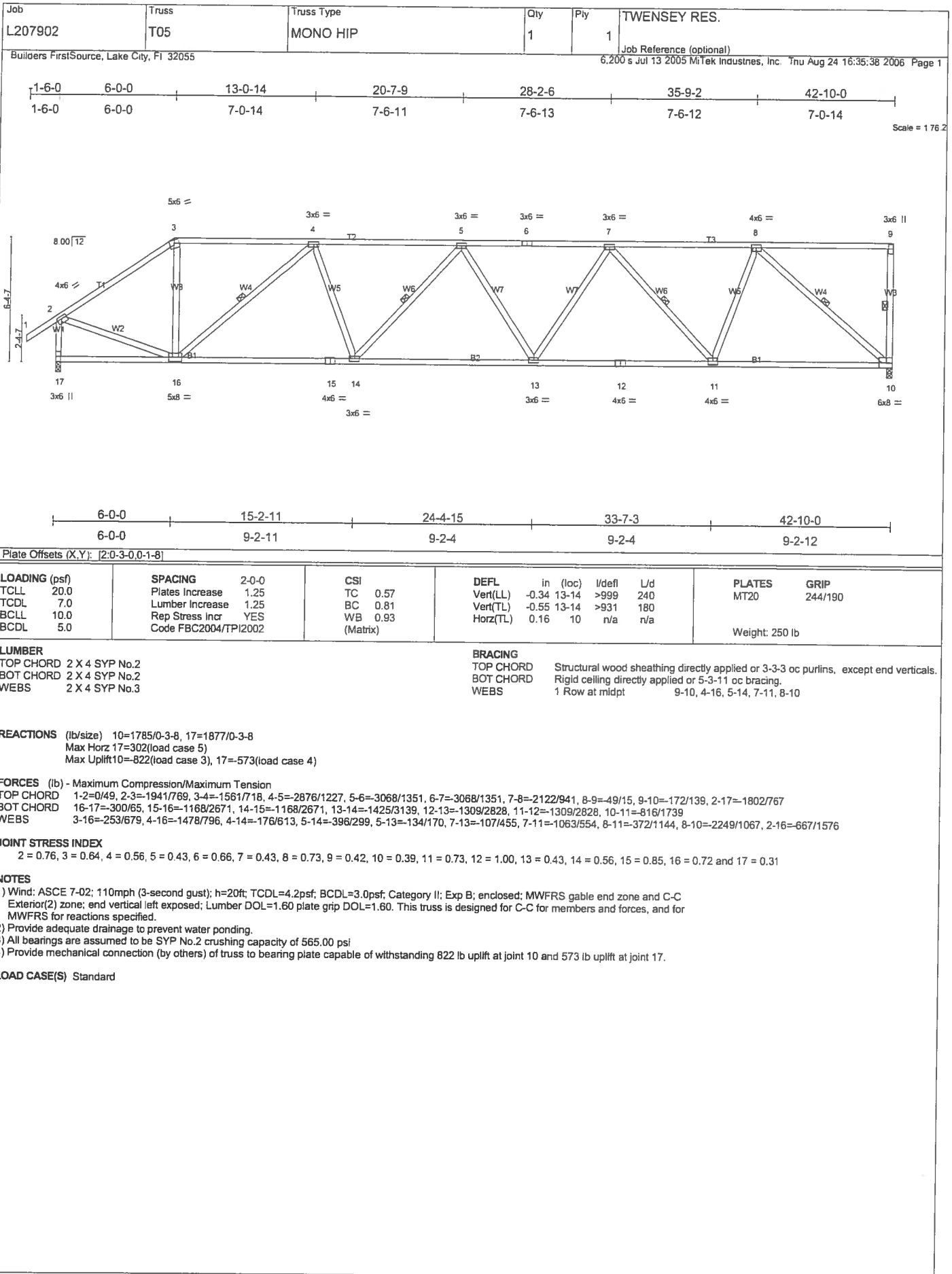
**NOTES**

- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 308 lb down and 235 lb up at 4-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 2-ply truss to be connected together with 0.131"x3" Nails as follows:  
 Top chords connected as follows: 2 X 4 - 1 row at 0-9-0 oc.  
 Bottom chords connected as follows: 2 X 6 - 2 rows at 0-9-0 oc.  
 Webs connected as follows: 2 X 4 - 1 row at 0-9-0 oc.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 308 lb down and 235 lb up at 4-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- All loads are considered equally applied to all piles, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCCL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60.
- Provide adequate drainage to prevent water ponding.
- All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 2456 lb uplift at joint 10 and 2378 lb uplift at joint 18.
- Girder carries tie-in span(s): 7-0-0 from 0-0-0 to 4-0-0
- Girder carries hip end with 0-0-0 right side setback, 4-0-0 left side setback, and 7-0-0 end setback.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 308 lb down and 235 lb up at 4-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard

- Regular: Lumber Increase=1.25, Plate Increase=1.25  
 Uniform Loads (plf)  
 Vert: 1-2=54, 2-3=54, 3-9=118(F=64), 17-18=135(F=105), 10-17=65(F=35)  
 Concentrated Loads (lb)  
 Vert: 17=308(F)





|                                           |              |                        |                          |          |              |
|-------------------------------------------|--------------|------------------------|--------------------------|----------|--------------|
| Job<br>L207902                            | Truss<br>T06 | Truss Type<br>MONO HIP | Qty<br>1                 | Ply<br>1 | TWENSEY RES. |
| Builders FirstSource, Lake City, FL 32055 |              |                        | Job Reference (optional) |          |              |

6.200 s Jul 13 2005 MiTek Industries, Inc. Thu Aug 24 16:35:40 2006 Page 1

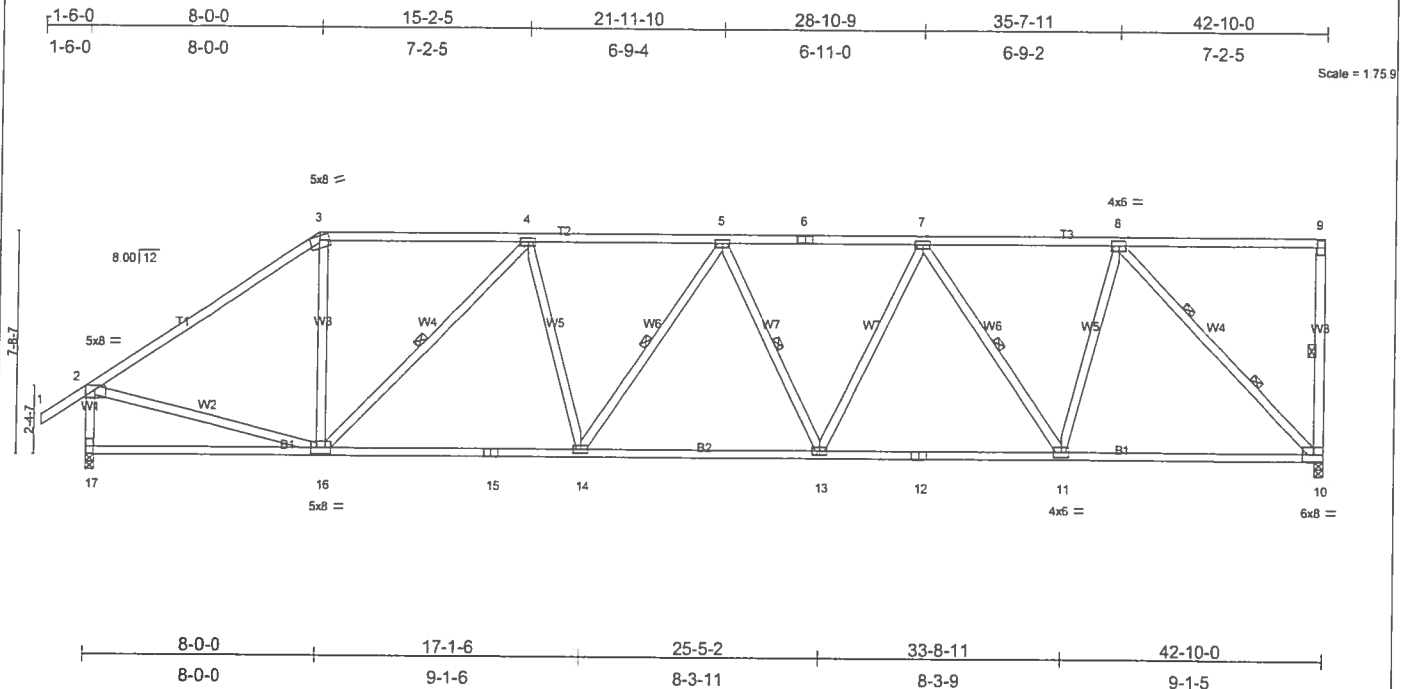


Plate Offsets (X,Y): [2:0-3-8,Edge]

| LOADING (psf) | SPACING              | 2-0-0 | CSI      | DEFL     | in (loc) | l/def | L/d  | PLATES | GRIP           |
|---------------|----------------------|-------|----------|----------|----------|-------|------|--------|----------------|
| TCLL 20.0     | Plates Increase      | 1.25  | TC 0.78  | Vert(LL) | -0.25    | 14-16 | >999 | 240    |                |
| TCDL 7.0      | Lumber Increase      | 1.25  | BC 0.69  | Vert(TL) | -0.41    | 14-16 | >999 | 180    |                |
| BCLL 10.0     | Rep Stress Incr      | YES   | WB 0.78  | Horz(TL) | 0.12     | 10    | n/a  | n/a    |                |
| BCDL 5.0      | Code FBC2004/TPI2002 |       | (Matrix) |          |          |       |      |        |                |
|               |                      |       |          |          |          |       |      |        | Weight: 269 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 3-9-3 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 6-0-3 oc bracing.  
 WEBS 1 Row at midpt 9-10, 4-16, 5-14, 5-13, 7-11  
 2 Rows at 1/3 pts 8-10

**REACTIONS** (lb/size) 10=1785/0-3-8, 17=1877/0-3-8

Max Horz 17=363(load case 5)

Max Uplift 10=-803(load case 3), 17=-539(load case 5)

**FORCES** (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/49, 2-3=2047/790, 3-4=1618/758, 4-5=-2471/1039, 5-6=-2473/1049, 6-7=-2473/1049, 7-8=-1726/745, 8-9=-39/13, 9-10=-178/145, 2-17=-1761/758

BOT CHORD 16-17=-419/159, 15-16=-1030/2363, 14-15=-1030/2363, 13-14=-1114/2573, 12-13=-1007/2260, 11-12=-1007/2260, 10-11=-657/1445

WEBS 3-16=-247/653, 4-16=-1082/643, 4-14=-117/434, 5-14=-186/200, 5-13=-238/202, 7-13=-151/502, 7-11=-977/478, 8-11=-351/1124, 8-10=-2040/936, 2-16=-643/1497

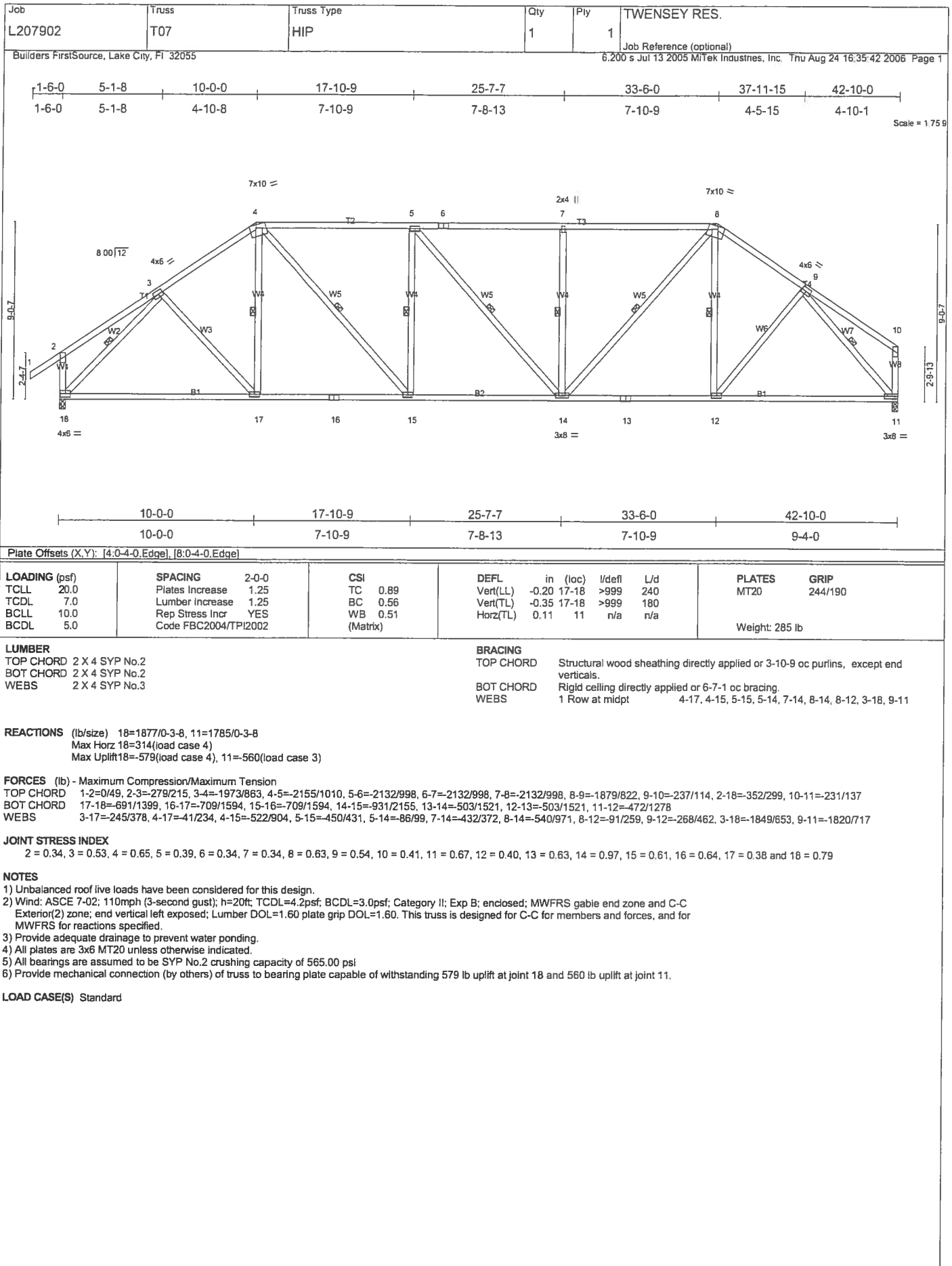
**JOINT STRESS INDEX**

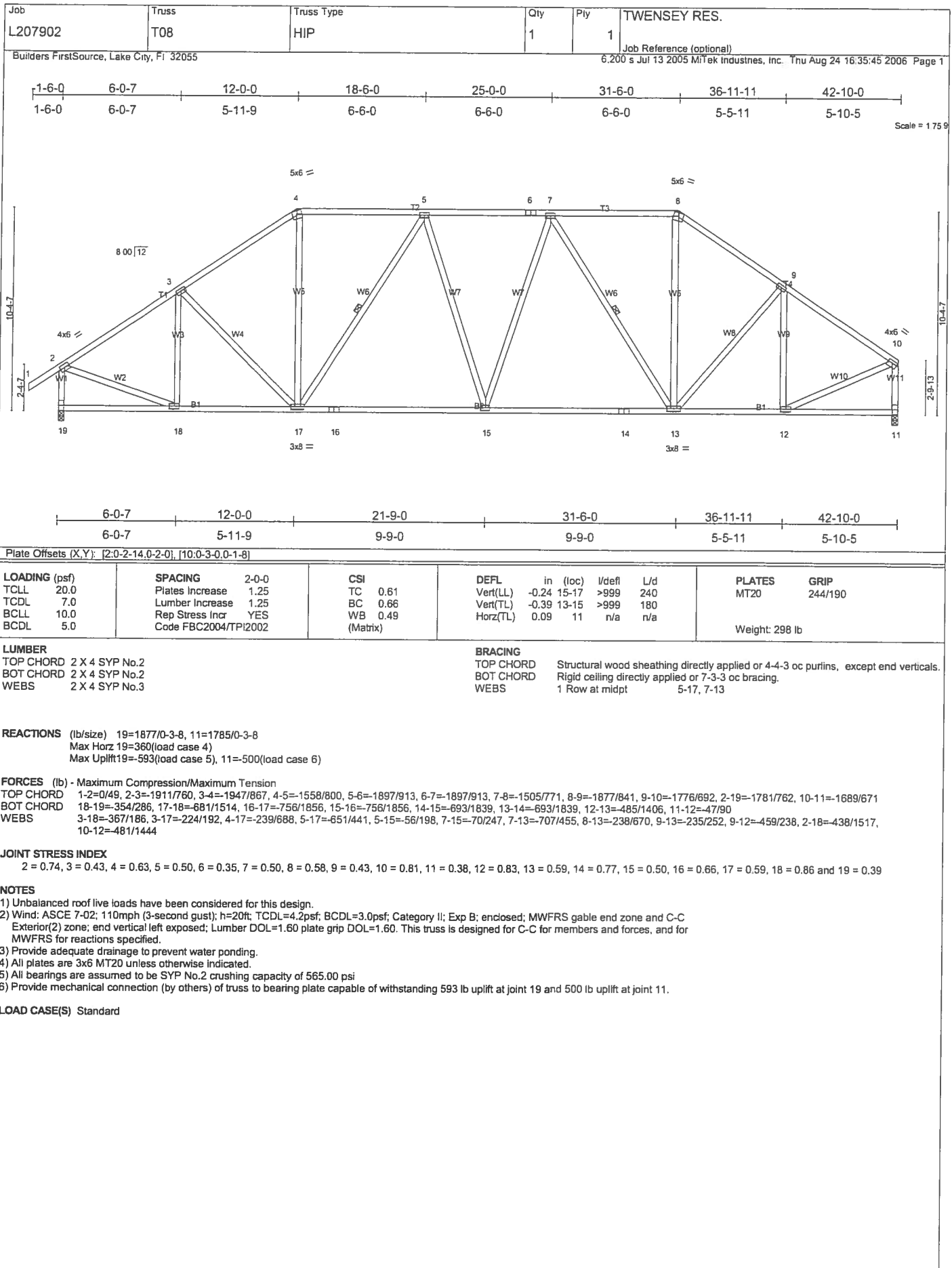
2 = 0.77, 3 = 0.78, 4 = 0.52, 5 = 0.47, 6 = 0.54, 7 = 0.47, 8 = 0.77, 9 = 0.42, 10 = 0.34, 11 = 0.77, 12 = 0.91, 13 = 0.47, 14 = 0.52, 15 = 0.96, 16 = 0.71 and 17 = 0.53

**NOTES**

- 1) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCCL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
- 2) Provide adequate drainage to prevent water ponding.
- 3) All plates are 3x6 MT20 unless otherwise indicated.
- 4) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 803 lb uplift at joint 10 and 539 lb uplift at joint 17.

**LOAD CASE(S)** Standard





|                |              |                       |          |          |                                          |
|----------------|--------------|-----------------------|----------|----------|------------------------------------------|
| Job<br>L207902 | Truss<br>T09 | Truss Type<br>SPECIAL | Qty<br>1 | Ply<br>1 | TWENSEY RES.<br>Job Reference (optional) |
|----------------|--------------|-----------------------|----------|----------|------------------------------------------|

Builders FirstSource, Lake City, FL 32055

6.200 s Jul 13 2005 MiTek Industries, Inc. Thu Aug 24 16:35:47 2006 Page 1

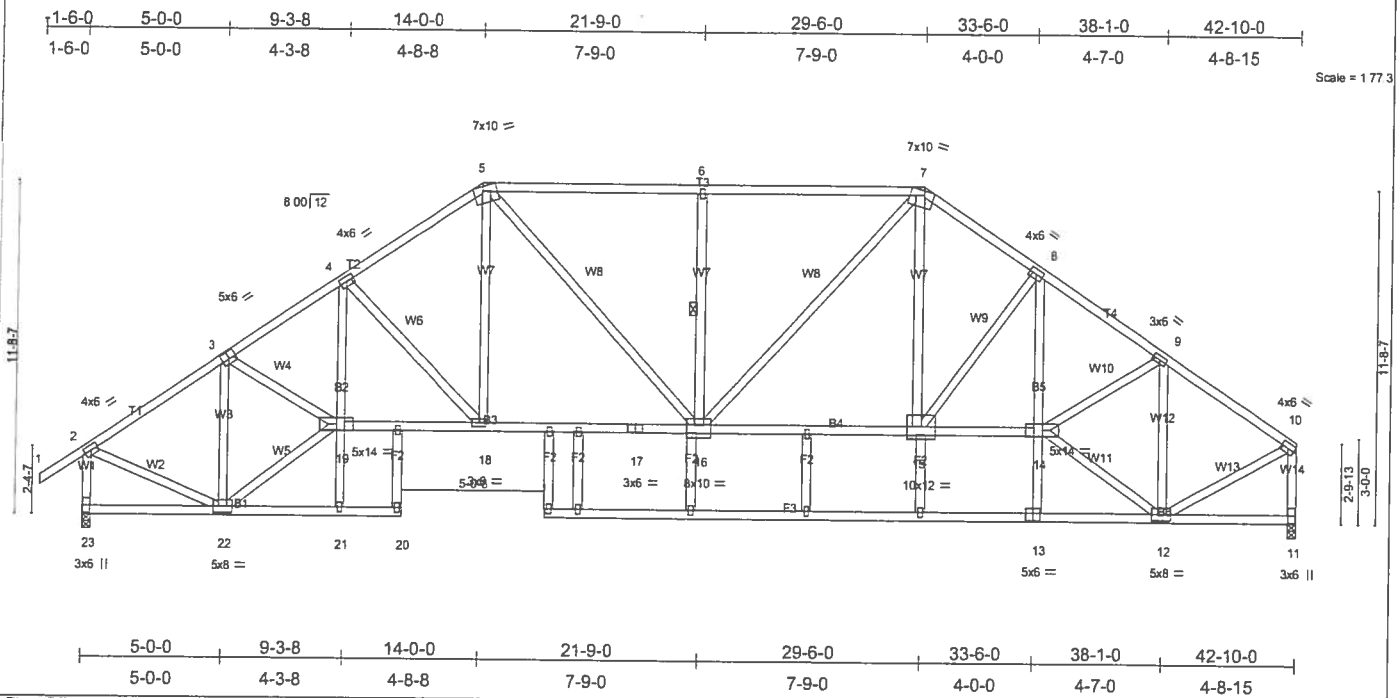


Plate Offsets (X,Y): [2:0-2-14,0-2-0], [3:0-3-0,0-3-0], [5:0-4-0,Edge], [7:0-4-0,Edge], [13:0-3-0,0-3-0], [16:0-5-0,0-2-8]

| LOADING (psf) | SPACING              | CSI      | DEFL                          | PLATES         | GRIP    |
|---------------|----------------------|----------|-------------------------------|----------------|---------|
| TCLL 20.0     | 2-0-0                | TC 0.47  | in (loc) l/defl L/d           | MT20           | 244/190 |
| TCDL 7.0      | Plates Increase 1.25 | BC 0.67  | Vert(LL) -0.25 16-18 >999 240 |                |         |
| BCLL 10.0     | Lumber Increase 1.25 | WB 0.91  | Vert(TL) -0.40 16-18 >999 180 |                |         |
| BCDL 5.0      | Rep Stress Incr YES  | (Matrix) | Horz(TL) 0.29 11 n/a n/a      |                |         |
|               | Code FBC2004/TPI2002 |          |                               |                |         |
|               |                      |          |                               | Weight: 370 lb |         |

**LUMBER**

TOP CHORD 2 X 4 SYP No.2  
 BOT CHORD 2 X 4 SYP No.2 "Except"  
 B2 2 X 4 SYP No.3, B5 2 X 4 SYP No.3  
 WEBS 2 X 4 SYP No.3

**BRACING**

TOP CHORD Structural wood sheathing directly applied or 3-5-13 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:  
 6-5-4 oc bracing: 18-19.  
 1 Row at midpt 16-18  
 1 Row at midpt 6-16  
 JOINTS 1 Brace at Jt(s): 16, 15, 14

**REACTIONS**

(lb/size) 23=1926/0-3-8, 11=1800/0-3-8  
 Max Horz 23=406(load case 4)  
 Max Uplift 23=598(load case 5), 11=512(load case 6)

**FORCES**

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/49, 2-3=1857/702, 3-4=3134/1176, 4-5=2536/1040, 5-6=2345/1047, 6-7=2345/1047, 7-8=2431/1022, 8-9=2818/1095,  
 9-10=1666/629, 2-23=1844/742, 10-11=1725/655  
 BOT CHORD 22-23=389/333, 21-22=14/16, 20-21=0/0, 19-21=0/138, 4-19=216/627, 18-19=972/2557, 17-18=772/2075, 16-17=772/2075,  
 15-16=533/1997, 14-15=698/2283, 13-14=0/70, 8-14=130/399, 12-13=8/35, 11-12=33/60  
 WEBS 3-22=1571/590, 19-22=765/1805, 3-19=392/1239, 4-18=709/394, 5-18=247/722, 5-16=402/527, 6-16=441/388, 7-16=405/630,  
 7-15=208/599, 8-15=488/305, 12-14=535/1562, 9-14=305/1114, 9-12=1463/578, 2-22=425/1549, 10-12=481/1457

**JOINT STRESS INDEX**

2 = 0.63, 3 = 0.63, 4 = 0.35, 5 = 0.64, 6 = 0.34, 7 = 0.62, 8 = 0.32, 9 = 0.74, 10 = 0.72, 11 = 0.31, 12 = 0.73, 13 = 0.33, 14 = 0.67, 15 = 0.26, 16 = 0.26, 17 = 0.76, 18 = 0.47, 19 = 0.68, 20 = 0.34, 21 = 0.34, 22 = 0.84, 23 = 0.33, 24 = 0.34, 25 = 0.34, 26 = 0.34, 27 = 0.34, 28 = 0.34, 29 = 0.34, 30 = 0.34, 31 = 0.34 and 32 = 0.34

**NOTES**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-02: 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
- Provide adequate drainage to prevent water ponding.
- All plates are 2x4 MT20 unless otherwise indicated.
- All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 598 lb uplift at joint 23 and 512 lb uplift at joint 11.

LOAD CASE(S) Standard

|                                           |              |                       |                          |          |              |
|-------------------------------------------|--------------|-----------------------|--------------------------|----------|--------------|
| Job<br>L207902                            | Truss<br>T10 | Truss Type<br>SPECIAL | Qty<br>3                 | Ply<br>1 | TWENSEY RES. |
| Builders FirstSource, Lake City, FL 32055 |              |                       | Job Reference (optional) |          |              |

6.200 s Jul 13 2005 MiTek Industries, Inc. Thu Aug 24 16:35:48 2006 Page 1

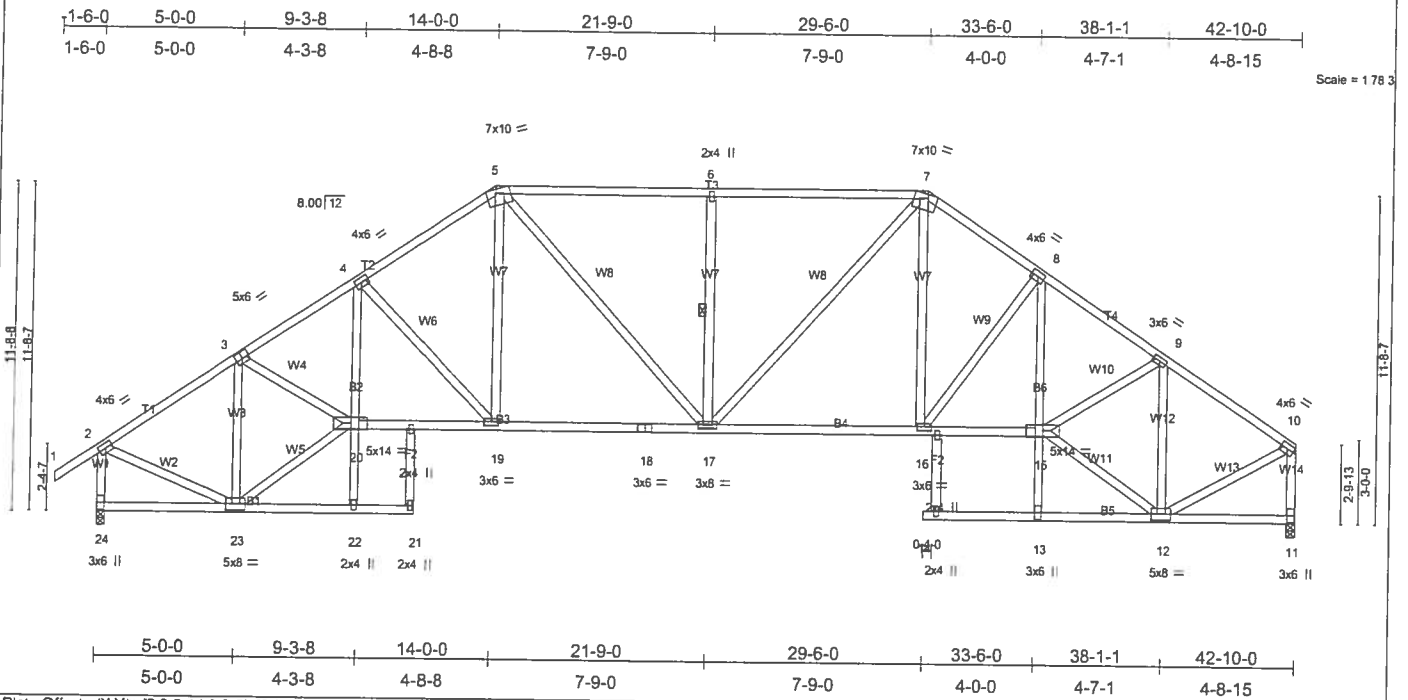


Plate Offsets (X,Y) [2:0-2-14,0-2-0], [3:0-3-0,0-3-0], [5:0-4-0,Edge], [7:0-4-1,Edge]

| LOADING (psf) | SPACING              | CSI      | DEFL                       | PLATES | GRIP           |
|---------------|----------------------|----------|----------------------------|--------|----------------|
| TCDL 20.0     | 2-0-0                | TC 0.50  | in (loc) l/defl L/d        | MT20   | 244/190        |
| BCDL 7.0      | Plates increase 1.25 | BC 0.70  | Vert(LL) -0.47 14 >999 240 |        |                |
| BCDL 10.0     | Lumber increase 1.25 | WB 0.93  | Vert(TL) -0.80 14 >642 180 |        |                |
| BCDL 5.0      | Rep Stress Incr YES  | (Matrix) | Horz(TL) 0.31 11 n/a n/a   |        |                |
|               | Code FBC2004/TPI2002 |          |                            |        | Weight: 334 lb |

**LUMBER**

TOP CHORD 2 X 4 SYP No.2  
 BOT CHORD 2 X 4 SYP No.2 \*Except\*  
 B2 2 X 4 SYP No.3, B6 2 X 4 SYP No.3  
 WEBS 2 X 4 SYP No.3

**BRACING**

TOP CHORD Structural wood sheathing directly applied or 3-5-5 oc purlins, except end verticals, and 2-0-0 oc purlins (3-8-0 max.); 5-7.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
 WEBS 1 Row at midpt 6-17  
 JOINTS 1 Brace at Jt(s): 15

**REACTIONS**

(lb/size) 24=1959/0-3-8, 11=1892/0-3-8  
 Max Horz 24=406(load case 4)  
 Max Uplift 24=592(load case 5), 11=493(load case 6)

**FORCES (lb) - Maximum Compression/Maximum Tension**

TOP CHORD 1-2=0/49, 2-3=1892/696, 3-4=3203/1163, 4-5=2601/1027, 5-6=2429/1031, 6-7=2429/1031, 7-8=2563/996, 8-9=3057/1047, 9-10=1749/612, 10-11=1808/638  
 BOT CHORD 23-24=389/333, 22-23=14/17, 21-22=0/0, 20-22=0/139, 4-20=215/632, 19-20=961/2614, 18-19=761/2129, 17-18=761/2129, 16-17=510/2110, 15-16=658/2478, 13-15=0/226, 8-15=96/569, 13-14=0/0, 12-13=33/0, 11-12=32/65  
 WEBS 3-23=1605/583, 20-23=758/1841, 3-20=386/1271, 4-19=714/393, 5-19=246/725, 5-17=393/571, 6-17=441/388, 7-17=414/586, 7-16=186/703, 8-16=626/277, 12-15=504/1718, 9-15=274/1267, 9-12=1628/545, 2-23=419/1580, 10-12=466/1529

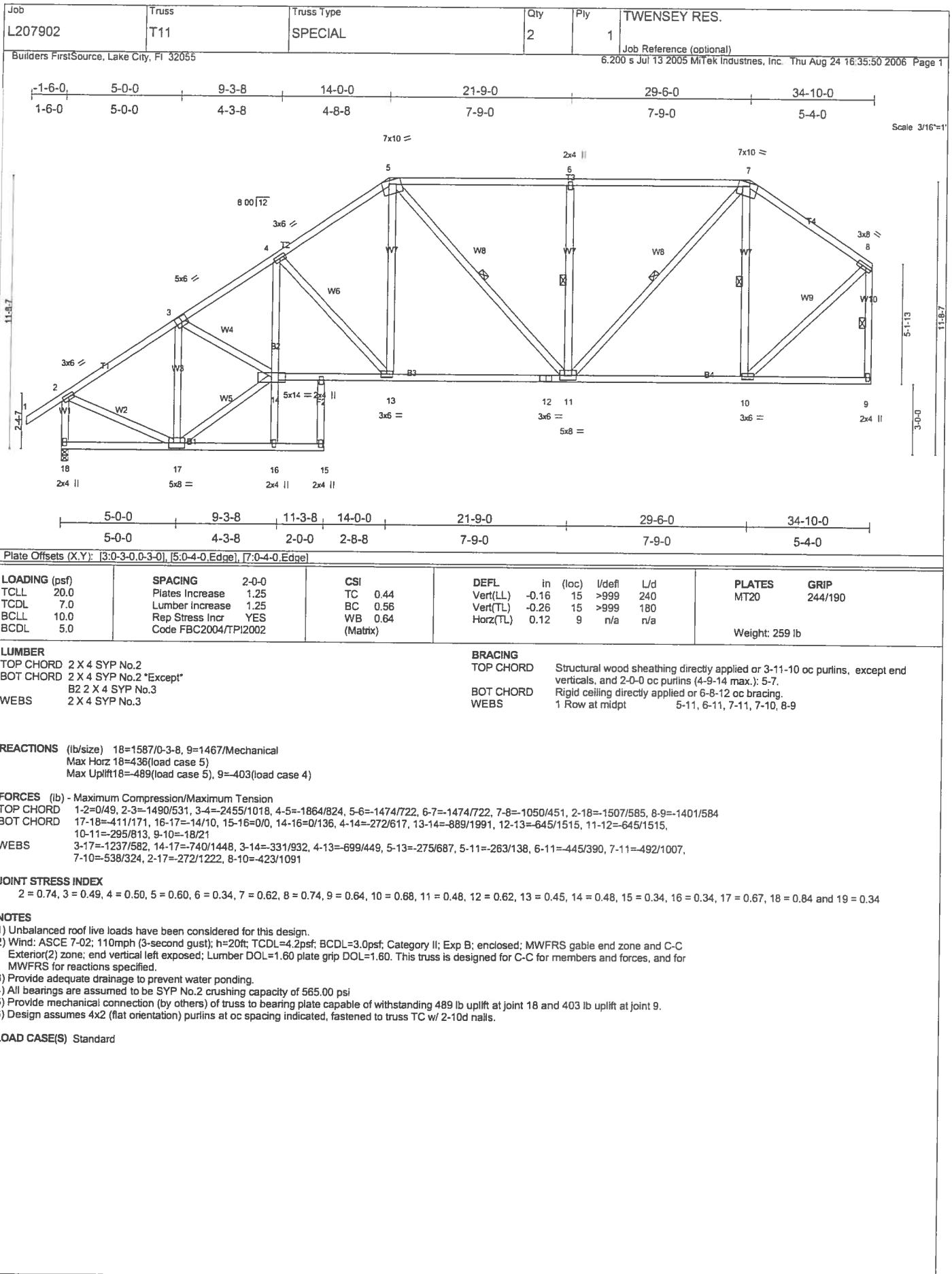
**JOINT STRESS INDEX**

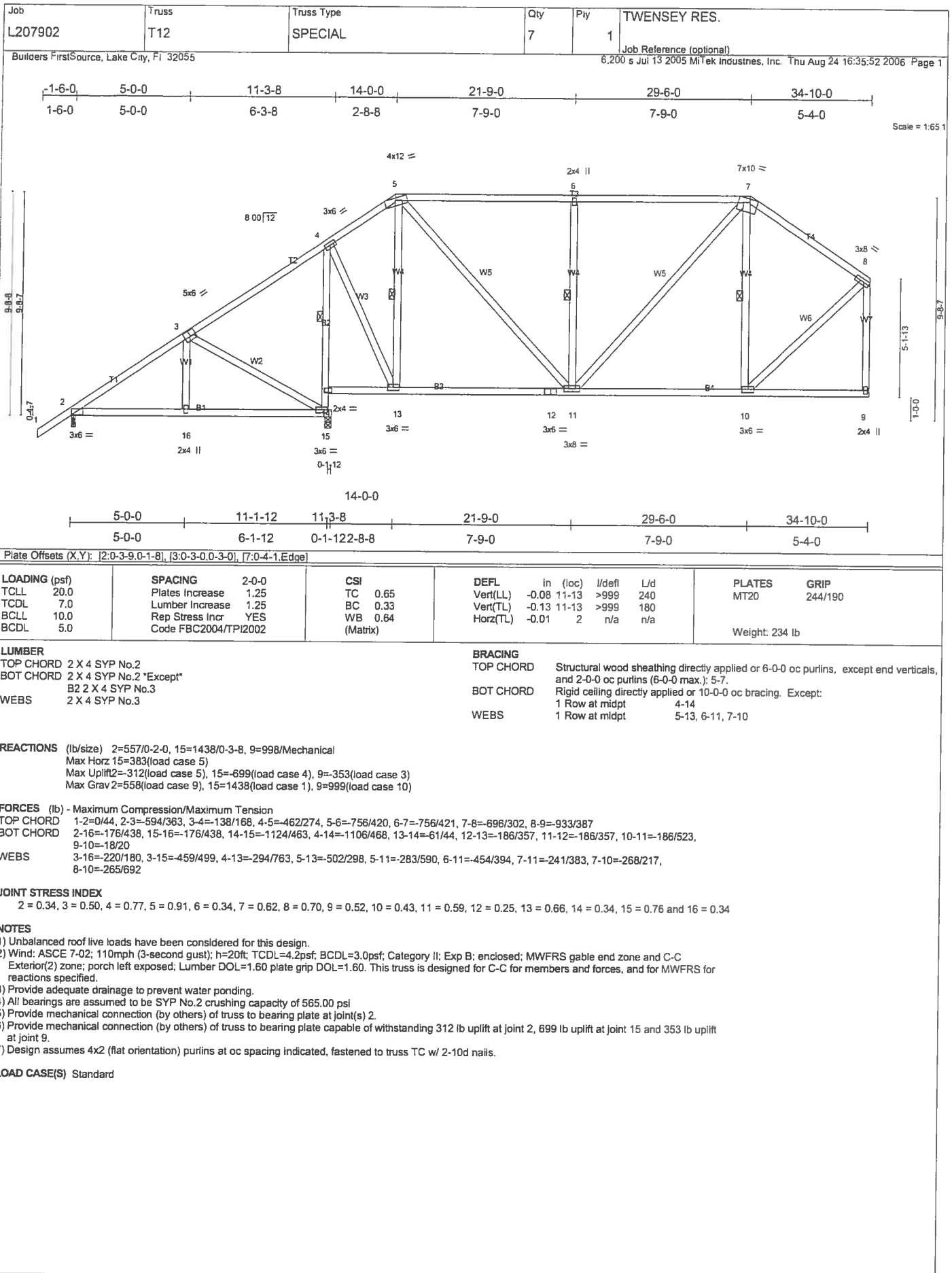
2 = 0.64, 3 = 0.64, 4 = 0.36, 5 = 0.66, 6 = 0.34, 7 = 0.65, 8 = 0.44, 9 = 0.84, 10 = 0.75, 11 = 0.34, 12 = 0.80, 13 = 0.39, 15 = 0.67, 16 = 0.46, 17 = 0.59, 18 = 0.78, 19 = 0.47, 20 = 0.70, 21 = 0.34, 22 = 0.34, 23 = 0.86, 24 = 0.34, 25 = 0.34, 26 = 0.34 and 27 = 0.34

**NOTES**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
- 3) Provide adequate drainage to prevent water ponding.
- 4) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 592 lb uplift at joint 24 and 493 lb uplift at joint 11.
- 6) Design assumes 4x2 (flat orientation) purlins at oc spacing indicated, fastened to truss TC w/ 2-10d nails.

LOAD CASE(S) Standard







|                |              |                       |          |          |              |
|----------------|--------------|-----------------------|----------|----------|--------------|
| Job<br>L207902 | Truss<br>T13 | Truss Type<br>SPECIAL | Qty<br>1 | Ply<br>1 | TWENSEY RES. |
|----------------|--------------|-----------------------|----------|----------|--------------|

Builders FirstSource, Lake City, FL 32055

6.200 s Jul 13 2005 MiTek Industries, Inc. Thu Aug 24 16:35:54 2006 Page 1

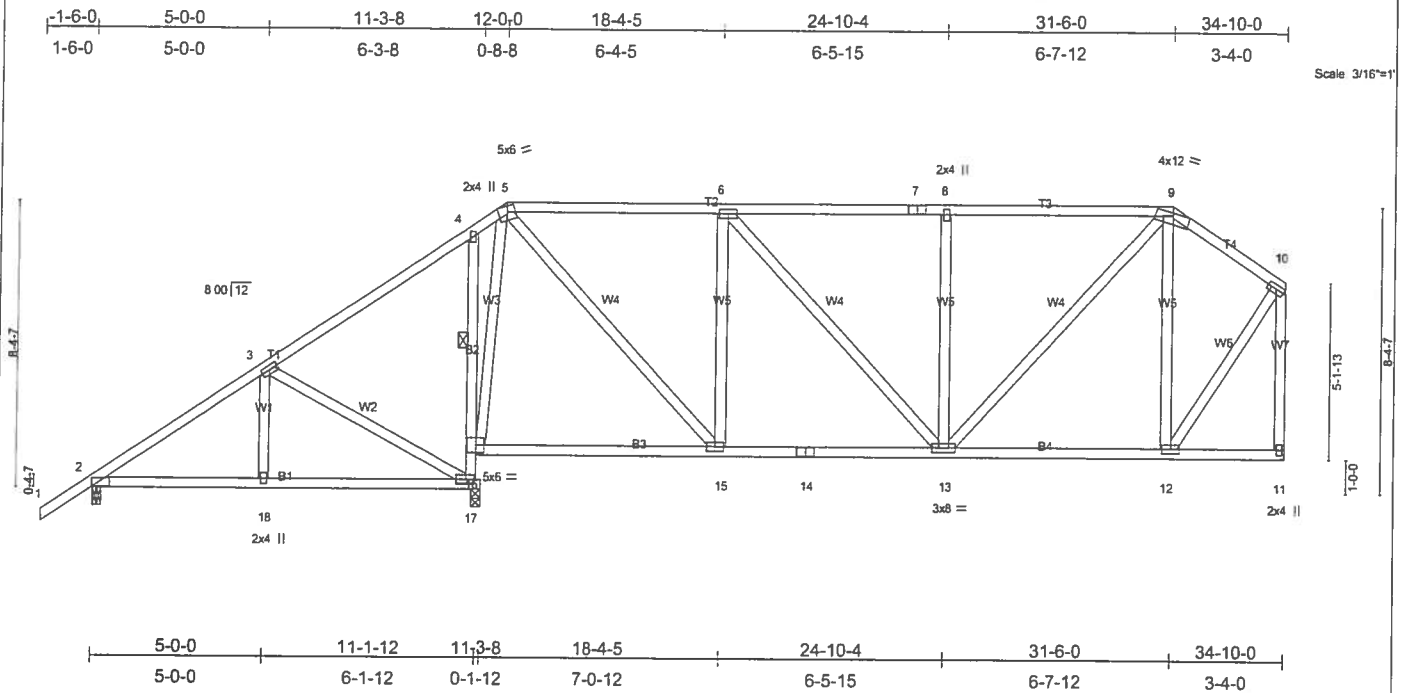


Plate Offsets (X,Y): [2-0-3-9,0-1-8]

| LOADING (psf) | SPACING              | CSI      | DEFL     | in (loc)    | l/defl | L/d | PLATES | GRIP    |
|---------------|----------------------|----------|----------|-------------|--------|-----|--------|---------|
| TCLL 20.0     | 2-0-0                | TC 0.52  | Vert(LL) | 0.06 17-18  | >999   | 240 | MT20   | 244/190 |
| TCDL 7.0      | Plates Increase 1.25 | BC 0.52  | Vert(TL) | -0.10 12-13 | >999   | 180 |        |         |
| BCLL 10.0     | Lumber Increase 1.25 | WB 0.84  | Horz(TL) | 0.01 11     | n/a    | n/a |        |         |
| BCDL 5.0      | Rep Stress Incr YES  | (Matrix) |          |             |        |     |        |         |
|               | Code FBC2004/TPI2002 |          |          |             |        |     |        |         |

Weight: 233 lb

**LUMBER**

TOP CHORD 2 X 4 SYP No.2  
 BOT CHORD 2 X 4 SYP No.2 \*Except\*  
 B2 2 X 4 SYP No.3  
 WEBS 2 X 4 SYP No.3

**BRACING**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:  
 6-0-0 oc bracing: 11-12.  
 1 Row at midpt 4-16

**REACTIONS**

(lb/size) 2=468/0-3-0, 17=1567/0-3-8, 11=957/Mechanical  
 Max Horz 17=365(load case 5)  
 Max Uplift 2=322(load case 5), 17=-751(load case 4), 11=-412(load case 3)  
 Max Grav 2=469(load case 9), 17=1567(load case 1), 11=968(load case 10)

**FORCES (lb) - Maximum Compression/Maximum Tension**

TOP CHORD 1-2=0/44, 2-3=-434/358, 3-4=-63/205, 4-5=0/149, 5-6=-694/429, 6-7=-814/464, 7-8=-814/464, 8-9=-814/464, 9-10=-529/248,  
 10-11=-939/416  
 BOT CHORD 2-18=-155/303, 17-18=-155/303, 16-17=-1261/521, 4-16=-208/255, 15-16=-108/73, 14-15=-366/694, 13-14=-366/694, 12-13=-178/411,  
 11-12=-5/6  
 WEBS 3-18=-222/186, 3-17=-454/492, 5-16=-975/498, 5-15=-392/944, 6-15=-498/338, 6-13=-52/193, 8-13=-366/315, 9-13=-334/589,  
 9-12=-450/307, 10-12=-329/743

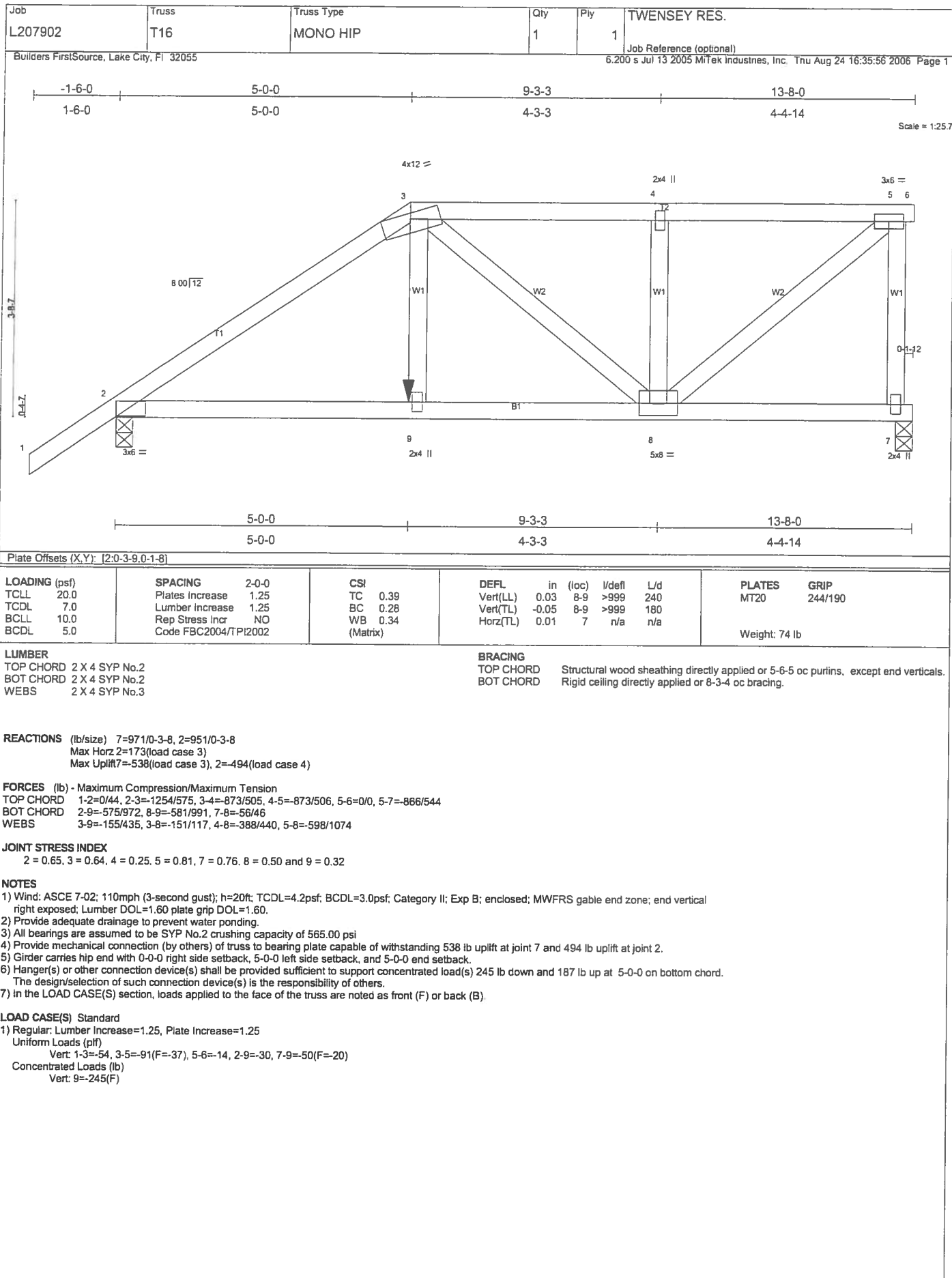
**JOINT STRESS INDEX**

2 = 0.34, 3 = 0.43, 4 = 0.50, 5 = 0.46, 6 = 0.38, 7 = 0.27, 8 = 0.34, 9 = 0.75, 10 = 0.58, 11 = 0.34, 12 = 0.57, 13 = 0.59, 14 = 0.31, 15 = 0.63, 16 = 0.72, 17 = 0.68 and 18 = 0.34

**NOTES**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; porch left exposed; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are 3x6 MT20 unless otherwise indicated.
- 5) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 322 lb uplift at joint 2, 751 lb uplift at joint 17 and 412 lb uplift at joint 11.

LOAD CASE(S) Standard



|                |              |                        |          |          |                                          |
|----------------|--------------|------------------------|----------|----------|------------------------------------------|
| Job<br>L207902 | Truss<br>T17 | Truss Type<br>MONO HIP | Qty<br>1 | Ply<br>1 | TWENSEY RES.<br>Job Reference (optional) |
|----------------|--------------|------------------------|----------|----------|------------------------------------------|

Builders FirstSource, Lake City, FL 32055

6.200 s Jul 13 2005 MiTek Industries, Inc. Thu Aug 24 16:35:57 2006 Page 1

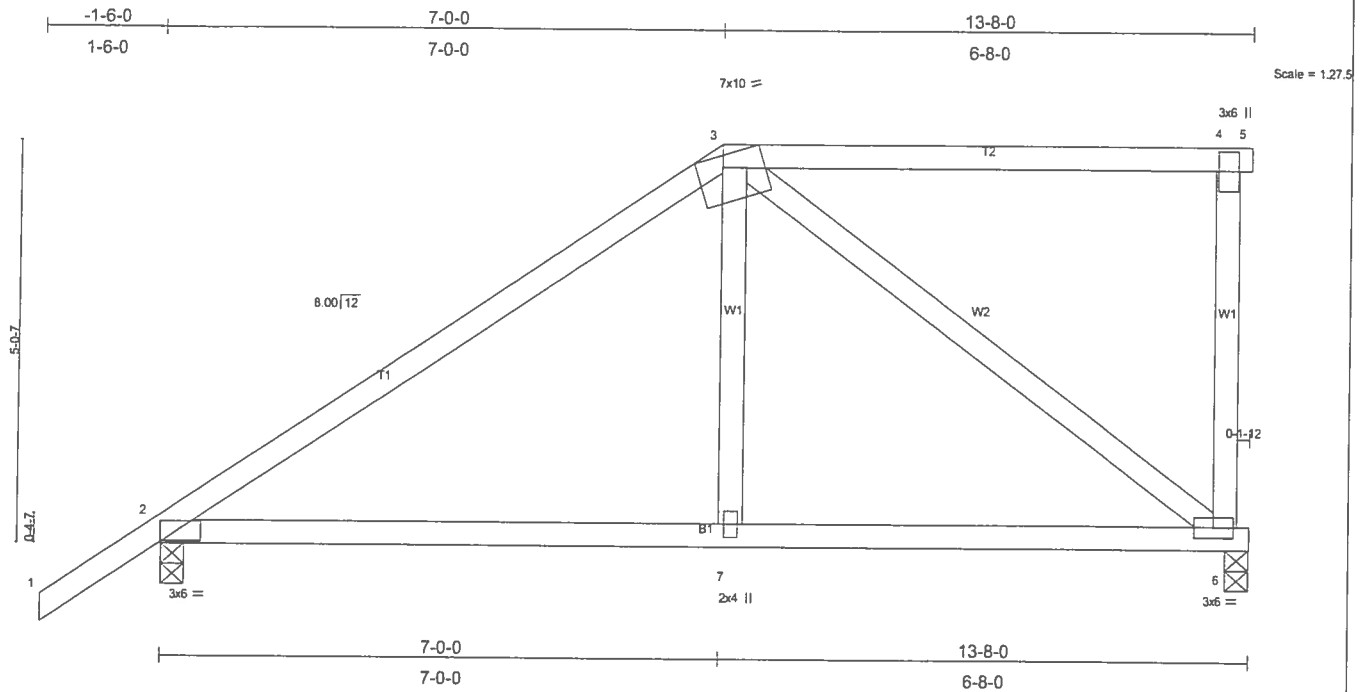


Plate Offsets (X,Y): [2-0-3-9, 0-1-8], [3-0-4-0, Edge]

| LOADING (psf) | SPACING              | CSI      | DEFL                        | PLATES | GRIP          |
|---------------|----------------------|----------|-----------------------------|--------|---------------|
| TCLL 20.0     | 2-0-0                | TC 0.48  | in (loc) l/defl L/d         | MT20   | 244/190       |
| TCDL 7.0      | Plates Increase 1.25 | BC 0.36  | Vert(LL) -0.08 2-7 >999 240 |        |               |
| BCLL 10.0     | Lumber Increase 1.25 | WB 0.57  | Vert(TL) -0.14 2-7 >999 180 |        |               |
| BCDL 5.0      | Rep Stress Incr YES  | (Matrix) | Horz(TL) 0.01 6 n/a n/a     |        |               |
|               | Code FBC2004/TP12002 |          |                             |        | Weight: 70 lb |

**LUMBER**

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

**BRACING**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS**

(lb/size) 6=554/0-3-8, 2=650/0-3-8  
 Max Horz 2=232(load case 4)  
 Max Uplift 6=220(load case 4), 2=269(load case 5)

**FORCES**

(lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=0/44, 2-3=-651/243, 3-4=-34/113, 4-5=0/0, 4-6=-153/169  
 BOT CHORD 2-7=-219/460, 6-7=-218/467  
 WEBS 3-7=0/235, 3-6=-540/225

**JOINT STRESS INDEX**

2 = 0.62, 3 = 0.72, 4 = 0.45, 6 = 0.38 and 7 = 0.17

**NOTES**

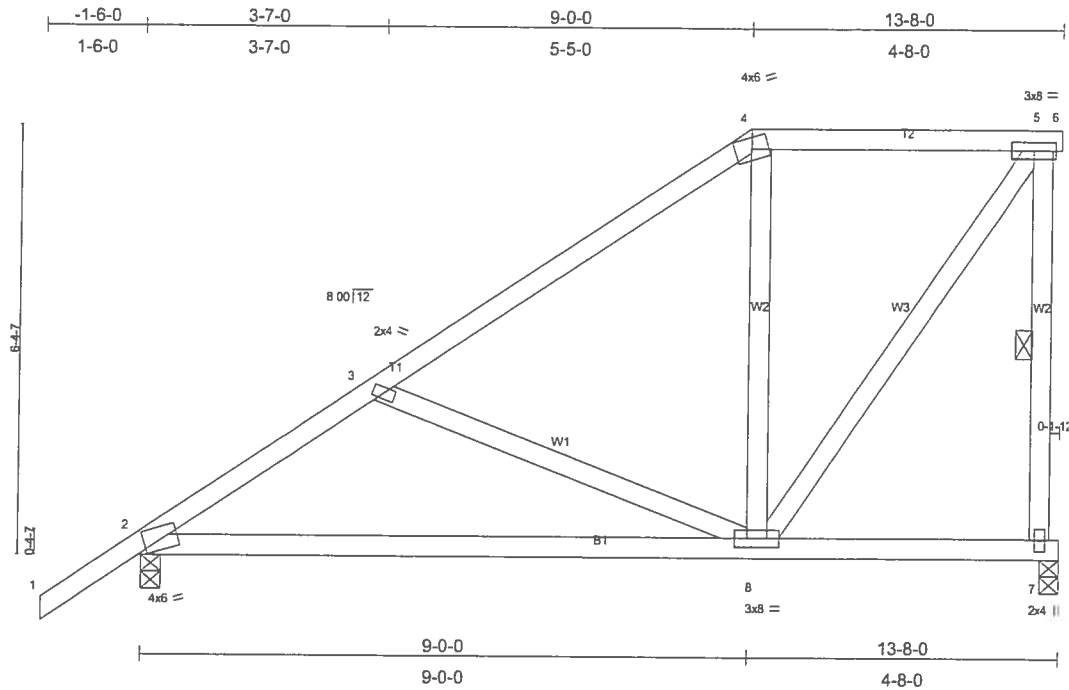
- 1) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; end vertical right exposed; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
- 2) Provide adequate drainage to prevent water ponding.
- 3) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 220 lb uplift at joint 6 and 269 lb uplift at joint 2.

LOAD CASE(S) Standard

|                |              |                        |          |          |                                          |
|----------------|--------------|------------------------|----------|----------|------------------------------------------|
| Job<br>L207902 | Truss<br>T18 | Truss Type<br>MONO HIP | Qty<br>1 | Ply<br>1 | TWENSEY RES.<br>Job Reference (optional) |
|----------------|--------------|------------------------|----------|----------|------------------------------------------|

Builders FirstSource, Lake City, FL 32055

6.200 s Jul 13 2005 MiTek Industries, Inc. Thu Aug 24 16:35:59 2006 Page 1



Scale = 1:32.7

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

|                      |                      |            |                             |               |             |
|----------------------|----------------------|------------|-----------------------------|---------------|-------------|
| <b>LOADING (psf)</b> | <b>SPACING</b>       | <b>CSI</b> | <b>DEFL</b>                 | <b>PLATES</b> | <b>GRIP</b> |
| TCLL 20.0            | 2-0-0                | TC 0.29    | in (loc) l/defl L/d         | MT20          | 244/190     |
| TCDL 7.0             | Plates Increase 1.25 | BC 0.32    | Vert(LL) -0.12 2-8 >999 240 |               |             |
| BCLL 10.0            | Lumber Increase 1.25 | WB 0.19    | Vert(TL) -0.22 2-8 >732 180 |               |             |
| BCDL 5.0             | Rep Stress Incr YES  | (Matrix)   | Horz(TL) 0.01 7 n/a n/a     |               |             |
|                      | Code FBC2004/TPI2002 |            |                             |               |             |
|                      |                      |            |                             | Weight: 83 lb |             |

**LUMBER**

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

**BRACING**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 WEBS 1 Row at midpt 5-7

**REACTIONS**

(lb/size) 7=554/0-3-8, 2=650/0-3-8  
 Max Horz 2=293(load case 4)  
 Max Uplift 7=221(load case 4), 2=268(load case 5)

**FORCES**

(lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=0/44, 2-3=701/308, 3-4=453/203, 4-5=305/241, 5-6=0/0, 5-7=527/248  
 BOT CHORD 2-8=279/570, 7-8=63/123  
 WEBS 3-8=284/253, 4-8=88/164, 5-8=195/523

**JOINT STRESS INDEX**

2 = 0.77, 3 = 0.14, 4 = 0.52, 5 = 0.84, 7 = 0.85 and 8 = 0.54

**NOTES**

- 1) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; end vertical 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) Provide adequate drainage to prevent water ponding.
- 3) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 221 lb uplift at joint 7 and 268 lb uplift at joint 2.

LOAD CASE(S) Standard

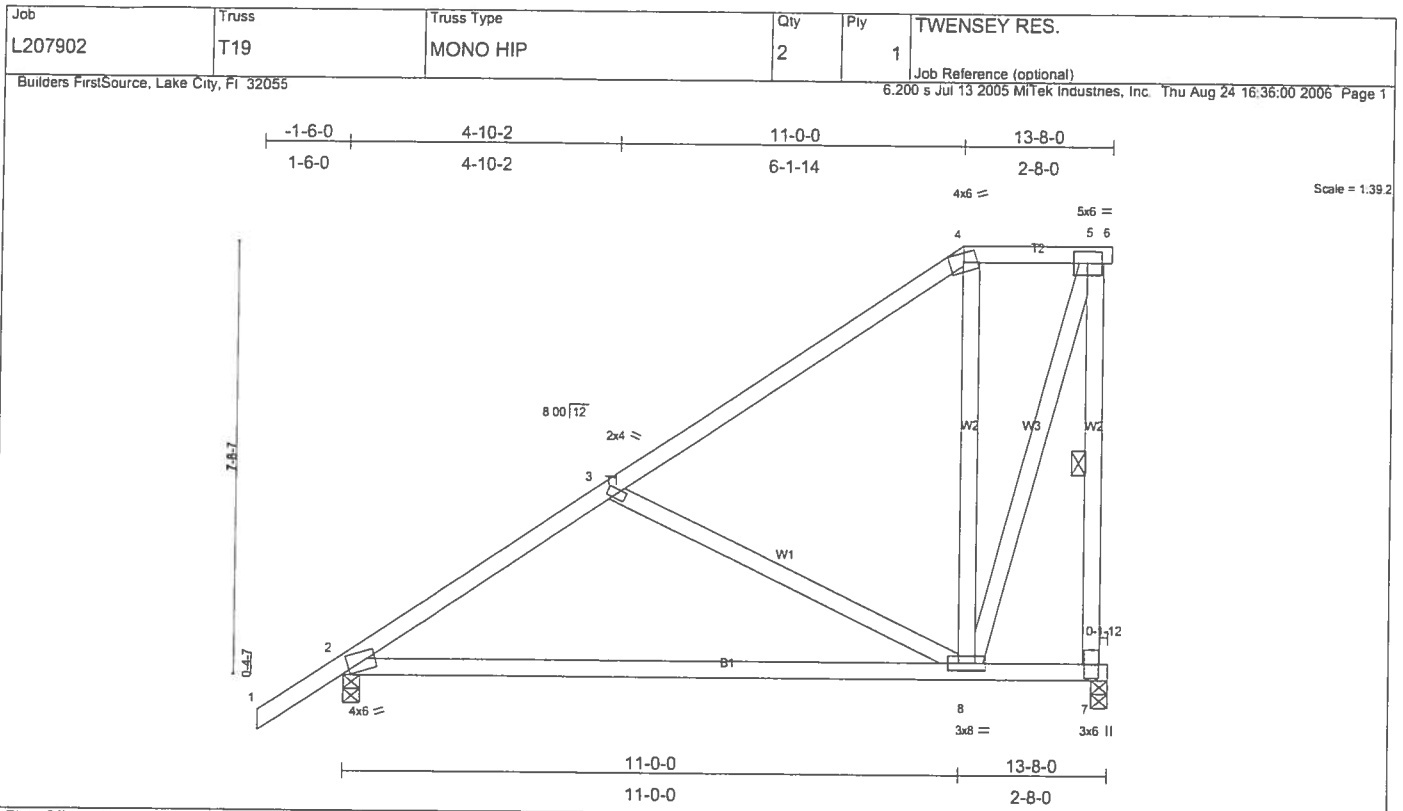


Plate Offsets (X,Y): [2:0-1-5,Edge]

| LOADING (psf) | SPACING              | 2-0-0 | CSI      | DEFL     | in    | (loc) | I/defl | L/d | PLATES        | GRIP    |
|---------------|----------------------|-------|----------|----------|-------|-------|--------|-----|---------------|---------|
| TCLL 20.0     | Plates Increase      | 1.25  | TC 0.39  | Vert(LL) | -0.27 | 2-8   | >590   | 240 | MT20          | 244/190 |
| TCDL 7.0      | Lumber Increase      | 1.25  | BC 0.53  | Vert(TL) | -0.47 | 2-8   | >338   | 180 |               |         |
| BCLL 10.0     | Rep Stress Incr      | YES   | WB 0.32  | Horz(TL) | 0.01  | 7     | n/a    | n/a |               |         |
| BCDL 5.0      | Code FBC2004/TPI2002 |       | (Matrix) |          |       |       |        |     |               |         |
|               |                      |       |          |          |       |       |        |     | Weight: 89 lb |         |

**LUMBER**

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

**BRACING**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
 WEBS 1 Row at midpt 5-7

**REACTIONS** (lb/size) 7=554/0-3-8, 2=650/0-3-8  
 Max Horz 2=353(load case 4)  
 Max Uplift 7=-224(load case 5), 2=-260(load case 5)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=0/44, 2-3=-632/283, 3-4=-334/167, 4-5=-192/220, 5-6=0/0, 5-7=-655/268  
 BOT CHORD 2-8=-267/508, 7-8=-71/156  
 WEBS 3-8=-350/306, 4-8=-153/218, 5-8=-250/674

**JOINT STRESS INDEX**

2 = 0.87, 3 = 0.16, 4 = 0.67, 5 = 0.57, 7 = 0.48 and 8 = 0.87

**NOTES**

- 1) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCCL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; end vertical right exposed; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
- 2) Provide adequate drainage to prevent water ponding.
- 3) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 224 lb uplift at joint 7 and 260 lb uplift at joint 2.

**LOAD CASE(S)** Standard

|         |       |            |     |     |              |
|---------|-------|------------|-----|-----|--------------|
| Job     | Truss | Truss Type | Qty | Ply | TWENSEY RES. |
| L207902 | T20   | MONO HIP   | 2   | 1   |              |

Builders FirstSource, Lake City, FL 32055

6.200 s Jul 13 2005 Mitek Industries, Inc. Thu Aug 24 16:36:02 2006 Page 1

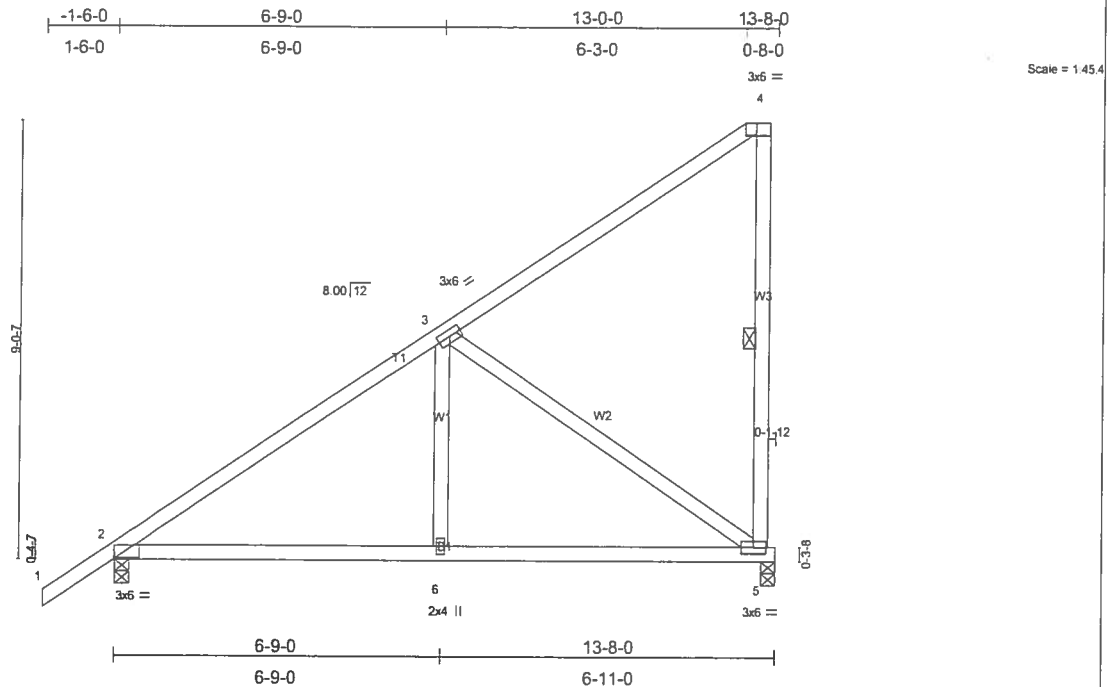


Plate Offsets (X,Y): [2:0-3-9,0-1-8], [4:0-2-12,Edge]

| LOADING (psf) | SPACING              | 2-0-0 | CSI      | DEFL     | in    | (loc) | l/defl | L/d | PLATES        | GRIP    |
|---------------|----------------------|-------|----------|----------|-------|-------|--------|-----|---------------|---------|
| TCLL 20.0     | Plates Increase      | 1.25  | TC 0.36  | Vert(LL) | -0.06 | 2-6   | >999   | 240 | MT20          | 244/190 |
| TCDL 7.0      | Lumber Increase      | 1.25  | BC 0.35  | Vert(TL) | -0.10 | 2-6   | >999   | 180 |               |         |
| BCLL 10.0     | Rep Stress Incr      | YES   | WB 0.63  | Horz(TL) | 0.01  | 5     | n/a    | n/a |               |         |
| BCDL 5.0      | Code FBC2004/TPI2002 |       | (Matrix) |          |       |       |        |     |               |         |
|               |                      |       |          |          |       |       |        |     | Weight: 78 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" oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10'-0" oc bracing.  
 WEBS 1 Row at midpt 4-5

**REACTIONS** (lb/size) 5=550/0-3-8, 2=650/0-3-8  
 Max Horz 2=471(load case 5)  
 Max Uplift 5=340(load case 5), 2=172(load case 5)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=0/44, 2-3=672/0, 3-4=132/64, 4-5=144/157  
 BOT CHORD 2-6=297/481, 5-6=297/481  
 WEBS 3-6=0/233, 3-5=562/345

**JOINT STRESS INDEX**

2 = 0.40, 3 = 0.19, 4 = 0.45, 5 = 0.34 and 6 = 0.17

**NOTES**

- 1) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
- 2) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- 3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 340 lb uplift at joint 5 and 172 lb uplift at joint 2.

**LOAD CASE(S)** Standard

|                |              |                       |          |          |                                          |
|----------------|--------------|-----------------------|----------|----------|------------------------------------------|
| Job<br>L207902 | Truss<br>T21 | Truss Type<br>SPECIAL | Qty<br>1 | Ply<br>1 | TWENSEY RES.<br>Job Reference (optional) |
|----------------|--------------|-----------------------|----------|----------|------------------------------------------|

Builders FirstSource, Lake City, FL 32055

6.200 s Jul 13 2005 MiTek Industries, Inc. Thu Aug 24 16:36:04 2006 Page 1

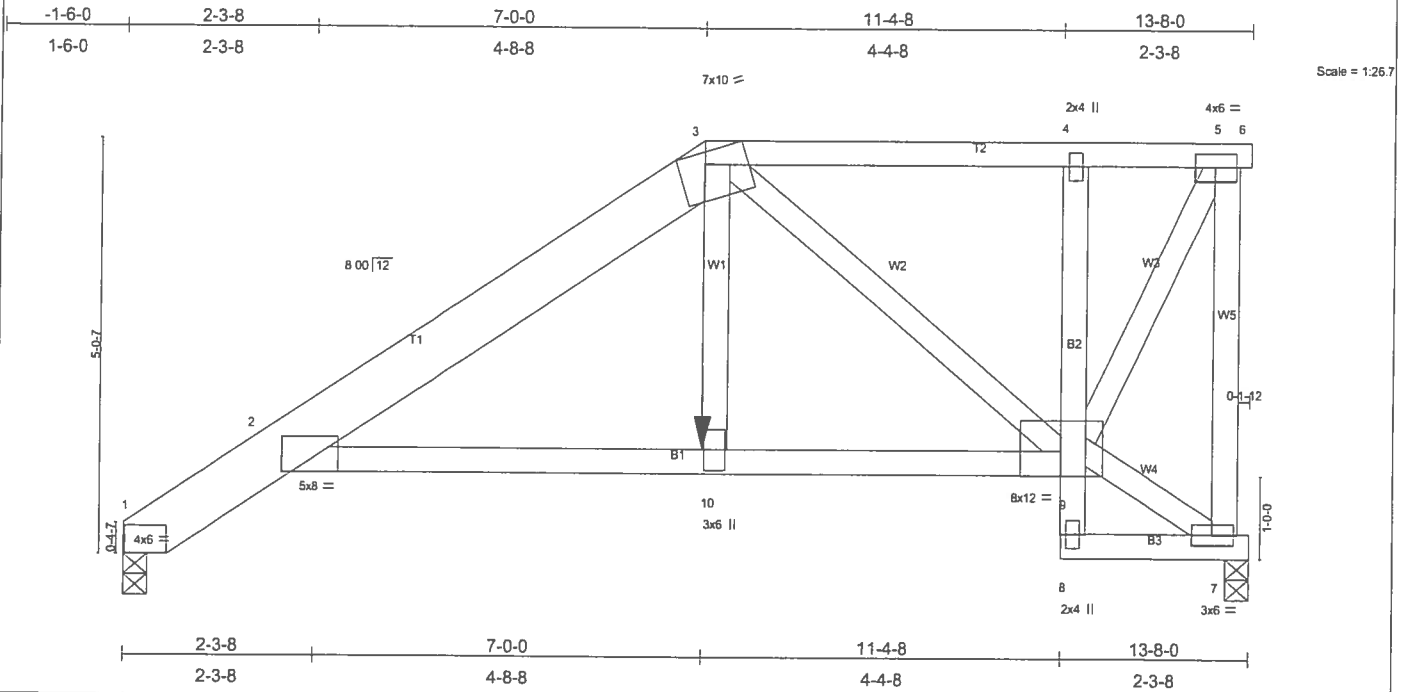


Plate Offsets (X,Y): [3:0-4-0, Edge], [7:12-8-7, 0-0-8]

| LOADING (psf) | SPACING              | 2-0-0 | CSI      | DEFL     | in    | (loc) | l/defl | L/d | PLATES        | GRIP    |
|---------------|----------------------|-------|----------|----------|-------|-------|--------|-----|---------------|---------|
| TCLL 20.0     | Plates Increase      | 1.25  | TC 0.94  | Vert(LL) | -0.14 | 2-10  | >999   | 240 | MT20          | 244/190 |
| TCDL 7.0      | Lumber Increase      | 1.25  | BC 0.59  | Vert(TL) | -0.23 | 2-10  | >680   | 180 |               |         |
| BCLL 10.0     | Rep Stress Incr      | NO    | WB 0.58  | Horz(TL) | 0.15  | 7     | n/a    | n/a |               |         |
| BCDL 5.0      | Code FBC2004/TPI2002 |       | (Matrix) |          |       |       |        |     |               |         |
|               |                      |       |          |          |       |       |        |     | Weight: 88 lb |         |

**LUMBER**

TOP CHORD 2 X 8 SYP No.10 "Except"  
T2 2 X 4 SYP No.2  
BOT CHORD 2 X 4 SYP No.2 "Except"  
B2 2 X 4 SYP No.3  
WEBS 2 X 4 SYP No.3

**BRACING**

TOP CHORD Structural wood sheathing directly applied or 5-4-1 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

**REACTIONS**

(lb/size) 1=939/0-3-8, 7=1377/0-3-8  
Max Horz 1=386(load case 4)  
Max Uplift 1=288(load case 4), 7=584(load case 2)

**FORCES**

(lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=448/0, 2-3=1596/518, 3-4=646/210, 4-5=600/257, 5-6=0/0, 5-7=1312/558  
BOT CHORD 2-10=747/1394, 9-10=758/1429, 8-9=7/46, 4-9=320/259, 7-8=24/0  
WEBS 3-10=290/868, 3-9=1013/504, 7-9=0/28, 5-9=570/1323

**JOINT STRESS INDEX**

2 = 0.52, 3 = 0.28, 4 = 0.71, 5 = 0.78, 7 = 0.45, 7 = 0.00, 8 = 0.08, 9 = 0.62 and 10 = 0.28

**NOTES**

- 1) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone; Lumber DOL=1.60 plate grip DOL=1.60.
- 2) Provide adequate drainage to prevent water ponding.
- 3) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- 4) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 288 lb uplift at joint 1 and 584 lb uplift at joint 7.
- 6) Girder carries tie-in span(s): 4-7-9 from 2-1-0 to 7-0-0; 4-7-9 from 7-0-0 to 11-4-8; 4-6-7 from 7-0-0 to 11-4-8
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 539 lb down and 256 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).

**LOAD CASE(S)** Standard

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

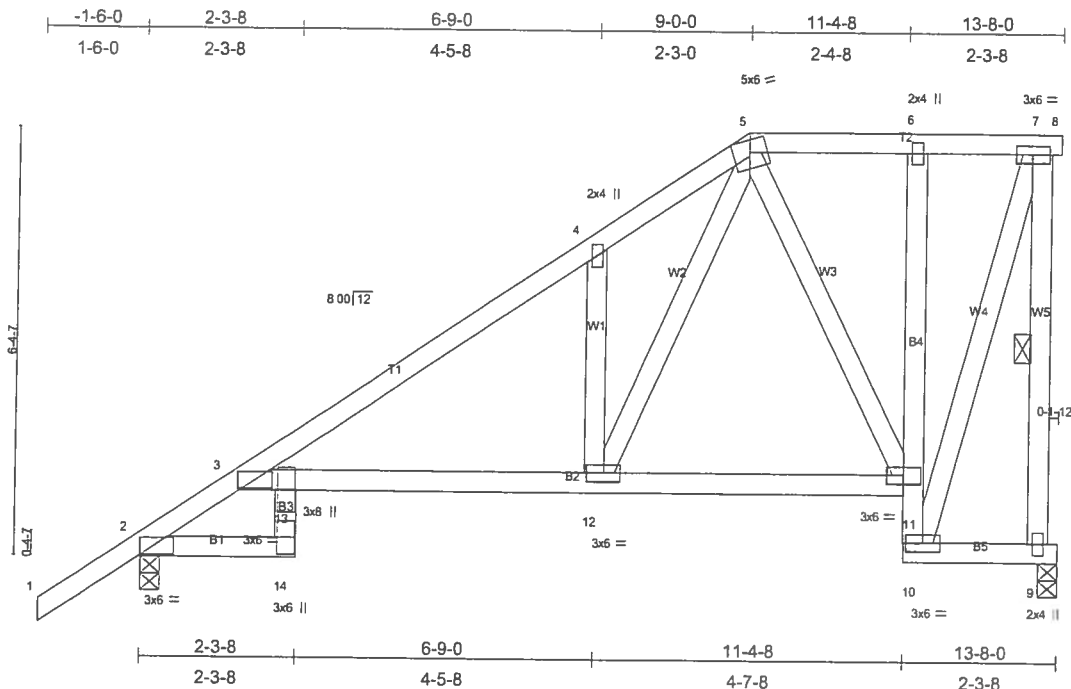
Uniform Loads (plf)

Vert: 1-2=-65, 2-3=-54, 3-4=-109(F=-55), 4-5=-121(F=-67), 5-6=-81(F=-67), 2-10=-30, 9-10=-83(F=-53), 7-8=-67(F=-38)

Concentrated Loads (lb)

Vert: 10=539(F)

|                                           |              |                       |                                                                            |          |                                          |
|-------------------------------------------|--------------|-----------------------|----------------------------------------------------------------------------|----------|------------------------------------------|
| Job<br>L207902                            | Truss<br>T22 | Truss Type<br>SPECIAL | Qty<br>1                                                                   | Ply<br>1 | TWENSEY RES.<br>Job Reference (optional) |
| Builders FirstSource, Lake City, FL 32055 |              |                       | 6.200 s Jul 13 2005 MiTek Industries, Inc. Thu Aug 24 16:36:06 2006 Page 1 |          |                                          |



Scale = 1/32"

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

| LOADING (psf) | SPACING              | CSI      | DEFL                          | PLATES        | GRIP    |
|---------------|----------------------|----------|-------------------------------|---------------|---------|
| TCLL 20.0     | 2-0-0                | TC 0.41  | in (loc) l/defl L/d           | MT20          | 244/190 |
| TCDL 7.0      | Plates Increase 1.25 | BC 0.87  | Vert(LL) -0.20 12-13 >794 240 |               |         |
| BCLL 10.0     | Lumber Increase 1.25 | WB 0.24  | Vert(TL) -0.32 12-13 >493 180 |               |         |
| BCDL 5.0      | Rep Stress Incr YES  | (Matrix) | Horz(TL) 0.17 9 n/a n/a       |               |         |
|               | Code FBC2004/TPI2002 |          |                               | Weight: 95 lb |         |

**LUMBER**

TOP CHORD 2 X 4 SYP No.2  
 BOT CHORD 2 X 4 SYP No.2 \*Except\*  
 B4 2 X 4 SYP No.3  
 WEBS 2 X 4 SYP No.3

**BRACING**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
 WEBS 1 Row at midpt 7-9

**REACTIONS**

(lb/size) 9=554/0-3-8, 2=650/0-3-8  
 Max Horz 2=341(load case 5)  
 Max Uplift 9=220(load case 5), 2=236(load case 5)

**FORCES (lb) - Maximum Compression/Maximum Tension**

TOP CHORD 1-2=0/44, 2-3=719/103, 3-4=770/231, 4-5=822/416, 5-6=169/85, 6-7=153/81, 7-8=0/0, 7-9=551/294  
 BOT CHORD 2-14=-255/440, 13-14=-26/109, 3-13=90/176, 12-13=345/616, 11-12=-179/316, 10-11=-431/255, 6-11=-117/106, 9-10=-3/5  
 WEBS 4-12=-350/322, 5-12=-419/740, 5-11=-331/210, 7-10=-267/506

**JOINT STRESS INDEX**

2 = 0.54, 3 = 0.43, 4 = 0.17, 5 = 0.41, 6 = 0.34, 7 = 0.49, 9 = 0.22, 10 = 0.49, 11 = 0.55, 12 = 0.65, 13 = 0.96 and 14 = 0.43

**NOTES**

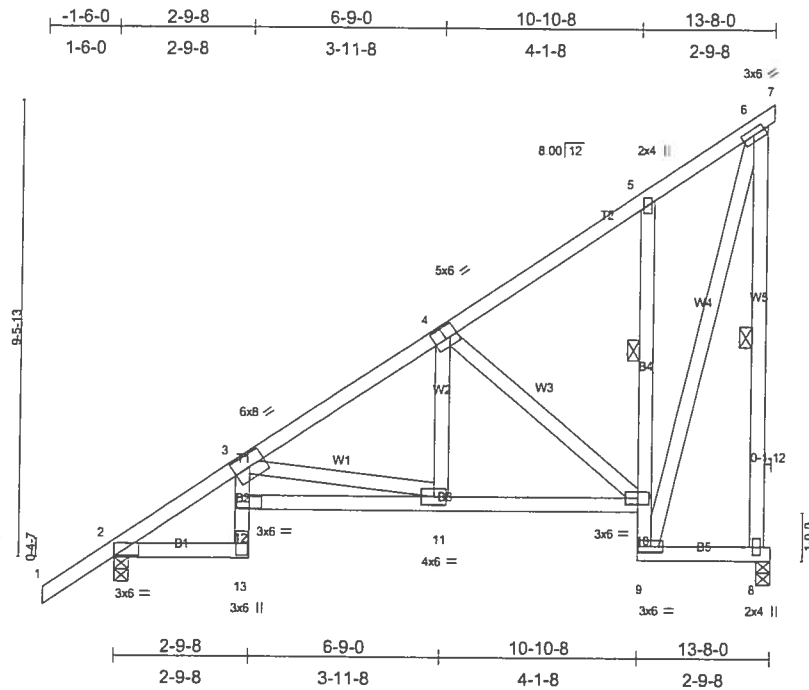
- 1) Wind: ASCE 7-02: 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
- 2) Provide adequate drainage to prevent water ponding.
- 3) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 220 lb uplift at joint 9 and 236 lb uplift at joint 2.

LOAD CASE(S) Standard



|                                           |              |                       |                          |          |              |
|-------------------------------------------|--------------|-----------------------|--------------------------|----------|--------------|
| Job<br>L207902                            | Truss<br>T23 | Truss Type<br>SPECIAL | Qty<br>7                 | Ply<br>1 | TWENSEY RES. |
| Builders FirstSource, Lake City, FL 32055 |              |                       | Job Reference (optional) |          |              |

6.200 s Jul 13 2005 MiTek Industries, Inc. Thu Aug 24 16:36:07 2006 Page 1



Scale = 1/4\"

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

| LOADING (psf) | SPACING              | CSI      | DEFL     | in (loc)    | I/defl | L/d | PLATES         | GRIP    |
|---------------|----------------------|----------|----------|-------------|--------|-----|----------------|---------|
| TCDL 20.0     | Plates Increase 1.25 | TC 0.26  | Vert(LL) | 0.08 11-12  | >999   | 240 | MT20           | 244/190 |
| TCDL 7.0      | Lumber Increase 1.25 | BC 0.86  | Vert(TL) | -0.12 11-12 | >999   | 180 |                |         |
| BCLL 10.0     | Rep Stress Incr YES  | WB 0.55  | Horz(TL) | 0.10 8      | 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 \*Except\*  
 B4 2 X 4 SYP No.3  
 WEBS 2 X 4 SYP No.3

**BRACING**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. Except:  
 1 Row at midpt 5-10  
 WEBS 1 Row at midpt 6-8

**REACTIONS**

(lb/size) 8=554/0-3-8, 2=650/0-3-8  
 Max Horz 2=483(load case 5)  
 Max Uplift 8=356(load case 5), 2=165(load case 5)

**FORCES (lb) - Maximum Compression/Maximum Tension**

TOP CHORD 1-2=0/44, 2-3=-837/41, 3-4=-724/93, 4-5=-273/0, 5-6=-221/83, 6-7=-2/0, 6-8=-542/371  
 BOT CHORD 2-13=-372/597, 12-13=-30/117, 3-12=0/135, 11-12=-765/1226, 10-11=-349/561, 9-10=-518/363, 5-10=-159/189, 8-9=-2/3  
 WEBS 3-11=-680/425, 4-11=-95/330, 4-10=-507/315, 6-9=-376/595

**JOINT STRESS INDEX**

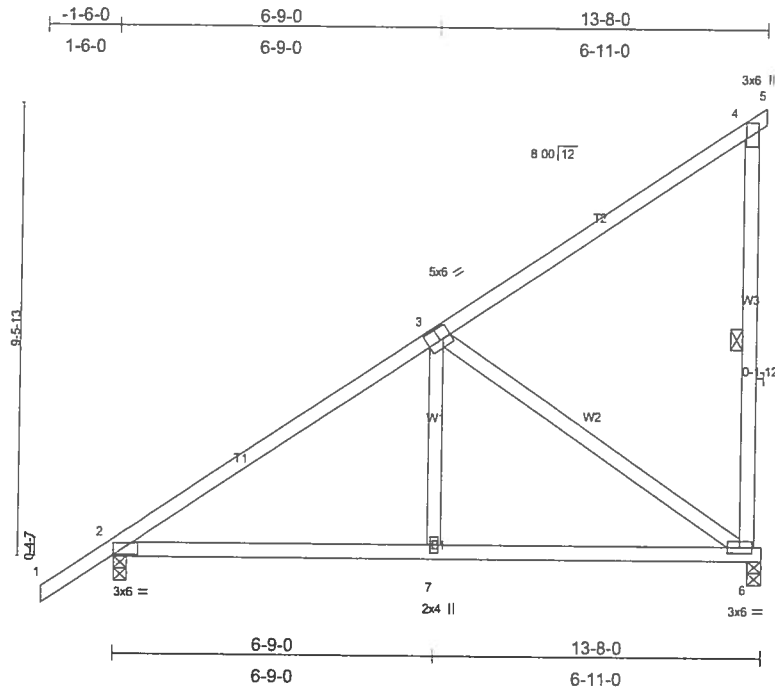
2 = 0.49, 3 = 0.83, 4 = 0.31, 5 = 0.46, 6 = 0.45, 8 = 0.21, 9 = 0.59, 10 = 0.47, 11 = 0.19, 12 = 0.61 and 13 = 0.64

**NOTES**

- 1) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
- 2) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- 3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 356 lb uplift at joint 8 and 165 lb uplift at joint 2.

LOAD CASE(S) Standard

|                                                                            |       |            |     |     |                          |
|----------------------------------------------------------------------------|-------|------------|-----|-----|--------------------------|
| Job                                                                        | Truss | Truss Type | Qty | Ply | TWENSEY RES.             |
| L207902                                                                    | T24   | MONO TRUSS | 4   | 1   |                          |
| Builders FirstSource, Lake City, FL 32055                                  |       |            |     |     | Job Reference (optional) |
| 6.200 s Jul 13 2005 MiTek Industries, Inc. Thu Aug 24 16:36:09 2006 Page 1 |       |            |     |     |                          |



Scale = 1/46.2

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

| LOADING (psf) | SPACING              | CSI      | DEFL     | in (loc) | l/defl | L/d  | PLATES        | GRIP    |
|---------------|----------------------|----------|----------|----------|--------|------|---------------|---------|
| TCLL 20.0     | 2-0-0                | TC 0.36  | Vert(LL) | -0.06    | 2-7    | >999 | MT20          | 244/190 |
| TCDL 7.0      | Plates Increase 1.25 | BC 0.35  | Vert(TL) | -0.10    | 2-7    | >999 |               |         |
| BCLL 10.0     | Lumber Increase 1.25 | WB 0.63  | Horz(TL) | 0.01     | 6      | n/a  |               |         |
| BCDL 5.0      | Rep Stress Incr YES  | (Matrix) |          |          |        |      |               |         |
|               | Code FBC2004/TPI2002 |          |          |          |        |      |               |         |
|               |                      |          |          |          |        |      | Weight: 79 lb |         |

**LUMBER**

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

**BRACING**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 WEBS 1 Row at midpt 4-6

**REACTIONS** (lb/size) 6=554/0-3-8, 2=650/0-3-8

Max Horz 2=483(load case 5)

Max Uplift 6=356(load case 5), 2=165(load case 5)

**FORCES** (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/44, 2-3=672/0, 3-4=134/65, 4-5=2/0, 4-6=149/174

BOT CHORD 2-7=297/482, 6-7=297/482

WEBS 3-7=0/233, 3-6=562/345

**JOINT STRESS INDEX**

2 = 0.39, 3 = 0.48, 4 = 0.32, 6 = 0.34 and 7 = 0.17

**NOTES**

- 1) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCCL=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) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- 3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 356 lb uplift at joint 6 and 165 lb uplift at joint 2.

LOAD CASE(S) Standard

|                                           |               |                      |                                                                                                        |          |              |
|-------------------------------------------|---------------|----------------------|--------------------------------------------------------------------------------------------------------|----------|--------------|
| Job<br>L207902                            | Truss<br>T25G | Truss Type<br>COMMON | Qty<br>1                                                                                               | Ply<br>1 | TWENSEY RES. |
| Builders FirstSource, Lake City, FL 32055 |               |                      | Job Reference (optional)<br>6.200 s Jul 13 2005 M/Tek Industries, Inc. Thu Aug 24 16:36:10 2006 Page 1 |          |              |

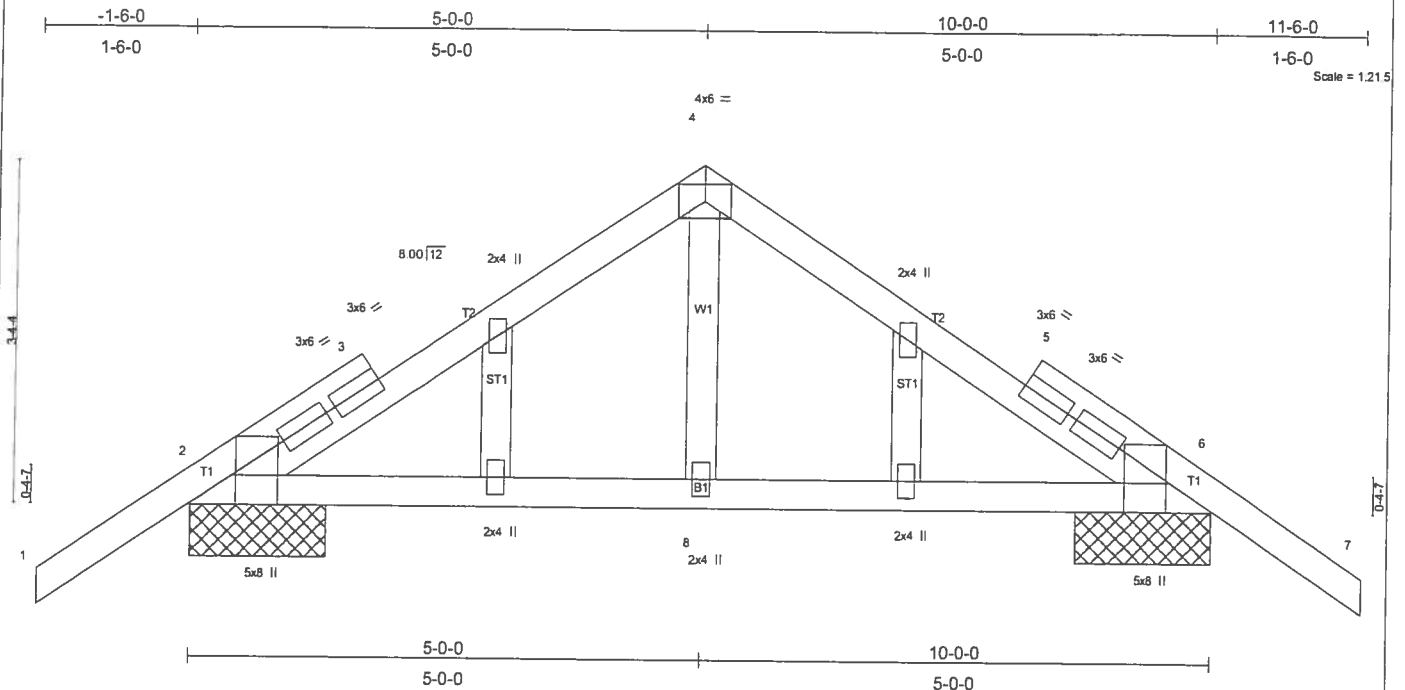


Plate Offsets (X,Y): [2:0-3-8,Edge], [6:0-3-8,Edge]

| LOADING (psf) | SPACING              | CSI      | DEFL     | in    | (loc) | I/defl | L/d | PLATES | GRIP          |
|---------------|----------------------|----------|----------|-------|-------|--------|-----|--------|---------------|
| TCLL 20.0     | Plates Increase 1.25 | TC 0.36  | Vert(LL) | -0.02 | 2-8   | >999   | 240 | MT20   | 244/190       |
| TCDL 7.0      | Lumber Increase 1.25 | BC 0.25  | Vert(TL) | -0.03 | 2-8   | >999   | 180 |        |               |
| BCLL 10.0     | Rep Stress Incr NO   | WB 0.06  | Horz(TL) | 0.01  | 6     | n/a    | n/a |        |               |
| BCDL 5.0      | Code FBC2004/TP12002 | (Matrix) |          |       |       |        |     |        |               |
|               |                      |          |          |       |       |        |     |        | Weight: 52 lb |

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

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

**REACTIONS** (lb/size) 2=784/1-4-0, 6=784/1-4-0  
 Max Horz 2=110/load case 4)  
 Max Uplift 2=347/load case 5), 6=347/load case 6)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=8/83, 2-3=-710/211, 3-4=-596/201, 4-5=-596/201, 5-6=-710/211, 6-7=-8/83  
 BOT CHORD 2-8=-86/496, 6-8=-86/496  
 WEBS 4-8=0/174

**JOINT STRESS INDEX**  
 2 = 0.51, 3 = 0.00, 3 = 0.35, 3 = 0.35, 4 = 0.50, 5 = 0.00, 5 = 0.35, 5 = 0.35, 6 = 0.51, 8 = 0.13, 9 = 0.00, 10 = 0.00, 11 = 0.00 and 12 = 0.00

#### NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCDL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see M/Tek "Standard Gable End Detail"
- 4) Gable studs spaced at 2-0-0 oc.
- 5) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 347 lb uplift at joint 2 and 347 lb uplift at joint 6.
- 7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

#### LOAD CASE(S) Standard

- 1) Regular: Lumber Increase=1.25, Plate Increase=1.25  
 Uniform Loads (plf)  
 Vert 1-4=-99(F=-45), 4-7=-99(F=-45), 2-6=-30

|                                           |              |                      |                                                                            |          |                                          |
|-------------------------------------------|--------------|----------------------|----------------------------------------------------------------------------|----------|------------------------------------------|
| Job<br>L207902                            | Truss<br>T26 | Truss Type<br>COMMON | Qty<br>1                                                                   | Ply<br>1 | TWENSEY RES.<br>Job Reference (optional) |
| Builders FirstSource, Lake City, FL 32055 |              |                      | 6.200 s Jul 13 2005 MiTek Industries, Inc. Thu Aug 24 16:36:12 2006 Page 1 |          |                                          |

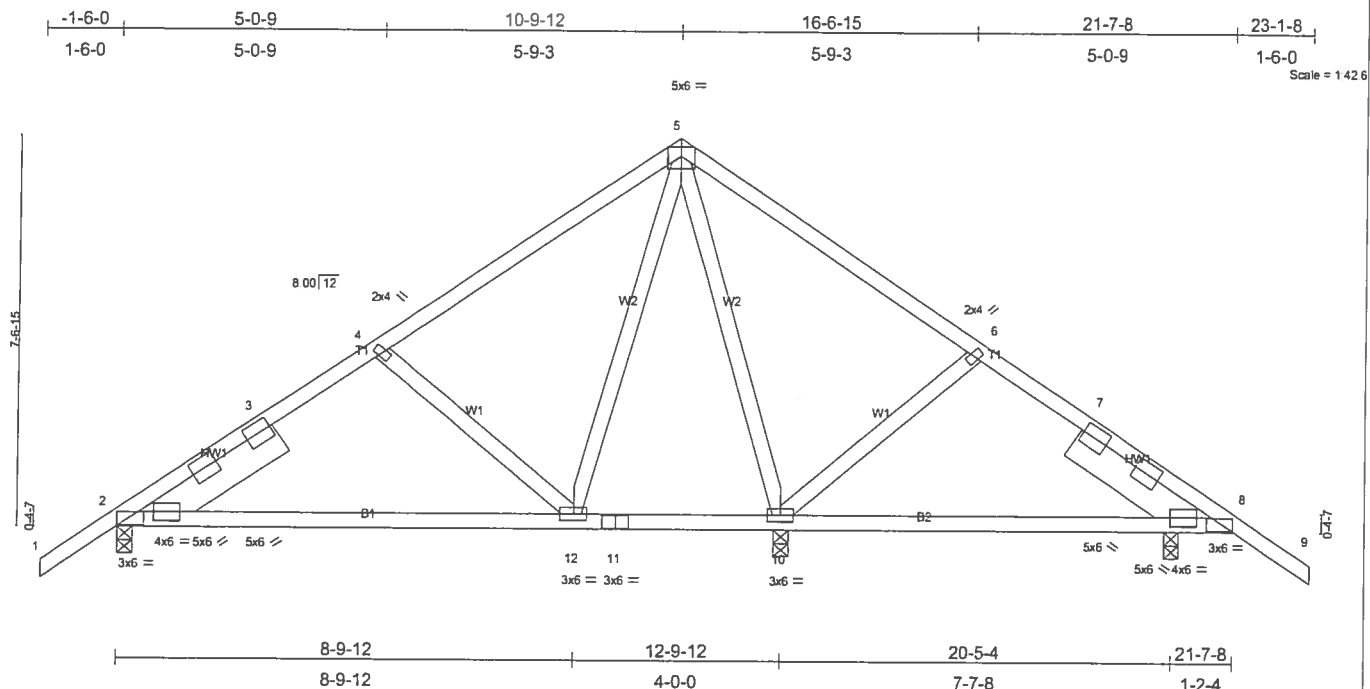


Plate Offsets (X,Y): [2:0-3-9:0-2-0], [2:0-1-2:0-0-2], [8:0-3-9:0-2-0], [8:0-0-0:0-0-0], [8:0-11-15:0-0-2]

| LOADING (psf) | SPACING              | 2-0-0 | CSI      | DEFL     | in   | (loc) | l/defl | L/d | PLATES         | GRIP    |
|---------------|----------------------|-------|----------|----------|------|-------|--------|-----|----------------|---------|
| TCLL 20.0     | Plates Increase      | 1.25  | TC 0.30  | Vert(LL) | 0.24 | 8-10  | >440   | 240 | MT20           | 244/190 |
| TCDL 7.0      | Lumber Increase      | 1.25  | BC 0.35  | Vert(TL) | 0.20 | 8-10  | >528   | 180 |                |         |
| BCLL 10.0     | Rep Stress Incr      | YES   | WB 0.60  | Horz(TL) | 0.01 | 8     | n/a    | n/a |                |         |
| BCDL 5.0      | Code FBC2004/TPI2002 |       | (Matrix) |          |      |       |        |     |                |         |
|               |                      |       |          |          |      |       |        |     | Weight: 132 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  
 SLIDER Left 2 X 8 SYP No.1D 3-0-10, Right 2 X 8 SYP No.1D 3-0-10

**BRACING**

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

**REACTIONS**

(lb/size) 2=598/0-3-8, 10=953/0-3-8, 8=419/0-3-8  
 Max Horz 2=-257(load case 3)  
 Max Uplift 2=-253(load case 5), 10=-421(load case 5), 8=322(load case 6)  
 Max Grav 2=598(load case 1), 10=953(load case 1), 8=432(load case 10)

**FORCES (lb) - Maximum Compression/Maximum Tension**

TOP CHORD 1-2=0/44, 2-3=-549/170, 3-4=-480/191, 4-5=-338/164, 5-6=-50/148, 6-7=-195/156, 7-8=-263/135, 8-9=0/44  
 BOT CHORD 2-12=-198/430, 11-12=-44/212, 10-11=-44/212, 8-10=-22/196  
 WEBS 4-12=-300/265, 5-12=-103/384, 5-10=-598/199, 6-10=-307/315

**JOINT STRESS INDEX**

2 = 0.65, 2 = 0.11, 2 = 0.12, 2 = 0.41, 3 = 0.00, 4 = 0.34, 5 = 0.60, 6 = 0.34, 7 = 0.00, 8 = 0.65, 8 = 0.11, 8 = 0.12, 8 = 0.41, 10 = 0.51, 11 = 0.45 and 12 = 0.51

**NOTES**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TC DL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; cantilever right exposed; porch 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.
- All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 253 lb uplift at joint 2, 421 lb uplift at joint 10 and 322 lb uplift at joint 8.

LOAD CASE(S) Standard

|                                           |               |                      |                                                                            |          |                                          |
|-------------------------------------------|---------------|----------------------|----------------------------------------------------------------------------|----------|------------------------------------------|
| Job<br>L207902                            | Truss<br>T26G | Truss Type<br>COMMON | Qty<br>1                                                                   | Ply<br>1 | TWENSEY RES.<br>Job Reference (optional) |
| Builders FirstSource, Lake City, FL 32055 |               |                      | 6.200 s Jul 13 2005 MiTek Industries, Inc. Thu Aug 24 16:36:14 2006 Page 1 |          |                                          |

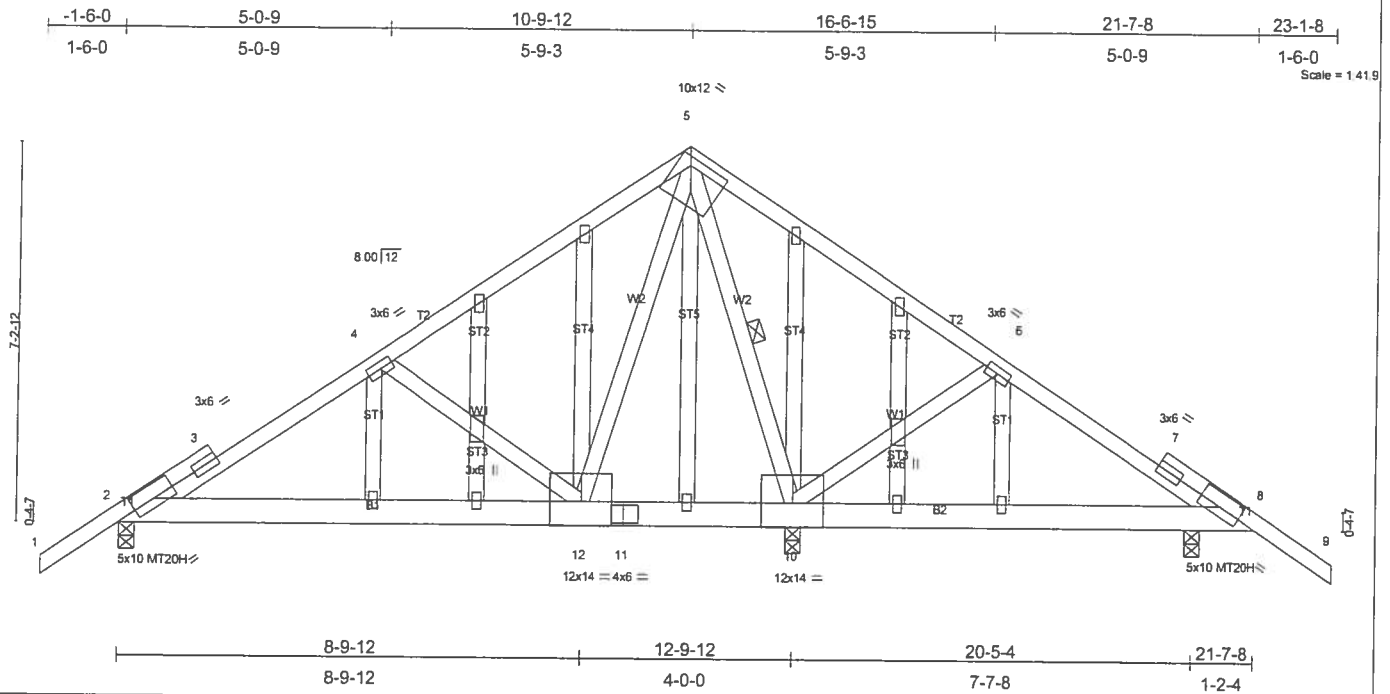


Plate Offsets (X,Y): [2:0-5-0-0-2-0], [5:0-9-0-0-1-12], [8:0-5-0-0-2-0], [11:0-2-12-0-2-0]

| LOADING (psf) | SPACING              | CSI      | DEFL                         | PLATES         | GRIP    |
|---------------|----------------------|----------|------------------------------|----------------|---------|
| TCLL 20.0     | 2-0-0                | TC 0.63  | in (loc) l/defl L/d          | MT20           | 244/190 |
| TCDL 7.0      | Plates Increase 1.25 | BC 0.24  | Vert(LL) 0.08 8-10 >999 240  | MT20H          | 187/143 |
| BCLL 10.0     | Lumber Increase 1.25 | WB 0.37  | Vert(TL) -0.11 2-12 >999 180 |                |         |
| BCDL 5.0      | Rep Stress Incr NO   | (Matrix) | Horz(TL) 0.01 8 n/a n/a      |                |         |
|               | Code FBC2004/TP12002 |          |                              |                |         |
|               |                      |          |                              | Weight: 174 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  
 OTHERS 2 X 4 SYP No.3

**BRACING**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
 WEBS 1 Row at midpt 5-10

**REACTIONS**

(lb/size) 2=955/0-3-8, 8=600/0-3-8, 10=1893/0-3-8  
 Max Horz 2=-242(load case 3)  
 Max Uplift 2=513(load case 5), 8=461(load case 6), 10=1016(load case 5)  
 Max Grav 2=965(load case 9), 8=630(load case 10), 10=1893(load case 1)

**FORCES (lb) - Maximum Compression/Maximum Tension**

TOP CHORD 1-2=45/100, 2-3=923/498, 3-4=-838/394, 4-5=-443/199, 5-6=-323/603, 6-7=-50/121, 7-8=-298/157, 8-9=-45/100  
 BOT CHORD 2-12=-356/698, 11-12=-40/240, 10-11=-40/240, 8-10=-26/165  
 WEBS 4-12=-607/541, 5-12=-201/572, 5-10=-1374/863, 6-10=-585/569

**JOINT STRESS INDEX**

2 = 0.88, 3 = 0.00, 3 = 0.47, 4 = 0.40, 5 = 0.81, 6 = 0.40, 7 = 0.00, 7 = 0.47, 8 = 0.88, 10 = 0.28, 11 = 0.48, 12 = 0.28, 13 = 0.34, 14 = 0.34, 15 = 0.66, 16 = 0.34, 17 = 0.34, 18 = 0.34, 19 = 0.34, 20 = 0.34, 21 = 0.34, 22 = 0.66 and 23 = 0.34

**NOTES**

- Unbalanced roof live loads have been considered for this design.
- 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; cantilever right exposed; porch 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.
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see MiTek "Standard Gable End Detail"
- All plates are MT20 plates unless otherwise indicated.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable studs spaced at 2-0-0 oc.
- All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 513 lb uplift at joint 2, 461 lb uplift at joint 8 and 1016 lb uplift at joint 10.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S) Standard**

- Regular: Lumber Increase=1.25, Plate Increase=1.25  
 Uniform Loads (plf)  
 Vert: 1-5=-114(F=60), 5-9=-114(F=60), 2-8=-30

|                                           |              |                       |                                                                            |          |                                          |
|-------------------------------------------|--------------|-----------------------|----------------------------------------------------------------------------|----------|------------------------------------------|
| Job<br>L207902                            | Truss<br>T27 | Truss Type<br>SPECIAL | Qty<br>1                                                                   | Ply<br>1 | TWENSEY RES.<br>Job Reference (optional) |
| Builders FirstSource, Lake City, FL 32055 |              |                       | 6.200 s Jul 13 2005 MiTek Industries, Inc. Thu Aug 24 16:36:16 2006 Page 1 |          |                                          |

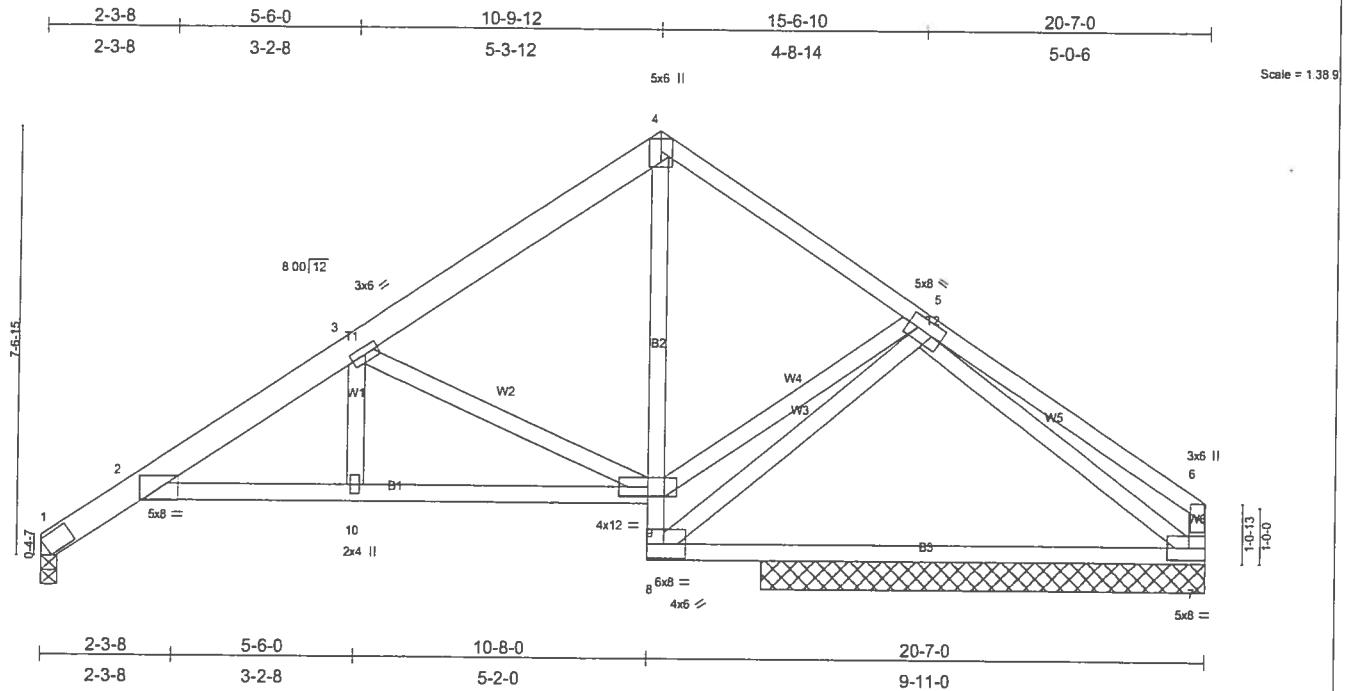


Plate Offsets (X,Y): [2:0-7-6,0-0-0], [8:8-5-14,5-11-5]

| LOADING (psf)  | SPACING              | 2-0-0 | CSI      | DEFL     | in    | (loc) | l/defl | L/d | PLATES | GRIP    |
|----------------|----------------------|-------|----------|----------|-------|-------|--------|-----|--------|---------|
| TCLL 20.0      | Plates Increase      | 1.25  | TC 0.79  | Vert(LL) | -0.16 | 2-10  | >999   | 240 | MT20   | 244/190 |
| TCDL 7.0       | Lumber Increase      | 1.25  | BC 0.94  | Vert(TL) | -0.26 | 7-8   | >919   | 180 |        |         |
| BCLL 10.0      | Rep Stress Incr      | YES   | WB 0.48  | Horz(TL) | 0.17  | 7     | n/a    | n/a |        |         |
| BCDL 5.0       | Code FBC2004/TPI2002 |       | (Matrix) |          |       |       |        |     |        |         |
| Weight: 125 lb |                      |       |          |          |       |       |        |     |        |         |

#### LUMBER

TOP CHORD 2 X 6 SYP No.1D \*Except\*  
T2 2 X 4 SYP No.2  
BOT CHORD 2 X 4 SYP No.2 \*Except\*  
B1 2 X 4 SYP No.1D, B2 2 X 4 SYP No.3  
WEBS 2 X 4 SYP No.3

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 4-11-7 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.

#### REACTIONS

(lb/size) 1=824/0-3-8, 6=399/7-11-0, 7=452/7-11-0  
Max Horz 1=246(load case 4)  
Max Uplift 1=-270(load case 5), 6=-184(load case 6), 7=-121(load case 5)

#### FORCES

(lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=-411/183, 2-3=-1605/562, 3-4=-948/393, 4-5=-902/392, 5-6=-549/181, 6-7=0/0  
BOT CHORD 2-10=-515/1416, 9-10=-515/1416, 8-9=-178/540, 4-9=-253/686, 7-8=-244/762  
WEBS 3-9=-790/418, 5-9=-154/464, 5-8=-601/314, 5-7=-481/235, 3-10=-20/278

#### JOINT STRESS INDEX

2 = 0.78, 3 = 0.43, 4 = 0.54, 5 = 0.35, 6 = 0.54, 7 = 0.76, 8 = 0.70, 9 = 0.00, 10 = 0.33 and 10 = 0.34

#### NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-02; 110mph (3-second gust); h=20ft; TCCL=4.2psf; BCDL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
- 3) All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- 4) Bearing at joint(s) 1, 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 270 lb uplift at joint 1, 184 lb uplift at joint 6 and 121 lb uplift at joint 7.

LOAD CASE(S) Standard

|                                           |       |            |                                                                            |     |              |
|-------------------------------------------|-------|------------|----------------------------------------------------------------------------|-----|--------------|
| Job                                       | Truss | Truss Type | Qty                                                                        | Ply | TWENSEY RES. |
| L207902                                   | T28   | SPECIAL    | 3                                                                          | 1   |              |
| Builders FirstSource, Lake City, FL 32055 |       |            | Job Reference (optional)                                                   |     |              |
|                                           |       |            | 6.200 s Jul 13 2005 MiTek Industries, Inc. Thu Aug 24 16:36:17 2006 Page 1 |     |              |

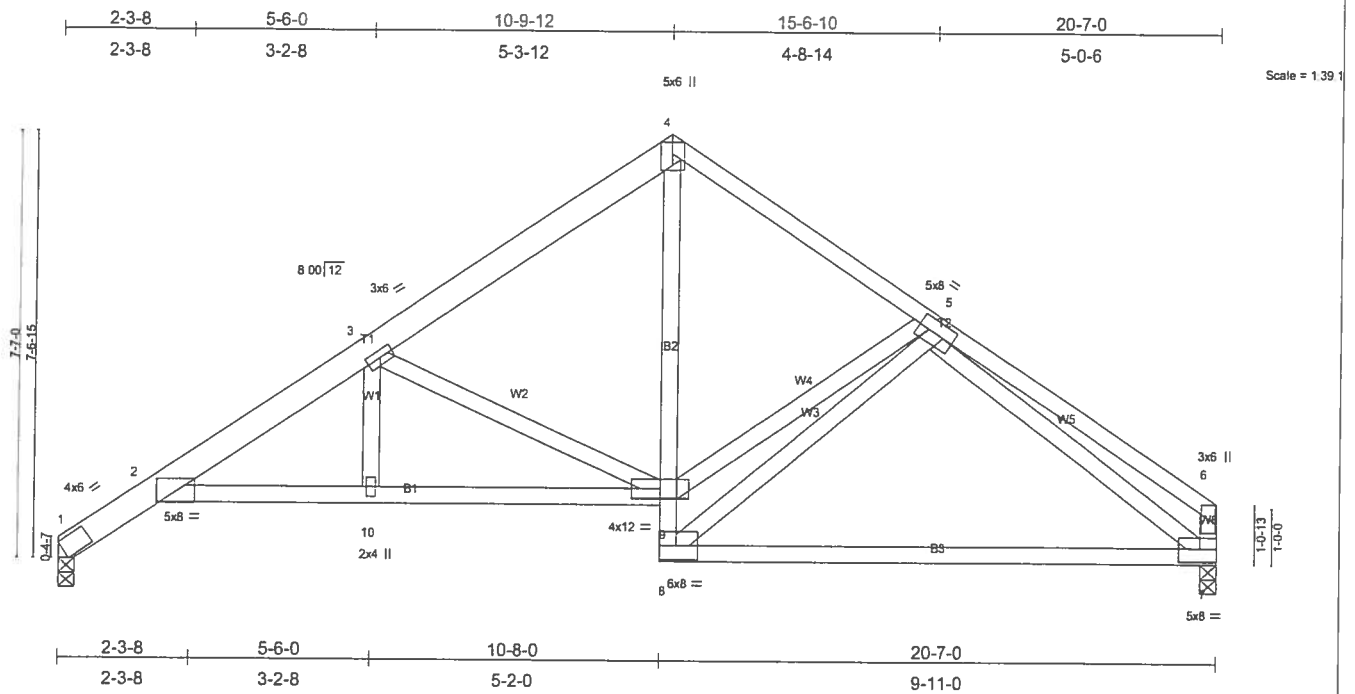


Plate Offsets (X, Y): [2:0-7-6,0-0-0], [2:1-2-9,0-3-12], [7:0-3-7,0-2-12]

| LOADING (psf)  | SPACING              | CSI      | DEFL     | in (loc) | l/defl | L/d  | PLATES | GRIP    |
|----------------|----------------------|----------|----------|----------|--------|------|--------|---------|
| TCLL 20.0      | Plates Increase 1.25 | TC 0.79  | Vert(LL) | -0.16    | 2-10   | >999 | 240    | 244/190 |
| TCDL 7.0       | Lumber Increase 1.25 | BC 0.94  | Vert(TL) | -0.27    | 7-8    | >917 | 180    |         |
| BCLL 10.0      | Rep Stress Incr YES  | WB 0.48  | Horz(TL) | 0.17     | 7      | n/a  | n/a    |         |
| BCDL 5.0       | Code FBC2004/TPI2002 | (Matrix) |          |          |        |      |        |         |
| Weight: 125 lb |                      |          |          |          |        |      |        |         |

**LUMBER**

TOP CHORD 2 X 6 SYP No.1D \*Except\*  
T2 2 X 4 SYP No.2  
BOT CHORD 2 X 4 SYP No.2 \*Except\*  
B1 2 X 4 SYP No.1D, B2 2 X 4 SYP No.3  
WEBS 2 X 4 SYP No.3

**BRACING**

TOP CHORD Structural wood sheathing directly applied or 4-10-14 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.

**REACTIONS**

(lb/size) 1=824/0-3-8, 7=851/0-3-8  
Max Horz 1=246(load case 4)  
Max Uplift 1=270(load case 5), 7=265(load case 6)

**FORCES** (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-411/182, 2-3=-1606/562, 3-4=-948/393, 4-5=-902/392, 5-6=-545/179, 6-7=-397/183  
BOT CHORD 2-10=-516/1417, 9-10=-516/1417, 8-9=-178/540, 4-9=-253/686, 7-8=-244/762  
WEBS 3-9=-791/419, 5-9=-154/464, 5-8=-600/314, 5-7=-485/236, 3-10=-20/278

**JOINT STRESS INDEX**

2 = 0.78, 2 = 0.00, 3 = 0.43, 4 = 0.56, 5 = 0.35, 6 = 0.41, 7 = 0.48, 8 = 0.70, 9 = 0.33 and 10 = 0.34

**NOTES**

- Unbalanced roof live loads have been considered for this design.
- 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.
- All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 270 lb uplift at joint 1 and 265 lb uplift at joint 7.

LOAD CASE(S) Standard

|                |              |                      |          |          |                                          |
|----------------|--------------|----------------------|----------|----------|------------------------------------------|
| Job<br>L207902 | Truss<br>T29 | Truss Type<br>COMMON | Qty<br>1 | Ply<br>2 | TWENSEY RES.<br>Job Reference (optional) |
|----------------|--------------|----------------------|----------|----------|------------------------------------------|

Builders FirstSource, Lake City, Fl 32055

6.200 s Jul 13 2005 MiTek Industries, Inc. Thu Aug 24 16:36:19 2006 Page 1

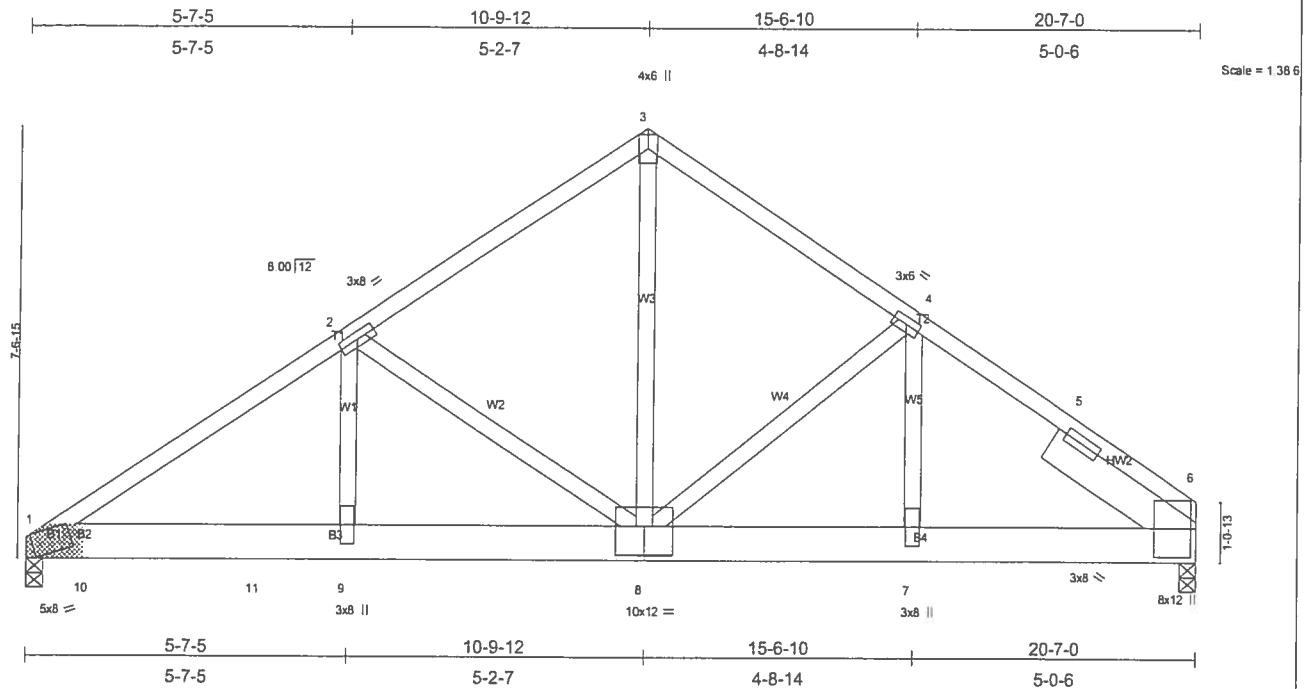


Plate Offsets (X,Y): [6:0-7-5,0-1-2], [8:0-6-0,0-6-0]

| LOADING (psf) | SPACING              | CSI      | DEFL           | In (loc) | I/defl | L/d | PLATES         | GRIP    |
|---------------|----------------------|----------|----------------|----------|--------|-----|----------------|---------|
| TCLL 20.0     | Plates Increase 1.25 | TC 0.97  | Vert(LL) -0.12 | 8-9      | >999   | 240 | MT20           | 244/190 |
| TCDL 7.0      | Lumber Increase 1.25 | BC 0.61  | Vert(TL) -0.19 | 8-9      | >999   | 180 |                |         |
| BCLL 10.0     | Rep Stress Incr NO   | WB 0.85  | Horz(TL) 0.04  | 6        | n/a    | n/a |                |         |
| BCDL 5.0      | Code FBC2004/TPI2002 | (Matrix) |                |          |        |     |                |         |
|               |                      |          |                |          |        |     | Weight: 307 lb |         |

**LUMBER**  
 TOP CHORD 2 X 4 SYP No.2  
 BOT CHORD 2 X 8 SYP No.1D  
 WEBS 2 X 4 SYP No.3  
 SLIDER Right 2 X 8 SYP No.1D 2-11-15

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

**REACTIONS** (lb/size) 6=5628/0-3-8, 1=6350/0-3-12 (0-3-8 + bearing block)  
 Max Horz 1=247(load case 3)  
 Max Uplift 6=2135(load case 5), 1=2424(load case 4)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=-8178/3104, 2-3=-5195/2041, 3-4=-5137/2034, 4-5=-6751/2592, 5-6=-6808/2559  
 BOT CHORD 1-10=-2594/6764, 10-11=-2594/6764, 9-11=-2594/6764, 8-9=-2594/6764, 7-8=-1994/5435, 6-7=-1994/5435  
 WEBS 2-9=-1138/3114, 2-8=-3055/1304, 3-8=-2052/5304, 4-8=-1550/720, 4-7=-726/1973

**JOINT STRESS INDEX**  
 1 = 0.77, 1 = 0.00, 1 = 0.00, 2 = 0.93, 3 = 0.63, 4 = 0.75, 5 = 0.00, 6 = 1.00, 6 = 0.93, 7 = 0.32, 8 = 0.50, 9 = 0.51, 10 = 0.00, 10 = 0.00 and 10 = 0.00

**NOTES**

- 2-ply truss to be connected together with 0.131"x3" Nails as follows:  
 Top chords connected as follows: 2 X 4 - 1 row at 0-9-0 oc.  
 Bottom chords connected as follows: 2 X 8 - 2 rows at 0-7-0 oc.  
 Webs connected as follows: 2 X 4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 2 X 8 SYP No.1D bearing block 12" long at jt. 1 attached to each face with 4 rows of 0.131"x3" Nails spaced 3" o.c. 16 Total fasteners per block. Bearing is assumed to be SYP.
- Unbalanced roof live loads have been considered for this design.
- 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.
- All bearings are assumed to be SYP No.2 crushing capacity of 565.00 psi
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 2135 lb uplift at joint 6 and 2424 lb uplift at joint 1.
- Girder carries tie-in span(s): 34-10-0 from 0-0-0 to 4-0-0; 23-10-0 from 4-0-0 to 20-7-0

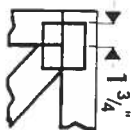
**LOAD CASE(S)** Standard

- Regular: Lumber Increase=1.25, Plate Increase=1.25  
 Uniform Loads (plf)  
 Vert: 1-3=-54, 3-6=-54, 1-11=-719(F=689), 6-11=-489(F=459)

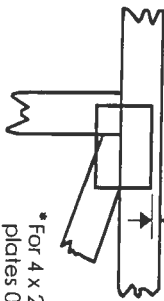


# Symbols

## PLATE LOCATION AND ORIENTATION



\* Center plate on joint unless x, y offsets are indicated. Dimensions are in ft-in-sixteenths. Apply plates to both sides of truss and securely seat.



\* For 4 x 2 orientation, locate plates 0-1/16" from outside edge of truss.



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

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

## PLATE SIZE

4 X 4

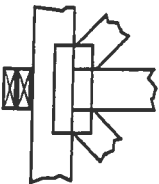
The first dimension is the width perpendicular to slots. Second dimension is the length parallel to slots.

## LATERAL BRACING



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

## BEARING



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

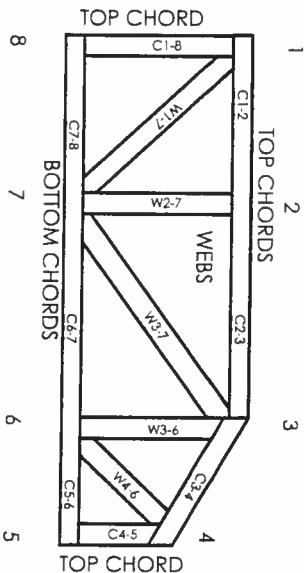
## Industry Standards:

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

# Numbering System



6-4-8 dimensions shown in ft-in-sixteenths



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

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

## CONNECTOR PLATE CODE APPROVALS

|       |                                     |
|-------|-------------------------------------|
| BOCA  | 96-31, 95-43, 96-20-1, 96-67, 84-32 |
| ICBO  | 4922, 5243, 5363, 3907              |
| SBCCI | 9667, 9730, 9604B, 9511, 9432A      |



Mitek Engineering Reference Sheet: MII-7473



# General Safety Notes

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

1. Additional stability bracing for truss system, e.g. diagonal or X bracing, is always required. See BCS11.
2. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
3. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
4. Cut members to bear tightly against each other.
5. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TP11.
6. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP11.
7. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
8. Unless expressly noted, this design is not applicable for use with fire retardant or preservative treated lumber.
9. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
10. Plate type, size, orientation and location dimensions shown indicate minimum plating requirements.
11. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
12. Top chords must be sheathed or purlins provided at spacing shown on design.
13. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
14. Connections not shown are the responsibility of others.
15. Do not cut or alter truss member or plate without prior approval of a professional engineer.
16. Install and load vertically unless indicated otherwise.