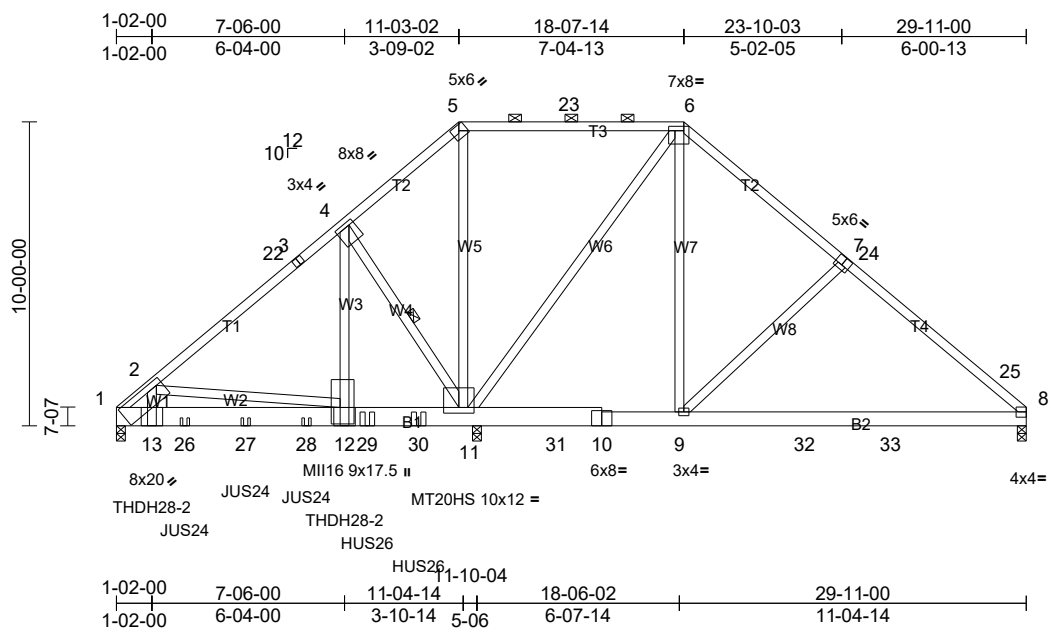


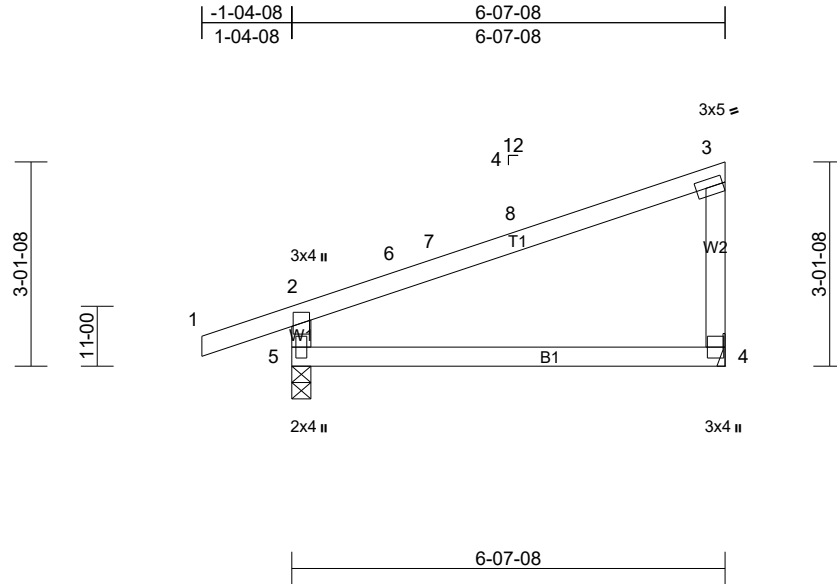
|            |       |                       |     |     |                          |
|------------|-------|-----------------------|-----|-----|--------------------------|
| Job        | Truss | Truss Type            | Qty | Ply |                          |
| 20110098JR | G01   | Piggyback Base Girder | 1   | 2   | Job Reference (optional) |



|            |       |             |     |     |                          |
|------------|-------|-------------|-----|-----|--------------------------|
| Job        | Truss | Truss Type  | Qty | Ply | Job Reference (optional) |
| 20110098JR | J01   | Jack-Closed | 5   | 1   |                          |

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Page: 1



Scale = 1:35.4

| Loading      | (psf)     | Spacing         | 2-00-00         | CSI       |      | DEFL     | in    | (loc) | I/defl | L/d | PLATES        | GRIP     |
|--------------|-----------|-----------------|-----------------|-----------|------|----------|-------|-------|--------|-----|---------------|----------|
| TCLL (roof)  | 30.0      | Plate Grip DOL  | 1.25            | TC        | 0.51 | Vert(LL) | 0.10  | 4-5   | >793   | 360 | MT20          | 197/144  |
| Snow (Pf/Pg) | 23.1/30.0 | Lumber DOL      | 1.25            | BC        | 0.22 | Vert(CT) | -0.08 | 4-5   | >990   | 240 |               |          |
| TCDL         | 10.0      | Rep Stress Incr | YES             | WB        | 0.00 | Horz(CT) | 0.00  | 4     | n/a    | n/a |               |          |
| BCLL         | 0.0 *     | Code            | IRC2015/TPI2014 | Matrix-MR |      |          |       |       |        |     |               |          |
| BCDL         | 10.0      |                 |                 |           |      |          |       |       |        |     | Weight: 21 lb | FT = 20% |

#### LUMBER

TOP CHORD 2x4 SPF No.2  
BOT CHORD 2x4 SPF No.2  
WEBS 2x4 SPF No.2

#### 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** (size) 4= Mechanical, (min. 1-08), 5=3-08, (min. 1-08)  
Max Horiz 5=76 (LC 9)  
Max Uplift 4=-91 (LC 9), 5=-111 (LC 9)  
Max Grav 4=302 (LC 2), 5=453 (LC 2)

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

TOP CHORD 2-5=-407/159

#### NOTES

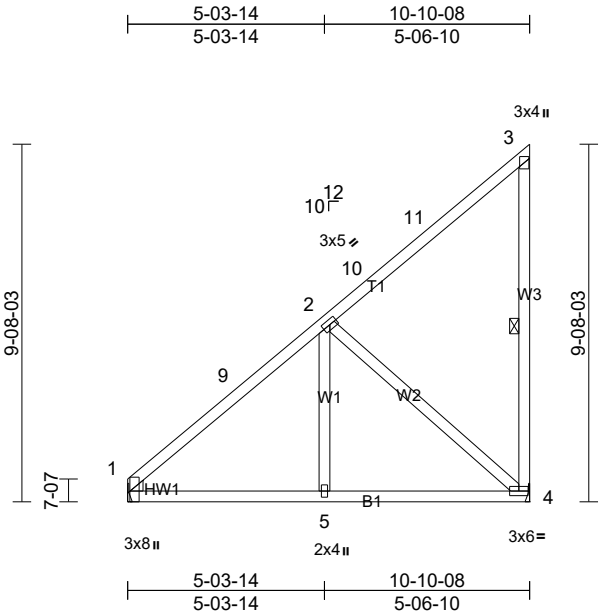
- This truss has been checked for uniform roof live load only, except as noted.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=24ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 1-4-8 to 1-7-8, Interior (1) 1-7-8 to 2-2-13, Exterior (2) 2-2-13 to 6-5-12 zone; cantilever left and right exposed; end vertical left exposed; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.25); Pg=30.0 psf (ground snow); Pf=23.1 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 23.1 psf on overhangs non-concurrent with other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 91 lb uplift at joint 4.
- One RT4 USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 5. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard



|            |       |             |     |     |                          |
|------------|-------|-------------|-----|-----|--------------------------|
| Job        | Truss | Truss Type  | Qty | Ply | Job Reference (optional) |
| 20110098JR | J02   | Jack-Closed | 3   | 1   |                          |



Scale = 1:62.6

| Loading      | (psf)     | Spacing         | 2-00-00         | CSI       |      | DEFL     | in    | (loc) | I/defl | L/d | PLATES        | GRIP     |
|--------------|-----------|-----------------|-----------------|-----------|------|----------|-------|-------|--------|-----|---------------|----------|
| TCLL (roof)  | 30.0      | Plate Grip DOL  | 1.25            | TC        | 0.41 | Vert(LL) | -0.03 | 4-5   | >999   | 360 | MT20          | 197/144  |
| Snow (Pf/Pg) | 23.1/30.0 | Lumber DOL      | 1.25            | BC        | 0.20 | Vert(CT) | -0.05 | 4-5   | >999   | 240 |               |          |
| TCDL         | 10.0      | Rep Stress Incr | YES             | WB        | 0.43 | Horz(CT) | 0.01  | 1     | n/a    | n/a |               |          |
| BCLL         | 0.0*      | Code            | IRC2015/TPI2014 | Matrix-MS |      |          |       |       |        |     |               |          |
| BCDL         | 10.0      |                 |                 |           |      |          |       |       |        |     | Weight: 52 lb | FT = 20% |

|                  |                                                                                        |                                                        |
|------------------|----------------------------------------------------------------------------------------|--------------------------------------------------------|
| <b>LUMBER</b>    |                                                                                        |                                                        |
| TOP CHORD        | 2x4 SPF No.2                                                                           |                                                        |
| BOT CHORD        | 2x4 SPF No.2                                                                           |                                                        |
| WEBS             | 2x4 SPF No.2                                                                           |                                                        |
| WEDGE            | Left: 2x4 SPF No.2                                                                     |                                                        |
| <b>BRACING</b>   |                                                                                        |                                                        |
| 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                                                                         | 3-4                                                    |
| <b>REACTIONS</b> | (size)                                                                                 | 1= Mechanical, (min. 1-08), 4= Mechanical, (min. 1-08) |
|                  | Max Horiz                                                                              | 1=270 (LC 12)                                          |
|                  | Max Uplift                                                                             | 4=-116 (LC 13)                                         |
|                  | Max Grav                                                                               | 1=536 (LC 2), 4=554 (LC 29)                            |
| <b>FORCES</b>    |                                                                                        |                                                        |
|                  | (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.           |                                                        |
| TOP CHORD        | 1-9=-591/59, 2-9=-407/77                                                               |                                                        |
| BOT CHORD        | 1-5=-179/396, 4-5=-100/396                                                             |                                                        |
| WEBS             | 2-4=-484/165                                                                           |                                                        |

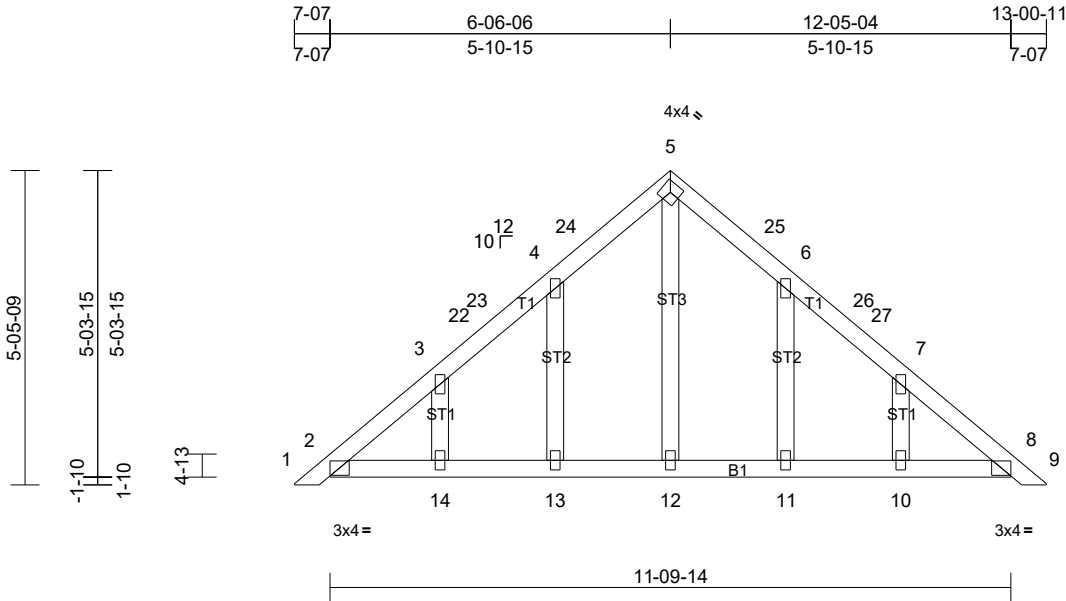
- NOTES**
- This truss has been checked for uniform roof live load only, except as noted.
  - Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=24ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-0-0 to 3-0-0, Interior (1) 3-0-0 to 6-5-13, Exterior (2) 6-5-13 to 10-8-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.25); Pg=30.0 psf (ground snow); Pf=23.1 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
  - Unbalanced snow loads have been considered for this design.

- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3'-06"-00 tall by 2'-00"-00 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 116 lb uplift at joint 4.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

|            |       |            |     |     |                          |
|------------|-------|------------|-----|-----|--------------------------|
| Job        | Truss | Truss Type | Qty | Ply | Job Reference (optional) |
| 20110098JR | PB01  | Piggyback  | 1   | 1   |                          |

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Mon Feb 15 09:25:18
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Page: 1



Scale = 1:40.2

| Loading      | (psf)     | Spacing         | 2-00-00         | CSI       |      | DEFL     | in   | (loc) | l/defl | L/d | PLATES        | GRIP     |
|--------------|-----------|-----------------|-----------------|-----------|------|----------|------|-------|--------|-----|---------------|----------|
| TCLL (roof)  | 30.0      | Plate Grip DOL  | 1.25            | TC        | 0.05 | Vert(LL) | n/a  | -     | n/a    | 999 | MT20          | 197/144  |
| Snow (Pf/Pg) | 23.1/30.0 | Lumber DOL      | 1.25            | BC        | 0.03 | Vert(CT) | n/a  | -     | n/a    | 999 |               |          |
| TCDL         | 10.0      | Rep Stress Incr | YES             | WB        | 0.05 | Horz(CT) | 0.00 | 8     | n/a    | n/a |               |          |
| BCLL         | 0.0*      | Code            | IRC2015/TPI2014 | Matrix-MS |      |          |      |       |        |     |               |          |
| BCDL         | 10.0      |                 |                 |           |      |          |      |       |        |     | Weight: 49 lb | FT = 20% |

- LUMBER**  
TOP CHORD 2x4 SPF No.2  
BOT CHORD 2x4 SPF No.2  
OTHERS 2x4 SPF 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** All bearings 11-09-14.  
(lb) - Max Horiz 2=-102 (LC 11), 15=-102 (LC 11)  
Max Uplift All uplift 100 (lb) or less at joint(s) 2, 10, 11, 13, 14, 15  
Max Grav All reactions 250 (lb) or less at joint (s) 2, 8, 10, 11, 12, 13, 14, 15, 19

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

**NOTES**  
1) This truss has been checked for uniform roof live load only, except as noted.  
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=24ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-2-14 to 3-2-14, Interior (1) 3-2-14 to 3-6-10, Exterior (2) 3-6-10 to 9-6-10, Interior (1) 9-6-10 to 9-10-7, Exterior (2) 9-10-7 to 12-10-7 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60  
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.  
4) TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.25); Pg=30.0 psf (ground snow); Pf=23.1 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10  
5) Unbalanced snow loads have been considered for this design.

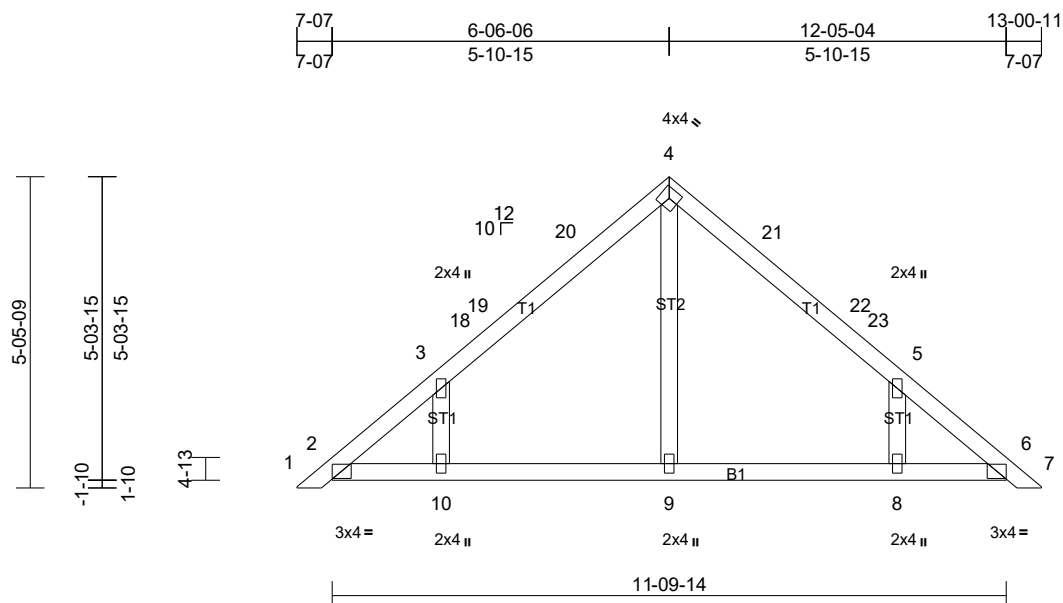
6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 23.1 psf on overhangs non-concurrent with other live loads.  
7) All plates are 2x4 MT20 unless otherwise indicated.  
8) Gable requires continuous bottom chord bearing.  
9) Gable studs spaced at 2-0-0 oc.  
10) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.  
11) One RT4 USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 13, 14, 11, and 10. This connection is for uplift only and does not consider lateral forces.  
12) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.  
13) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

|            |       |            |     |     |                          |
|------------|-------|------------|-----|-----|--------------------------|
| Job        | Truss | Truss Type | Qty | Ply | Job Reference (optional) |
| 20110098JR | PB02  | Piggyback  | 13  | 1   |                          |

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Scale = 1:40.6

| Loading      | (psf)     | Spacing         | 2-00-00         | CSI       | DEFL | in       | (loc) | I/defl | L/d | PLATES        | GRIP     |
|--------------|-----------|-----------------|-----------------|-----------|------|----------|-------|--------|-----|---------------|----------|
| TCLL (roof)  | 30.0      | Plate Grip DOL  | 1.25            | TC        | 0.17 | Vert(LL) | n/a   | -      | n/a | 999           | 197/144  |
| Snow (Pf/Pg) | 23.1/30.0 | Lumber DOL      | 1.25            | BC        | 0.07 | Vert(CT) | n/a   | -      | n/a | 999           |          |
| TCDL         | 10.0      | Rep Stress Incr | YES             | WB        | 0.09 | Horz(CT) | 0.00  | 15     | n/a | n/a           |          |
| BCLL         | 0.0*      | Code            | IRC2015/TPI2014 | Matrix-MS |      |          |       |        |     |               |          |
| BCDL         | 10.0      |                 |                 |           |      |          |       |        |     |               |          |
|              |           |                 |                 |           |      |          |       |        |     | Weight: 41 lb | FT = 20% |

#### LUMBER

TOP CHORD 2x4 SPF No.2  
BOT CHORD 2x4 SPF No.2  
OTHERS 2x4 SPF 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

All bearings 11-09-14.  
(lb) - Max Horiz 2=-102 (LC 11), 11=-102 (LC 11)  
Max Uplift All uplift 100 (lb) or less at joint(s)  
2, 6, 11, 15 except 8=-125 (LC 14),  
10=-126 (LC 13)  
Max Grav All reactions 250 (lb) or less at joint  
(s) 2, 6, 11, 15 except 8=360 (LC  
28), 9=306 (LC 2), 10=361 (LC 27)

#### FORCES

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

WEBS 3-10=-304/162, 5-8=-303/162

#### NOTES

- This truss has been checked for uniform roof live load only, except as noted.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=24ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-2-14 to 3-2-14, Interior (1) 3-2-14 to 3-6-10, Exterior (2) 3-6-10 to 9-6-10, Interior (1) 9-6-10 to 9-10-7, Exterior (2) 9-10-7 to 12-10-7 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.25); Pg=30.0 psf (ground snow); Pf=23.1 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10

- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 23.1 psf on overhangs non-concurrent with other live loads.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- One RT4 USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 6, 10, and 8. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

#### LOAD CASE(S)

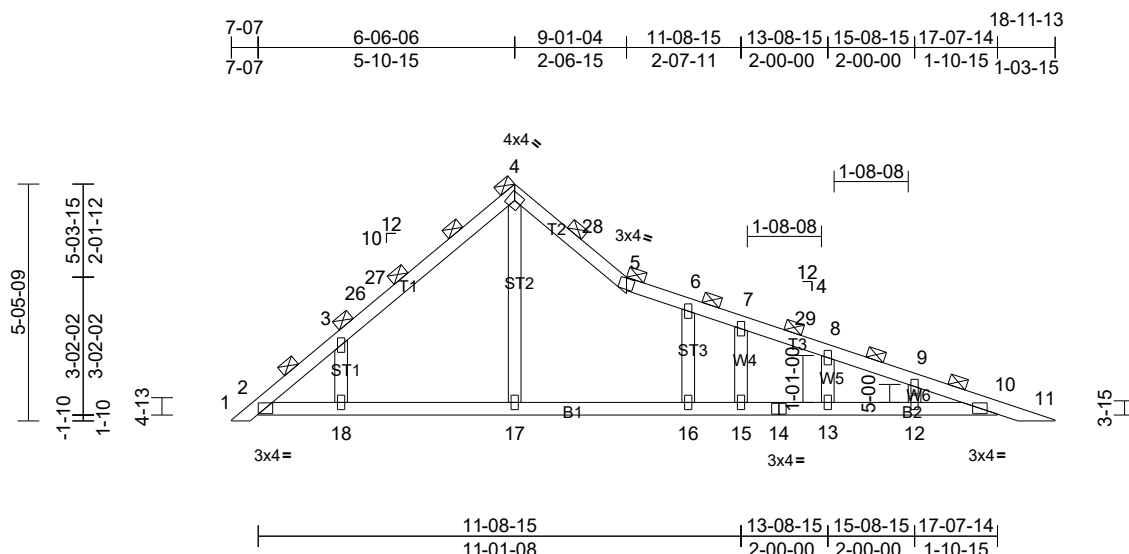
Standard



|            |       |            |     |          |                          |
|------------|-------|------------|-----|----------|--------------------------|
| Job        | Truss | Truss Type | Qty | Ply      | Job Reference (optional) |
| 20110098JR | PB03  | Piggyback  | 6   | <b>2</b> |                          |

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Scale = 1:53.3

| Loading                 | (psf)     | Spacing         | 3-00-00         | CSI       | DEFL | in       | (loc) | l/defl | L/d | PLATES | GRIP    |
|-------------------------|-----------|-----------------|-----------------|-----------|------|----------|-------|--------|-----|--------|---------|
| TCLL (roof)             | 30.0      | Plate Grip DOL  | 1.25            | TC        | 0.21 | Vert(LL) | n/a   | -      | n/a | 999    | 197/144 |
| Snow (Pf/Pg)            | 23.1/30.0 | Lumber DOL      | 1.25            | BC        | 0.06 | Vert(CT) | n/a   | -      | n/a | 999    |         |
| TCDL                    | 10.0      | Rep Stress Incr | NO              | WB        | 0.07 | Horz(CT) | 0.00  | 23     | n/a | n/a    |         |
| BCLL                    | 0.0*      | Code            | IRC2015/TPI2014 | Matrix-MS |      |          |       |        |     |        |         |
| BCDL                    | 10.0      |                 |                 |           |      |          |       |        |     |        |         |
| Weight: 116 lb FT = 20% |           |                 |                 |           |      |          |       |        |     |        |         |

#### LUMBER

|           |              |
|-----------|--------------|
| TOP CHORD | 2x4 SPF No.2 |
| BOT CHORD | 2x4 SPF No.2 |
| WEBS      | 2x4 SPF No.2 |
| OTHERS    | 2x4 SPF No.2 |

#### BRACING

|           |                                                                            |
|-----------|----------------------------------------------------------------------------|
| TOP CHORD | 2-0-0 oc purlins (6-0-0 max.)<br>(Switched from sheeted: Spacing > 2-0-0). |
| BOT CHORD | Rigid ceiling directly applied or 6-0-0 oc bracing.                        |

#### REACTIONS

|                  |                                                                                                                                                          |
|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| (lb) - Max Horiz | 2=-169 (LC 11), 19=-169 (LC 11)                                                                                                                          |
| Max Uplift       | All uplift 100 (lb) or less at joint(s)<br>2, 10, 12, 13, 15, 17, 19, 23 except<br>16=-112 (LC 14), 18=-189 (LC 13)                                      |
| Max Grav         | All reactions 250 (lb) or less at joint<br>(s) 2, 10, 15, 19, 23 except 12=286<br>(LC 2), 13=333 (LC 2), 16=495 (LC 2),<br>17=760 (LC 2), 18=549 (LC 20) |

#### FORCES

|                                                                              |                                                             |
|------------------------------------------------------------------------------|-------------------------------------------------------------|
| (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. |                                                             |
| TOP CHORD                                                                    | 2-3=-198/296, 4-27=-6/300, 4-28=-18/286                     |
| WEBS                                                                         | 4-17=-631/97, 3-18=-473/242,<br>6-16=-398/161, 8-13=-268/83 |

#### NOTES

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x4 - 1 row at 9-00 oc.  
Bottom chords connected as follows: 2x4 - 1 row at 9-00 oc.  
Web connected as follows: 2x4 - 1 row at 9-00 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.
- This truss has been checked for uniform roof live load only, except as noted.

- Wind: ASCE 7-10; Vult=115mph (3-second gust)  
Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=24ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-2-14 to 3-2-14, Interior (1) 3-2-14 to 3-6-10, Exterior (2) 3-6-10 to 9-1-9, Interior (1) 9-1-9 to 15-6-15, Exterior (2) 15-6-15 to 18-6-15 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.25); Pg=30.0 psf (ground snow); Pf=23.1 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 23.1 psf on overhangs non-concurrent with other live loads.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- One RT4 USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 10, 17, 18, 16, 12, 13, and 15. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

#### LOAD CASE(S) Standard

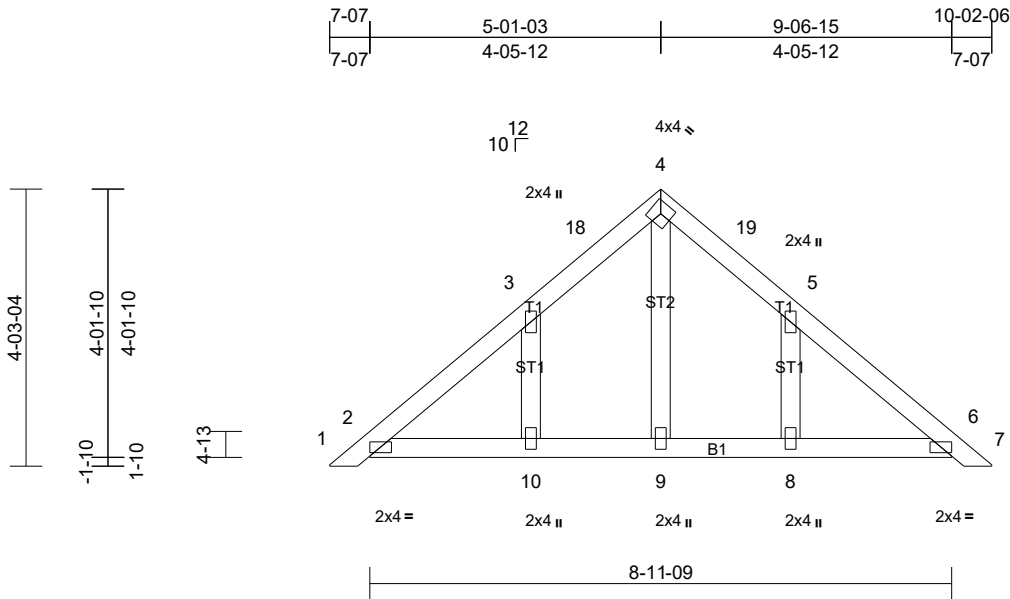
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|            |       |            |     |     |                          |
|------------|-------|------------|-----|-----|--------------------------|
| Job        | Truss | Truss Type | Qty | Ply | Job Reference (optional) |
| 20110098JR | PB04  | Piggyback  | 1   | 1   |                          |

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Page: 1



Scale = 1:35.6

| Loading      | (psf)     | Spacing         | 2-00-00         | CSI       | DEFL | in       | (loc) | l/defl | L/d | PLATES        | GRIP     |
|--------------|-----------|-----------------|-----------------|-----------|------|----------|-------|--------|-----|---------------|----------|
| TCLL (roof)  | 30.0      | Plate Grip DOL  | 1.25            | TC        | 0.07 | Vert(LL) | n/a   | -      | n/a | 999           | 197/144  |
| Snow (Pf/Pg) | 23.1/30.0 | Lumber DOL      | 1.25            | BC        | 0.05 | Vert(CT) | n/a   | -      | n/a | 999           |          |
| TCDL         | 10.0      | Rep Stress Incr | YES             | WB        | 0.03 | Horz(CT) | 0.00  | 6      | n/a | n/a           |          |
| BCLL         | 0.0*      | Code            | IRC2015/TPI2014 | Matrix-MP |      |          |       |        |     |               |          |
| BCDL         | 10.0      |                 |                 |           |      |          |       |        |     |               |          |
|              |           |                 |                 |           |      |          |       |        |     | Weight: 34 lb | FT = 20% |

#### LUMBER

TOP CHORD 2x4 SPF No.2  
BOT CHORD 2x4 SPF No.2  
OTHERS 2x4 SPF 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

All bearings 8-11-09.  
(lb) - Max Horiz 2=-79 (LC 11), 11=-79 (LC 11)  
Max Uplift All uplift 100 (lb) or less at joint(s) 2, 8, 10, 11  
Max Grav All reactions 250 (lb) or less at joint (s) 2, 6, 9, 11, 15 except 8=276 (LC 2), 10=276 (LC 2)

#### FORCES

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

#### NOTES

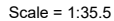
- This truss has been checked for uniform roof live load only, except as noted.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=24ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.25); Pg=30.0 psf (ground snow); Pf=23.1 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 23.1 psf on overhangs non-concurrent with other live loads.
- Gable requires continuous bottom chord bearing.

- Gable studs spaced at 2-0-0 oc.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- One RT4 USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 10, and 8. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

This design is based upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of the Building Designer. Building Designer shall verify all design information on this sheet for conformance with conditions and requirements of the specific building and governing codes and ordinances. Building Designer accepts responsibility for the correctness or accuracy of the design information as it may relate to a specific building. Certification is valid only when truss is fabricated by a UFPI plant. Bracing shown is for lateral support of truss members only and does not replace erection and permanent bracing. Refer to Building Component Safety Information (BCSI) for general guidance regarding storage, erection and bracing available from SBCA and Truss Plate Institute.

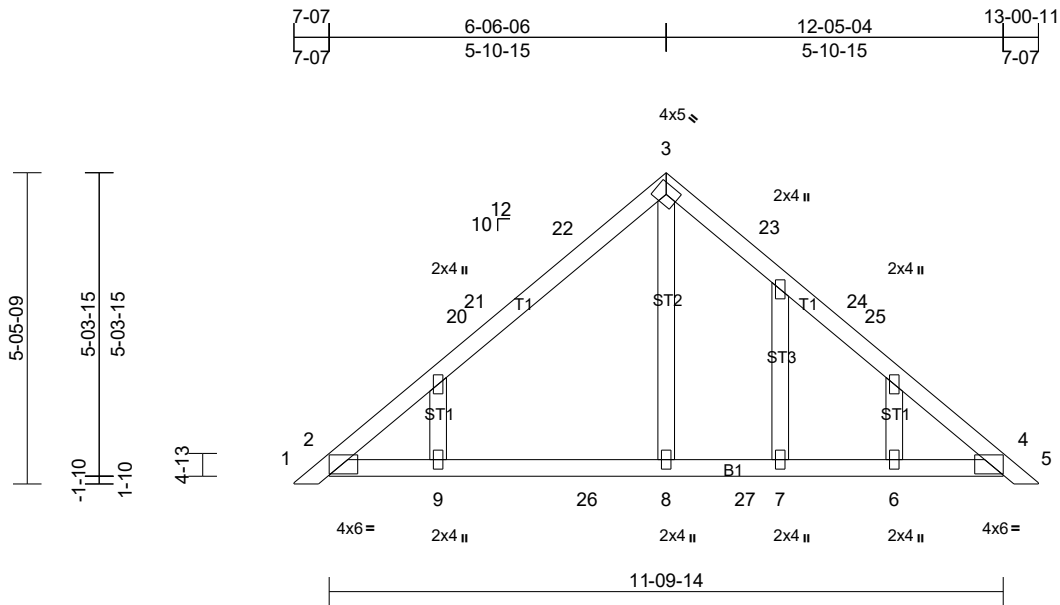




|            |       |            |     |     |                          |
|------------|-------|------------|-----|-----|--------------------------|
| Job        | Truss | Truss Type | Qty | Ply | Job Reference (optional) |
| 20110098JR | PB06  | Piggyback  | 1   | 1   |                          |

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Page: 1



Scale = 1:40.6

| Loading                | (psf)     | Spacing         | 2-00-00         | CSI       | DEFL | in       | (loc) | I/defl | L/d | PLATES | GRIP    |
|------------------------|-----------|-----------------|-----------------|-----------|------|----------|-------|--------|-----|--------|---------|
| TCLL (roof)            | 30.0      | Plate Grip DOL  | 1.25            | TC        | 0.36 | Vert(LL) | n/a   | -      | n/a | 999    | 197/144 |
| Snow (Pf/Pg)           | 23.1/30.0 | Lumber DOL      | 1.25            | BC        | 0.42 | Vert(CT) | n/a   | -      | n/a | 999    |         |
| TCDL                   | 10.0      | Rep Stress Incr | YES             | WB        | 0.00 | Horz(CT) | 0.00  | 17     | n/a | n/a    |         |
| BCLL                   | 0.0*      | Code            | IRC2015/TPI2014 | Matrix-MS |      |          |       |        |     |        |         |
| BCDL                   | 10.0      |                 |                 |           |      |          |       |        |     |        |         |
| Weight: 45 lb FT = 20% |           |                 |                 |           |      |          |       |        |     |        |         |

#### LUMBER

TOP CHORD 2x4 SPF No.2  
BOT CHORD 2x4 SPF No.2  
OTHERS 2x4 SPF 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

All bearings 11-09-14.  
(lb) - Max Horiz 2=-102 (LC 11), 13=-102 (LC 11)  
Max Uplift All uplift 100 (lb) or less at joint(s)  
2, 4, 7, 9, 13, 17 except 6=-103 (LC 14)  
Max Grav All reactions 250 (lb) or less at joint (s)  
7, 8 except 2=349 (LC 2), 4=345 (LC 2), 6=269 (LC 28), 9=264 (LC 27), 13=349 (LC 2), 17=345 (LC 2)

#### FORCES

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-20=-477/89, 20-21=-345/79, 21-22=-324/81, 3-22=-266/98, 3-23=-266/98, 23-24=-324/81, 24-25=-345/79, 4-25=-477/77

#### NOTES

- This truss has been checked for uniform roof live load only, except as noted.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=24ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-2-14 to 3-2-14, Interior (1) 3-2-14 to 3-6-10, Exterior (2) 3-6-10 to 9-6-10, Interior (1) 9-6-10 to 9-10-7, Exterior (2) 9-10-7 to 12-10-7 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

- TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.25); Pg=30.0 psf (ground snow); Pf=23.1 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 23.1 psf on overhangs non-concurrent with other live loads.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- One RT4 USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 4, 9, 7, and 6. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

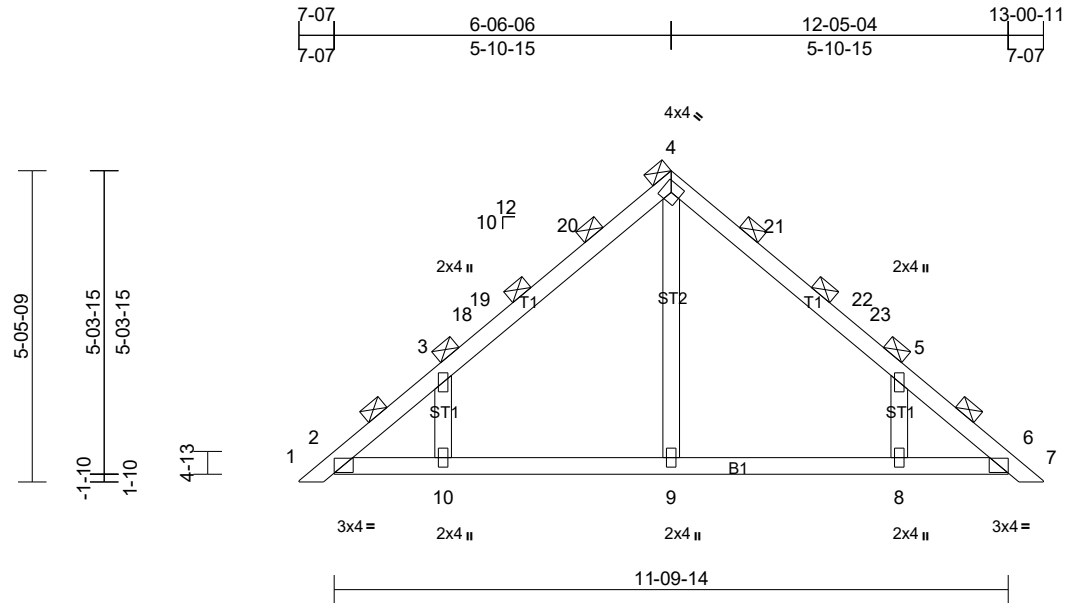
**LOAD CASE(S)** Standard



|            |       |            |     |          |                          |
|------------|-------|------------|-----|----------|--------------------------|
| Job        | Truss | Truss Type | Qty | Ply      | Job Reference (optional) |
| 20110098JR | PB07  | Piggyback  | 2   | <b>2</b> |                          |

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| Loading      | (psf)     | Spacing         | 3-08-04         | CSI       | DEFL | in       | (loc) | l/defl | L/d | PLATES        | GRIP     |
|--------------|-----------|-----------------|-----------------|-----------|------|----------|-------|--------|-----|---------------|----------|
| TCLL (roof)  | 30.0      | Plate Grip DOL  | 1.25            | TC        | 0.18 | Vert(LL) | n/a   | -      | n/a | 999           | 197/144  |
| Snow (Pf/Pg) | 23.1/30.0 | Lumber DOL      | 1.25            | BC        | 0.08 | Vert(CT) | n/a   | -      | n/a | 999           |          |
| TCDL         | 10.0      | Rep Stress Incr | NO              | WB        | 0.04 | Horz(CT) | 0.00  | 15     | n/a | n/a           |          |
| BCLL         | 0.0*      | Code            | IRC2015/TPI2014 | Matrix-MS |      |          |       |        |     |               |          |
| BCDL         | 10.0      |                 |                 |           |      |          |       |        |     |               |          |
|              |           |                 |                 |           |      |          |       |        |     | Weight: 83 lb | FT = 20% |

#### LUMBER

TOP CHORD 2x4 SPF No.2  
BOT CHORD 2x4 SPF No.2  
OTHERS 2x4 SPF No.2

#### BRACING

TOP CHORD 2-0-0 oc purlins (6-0-0 max.)  
(Switched from sheeted: Spacing > 2-0-0).  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc  
bracing.

#### REACTIONS

All bearings 11-09-14.  
(lb) - Max Horiz 2=188 (LC 12), 11=188 (LC 12)  
Max Uplift All uplift 100 (lb) or less at joint(s)  
2, 6, 11, 15 except 8=230 (LC 14),  
10=231 (LC 13)  
Max Grav All reactions 250 (lb) or less at joint  
(s) 2, 6, 11, 15 except 8=663 (LC  
28), 9=565 (LC 2), 10=665 (LC 27)

#### FORCES

(lb) - Max. Comp./Max. Ten. - All forces 250  
(lb) or less except when shown.  
TOP CHORD 3-18=-319/112, 5-23=-319/104  
WEBS 4-9=-403/1, 3-10=-559/299, 5-8=-558/298

#### NOTES

- 2-ply truss to be connected together as follows:  
Top chords connected with 10d (0.131"x3") nails as follows: 2x4 - 1 row at 9-00 oc.  
Bottom chords connected with 10d (0.131"x3") nails as follows: 2x4 - 1 row at 9-00 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.
- This truss has been checked for uniform roof live load only, except as noted.

- Wind: ASCE 7-10; Vult=115mph (3-second gust)  
Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=24ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-2-14 to 3-2-14, Interior (1) 3-2-14 to 3-6-10, Exterior (2) 3-6-10 to 9-6-10, Interior (1) 9-6-10 to 9-10-7, Exterior (2) 9-10-7 to 12-10-7 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.25); Pg=30.0 psf (ground snow); Pf=23.1 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 23.1 psf on overhangs non-concurrent with other live loads.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- One RT4 USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 6, 10, and 8. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard

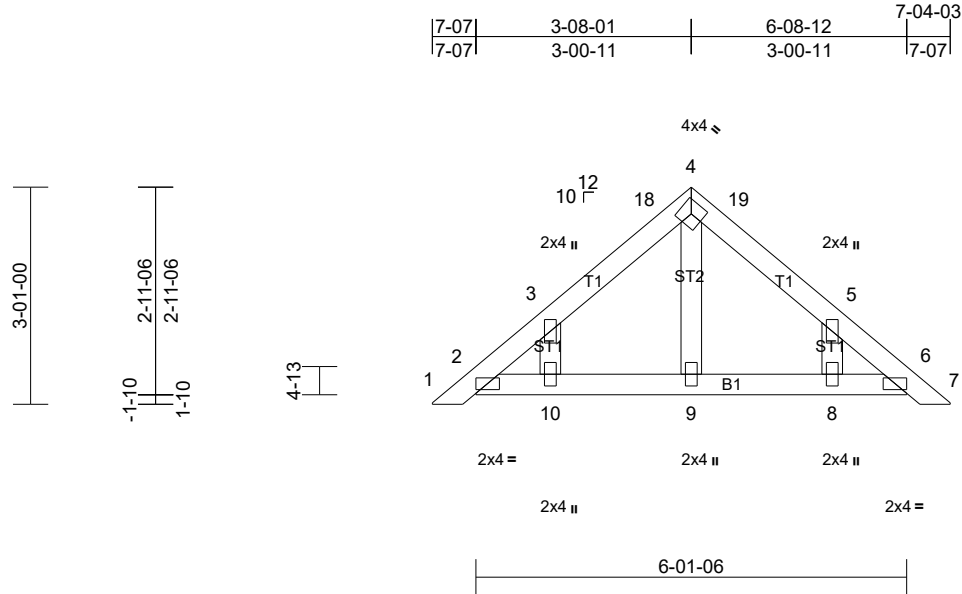
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|            |       |            |     |     |                          |
|------------|-------|------------|-----|-----|--------------------------|
| Job        | Truss | Truss Type | Qty | Ply | Job Reference (optional) |
| 20110098JR | PB08  | Piggyback  | 1   | 1   |                          |

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| Loading      | (psf)     | Spacing         | 2-00-00         | CSI       | DEFL | in       | (loc) | I/defl | L/d | PLATES | GRIP          |          |
|--------------|-----------|-----------------|-----------------|-----------|------|----------|-------|--------|-----|--------|---------------|----------|
| TCLL (roof)  | 30.0      | Plate Grip DOL  | 1.25            | TC        | 0.05 | Vert(LL) | n/a   | -      | n/a | 999    | MT20          | 197/144  |
| Snow (Pf/Pg) | 23.1/30.0 | Lumber DOL      | 1.25            | BC        | 0.02 | Vert(CT) | n/a   | -      | n/a | 999    |               |          |
| TCDL         | 10.0      | Rep Stress Incr | YES             | WB        | 0.02 | Horz(CT) | 0.00  | 15     | n/a | n/a    |               |          |
| BCLL         | 0.0 *     | Code            | IRC2015/TPI2014 | Matrix-MP |      |          |       |        |     |        |               |          |
| BCDL         | 10.0      |                 |                 |           |      |          |       |        |     |        | Weight: 22 lb | FT = 20% |

#### LUMBER

TOP CHORD 2x4 SPF No.2  
BOT CHORD 2x4 SPF No.2  
OTHERS 2x4 SPF 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

All bearings 6-01-06.  
(lb) - Max Horiz 2=56 (LC 12), 11=56 (LC 12)  
Max Uplift All uplift 100 (lb) or less at joint(s) 2, 6, 8, 10, 11, 15  
Max Grav All reactions 250 (lb) or less at joint (s) 2, 6, 8, 9, 10, 11, 15

#### FORCES

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

#### NOTES

- This truss has been checked for uniform roof live load only, except as noted.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=24ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.25); Pg=30.0 psf (ground snow); Pf=23.1 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 23.1 psf on overhangs non-concurrent with other live loads.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.

- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- One RT4 USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 6, 10, and 8. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

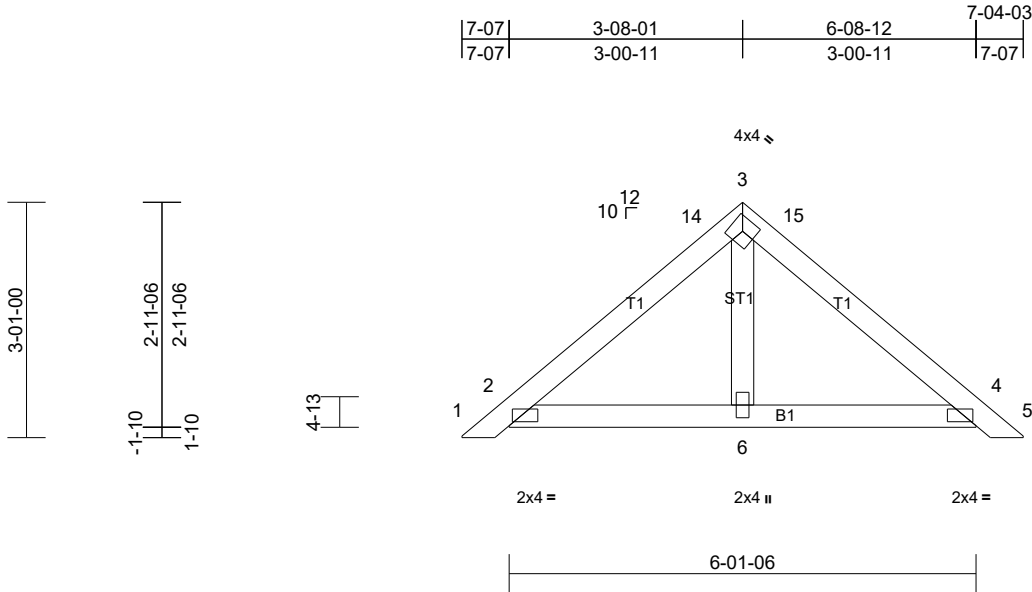
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|            |       |            |     |     |                          |
|------------|-------|------------|-----|-----|--------------------------|
| Job        | Truss | Truss Type | Qty | Ply | Job Reference (optional) |
| 20110098JR | PB09  | Piggyback  | 5   | 1   |                          |

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| Loading      | (psf)     | Spacing         | 2-00-00         | CSI       | DEFL | in       | (loc) | I/defl | L/d | PLATES        | GRIP     |
|--------------|-----------|-----------------|-----------------|-----------|------|----------|-------|--------|-----|---------------|----------|
| TCLL (roof)  | 30.0      | Plate Grip DOL  | 1.25            | TC        | 0.11 | Vert(LL) | n/a   | -      | n/a | 999           | 197/144  |
| Snow (Pf/Pg) | 23.1/30.0 | Lumber DOL      | 1.25            | BC        | 0.13 | Vert(CT) | n/a   | -      | n/a | 999           |          |
| TCDL         | 10.0      | Rep Stress Incr | YES             | WB        | 0.01 | Horz(CT) | 0.00  | 2      | n/a | n/a           |          |
| BCLL         | 0.0*      | Code            | IRC2015/TPI2014 | Matrix-MP |      |          |       |        |     |               |          |
| BCDL         | 10.0      |                 |                 |           |      |          |       |        |     |               |          |
|              |           |                 |                 |           |      |          |       |        |     | Weight: 21 lb | FT = 20% |

#### LUMBER

TOP CHORD 2x4 SPF No.2  
BOT CHORD 2x4 SPF No.2  
OTHERS 2x4 SPF 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

All bearings 6-01-06.  
(lb) - Max Horiz 2=56 (LC 12), 7=56 (LC 12)  
Max Uplift All uplift 100 (lb) or less at joint(s) 2, 4, 7, 11  
Max Grav All reactions 250 (lb) or less at joint (s) 2, 4, 6, 7, 11

#### FORCES

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

#### NOTES

- This truss has been checked for uniform roof live load only, except as noted.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=24ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.25); Pg=30.0 psf (ground snow); Pf=23.1 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 23.1 psf on overhangs non-concurrent with other live loads.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.

- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- One RT4 USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 4. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

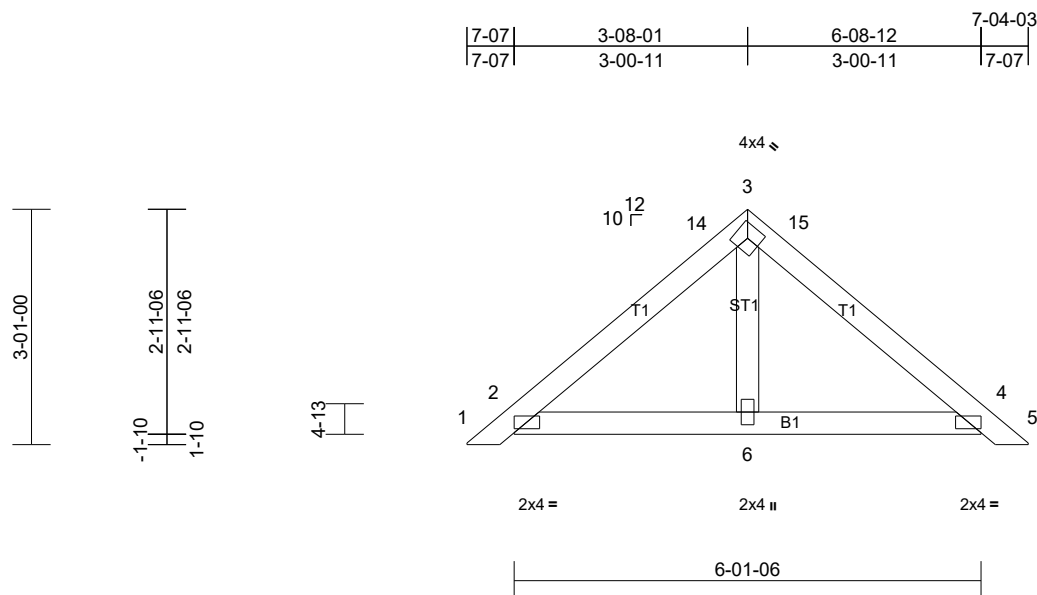
This design is based upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of the Building Designer. Building Designer shall verify all design information on this sheet for conformance with conditions and requirements of the specific building and governing codes and ordinances. Building Designer accepts responsibility for the correctness or accuracy of the design information as it may relate to a specific building. Certification is valid only when truss is fabricated by a UFPI plant. Bracing shown is for lateral support of truss members only and does not replace erection and permanent bracing. Refer to Building Component Safety Information (BCSI) for general guidance regarding storage, erection and bracing available from SBCA and Truss Plate Institute.



|            |       |            |     |          |                          |
|------------|-------|------------|-----|----------|--------------------------|
| Job        | Truss | Truss Type | Qty | Ply      | Job Reference (optional) |
| 20110098JR | PB10  | Piggyback  | 1   | <b>2</b> |                          |

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Page: 1



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| Loading                | (psf)     | Spacing         | 2-00-00         | CSI       | DEFL | in       | (loc) | I/defl | L/d | PLATES | GRIP    |
|------------------------|-----------|-----------------|-----------------|-----------|------|----------|-------|--------|-----|--------|---------|
| TCLL (roof)            | 30.0      | Plate Grip DOL  | 1.25            | TC        | 0.06 | Vert(LL) | n/a   | -      | n/a | 999    | 197/144 |
| Snow (Pf/Pg)           | 23.1/30.0 | Lumber DOL      | 1.25            | BC        | 0.07 | Vert(CT) | n/a   | -      | n/a | 999    |         |
| TCDL                   | 10.0      | Rep Stress Incr | YES             | WB        | 0.00 | Horz(CT) | 0.00  | 11     | n/a | n/a    |         |
| BCLL                   | 0.0*      | Code            | IRC2015/TPI2014 | Matrix-MP |      |          |       |        |     |        |         |
| BCDL                   | 10.0      |                 |                 |           |      |          |       |        |     |        |         |
| Weight: 41 lb FT = 20% |           |                 |                 |           |      |          |       |        |     |        |         |

#### LUMBER

TOP CHORD 2x4 SPF No.2  
BOT CHORD 2x4 SPF No.2  
OTHERS 2x4 SPF 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

All bearings 6-01-06.  
(lb) - Max Horiz 2=56 (LC 12), 7=56 (LC 12)  
Max Uplift All uplift 100 (lb) or less at joint(s) 2, 4, 7, 11  
Max Grav All reactions 250 (lb) or less at joint (s) 6 except 2=271 (LC 2), 4=271 (LC 2), 7=271 (LC 2), 11=271 (LC 2)

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

#### NOTES

- 2-ply truss to be connected together as follows:  
Top chords connected with 10d (0.131"x3") nails as follows: 2x4 - 1 row at 9-00 oc.  
Bottom chords connected with 10d (0.131"x3") nails as follows: 2x4 - 1 row at 9-00 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.
- This truss has been checked for uniform roof live load only, except as noted.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=24ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

- TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.25); Pg=30.0 psf (ground snow); Pf=23.1 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 23.1 psf on overhangs non-concurrent with other live loads.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- One RT4 USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 4. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

**LOAD CASE(S)** Standard

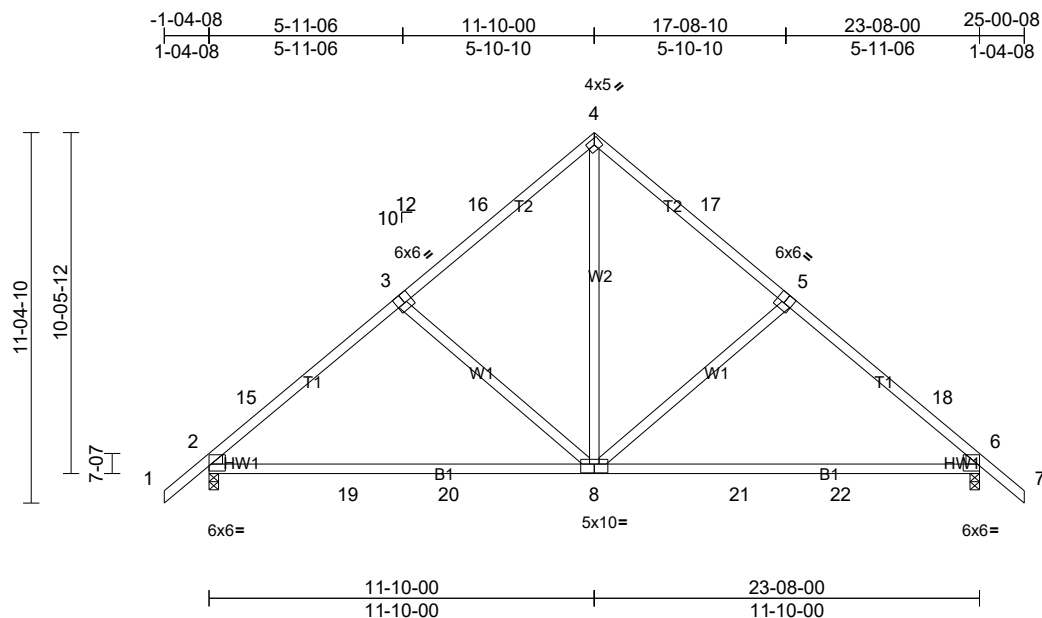
This design is based upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of the Building Designer. Building Designer shall verify all design information on this sheet for conformance with conditions and requirements of the specific building and governing codes and ordinances. Building Designer accepts responsibility for the correctness or accuracy of the design information as it may relate to a specific building. Certification is valid only when truss is fabricated by a UFPI plant. Bracing shown is for lateral support of truss members only and does not replace erection and permanent bracing. Refer to Building Component Safety Information (BCSI) for general guidance regarding storage, erection and bracing available from SBCA and Truss Plate Institute.



|            |       |            |     |     |                          |
|------------|-------|------------|-----|-----|--------------------------|
| Job        | Truss | Truss Type | Qty | Ply | Job Reference (optional) |
| 20110098JR | T01   | Common     | 12  | 1   |                          |

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| Loading                | (psf)     | Spacing         | 2-00-00         | CSI       | DEFL | in       | (loc) | I/defl | L/d  | PLATES | GRIP    |
|------------------------|-----------|-----------------|-----------------|-----------|------|----------|-------|--------|------|--------|---------|
| TCLL (roof)            | 30.0      | Plate Grip DOL  | 1.25            | TC        | 0.52 | Vert(LL) | -0.28 | 8-11   | >999 | 360    | 197/144 |
| Snow (Pf/Pg)           | 23.1/30.0 | Lumber DOL      | 1.25            | BC        | 0.98 | Vert(CT) | -0.58 | 8-11   | >490 | 240    |         |
| TCDL                   | 10.0      | Rep Stress Incr | YES             | WB        | 0.46 | Horz(CT) | 0.03  | 2      | n/a  | n/a    |         |
| BCLL                   | 0.0*      | Code            | IRC2015/TPI2014 | Matrix-MS |      |          |       |        |      |        |         |
| BCDL                   | 10.0      |                 |                 |           |      |          |       |        |      |        |         |
| Weight: 96 lb FT = 20% |           |                 |                 |           |      |          |       |        |      |        |         |

#### LUMBER

|           |                                           |
|-----------|-------------------------------------------|
| TOP CHORD | 2x4 SPF No.2                              |
| BOT CHORD | 2x4 SPF No.2                              |
| WEBS      | 2x4 SPF No.2                              |
| WEDGE     | Left: 2x4 SPF No.2<br>Right: 2x4 SPF No.2 |

#### BRACING

|           |                                                                 |
|-----------|-----------------------------------------------------------------|
| TOP CHORD | Structural wood sheathing directly applied or 4-8-6 oc purlins. |
| BOT CHORD | Rigid ceiling directly applied or 2-2-0 oc bracing.             |

|           |                                                 |
|-----------|-------------------------------------------------|
| REACTIONS | (size) 2=3-08, (min. 2-00), 6=3-08, (min. 2-00) |
|           | Max Horiz 2=213 (LC 12)                         |
|           | Max Uplift 2=-77 (LC 13), 6=-77 (LC 14)         |
|           | Max Grav 2=1293 (LC 2), 6=1293 (LC 2)           |

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

|           |                                                                                                                            |
|-----------|----------------------------------------------------------------------------------------------------------------------------|
| TOP CHORD | 2-15=-1447/97, 3-15=-1249/128, 3-16=-1104/125, 4-16=-937/145, 4-17=-937/145, 5-17=-1104/125, 5-18=-1249/128, 6-18=-1447/97 |
| BOT CHORD | 2-19=-126/1085, 19-20=-103/1085, 8-20=-103/1085, 8-21=-11/1020, 21-22=-11/1020, 6-22=-11/1020                              |
| WEBS      | 4-8=-63/817, 5-8=-423/199, 3-8=-423/199                                                                                    |

#### NOTES

- This truss has been checked for uniform roof live load only, except as noted.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf, BCDL=5.0psf; h=24ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -1-4-8 to 1-7-8, Interior (1) 1-7-8 to 8-10-0, Exterior (2) 8-10-0 to 14-10-0, Interior (1) 14-10-0 to 22-0-8, Exterior (2) 22-0-8 to 25-0-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

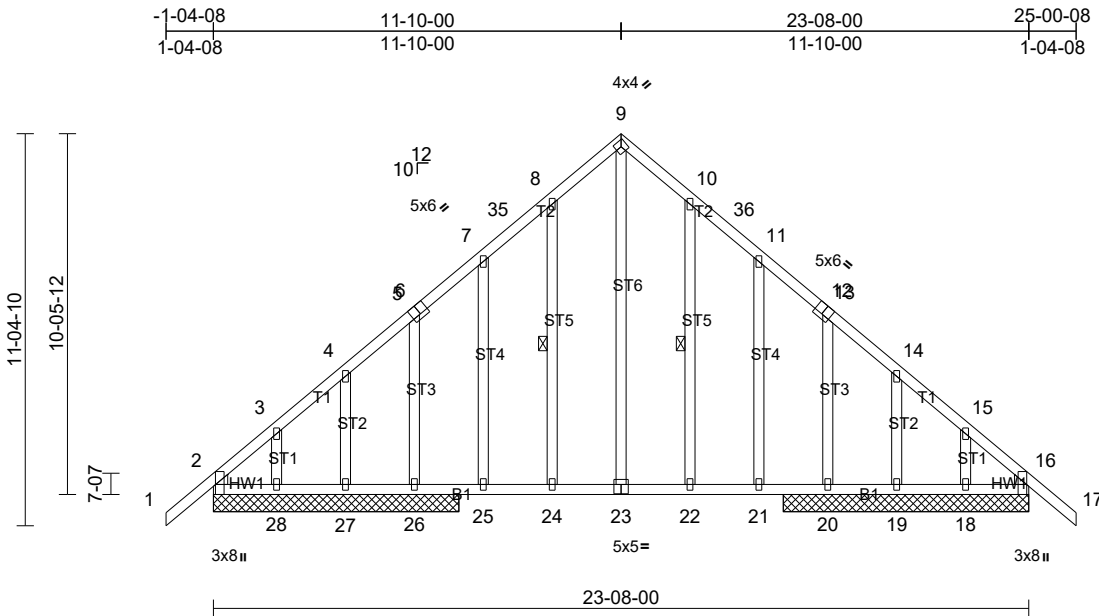
- TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.25); Pg=30.0 psf (ground snow); Pf=23.1 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 23.1 psf on overhangs non-concurrent with other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- One RT4 USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 6. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



|            |       |                        |     |     |                          |
|------------|-------|------------------------|-----|-----|--------------------------|
| Job        | Truss | Truss Type             | Qty | Ply | Job Reference (optional) |
| 20110098JR | T01GE | Common Supported Gable | 1   | 1   |                          |

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| Loading                 | (psf)     | Spacing         | 2-00-00         | CSI       | DEFL | in       | (loc) | l/defl | L/d  | PLATES | GRIP    |
|-------------------------|-----------|-----------------|-----------------|-----------|------|----------|-------|--------|------|--------|---------|
| TCLL (roof)             | 30.0      | Plate Grip DOL  | 1.25            | TC        | 0.23 | Vert(LL) | -0.06 | 24-25  | >999 | 360    | 197/144 |
| Snow (Pf/Pg)            | 23.1/30.0 | Lumber DOL      | 1.25            | BC        | 0.39 | Vert(CT) | -0.09 | 24-25  | >999 | 240    |         |
| TCDL                    | 10.0      | Rep Stress Incr | YES             | WB        | 0.14 | Horz(CT) | 0.02  | 16     | n/a  | n/a    |         |
| BCLL                    | 0.0*      | Code            | IRC2015/TPI2014 | Matrix-MS |      |          |       |        |      |        |         |
| BCDL                    | 10.0      |                 |                 |           |      |          |       |        |      |        |         |
| Weight: 135 lb FT = 20% |           |                 |                 |           |      |          |       |        |      |        |         |

**LUMBER**  
TOP CHORD 2x4 SPF No.2  
BOT CHORD 2x4 SPF No.2  
OTHERS 2x4 SPF No.2  
WEDGE Left: 2x4 SPF No.2  
Right: 2x4 SPF 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.  
WEBS 1 Row at midpt 8-24, 10-22

**REACTIONS** All bearings 7-01-08.  
(lb) - Max Horiz 2=-213 (LC 11), 29=-213 (LC 11)  
Max Uplift All uplift 100 (lb) or less at joint(s)  
19, 27 except 18=-112 (LC 14),  
20=-172 (LC 14), 26=-175 (LC 13),  
28=-112 (LC 13)  
Max Grav All reactions 250 (lb) or less at joint  
(s) 18, 19, 27, 28 except 2=595 (LC 2),  
16=595 (LC 2), 20=545 (LC 28),  
26=548 (LC 27), 29=595 (LC 2),  
32=595 (LC 2)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250  
(lb) or less except when shown.  
TOP CHORD 2-3=-545/28, 3-4=-526/0, 4-5=-487/4,  
5-6=-577/4, 6-7=-573/16, 7-35=-512/41,  
8-35=-472/49, 8-9=-472/97, 9-10=-472/97,  
10-36=-472/48, 11-36=-512/39,  
11-12=-573/14, 12-13=-577/3, 13-14=-487/1,  
14-15=-526/0, 15-16=-543/0  
BOT CHORD 2-28=-84/418, 27-28=0/418, 26-27=0/418,  
25-26=0/418, 24-25=0/418, 23-24=0/418,  
22-23=0/418, 21-22=0/418, 20-21=0/418,  
19-20=0/418, 18-19=0/418, 16-18=0/418  
WEBS 9-23=-57/305, 5-26=-303/129,  
13-20=-302/128

**NOTES**  
1) This truss has been checked for uniform roof live load only, except as noted.

- Wind: ASCE 7-10; Vult=115mph (3-second gust)  
Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=24ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -1-4-8 to 1-10-0, Interior (1) 1-10-0 to 8-10-0, Exterior (2) 8-10-0 to 14-10-0, Interior (1) 14-10-0 to 21-10-0, Exterior (2) 21-10-0 to 25-0-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.25); Pg=30.0 psf (ground snow); Pf=23.1 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 23.1 psf on overhangs non-concurrent with other live loads.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable studs spaced at 2-0-0 oc.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- One RT4 USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 26, 27, 28, 20, 19, and 18. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

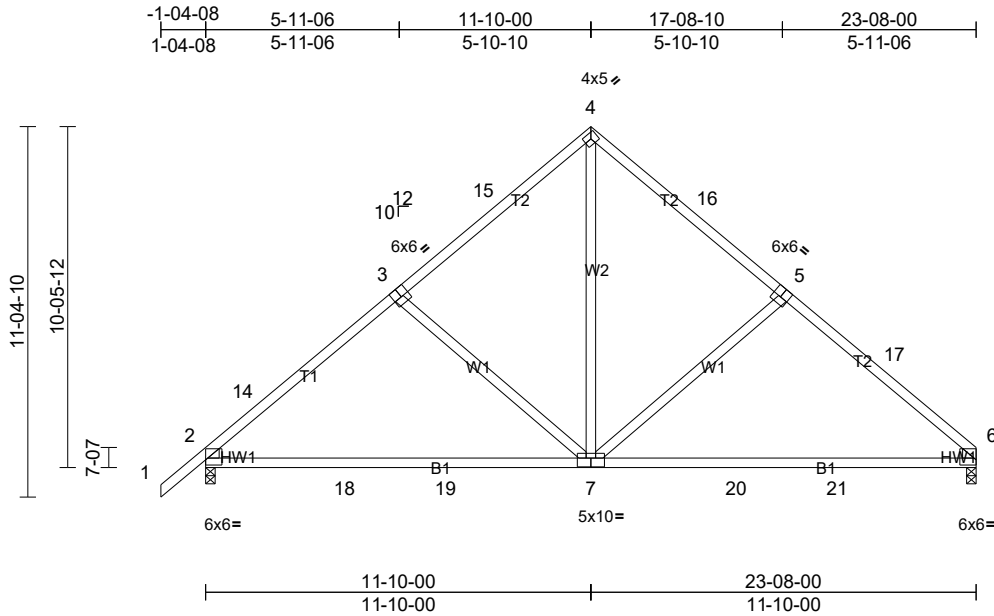
**LOAD CASE(S)** Standard



|            |       |            |     |     |                          |
|------------|-------|------------|-----|-----|--------------------------|
| Job        | Truss | Truss Type | Qty | Ply | Job Reference (optional) |
| 20110098JR | T02   | Common     | 2   | 1   |                          |

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| Loading      | (psf)     | Spacing         | 2-00-00         | CSI       |      | DEFL     | in    | (loc) | l/defl | L/d | PLATES        | GRIP     |
|--------------|-----------|-----------------|-----------------|-----------|------|----------|-------|-------|--------|-----|---------------|----------|
| TCLL (roof)  | 30.0      | Plate Grip DOL  | 1.25            | TC        | 0.53 | Vert(LL) | -0.28 | 7-13  | >999   | 360 | MT20          | 197/144  |
| Snow (Pf/Pg) | 23.1/30.0 | Lumber DOL      | 1.25            | BC        | 1.00 | Vert(CT) | -0.59 | 7-13  | >482   | 240 |               |          |
| TCDL         | 10.0      | Rep Stress Incr | YES             | WB        | 0.47 | Horz(CT) | 0.03  | 2     | n/a    | n/a |               |          |
| BCLL         | 0.0 *     | Code            | IRC2015/TPI2014 | Matrix-MS |      |          |       |       |        |     |               |          |
| BCDL         | 10.0      |                 |                 |           |      |          |       |       |        |     | Weight: 94 lb | FT = 20% |

#### LUMBER

|           |                                           |
|-----------|-------------------------------------------|
| TOP CHORD | 2x4 SPF No.2                              |
| BOT CHORD | 2x4 SPF No.2                              |
| WEBS      | 2x4 SPF No.2                              |
| WEDGE     | Left: 2x4 SPF No.2<br>Right: 2x4 SPF No.2 |

#### BRACING

|           |                                                                 |
|-----------|-----------------------------------------------------------------|
| TOP CHORD | Structural wood sheathing directly applied or 4-5-3 oc purlins. |
| BOT CHORD | Rigid ceiling directly applied or 2-2-0 oc bracing.             |

|           |                                                                                                                                                                |
|-----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| REACTIONS | (size) 2=3-08, (min. 2-01), 6=3-08, (min. 1-14)<br>Max Horiz 2=206 (LC 12)<br>Max Uplift 2=-77 (LC 13), 6=-54 (LC 14)<br>Max Grav 2=1297 (LC 2), 6=1180 (LC 2) |
|-----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|

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

|           |                                                                                                                                       |
|-----------|---------------------------------------------------------------------------------------------------------------------------------------|
| TOP CHORD | 2-14=-1453/101, 3-14=-1254/133,<br>3-15=-1110/131, 4-15=-942/150,<br>4-16=-942/150, 5-16=-1111/131,<br>5-17=-1230/136, 6-17=-1456/116 |
|-----------|---------------------------------------------------------------------------------------------------------------------------------------|

|           |                                                                                                     |
|-----------|-----------------------------------------------------------------------------------------------------|
| BOT CHORD | 2-18=-137/1077, 18-19=-118/1077,<br>7-19=-118/1077, 7-20=-27/1031,<br>20-21=-27/1031, 6-21=-27/1031 |
|-----------|-----------------------------------------------------------------------------------------------------|

|      |                                         |
|------|-----------------------------------------|
| WEBS | 4-7=-72/825, 5-7=-432/202, 3-7=-423/199 |
|------|-----------------------------------------|

#### NOTES

- This truss has been checked for uniform roof live load only, except as noted.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf, BCDL=5.0psf; h=24ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -1-4-8 to 1-7-8, Interior (1) 1-7-8 to 8-10-0, Exterior (2) 8-10-0 to 14-10-0, Interior (1) 14-10-0 to 20-8-0, Exterior (2) 20-8-0 to 23-8-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

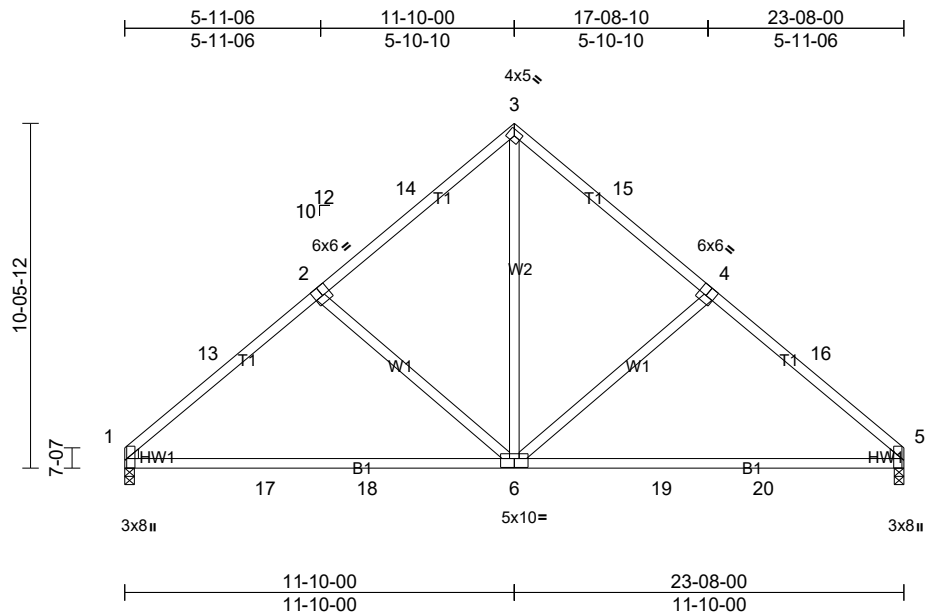
- TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.25); Pg=30.0 psf (ground snow); Pf=23.1 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 23.1 psf on overhangs non-concurrent with other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- One RT4 USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 6. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



|            |       |            |     |     |                          |
|------------|-------|------------|-----|-----|--------------------------|
| Job        | Truss | Truss Type | Qty | Ply | Job Reference (optional) |
| 20110098JR | T03   | Common     | 2   | 1   |                          |

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Scale = 1:70.3

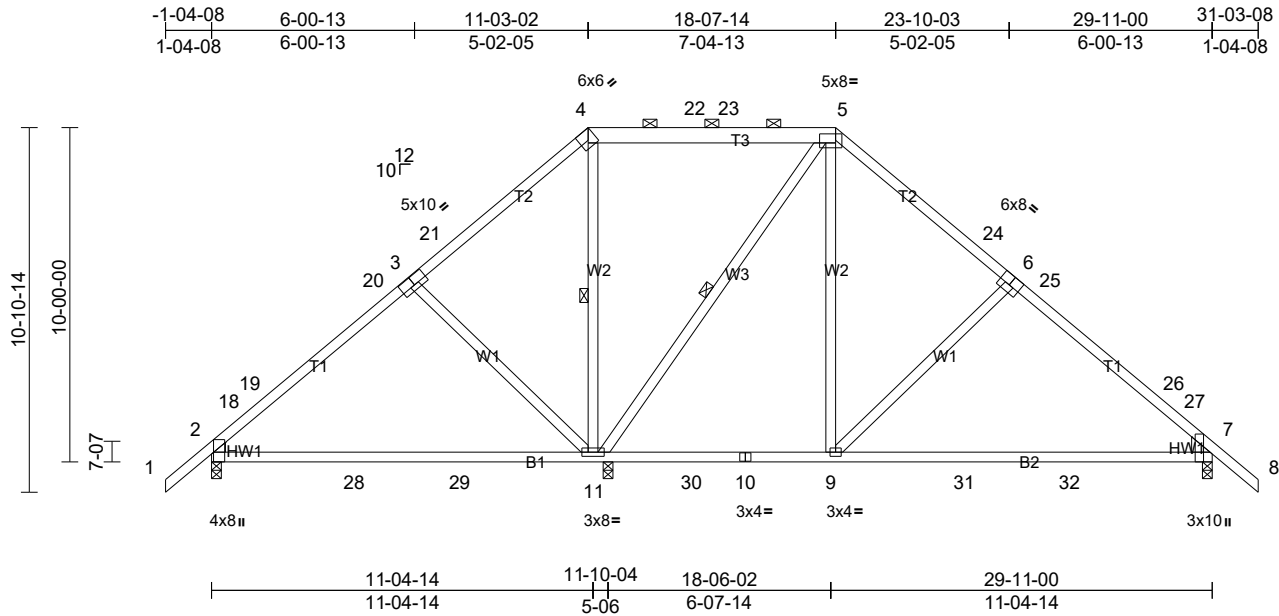
| Loading      | (psf)     | Spacing         | 2-00-00         | CSI       |      | DEFL     | in    | (loc) | l/defl | L/d | PLATES        | GRIP     |
|--------------|-----------|-----------------|-----------------|-----------|------|----------|-------|-------|--------|-----|---------------|----------|
| TCLL (roof)  | 30.0      | Plate Grip DOL  | 1.25            | TC        | 0.51 | Vert(LL) | -0.26 | 6-12  | >999   | 360 | MT20          | 197/144  |
| Snow (Pf/Pg) | 23.1/30.0 | Lumber DOL      | 1.25            | BC        | 0.78 | Vert(CT) | -0.55 | 6-12  | >512   | 240 |               |          |
| TCDL         | 10.0      | Rep Stress Incr | YES             | WB        | 0.46 | Horz(CT) | 0.03  | 1     | n/a    | n/a |               |          |
| BCLL         | 0.0*      | Code            | IRC2015/TPI2014 | Matrix-MS |      |          |       |       |        |     |               |          |
| BCDL         | 10.0      |                 |                 |           |      |          |       |       |        |     | Weight: 92 lb | FT = 20% |

- LUMBER**
- TOP CHORD 2x4 SPF No.2
- BOT CHORD 2x4 SPF 1650F 1.5E
- WEBS 2x4 SPF No.2
- WEDGE Left: 2x4 SPF No.2
- Right: 2x4 SPF No.2
- BRACING**
- TOP CHORD Structural wood sheathing directly applied or 4-5-4 oc purlins.
- BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
- REACTIONS** (size) 1=3-08, (min. 1-14), 5=3-08, (min. 1-14)
- Max Horiz 1=-191 (LC 9)
- Max Uplift 1=-54 (LC 13), 5=-54 (LC 14)
- Max Grav 1=1183 (LC 2), 5=1183 (LC 2)
- FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
- TOP CHORD 1-13=-1461/108, 2-13=-1235/140, 2-14=-1117/137, 3-14=-948/155, 3-15=-948/155, 4-15=-1117/137, 4-16=-1235/140, 5-16=-1461/108
- BOT CHORD 1-17=-161/1086, 17-18=-121/1086, 6-18=-121/1086, 6-19=-28/1035, 19-20=-28/1035, 5-20=-28/1035
- WEBS 3-6=-81/832, 2-6=-430/202, 4-6=-430/202
- NOTES**
- 1) This truss has been checked for uniform roof live load only, except as noted.
- 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf, BCDL=5.0psf; h=24ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-0-0 to 3-0-0, Interior (1) 3-0-0 to 8-10-0, Exterior (2) 8-10-0 to 14-10-0, Interior (1) 14-10-0 to 20-8-0, Exterior (2) 20-8-0 to 23-8-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.25); Pg=30.0 psf (ground snow); Pf=23.1 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) One RT4 USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 5. This connection is for uplift only and does not consider lateral forces.
- 7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- LOAD CASE(S)** Standard



|            |       |                |     |     |                          |
|------------|-------|----------------|-----|-----|--------------------------|
| Job        | Truss | Truss Type     | Qty | Ply | Job Reference (optional) |
| 20110098JR | T04   | Piggyback Base | 5   | 1   |                          |

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| Loading                 | (psf)     | Spacing         | 2-00-00         | CSI       |      | DEFL     | in    | (loc) | l/defl | L/d | PLATES | GRIP    |
|-------------------------|-----------|-----------------|-----------------|-----------|------|----------|-------|-------|--------|-----|--------|---------|
| TCLL (roof)             | 30.0      | Plate Grip DOL  | 1.25            | TC        | 0.78 | Vert(LL) | -0.26 | 11-14 | >525   | 360 | MT20   | 197/144 |
| Snow (Pf/Pg)            | 23.1/30.0 | Lumber DOL      | 1.25            | BC        | 0.57 | Vert(CT) | -0.56 | 11-14 | >243   | 240 |        |         |
| TCDL                    | 10.0      | Rep Stress Incr | YES             | WB        | 0.61 | Horz(CT) | 0.03  | 2     | n/a    | n/a |        |         |
| BCLL                    | 0.0*      | Code            | IRC2015/TPI2014 | Matrix-MS |      |          |       |       |        |     |        |         |
| BCDL                    | 10.0      |                 |                 |           |      |          |       |       |        |     |        |         |
| Weight: 137 lb FT = 20% |           |                 |                 |           |      |          |       |       |        |     |        |         |

**LUMBER**  
TOP CHORD 2x4 SPF No.2 \*Except\* 4-5:2x6 SPF No.2  
BOT CHORD 2x4 SPF 2100F 1.8E  
WEBS 2x4 SPF No.2  
WEDGE Left: 2x4 SPF No.2  
Right: 2x6 SPF No.2

**BRACING**  
TOP CHORD Structural wood sheathing directly applied or 4-2-13 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 4-5.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
WEBS 1 Row at midpt 4-11, 5-11  
**REACTIONS** (size) 2=3-08, (min. 1-08), 7=3-08, (min. 1-11), 11=3-08, (min. 2-00)  
Max Horiz 2=-204 (LC 11)  
Max Uplift 2=-9 (LC 13), 7=-85 (LC 9), 11=-167 (LC 10)  
Max Grav 2=976 (LC 39), 7=1311 (LC 39), 11=1412 (LC 39)

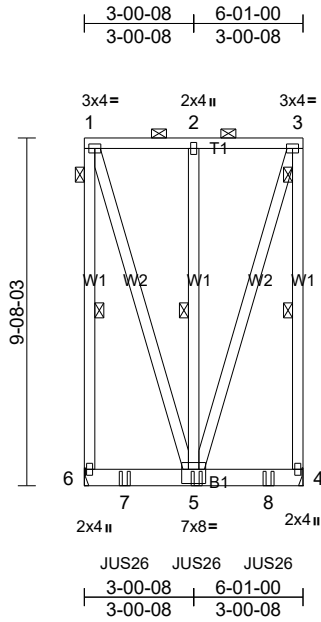
**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-18=-932/63, 18-19=-892/63, 19-20=-840/91, 3-20=-655/95, 3-21=-567/84, 4-21=-471/114, 4-22=-357/134, 22-23=-357/134, 5-23=-357/134, 5-24=-819/362, 6-24=-1007/332, 6-25=-1094/347, 25-26=-1286/322, 26-27=-1378/320, 7-27=-1452/316  
BOT CHORD 2-28=-141/744, 28-29=-64/744, 11-29=-64/744, 11-30=-34/683, 10-30=-34/683, 9-10=-34/683, 9-31=-152/988, 31-32=-152/988, 7-32=-152/988  
WEBS 3-11=-611/187, 4-11=-371/171, 5-9=-361/664, 6-9=-597/185, 5-11=-668/317

**NOTES**  
1) This truss has been checked for uniform roof live load only, except as noted.

- 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=24ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -1-4-8 to 1-7-8, Interior (1) 1-7-8 to 7-0-3, Exterior (2) 7-0-3 to 22-10-13, Interior (1) 22-10-13 to 28-3-8, Exterior (2) 28-3-8 to 31-3-8 zone; cantilever left and right exposed; end vertical left and right exposed; porch right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.25); Pg=30.0 psf (ground snow); Pf=23.1 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 23.1 psf on overhangs non-concurrent with other live loads.
- 6) Provide adequate drainage to prevent water ponding.
- 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 8) One RT4 USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 11, and 7. This connection is for uplift only and does not consider lateral forces.
- 9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard

|            |       |             |     |     |                          |
|------------|-------|-------------|-----|-----|--------------------------|
| Job        | Truss | Truss Type  | Qty | Ply | Job Reference (optional) |
| 20110098JR | T05   | Flat Girder | 1   | 1   |                          |



Scale = 1:64.4

| Loading      | (psf)     | Spacing         | 2-00-00         | CSI       |      | DEFL     | in    | (loc) | I/defl | L/d | PLATES        | GRIP     |
|--------------|-----------|-----------------|-----------------|-----------|------|----------|-------|-------|--------|-----|---------------|----------|
| TCLL (roof)  | 30.0      | Plate Grip DOL  | 1.25            | TC        | 0.48 | Vert(LL) | -0.01 | 5-6   | >999   | 360 | MT20          | 197/144  |
| Snow (Pf/Pg) | 23.1/30.0 | Lumber DOL      | 1.25            | BC        | 0.39 | Vert(CT) | -0.02 | 5-6   | >999   | 240 |               |          |
| TCDL         | 10.0      | Rep Stress Incr | NO              | WB        | 0.58 | Horz(CT) | 0.00  | 4     | n/a    | n/a |               |          |
| BCLL         | 0.0*      | Code            | IRC2015/TPI2014 | Matrix-MP |      |          |       |       |        |     |               |          |
| BCDL         | 10.0      |                 |                 |           |      |          |       |       |        |     | Weight: 70 lb | FT = 20% |

|                                                                                            |                                                           |  |
|--------------------------------------------------------------------------------------------|-----------------------------------------------------------|--|
| <b>LUMBER</b>                                                                              |                                                           |  |
| TOP CHORD                                                                                  | 2x4 SPF No.2                                              |  |
| BOT CHORD                                                                                  | 2x6 SPF No.2                                              |  |
| WEBS                                                                                       | 2x4 SPF No.2                                              |  |
| <b>BRACING</b>                                                                             |                                                           |  |
| TOP CHORD                                                                                  | 2-0-0 oc purlins (6-0-0 max.): 1-3, except end verticals. |  |
| BOT CHORD                                                                                  | Rigid ceiling directly applied or 10-0-0 oc bracing.      |  |
| WEBS                                                                                       | 1 Row at midpt 1-6, 3-4, 2-5                              |  |
| <b>REACTIONS</b> (size) 4= Mechanical, (min. 1-08), 6= Mechanical, (min. 1-08)             |                                                           |  |
|                                                                                            | Max Horiz 6=-263 (LC 7)                                   |  |
|                                                                                            | Max Uplift 4=-433 (LC 8), 6=-427 (LC 7)                   |  |
|                                                                                            | Max Grav 4=1176 (LC 24), 6=1144 (LC 25)                   |  |
| <b>FORCES</b> (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. |                                                           |  |
| TOP CHORD                                                                                  | 1-6=-801/362, 3-4=-801/362                                |  |
| WEBS                                                                                       | 1-5=-354/776, 2-5=-273/77, 3-5=-354/776                   |  |
| <b>NOTES</b>                                                                               |                                                           |  |

- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - Use USP JUS26 (With 4-10d nails into Girder & 4-10d nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 1-1-8 from the left end to 5-1-8 to connect truss(es) to back face of bottom chord.
  - Fill all nail holes where hanger is in contact with lumber.
  - 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
- Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (lb/ft)  
Vert: 1-3=-66, 4-6=-20  
Concentrated Loads (lb)  
Vert: 5=-508 (B), 7=-508 (B), 8=-510 (B)

- This truss has been checked for uniform roof live load only, except as noted.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=24ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.25); Pg=30.0 psf (ground snow); Pf=23.1 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0
- Unbalanced snow loads have been considered for this design.
- Provide adequate drainage to prevent water ponding.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 427 lb uplift at joint 6 and 433 lb uplift at joint 4.

This design is based upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of the Building Designer. Building Designer shall verify all design information on this sheet for conformance with conditions and requirements of the specific building and governing codes and ordinances. Building Designer accepts responsibility for the correctness or accuracy of the design information as it may relate to a specific building. Certification is valid only when truss is fabricated by a UFPI plant. Bracing shown is for lateral support of truss members only and does not replace erection and permanent bracing. Refer to Building Component Safety Information (BCSI) for general guidance regarding storage, erection and bracing available from SBCA and Truss Plate Institute.

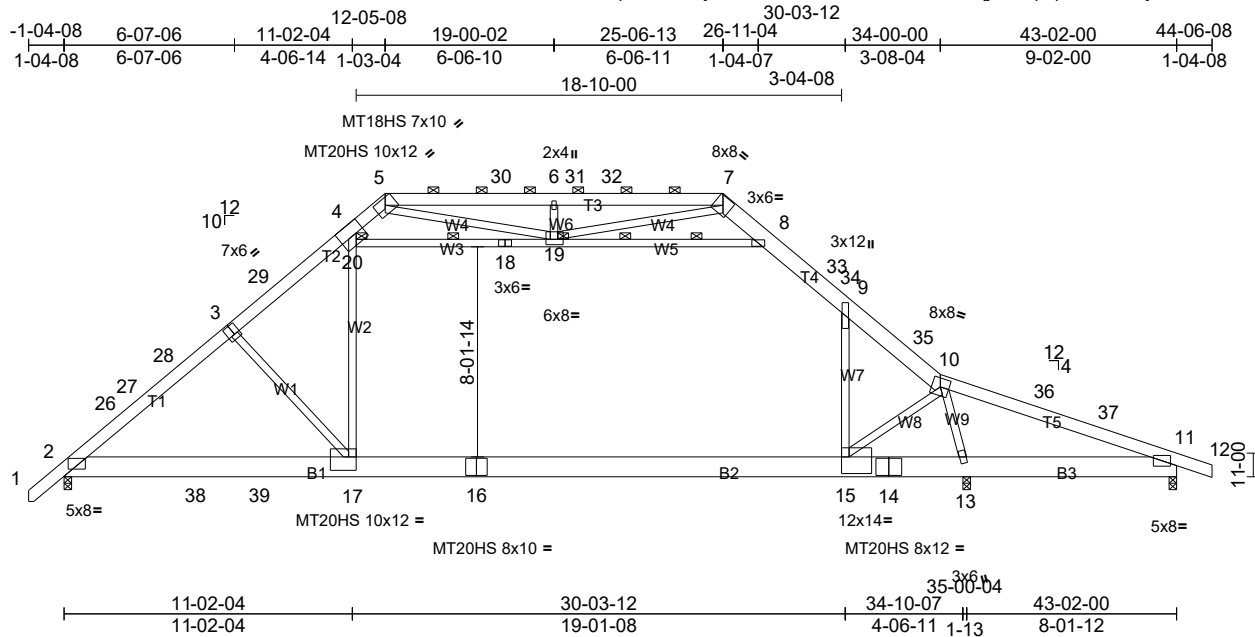


|            |       |            |     |     |                          |
|------------|-------|------------|-----|-----|--------------------------|
| Job        | Truss | Truss Type | Qty | Ply | Job Reference (optional) |
| 20110098JR | T06   | Attic      | 4   | 1   |                          |

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Scale = 1:89.8

| Loading      | (psf)     | Spacing         | 2-00-00         | CSI       |      | DEFL     | in    | (loc) | l/defl | L/d | PLATES         | GRIP     |
|--------------|-----------|-----------------|-----------------|-----------|------|----------|-------|-------|--------|-----|----------------|----------|
| TCLL (roof)  | 30.0      | Plate Grip DOL  | 1.25            | TC        | 0.91 | Vert(LL) | -0.61 | 15-17 | >687   | 360 | MT18HS         | 197/144  |
| Snow (Pf/Pg) | 23.1/30.0 | Lumber DOL      | 1.25            | BC        | 0.66 | Vert(CT) | -0.90 | 15-17 | >469   | 240 | MT20           | 197/144  |
| TCDL         | 10.0      | Rep Stress Incr | YES             | WB        | 0.90 | Horz(CT) | 0.04  | 13    | n/a    | n/a | MT20HS         | 187/143  |
| BCLL         | 0.0 *     | Code            | IRC2015/TPI2014 | Matrix-MS |      | Attic    | -0.48 | 15-17 | >480   | 360 |                |          |
| BCDL         | 10.0      |                 |                 |           |      |          |       |       |        |     |                |          |
|              |           |                 |                 |           |      |          |       |       |        |     | Weight: 344 lb | FT = 20% |

|                                                                                            |                                                                                                                                                                                                                                                                                                                            |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |  |                                                                                                                                                                                                                                                                         |  |  |
|--------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| <b>LUMBER</b>                                                                              |                                                                                                                                                                                                                                                                                                                            |  | 1) This truss has been checked for uniform roof live load only, except as noted.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |  | 14) NOTE: DUE TO THE OVERALL LENGTH TO DEPTH RATIO OF THE ROOM, THE FLOOR MAY EXHIBIT OBJECTIONABLE VIBRATION AND OR BOUNCE. BUILDING DESIGNER TO CONSIDER PROVIDING MEANS TO DAMPEN THESE EFFECTS. TRUSS DESIGN SHALL BE REVIEWED AND APPROVED PRIOR TO MANUFACTURING. |  |  |
| TOP CHORD                                                                                  | 2x6 SPF No.2 *Except* 3-5:2x6 SP 2400F 2.0E, 7-10:2x8 SPF No.2                                                                                                                                                                                                                                                             |  | 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=24ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -1-3-5 to 3-0-8, Interior (1) 3-0-8 to 8-1-11, Exterior (2) 8-1-11 to 16-9-5, Interior (1) 16-9-5 to 21-3-0, Exterior (2) 21-3-0 to 29-10-10, Interior (1) 29-10-10 to 40-2-11, Exterior (2) 40-2-11 to 44-6-8 zone; cantilever left and right exposed; end vertical left and right exposed; porch right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60 |  |  | 15) Attic room checked for L/360 deflection.                                                                                                                                                                                                                            |  |  |
| BOT CHORD                                                                                  | 2x10 SP 2400F 2.0E                                                                                                                                                                                                                                                                                                         |  | 3) TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.25); Pg=30.0 psf (ground snow); Pf=23.1 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0                                                                                                                                                                                                                                                                                                                                                         |  |  | <b>LOAD CASE(S)</b> Standard                                                                                                                                                                                                                                            |  |  |
| WEBS                                                                                       | 2x4 SPF No.2                                                                                                                                                                                                                                                                                                               |  | 4) Unbalanced snow loads have been considered for this design.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |                                                                                                                                                                                                                                                                         |  |  |
| <b>BRACING</b>                                                                             |                                                                                                                                                                                                                                                                                                                            |  | 5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 23.1 psf on overhangs non-concurrent with other live loads.                                                                                                                                                                                                                                                                                                                                                                                                                 |  |  |                                                                                                                                                                                                                                                                         |  |  |
| TOP CHORD                                                                                  | Structural wood sheathing directly applied or 2-2-0 oc purlins, except 2-0-0 oc purlins (3-3-2 max.): 5-7.                                                                                                                                                                                                                 |  | 6) Provide adequate drainage to prevent water ponding.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |                                                                                                                                                                                                                                                                         |  |  |
| BOT CHORD                                                                                  | Rigid ceiling directly applied or 6-0-0 oc bracing.                                                                                                                                                                                                                                                                        |  | 7) All plates are MT20 plates unless otherwise indicated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |  |                                                                                                                                                                                                                                                                         |  |  |
| WEBS                                                                                       | 1 Row at midpt 19-20                                                                                                                                                                                                                                                                                                       |  | 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.                                                                                                                                                                                                                                                                                                                                                                |  |  |                                                                                                                                                                                                                                                                         |  |  |
| WEBS                                                                                       | 2 Rows at 1/3 pts 8-19                                                                                                                                                                                                                                                                                                     |  | 9) Ceiling dead load (10.0 psf) on member(s). 8-9, 9-10, 19-20, 8-19; Wall dead load (5.0psf) on member (s). 17-20, 9-15                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |  |                                                                                                                                                                                                                                                                         |  |  |
| JOINTS                                                                                     | 1 Brace at Jt(s): 19, 20                                                                                                                                                                                                                                                                                                   |  | 10) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 15-17                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |  |                                                                                                                                                                                                                                                                         |  |  |
| <b>REACTIONS</b> (size)                                                                    |                                                                                                                                                                                                                                                                                                                            |  | 11) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 11. This connection is for uplift only and does not consider lateral forces.                                                                                                                                                                                                                                                                                                                                                                                                             |  |  |                                                                                                                                                                                                                                                                         |  |  |
|                                                                                            | 2=3-08, (min. 2-01), 11=3-08, (min. 1-08), 13=3-08, (min. 2-06)                                                                                                                                                                                                                                                            |  | 12) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.                                                                                                                                                                                                                                                                                                                                                                                                                                |  |  |                                                                                                                                                                                                                                                                         |  |  |
|                                                                                            | Max Horiz 2=-224 (LC 11)                                                                                                                                                                                                                                                                                                   |  | 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |  |                                                                                                                                                                                                                                                                         |  |  |
|                                                                                            | Max Uplift 11=-283 (LC 10)                                                                                                                                                                                                                                                                                                 |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |  |                                                                                                                                                                                                                                                                         |  |  |
|                                                                                            | Max Grav 2=2474 (LC 51), 11=753 (LC 49), 13=2905 (LC 3)                                                                                                                                                                                                                                                                    |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |  |                                                                                                                                                                                                                                                                         |  |  |
| <b>FORCES</b> (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. |                                                                                                                                                                                                                                                                                                                            |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |  |                                                                                                                                                                                                                                                                         |  |  |
| TOP CHORD                                                                                  | 2-26=-3529/0, 26-27=-3432/0, 27-28=-3431/0, 3-28=-3251/0, 3-29=-3194/0, 4-29=-3050/0, 4-5=-1901/57, 5-30=-3404/193, 6-30=-3404/193, 6-31=-3404/193, 31-32=-3404/193, 7-32=-3404/193, 7-8=-1326/264, 8-33=-2413/0, 33-34=-2486/0, 9-34=-2502/0, 9-35=-3008/0, 10-35=-3149/0, 10-36=-890/438, 36-37=-892/412, 11-37=-937/400 |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |  |                                                                                                                                                                                                                                                                         |  |  |
| BOT CHORD                                                                                  | 2-38=0/2710, 38-39=0/2710, 17-39=0/2710, 16-17=0/2286, 15-16=0/2286, 14-15=-151/1329, 13-14=-151/1329, 11-13=-376/846                                                                                                                                                                                                      |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |  |                                                                                                                                                                                                                                                                         |  |  |
| WEBS                                                                                       | 3-17=-829/172, 17-20=0/1749, 4-20=0/1813, 9-15=-241/1065, 10-15=0/1678, 18-20=-340/5, 18-19=-325/14, 8-19=-2608/0, 5-19=-941/1707, 6-19=-742/169, 7-19=-7/2615, 10-13=-3526/0                                                                                                                                              |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |  |                                                                                                                                                                                                                                                                         |  |  |
| <b>NOTES</b>                                                                               |                                                                                                                                                                                                                                                                                                                            |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |  |                                                                                                                                                                                                                                                                         |  |  |

This design is based upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of the Building Designer. Building Designer shall verify all design information on this sheet for conformance with conditions and requirements of the specific building and governing codes and ordinances. Building Designer accepts responsibility for the correctness or accuracy of the design information as it may relate to a specific building. Certification is valid only when truss is fabricated by a UFPI plant. Bracing shown is for lateral support of truss members only and does not replace erection and permanent bracing. Refer to Building Component Safety Information (BCSI) for general guidance regarding storage, erection and bracing available from SBCA and Truss Plate Institute.

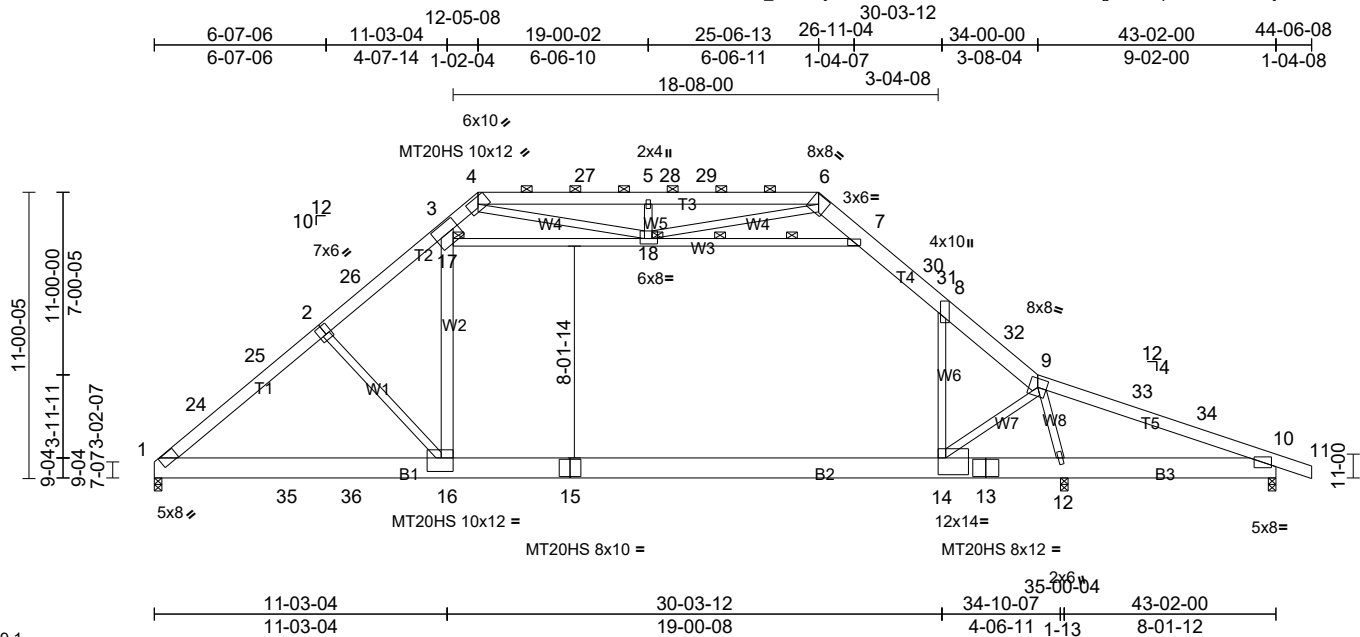


|            |       |            |     |     |                          |
|------------|-------|------------|-----|-----|--------------------------|
| Job        | Truss | Truss Type | Qty | Ply |                          |
| 20110098JR | T07   | Attic      | 5   | 1   | Job Reference (optional) |

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Scale = 1:89.1

[illegible]

## LUMBER

|           |                                                                  |
|-----------|------------------------------------------------------------------|
| TOP CHORD | 2x6 SPF No.2 *Except* 2-4:2x6 SP 2400F<br>2.0E, 6-9:2x8 SPF No.2 |
| BOT CHORD | 2x10 SP 2400F 2.0E                                               |
| WEBS      | 2x4 SPF No.2 *Except* 3-16:2x6 SPF No.2                          |

## BRACING

**TOP CHORD** Structural wood sheathing directly applied or 1-7-8 oc purlins, except 2-0-0 oc purlins (3-3-15 max.): 4-6.

**BOT CHORD** Rigid ceiling directly applied or 6-0-0 oc bracing.

WEBS      2 Rows at 1/3 pts    7-18

JOINTS      1 Brace at Jt(s): 17,  
18

**REACTIONS** (size) 1=3-08, (min. 2-00), 10=3-08, (min. 1-08), 12=3-08, (min. 2-06)  
 Max Horiz 1=217 (LC 11)  
 Max Uplift 10=273 (LC 10)  
 Max Grav 1=2407 (LC 51), 10=771 (LC 2), 12=2844 (LC 3)

## FORCES

(lb) or less except when shown.

TOP CHORD 1-24=-3498/0, 24-25=-3386/0, 2-25=-3220/0,  
2-26=-3159/0, 3-26=-3014/0, 3-4=-1750/63,  
4-27=-3317/208, 5-27=-3317/208,  
5-28=-3317/208, 28-29=-3317/208,  
6-29=-3317/208, 6-7=-1286/272,  
7-30=-2419/0, 30-31=-2493/0, 8-31=-2508/0,  
8-32=-3037/0, 9-32=-3187/0, 9-33=-952/396,  
33-34=-954/384, 10-34=-999/373  
BOT CHORD 1-35=0/2675, 35-36=0/2675, 16-36=0/2675,  
15-16=0/2298, 14-15=0/2298,  
13-14=-129/1387, 12-13=-129/1387,  
10-12=-290/905

WEBS 2-16=-759/180, 16-17=0/1674, 3-17=0/1752,  
8-14=-190/1102, 9-14=0/1586, 17-18=-622/4,  
7-18=-2707/0, 4-18=-843/1772,  
5-18=-757/164, 6-18=-19/2568, 9-12=-3459/0

## NOTES

1) This truss has been checked for uniform roof live load only, except as noted.

2) Wind: ASCE 7-10; Vult=115mph (3-second gust)  
Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf, h=24ft; Cat. I; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-1-12 to 4-5-9, Interior (1) 4-5-9 to 8-1-11, Exterior (2) 8-1-11 to 16-9-5, Interior (1) 16-9-5 to 21-3-0, Exterior (2) 21-3-0 to 29-10-10, Interior (1) 29-10-10 to 40-2-11, Exterior (2) 40-2-11 to 44-6-8 zone; cantilever left and right exposed ; end vertical left and right exposed; porch right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.25); Pg=30.0 psf (ground snow); Pf=23.1 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10. Lu=50-0-0

4) Unbalanced snow loads have been considered for this design.

5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 23.1 psf on overhangs non-concurrent with other live loads.

6) Provide adequate drainage to prevent water ponding.

7) All plates are MT20 plates unless otherwise indicated.

8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

9) Ceiling dead load (10.0 psf) on member(s). 7-8, 8-9, 17-18, 7-18; Wall dead load (5.0psf) on member (s).16-17, 8-14

10) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 14-16

11) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 10. This connection is for uplift only and does not consider lateral forces.

12) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

14) NOTE: DUE TO THE OVERALL LENGTH TO DEPTH RATIO OF THE ROOM, THE FLOOR MAY EXHIBIT OBJECTIONABLE VIBRATION AND OR BOUNCE. BUILDING DESIGNER TO CONSIDER PROVIDING MEANS TO DAMPEN THESE EFFECTS. TRUSS DESIGN SHALL BE REVIEWED AND APPROVED PRIOR TO MANUFACTURING.

15) Attic room checked for L/360 deflection.

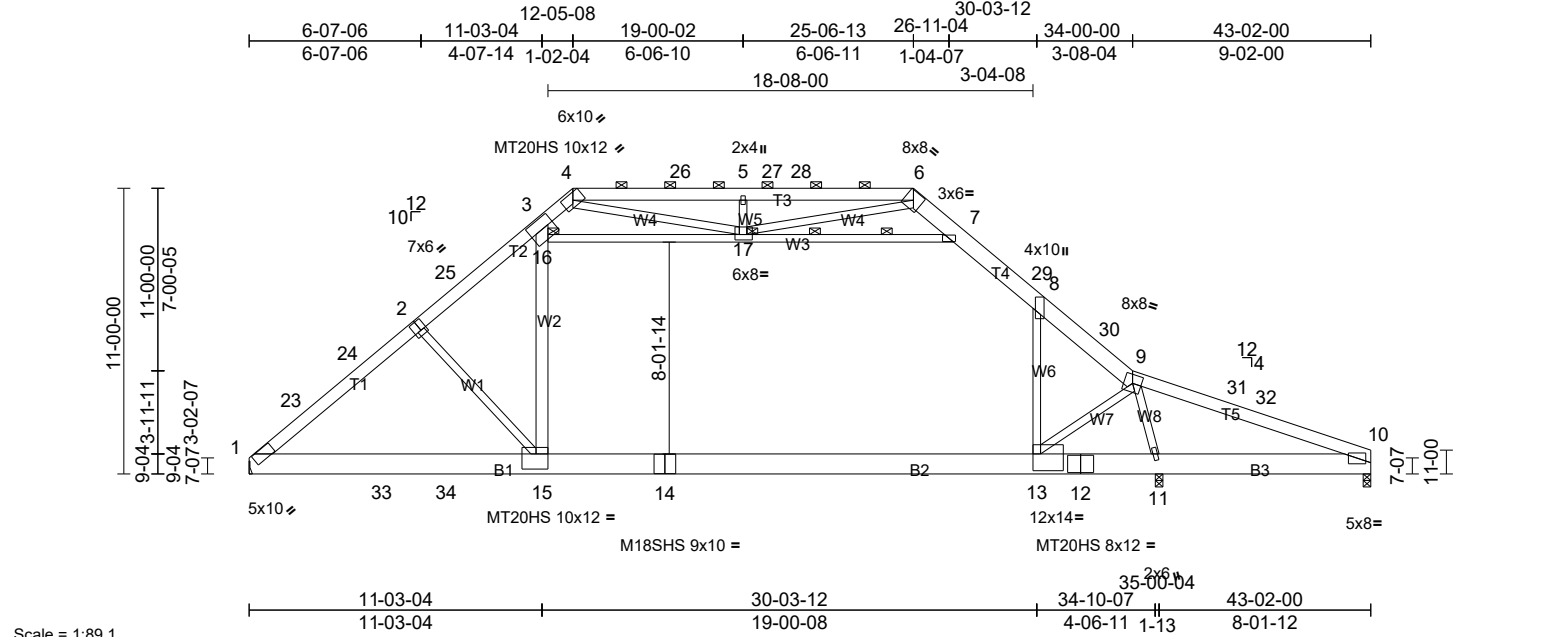
LOAD CASE(S) Standard



This design is based upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of the Building Designer. Building Designer shall verify all design information on this sheet for conformance with conditions and requirements of the specific building and governing codes and ordinances. Building Designer accepts responsibility for the correctness or accuracy of the design information as it may relate to a specific building. Certification is valid only when truss is fabricated by a UFPI plant. Bracing shown is for lateral support of truss members only and does not replace erection and permanent bracing. Refer to Building Component Safety Information (BCSI) for general guidance regarding storage, erection and bracing available from SBCE and Truss Plate Institute.

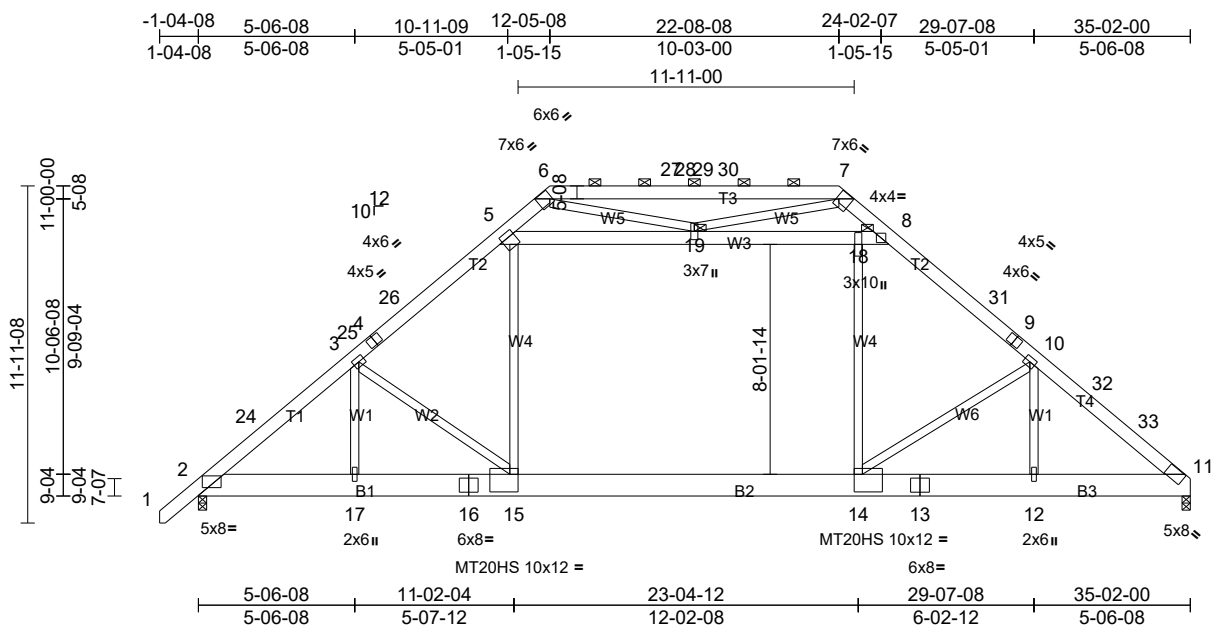
|            |       |            |     |     |                          |
|------------|-------|------------|-----|-----|--------------------------|
| Job        | Truss | Truss Type | Qty | Ply | Job Reference (optional) |
| 20110098JR | T07B  | Attic      | 1   | 1   |                          |

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|            |       |            |     |     |                          |
|------------|-------|------------|-----|-----|--------------------------|
| Job        | Truss | Truss Type | Qty | Ply |                          |
| 20110098JR | T08   | Attic      | 5   | 1   | Job Reference (optional) |

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Scale = 1:82

| Loading                 | (psf)     | Spacing         | 2-00-00         | CSI       |      | DEFL     | in    | (loc) | l/defl | L/d | PLATES | GRIP    |
|-------------------------|-----------|-----------------|-----------------|-----------|------|----------|-------|-------|--------|-----|--------|---------|
| TCLL (roof)             | 30.0      | Plate Grip DOL  | 1.25            | TC        | 0.68 | Vert(LL) | -0.22 | 14-15 | >999   | 360 | MT20   | 197/144 |
| Snow (Pf/Pg)            | 23.1/30.0 | Lumber DOL      | 1.25            | BC        | 0.75 | Vert(CT) | -0.34 | 14-15 | >999   | 240 | MT20HS | 148/108 |
| TCDL                    | 10.0      | Rep Stress Incr | YES             | WB        | 0.48 | Horz(CT) | 0.04  | 11    | n/a    | n/a |        |         |
| BCLL                    | 0.0*      | Code            | IRC2015/TPI2014 | Matrix-MS |      | Attic    | -0.14 | 14-15 | >999   | 360 |        |         |
| BCDL                    | 10.0      |                 |                 |           |      |          |       |       |        |     |        |         |
| Weight: 298 lb FT = 20% |           |                 |                 |           |      |          |       |       |        |     |        |         |

**LUMBER**  
TOP CHORD 2x6 SPF No.2 \*Except\* 6-7:2x6 SP 2400F 2.0E  
BOT CHORD 2x10 SP 2400F 2.0E \*Except\* 16-13:2x10 SPF No.2  
WEBS 2x4 SPF No.2 \*Except\* 5-8:2x6 SP 2400F 2.0E

**BRACING**  
TOP CHORD Structural wood sheathing directly applied or 4-0-1 oc purlins, except 2-0-0 oc purlins (5-2-5 max.): 6-7.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
JOINTS 1 Brace at Jt(s): 18, 19

**REACTIONS** (size) 2=3-08, (min. 1-15), 11=3-08, (min. 1-14)  
Max Horiz 2=212 (LC 10)  
Max Grav 2=2341 (LC 47), 11=2268 (LC 47)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-24=-3253/0, 3-24=-3039/0, 3-25=-2965/0, 4-25=-2936/0, 4-26=-2843/0, 5-26=-2771/0, 5-6=-1628/165, 6-27=-1947/0, 27-28=-1947/0, 28-29=-1947/0, 29-30=-1947/0, 7-30=-1947/0, 7-8=-1514/196, 8-31=-2663/0, 9-31=-2822/0, 9-10=-2907/0, 10-32=-2994/0, 32-33=-3004/0, 11-33=-3135/0  
BOT CHORD 2-17=0/2523, 16-17=0/2523, 15-16=0/2523, 14-15=0/2168, 13-14=0/2302, 12-13=0/2302, 11-12=0/2308  
WEBS 3-15=-595/230, 5-15=0/1083, 14-18=0/988, 10-14=-496/266, 5-19=-1778/0, 18-19=-1974/0, 8-18=-1984/0, 6-19=0/687, 7-19=0/937, 10-12=-251/153

**NOTES**

- 1) This truss has been checked for uniform roof live load only, except as noted.

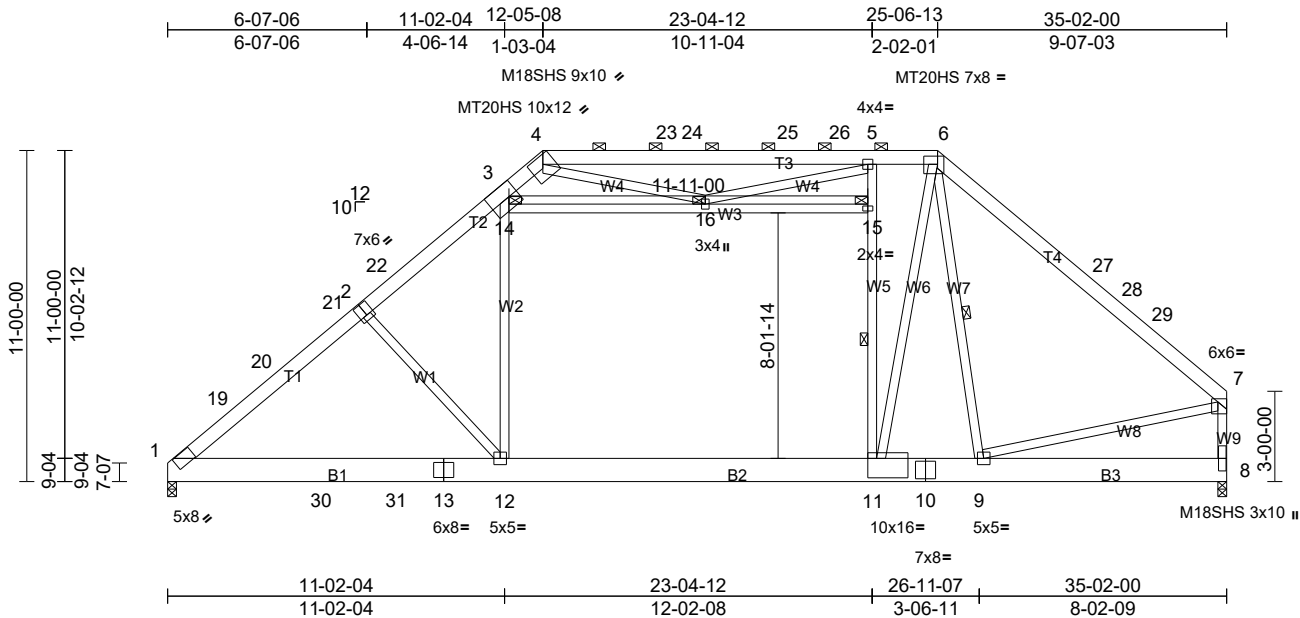
- 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=24ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -1-3-5 to 2-2-14, Interior (1) 2-2-14 to 7-3-14, Exterior (2) 7-3-14 to 17-3-4, Interior (1) 17-3-4 to 17-10-12, Exterior (2) 17-10-12 to 27-10-2, Interior (1) 27-10-2 to 31-6-1, Exterior (2) 31-6-1 to 35-0-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.25); Pg=30.0 psf (ground snow); Pf=23.1 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 23.1 psf on overhangs non-concurrent with other live loads.
- 6) Provide adequate drainage to prevent water ponding.
- 7) All plates are MT20 plates unless otherwise indicated.
- 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 9) Ceiling dead load (10.0 psf) on member(s). 5-19, 18-19, 8-18; Wall dead load (5.0psf) on member(s). 5-15, 14-18
- 10) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 14-15
- 11) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 13) Attic room checked for L/360 deflection.
- LOAD CASE(S)** Standard



|            |       |            |     |     |                          |
|------------|-------|------------|-----|-----|--------------------------|
| Job        | Truss | Truss Type | Qty | Ply |                          |
| 20110098JR | T09   | Attic      | 1   | 1   | Job Reference (optional) |

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| Loading      | (psf)     | Spacing         | 2-00-00         | CSI       |      | DEFL     | in    | (loc) | l/defl | L/d | PLATES         | GRIP     |
|--------------|-----------|-----------------|-----------------|-----------|------|----------|-------|-------|--------|-----|----------------|----------|
| TCLL (roof)  | 30.0      | Plate Grip DOL  | 1.25            | TC        | 0.86 | Vert(LL) | -0.25 | 11-12 | >999   | 360 | M18SHS         | 197/144  |
| Snow (Pf/Pg) | 23.1/30.0 | Lumber DOL      | 1.25            | BC        | 0.84 | Vert(CT) | -0.39 | 11-12 | >999   | 240 | MT20           | 197/144  |
| TCDL         | 10.0      | Rep Stress Incr | YES             | WB        | 0.84 | Horz(CT) | 0.03  | 8     | n/a    | n/a | MT20HS         | 148/108  |
| BCLL         | 0.0*      | Code            | IRC2015/TPI2014 | Matrix-MS |      | Attic    | -0.16 | 11-12 | >933   | 360 |                |          |
| BCDL         | 10.0      |                 |                 |           |      |          |       |       |        |     |                |          |
|              |           |                 |                 |           |      |          |       |       |        |     | Weight: 292 lb | FT = 20% |

#### LUMBER

|           |                                      |
|-----------|--------------------------------------|
| TOP CHORD | 2x6 SPF No.2 *Except* 4-6,6-7:2x6 SP |
|           | 2400F 2.0E                           |
| BOT CHORD | 2x10 SPF No.2 *Except* 1-13:2x10 SP  |
|           | 2400F 2.0E                           |
| WEBS      | 2x4 SPF No.2                         |

#### BRACING

|           |                                                                                                                               |
|-----------|-------------------------------------------------------------------------------------------------------------------------------|
| TOP CHORD | Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (5-9-0 max.): 4-6. |
| BOT CHORD | Rigid ceiling directly applied or 8-2-5 oc bracing.                                                                           |
| WEBS      | 1 Row at midpt 11-15, 6-9                                                                                                     |
| JOINTS    | 1 Brace at Jt(s): 14, 15, 16                                                                                                  |

|           |                                                 |
|-----------|-------------------------------------------------|
| REACTIONS | (size) 1=3-08, (min. 1-14), 8=3-08, (min. 3-08) |
|           | Max Horiz 1=196 (LC 10)                         |
|           | Max Grav 1=2270 (LC 46), 8=2211 (LC 46)         |

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

|           |                                                                                                                                                                                                                                                                  |
|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TOP CHORD | 1-19=-3119/0, 19-20=-3025/0, 20-21=-2842/0, 2-21=-2813/0, 2-22=-2800/0, 3-22=-2682/0, 3-4=-1746/77, 4-23=-2157/0, 23-24=-2157/0, 24-25=-2157/0, 25-26=-2157/0, 5-26=-2157/0, 5-6=-2048/38, 6-27=-2062/0, 27-28=-2062/0, 28-29=-2081/0, 7-29=-2248/0, 7-8=-2113/0 |
| BOT CHORD | 1-30=0/2339, 30-31=0/2339, 13-31=0/2339, 12-13=0/2339, 11-12=0/2049, 10-11=0/1653, 9-10=0/1653                                                                                                                                                                   |
| WEBS      | 2-12=-747/189, 12-14=0/1128, 3-14=0/1194, 11-15=-1397/266, 5-15=-1279/289, 6-11=-55/1990, 14-16=-393/0, 7-9=0/1585, 4-16=0/467, 5-16=0/256, 6-9=-896/26                                                                                                          |

#### NOTES

- 1) This truss has been checked for uniform roof live load only, except as noted.

- 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=24ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-1-12 to 3-7-15, Interior (1) 3-7-15 to 7-5-13, Exterior (2) 7-5-13 to 17-5-3, Interior (1) 17-5-3 to 20-7-2, Exterior (2) 20-7-2 to 30-6-8, Interior (1) 30-6-8 to 31-6-1, Exterior (2) 31-6-1 to 35-0-4 zone; cantilever left and right exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.25); Pg=30.0 psf (ground snow); Pf=23.1 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0
- 4) Unbalanced snow loads have been considered for this design.
- 5) Provide adequate drainage to prevent water ponding.
- 6) All plates are MT20 plates unless otherwise indicated.
- 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 8) Ceiling dead load (10.0 psf) on member(s). 14-16, 15-16; Wall dead load (5.0psf) on member(s). 12-14, 11-15
- 9) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 11-12
- 10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 12) Attic room checked for L/360 deflection.

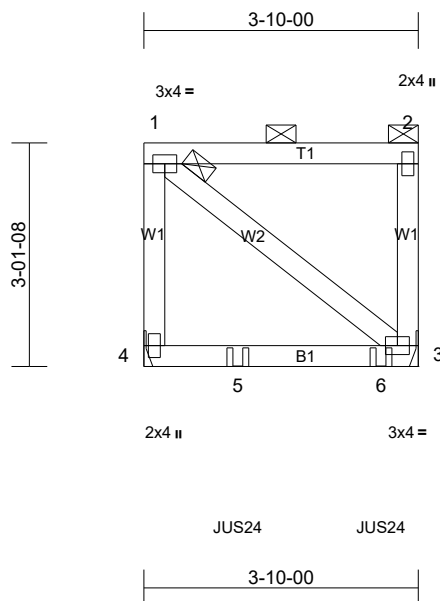
LOAD CASE(S) Standard



|            |       |             |     |     |                          |
|------------|-------|-------------|-----|-----|--------------------------|
| Job        | Truss | Truss Type  | Qty | Ply | Job Reference (optional) |
| 20110098JR | T09A  | Flat Girder | 1   | 1   |                          |

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| Loading      | (psf)     | Spacing         | 2-00-00         | CSI       | DEFL | in       | (loc) | l/defl | L/d  | PLATES        | GRIP     |
|--------------|-----------|-----------------|-----------------|-----------|------|----------|-------|--------|------|---------------|----------|
| TCLL (roof)  | 30.0      | Plate Grip DOL  | 1.25            | TC        | 0.28 | Vert(LL) | -0.04 | 3-4    | >960 | 360           | 197/144  |
| Snow (Pf/Pg) | 23.1/30.0 | Lumber DOL      | 1.25            | BC        | 0.83 | Vert(CT) | -0.08 | 3-4    | >534 | 240           |          |
| TCDL         | 10.0      | Rep Stress Incr | NO              | WB        | 0.00 | Horz(CT) | 0.00  | 3      | n/a  | n/a           |          |
| BCLL         | 0.0*      | Code            | IRC2015/TPI2014 | Matrix-MP |      |          |       |        |      |               |          |
| BCDL         | 10.0      |                 |                 |           |      |          |       |        |      |               |          |
|              |           |                 |                 |           |      |          |       |        |      | Weight: 19 lb | FT = 20% |

#### LUMBER

TOP CHORD 2x4 SPF No.2  
BOT CHORD 2x4 SPF No.2  
WEBS 2x4 SPF No.2

#### BRACING

TOP CHORD 2-0-0 oc purlins: 1-2, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 3= Mechanical, (min. 1-08), 4= Mechanical, (min. 1-08)  
Max Uplift 3=-150 (LC 7), 4=-111 (LC 7)  
Max Grav 3=528 (LC 2), 4=397 (LC 2)

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

#### NOTES

- 1) This truss has been checked for uniform roof live load only, except as noted.
- 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=24ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.25); Pg=30.0 psf (ground snow); Pf=23.1 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0
- 4) Unbalanced snow loads have been considered for this design.
- 5) Provide adequate drainage to prevent water ponding.
- 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 111 lb uplift at joint 4 and 150 lb uplift at joint 3.
- 9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

11) Use USP JUS24 (With 4-10d nails into Girder & 2-10d nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 1-3-12 from the left end to 3-3-12 to connect truss(es) to front face of bottom chord.

12) Fill all nail holes where hanger is in contact with lumber.

13) 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

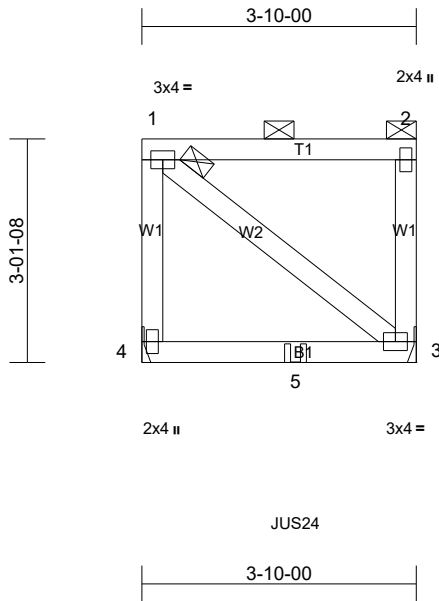
- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (lb/ft)  
Vert: 1-2=-66, 3-4=-20  
Concentrated Loads (lb)  
Vert: 5=-272 (F), 6=-278 (F)



|            |       |             |     |     |                          |
|------------|-------|-------------|-----|-----|--------------------------|
| Job        | Truss | Truss Type  | Qty | Ply | Job Reference (optional) |
| 20110098JR | T09B  | Flat Girder | 1   | 1   |                          |

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| Loading      | (psf)     | Spacing         | 2-00-00         | CSI       |      | DEFL     | in    | (loc) | l/defl | L/d | PLATES        | GRIP     |
|--------------|-----------|-----------------|-----------------|-----------|------|----------|-------|-------|--------|-----|---------------|----------|
| TCLL (roof)  | 30.0      | Plate Grip DOL  | 1.25            | TC        | 0.28 | Vert(LL) | -0.04 | 3-4   | >999   | 360 | MT20          | 197/144  |
| Snow (Pf/Pg) | 23.1/30.0 | Lumber DOL      | 1.25            | BC        | 0.81 | Vert(CT) | -0.07 | 3-4   | >623   | 240 |               |          |
| TCDL         | 10.0      | Rep Stress Incr | NO              | WB        | 0.00 | Horz(CT) | 0.00  | 3     | n/a    | n/a |               |          |
| BCLL         | 0.0*      | Code            | IRC2015/TPI2014 | Matrix-MP |      |          |       |       |        |     |               |          |
| BCDL         | 10.0      |                 |                 |           |      |          |       |       |        |     | Weight: 19 lb | FT = 20% |

#### LUMBER

TOP CHORD 2x4 SPF No.2  
BOT CHORD 2x4 SPF No.2  
WEBS 2x4 SPF No.2

#### BRACING

TOP CHORD 2-0-0 oc purlins: 1-2, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 3= Mechanical, (min. 1-08), 4= Mechanical, (min. 1-08)  
Max Uplift 3=-92 (LC 7), 4=-81 (LC 7)  
Max Grav 3=336 (LC 2), 4=300 (LC 2)

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

#### NOTES

- 1) This truss has been checked for uniform roof live load only, except as noted.
- 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=24ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.25); Pg=30.0 psf (ground snow); Pf=23.1 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0
- 4) Unbalanced snow loads have been considered for this design.
- 5) Provide adequate drainage to prevent water ponding.
- 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 81 lb uplift at joint 4 and 92 lb uplift at joint 3.
- 9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

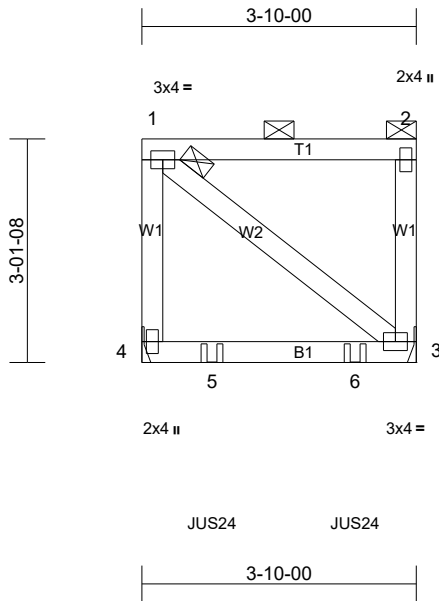
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - 11) Use USP JUS24 (With 4-10d nails into Girder & 2-10d nails into Truss) or equivalent at 2-1-12 from the left end to connect truss(es) to front face of bottom chord.
  - 12) Fill all nail holes where hanger is in contact with lumber.
  - 13) 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) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (lb/ft)  
Vert: 1-2=-66, 3-4=-20  
Concentrated Loads (lb)  
Vert: 5=-272 (F)



|            |       |             |     |     |                          |
|------------|-------|-------------|-----|-----|--------------------------|
| Job        | Truss | Truss Type  | Qty | Ply | Job Reference (optional) |
| 20110098JR | T09C  | Flat Girder | 1   | 1   |                          |

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Scale = 1:32.3

| Loading      | (psf)     | Spacing         | 2-00-00         | CSI       |      | DEFL     | in    | (loc) | I/defl | L/d | PLATES        | GRIP     |
|--------------|-----------|-----------------|-----------------|-----------|------|----------|-------|-------|--------|-----|---------------|----------|
| TCLL (roof)  | 30.0      | Plate Grip DOL  | 1.25            | TC        | 0.28 | Vert(LL) | -0.05 | 3-4   | >911   | 360 | MT20          | 197/144  |
| Snow (Pf/Pg) | 23.1/30.0 | Lumber DOL      | 1.25            | BC        | 0.74 | Vert(CT) | -0.08 | 3-4   | >509   | 240 |               |          |
| TCDL         | 10.0      | Rep Stress Incr | NO              | WB        | 0.00 | Horz(CT) | 0.00  | 3     | n/a    | n/a |               |          |
| BCLL         | 0.0*      | Code            | IRC2015/TPI2014 | Matrix-MP |      |          |       |       |        |     |               |          |
| BCDL         | 10.0      |                 |                 |           |      |          |       |       |        |     | Weight: 19 lb | FT = 20% |

#### LUMBER

TOP CHORD 2x4 SPF No.2  
BOT CHORD 2x4 SPF No.2  
WEBS 2x4 SPF No.2

#### BRACING

TOP CHORD 2-0-0 oc purlins: 1-2, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 3= Mechanical, (min. 1-08), 4= Mechanical, (min. 1-08)  
Max Uplift 3=134 (LC 7), 4=127 (LC 7)  
Max Grav 3=472 (LC 2), 4=451 (LC 2)

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

#### NOTES

- 1) This truss has been checked for uniform roof live load only, except as noted.
- 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=24ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.25); Pg=30.0 psf (ground snow); Pf=23.1 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0
- 4) Unbalanced snow loads have been considered for this design.
- 5) Provide adequate drainage to prevent water ponding.
- 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 127 lb uplift at joint 4 and 134 lb uplift at joint 3.
- 9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

11) Use USP JUS24 (With 4-10d nails into Girder & 2-10d nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 0-11-12 from the left end to 2-11-12 to connect truss(es) to front face of bottom chord.

12) Fill all nail holes where hanger is in contact with lumber.

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

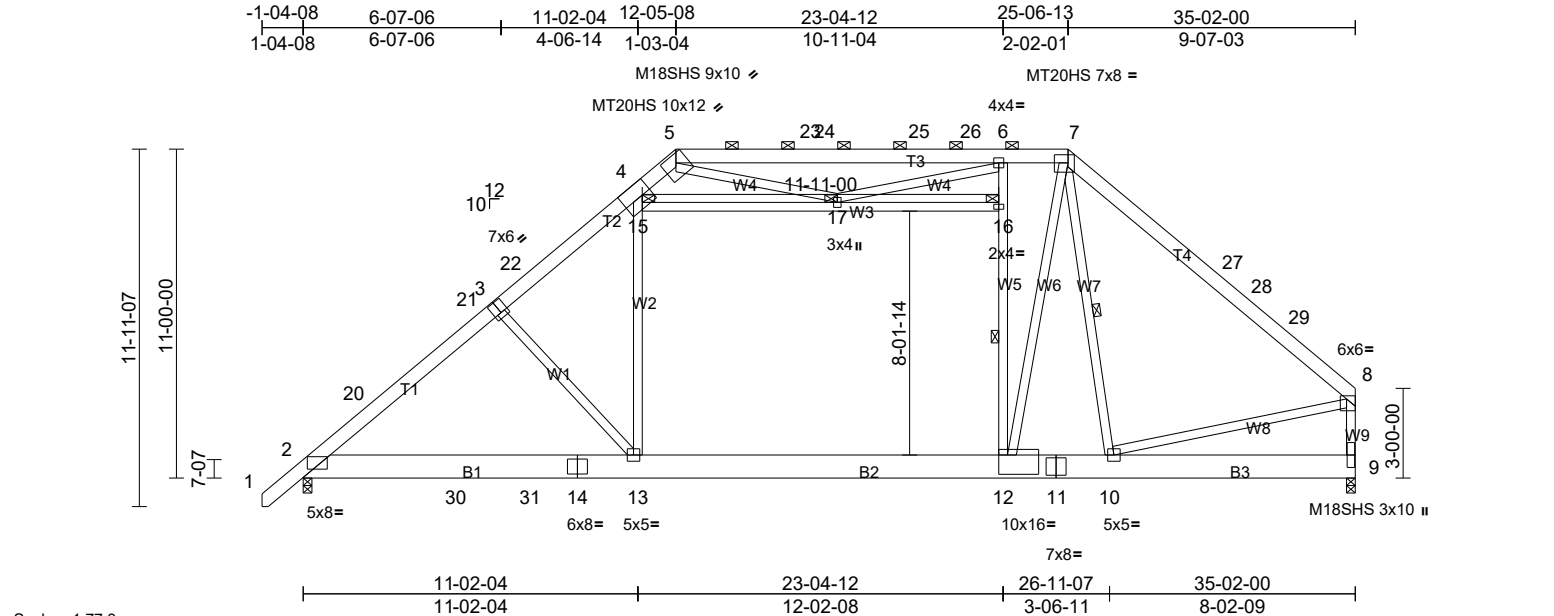
#### LOAD CASE(S) Standard

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (lb/ft)  
Vert: 1-2=-66, 3-4=-20  
Concentrated Loads (lb)  
Vert: 5=-273 (F), 6=-275 (F)



|            |       |            |     |     |                          |
|------------|-------|------------|-----|-----|--------------------------|
| Job        | Truss | Truss Type | Qty | Ply | Job Reference (optional) |
| 20110098JR | T10   | Attic      | 1   | 1   |                          |

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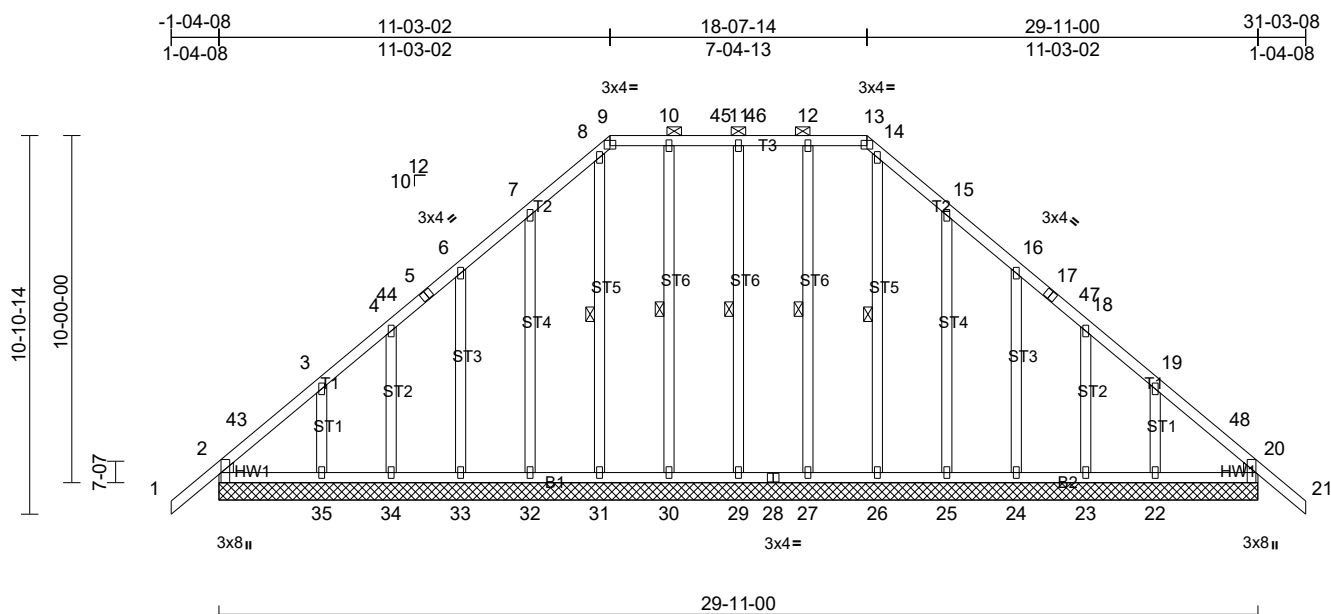
|                |           |                 |                 |            |      |             |          |        |      |               |                |          |
|----------------|-----------|-----------------|-----------------|------------|------|-------------|----------|--------|------|---------------|----------------|----------|
| <b>Loading</b> | (psf)     | <b>Spacing</b>  | 2-00-00         | <b>CSI</b> |      | <b>DEFL</b> | in (loc) | l/defl | L/d  | <b>PLATES</b> | <b>GRIP</b>    |          |
| TCLL (roof)    | 30.0      | Plate Grip DOL  | 1.25            | TC         | 0.88 | Vert(LL)    | -0.26    | 12-13  | >999 | 360           | M18SHS         | 197/144  |
| Snow (Pf/Pg)   | 23.1/30.0 | Lumber DOL      | 1.25            | BC         | 0.85 | Vert(CT)    | -0.40    | 12-13  | >999 | 240           | MT20           | 197/144  |
| TCDL           | 10.0      | Rep Stress Incr | YES             | WB         | 0.84 | Horz(CT)    | 0.03     | 9      | n/a  | n/a           | MT20HS         | 148/108  |
| BCLL           | 0.0*      | Code            | IRC2015/TPI2014 | Matrix-MS  |      | Attic       | -0.16    | 12-13  | >911 | 360           |                |          |
| BCDL           | 10.0      |                 |                 |            |      |             |          |        |      |               |                |          |
|                |           |                 |                 |            |      |             |          |        |      |               | Weight: 296 lb | FT = 20% |

|                                                                                     |                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>LUMBER</b>                                                                       |                                                                                                                                                                                                                                                                     | 2) Wind: ASCE 7-10; Vult=115mph (3-second gust)<br>Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=24ft; Cat.<br>II; Exp B; Enclosed; MWFRS (envelope) exterior zone<br>and C-C Exterior (2) -1-3-4 to 2-2-15, Interior (1) 2-2-15<br>to 7-5-13, Exterior (2) 7-5-13 to 17-5-3, Interior (1)<br>17-5-3 to 20-7-2, Exterior (2) 20-7-2 to 30-6-8, Interior<br>(1) 30-6-8 to 31-6-1, Exterior (2) 31-6-1 to 35-0-4 zone;<br>cantilever left and right exposed ; end vertical left<br>exposed;C-C for members and forces & MWFRS for<br>reactions shown; Lumber DOL=1.60 plate grip<br>DOL=1.60 |
| TOP CHORD                                                                           | 2x6 SPF No.2 *Except* 5-7,7-8:2x6 SP<br>2400F 2.0E                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| BOT CHORD                                                                           | 2x10 SPF No.2 *Except* 2-14:2x10 SP<br>2400F 2.0E                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| WEBS                                                                                | 2x4 SPF No.2                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>BRACING</b>                                                                      |                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| TOP CHORD                                                                           | Structural wood sheathing directly applied or<br>2-2-0 oc purlins, except end verticals, and<br>2-0-0 oc purlins (5-9-6 max.): 5-7.                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| BOT CHORD                                                                           | Rigid ceiling directly applied or 7-11-9 oc<br>bracing.                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| WEBS                                                                                | 1 Row at midpt 12-16, 7-10                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| JOINTS                                                                              | 1 Brace at Jt(s): 15,<br>16, 17                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>REACTIONS</b> (size)                                                             | 2=3-08, (min. 1-15), 9=3-08, (min.<br>3-08)                                                                                                                                                                                                                         | 4) Unbalanced snow loads have been considered for this<br>design.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Max Horiz                                                                           | 2=210 (LC 10)                                                                                                                                                                                                                                                       | 5) This truss has been designed for greater of min roof live<br>load of 12.0 psf or 2.00 times flat roof load of 23.1 psf on<br>overhangs non-concurrent with other live loads.                                                                                                                                                                                                                                                                                                                                                                                                      |
| Max Grav                                                                            | 2=2340 (LC 47), 9=2219 (LC 47)                                                                                                                                                                                                                                      | 6) Provide adequate drainage to prevent water ponding.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>FORCES</b>                                                                       | (lb) - Max. Comp./Max. Ten. - All forces 250<br>(lb) or less except when shown.                                                                                                                                                                                     | 7) All plates are MT20 plates unless otherwise indicated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| TOP CHORD                                                                           | 2-20=-3127/0, 20-21=-2870/0, 3-21=-2840/0,<br>3-22=-2826/0, 4-22=-2708/0, 4-5=-1761/72,<br>5-23=-2174/0, 23-24=-2174/0,<br>24-25=-2174/0, 25-26=-2174/0,<br>6-26=-2174/0, 6-7=-2062/33, 7-27=-2070/0,<br>27-28=-2071/0, 28-29=-2089/0,<br>8-29=-2257/0, 8-9=-2121/0 | 8) * This truss has been designed for a live load of 20.0psf<br>on the bottom chord in all areas where a rectangle<br>3-06-00 tall by 2-00-00 wide will fit between the bottom<br>chord and any other members, with BCDL = 10.0psf.                                                                                                                                                                                                                                                                                                                                                  |
| BOT CHORD                                                                           | 2-30=0/2368, 30-31=0/2368, 14-31=0/2368,<br>13-14=0/2368, 12-13=0/2063, 11-12=0/1661,<br>10-11=0/1661                                                                                                                                                               | 9) Ceiling dead load (10.0 psf) on member(s). 15-17,<br>16-17; Wall dead load (5.0psf) on member(s).13-15,<br>12-16                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| WEBS                                                                                | 3-13=-767/187, 13-15=0/1155, 4-15=0/1221,<br>12-16=-1405/265, 6-16=-1287/288,<br>7-12=-52/2018, 15-17=-386/0, 8-10=0/1592,<br>5-17=0/464, 6-17=-69/259, 7-10=-912/24                                                                                                | 10) Bottom chord live load (40.0 psf) and additional bottom<br>chord dead load (5.0 psf) applied only to room. 12-13                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>NOTES</b>                                                                        |                                                                                                                                                                                                                                                                     | 11) This truss is designed in accordance with the 2015<br>International Residential Code sections R502.11.1 and<br>R802.10.2 and referenced standard ANSI/TPI 1.                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 1) This truss has been checked for uniform roof live load<br>only, except as noted. |                                                                                                                                                                                                                                                                     | 12) Graphical purlin representation does not depict the size<br>or the orientation of the purlin along the top and/or<br>bottom chord.                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|                                                                                     |                                                                                                                                                                                                                                                                     | 13) Attic room checked for L/360 deflection.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|                                                                                     |                                                                                                                                                                                                                                                                     | <b>LOAD CASE(S)</b> Standard                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

|            |       |                                |     |     |                          |
|------------|-------|--------------------------------|-----|-----|--------------------------|
| Job        | Truss | Truss Type                     | Qty | Ply | Job Reference (optional) |
| 20110098JR | T11   | Piggyback Base Supported Gable | 1   | 1   |                          |

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| Loading                 | (psf)     | Spacing         | 2-00-00         | CSI       | DEFL | in       | (loc) | l/defl | L/d | PLATES | GRIP    |
|-------------------------|-----------|-----------------|-----------------|-----------|------|----------|-------|--------|-----|--------|---------|
| TCLL (roof)             | 30.0      | Plate Grip DOL  | 1.25            | TC        | 0.22 | Vert(LL) | n/a   | -      | n/a | 999    | 197/144 |
| Snow (Pf/Pg)            | 23.1/30.0 | Lumber DOL      | 1.25            | BC        | 0.07 | Vert(CT) | n/a   | -      | n/a | 999    |         |
| TCDL                    | 10.0      | Rep Stress Incr | YES             | WB        | 0.27 | Horz(CT) | 0.01  | 20     | n/a | n/a    |         |
| BCLL                    | 0.0*      | Code            | IRC2015/TPI2014 | Matrix-MS |      |          |       |        |     |        |         |
| BCDL                    | 10.0      |                 |                 |           |      |          |       |        |     |        |         |
| Weight: 181 lb FT = 20% |           |                 |                 |           |      |          |       |        |     |        |         |

**LUMBER**  
TOP CHORD 2x4 SPF No.2  
BOT CHORD 2x4 SPF No.2  
OTHERS 2x4 SPF No.2  
WEDGE Left: 2x4 SPF No.2  
Right: 2x4 SPF No.2

**BRACING**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 9-13.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
WEBS 1 Row at midpt 11-29, 10-30, 8-31, 12-27, 14-26

**REACTIONS** All bearings 29-10-15.  
(lb) - Max Horiz 2=-205 (LC 11), 36=-205 (LC 11)  
Max Uplift All uplift 100 (lb) or less at joint(s) 2, 20, 23, 24, 25, 27, 29, 30, 31, 32, 33, 34, 36, 40 except 22=-105 (LC 14), 35=-111 (LC 13)  
Max Grav All reactions 250 (lb) or less at joint (s) 26, 31 except 2=294 (LC 2), 20=294 (LC 2), 22=375 (LC 39), 23=259 (LC 39), 24=293 (LC 39), 25=300 (LC 39), 27=288 (LC 38), 29=291 (LC 38), 30=288 (LC 38), 32=300 (LC 39), 33=293 (LC 39), 34=259 (LC 39), 35=375 (LC 39), 36=294 (LC 2), 40=294 (LC 2)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
WEBS 11-29=-251/56, 7-32=-260/93, 3-35=-302/111, 15-25=-260/95, 19-22=-302/108

#### NOTES

1) This truss has been checked for uniform roof live load only, except as noted.

- 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=24ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner (3) -1-4-8 to 1-7-8, Exterior (2) 1-7-8 to 8-3-2, Corner (3) 8-3-2 to 14-3-2, Exterior (2) 14-3-2 to 15-7-14, Corner (3) 15-7-14 to 21-7-14, Exterior (2) 21-7-14 to 28-3-8, Corner (3) 28-3-8 to 31-3-8 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.25); Pg=30.0 psf (ground snow); Pf=23.1 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0
- 5) Unbalanced snow loads have been considered for this design.
- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 23.1 psf on overhangs non-concurrent with other live loads.
- 7) Provide adequate drainage to prevent water ponding.
- 8) All plates are 2x4 MT20 unless otherwise indicated.
- 9) Gable studs spaced at 2-0-0 oc.
- 10) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 11) One RT4 USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 20, 29, 30, 31, 32, 33, 34, 35, 27, 25, 24, 23, and 22. This connection is for uplift only and does not consider lateral forces.
- 12) Non Standard bearing condition. Review required.
- 13) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard

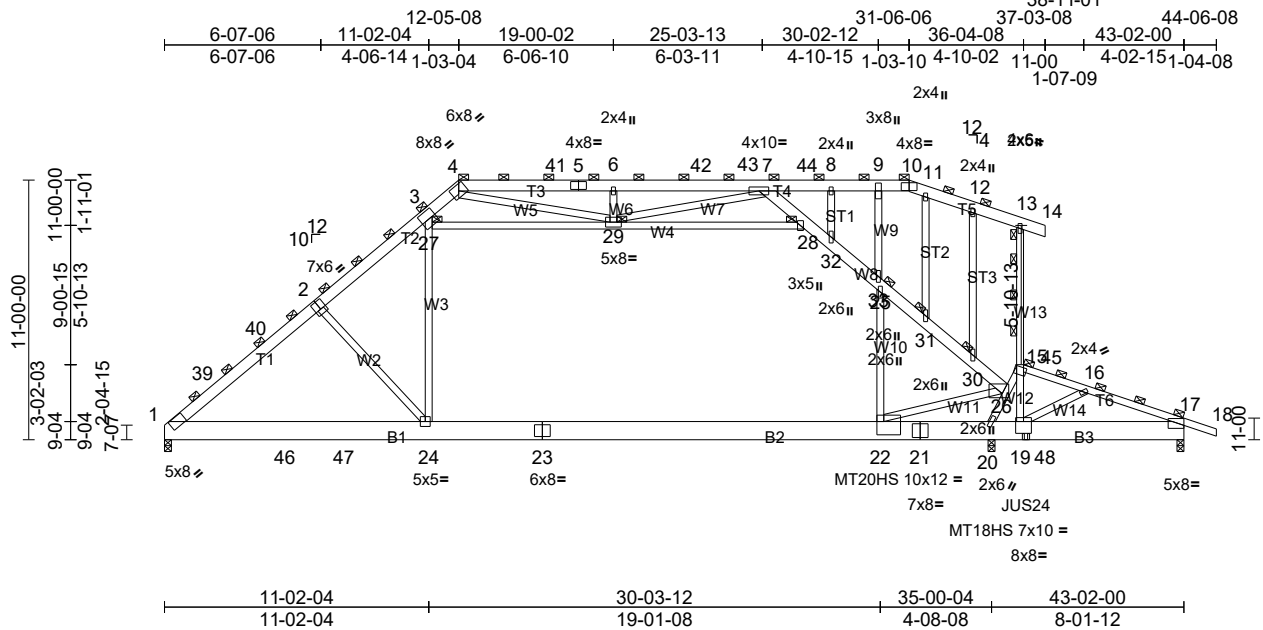
This design is based upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of the Building Designer. Building Designer shall verify all design information on this sheet for conformance with conditions and requirements of the specific building and governing codes and ordinances. Building Designer accepts responsibility for the correctness or accuracy of the design information as it may relate to a specific building. Certification is valid only when truss is fabricated by a UFPI plant. Bracing shown is for lateral support of truss members only and does not replace erection and permanent bracing. Refer to Building Component Safety Information (BCSI) for general guidance regarding storage, erection and bracing available from SBCA and Truss Plate Institute.



|            |       |              |     |     |                          |
|------------|-------|--------------|-----|-----|--------------------------|
| Job        | Truss | Truss Type   | Qty | Ply | Job Reference (optional) |
| 20110098JR | TG01  | Attic Girder | 2   | 2   |                          |

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| Loading      | (psf)     | Spacing         | 3-00-08         | CSI       |      | DEFL     | in    | (loc) | l/defl | L/d | PLATES         | GRIP     |
|--------------|-----------|-----------------|-----------------|-----------|------|----------|-------|-------|--------|-----|----------------|----------|
| TCLL (roof)  | 30.0      | Plate Grip DOL  | 1.25            | TC        | 0.78 | Vert(LL) | -0.34 | 22-24 | >999   | 360 | MT20           | 197/144  |
| Snow (Pf/Pg) | 23.1/30.0 | Lumber DOL      | 1.25            | BC        | 0.73 | Vert(CT) | -0.52 | 22-24 | >797   | 240 | MT20HS         | 148/108  |
| TCDL         | 10.0      | Rep Stress Incr | NO              | WB        | 0.70 | Horz(CT) | 0.03  | 17    | n/a    | n/a | MT18HS         | 197/144  |
| BCLL         | 0.0 *     | Code            | IRC2015/TPI2014 | Matrix-MS |      |          |       |       |        |     |                |          |
| BCDL         | 10.0      |                 |                 |           |      |          |       |       |        |     |                |          |
|              |           |                 |                 |           |      |          |       |       |        |     | Weight: 675 lb | FT = 20% |

**LUMBER**  
TOP CHORD 2x6 SPF No.2 \*Except\* 15-18:2x4 SPF No.2  
BOT CHORD 2x10 SPF No.2  
WEBS 2x4 SPF No.2 \*Except\* 7-26:2x6 SPF No.2  
OTHERS 2x4 SPF No.2

**BRACING**  
TOP CHORD 2-0-0 oc purlins (6-0-0 max.), except end verticals  
(Switched from sheeted: Spacing > 2-0-0).  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:  
6-0-0 oc bracing: 20-22.

**JOINTS**  
1 Brace at Jt(s): 4, 10, 13, 15, 25, 27, 28, 29, 30, 31

**REACTIONS** (size)  
1=3-08, (min. 2-03), 17=3-08, (min. 1-08), 20=3-08, (min. 2-12)  
Max Horiz 1=520 (LC 11)  
Max Uplift 1=-80 (LC 11), 17=-222 (LC 8), 20=-525 (LC 8)  
Max Grav 1=2775 (LC 45), 17=1097 (LC 2), 20=3545 (LC 44)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-39=-3803/132, 39-40=-3665/155, 2-40=-3478/181, 2-3=-3421/224, 3-4=-2349/320, 4-41=-4249/862, 5-41=-4249/862, 5-6=-4249/862, 6-42=-4249/862, 42-43=-4249/862, 7-43=-4249/862, 15-19=-329/1052, 13-15=-547/134, 15-45=-1412/429, 16-45=-1445/425, 16-17=-1645/449  
BOT CHORD 1-46=-438/2818, 46-47=-436/2818, 24-47=-436/2818, 23-24=-220/2476, 22-23=-220/2476, 21-22=-821/303, 20-21=-821/303, 19-20=-317/1299, 19-48=-387/1526, 17-48=-387/1526

**WEBS**  
24-27=0/1736, 3-27=0/1744, 22-25=-276/1222, 22-26=-105/3371, 20-26=-4045/366, 15-26=-1703/360, 16-19=-468/169, 27-29=-341/29, 28-29=-2860/181, 4-29=-1628/2209, 6-29=-1108/225, 7-29=-318/2836, 7-28=-2182/585, 28-32=-2812/259, 32-33=-3103/263, 25-33=-3123/316, 25-31=-3215/243, 30-31=-3267/279, 26-30=-3363/256, 2-24=-1159/323, 12-30=-313/56, 8-32=-1145/72, 9-33=-261/880

**NOTES**  
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x6 - 2 rows staggered at 9-00 oc, 2x4 - 1 row at 9-00 oc.  
Bottom chords connected as follows: 2x10 - 2 rows staggered at 9-00 oc.  
Web connected as follows: 2x4 - 1 row at 9-00 oc, 2x6 - 2 rows staggered at 9-00 oc.  
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.  
3) This truss has been checked for uniform roof live load only, except as noted.  
4) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCCL=5.0psf; BCDL=5.0psf; h=24ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; porch right exposed; Lumber DOL=1.60 plate grip DOL=1.60  
5) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.  
6) TCCL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.25); Pg=30.0 psf (ground snow); Pf=23.1 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0

7) Unbalanced snow loads have been considered for this design.  
8) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 23.1 psf on overhangs non-concurrent with other live loads.  
9) Provide adequate drainage to prevent water ponding.  
10) All plates are MT20 plates unless otherwise indicated.  
11) Gable studs spaced at 2-0-0 oc.  
12) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.  
13) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 17. This connection is for uplift only and does not consider lateral forces.  
14) One RT8A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 20. This connection is for uplift only and does not consider lateral forces.  
15) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.  
16) Load case(s) 3 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.



|            |       |              |     |     |                          |
|------------|-------|--------------|-----|-----|--------------------------|
| Job        | Truss | Truss Type   | Qty | Ply |                          |
| 20110098JR | TG01  | Attic Girder | 2   | 2   | Job Reference (optional) |

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- 17) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 18) Use USP JUS24 (With 4-10d nails into Girder & 2-10d nails into Truss) or equivalent at 36-5-12 from the left end to connect truss(es) to front face of bottom chord.
- 19) Fill all nail holes where hanger is in contact with lumber.
- 20) Attic room checked for L/360 deflection.

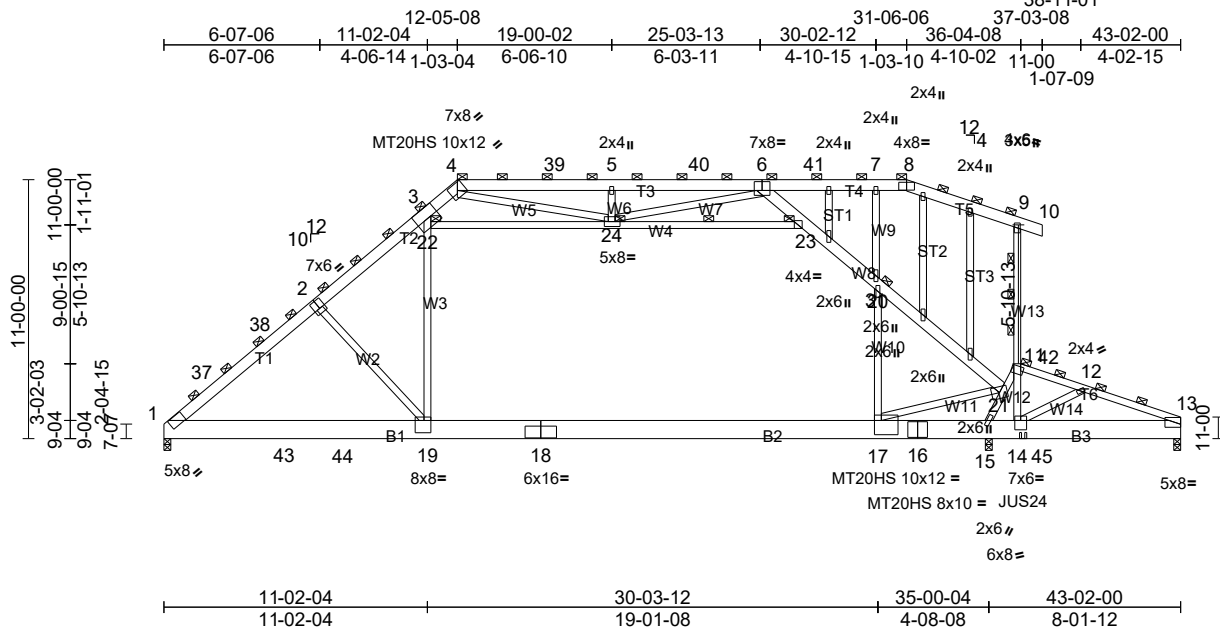
**LOAD CASE(S)** Standard

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (lb/ft)  
Vert: 1-4=-101, 4-10=-101, 10-13=-101, 13-14=-101, 15-18=-101, 1-36=-30  
Concentrated Loads (lb)  
Vert: 19=-276 (F)
- 3) Dead + 0.75 Roof Live (balanced) + 0.75 Uninhab. Attic Storage + 0.75 Attic Floor: Lumber Increase=1.25, Plate Increase=1.25  
Uniform Loads (lb/ft)  
Vert: 1-4=-99, 4-10=-99, 10-13=-99, 13-14=-99, 15-45=-30, 18-45=-99, 1-46=-30, 46-47=-76, 24-47=-30, 22-24=-76, 19-22=-60 (F=-30), 19-36=-30  
Concentrated Loads (lb)  
Vert: 19=-254 (F)

|            |       |              |     |     |                          |
|------------|-------|--------------|-----|-----|--------------------------|
| Job        | Truss | Truss Type   | Qty | Ply | Job Reference (optional) |
| 20110098JR | TG02  | Attic Girder | 4   | 2   |                          |

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|                |           |                 |                 |            |      |             |       |       |        |     |                |             |
|----------------|-----------|-----------------|-----------------|------------|------|-------------|-------|-------|--------|-----|----------------|-------------|
| <b>Loading</b> | (psf)     | <b>Spacing</b>  | 3-00-00         | <b>CSI</b> |      | <b>DEFL</b> | in    | (loc) | l/defl | L/d | <b>PLATES</b>  | <b>GRIP</b> |
| TCLL (roof)    | 30.0      | Plate Grip DOL  | 1.25            | TC         | 0.64 | Vert(LL)    | -0.51 | 17-19 | >810   | 360 | MT20           | 197/144     |
| Snow (Pf/Pg)   | 23.1/30.0 | Lumber DOL      | 1.25            | BC         | 0.84 | Vert(CT)    | -0.74 | 17-19 | >561   | 240 | MT20HS         | 148/108     |
| TCDL           | 10.0      | Rep Stress Incr | NO              | WB         | 0.70 | Horz(CT)    | 0.03  | 13    | n/a    | n/a |                |             |
| BCLL           | 0.0 *     | Code            | IRC2015/TPI2014 | Matrix-MS  |      | Attic       | -0.40 | 17-19 | >572   | 360 |                |             |
| BCDL           | 10.0      |                 |                 |            |      |             |       |       |        |     |                |             |
|                |           |                 |                 |            |      |             |       |       |        |     | Weight: 736 lb | FT = 20%    |

|               |                                                                  |
|---------------|------------------------------------------------------------------|
| <b>LUMBER</b> |                                                                  |
| TOP CHORD     | 2x6 SPF No.2 *Except* 2-4:2x6 SPF 2100F 1.8E, 11-13:2x4 SPF No.2 |
| BOT CHORD     | 2x10 SP 2400F 2.0E *Except* 1-18:2x10 SPF No.2                   |
| WEBS          | 2x4 SPF No.2 *Except* 6-21:2x6 SP 2400F 2.0E                     |
| OTHERS        | 2x4 SPF No.2                                                     |

|                |                                                                                               |
|----------------|-----------------------------------------------------------------------------------------------|
| <b>BRACING</b> |                                                                                               |
| TOP CHORD      | 2-0-0 oc purlins (6-0-0 max.), except end verticals (Switched from sheeted: Spacing > 2-0-0). |
| BOT CHORD      | Rigid ceiling directly applied or 6-0-0 oc bracing.                                           |
| WEBS           | 1 Row at midpt 23-24                                                                          |
| JOINTS         | 1 Brace at Jt(s): 4, 8, 11, 20, 22, 23, 24                                                    |

|                  |                                                                 |
|------------------|-----------------------------------------------------------------|
| <b>REACTIONS</b> | (size)                                                          |
|                  | 1=3-08, (min. 2-12), 13=3-08, (min. 1-08), 15=3-08, (min. 2-00) |
|                  | Max Horiz 1=521 (LC 11)                                         |
|                  | Max Uplift 13=-148 (LC 12), 15=-212 (LC 8)                      |
|                  | Max Grav 1=3507 (LC 44), 13=949 (LC 2), 15=4758 (LC 43)         |

|               |                                                                                                                                                                                                                         |
|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>FORCES</b> | (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.                                                                                                                                            |
| TOP CHORD     | 1-37=-5044/0, 37-38=-4898/0, 2-38=-4723/0, 2-3=-4664/0, 3-4=-2779/51, 4-39=-4939/390, 5-39=-4939/390, 5-40=-4939/390, 6-40=-4939/390, 11-14=-333/1059, 9-11=-632/148, 11-42=-1406/375, 12-42=-1441/371, 12-13=-1649/400 |
| BOT CHORD     | 1-43=-114/3766, 43-44=-71/3766, 19-44=-71/3766, 18-19=0/3366, 17-18=0/3366, 16-17=-1327/73, 15-16=-1327/73, 14-15=-277/1283, 14-45=-349/1532, 13-45=-349/1532                                                           |

|             |                                                                                                                                                                                                                                                                                |
|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>WEBS</b> | 19-22=0/2501, 3-22=0/2598, 17-20=-204/1734, 17-21=0/4869, 15-21=-5117/0, 11-21=-1685/334, 12-14=-477/172, 22-24=-438/0, 23-24=-3462/0, 6-23=-2492/327, 23-31=-3800/0, 20-31=-3941/0, 20-21=-4509/0, 4-24=-1685/2479, 6-24=0/3330, 5-24=-992/282, 2-19=-1252/280, 7-31=-531/253 |
|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

- NOTES**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x6 - 2 rows staggered at 9-00 oc, 2x4 - 1 row at 9-00 oc.  
Bottom chords connected as follows: 2x10 - 2 rows staggered at 9-00 oc.  
Web connected as follows: 2x4 - 1 row at 9-00 oc, 2x6 - 2 rows staggered at 9-00 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.
  - This truss has been checked for uniform roof live load only, except as noted.
  - Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=24ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; porch right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.25); Pg=30.0 psf (ground snow); Pf=23.1 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0
  - Unbalanced snow loads have been considered for this design.
  - Provide adequate drainage to prevent water ponding.
  - All plates are MT20 plates unless otherwise indicated.

- Gable studs spaced at 2-0-0 oc.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Ceiling dead load (10.0 psf) on member(s). 22-24, 23-24; Wall dead load (5.0psf) on member(s).19-22, 17-20
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 17-19
- One RT4 USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 13 and 15. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Load case(s) 3 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Use USP JUS24 (With 4-10d nails into Girder & 2-10d nails into Truss) or equivalent at 36-5-12 from the left end to connect truss(es) to front face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.



|            |       |              |     |     |                          |
|------------|-------|--------------|-----|-----|--------------------------|
| Job        | Truss | Truss Type   | Qty | Ply |                          |
| 20110098JR | TG02  | Attic Girder | 4   | 2   | Job Reference (optional) |

20) NOTE: DUE TO THE OVERALL LENGTH TO DEPTH RATIO OF THE ROOM, THE FLOOR MAY EXHIBIT OBJECTIONABLE VIBRATION AND OR BOUNCE. BUILDING DESIGNER TO CONSIDER PROVIDING MEANS TO DAMPEN THESE EFFECTS. TRUSS DESIGN SHALL BE REVIEWED AND APPROVED PRIOR TO MANUFACTURING.

21) Attic room checked for L/360 deflection.

**LOAD CASE(S)** Standard

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (lb/ft)

Vert: 1-4=-99, 4-8=-99, 8-9=-99, 9-10=-99, 11-13=-99, 1-19=-30, 17-19=-45, 17-32=-30, 22-24=-30, 23-24=-30

Drag: 19-22=-15, 17-20=-15

Concentrated Loads (lb)

Vert: 14=-461 (F)
- 3) Dead + 0.75 Roof Live (balanced) + 0.75 Uninhab. Attic Storage + 0.75 Attic Floor: Lumber Increase=1.25, Plate Increase=1.25

Uniform Loads (lb/ft)

Vert: 1-4=-98, 4-8=-98, 8-9=-98, 9-10=-98, 11-42=-30, 13-42=-98, 1-43=-30, 43-44=-75, 19-44=-30, 17-19=-135, 14-17=-60 (F=-30), 14-32=-30, 22-24=-30, 23-24=-30

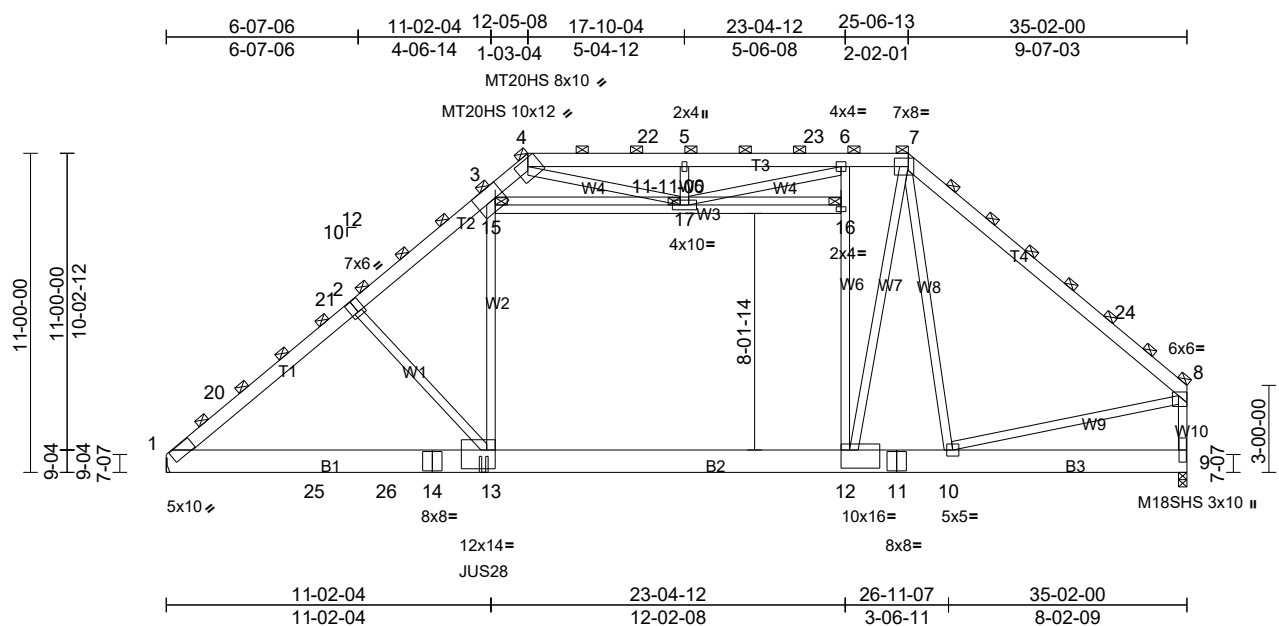
Drag: 19-22=-15, 17-20=-15

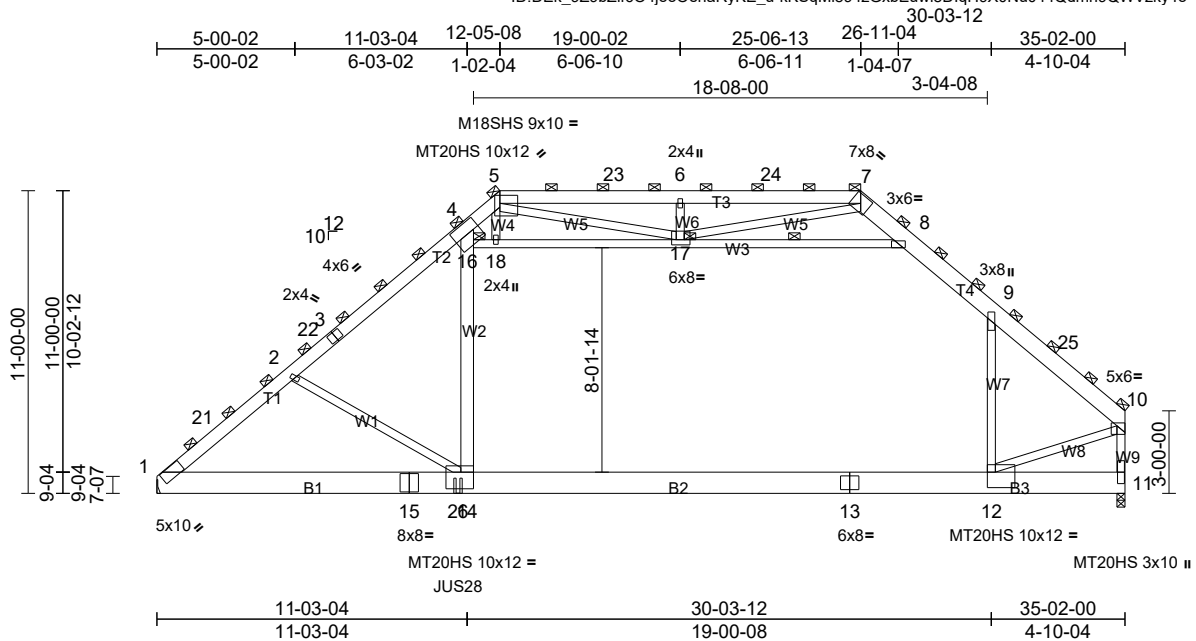
Concentrated Loads (lb)

Vert: 14=-416 (F)

|            |       |              |     |     |                          |
|------------|-------|--------------|-----|-----|--------------------------|
| Job        | Truss | Truss Type   | Qty | Ply | Job Reference (optional) |
| 20110098JR | TG03  | Attic Girder | 1   | 2   |                          |

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## LUMBER

|           |                                                                         |
|-----------|-------------------------------------------------------------------------|
| TOP CHORD | 2x6 SPF No.2 *Except* 3-5:2x6 SPF 2100F<br>1.8E, 7-10:2x8 SP 2400F 2.0E |
| BOT CHORD | 2x10 SP 2400F 2.0E *Except* 1-15:2x10<br>SPF No.2                       |
| WEBS      | 2x4 SPF No.2 *Except* 4-14:2x6 SPF No.2,<br>16-8:2x4 SPF 1650F 1.5E     |

## BRACING

|           |                                                                                                  |
|-----------|--------------------------------------------------------------------------------------------------|
| TOP CHORD | 2-0-0 oc purlins (5-3-0 max.), except end verticals<br>(Switched from sheeted: Spacing > 2-0-0). |
| BOT CHORD | Rigid ceiling directly applied or 6-0-0 oc bracing.                                              |
| WEBS      | 1 Row at midpt 8-17                                                                              |
| JOINTS    | 1 Brace at Jt(s): 5,<br>7, 10, 16, 17                                                            |

## REACTIONS

11=3-08, (min. 2-02)  
Max Horiz 1=362 (LC 8)  
Max Uplift 1=-40 (LC 11)  
Max Grav 1=4950 (LC 42), 11=5185 (LC 40)

## FORCES

(lb) or less except when shown.

TOP CHORD

1-21=-7261/114, 2-21=-6922/0,  
2-22=-6385/0, 3-22=-6214/0, 3-4=-5934/0,  
4-5=-4117/210, 5-23=-6030/470,  
6-23=-6030/470, 6-24=-6030/470,  
7-24=-6030/470, 7-8=-1963/928,  
8-9=-4921/0, 9-25=-5952/0, 10-25=-6273/0,  
10-11=-6695/0

BOT CHORD

1-15=-272/5864, 15-26=-235/5864,  
14-26=-235/5864, 13-14=0/4589,  
12-13=0/4589

WEBS

14-16=-83/3389, 4-16=0/2981, 9-12=0/2099,  
16-18=-1174/394, 17-18=-1239/385,  
8-17=-6413/241, 10-12=0/5091,  
5-17=-2783/2176, 6-17=-1377/323,  
7-17=-366/5348, 2-14=-1675/512,  
5-18=0/675

## NOTES

- 1) 2-ply truss to be connected together with 30d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x6 - 2 rows staggered at 9-00 oc, 2x8 - 2 rows staggered at 9-00 oc, 2x4 - 1 row at 9-00 oc.  
Bottom chords connected as follows: 2x10 - 2 rows staggered at 9-00 oc.  
Web connected as follows: 2x6 - 2 rows staggered at 9-00 oc, 2x4 - 1 row at 9-00 oc.
  - 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - 3) This truss has been checked for uniform roof live load only, except as noted.
  - 4) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=24ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - 5) TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.25); Pg=30.0 psf (ground snow); Pf=23.1 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0
  - 6) Unbalanced snow loads have been considered for this design.
  - 7) Provide adequate drainage to prevent water ponding.
  - 8) All plates are MT20 plates unless otherwise indicated.
  - 9) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
  - 10) Ceiling dead load (10.0 psf) on member(s). 8-9, 16-18, 17-18, 8-17; Wall dead load (5.0psf) on member (s).14-16, 9-12
  - 11) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 12-14
  - 12) Refer to girder(s) for truss to truss connections.
  - 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 40 lb uplift at joint 1
  - 14) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 15) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - 16) Use USP JUS28 (With 6-10d nails into Girder & 4-10d nails into Truss) or equivalent at 10-11-4 from the left end to connect truss(es) to back face of bottom chord.
  - 17) Fill all nail holes where hanger is in contact with lumber.
  - 18) NOTE: DUE TO THE OVERALL LENGTH TO DEPTH RATIO OF THE ROOM, THE FLOOR MAY EXHIBIT OBJECTIONABLE VIBRATION AND OR BOUNCE. BUILDING DESIGNER TO CONSIDER PROVIDING MEANS TO DAMPEN THESE EFFECTS. TRUSS DESIGN SHALL BE REVIEWED AND APPROVED PRIOR TO MANUFACTURING.
  - 19) Attic room checked for L/360 deflection.
- LOAD CASE(S) Standard**
- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (lb/ft)  
Vert: 1-5=-122, 5-7=-122, 7-8=-122, 8-9=-159, 9-10=-122, 1-14=-37, 12-14=-55, 11-12=-37, 16-18=-37, 17-18=-37, 8-17=-37  
Drag: 14-16=-18, 9-12=-18  
Concentrated Loads (lb)  
Vert: 26=-961 (B)



This design is based upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of the Building Designer. Building Designer shall verify all design information on this sheet for conformance with conditions and requirements of the specific building and governing codes and ordinances. Building Designer accepts responsibility for the correctness or accuracy of the design information as it may relate to a specific building. Certification is valid only when truss is fabricated by a UFPI plant. Bracing shown is for lateral support of truss members only and does not replace erection and permanent bracing. Refer to Building Component Safety Information (BCSI) for general guidance regarding storage, erection and bracing available from SBCE and Truss Plate Institute.

Continued on page 2



| Job        | Truss | Truss Type            | Qty | Ply |                          |
|------------|-------|-----------------------|-----|-----|--------------------------|
| 20110098JR | TGE01 | Attic Supported Gable | 1   | 1   | Job Reference (optional) |

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Page: 2

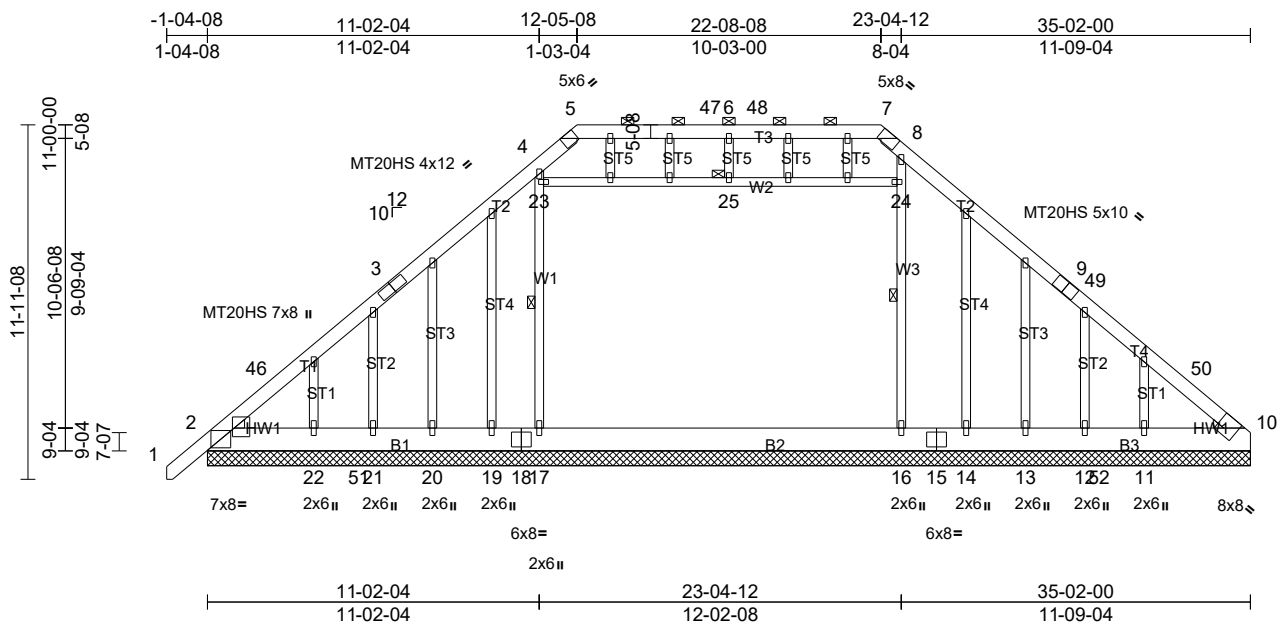
- 19) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 20) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 21) This truss has large uplift reaction(s) from gravity load case(s). Proper connection is required to secure truss against upward movement at the bearings. Building designer must provide for uplift reactions indicated.
- 22) Double installations of RT16A require installation on both interior and exterior sides.
- 23) Double installations of RT8A require the two hurricane ties to be installed on opposite sides of top plate to avoid nail interference in single ply truss.
- 24) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

|            |       |                       |     |     |                          |
|------------|-------|-----------------------|-----|-----|--------------------------|
| Job        | Truss | Truss Type            | Qty | Ply | Job Reference (optional) |
| 20110098JR | TGE02 | Attic Supported Gable | 1   | 1   |                          |

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Scale = 1:78

| Loading                 | (psf)     | Spacing         | 2-00-00         | CSI       | DEFL | in       | (loc) | l/defl | L/d | PLATES | GRIP    |
|-------------------------|-----------|-----------------|-----------------|-----------|------|----------|-------|--------|-----|--------|---------|
| TCLL (roof)             | 30.0      | Plate Grip DOL  | 1.25            | TC        | 0.96 | Vert(LL) | n/a   | -      | 999 | MT20HS | 148/108 |
| Snow (Pf/Pg)            | 23.1/30.0 | Lumber DOL      | 1.25            | BC        | 0.39 | Vert(CT) | n/a   | -      | 999 | MT20   | 197/144 |
| TCDL                    | 10.0      | Rep Stress Incr | YES             | WB        | 0.35 | Horz(CT) | 0.02  | 10     | n/a |        |         |
| BCLL                    | 0.0*      | Code            | IRC2015/TPI2014 | Matrix-MS |      |          |       |        |     |        |         |
| BCDL                    | 10.0      |                 |                 |           |      |          |       |        |     |        |         |
| Weight: 279 lb FT = 20% |           |                 |                 |           |      |          |       |        |     |        |         |

|               |                                             |
|---------------|---------------------------------------------|
| <b>LUMBER</b> |                                             |
| TOP CHORD     | 2x6 SPF No.2 *Except* 5-7:2x6 SP 2400F 2.0E |
| BOT CHORD     | 2x10 SPF No.2                               |
| WEBS          | 2x4 SPF No.2                                |
| OTHERS        | 2x4 SPF No.2                                |
| WEDGE         | Left: 2x4 SPF No.2<br>Right: 2x4 SPF No.2   |

|                |                                                                                           |
|----------------|-------------------------------------------------------------------------------------------|
| <b>BRACING</b> |                                                                                           |
| TOP CHORD      | Structural wood sheathing directly applied, except<br>2-0-0 oc purlins (6-0-0 max.): 5-7. |
| BOT CHORD      | Rigid ceiling directly applied or 6-0-0 oc bracing.                                       |
| WEBS           | 1 Row at midpt 17-23, 16-24                                                               |
| JOINTS         | 1 Brace at Jt(s): 25                                                                      |

|                  |                                                                                                                                                                                                                   |
|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>REACTIONS</b> | All bearings 35-02-00.                                                                                                                                                                                            |
| (lb) - Max Horiz | 2=216 (LC 10)                                                                                                                                                                                                     |
| Max Uplift       | All uplift 100 (lb) or less at joint(s)<br>2, 16, 17 except 10=178 (LC 51),<br>11=346 (LC 14), 12=437 (LC 41),<br>14=370 (LC 20), 19=539 (LC 20),<br>21=374 (LC 41), 22=289 (LC 13)                               |
| Max Grav         | All reactions 250 (lb) or less at joint<br>(s) 12, 14, 19, 21 except 2=903 (LC<br>40), 10=855 (LC 40), 11=1130 (LC<br>41), 13=336 (LC 51), 16=1775 (LC<br>51), 17=1914 (LC 49), 20=317 (LC<br>49), 22=985 (LC 41) |

|               |                                                                                                                                                                                                                               |
|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>FORCES</b> | (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.                                                                                                                                                  |
| TOP CHORD     | 2-46=-1352/1123, 3-46=-1331/304,<br>3-4=-1158/613, 4-5=-1243/89,<br>5-47=-1027/240, 6-47=-1027/240,<br>6-48=-1027/240, 7-48=-1027/240,<br>7-8=-1232/107, 8-9=-1148/602,<br>9-49=-1256/256, 49-50=-1333/227,<br>10-50=-1354/48 |

|                  |                                                                                                                                                                                                                                                                    |
|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>BOT CHORD</b> | 2-22=-454/964, 22-51=-266/964,<br>21-51=-266/964, 20-21=-266/964,<br>19-20=-266/964, 18-19=-266/964,<br>17-18=-266/964, 16-17=-263/959,<br>15-16=-268/967, 14-15=-268/967,<br>13-14=-268/967, 12-13=-268/967,<br>12-52=-268/967, 11-52=-268/967,<br>10-11=-268/967 |
| <b>WEBS</b>      | 17-23=-1229/324, 4-23=-1096/357,<br>16-24=-1235/312, 8-24=-1109/342                                                                                                                                                                                                |

#### NOTES

- 1) This truss has been checked for uniform roof live load only, except as noted.
- 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=24ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner (3) 1-3-5 to 2-2-14, Exterior (2) 2-2-14 to 8-11-5, Corner (3) 8-11-5 to 15-11-11, Exterior (2) 15-11-11 to 19-2-5, Corner (3) 19-2-5 to 26-2-11, Exterior (2) 26-2-11 to 31-7-13, Corner (3) 31-7-13 to 35-2-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.25); Pg=30.0 psf (ground snow); Pf=23.1 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0
- 5) Unbalanced snow loads have been considered for this design.
- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 23.1 psf on overhangs non-concurrent with other live loads.
- 7) Provide adequate drainage to prevent water ponding.
- 8) All plates are MT20 plates unless otherwise indicated.
- 9) All plates are 2x4 MT20 unless otherwise indicated.
- 10) Gable requires continuous bottom chord bearing.
- 11) Gable studs spaced at 2-0-0 oc.

- 12) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 13) Ceiling dead load (10.0 psf) on member(s). 23-25, 24-25; Wall dead load (5.0psf) on member(s). 17-23, 16-24
- 14) One RT4 USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 17, 16, and 10. This connection is for uplift only and does not consider lateral forces.
- 15) One RT8A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 19. This connection is for uplift only and does not consider lateral forces.
- 16) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 21, 22, 14, 12, and 11. This connection is for uplift only and does not consider lateral forces.
- 17) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 18) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 19) Attic room checked for L/360 deflection.

**LOAD CASE(S)** Standard

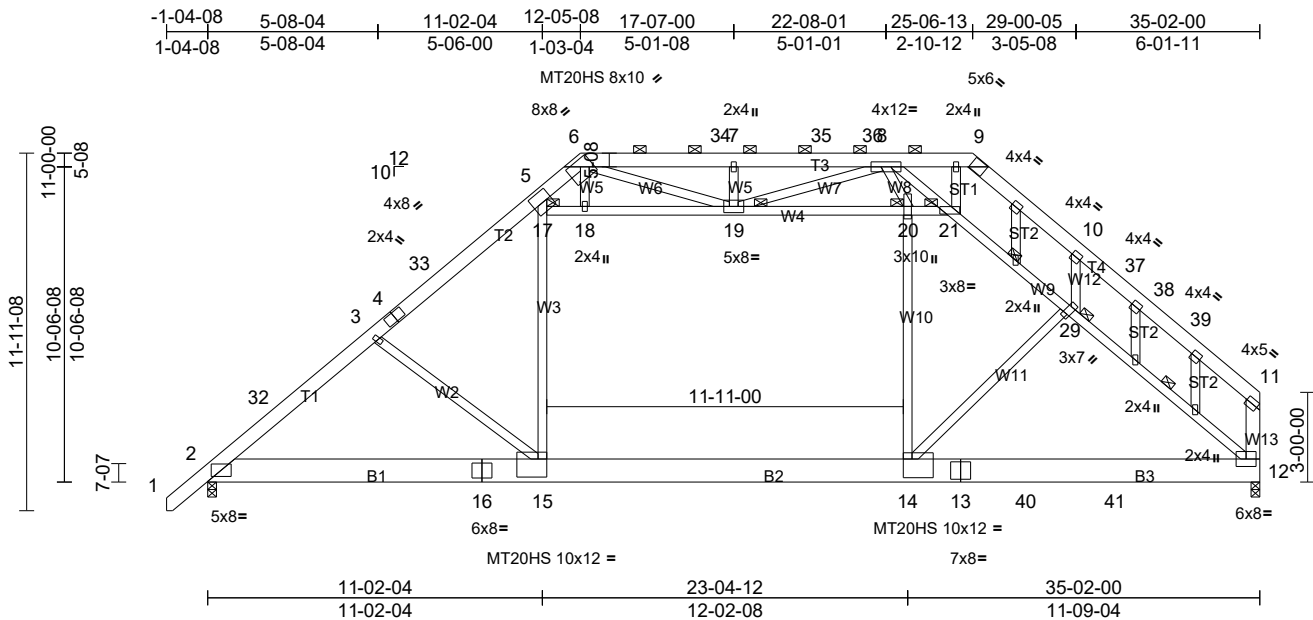
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|            |        |                        |     |     |                          |
|------------|--------|------------------------|-----|-----|--------------------------|
| Job        | Truss  | Truss Type             | Qty | Ply | Job Reference (optional) |
| 20110098JR | TSGE01 | Attic Structural Gable | 1   | 1   |                          |

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| Loading      | (psf)     | Spacing         | 2-00-00         | CSI       |      | DEFL     | in    | (loc) | l/defl | L/d | PLATES         | GRIP     |
|--------------|-----------|-----------------|-----------------|-----------|------|----------|-------|-------|--------|-----|----------------|----------|
| TCLL (roof)  | 30.0      | Plate Grip DOL  | 1.25            | TC        | 0.68 | Vert(LL) | -0.26 | 14-15 | >999   | 360 | MT20           | 197/144  |
| Snow (Pf/Pg) | 23.1/30.0 | Lumber DOL      | 1.25            | BC        | 0.78 | Vert(CT) | -0.39 | 14-15 | >999   | 240 | MT20HS         | 148/108  |
| TCDL         | 10.0      | Rep Stress Incr | YES             | WB        | 0.99 | Horz(CT) | 0.04  | 12    | n/a    | n/a |                |          |
| BCLL         | 0.0 *     | Code            | IRC2015/TPI2014 | Matrix-MS |      | Attic    | -0.16 | 14-15 | >898   | 360 |                |          |
| BCDL         | 10.0      |                 |                 |           |      |          |       |       |        |     |                |          |
|              |           |                 |                 |           |      |          |       |       |        |     | Weight: 302 lb | FT = 20% |

**LUMBER**  
TOP CHORD 2x6 SPF No.2  
BOT CHORD 2x10 SP 2400F 2.0E \*Except\* 16-13:2x10 SPF No.2  
WEBS 2x4 SPF No.2 \*Except\* 12-11:2x6 SPF No.2  
OTHERS 2x4 SPF No.2

**BRACING**  
TOP CHORD Structural wood sheathing directly applied or 3-1-15 oc purlins, except end verticals, and 2-0-0 oc purlins (4-4-9 max.): 6-9.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
WEBS 1 Row at midpt 21-29, 12-29  
JOINTS 1 Brace at Jt(s): 17, 19, 20, 21, 29

**REACTIONS** (size) 2=3-08, (min. 1-15), 12=3-08, (min. 1-15)  
Max Horiz 2=210 (LC 10)  
Max Grav 2=2306 (LC 47), 12=2302 (LC 47)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-32=-3213/0, 3-32=-3007/0, 3-4=-2857/0, 4-33=-2756/0, 5-33=-2686/0, 5-6=-1848/34, 6-34=-2523/111, 7-34=-2523/111, 7-35=-2523/111, 35-36=-2523/111, 8-36=-2523/111, 8-9=-269/173, 9-10=-416/179, 10-37=-306/49, 37-38=-318/34, 38-39=-324/27, 11-39=-516/26, 11-12=-550/68  
BOT CHORD 2-16=0/2476, 15-16=0/2476, 14-15=0/2086, 13-14=0/2184, 13-40=0/2184, 40-41=0/2184, 12-41=0/2184  
WEBS 3-15=-718/210, 15-17=0/1078, 5-17=0/928, 14-20=0/1161, 17-18=-447/0, 18-19=-447/0, 19-20=-575/0, 6-18=0/274, 6-19=-240/1045, 7-19=-538/168, 8-19=-85/839, 8-21=-2591/0, 21-29=-2420/0, 12-29=-2611/0, 14-29=-397/177, 8-20=0/1436, 10-29=-594/197

**NOTES**  
1) This truss has been checked for uniform roof live load only, except as noted.

- 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=24ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -1-3-5 to 2-2-14, Interior (1) 2-2-14 to 7-7-9, Exterior (2) 7-7-9 to 17-7-0, Interior (1) 17-7-0 to 20-6-2, Exterior (2) 20-6-2 to 30-5-8, Interior (1) 30-5-8 to 31-5-1, Exterior (2) 31-5-1 to 34-11-4 zone; cantilever left and right exposed ; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.25); Pg=30.0 psf (ground snow); Pf=23.1 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0
- 5) Unbalanced snow loads have been considered for this design.
- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 23.1 psf on overhangs non-concurrent with other live loads.
- 7) Provide adequate drainage to prevent water ponding.
- 8) All plates are MT20 plates unless otherwise indicated.
- 9) Gable studs spaced at 2-0-0 oc.
- 10) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 11) Ceiling dead load (10.0 psf) on member(s). 17-18, 18-19, 19-20, 20-21; Wall dead load (5.0psf) on member(s).15-17, 14-20
- 12) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 14-15
- 13) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 15) Attic room checked for L/360 deflection.

**LOAD CASE(S)** Standard

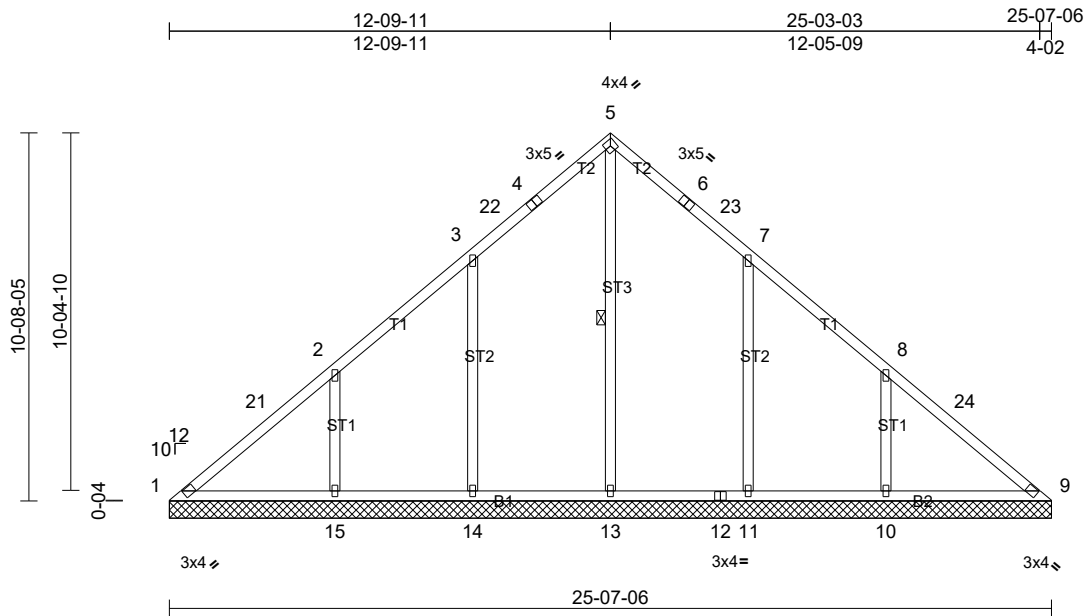
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|            |       |            |     |     |                          |
|------------|-------|------------|-----|-----|--------------------------|
| Job        | Truss | Truss Type | Qty | Ply | Job Reference (optional) |
| 20110098JR | V01   | Valley     | 1   | 1   |                          |

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| Loading                 | (psf)     | Spacing         | 2-00-00         | CSI       | DEFL | in        | (loc) | l/defl | L/d | PLATES | GRIP    |
|-------------------------|-----------|-----------------|-----------------|-----------|------|-----------|-------|--------|-----|--------|---------|
| TCLL (roof)             | 30.0      | Plate Grip DOL  | 1.25            | TC        | 0.33 | Vert(LL)  | n/a   | -      | n/a | 999    | 197/144 |
| Snow (Pf/Pg)            | 23.1/30.0 | Lumber DOL      | 1.25            | BC        | 0.18 | Vert(TL)  | n/a   | -      | n/a | 999    |         |
| TCDL                    | 10.0      | Rep Stress Incr | YES             | WB        | 0.35 | Horiz(TL) | -0.01 | 20     | n/a | n/a    |         |
| BCLL                    | 0.0*      | Code            | IRC2015/TPI2014 | Matrix-MS |      |           |       |        |     |        |         |
| BCDL                    | 10.0      |                 |                 |           |      |           |       |        |     |        |         |
| Weight: 101 lb FT = 20% |           |                 |                 |           |      |           |       |        |     |        |         |

#### LUMBER

TOP CHORD 2x4 SPF No.2  
BOT CHORD 2x4 SPF No.2  
OTHERS 2x4 SPF No.2

#### BRACING

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

WEBS 1 Row at midpt 5-13

#### REACTIONS

All bearings 25-07-06.  
(lb) - Max Horiz 1=203 (LC 10)  
Max Uplift All uplift 100 (lb) or less at joint(s)  
1, 9, 20 except 10=-141 (LC 14),  
11=-133 (LC 14), 14=-129 (LC 13),  
15=-148 (LC 13)  
Max Grav All reactions 250 (lb) or less at joint  
(s) 1, 9, 20 except 10=541 (LC 27),  
11=515 (LC 27), 13=884 (LC 29),  
14=524 (LC 26), 15=530 (LC 26)

#### FORCES

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-21=-150/415, 2-21=-136/512, 2-3=-75/458,  
3-22=-38/314, 4-22=-15/372, 4-5=-11/464,  
5-6=-11/447, 6-23=-15/355, 7-23=-38/297,  
7-8=0/427, 8-24=-24/452, 9-24=-39/330  
BOT CHORD 1-15=-253/81, 14-15=-253/81,  
13-14=-253/81, 12-13=-253/81,  
11-12=-253/81, 10-11=-253/81, 9-10=-253/81  
WEBS 5-13=-713/0, 3-14=-331/173, 2-15=-352/174,  
7-11=-326/174, 8-10=-360/173

#### NOTES

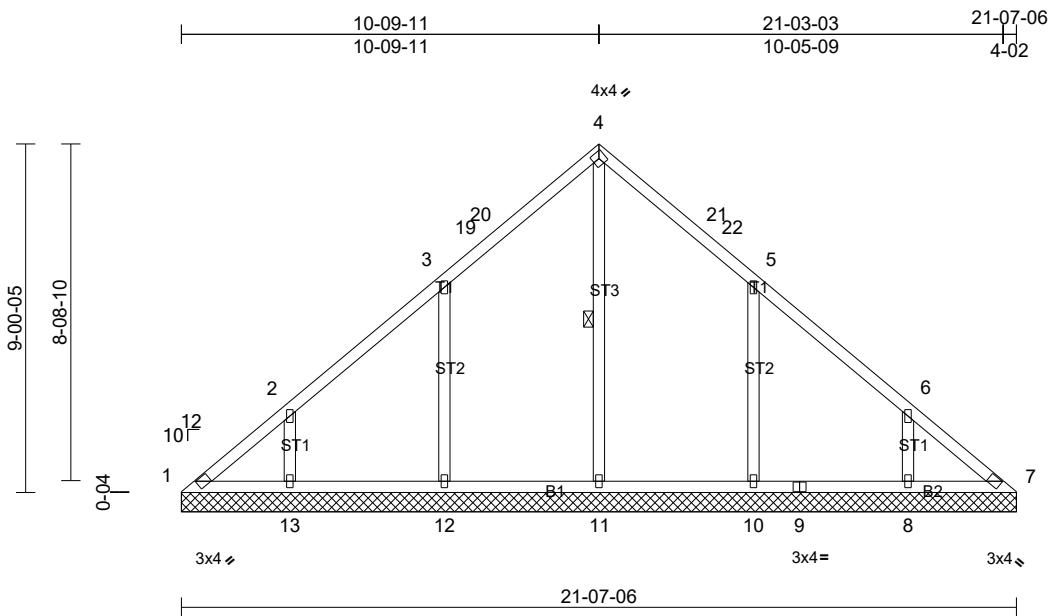
1) This truss has been checked for uniform roof live load only, except as noted.

- Wind: ASCE 7-10; Vult=115mph (3-second gust)  
Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=24ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-0-5 to 3-0-5, Interior (1) 3-0-5 to 9-10-0, Exterior (2) 9-10-0 to 15-10-0, Interior (1) 15-10-0 to 22-7-10, Exterior (2) 22-7-10 to 25-7-10 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.25); Pg=30.0 psf (ground snow); Pf=23.1 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1.
- One RT4 USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 14, 15, 11, and 10. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard



|            |       |            |     |     |                          |
|------------|-------|------------|-----|-----|--------------------------|
| Job        | Truss | Truss Type | Qty | Ply | Job Reference (optional) |
| 20110098JR | V02   | Valley     | 1   | 1   |                          |



Scale = 1:59.9

| Loading                | (psf)     | Spacing         | 2-00-00         | CSI       | DEFL | in        | (loc) | I/defl | L/d | PLATES | GRIP    |
|------------------------|-----------|-----------------|-----------------|-----------|------|-----------|-------|--------|-----|--------|---------|
| TCLL (roof)            | 30.0      | Plate Grip DOL  | 1.25            | TC        | 0.26 | Vert(LL)  | n/a   | -      | n/a | 999    | 197/144 |
| Snow (Pf/Pg)           | 23.1/30.0 | Lumber DOL      | 1.25            | BC        | 0.16 | Vert(TL)  | n/a   | -      | n/a | 999    |         |
| TCDL                   | 10.0      | Rep Stress Incr | YES             | WB        | 0.17 | Horiz(TL) | -0.01 | 7      | n/a | n/a    |         |
| BCLL                   | 0.0*      | Code            | IRC2015/TPI2014 | Matrix-MS |      |           |       |        |     |        |         |
| BCDL                   | 10.0      |                 |                 |           |      |           |       |        |     |        |         |
| Weight: 81 lb FT = 20% |           |                 |                 |           |      |           |       |        |     |        |         |

- LUMBER**  
TOP CHORD 2x4 SPF No.2  
BOT CHORD 2x4 SPF No.2  
OTHERS 2x4 SPF No.2
- BRACING**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
WEBS 1 Row at midpt 4-11
- REACTIONS** All bearings 21-07-06.  
(lb) - Max Horiz 1=171 (LC 10)  
Max Uplift All uplift 100 (lb) or less at joint(s) 1, 7, 8, 18 except 10=-149 (LC 14), 12=-141 (LC 13), 13=-103 (LC 13)  
Max Grav All reactions 250 (lb) or less at joint (s) 1 except 8=386 (LC 2), 10=475 (LC 27), 11=720 (LC 29), 12=488 (LC 26), 13=353 (LC 2)
- FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-159/330, 2-3=-108/326, 4-20=-89/324, 4-21=-89/309, 5-6=-2/258  
WEBS 4-11=-501/0, 3-12=-350/182, 2-13=-272/136, 5-10=-343/185, 6-8=-287/132

- 4) Unbalanced snow loads have been considered for this design.
- 5) All plates are 2x4 MT20 unless otherwise indicated.
- 6) Gable requires continuous bottom chord bearing.
- 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1.
- 9) One RT4 USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 12, 13, 10, and 8. This connection is for uplift only and does not consider lateral forces.
- 10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

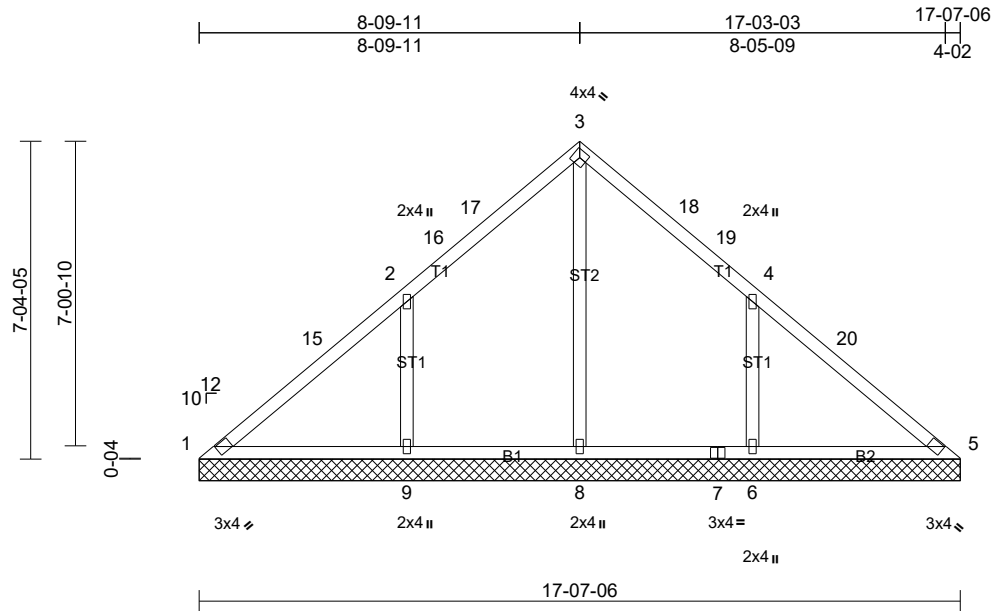
**LOAD CASE(S)** Standard

- NOTES**
- 1) This truss has been checked for uniform roof live load only, except as noted.
- 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=24ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-0-5 to 2-10-0, Interior (1) 2-10-0 to 7-10-0, Exterior (2) 7-10-0 to 13-10-0, Interior (1) 13-10-0 to 18-7-10, Exterior (2) 18-7-10 to 21-7-10 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.25); Pg=30.0 psf (ground snow); Pf=23.1 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10

|            |       |            |     |     |                          |
|------------|-------|------------|-----|-----|--------------------------|
| Job        | Truss | Truss Type | Qty | Ply | Job Reference (optional) |
| 20110098JR | V03   | Valley     | 1   | 1   |                          |

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Scale = 1:53.5

| Loading      | (psf)     | Spacing         | 2-00-00         | CSI       | DEFL | in        | (loc) | l/defl | L/d | PLATES        | GRIP     |
|--------------|-----------|-----------------|-----------------|-----------|------|-----------|-------|--------|-----|---------------|----------|
| TCLL (roof)  | 30.0      | Plate Grip DOL  | 1.25            | TC        | 0.35 | Vert(LL)  | n/a   | -      | n/a | 999           | 197/144  |
| Snow (Pf/Pg) | 23.1/30.0 | Lumber DOL      | 1.25            | BC        | 0.15 | Vert(TL)  | n/a   | -      | n/a | 999           |          |
| TCDL         | 10.0      | Rep Stress Incr | YES             | WB        | 0.59 | Horiz(TL) | 0.00  | 14     | n/a | n/a           |          |
| BCLL         | 0.0*      | Code            | IRC2015/TPI2014 | Matrix-MS |      |           |       |        |     |               |          |
| BCDL         | 10.0      |                 |                 |           |      |           |       |        |     |               |          |
|              |           |                 |                 |           |      |           |       |        |     | Weight: 61 lb | FT = 20% |

#### LUMBER

TOP CHORD 2x4 SPF No.2  
BOT CHORD 2x4 SPF No.2  
OTHERS 2x4 SPF No.2

#### BRACING

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

#### REACTIONS

All bearings 17-07-06.  
(lb) - Max Horiz 1=-139 (LC 9)  
Max Uplift All uplift 100 (lb) or less at joint(s)  
1, 5, 14 except 6=-159 (LC 14),  
9=-164 (LC 13)  
Max Grav All reactions 250 (lb) or less at joint  
(s) 1, 5, 14 except 6=563 (LC 27),  
8=793 (LC 26), 9=561 (LC 26)

#### FORCES

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

TOP CHORD 1-15=-85/355, 2-15=-62/456, 16-17=0/305,  
3-17=0/415, 3-18=0/413, 18-19=0/304,  
4-20=-12/454, 5-20=-35/329  
BOT CHORD 1-9=-253/77, 8-9=-253/77, 7-8=-253/77,  
6-7=-253/77, 5-6=-253/77  
WEBS 3-8=-686/0, 2-9=-380/190, 4-6=-384/189

#### NOTES

- This truss has been checked for uniform roof live load only, except as noted.
- Wind: ASCE 7-10; Vult=115mph (3-second gust)  
Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=24ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-0-5 to 3-0-5, Interior (1) 3-0-5 to 5-10-0, Exterior (2) 5-10-0 to 11-10-0, Interior (1) 11-10-0 to 14-7-10, Exterior (2) 14-7-10 to 17-7-10 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.25); Pg=30.0 psf (ground snow); Pf=23.1 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10

- Unbalanced snow loads have been considered for this design.
- Gable requires continuous bottom chord bearing.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1.
- One RT4 USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 9 and 6. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

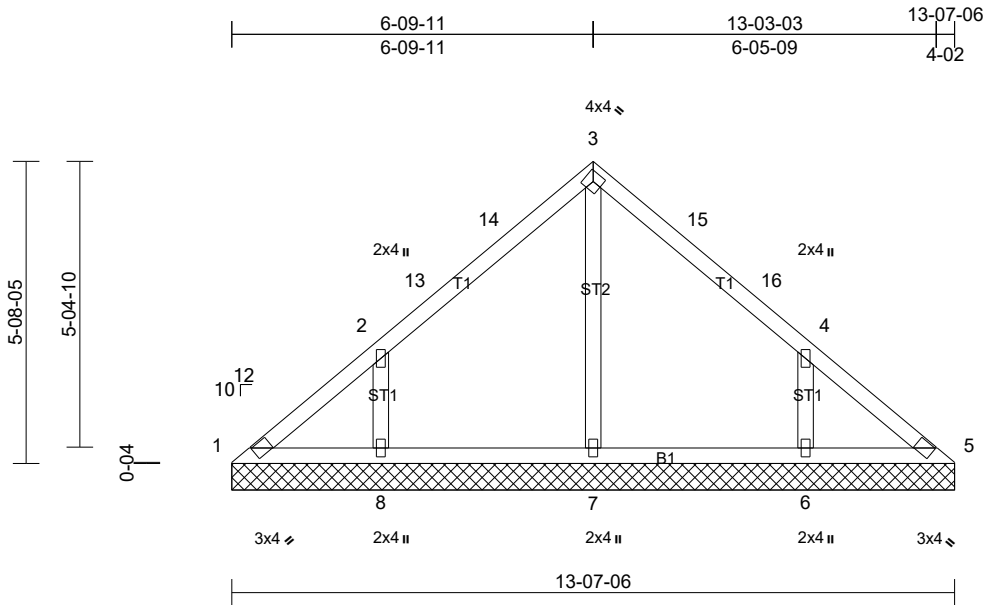
This design is based upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of the Building Designer. Building Designer shall verify all design information on this sheet for conformance with conditions and requirements of the specific building and governing codes and ordinances. Building Designer accepts responsibility for the correctness or accuracy of the design information as it may relate to a specific building. Certification is valid only when truss is fabricated by a UFPI plant. Bracing shown is for lateral support of truss members only and does not replace erection and permanent bracing. Refer to Building Component Safety Information (BCSI) for general guidance regarding storage, erection and bracing available from SBCA and Truss Plate Institute.



|            |       |            |     |     |                          |
|------------|-------|------------|-----|-----|--------------------------|
| Job        | Truss | Truss Type | Qty | Ply | Job Reference (optional) |
| 20110098JR | V04   | Valley     | 1   | 1   |                          |

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| Loading      | (psf)     | Spacing         | 2-00-00         | CSI       | DEFL | in        | (loc) | l/defl | L/d | PLATES | GRIP                   |
|--------------|-----------|-----------------|-----------------|-----------|------|-----------|-------|--------|-----|--------|------------------------|
| TCLL (roof)  | 30.0      | Plate Grip DOL  | 1.25            | TC        | 0.18 | Vert(LL)  | n/a   | -      | n/a | 999    | MT20                   |
| Snow (Pf/Pg) | 23.1/30.0 | Lumber DOL      | 1.25            | BC        | 0.07 | Vert(TL)  | n/a   | -      | n/a | 999    | 197/144                |
| TCDL         | 10.0      | Rep Stress Incr | YES             | WB        | 0.13 | Horiz(TL) | 0.00  | 5      | n/a | n/a    |                        |
| BCLL         | 0.0*      | Code            | IRC2015/TPI2014 | Matrix-MS |      |           |       |        |     |        |                        |
| BCDL         | 10.0      |                 |                 |           |      |           |       |        |     |        | Weight: 45 lb FT = 20% |

**LUMBER**

TOP CHORD 2x4 SPF No.2  
BOT CHORD 2x4 SPF No.2  
OTHERS 2x4 SPF 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**

All bearings 13-07-06.  
(lb) - Max Horiz 1=107 (LC 10)  
Max Uplift All uplift 100 (lb) or less at joint(s) 1 except 6=121 (LC 14), 8=123 (LC 13)  
Max Grav All reactions 250 (lb) or less at joint (s) 1, 5 except 6=402 (LC 2), 7=337 (LC 2), 8=402 (LC 2)

**FORCES**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
WEBS 3-7=-258/0, 2-8=-316/158, 4-6=-316/157

**NOTES**

- This truss has been checked for uniform roof live load only, except as noted.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=24ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-0-5 to 2-10-0, Interior (1) 2-10-0 to 3-10-0, Exterior (2) 3-10-0 to 9-10-0, Interior (1) 9-10-0 to 10-7-10, Exterior (2) 10-7-10 to 13-7-10 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.25); Pg=30.0 psf (ground snow); Pf=23.1 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Gable requires continuous bottom chord bearing.

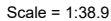
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1.
- One RT4 USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 8 and 6. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

This design is based upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of the Building Designer. Building Designer shall verify all design information on this sheet for conformance with conditions and requirements of the specific building and governing codes and ordinances. Building Designer accepts responsibility for the correctness or accuracy of the design information as it may relate to a specific building. Certification is valid only when truss is fabricated by a UFPI plant. Bracing shown is for lateral support of truss members only and does not replace erection and permanent bracing. Refer to Building Component Safety Information (BCSI) for general guidance regarding storage, erection and bracing available from SBCA and Truss Plate Institute.



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**LUMBER**

## BRACING

**REACTIONS** (size) 1=9-07-06, (min. 1-08), 3=9-07-06,  
(min. 1-08), 4=9-07-06, (min. 1-08)  
Max Horiz 1=-74 (LC 9)  
Max Uplift 1=-15 (LC 20), 3=-15 (LC 19),  
4=-88 (LC 13)  
Max Grav 1=64 (LC 19), 3=64 (LC 20), 4=891  
(LC 2)

TOP CHORD 1-9=-74/278, 2-9=-54/388, 2-10=-54/388,  
3-10=-74/278

WEBS 2-4=-700/162

## NOTES

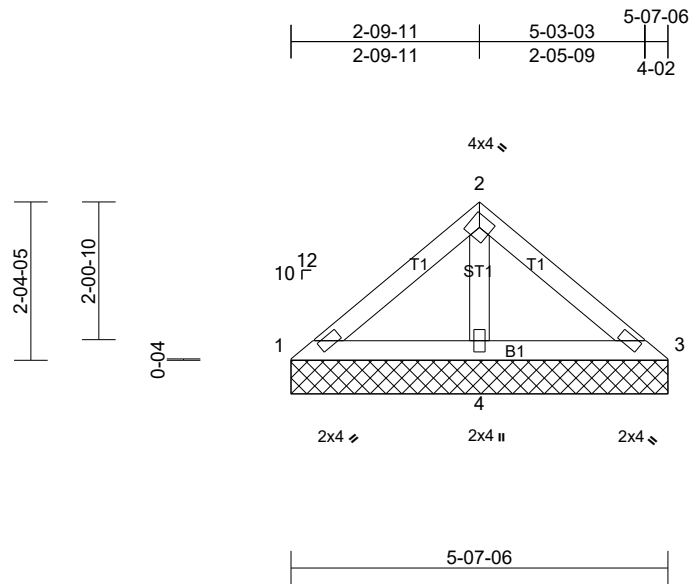
- 1) This truss has been checked for uniform roof live load only, except as noted.
- 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=24ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCELL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.25); Pg=30.0 psf (ground snow); Pf=23.1 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) Gable requires continuous bottom chord bearing.
- 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

This design is based upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of the Building Designer. Building Designer shall verify all design information on this sheet for conformance with conditions and requirements of the specific building and governing codes and ordinances. Building Designer accepts responsibility for the correctness or accuracy of the design information as it may relate to a specific building. Certification is valid only when truss is fabricated by a UFPI plant. Bracing shown is for lateral support of truss members only and does not replace erection and permanent bracing. Refer to Building Component Safety Information (BCSI) for general guidance regarding storage, erection and bracing available from SBCA and Truss Plate Institute.



|            |       |            |     |     |                          |
|------------|-------|------------|-----|-----|--------------------------|
| Job        | Truss | Truss Type | Qty | Ply | Job Reference (optional) |
| 20110098JR | V06   | Valley     | 1   | 1   |                          |

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|                |           |                 |                 |            |      |             |      |       |        |     |               |             |
|----------------|-----------|-----------------|-----------------|------------|------|-------------|------|-------|--------|-----|---------------|-------------|
| <b>Loading</b> | (psf)     | <b>Spacing</b>  | 2-00-00         | <b>CSI</b> |      | <b>DEFL</b> | in   | (loc) | l/defl | L/d | <b>PLATES</b> | <b>GRIP</b> |
| TCLL (roof)    | 30.0      | Plate Grip DOL  | 1.25            | TC         | 0.09 | Vert(LL)    | n/a  | -     | n/a    | 999 | MT20          | 197/144     |
| Snow (Pf/Pg)   | 23.1/30.0 | Lumber DOL      | 1.25            | BC         | 0.10 | Vert(TL)    | n/a  | -     | n/a    | 999 |               |             |
| TCDL           | 10.0      | Rep Stress Incr | YES             | WB         | 0.04 | Horiz(TL)   | 0.00 | 3     | n/a    | n/a |               |             |
| BCLL           | 0.0 *     | Code            | IRC2015/TPI2014 | Matrix-MP  |      |             |      |       |        |     |               |             |
| BCDL           | 10.0      |                 |                 |            |      |             |      |       |        |     | Weight: 16 lb | FT = 20%    |

**LUMBER**  
TOP CHORD 2x4 SPF No.2  
BOT CHORD 2x4 SPF No.2  
OTHERS 2x4 SPF No.2

**BRACING**  
TOP CHORD Structural wood sheathing directly applied or 5-7-6 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

**REACTIONS** (size) 1=5-07-06, (min. 1-08), 3=5-07-06, (min. 1-08), 4=5-07-06, (min. 1-08)  
Max Horiz 1=-42 (LC 9)  
Max Uplift 3=-4 (LC 14), 4=-36 (LC 13)  
Max Grav 1=65 (LC 19), 3=65 (LC 20), 4=439 (LC 2)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**WEBS** 2-4=-297/63

**NOTES**  
1) This truss has been checked for uniform roof live load only, except as noted.  
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=24ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60  
3) TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.25); Pg=30.0 psf (ground snow); Pf=23.1 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10  
4) Unbalanced snow loads have been considered for this design.  
5) Gable requires continuous bottom chord bearing.  
6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.  
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 4 lb uplift at joint 3.

- One RT4 USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 4. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

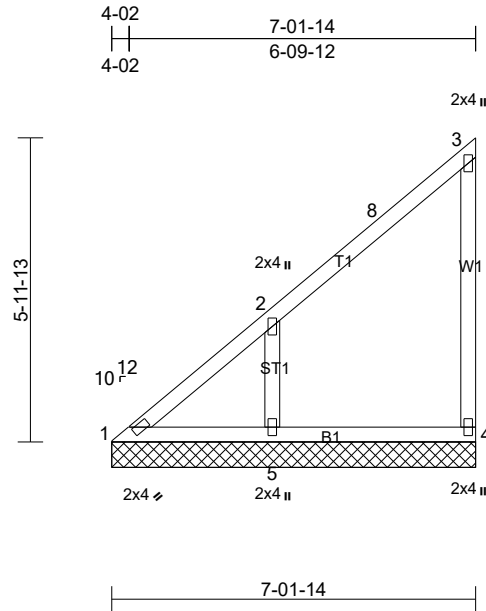
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|            |       |            |     |     |                          |
|------------|-------|------------|-----|-----|--------------------------|
| Job        | Truss | Truss Type | Qty | Ply | Job Reference (optional) |
| 20110098JR | V07   | Valley     | 1   | 1   |                          |

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| Loading      | (psf)     | Spacing         | 2-00-00         | CSI       | DEFL | in        | (loc) | I/defl | L/d | PLATES | GRIP          |          |
|--------------|-----------|-----------------|-----------------|-----------|------|-----------|-------|--------|-----|--------|---------------|----------|
| TCLL (roof)  | 30.0      | Plate Grip DOL  | 1.25            | TC        | 0.22 | Vert(LL)  | n/a   | -      | n/a | 999    | MT20          | 197/144  |
| Snow (Pf/Pg) | 23.1/30.0 | Lumber DOL      | 1.25            | BC        | 0.07 | Vert(TL)  | n/a   | -      | n/a | 999    |               |          |
| TCDL         | 10.0      | Rep Stress Incr | YES             | WB        | 0.05 | Horiz(TL) | 0.00  | 4      | n/a | n/a    |               |          |
| BCLL         | 0.0 *     | Code            | IRC2015/TPI2014 | Matrix-MP |      |           |       |        |     |        |               |          |
| BCDL         | 10.0      |                 |                 |           |      |           |       |        |     |        | Weight: 27 lb | FT = 20% |

#### LUMBER

|           |              |
|-----------|--------------|
| TOP CHORD | 2x4 SPF No.2 |
| BOT CHORD | 2x4 SPF No.2 |
| WEBS      | 2x4 SPF No.2 |
| OTHERS    | 2x4 SPF No.2 |

#### 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 | (size)     | 1=7-01-14, (min. 1-08), 4=7-01-14, (min. 1-08), 5=7-01-14, (min. 1-08) |
|           | Max Horiz  | 1=166 (LC 10)                                                          |
|           | Max Uplift | 1=-21 (LC 9), 4=-43 (LC 10), 5=-125 (LC 13)                            |
|           | Max Grav   | 1=145 (LC 27), 4=163 (LC 26), 5=441 (LC 2)                             |

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

|      |              |
|------|--------------|
| WEBS | 2-5=-339/180 |
|------|--------------|

#### NOTES

- This truss has been checked for uniform roof live load only, except as noted.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=24ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.25); Pg=30.0 psf (ground snow); Pf=23.1 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Gable requires continuous bottom chord bearing.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 21 lb uplift at joint 1.
- One RT4 USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 4 and 5. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

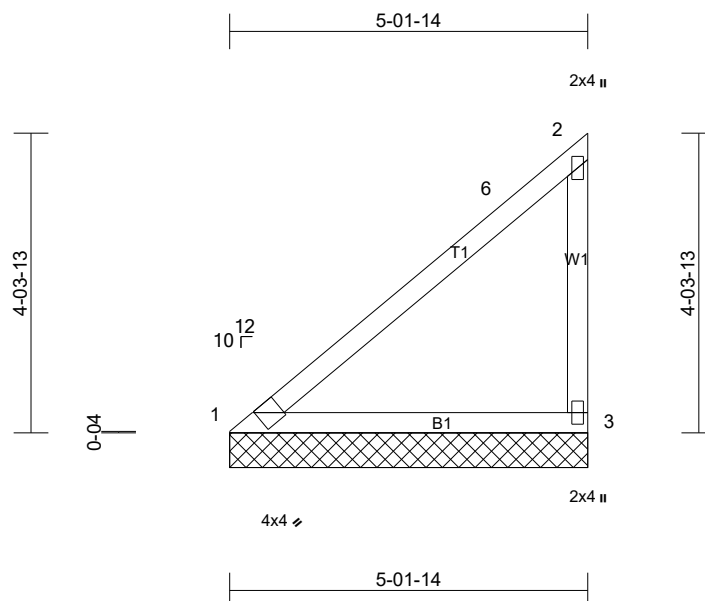
LOAD CASE(S) Standard



|            |       |            |     |     |                          |
|------------|-------|------------|-----|-----|--------------------------|
| Job        | Truss | Truss Type | Qty | Ply | Job Reference (optional) |
| 20110098JR | V08   | Valley     | 1   | 1   |                          |

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Page: 1



Scale = 1:33.3

| Loading      | (psf)     | Spacing         | 2-00-00         | CSI       | DEFL | in        | (loc) | I/defl | L/d | PLATES        | GRIP     |
|--------------|-----------|-----------------|-----------------|-----------|------|-----------|-------|--------|-----|---------------|----------|
| TCLL (roof)  | 30.0      | Plate Grip DOL  | 1.25            | TC        | 0.36 | Vert(LL)  | n/a   | -      | n/a | 999           | MT20     |
| Snow (Pf/Pg) | 23.1/30.0 | Lumber DOL      | 1.25            | BC        | 0.35 | Vert(TL)  | n/a   | -      | n/a | 999           | 197/144  |
| TCDL         | 10.0      | Rep Stress Incr | YES             | WB        | 0.00 | Horiz(TL) | 0.01  | 3      | n/a | n/a           |          |
| BCLL         | 0.0*      | Code            | IRC2015/TPI2014 | Matrix-MP |      |           |       |        |     |               |          |
| BCDL         | 10.0      |                 |                 |           |      |           |       |        |     |               |          |
|              |           |                 |                 |           |      |           |       |        |     | Weight: 17 lb | FT = 20% |

#### LUMBER

TOP CHORD 2x4 SPF No.2  
BOT CHORD 2x4 SPF No.2  
WEBS 2x4 SPF No.2

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 5-2-3 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 1=5-01-14, (min. 1-08), 3=5-01-14, (min. 1-08)  
Max Horiz 1=116 (LC 10)  
Max Uplift 1=-1 (LC 13), 3=-51 (LC 13)  
Max Grav 1=251 (LC 2), 3=255 (LC 26)

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

TOP CHORD 1-6=-303/45

#### NOTES

- This truss has been checked for uniform roof live load only, except as noted.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=24ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.25); Pg=30.0 psf (ground snow); Pf=23.1 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Gable requires continuous bottom chord bearing.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1 lb uplift at joint 1.

- One RT4 USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 3. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

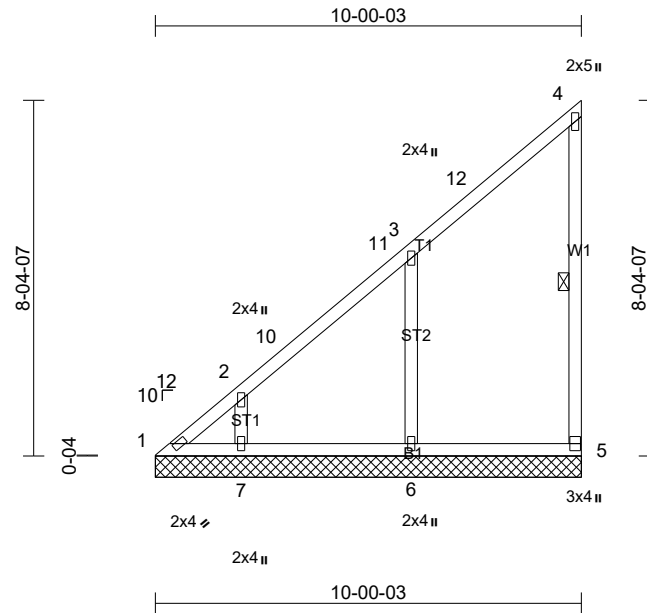
**LOAD CASE(S)** Standard



|            |       |            |     |     |                          |
|------------|-------|------------|-----|-----|--------------------------|
| Job        | Truss | Truss Type | Qty | Ply | Job Reference (optional) |
| 20110098JR | V09   | Valley     | 1   | 1   |                          |

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Page: 1



Scale = 1:54.4

| Loading      | (psf)     | Spacing         | 2-00-00         | CSI       | DEFL | in        | (loc) | I/defl | L/d | PLATES | GRIP                   |
|--------------|-----------|-----------------|-----------------|-----------|------|-----------|-------|--------|-----|--------|------------------------|
| TCLL (roof)  | 30.0      | Plate Grip DOL  | 1.25            | TC        | 0.30 | Vert(LL)  | n/a   | -      | n/a | 999    | MT20                   |
| Snow (Pf/Pg) | 23.1/30.0 | Lumber DOL      | 1.25            | BC        | 0.14 | Vert(TL)  | n/a   | -      | n/a | 999    | 197/144                |
| TCDL         | 10.0      | Rep Stress Incr | YES             | WB        | 0.14 | Horiz(TL) | 0.00  | 5      | n/a | n/a    |                        |
| BCLL         | 0.0*      | Code            | IRC2015/TPI2014 | Matrix-MS |      |           |       |        |     |        |                        |
| BCDL         | 10.0      |                 |                 |           |      |           |       |        |     |        | Weight: 41 lb FT = 20% |

#### LUMBER

|           |              |
|-----------|--------------|
| TOP CHORD | 2x4 SPF No.2 |
| BOT CHORD | 2x4 SPF No.2 |
| WEBS      | 2x4 SPF No.2 |
| OTHERS    | 2x4 SPF No.2 |

#### 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) - Max Horiz | 1=236 (LC 10)                                                                       |
| Max Uplift       | All uplift 100 (lb) or less at joint(s) 1, 5, 7 except 6=142 (LC 13)                |
| Max Grav         | All reactions 250 (lb) or less at joint (s) 1, 5 except 6=510 (LC 26), 7=334 (LC 2) |

#### FORCES

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

#### WEBS

|                            |
|----------------------------|
| 3-6=-355/169, 2-7=-269/136 |
|----------------------------|

#### NOTES

- This truss has been checked for uniform roof live load only, except as noted.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=24ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-0-5 to 3-0-5, Interior (1) 3-0-5 to 5-7-13, Exterior (2) 5-7-13 to 9-10-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.25); Pg=30.0 psf (ground snow); Pf=23.1 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Gable requires continuous bottom chord bearing.

- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3'-0" tall by 2'-0" wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1.
- One RT4 USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 5, 6, and 7. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

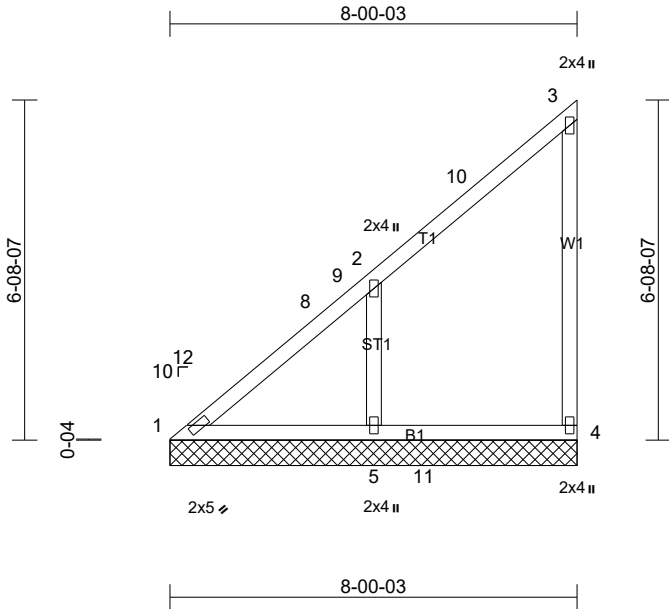
LOAD CASE(S) Standard



|            |       |            |     |     |                          |
|------------|-------|------------|-----|-----|--------------------------|
| Job        | Truss | Truss Type | Qty | Ply | Job Reference (optional) |
| 20110098JR | V10   | Valley     | 1   | 1   |                          |

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Page: 1



Scale = 1:45.6

| Loading      | (psf)     | Spacing         | 2-00-00         | CSI       | DEFL | in        | (loc) | I/defl | L/d | PLATES | GRIP                   |
|--------------|-----------|-----------------|-----------------|-----------|------|-----------|-------|--------|-----|--------|------------------------|
| TCLL (roof)  | 30.0      | Plate Grip DOL  | 1.25            | TC        | 0.28 | Vert(LL)  | n/a   | -      | n/a | 999    | MT20                   |
| Snow (Pf/Pg) | 23.1/30.0 | Lumber DOL      | 1.25            | BC        | 0.15 | Vert(TL)  | n/a   | -      | n/a | 999    | 197/144                |
| TCDL         | 10.0      | Rep Stress Incr | YES             | WB        | 0.07 | Horiz(TL) | 0.00  | 4      | n/a | n/a    |                        |
| BCLL         | 0.0*      | Code            | IRC2015/TPI2014 | Matrix-MP |      |           |       |        |     |        |                        |
| BCDL         | 10.0      |                 |                 |           |      |           |       |        |     |        | Weight: 31 lb FT = 20% |

#### LUMBER

|           |              |
|-----------|--------------|
| TOP CHORD | 2x4 SPF No.2 |
| BOT CHORD | 2x4 SPF No.2 |
| WEBS      | 2x4 SPF No.2 |
| OTHERS    | 2x4 SPF No.2 |

#### 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 | (size)     | 1=8'-00-03, (min. 1'-08), 4=8'-00-03, (min. 1'-08), 5=8'-00-03, (min. 1'-08) |
|           | Max Horiz  | 1=187 (LC 10)                                                                |
|           | Max Uplift | 1=-16 (LC 9), 4=-46 (LC 10), 5=-141 (LC 13)                                  |
|           | Max Grav   | 1=181 (LC 27), 4=204 (LC 26), 5=526 (LC 26)                                  |

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

|      |              |
|------|--------------|
| WEBS | 2-5=-367/185 |
|------|--------------|

#### NOTES

- This truss has been checked for uniform roof live load only, except as noted.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=24ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-0-5 to 3-0-5, Interior (1) 3-0-5 to 3-7-13, Exterior (2) 3-7-13 to 7-10-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.25); Pg=30.0 psf (ground snow); Pf=23.1 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Gable requires continuous bottom chord bearing.

- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3'-06'-00 tall by 2'-00'-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 16 lb uplift at joint 1.
- One RT4 USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 4 and 5. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

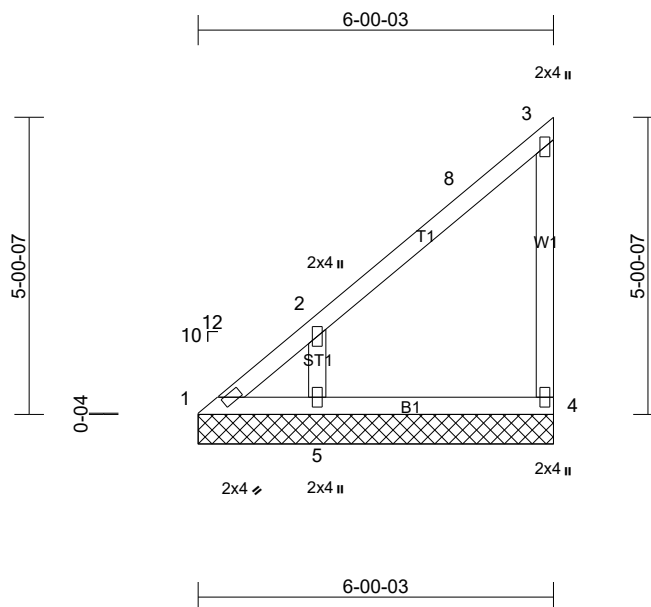
LOAD CASE(S) Standard



|            |       |            |     |     |                          |
|------------|-------|------------|-----|-----|--------------------------|
| Job        | Truss | Truss Type | Qty | Ply | Job Reference (optional) |
| 20110098JR | V11   | Valley     | 1   | 1   |                          |

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Page: 1



Scale = 1:39.2

| Loading      | (psf)     | Spacing         | 2-00-00         | CSI       | DEFL      | in   | (loc) | I/defl | L/d | PLATES        | GRIP     |
|--------------|-----------|-----------------|-----------------|-----------|-----------|------|-------|--------|-----|---------------|----------|
| TCLL (roof)  | 30.0      | Plate Grip DOL  | 1.25            | TC        | Vert(LL)  | 1.25 | n/a   | -      | n/a | 999           | 197/144  |
| Snow (Pf/Pg) | 23.1/30.0 | Lumber DOL      | 1.25            | BC        | Vert(TL)  | 0.07 | n/a   | -      | n/a | 999           |          |
| TCDL         | 10.0      | Rep Stress Incr | YES             | WB        | Horiz(TL) | 0.04 | 0.00  | 4      | n/a | n/a           |          |
| BCLL         | 0.0*      | Code            | IRC2015/TPI2014 | Matrix-MP |           |      |       |        |     |               |          |
| BCDL         | 10.0      |                 |                 |           |           |      |       |        |     |               |          |
|              |           |                 |                 |           |           |      |       |        |     | Weight: 22 lb | FT = 20% |

#### LUMBER

TOP CHORD 2x4 SPF No.2  
BOT CHORD 2x4 SPF No.2  
WEBS 2x4 SPF No.2  
OTHERS 2x4 SPF No.2

#### 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.

**REACTIONS** (size) 1=6'-00-03, (min. 1'-08), 4=6'-00-03, (min. 1'-08), 5=6'-00-03, (min. 1'-08)  
Max Horiz 1=138 (LC 10)  
Max Uplift 1=-34 (LC 11), 4=-38 (LC 10), 5=-110 (LC 13)  
Max Grav 1=82 (LC 10), 4=166 (LC 26), 5=398 (LC 2)

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

WEBS 2-5=-334/189

#### NOTES

- This truss has been checked for uniform roof live load only, except as noted.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=24ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.25); Pg=30.0 psf (ground snow); Pf=23.1 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Gable requires continuous bottom chord bearing.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3'-06-00 tall by 2'-00-00 wide will fit between the bottom chord and any other members.

- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 34 lb uplift at joint 1.
- One RT4 USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 4 and 5. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

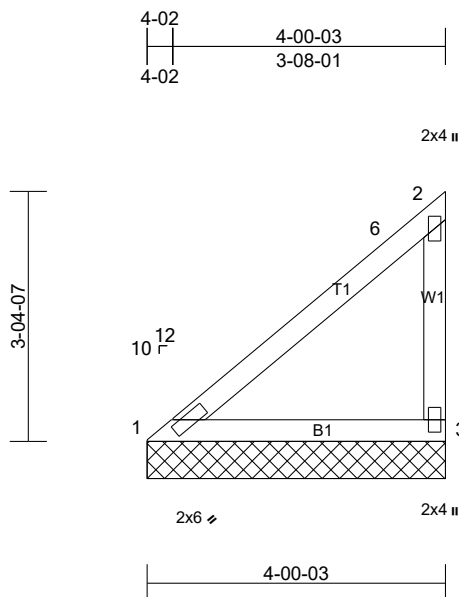
**LOAD CASE(S)** Standard



|            |       |            |     |     |                          |
|------------|-------|------------|-----|-----|--------------------------|
| Job        | Truss | Truss Type | Qty | Ply | Job Reference (optional) |
| 20110098JR | V12   | Valley     | 1   | 1   |                          |

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Page: 1



Scale = 1:31.2

| Loading      | (psf)     | Spacing         | 2-00-00         | CSI       |      | DEFL      | in   | (loc) | I/defl | L/d | PLATES        | GRIP     |
|--------------|-----------|-----------------|-----------------|-----------|------|-----------|------|-------|--------|-----|---------------|----------|
| TCLL (roof)  | 30.0      | Plate Grip DOL  | 1.25            | TC        | 0.20 | Vert(LL)  | n/a  | -     | n/a    | 999 | MT20          | 197/144  |
| Snow (Pf/Pg) | 23.1/30.0 | Lumber DOL      | 1.25            | BC        | 0.21 | Vert(TL)  | n/a  | -     | n/a    | 999 |               |          |
| TCDL         | 10.0      | Rep Stress Incr | YES             | WB        | 0.00 | Horiz(TL) | 0.00 | 3     | n/a    | n/a |               |          |
| BCLL         | 0.0*      | Code            | IRC2015/TPI2014 | Matrix-MP |      |           |      |       |        |     |               |          |
| BCDL         | 10.0      |                 |                 |           |      |           |      |       |        |     | Weight: 13 lb | FT = 20% |

#### LUMBER

TOP CHORD 2x4 SPF No.2  
BOT CHORD 2x4 SPF No.2  
WEBS 2x4 SPF No.2

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 4-0-3 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 1=4-00-03, (min. 1-08), 3=4-00-03, (min. 1-08)  
Max Horiz 1=88 (LC 10)  
Max Uplift 1=-1 (LC 13), 3=-39 (LC 13)  
Max Grav 1=194 (LC 2), 3=197 (LC 26)

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

#### NOTES

- This truss has been checked for uniform roof live load only, except as noted.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=24ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.25); Pg=30.0 psf (ground snow); Pf=23.1 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Gable requires continuous bottom chord bearing.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1 lb uplift at joint 1.

- One RT4 USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 3. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

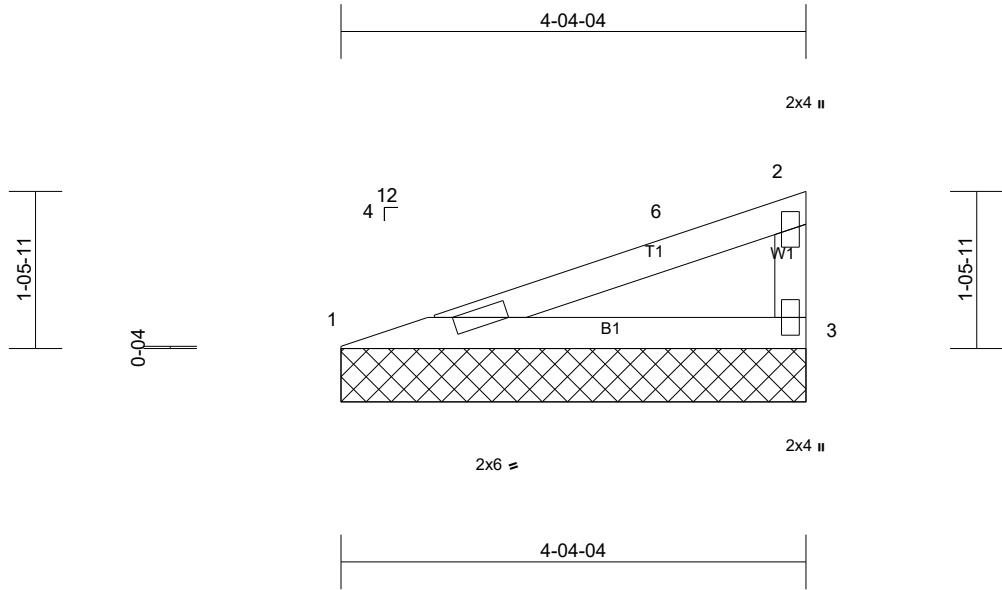
**LOAD CASE(S)** Standard



|            |       |            |     |     |                          |
|------------|-------|------------|-----|-----|--------------------------|
| Job        | Truss | Truss Type | Qty | Ply | Job Reference (optional) |
| 20110098JR | V13   | Valley     | 1   | 1   |                          |

Run: 8.41 S Jul 24 2020 Print: 8.410 S Jul 24 2020 MiTek Industries, Inc. Mon Feb 15 09:25:18  
ID:Vm9iLXBouM\_?4EYx98sb4PyKEnc-G8uS8M8XJf85z4JkCRh3H3dViziALoXTX1Ps\_2zky4p

Page: 1



Scale = 1:21.7

| Loading      | (psf)     | Spacing         | 2-00-00         | CSI       |      | DEFL      | in   | (loc) | l/defl | L/d | PLATES        | GRIP     |
|--------------|-----------|-----------------|-----------------|-----------|------|-----------|------|-------|--------|-----|---------------|----------|
| TCLL (roof)  | 30.0      | Plate Grip DOL  | 1.25            | TC        | 0.20 | Vert(LL)  | n/a  | -     | n/a    | 999 | MT20          | 197/144  |
| Snow (Pf/Pg) | 23.1/30.0 | Lumber DOL      | 1.25            | BC        | 0.25 | Vert(TL)  | n/a  | -     | n/a    | 999 |               |          |
| TCDL         | 10.0      | Rep Stress Incr | YES             | WB        | 0.00 | Horiz(TL) | 0.00 | 3     | n/a    | n/a |               |          |
| BCLL         | 0.0*      | Code            | IRC2015/TPI2014 | Matrix-MP |      |           |      |       |        |     |               |          |
| BCDL         | 10.0      |                 |                 |           |      |           |      |       |        |     | Weight: 10 lb | FT = 20% |

#### LUMBER

TOP CHORD 2x4 SPF No.2  
BOT CHORD 2x4 SPF No.2  
WEBS 2x4 SPF No.2

#### BRACING

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

**REACTIONS** (size) 1=4-04-04, (min. 1-08), 3=4-04-04, (min. 1-08)  
Max Horiz 1=40 (LC 10)  
Max Uplift 1=-19 (LC 9), 3=-25 (LC 13)  
Max Grav 1=211 (LC 2), 3=211 (LC 2)

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

TOP CHORD 1-6=-440/102  
BOT CHORD 1-3=-110/408

#### NOTES

- This truss has been checked for uniform roof live load only, except as noted.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=5.0psf; BCDL=5.0psf; h=24ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-10; Pr=30.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.25); Pg=30.0 psf (ground snow); Pf=23.1 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Gable requires continuous bottom chord bearing.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 19 lb uplift at joint 1.

- One RT4 USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 3. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard