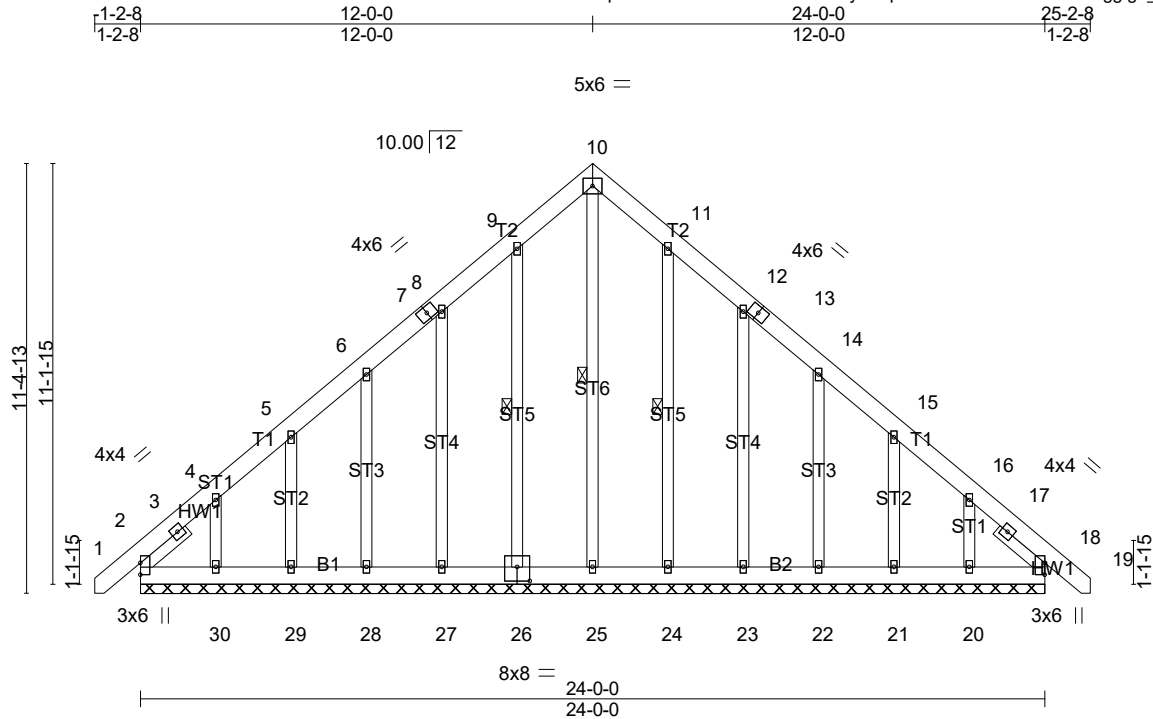


|                          |             |                     |          |          |                             |
|--------------------------|-------------|---------------------|----------|----------|-----------------------------|
| Job<br>28460             | Truss<br>G1 | Truss Type<br>GABLE | Qty<br>1 | Ply<br>1 | Freedom Const\Campbell Plan |
| Job Reference (optional) |             |                     |          |          |                             |

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ID:pFJVHx?bQQurmNPxZvS0ORyE18p-la102mU5Zb9wVXGwP6ggfg0\_aPv70\_f7i0ONd5zuAWQ



Scale = 1:61.1

Plate Offsets (X,Y)-- [26:0-4-0,0-4-8]

| LOADING (psf) | SPACING-             |       | CSI.     |  | DEFL.    | in    | (loc) | l/defl | L/d | PLATES         | GRIP     |
|---------------|----------------------|-------|----------|--|----------|-------|-------|--------|-----|----------------|----------|
| TCLL 20.0     | Plate Grip DOL 1.15  | 2-0-0 | TC 0.04  |  | Vert(LL) | -0.00 | 18    | n/r    | 120 | MT20           | 244/190  |
| TCDL 10.0     | Lumber DOL 1.15      |       | BC 0.02  |  | Vert(CT) | -0.00 | 18    | n/r    | 120 |                |          |
| BCLL 0.0 *    | Rep Stress Incr YES  |       | WB 0.13  |  | Horz(CT) | 0.00  | 18    | n/a    | n/a |                |          |
| BCDL 10.0     | Code IRC2018/TPI2014 |       | Matrix-S |  |          |       |       |        |     |                |          |
|               |                      |       |          |  |          |       |       |        |     | Weight: 235 lb | FT = 20% |

#### LUMBER-

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 OTHERS 2x4 SP No.3  
 SLIDER Left 2x4 SP No.3 -E 1-7-5, Right 2x4 SP No.3 -E 1-7-5

#### 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 10-25, 9-26, 11-24

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

#### REACTIONS.

All bearings 24-0-0.  
 (lb) - Max Horz 2=-261(LC 6)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 18, 26, 27, 28, 29, 24, 23, 22, 21 except 30=-106(LC 8), 20=-106(LC 8)  
 Max Grav All reactions 250 lb or less at joint(s) 18, 25, 26, 27, 28, 29, 30, 24, 23, 22, 21, 20 except 2=255(LC 14)

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

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and 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.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 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) 2, 18, 26, 27, 28, 29, 24, 23, 22, 21 except (jt=lb) 30=106, 20=106.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

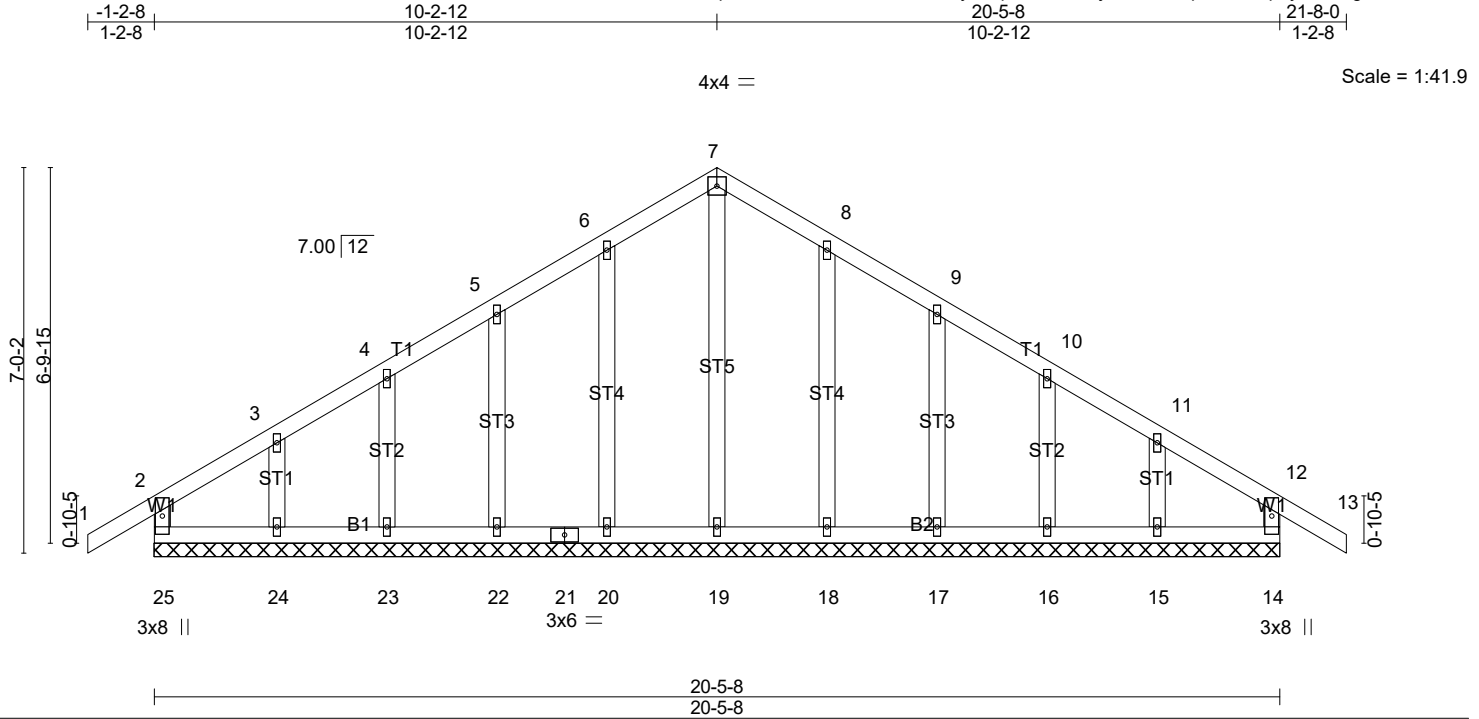
**LOAD CASE(S)** Standard

|                          |             |                                      |          |          |                             |
|--------------------------|-------------|--------------------------------------|----------|----------|-----------------------------|
| Job<br>28460             | Truss<br>G2 | Truss Type<br>Common Supported Gable | Qty<br>1 | Ply<br>1 | Freedom Const\Campbell Plan |
| Job Reference (optional) |             |                                      |          |          |                             |

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ID:pFJVHx?bQQurmNPxZvS0ORyE18p-mnbOG6VjKvHn7hr7zpBvCtZ8vpFy|SSGwg8w9XzuAWP



| LOADING (psf) | SPACING-             | 2-0-0 | CSI.     | DEFL.    | in    | (loc) | l/defl | L/d | PLATES         | GRIP     |
|---------------|----------------------|-------|----------|----------|-------|-------|--------|-----|----------------|----------|
| TCLL 20.0     | Plate Grip DOL       | 1.15  | TC 0.13  | Vert(LL) | -0.01 | 13    | n/r    | 120 | MT20           | 244/190  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.05  | Vert(CT) | -0.01 | 13    | n/r    | 120 |                |          |
| BCLL 0.0 *    | Rep Stress Incr      | YES   | WB 0.10  | Horz(CT) | 0.00  | 14    | n/a    | n/a |                |          |
| BCDL 10.0     | Code IRC2018/TPI2014 |       | Matrix-R |          |       |       |        |     | Weight: 121 lb | FT = 20% |

#### LUMBER-

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3  
OTHERS 2x4 SP No.3

#### BRACING-

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

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

#### REACTIONS.

All bearings 20-5-8.

(lb) - Max Horz 25=-167(LC 6)

Max Uplift All uplift 100 lb or less at joint(s) 25, 14, 20, 22, 23, 24, 18, 17, 16, 15

Max Grav All reactions 250 lb or less at joint(s) 25, 14, 19, 20, 22, 23, 24, 18, 17, 16, 15

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

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and 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.
- All plates are 1.5x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 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) 25, 14, 20, 22, 23, 24, 18, 17, 16, 15.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

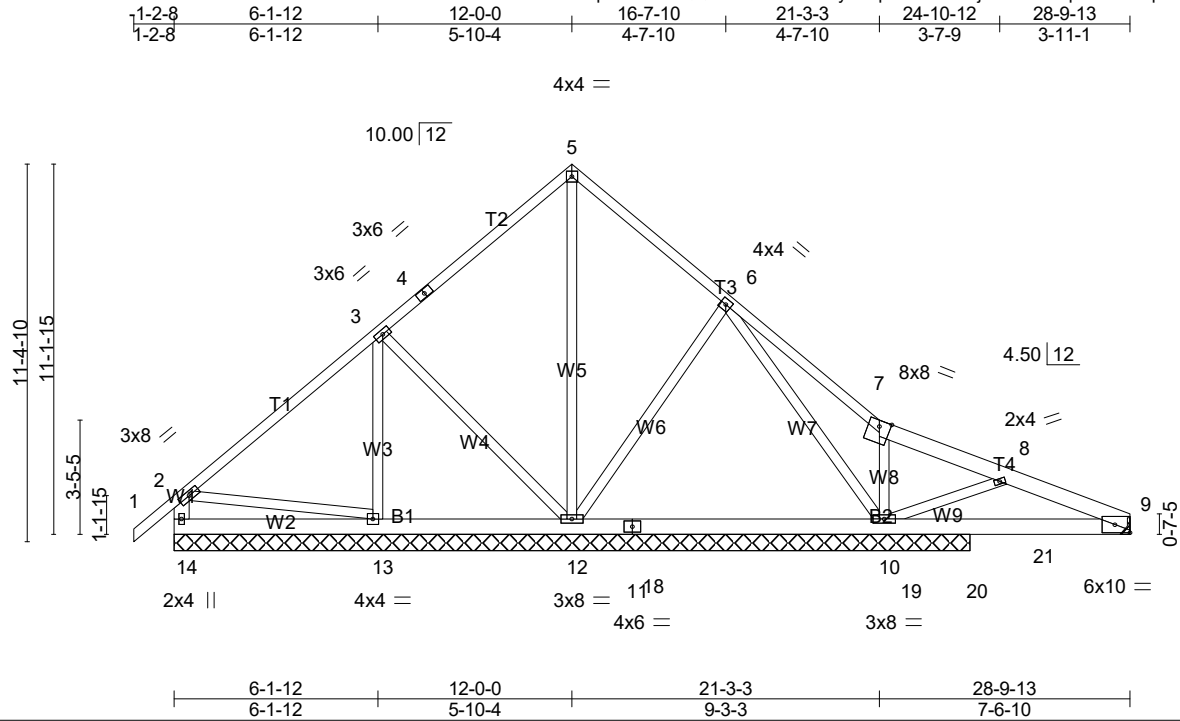
**LOAD CASE(S)** Standard

|                          |              |                            |          |          |                             |
|--------------------------|--------------|----------------------------|----------|----------|-----------------------------|
| Job<br>28460             | Truss<br>GR1 | Truss Type<br>ROOF SPECIAL | Qty<br>1 | Ply<br>2 | Freedom Const\Campbell Plan |
| Job Reference (optional) |              |                            |          |          |                             |

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ID:pFJVHx?bQQumNPxZvS0ORyE18p-mnbOG6VjKvHn7hr7zpBvCtZ?Op51IRMGwg8w9XzuAWP



Scale = 1:69.5

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

| LOADING (psf) | SPACING-             | CSI.      | DEFL.    | in (loc)    | l/defl | L/d | PLATES         | GRIP     |
|---------------|----------------------|-----------|----------|-------------|--------|-----|----------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.67   | Vert(LL) | -0.08 10-17 | >999   | 360 | MT20           | 244/190  |
| TCDL 10.0     | Plate Grip DOL 1.15  | BC 0.68   | Vert(CT) | -0.14 10-17 | >642   | 240 |                |          |
| BCLL 0.0 *    | Lumber DOL 1.15      | WB 0.17   | Horz(CT) | 0.00 9      | n/a    | n/a |                |          |
| BCDL 10.0     | Rep Stress Incr NO   | Matrix-MS | Wind(LL) | 0.05 10-17  | >999   | 240 |                |          |
|               | Code IRC2018/TPI2014 |           |          |             |        |     | Weight: 418 lb | FT = 20% |

#### LUMBER-

TOP CHORD 2x4 SP 2400F 2.0E \*Except\*  
T4: 2x6 SP No.1  
BOT CHORD 2x6 SP No.1  
WEBS 2x4 SP No.3 \*Except\*  
W1: 2x6 SP No.1

#### 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.

All bearings 24-0-0 except (jt=length) 9=Mechanical.  
(lb) - Max Horz 14=-286(LC 6)  
Max Uplift All uplift 100 lb or less at joint(s) 14, 13, 12 except 9=-129(LC 8), 10=-174(LC 8)  
Max Grav All reactions 250 lb or less at joint(s) except 9=1743(LC 2), 14=382(LC 19), 13=404(LC 19), 12=740(LC 14), 10=1998(LC 2)

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

TOP CHORD 8-9=-1187/85, 2-14=-337/83  
BOT CHORD 13-14=-182/362, 10-20=-78/1344, 20-21=-78/1344, 9-21=-78/1344  
WEBS 8-10=-1483/210

#### 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 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.  
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=29ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
- Refer to girder(s) for truss to truss connections.

Continued on page 2

|       |       |              |     |     |                             |
|-------|-------|--------------|-----|-----|-----------------------------|
| Job   | Truss | Truss Type   | Qty | Ply | Freedom Const\Campbell Plan |
| 28460 | GR1   | ROOF SPECIAL | 1   | 2   | Job Reference (optional)    |

**NOTES-**

8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14, 13, 12 except (jt=lb) 9=129, 10=174.

9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 880 lb down and 87 lb up at 24-0-12, and 877 lb down and 85 lb up at 26-0-12, and 879 lb down and 83 lb up at 28-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-2=-60, 2-5=-60, 5-7=-60, 7-9=-60, 14-15=-20

Concentrated Loads (lb)

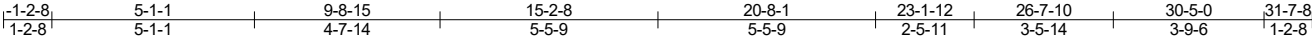
Vert: 17=-764(F) 20=-765(F) 21=-762(F)

|       |       |            |     |     |                             |
|-------|-------|------------|-----|-----|-----------------------------|
| Job   | Truss | Truss Type | Qty | Ply | Freedom Const\Campbell Plan |
| 28460 | GR2   | COMMON     | 1   | 2   | Job Reference (optional)    |

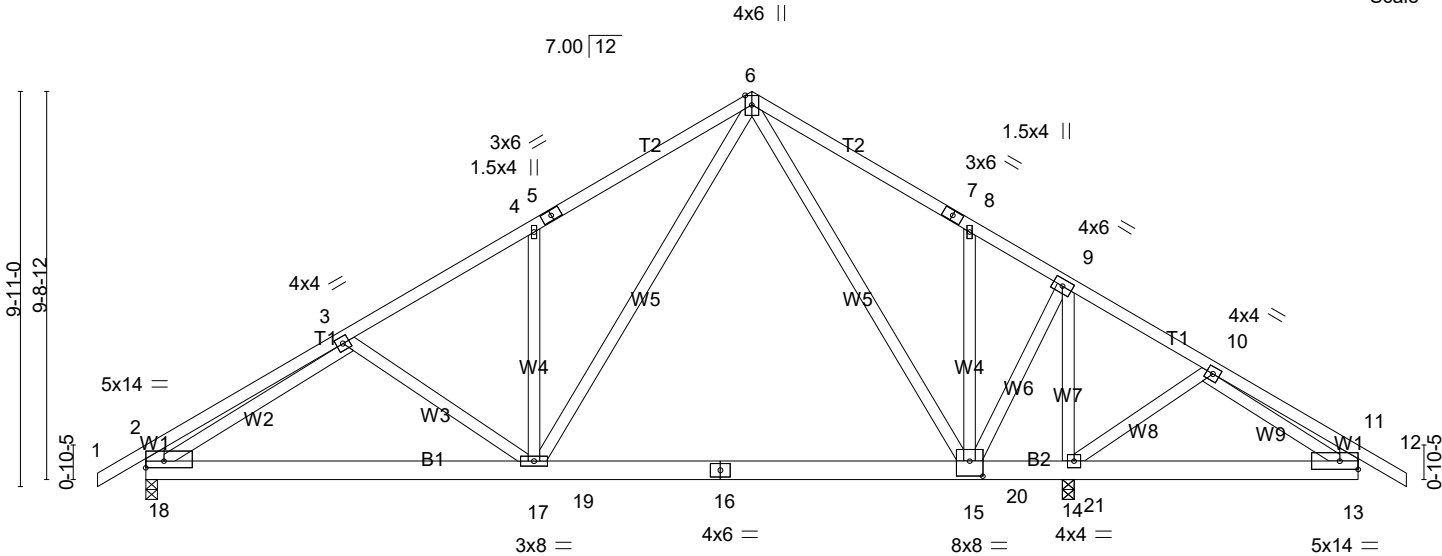
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ID:pFJVHx?bQQurmNPxZvS0ORyE18p-Fz9nTSWL5DPekrQjXXi8k56H5DTvUmuQ9KtUhzzuAWO



Scale = 1:57.8



|                       |                                  |
|-----------------------|----------------------------------|
| Plate Offsets (X,Y)-- | [2:Edge,0-2-0], [15:0-4-0,0-4-8] |
|-----------------------|----------------------------------|

| LOADING (psf) | SPACING-             | CSI.      | DEFL.    | in (loc)    | l/defl | L/d | PLATES         | GRIP     |
|---------------|----------------------|-----------|----------|-------------|--------|-----|----------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.23   | Vert(LL) | -0.11 15-17 | >999   | 360 | MT20           | 244/190  |
| TCDL 10.0     | Plate Grip DOL 1.15  | BC 0.51   | Vert(CT) | -0.18 15-17 | >999   | 240 |                |          |
| BCLL 0.0 *    | Lumber DOL 1.15      | WB 0.66   | Horz(CT) | 0.01 14     | n/a    | n/a |                |          |
| BCDL 10.0     | Rep Stress Incr NO   | Matrix-MS | Wind(LL) | 0.03 15-17  | >999   | 240 |                |          |
|               | Code IRC2018/TPI2014 |           |          |             |        |     | Weight: 440 lb | FT = 20% |

| LUMBER-                   | BRACING-                                                                                        |
|---------------------------|-------------------------------------------------------------------------------------------------|
| TOP CHORD 2x4 SP No.2     | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. |
| BOT CHORD 2x6 SP No.1     | BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.                                   |
| WEBS 2x4 SP No.3 *Except* |                                                                                                 |
| W1: 2x6 SP No.1           |                                                                                                 |

**REACTIONS.** (lb/size) 14=4262/0-3-8 (min. 0-2-9), 14=4262/0-3-8 (min. 0-2-9), 18=1173/0-3-8 (min. 0-1-8)  
Max Horz 18=-230(LC 6)  
Max Uplift 14=-417(LC 8), 18=-124(LC 8)  
Max Grav 14=4377(LC 2), 14=4262(LC 1), 18=1205(LC 31)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-473/57, 3-4=-1553/136, 4-5=-1574/215, 5-6=-1563/248, 6-7=-1354/208, 7-8=-1356/175, 8-9=-1354/108, 9-10=-120/614, 2-18=-444/116  
BOT CHORD 17-18=-20/1485, 17-19=0/901, 16-19=0/901, 16-20=0/901, 15-20=0/901, 15-21=-489/243, 14-21=-489/243, 13-14=-281/150  
WEBS 4-17=-340/155, 6-17=-102/955, 6-15=-563/610, 8-15=-293/147, 9-15=-240/3201, 9-14=-3831/342, 10-14=-260/115, 3-18=-1301/97, 10-13=-163/309

- 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 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.  
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-5-0 oc.  
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=30ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.

|       |       |            |     |     |                             |
|-------|-------|------------|-----|-----|-----------------------------|
| Job   | Truss | Truss Type | Qty | Ply | Freedom Const\Campbell Plan |
| 28460 | GR2   | COMMON     | 1   | 2   | Job Reference (optional)    |

- NOTES-**
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 14=417, 18=124.
  - 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1888 lb down and 165 lb up at 20-1-8, and 1130 lb down and 108 lb up at 22-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-2=-60, 2-6=-60, 6-11=-60, 11-12=-60, 13-18=-20

Concentrated Loads (lb)

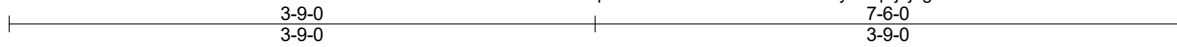
Vert: 20=-1744(B) 21=-1121(B)

|                          |              |                     |          |          |                             |
|--------------------------|--------------|---------------------|----------|----------|-----------------------------|
| Job<br>28460             | Truss<br>PB1 | Truss Type<br>GABLE | Qty<br>1 | Ply<br>1 | Freedom Const\Campbell Plan |
| Job Reference (optional) |              |                     |          |          |                             |

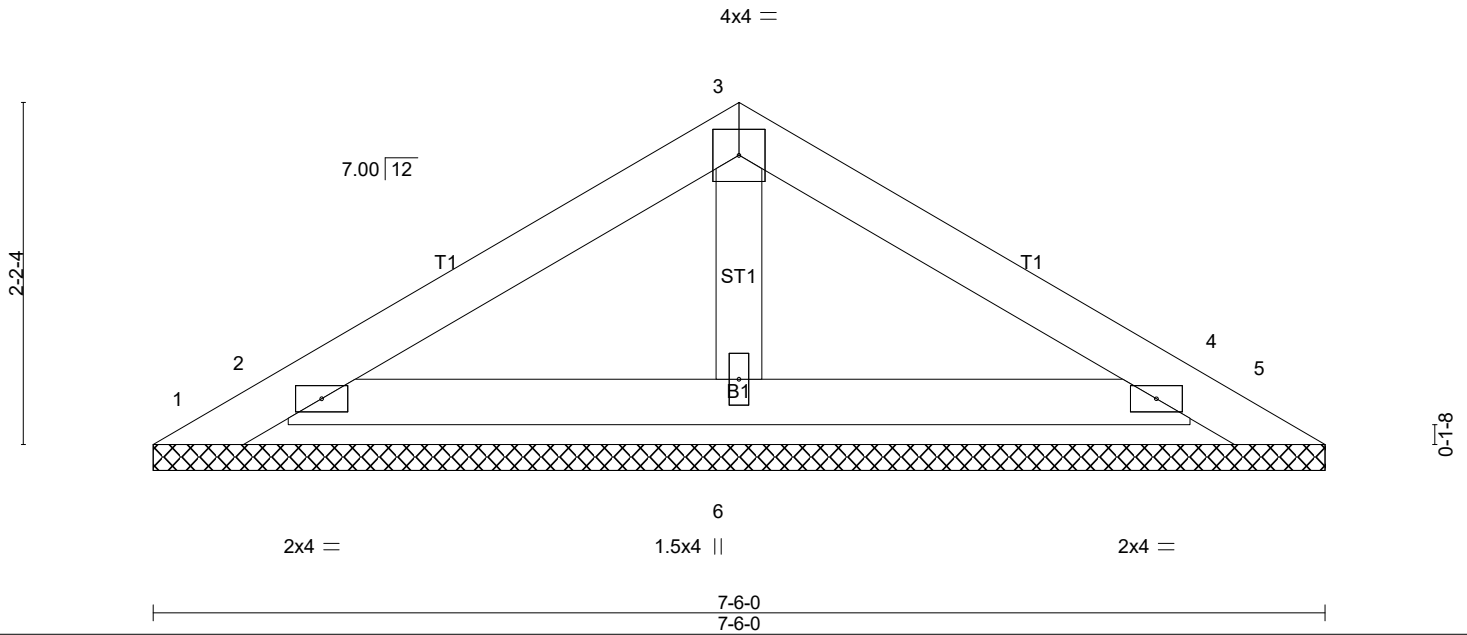
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ID:pFJVHx?bQQurmNPxZvS0ORyE18p-j9j9goXzsWXVM??V5EDNHleVXdvrDN7ZO\_d1DQzuAWN



Scale = 1:14.7



| LOADING (psf) | SPACING-             |      | CSI.     |  | DEFL.    | in   | (loc) | l/defl | L/d | PLATES        | GRIP     |
|---------------|----------------------|------|----------|--|----------|------|-------|--------|-----|---------------|----------|
| TCLL 20.0     | Plate Grip DOL       | 1.15 | TC 0.05  |  | Vert(LL) | n/a  | -     | n/a    | 999 | MT20          | 244/190  |
| TCDL 10.0     | Lumber DOL           | 1.15 | BC 0.08  |  | Vert(CT) | n/a  | -     | n/a    | 999 |               |          |
| BCLL 0.0 *    | Rep Stress Incr      | YES  | WB 0.02  |  | Horz(CT) | 0.00 | 5     | n/a    | n/a |               |          |
| BCDL 10.0     | Code IRC2018/TPI2014 |      | Matrix-P |  |          |      |       |        |     | Weight: 24 lb | FT = 20% |

#### LUMBER-

TOP CHORD 2x4 SP 2400F 2.0E  
BOT CHORD 2x4 SP No.2  
OTHERS 2x4 SP No.3

#### BRACING-

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

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

#### REACTIONS.

All bearings 7-6-0.  
(lb) - Max Horz 1=44(LC 6)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 2, 4  
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 6 except  
2=259(LC 13), 4=254(LC 1)

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

#### NOTES-

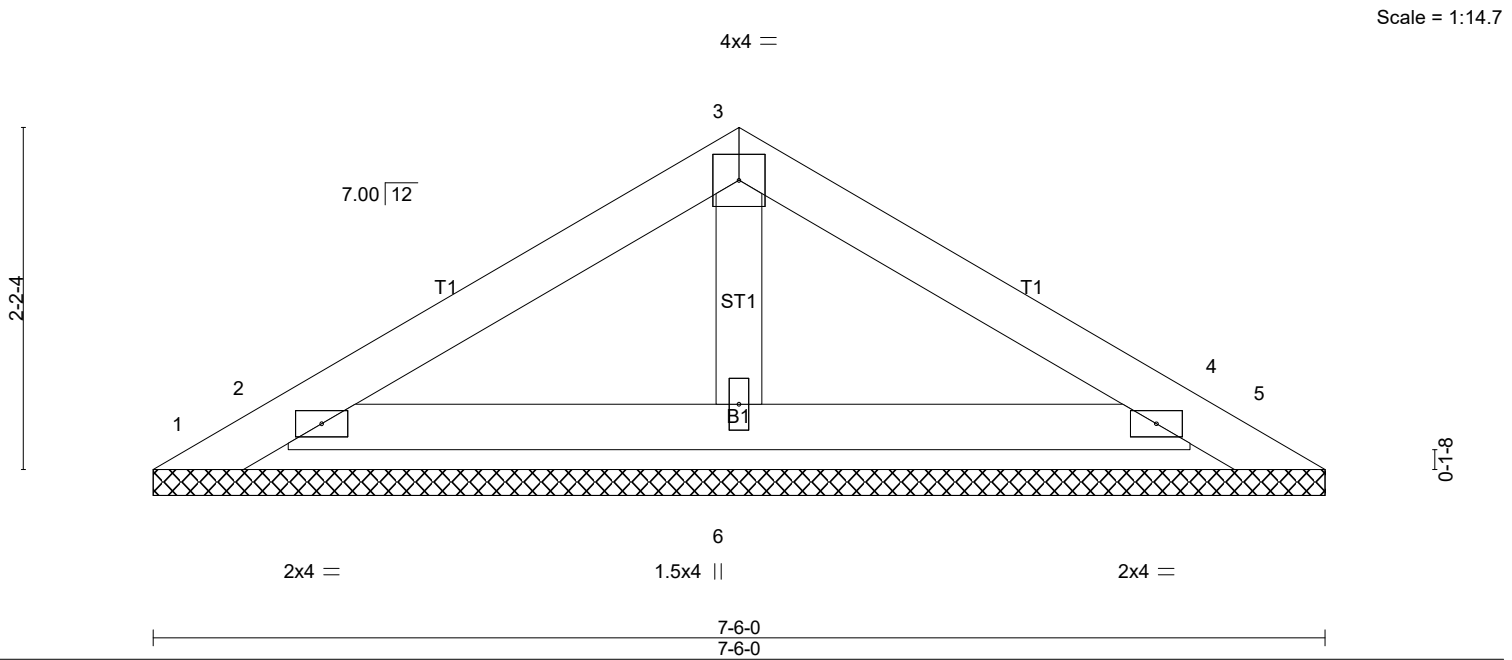
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; 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.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 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, 5, 2, 4.
- This truss is designed in accordance with the 2018 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<br><b>28460</b> | Truss<br><b>PB2</b> | Truss Type<br><b>GABLE</b> | Qty<br><b>16</b> | Ply<br><b>1</b> | Freedom Const\Campbell Plan<br>Job Reference (optional) |
|---------------------|---------------------|----------------------------|------------------|-----------------|---------------------------------------------------------|

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8.430 s Jan 20 2021 MiTek Industries, Inc. Sat Jan 18 09:38:31 2025 Page 1  
ID:pFJVHx?bQQurmNPxZvS0ORyE18p-BMHXu8XbdqfM\_8aheykcqWBgH1F4yqMjdeMamszuAWM  
3-9-0 3-9-0 7-6-0 3-9-0



| LOADING (psf) | SPACING-             |      | CSI.     | DEFL.    | in   | (loc) | l/defl | L/d | PLATES        | GRIP     |
|---------------|----------------------|------|----------|----------|------|-------|--------|-----|---------------|----------|
| TCLL 20.0     | Plate Grip DOL       | 1.15 | TC 0.05  | Vert(LL) | n/a  | -     | n/a    | 999 | MT20          | 244/190  |
| TCDL 10.0     | Lumber DOL           | 1.15 | BC 0.08  | Vert(CT) | n/a  | -     | n/a    | 999 |               |          |
| BCLL 0.0 *    | Rep Stress Incr      | YES  | WB 0.02  | Horz(CT) | 0.00 | 5     | n/a    | n/a |               |          |
| BCDL 10.0     | Code IRC2018/TPI2014 |      | Matrix-P |          |      |       |        |     | Weight: 24 lb | FT = 20% |

#### LUMBER-

TOP CHORD 2x4 SP 2400F 2.0E  
BOT CHORD 2x4 SP No.2  
OTHERS 2x4 SP No.3

#### BRACING-

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

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

#### REACTIONS.

All bearings 7-6-0.  
(lb) - Max Horz 1=44(LC 6)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 2, 4  
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 6 except  
2=259(LC 13), 4=254(LC 1)

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

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and 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.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 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, 5, 2, 4.
- This truss is designed in accordance with the 2018 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<br>28460             | Truss<br>SG1 | Truss Type<br>GABLE | Qty<br>1 | Ply<br>1 | Freedom Const\Campbell Plan |
| Job Reference (optional) |              |                     |          |          |                             |

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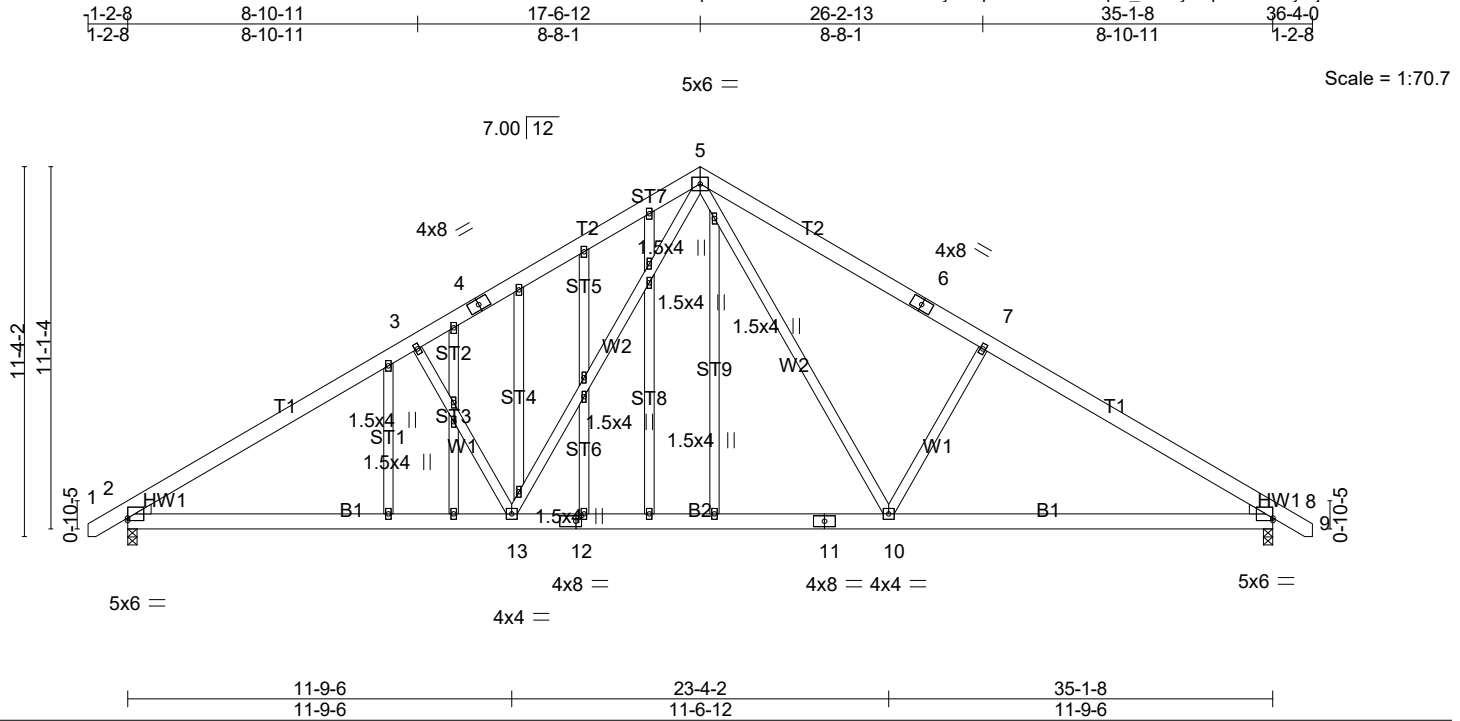


Plate Offsets (X,Y)-- [2:0-0-0,0-1-0], [8:Edge,0-1-0], [12:0-2-0,0-2-0]

| LOADING (psf) | SPACING-             | CSI.      | DEFL.    | in (loc)    | l/defl | L/d | PLATES         | GRIP     |
|---------------|----------------------|-----------|----------|-------------|--------|-----|----------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.26   | Vert(LL) | -0.29 10-13 | >999   | 360 | MT20           | 244/190  |
| TCDL 10.0     | Plate Grip DOL 1.15  | BC 0.53   | Vert(CT) | -0.40 10-13 | >999   | 240 |                |          |
| BCLL 0.0 *    | Lumber DOL 1.15      | WB 0.35   | Horz(CT) | 0.05 8      | n/a    | n/a |                |          |
| BCDL 10.0     | Rep Stress Incr YES  | Matrix-AS | Wind(LL) | 0.05 10-13  | >999   | 240 |                |          |
|               | Code IRC2018/TPI2014 |           |          |             |        |     | Weight: 303 lb | FT = 20% |

#### LUMBER-

TOP CHORD 2x6 SP No.1

BOT CHORD 2x6 SP No.1

WEBS 2x4 SP No.3

OTHERS 2x4 SP No.3

WEDGE

Left: 2x4 SP No.3 , Right: 2x4 SP No.3

#### BRACING-

TOP CHORD

BOT CHORD

Structural wood sheathing directly applied.

Rigid ceiling directly applied.

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

**REACTIONS.** (lb/size) 2=1471/0-3-8 (min. 0-1-13), 8=1471/0-3-8 (min. 0-1-13)

Max Horz 2=-238(LC 6)

Max Uplift 2=-146(LC 8), 8=-146(LC 8)

Max Grav 2=1513(LC 13), 8=1513(LC 14)

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

TOP CHORD 2-3=-2255/223, 3-4=-2052/235, 4-5=-1939/282, 5-6=-1939/282,

6-7=-2053/235, 7-8=-2256/223

BOT CHORD 2-13=-63/2003, 12-13=0/1334, 11-12=0/1334, 10-11=0/1334, 8-10=-63/1825

WEBS 3-13=-479/221, 5-13=-61/940, 5-10=-61/941, 7-10=-479/221

#### NOTES-

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

2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=35ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; 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) All plates are 2x4 MT20 unless otherwise indicated.

5) Gable studs spaced at 2-0-0 oc.

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

7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 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) except (jt=lb) 2=146, 8=146.

9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

Continued on page 2

|       |       |            |     |     |                             |
|-------|-------|------------|-----|-----|-----------------------------|
| Job   | Truss | Truss Type | Qty | Ply | Freedom Const\Campbell Plan |
| 28460 | SG1   | GABLE      | 1   | 1   | Job Reference (optional)    |

**NOTES-**  
10) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

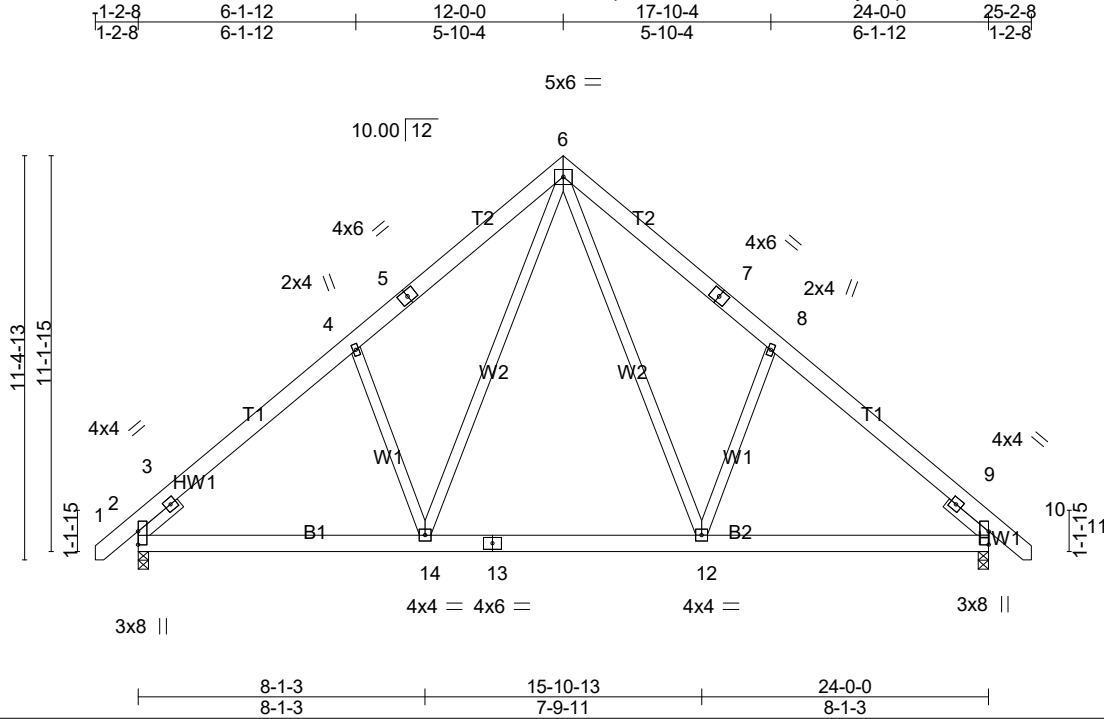
**LOAD CASE(S)** Standard

|                          |             |                      |          |          |                             |
|--------------------------|-------------|----------------------|----------|----------|-----------------------------|
| Job<br>28460             | Truss<br>T1 | Truss Type<br>Common | Qty<br>1 | Ply<br>1 | Freedom Const\Campbell Plan |
| Job Reference (optional) |             |                      |          |          |                             |

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| LOADING (psf) | SPACING-             | CSI.      | DEFL.                         | PLATES         | GRIP     |
|---------------|----------------------|-----------|-------------------------------|----------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.14   | in (loc) l/defl L/d           | MT20           | 244/190  |
| TCDL 10.0     | Plate Grip DOL 1.15  | BC 0.25   | Vert(LL) -0.07 12-14 >999 360 |                |          |
| BCLL 0.0 *    | Lumber DOL 1.15      | WB 0.24   | Vert(CT) -0.11 12-14 >999 240 |                |          |
| BCDL 10.0     | Rep Stress Incr YES  | Matrix-AS | Horz(CT) 0.02 10 n/a n/a      |                |          |
|               | Code IRC2018/TPI2014 |           | Wind(LL) 0.02 12-14 >999 240  |                |          |
|               |                      |           |                               | Weight: 191 lb | FT = 20% |

#### LUMBER-

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.3  
 SLIDER Left 2x4 SP No.3 -E 1-6-0, Right 2x4 SP No.3 -E 1-6-0

#### BRACING-

TOP CHORD Structural wood sheathing directly applied.  
 BOT CHORD Rigid ceiling directly applied.

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

#### REACTIONS.

(lb/size) 2=1025/0-3-8 (min. 0-1-8), 10=1025/0-3-8 (min. 0-1-8)  
 Max Horz 2=-261(LC 6)  
 Max Uplift 2=-111(LC 8), 10=-111(LC 8)  
 Max Grav 2=1043(LC 13), 10=1043(LC 14)

#### FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-478/0, 3-4=-1181/137, 4-5=-1091/209, 5-6=-998/250, 6-7=-999/250,  
 7-8=-1092/209, 8-9=-1181/137, 9-10=-478/0  
 BOT CHORD 2-14=0/980, 13-14=0/679, 12-13=0/679, 10-12=0/853  
 WEBS 6-12=-101/590, 8-12=-290/198, 6-14=-101/590, 4-14=-290/198

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 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) except (jt=lb) 2=111, 10=111.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

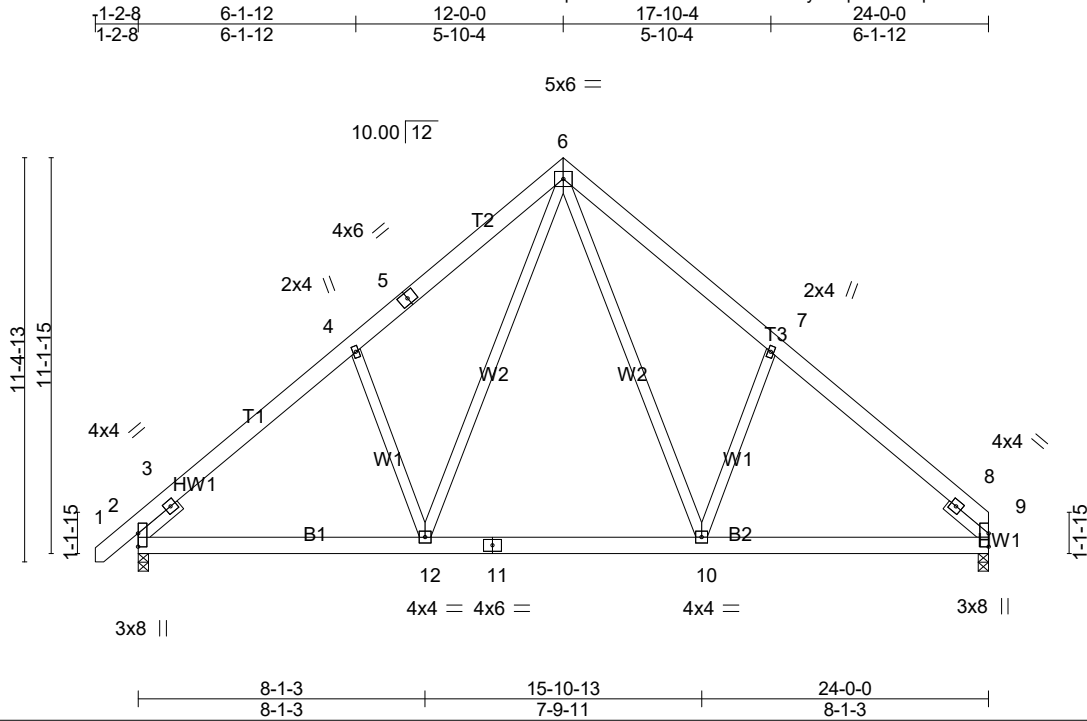
LOAD CASE(S) Standard

|                          |             |                      |           |          |                             |
|--------------------------|-------------|----------------------|-----------|----------|-----------------------------|
| Job<br>28460             | Truss<br>T2 | Truss Type<br>Common | Qty<br>10 | Ply<br>1 | Freedom Const\Campbell Plan |
| Job Reference (optional) |             |                      |           |          |                             |

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| LOADING (psf) | SPACING-             | CSI.      | DEFL.                         | PLATES         | GRIP     |
|---------------|----------------------|-----------|-------------------------------|----------------|----------|
| TCLL 20.0     | Plate Grip DOL 1.15  | TC 0.14   | in (loc) l/defl L/d           | MT20           | 244/190  |
| TCDL 10.0     | Lumber DOL 1.15      | BC 0.25   | Vert(LL) -0.07 10-12 >999 360 |                |          |
| BCLL 0.0 *    | Rep Stress Incr YES  | WB 0.25   | Vert(CT) -0.11 10-12 >999 240 |                |          |
| BCDL 10.0     | Code IRC2018/TPI2014 | Matrix-AS | Horz(CT) 0.02 9 n/a n/a       |                |          |
|               |                      |           | Wind(LL) 0.02 10-12 >999 240  | Weight: 188 lb | FT = 20% |

#### LUMBER-

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.3  
 SLIDER Left 2x4 SP No.3 -E 1-6-0, Right 2x4 SP No.3 -E 1-6-0

#### BRACING-

TOP CHORD Structural wood sheathing directly applied.  
 BOT CHORD Rigid ceiling directly applied.

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

**REACTIONS.** (lb/size) 9=959/0-3-8 (min. 0-1-8), 2=1027/0-3-8 (min. 0-1-8)  
 Max Horz 2=254(LC 7)  
 Max Uplift 9=-74(LC 8), 2=-112(LC 8)  
 Max Grav 9=981(LC 14), 2=1044(LC 13)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-479/0, 3-4=-1183/137, 4-5=-1093/210, 5-6=-1000/251, 6-7=-1097/252,  
 7-8=-1184/138, 8-9=-494/0  
 BOT CHORD 2-12=-12/970, 11-12=0/669, 10-11=0/669, 9-10=-14/846  
 WEBS 6-10=-104/596, 7-10=-294/200, 6-12=-101/589, 4-12=-290/198

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 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) 9 except (jt=lb) 2=112.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

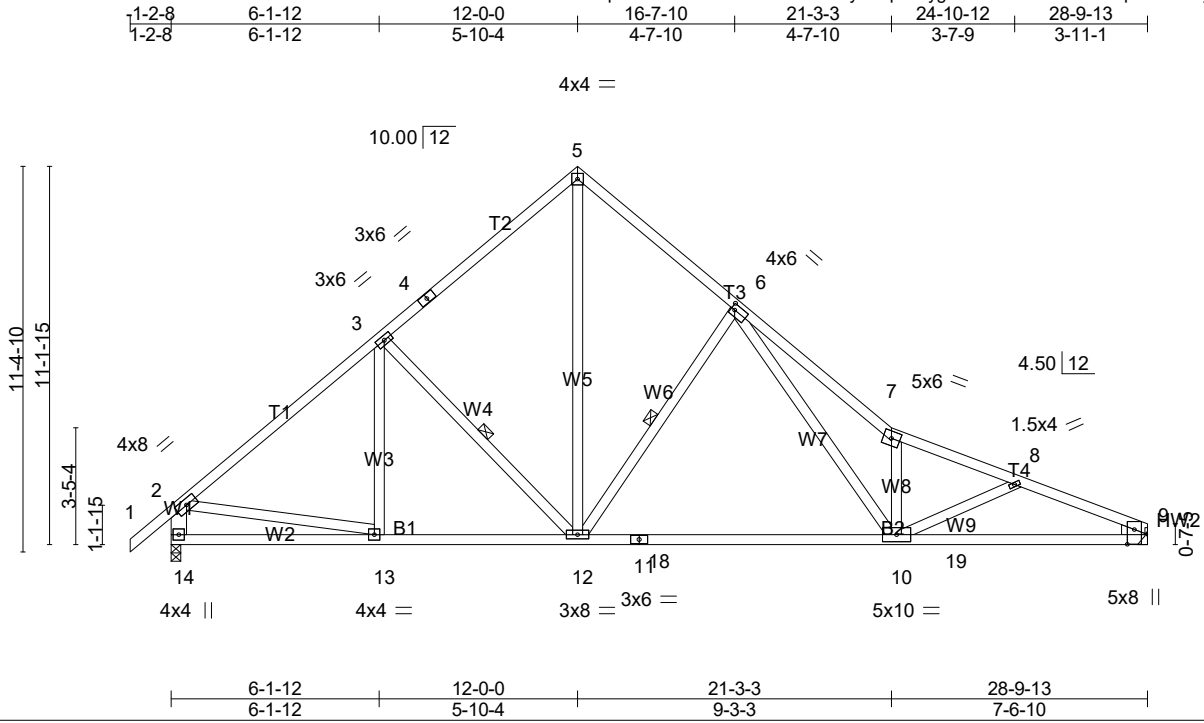
**LOAD CASE(S)** Standard

|       |       |              |     |     |                             |
|-------|-------|--------------|-----|-----|-----------------------------|
| Job   | Truss | Truss Type   | Qty | Ply | Freedom Const\Campbell Plan |
| 28460 | T3    | ROOF SPECIAL | 1   | 1   | Job Reference (optional)    |

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Scale = 1:68.0

Plate Offsets (X,Y)-- [6:0-1-4,0-2-0], [9:0-5-3,0-2-8]

|                      |                       |             |                                  |                |             |
|----------------------|-----------------------|-------------|----------------------------------|----------------|-------------|
| <b>LOADING</b> (psf) | <b>SPACING-</b> 2-0-0 | <b>CSI.</b> | <b>DEFL.</b> in (loc) l/defl L/d | <b>PLATES</b>  | <b>GRIP</b> |
| TCLL 20.0            | Plate Grip DOL 1.15   | TC 0.40     | Vert(LL) -0.34 10-12 >999 360    | MT20           | 244/190     |
| TCDL 10.0            | Lumber DOL 1.15       | BC 0.49     | Vert(CT) -0.55 10-12 >619 240    |                |             |
| BCLL 0.0 *           | Rep Stress Incr YES   | WB 0.78     | Horz(CT) 0.04 9 n/a n/a          |                |             |
| BCDL 10.0            | Code IRC2018/TPI2014  | Matrix-AS   | Wind(LL) 0.10 10-12 >999 240     | Weight: 181 lb | FT = 20%    |

**LUMBER-**

TOP CHORD 2x4 SP 2400F 2.0E  
BOT CHORD 2x4 SP 2400F 2.0E  
WEBS 2x4 SP No.3 \*Except\*  
W1: 2x6 SP No.1

**BRACING-**

|           |                                                                      |
|-----------|----------------------------------------------------------------------|
| TOP CHORD | Structural wood sheathing directly applied, except end<br>verticals. |
| BOT CHORD | Rigid ceiling directly applied.                                      |
| WEBS      | 1 Row at midpt                      3-12, 6-12                       |

WEDGE  
Right: 2x4 SP No.3

|                                                                                                                                                           |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.</p> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------|

**REACTIONS.** (lb/size) 14=1232/0-3-8 (min. 0-1-8), 9=1141/Mechanical  
Max Horz 14=-288(LC 6)  
Max Uplift 14=-138(LC 8), 9=-88(LC 8)  
Max Grav 14=1232(LC 1), 9=1173(LC 14)

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

TOP CHORD 2-3=-1322/150, 3-4=-1176/177, 4-5=-1082/218, 5-6=-1144/228,  
6-7=-3073/339, 7-8=-2408/179, 8-9=-2464/214, 2-14=-1165/173  
BOT CHORD 13-14=-147/419, 12-13=-3/1082, 12-18=-11/1249, 11-18=-11/1249,  
11-19=-11/1249, 10-19=-11/1249, 9-10=-164/2230  
WEBS 3-12=-285/146, 5-12=-172/1103, 6-12=-826/198, 6-10=-174/194,  
7-10=-1331/223, 2-13=0/791

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=29ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6'-0" between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9 except (jt=lb) 14=138.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

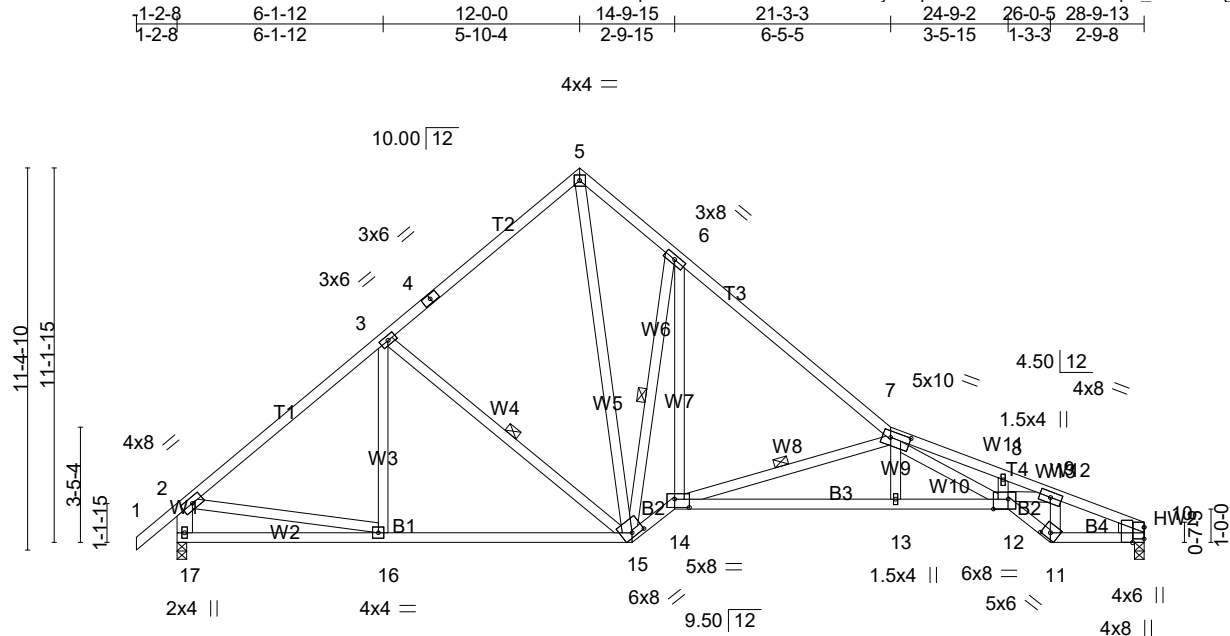
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|       |       |              |     |     |                             |
|-------|-------|--------------|-----|-----|-----------------------------|
| Job   | Truss | Truss Type   | Qty | Ply | Freedom Const\Campbell Plan |
| 28460 | T3    | ROOF SPECIAL | 1   | 1   | Job Reference (optional)    |

NOTES-

8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard



Scale = 1:68.6

|                       |                 |                 |                  |                 |                  |                  |         |
|-----------------------|-----------------|-----------------|------------------|-----------------|------------------|------------------|---------|
|                       | 6-1-12          | 13-6-12         | 14-9-15          | 21-3-3          | 24-9-2           | 26-0-5           | 28-9-13 |
|                       | 6-1-12          | 7-5-0           | 1-3-3            | 6-5-5           | 3-5-15           | 1-3-3            | 2-9-8   |
| Plate Offsets (X,Y)-- | [7:0-7-0,0-2-4] | [10:0-5-7,Edge] | [11:0-3-0,0-2-1] | [12:0-5-4,Edge] | [14:0-5-4,0-3-0] | [15:0-4-4,0-1-8] |         |

|                      |                       |             |                                  |                |             |
|----------------------|-----------------------|-------------|----------------------------------|----------------|-------------|
| <b>LOADING</b> (psf) | <b>SPACING-</b> 2-0-0 | <b>CSI.</b> | <b>DEFL.</b> in (loc) l/defl L/d | <b>PLATES</b>  | <b>GRIP</b> |
| TCLL 20.0            | Plate Grip DOL 1.15   | TC 0.33     | Vert(LL) -0.20 13-14 >999 360    | MT20           | 244/190     |
| TCDL 10.0            | Lumber DOL 1.15       | BC 0.43     | Vert(CT) -0.43 13-14 >795 240    |                |             |
| BCLL 0.0 *           | Rep Stress Incr YES   | WB 0.64     | Horz(CT) 0.16 10 n/a n/a         |                |             |
| BCDL 10.0            | Code IRC2018/TPI2014  | Matrix-AS   | Wind(LL) 0.15 13-14 >999 240     | Weight: 195 lb | FT = 20%    |

**LUMBER-**

TOP CHORD 2x4 SP 2400F 2.0E  
BOT CHORD 2x4 SP 2400F 2.0E  
WEBS 2x4 SP No.3 \*Except\*  
W12: 2x4 SP No.2, W1: 2x6 SP No.1

WEDGE

Right: 2x4 SP No.3

**REACTIONS.**

(lb/size) 17=1232/0-3-8 (min. 0-1-8), 10=1141/0-3-8 (min. 0-1-8)  
Max Horz 17=-288(LC 6)  
Max Uplift 17=-138(LC 8), 10=-88(LC 8)

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

|           |                                                                                                                                                     |
|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| TOP CHORD | 2-3=-1330/143, 3-4=-1049/173, 4-5=-929/213, 5-6=-1188/298, 6-7=-1554/184, 7-8=-4657/376, 8-9=-4691/355, 9-10=-2230/186, 2-17=-1173/167              |
| BOT CHORD | 16-17=-163/394, 15-16=0/985, 14-15=0/1363, 13-14=-193/3060, 12-13=-188/3074, 11-12=-173/2307, 10-11=-148/2017                                       |
| WEBS      | 5-15=-246/1081, 7-13=0/303, 7-12=-118/1508, 9-12=-156/2558, 9-11=-1420/127, 6-14=-1/1475, 3-15=-348/132, 7-14=-2063/245, 6-15=-1585/180, 2-16=0/764 |

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=29ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6'-0" between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10 except (jt=lb) 17=138.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

Continued on page 2

**BRACING-**

|           |                                                                      |
|-----------|----------------------------------------------------------------------|
| TOP CHORD | Structural wood sheathing directly applied, except end<br>verticals. |
|-----------|----------------------------------------------------------------------|

**BOT CHORD** Rigid ceiling directly applied.

|      |                |                  |
|------|----------------|------------------|
| WEBS | 1 Row at midpt | 3-15, 7-14, 6-15 |
|------|----------------|------------------|

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

|       |       |              |     |     |                             |
|-------|-------|--------------|-----|-----|-----------------------------|
| Job   | Truss | Truss Type   | Qty | Ply | Freedom Const\Campbell Plan |
| 28460 | T4    | ROOF SPECIAL | 4   | 1   | Job Reference (optional)    |

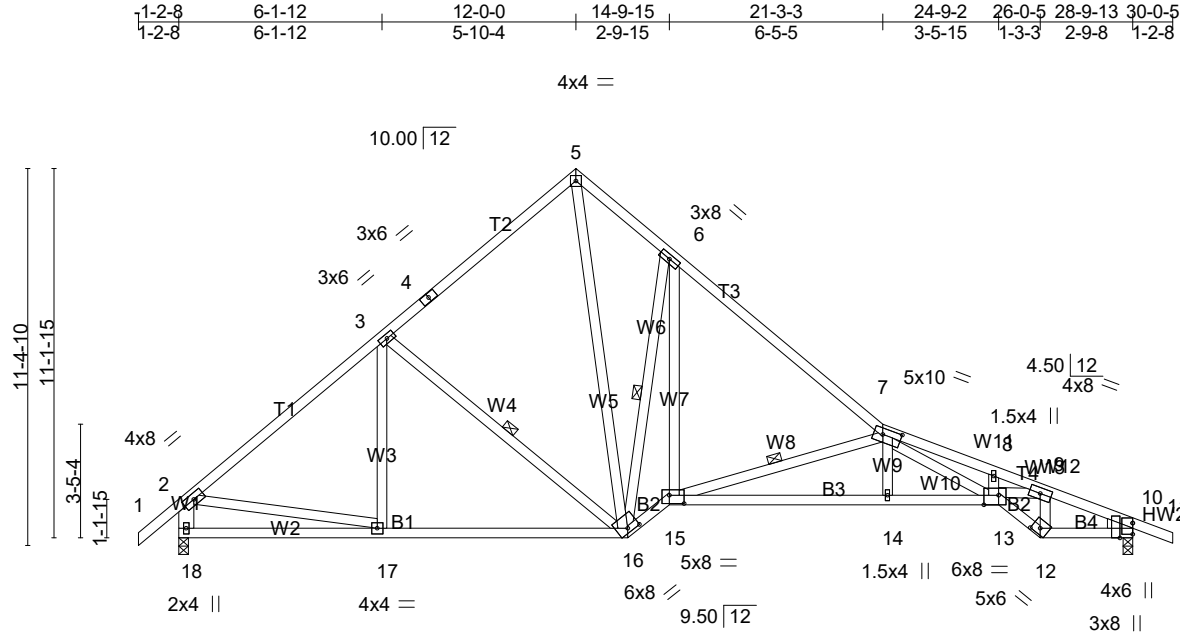
LOAD CASE(S) Standard

|                          |             |                            |          |          |                             |
|--------------------------|-------------|----------------------------|----------|----------|-----------------------------|
| Job<br>28460             | Truss<br>T5 | Truss Type<br>Roof Special | Qty<br>1 | Ply<br>1 | Freedom Const\Campbell Plan |
| Job Reference (optional) |             |                            |          |          |                             |

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Scale = 1:69.6

Plate Offsets (X,Y)-- [7:0-6-12,0-2-4], [10:0-5-7,Edge], [12:0-3-0,0-2-1], [13:0-5-4,Edge], [15:0-5-4,0-3-0], [16:0-4-4,0-1-8]

| LOADING (psf) | SPACING-             | CSI.      | DEFL.    | in (loc)    | l/defl | L/d | PLATES         | GRIP     |
|---------------|----------------------|-----------|----------|-------------|--------|-----|----------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.33   | Vert(LL) | -0.20 14-15 | >999   | 360 | MT20           | 244/190  |
| TCDL 10.0     | Plate Grip DOL 1.15  | BC 0.42   | Vert(CT) | -0.43 14-15 | >799   | 240 |                |          |
| BCLL 0.0 *    | Lumber DOL 1.15      | WB 0.64   | Horz(CT) | 0.16 10     | n/a    | n/a |                |          |
| BCDL 10.0     | Rep Stress Incr YES  | Matrix-AS | Wind(LL) | 0.15 14-15  | >999   | 240 |                |          |
|               | Code IRC2018/TPI2014 |           |          |             |        |     | Weight: 197 lb | FT = 20% |

#### LUMBER-

TOP CHORD 2x4 SP 2400F 2.0E  
 BOT CHORD 2x4 SP 2400F 2.0E  
 WEBS 2x4 SP No.3 \*Except\*  
 W12: 2x4 SP No.2, W1: 2x6 SP No.1

#### WEDGE

Right: 2x4 SP No.3

#### BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals.  
 BOT CHORD Rigid ceiling directly applied.  
 WEBS 1 Row at midpt 3-16, 7-15, 6-16

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

**REACTIONS.** (lb/size) 18=1230/0-3-8 (min. 0-1-8), 10=1215/0-3-8 (min. 0-1-8)  
 Max Horz 18=-295(LC 6)  
 Max Uplift 18=-137(LC 8), 10=-130(LC 8)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1328/142, 3-4=-1046/171, 4-5=-927/212, 5-6=-1186/296, 6-7=-1550/179,  
 7-8=-4616/331, 8-9=-4647/308, 9-10=-2194/166, 2-18=-1172/166  
 BOT CHORD 17-18=-162/401, 16-17=0/990, 15-16=0/1359, 14-15=-154/3045,  
 13-14=-149/3058, 12-13=-127/2266, 10-12=-108/1981  
 WEBS 5-16=-244/1078, 7-14=0/302, 7-13=-90/1482, 9-13=-130/2553,  
 9-12=-1404/105, 6-15=0/1469, 3-16=-348/133, 7-15=-2050/231,  
 6-16=-1580/160, 2-17=0/763

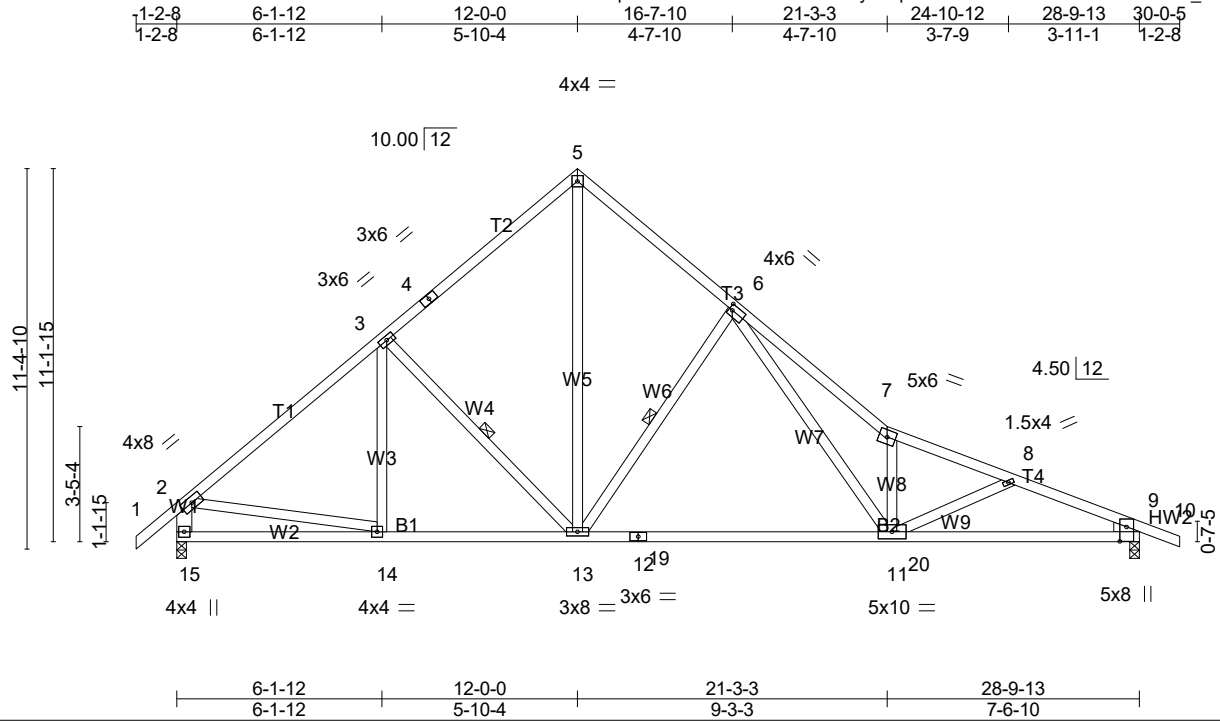
#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=29ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 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) except (jt=lb) 18=137, 10=130.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

Continued on page 2

|       |       |              |     |     |                             |
|-------|-------|--------------|-----|-----|-----------------------------|
| Job   | Truss | Truss Type   | Qty | Ply | Freedom Const\Campbell Plan |
| 28460 | T5    | Roof Special | 1   | 1   | Job Reference (optional)    |

**LOAD CASE(S)** Standard



Scale = 1:69.0

Plate Offsets (X,Y)-- [6:0-1-4,0-2-0], [9:0-5-3,0-2-8]

|                      |                       |             |                                  |                |             |
|----------------------|-----------------------|-------------|----------------------------------|----------------|-------------|
| <b>LOADING</b> (psf) | <b>SPACING-</b> 2-0-0 | <b>CSI.</b> | <b>DEFL.</b> in (loc) l/defl L/d | <b>PLATES</b>  | <b>GRIP</b> |
| TCLL 20.0            | Plate Grip DOL 1.15   | TC 0.42     | Vert(LL) -0.34 11-13 >999 360    | MT20           | 244/190     |
| TCDL 10.0            | Lumber DOL 1.15       | BC 0.49     | Vert(CT) -0.55 11-13 >618 240    |                |             |
| BCLL 0.0 *           | Rep Stress Incr YES   | WB 0.78     | Horz(CT) 0.04 9 n/a n/a          |                |             |
| BCDL 10.0            | Code IRC2018/TPI2014  | Matrix-AS   | Wind(LL) 0.10 11-13 >999 240     | Weight: 182 lb | FT = 20%    |

**LUMBER-**

TOP CHORD 2x4 SP 2400F 2.0E

BOT CHORD 2x4 SP 2400F 2.0E

WEBS 2x4 SP No.3 \*Except\*

W1: 2x6 SP No.1

WEDGE

Right: 2x4 SP No.3

**REACTIONS.**

(lb/size) 15=1230/0-3-8 (min. 0-1-8), 9=1215/0-3-8 (min. 0-1-8)

Max Horz 15=-295(LC 6)

Max Uplift15=-137(LC 8), 9=-130(LC 8)

Max Grav 15=1230(LC 1), 9=1233(LC 14)

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

TOP CHORD    2-3=-1320/148, 3-4=-1174/176, 4-5=-1081/217, 5-6=-1143/227,

 $6-7=-3061/332, 7-8=-2398/173, 8-9=-2445/202, 2-15=-1163/173$ 

14-15=-147/425, 13-14=0/1086, 13-19=0/1252, 12-19=0/1252, 12-20=0/1252,

$$11-20=0/1252, 9-11=-130/2210$$
 $3-13=-285/146, 5-13=-170/110$ 
$$7-11=-1329/221, 2-14=0/790$$

1020, 1113, 1214, 1271, 1330, 1450, 1500, 1545, 1600, 1640, 1690, 1710, 1735, 1780, 1800, 1850, 1900, 2000, 2100, 2150, 2200, 2250, 2300, 2350, 2400, 2450, 2500, 2550, 2600, 2650, 2700, 2750, 2800, 2850, 2900, 2950, 3000, 3050, 3100, 3150, 3200, 3250, 3300, 3350, 3400, 3450, 3500, 3550, 3600, 3650, 3700, 3750, 3800, 3850, 3900, 3950, 4000, 4050, 4100, 4150, 4200, 4250, 4300, 4350, 4400, 4450, 4500, 4550, 4600, 4650, 4700, 4750, 4800, 4850, 4900, 4950, 5000, 5050, 5100, 5150, 5200, 5250, 5300, 5350, 5400, 5450, 5500, 5550, 5600, 5650, 5700, 5750, 5800, 5850, 5900, 5950, 6000, 6050, 6100, 6150, 6200, 6250, 6300, 6350, 6400, 6450, 6500, 6550, 6600, 6650, 6700, 6750, 6800, 6850, 6900, 6950, 7000, 7050, 7100, 7150, 7200, 7250, 7300, 7350, 7400, 7450, 7500, 7550, 7600, 7650, 7700, 7750, 7800, 7850, 7900, 7950, 8000, 8050, 8100, 8150, 8200, 8250, 8300, 8350, 8400, 8450, 8500, 8550, 8600, 8650, 8700, 8750, 8800, 8850, 8900, 8950, 9000, 9050, 9100, 9150, 9200, 9250, 9300, 9350, 9400, 9450, 9500, 9550, 9600, 9650, 9700, 9750, 9800, 9850, 9900, 9950, 10000, 10050, 10100, 10150, 10200, 10250, 10300, 10350, 10400, 10450, 10500, 10550, 10600, 10650, 10700, 10750, 10800, 10850, 10900, 10950, 11000, 11050, 11100, 11150, 11200, 11250, 11300, 11350, 11400, 11450, 11500, 11550, 11600, 11650, 11700, 11750, 11800, 11850, 11900, 11950, 12000, 12050, 12100, 12150, 12200, 12250, 12300, 12350, 12400, 12450, 12500, 12550, 12600, 12650, 12700, 12750, 12800, 12850, 12900, 12950, 13000, 13050, 13100, 13150, 13200, 13250, 13300, 13350, 13400, 13450, 13500, 13550, 13600, 13650, 13700, 13750, 13800, 13850, 13900, 13950, 14000, 14050, 14100, 14150, 14200, 14250, 14300, 14350, 14400, 14450, 14500, 14550, 14600, 14650, 14700, 14750, 14800, 14850, 14900, 14950, 15000, 15050, 15100, 15150, 15200, 15250, 15300, 15350, 15400, 15450, 15500, 15550, 15600, 15650, 15700, 15750, 15800, 15850, 15900, 15950, 16000, 16050, 16100, 16150, 16200, 16250, 16300, 16350, 16400, 16450, 16500, 16550, 16600, 16650, 16700, 16750, 16800, 16850, 16900, 16950, 17000, 17050, 17100, 17150, 17200, 17250, 17300, 17350, 17400, 17450, 17500, 17550, 17600, 17650, 17700, 17750, 17800, 17850, 17900, 17950, 18000, 18050, 18100, 18150, 18200, 18250, 18300, 18350, 18400, 18450, 18500, 18550, 18600, 18650, 18700, 18750, 18800, 18850, 18900, 18950, 19000, 19050, 19100, 19150, 19200, 19250, 19300, 19350, 19400, 19450, 19500, 19550, 19600, 19650, 19700, 19750, 19800, 19850, 19900, 19950, 20000, 20050, 20100, 20150, 20200, 20250, 20300, 20350, 20400, 20450, 20500, 20550, 20600, 20650, 20700, 20750, 20800, 20850, 20900, 20950, 21000, 21050, 21100, 21150, 21200, 21250, 21300, 21350, 21400, 21450, 21500, 21550, 21600, 21650, 21700, 21750, 21800, 21850, 21900, 21950, 22000, 22050, 22100, 22150, 22200, 22250, 22300, 22350, 22400, 22450, 22500, 22550, 22600, 22650, 22700, 22750, 22800, 22850, 22900, 22950, 23000, 23050, 23100, 23150, 23200, 23250, 23300, 23350, 23400, 23450, 23500, 23550, 23600, 23650, 23700, 23750, 23800, 23850, 23900, 23950, 24000, 24050, 24100, 24150, 24200, 24250, 24300, 24350, 24400, 24450, 24500, 24550, 24600, 24650, 24700, 24750, 24800, 24850, 24900, 24950, 25000, 25050, 25100, 25150, 25200, 25250, 25300, 25350, 25400, 25450, 25500, 25550, 25600, 25650, 25700, 25750, 25800, 25850, 25900, 25950, 26000, 26050, 26100, 26150, 26200, 26250, 26300, 26350, 26400, 26450, 26500, 26550, 26600, 26650, 26700, 26750, 26800, 26850, 26900, 26950, 27000, 27050, 27100, 27150, 27200, 27250, 27300, 27350, 27400, 27450, 27500, 27550, 27600, 27650, 27700, 27750, 27800, 27850, 27900, 27950, 28000, 28050, 28100, 28150, 28200, 28250, 28300, 28350, 28400, 28450, 28500, 28550, 28600, 28650, 28700, 28750, 28800, 28850, 28900, 28950, 29000, 29050, 29100, 29150, 29200, 29250, 29300, 29350, 29400, 29450, 29500, 29550, 29600, 29650, 29700, 29750, 29800, 29850, 29900, 29950, 30000, 30050, 30100, 30150, 30200, 30250, 30300, 30350, 30400, 30450, 30500, 30550, 30600, 30650, 30700, 30750, 30800, 30850, 30900, 30950, 31000, 31050, 31100, 31150, 31200, 31250, 31300, 31350, 31400, 31450, 31500, 31550, 31600, 31650,

**NOTES-**

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

2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=29ft;

eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right

exposed; Lumber DOL=1.60 plate grip DOL=1.60

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

4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than

6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except

(jt=lb) 15=137, 9=130.

6) This truss is designed in accordance with the following specifications:

7) This thread is designed in accordance with the 2015 International Mechanical Code sections 902.1.1.1 and 902.1.1.2 and referenced standard ANSI/TPI 1.

7) This truss design requires that a minimum of 7/16" structu

- gypsum sheetrock

**BRACING-**

TOP CHORD Structural wood sheathing directly applied, except end verticals.

**BOT CHORD**      Rigid ceiling directly applied.

|      |                |            |
|------|----------------|------------|
| WEBS | 1 Row at midpt | 3-13, 6-13 |
|------|----------------|------------|

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

|       |       |              |     |     |                             |
|-------|-------|--------------|-----|-----|-----------------------------|
| Job   | Truss | Truss Type   | Qty | Ply | Freedom Const\Campbell Plan |
| 28460 | T6    | Roof Special | 2   | 1   | Job Reference (optional)    |

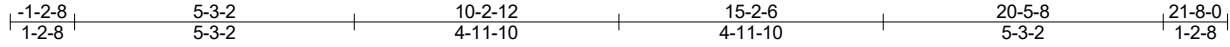
LOAD CASE(S) Standard

|                          |                    |                             |                 |                 |                             |
|--------------------------|--------------------|-----------------------------|-----------------|-----------------|-----------------------------|
| Job<br><b>28460</b>      | Truss<br><b>T7</b> | Truss Type<br><b>Common</b> | Qty<br><b>1</b> | Ply<br><b>1</b> | Freedom Const\Campbell Plan |
| Job Reference (optional) |                    |                             |                 |                 |                             |

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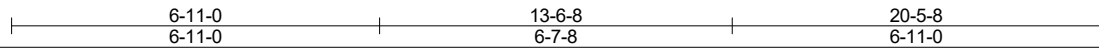
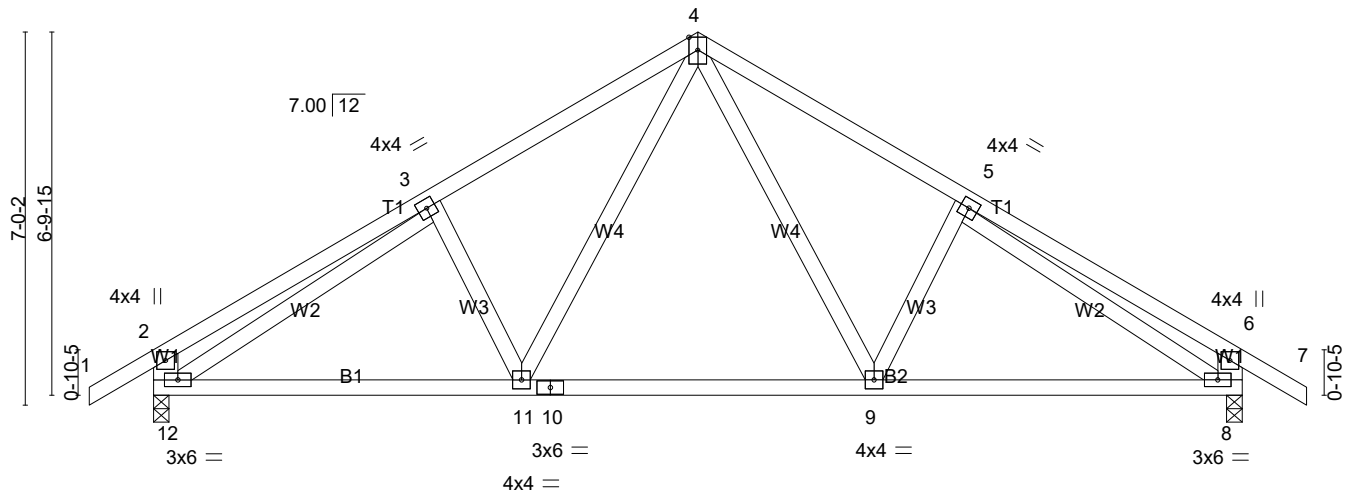
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4x6 ||

Scale = 1:43.3



| LOADING (psf) | SPACING-             |      | CSI.      | DEFL.    | in    | (loc) | l/defl | L/d | PLATES         | GRIP     |
|---------------|----------------------|------|-----------|----------|-------|-------|--------|-----|----------------|----------|
| TCLL 20.0     | Plate Grip DOL       | 1.15 | TC 0.27   | Vert(LL) | -0.04 | 8-9   | >999   | 360 | MT20           | 244/190  |
| TCDL 10.0     | Lumber DOL           | 1.15 | BC 0.41   | Vert(CT) | -0.09 | 8-9   | >999   | 240 |                |          |
| BCLL 0.0 *    | Rep Stress Incr      | YES  | WB 0.53   | Horz(CT) | 0.03  | 8     | n/a    | n/a |                |          |
| BCDL 10.0     | Code IRC2018/TPI2014 |      | Matrix-AS | Wind(LL) | 0.02  | 9-11  | >999   | 240 |                |          |
|               |                      |      |           |          |       |       |        |     | Weight: 121 lb | FT = 20% |

#### LUMBER-

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3 \*Except\*  
W1: 2x6 SP No.1

#### BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals.  
BOT CHORD Rigid ceiling directly applied.

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

**REACTIONS.** (lb/size) 12=886/0-3-8 (min. 0-1-8), 8=886/0-3-8 (min. 0-1-8)  
Max Horz 12=-169(LC 6)  
Max Uplift 12=-111(LC 8), 8=-111(LC 8)

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

TOP CHORD 2-3=-345/67, 3-4=-963/157, 4-5=-963/157, 5-6=-345/67, 2-12=-375/118, 6-8=-375/118

BOT CHORD 11-12=0/855, 10-11=0/614, 9-10=0/614, 8-9=0/846

WEBS 4-9=-30/356, 4-11=-30/356, 3-12=-758/52, 5-8=-758/52

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 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) except (jt=lb) 12=111, 8=111.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

**LOAD CASE(S)** Standard

|                          |             |                     |          |          |                             |
|--------------------------|-------------|---------------------|----------|----------|-----------------------------|
| Job<br>28460             | Truss<br>T8 | Truss Type<br>GABLE | Qty<br>1 | Ply<br>1 | Freedom Const\Campbell Plan |
| Job Reference (optional) |             |                     |          |          |                             |

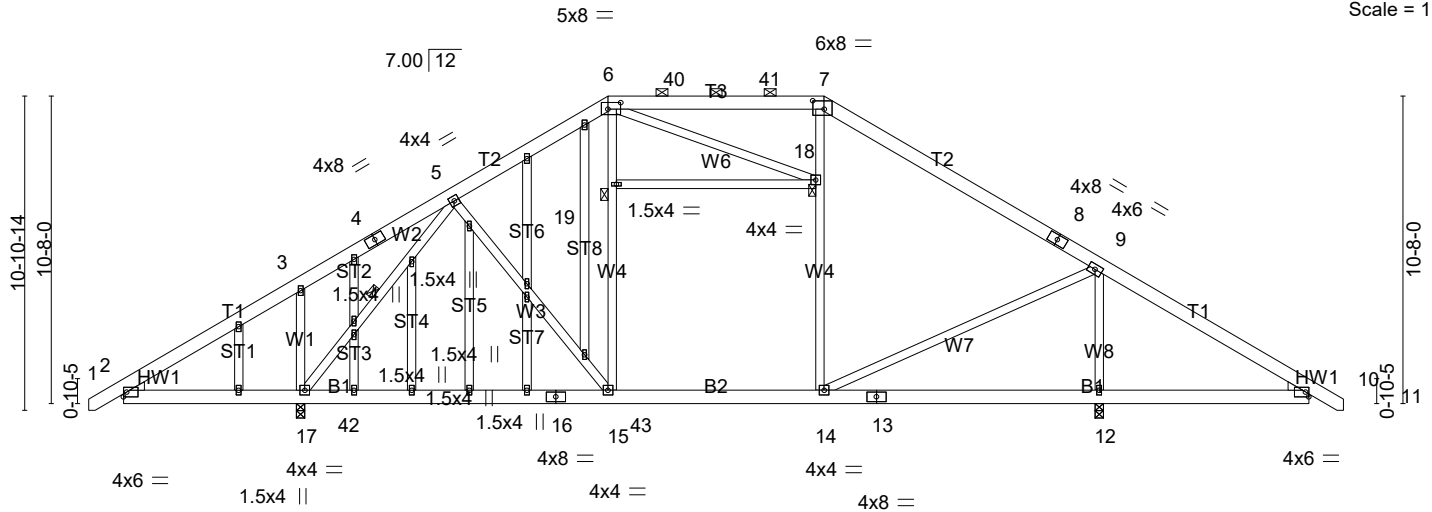
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|       |        |         |         |         |         |        |        |
|-------|--------|---------|---------|---------|---------|--------|--------|
| 1-2-8 | 6-1-12 | 11-5-12 | 16-9-12 | 24-3-12 | 33-10-4 | 41-1-8 | 42-4-0 |
| 1-2-8 | 6-1-12 | 5-4-0   | 5-4-0   | 7-6-0   | 9-6-8   | 7-3-4  | 1-2-8  |

Scale = 1:79.9



|       |        |         |         |         |        |        |
|-------|--------|---------|---------|---------|--------|--------|
| 6-0-0 | 6-1-12 | 16-9-12 | 24-3-12 | 33-10-4 | 34-0-0 | 41-1-8 |
| 6-0-0 | 0-1-12 | 10-8-0  | 7-6-0   | 9-6-8   | 0-1-12 | 7-1-8  |

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

| LOADING (psf) | SPACING-             | 2-0-0 | CSI.      | DEFL.    | in (loc)    | l/defl | L/d | PLATES         | GRIP     |
|---------------|----------------------|-------|-----------|----------|-------------|--------|-----|----------------|----------|
| TCLL 20.0     | Plate Grip DOL       | 1.15  | TC 0.36   | Vert(LL) | -0.26 15-17 | >999   | 360 | MT20           | 244/190  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.46   | Vert(CT) | -0.35 15-17 | >938   | 240 |                |          |
| BCLL 0.0 *    | Rep Stress Incr      | YES   | WB 0.63   | Horz(CT) | 0.01 12     | n/a    | n/a |                |          |
| BCDL 10.0     | Code IRC2018/TPI2014 |       | Matrix-AS | Wind(LL) | 0.10 15-17  | >999   | 240 | Weight: 365 lb | FT = 20% |

#### LUMBER-

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.3  
 OTHERS 2x4 SP No.3  
 WEDGE  
 Left: 2x4 SP No.3 , Right: 2x4 SP No.3

#### BRACING-

TOP CHORD Structural wood sheathing directly applied, except  
 2-0-0 oc purlins (6-0-0 max.): 6-7.  
 BOT CHORD Rigid ceiling directly applied.  
 WEBS 1 Row at midpt 5-17  
 JOINTS 1 Brace at Jt(s): 18, 19

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

#### REACTIONS.

All bearings 0-3-8.  
 (lb) - Max Horz 17=231(LC 7)  
 Max Uplift All uplift 100 lb or less at joint(s) except 17=-306(LC 8),  
 12=-156(LC 8)  
 Max Grav All reactions 250 lb or less at joint(s) except 17=1807(LC 16),  
 17=1641(LC 1), 12=1780(LC 1), 12=1780(LC 1)

#### FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-227/527, 3-4=-92/338, 4-5=-72/483, 5-6=-878/128, 6-40=-640/149,  
 40-41=-640/149, 7-41=-640/149, 7-8=-770/112, 8-9=-894/60, 9-10=-163/629  
 BOT CHORD 2-17=-360/256, 17-42=0/684, 16-42=0/684, 16-43=0/684, 15-43=0/684,  
 14-15=0/755, 13-14=-420/180, 12-13=-420/180, 10-12=-420/180  
 WEBS 3-17=-407/205, 5-17=-1288/173, 5-15=-19/308, 15-19=-40/338, 6-19=-39/340,  
 14-18=-258/98, 7-18=-251/102, 9-14=-12/1171, 9-12=-1565/252

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=41ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and 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.
- Provide adequate drainage to prevent water ponding.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

Continued on page 2

|       |       |            |     |     |                             |
|-------|-------|------------|-----|-----|-----------------------------|
| Job   | Truss | Truss Type | Qty | Ply | Freedom Const\Campbell Plan |
| 28460 | T8    | GABLE      | 1   | 1   | Job Reference (optional)    |

- NOTES-**
- 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6'-0" between the bottom chord and any other members, with BCDL = 10.0psf.
  - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 306 lb uplift at joint 17 and 156 lb uplift at joint 12.
  - 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 11) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
  - 12) 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 | Freedom Const\Campbell Plan |
| 28460 | T9    | Piggyback Base | 6   | 1   | Job Reference (optional)    |

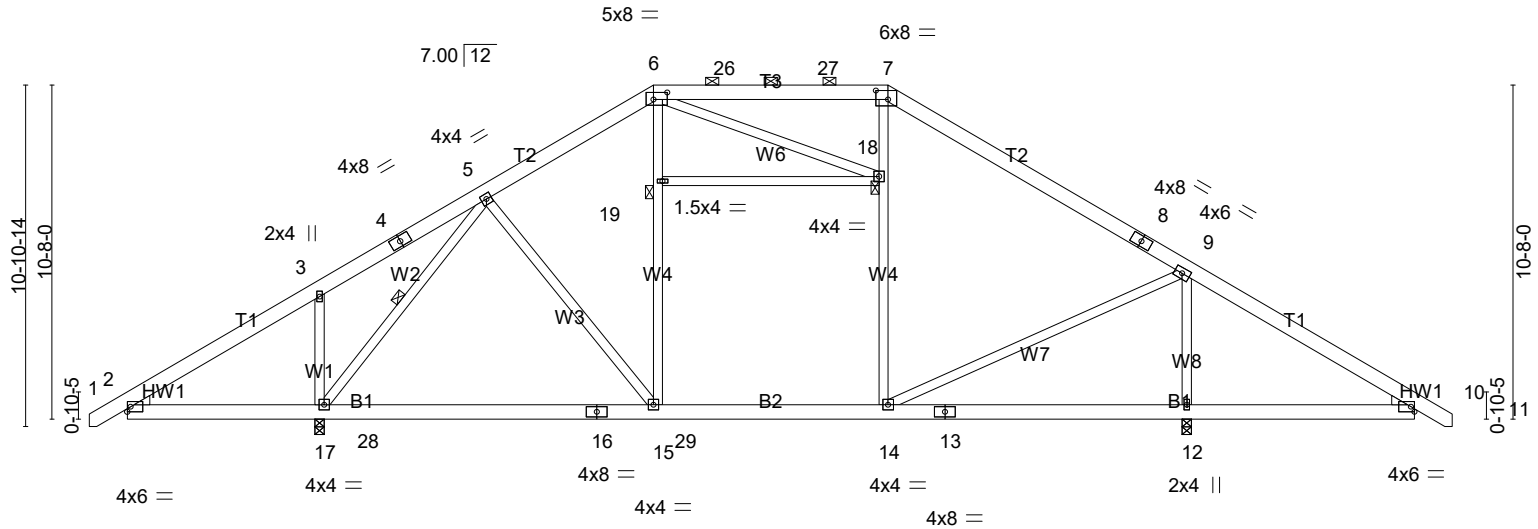
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|       |        |         |         |         |         |        |        |
|-------|--------|---------|---------|---------|---------|--------|--------|
| 1-2-8 | 6-1-12 | 11-5-12 | 16-9-12 | 24-3-12 | 33-10-4 | 41-1-8 | 42-4-0 |
| 1-2-8 | 6-1-12 | 5-4-0   | 5-4-0   | 7-6-0   | 9-6-8   | 7-3-4  | 1-2-8  |

Scale = 1:73.6



|                       |                                    |        |         |         |         |        |        |
|-----------------------|------------------------------------|--------|---------|---------|---------|--------|--------|
|                       | 6-0-0                              | 6-1-12 | 16-9-12 | 24-3-12 | 33-10-4 | 34-0-0 | 41-1-8 |
|                       | 6-0-0                              | 0-1-12 | 10-8-0  | 7-6-0   | 9-6-8   | 0-1-12 | 7-1-8  |
| Plate Offsets (X,Y)-- | [6:0-5-4,0-2-12], [7:0-4-12,0-3-8] |        |         |         |         |        |        |

| LOADING (psf) | SPACING-             | 2-0-0 | CSI.      | DEFL.    | in (loc)    | l/defl | L/d | PLATES         | GRIP     |
|---------------|----------------------|-------|-----------|----------|-------------|--------|-----|----------------|----------|
| TCLL 20.0     | Plate Grip DOL       | 1.15  | TC 0.36   | Vert(LL) | -0.25 15-17 | >999   | 360 | MT20           | 244/190  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.46   | Vert(CT) | -0.35 15-17 | >945   | 240 |                |          |
| BCLL 0.0 *    | Rep Stress Incr      | YES   | WB 0.63   | Horz(CT) | 0.01 12     | n/a    | n/a |                |          |
| BCDL 10.0     | Code IRC2018/TPI2014 |       | Matrix-AS | Wind(LL) | 0.10 15-17  | >999   | 240 | Weight: 316 lb | FT = 20% |

#### LUMBER-

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.3 \*Except\*  
 W4: 2x4 SP No.2  
 WEDGE  
 Left: 2x4 SP No.3 , Right: 2x4 SP No.3

#### BRACING-

TOP CHORD Structural wood sheathing directly applied, except  
 2-0-0 oc purlins (6-0-0 max.): 6-7.  
 BOT CHORD Rigid ceiling directly applied.  
 WEBS 1 Row at midpt 5-17  
 JOINTS 1 Brace at Jt(s): 18, 19

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

#### REACTIONS.

All bearings 0-3-8.  
 (lb) - Max Horz 17=231(LC 7)  
 Max Uplift All uplift 100 lb or less at joint(s) except 17=-306(LC 8),  
 12=-156(LC 8)  
 Max Grav All reactions 250 lb or less at joint(s) except 17=1807(LC 16),  
 17=1641(LC 1), 12=1780(LC 1), 12=1780(LC 1)

#### FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-227/527, 3-4=-92/338, 4-5=-72/483, 5-6=-878/128, 6-26=-639/150,  
 26-27=-639/150, 7-27=-639/150, 7-8=-769/113, 8-9=-893/60, 9-10=-163/629  
 BOT CHORD 2-17=-360/256, 17-28=0/684, 16-28=0/684, 16-29=0/684, 15-29=0/684,  
 14-15=0/755, 13-14=-420/180, 12-13=-420/180, 10-12=-420/180  
 WEBS 3-17=-407/205, 5-17=-1288/173, 5-15=-19/309, 15-19=-40/339, 6-19=-39/341,  
 14-18=-258/98, 7-18=-251/103, 9-14=-12/1169, 9-12=-1564/252

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=41ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 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 306 lb uplift at joint 17 and 156 lb uplift at joint 12.

Continued on page 2

|       |       |                |     |     |                             |
|-------|-------|----------------|-----|-----|-----------------------------|
| Job   | Truss | Truss Type     | Qty | Ply | Freedom Const\Campbell Plan |
| 28460 | T9    | Piggyback Base | 6   | 1   | Job Reference (optional)    |

NOTES-

- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 9) 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<br><b>28460</b> | Truss<br><b>T10</b> | Truss Type<br><b>Piggyback Base</b> | Qty<br><b>8</b> | Ply<br><b>1</b> | Freedom Const\Campbell Plan<br>Job Reference (optional) |
|---------------------|---------------------|-------------------------------------|-----------------|-----------------|---------------------------------------------------------|

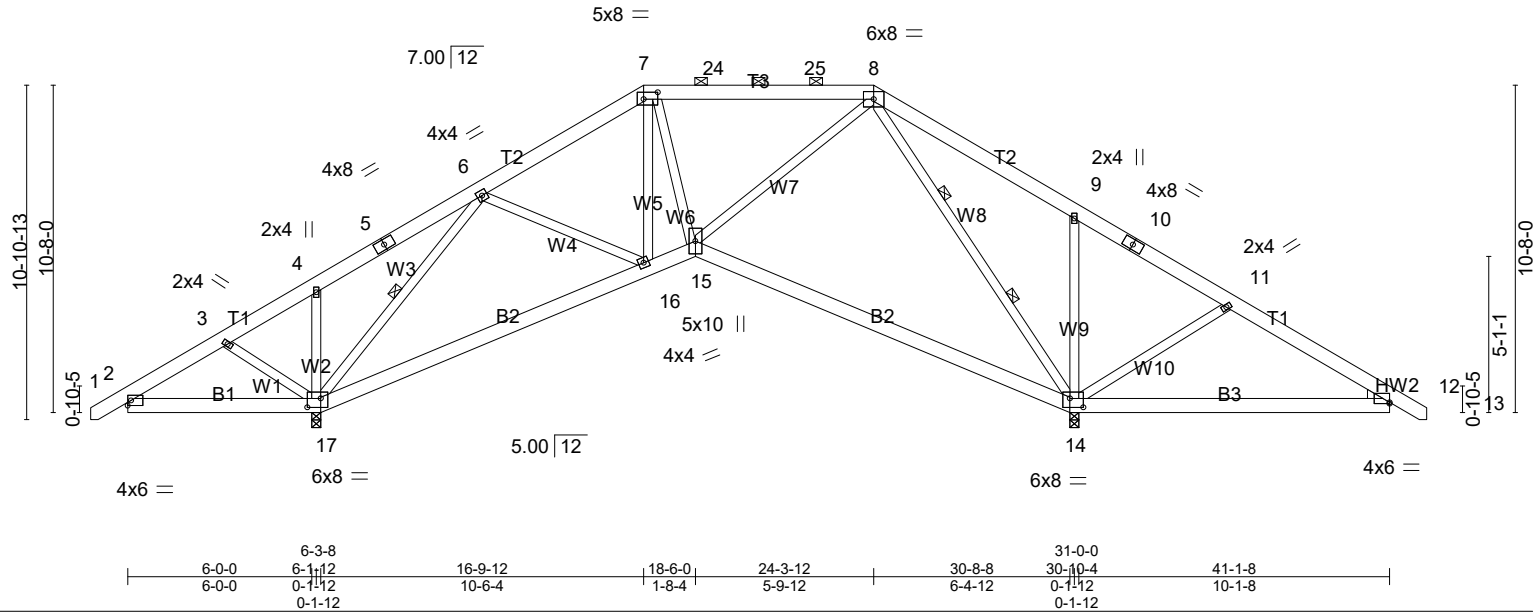
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|       |       |       |         |         |         |        |         |        |        |
|-------|-------|-------|---------|---------|---------|--------|---------|--------|--------|
| 1-2-8 | 3-3-1 | 6-3-8 | 11-6-10 | 16-9-12 | 24-3-12 | 30-8-8 | 35-9-11 | 41-1-8 | 42-4-0 |
| 1-2-8 | 3-3-1 | 3-0-7 | 5-3-2   | 5-3-2   | 7-6-0   | 6-4-12 | 5-1-3   | 5-3-13 | 1-2-8  |

Scale = 1:75.1



| LOADING (psf) | SPACING-             | CSI.      | DEFL.    | in (loc)    | l/defl | L/d | PLATES         | GRIP     |
|---------------|----------------------|-----------|----------|-------------|--------|-----|----------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.24   | Vert(LL) | -0.14 14-15 | >999   | 360 | MT20           | 244/190  |
| TCDL 10.0     | Plate Grip DOL 1.15  | BC 0.34   | Vert(CT) | -0.29 14-15 | >999   | 240 |                |          |
| BCLL 0.0 *    | Lumber DOL 1.15      | WB 0.79   | Horz(CT) | 0.06 14     | n/a    | n/a |                |          |
| BCDL 10.0     | Rep Stress Incr YES  | Matrix-AS | Wind(LL) | -0.04 14-15 | >999   | 240 |                |          |
|               | Code IRC2018/TPI2014 |           |          |             |        |     | Weight: 310 lb | FT = 20% |

#### LUMBER-

TOP CHORD 2x6 SP No.1  
BOT CHORD 2x6 SP No.1  
WEBS 2x4 SP No.3  
WEDGE  
Right: 2x4 SP No.3

#### BRACING-

TOP CHORD Structural wood sheathing directly applied, except  
2-0-0 oc purlins (6-0-0 max.): 7-8.  
BOT CHORD Rigid ceiling directly applied.  
WEBS 1 Row at midpt 6-17  
2 Rows at 1/3 pts 8-14

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

#### REACTIONS.

All bearings 0-3-8.  
(lb) - Max Horz 17=-231(LC 6)  
Max Uplift All uplift 100 lb or less at joint(s) except 17=-291(LC 8),  
14=-192(LC 9)  
Max Grav All reactions 250 lb or less at joint(s) except 17=1496(LC 19),  
17=1421(LC 1), 14=1999(LC 1), 14=1999(LC 1)

#### FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-164/380, 3-4=-201/551, 4-5=-128/424, 5-6=-113/571, 6-7=-805/0,  
7-24=-661/0, 24-25=-661/0, 8-25=-661/0, 8-9=-125/934, 9-10=-163/904,  
10-11=-191/764, 11-12=-166/578  
BOT CHORD 2-17=-274/174, 16-17=-115/582, 15-16=0/757, 14-15=-80/342,  
12-14=-403/165  
WEBS 4-17=-315/114, 6-17=-1300/55, 6-16=0/320, 8-15=0/688, 9-14=-374/174,  
11-14=-366/128, 8-14=-1443/14

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=41ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.

Continued on page 2

|       |       |                |     |     |                             |
|-------|-------|----------------|-----|-----|-----------------------------|
| Job   | Truss | Truss Type     | Qty | Ply | Freedom Const\Campbell Plan |
| 28460 | T10   | Piggyback Base | 8   | 1   | Job Reference (optional)    |

- NOTES-**
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 291 lb uplift at joint 17 and 192 lb uplift at joint 14.
  - 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
  - 9) 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<br><b>28460</b> | Truss<br><b>T11</b> | Truss Type<br><b>Piggyback Base</b> | Qty<br><b>1</b> | Ply<br><b>1</b> | Freedom Const\Campbell Plan<br>Job Reference (optional) |
|---------------------|---------------------|-------------------------------------|-----------------|-----------------|---------------------------------------------------------|

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|                 |                  |                  |                  |                  |                  |                 |                 |
|-----------------|------------------|------------------|------------------|------------------|------------------|-----------------|-----------------|
| -1-2-8<br>1-2-8 | 6-1-12<br>6-1-12 | 11-5-12<br>5-4-0 | 16-9-12<br>5-4-0 | 24-3-12<br>7-6-0 | 33-10-3<br>9-6-7 | 41-1-8<br>7-3-5 | 42-4-0<br>1-2-8 |
|-----------------|------------------|------------------|------------------|------------------|------------------|-----------------|-----------------|

Scale = 1:78.1

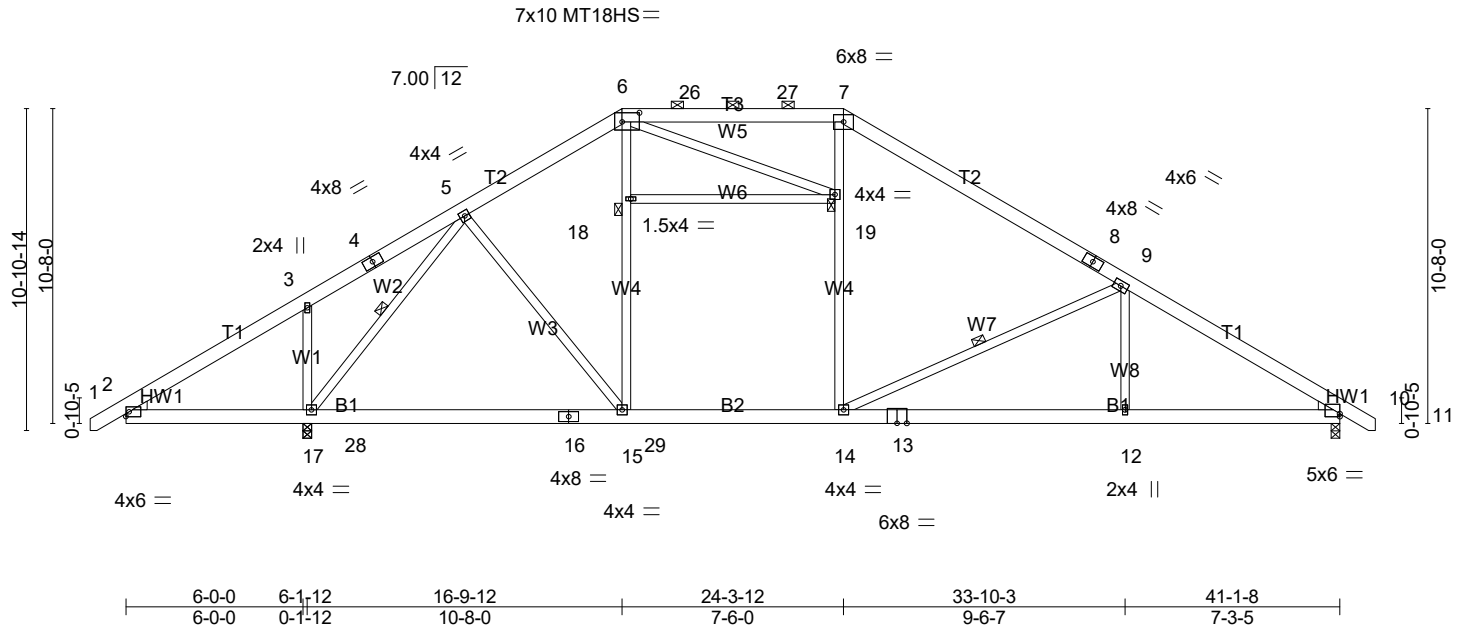


Plate Offsets (X,Y)-- [6:0-7-0,0-3-12], [10:Edge,0-1-4]

| LOADING (psf) | SPACING-             | CSI.      | DEFL.    | in (loc)    | l/defl | L/d | PLATES         | GRIP     |
|---------------|----------------------|-----------|----------|-------------|--------|-----|----------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.49   | Vert(LL) | -0.32 12-14 | >999   | 360 | MT20           | 244/190  |
| TCDL 10.0     | Plate Grip DOL 1.15  | BC 0.69   | Vert(CT) | -0.61 12-14 | >684   | 240 | MT18HS         | 244/190  |
| BCLL 0.0 *    | Lumber DOL 1.15      | WB 0.73   | Horz(CT) | 0.04 10     | n/a    | n/a |                |          |
| BCDL 10.0     | Rep Stress Incr YES  | Matrix-AS | Wind(LL) | 0.24 12-14  | >999   | 240 |                |          |
|               | Code IRC2018/TPI2014 |           |          |             |        |     | Weight: 316 lb | FT = 20% |

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.3 \*Except\*  
 W4: 2x4 SP No.2  
 WEDGE  
 Left: 2x4 SP No.3 , Right: 2x4 SP No.3

**BRACING-**

TOP CHORD Structural wood sheathing directly applied, except  
 2-0-0 oc purlins (6-0-0 max.): 6-7.  
 BOT CHORD Rigid ceiling directly applied.  
 WEBS 1 Row at midpt 5-17, 9-14  
 JOINTS 1 Brace at Jt(s): 18, 19

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

**REACTIONS.** (lb/size) 17=2011/0-3-8 (min. 0-2-9), 17=2011/0-3-8 (min. 0-2-9), 10=1410/0-3-8 (min. 0-1-11)  
 Max Horz 17=231(LC 7)  
 Max Uplift 17=-338(LC 8), 10=-124(LC 8)  
 Max Grav 17=2152(LC 16), 17=2011(LC 1), 10=1454(LC 14)

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

TOP CHORD 2-3=-231/569, 3-4=-92/344, 4-5=-72/473, 5-6=-1375/172, 6-26=-1289/207,  
 26-27=-1289/207, 7-27=-1289/207, 7-8=-1390/171, 8-9=-1526/118,  
 9-10=-2252/170  
 BOT CHORD 2-17=-386/259, 17-28=0/942, 16-28=0/942, 16-29=0/942, 15-29=0/942,  
 14-15=0/1239, 13-14=-43/1849, 12-13=-43/1849, 10-12=-43/1849  
 WEBS 3-17=-479/211, 5-17=-1763/218, 5-15=-1/657, 15-18=-89/302, 6-18=-93/302,  
 14-19=0/455, 7-19=0/405, 9-14=-830/188, 9-12=0/385

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=41ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are MT20 plates unless otherwise indicated.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 338 lb uplift at joint 17 and 124 lb uplift at joint 10.

Continued on page 2

|       |       |                |     |     |                             |
|-------|-------|----------------|-----|-----|-----------------------------|
| Job   | Truss | Truss Type     | Qty | Ply | Freedom Const\Campbell Plan |
| 28460 | T11   | Piggyback Base | 1   | 1   | Job Reference (optional)    |

- NOTES-**
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 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<br><b>28460</b> | Truss<br><b>T12</b> | Truss Type<br><b>FINK</b> | Qty<br><b>6</b> | Ply<br><b>1</b> | Freedom Const\Campbell Plan<br>Job Reference (optional) |
|---------------------|---------------------|---------------------------|-----------------|-----------------|---------------------------------------------------------|

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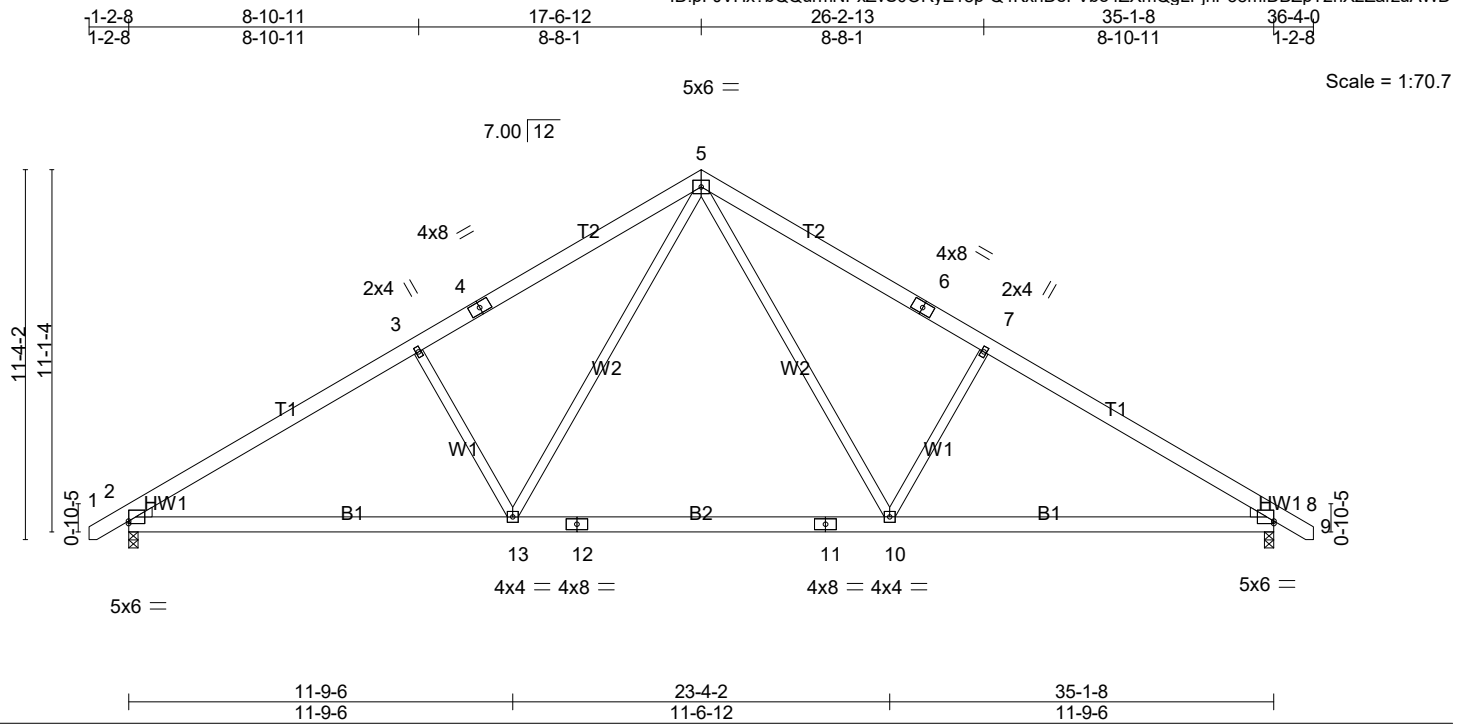


Plate Offsets (X,Y)-- [2:0-0-0,0-1-0], [8:Edge,0-1-0]

| LOADING (psf) | SPACING-             | CSI.      | DEFL.    | in (loc)    | l/defl | L/d | PLATES         | GRIP     |
|---------------|----------------------|-----------|----------|-------------|--------|-----|----------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.26   | Vert(LL) | -0.29 10-13 | >999   | 360 | MT20           | 244/190  |
| TCDL 10.0     | Plate Grip DOL 1.15  | BC 0.53   | Vert(CT) | -0.40 10-13 | >999   | 240 |                |          |
| BCLL 0.0 *    | Lumber DOL 1.15      | WB 0.35   | Horz(CT) | 0.05 8      | n/a    | n/a |                |          |
| BCDL 10.0     | Rep Stress Incr YES  | Matrix-AS | Wind(LL) | 0.05 10-13  | >999   | 240 |                |          |
|               | Code IRC2018/TPI2014 |           |          |             |        |     | Weight: 238 lb | FT = 20% |

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.3 \*Except\*  
 W2: 2x4 SP No.2

**WEDGE**

Left: 2x4 SP No.3 , Right: 2x4 SP No.3

**BRACING-**

TOP CHORD Structural wood sheathing directly applied.  
 BOT CHORD Rigid ceiling directly applied.

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

**REACTIONS.** (lb/size) 2=1471/0-3-8 (min. 0-1-13), 8=1471/0-3-8 (min. 0-1-13)

Max Horz 2=-238(LC 6)

Max Uplift 2=-146(LC 8), 8=-146(LC 8)

Max Grav 2=1513(LC 13), 8=1513(LC 14)

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

TOP CHORD 2-3=-2256/223, 3-4=-2053/235, 4-5=-1939/282, 5-6=-1939/282,  
 6-7=-2053/235, 7-8=-2256/223

BOT CHORD 2-13=-63/2003, 12-13=0/1334, 11-12=0/1334, 10-11=0/1334, 8-10=-63/1825

WEBS 3-13=-479/221, 5-13=-61/941, 5-10=-61/941, 7-10=-479/221

**NOTES-**

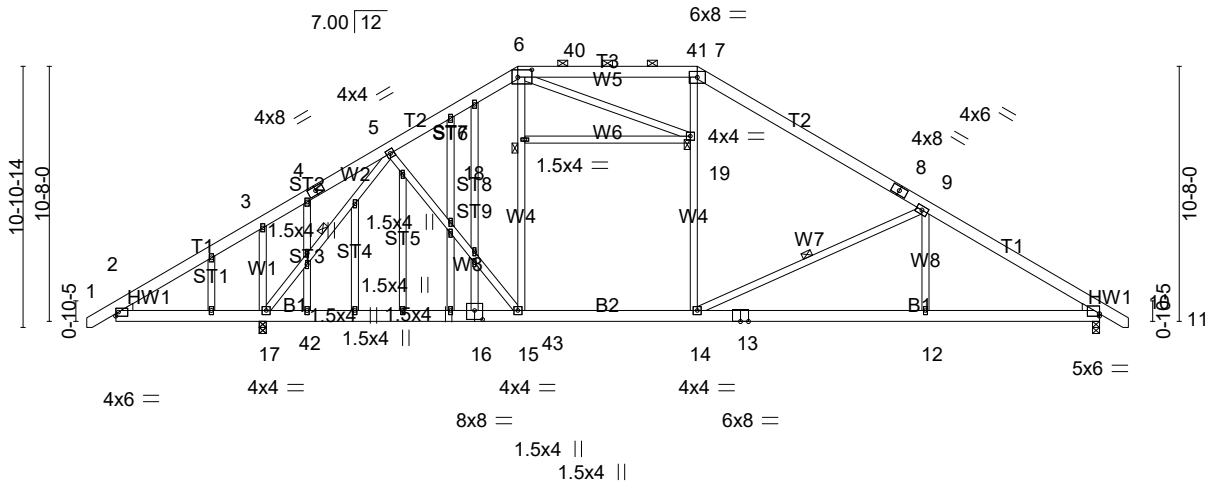
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=35ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 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 146 lb uplift at joint 2 and 146 lb uplift at joint 8.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

**LOAD CASE(S)** Standard

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|        |        |         |         |         |         |        |        |
|--------|--------|---------|---------|---------|---------|--------|--------|
| -1-2-8 | 6-1-12 | 11-5-12 | 16-9-12 | 24-3-12 | 33-10-3 | 41-1-8 | 42-4-0 |
| 1-2-8  | 6-1-12 | 5-4-0   | 5-4-0   | 7-6-0   | 9-6-7   | 7-3-5  | 1-2-8  |

Scale: 1/8"=1'



|       |        |         |         |         |        |
|-------|--------|---------|---------|---------|--------|
| 6-0-0 | 6-1-12 | 16-9-12 | 24-3-12 | 33-10-3 | 41-1-8 |
| 6-0-0 | 0-1-12 | 10-8-0  | 7-6-0   | 9-6-7   | 7-3-5  |

Plate Offsets (X,Y)-- [6:0-7-0,0-3-12], [10:Edge,0-1-4], [16:0-4-0,0-4-8]

|                      |                       |             |                       |        |     |                |             |
|----------------------|-----------------------|-------------|-----------------------|--------|-----|----------------|-------------|
| <b>LOADING</b> (psf) | <b>SPACING-</b> 2-0-0 | <b>CSI.</b> | <b>DEFL.</b> in (loc) | l/defl | L/d | <b>PLATES</b>  | <b>GRIP</b> |
| TCLL 20.0            | Plate Grip DOL 1.15   | TC 0.49     | Vert(LL) -0.32 12-14  | >999   | 360 | MT20           | 244/190     |
| TCDL 10.0            | Lumber DOL 1.15       | BC 0.69     | Vert(CT) -0.61 12-14  | >684   | 240 | MT18HS         | 244/190     |
| BCLL 0.0 *           | Rep Stress Incr YES   | WB 0.73     | Horz(CT) 0.04 10      | n/a    | n/a |                |             |
| BCDL 10.0            | Code IRC2018/TPI2014  | Matrix-AS   | Wind(LL) 0.24 12-14   | >999   | 240 | Weight: 366 lb | FT = 20%    |

**LUMBER-**

TOP CHORD 2x6 SP No.1  
BOT CHORD 2x6 SP No.1  
WEBS 2x4 SP No.3 \*Except\*  
W4: 2x4 SP No.2  
OTHERS 2x4 SP No.3  
WEDGE  
Left: 2x4 SP No.3 , Right: 2x4 SP No.3

## BRACING-

|           |                                                                                        |
|-----------|----------------------------------------------------------------------------------------|
| TOP CHORD | Structural wood sheathing directly applied, except 2-0-0 oc purlins (6-0-0 max.): 6-7. |
| BOT CHORD | Rigid ceiling directly applied.                                                        |
| WEBS      | 1 Row at midpt 5-17, 9-14                                                              |
| JOINTS    | 1 Brace at Jt(s): 18, 19                                                               |

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

**REACTIONS.**

(lb/size) 17=2011/0-3-8 (min. 0-2-9), 17=2011/0-3-8 (min. 0-2-9), 10=1410/0-3-8 (min. 0-1-11)  
 Max Horz 17=231(LC 7)  
 Max Uplift 17=-338(LC 8), 10=-124(LC 8)  
 Max Grav 17=2152(LC 16), 17=2011(LC 1), 10=1454(LC 14)

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

TOP CHORD 2-3=-231/569, 3-4=-92/344, 4-5=-72/473, 5-6=-1375/172, 6-40=-1289/207,  
40-41=-1289/207, 7-41=-1289/207, 7-8=-1390/171, 8-9=-1526/118,  
9-10=-2252/170

BOT CHORD 2-17=-386/259, 17-42=0/942, 16-42=0/942, 16-43=0/942, 15-43=0/942,  
14-15=0/1239, 13-14=-43/1849, 12-13=-43/1849, 10-12=-43/1849

WEBS 3-17=-479/211, 5-17=-1763/218, 5-15=-1/657, 15-18=-89/302, 6-18=-93/302,  
14-19=0/455, 7-19=0/405, 9-14=-830/188, 9-12=0/385

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=41ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; 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) Provide adequate drainage to prevent water ponding.
- 5) All plates are MT20 plates unless otherwise indicated.
- 6) All plates are 2x4 MT20 unless otherwise indicated.
- 7) Gable studs spaced at 2-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

Continued on page 2

|       |       |            |     |     |                             |
|-------|-------|------------|-----|-----|-----------------------------|
| Job   | Truss | Truss Type | Qty | Ply | Freedom Const\Campbell Plan |
| 28460 | T13   | GABLE      | 1   | 1   | Job Reference (optional)    |

- NOTES-**
- 9) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6'-0" between the bottom chord and any other members, with BCDL = 10.0psf.
  - 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 338 lb uplift at joint 17 and 124 lb uplift at joint 10.
  - 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 12) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
  - 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

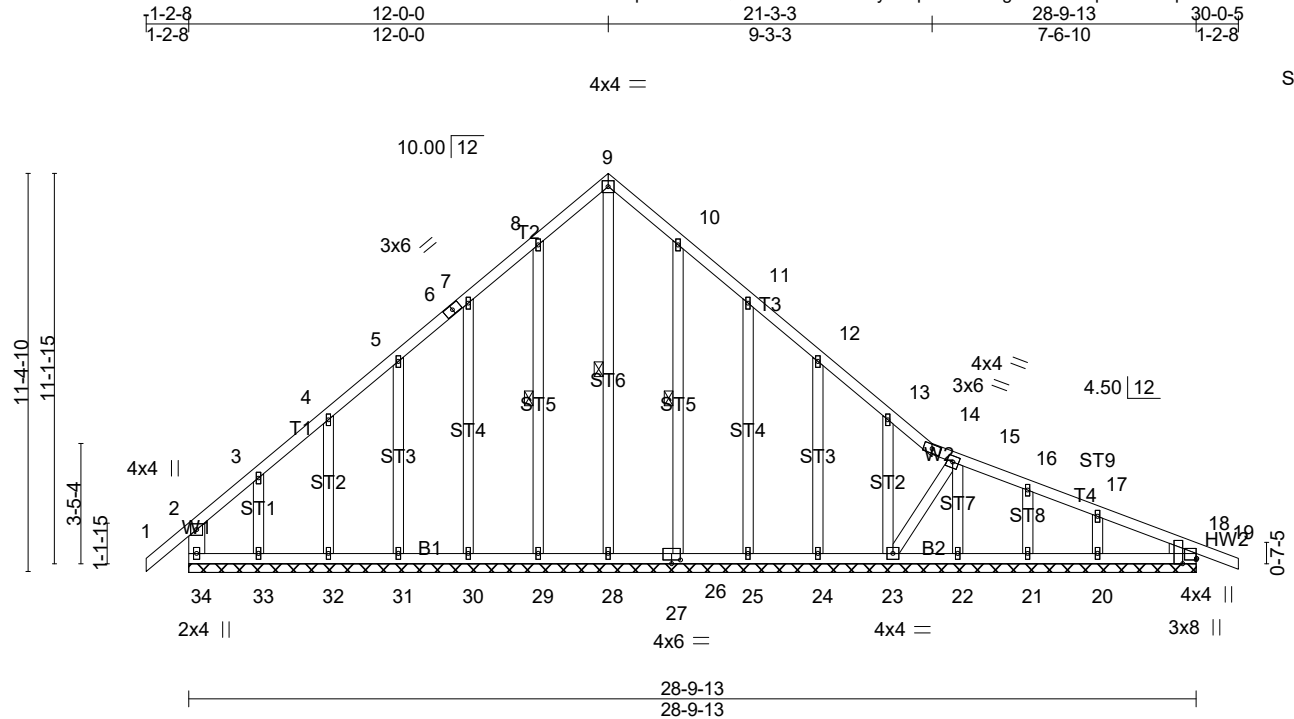
**LOAD CASE(S)** Standard

|                     |                     |                            |                 |                 |                                                         |
|---------------------|---------------------|----------------------------|-----------------|-----------------|---------------------------------------------------------|
| Job<br><b>28460</b> | Truss<br><b>T14</b> | Truss Type<br><b>GABLE</b> | Qty<br><b>1</b> | Ply<br><b>1</b> | Freedom Const\Campbell Plan<br>Job Reference (optional) |
|---------------------|---------------------|----------------------------|-----------------|-----------------|---------------------------------------------------------|

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Scale = 1:65.9

Plate Offsets (X,Y)-- [18:0-1-12,Edge], [18:Edge,0-0-2], [27:0-3-0,0-1-4]

| LOADING (psf) | SPACING-             | CSI.     | DEFL.    | in    | (loc) | l/defl | L/d | PLATES         | GRIP     |
|---------------|----------------------|----------|----------|-------|-------|--------|-----|----------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.15  | Vert(LL) | -0.00 | 19    | n/r    | 120 | MT20           | 244/190  |
| TCDL 10.0     | Plate Grip DOL 1.15  | BC 0.05  | Vert(CT) | -0.00 | 19    | n/r    | 120 |                |          |
| BCLL 0.0 *    | Lumber DOL 1.15      | WB 0.15  | Horz(CT) | 0.00  | 18    | n/a    | n/a |                |          |
| BCDL 10.0     | Rep Stress Incr YES  | Matrix-S |          |       |       |        |     |                |          |
|               | Code IRC2018/TPI2014 |          |          |       |       |        |     |                |          |
|               |                      |          |          |       |       |        |     | Weight: 213 lb | FT = 20% |

#### LUMBER-

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP 2400F 2.0E  
WEBS 2x4 SP No.3 \*Except\*  
W1: 2x6 SP No.1  
OTHERS 2x4 SP No.3  
WEDGE  
Right: 2x4 SP No.3

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing, Except: 10-0-0 oc bracing: 22-23,21-22,20-21,18-20.  
WEBS 1 Row at midpt 9-28, 8-29, 10-26

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

#### REACTIONS.

All bearings 28-9-13.  
(lb) - Max Horz 34=-293(LC 6)  
Max Uplift All uplift 100 lb or less at joint(s) 34, 18, 29, 30, 31, 32, 26, 25, 24, 22, 21, 20 except 33=-133(LC 8), 23=-112(LC 8)  
Max Grav All reactions 250 lb or less at joint(s) 34, 18, 29, 30, 31, 32, 33, 26, 25, 24, 23, 22, 21, 20 except 28=278(LC 8)

#### FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
WEBS 9-28=-254/25

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=29ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and 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.
- All plates are 1.5x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 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) 34, 18, 29, 30, 31, 32, 26, 25, 24, 22, 21, 20 except (jt=lb) 33=133, 23=112.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 18.

Continued on page 2

|       |       |            |     |     |                             |
|-------|-------|------------|-----|-----|-----------------------------|
| Job   | Truss | Truss Type | Qty | Ply | Freedom Const\Campbell Plan |
| 28460 | T14   | GABLE      | 1   | 1   | Job Reference (optional)    |

**NOTES-**  
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

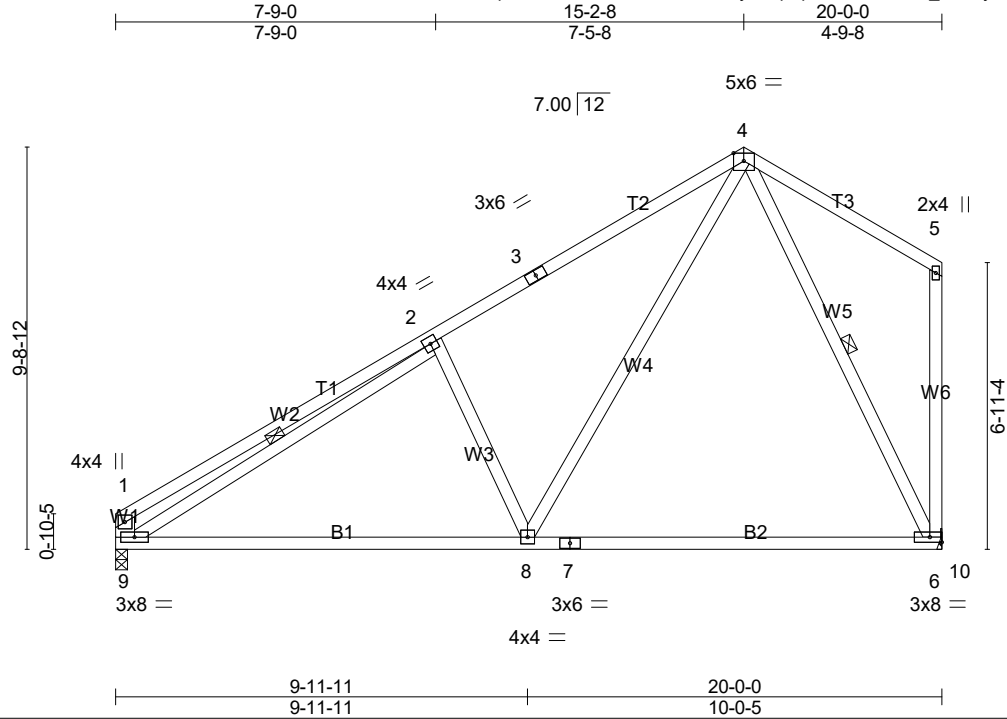
**LOAD CASE(S)** Standard

|                          |              |                      |          |          |                             |
|--------------------------|--------------|----------------------|----------|----------|-----------------------------|
| Job<br>28460             | Truss<br>T15 | Truss Type<br>COMMON | Qty<br>1 | Ply<br>1 | Freedom Const\Campbell Plan |
| Job Reference (optional) |              |                      |          |          |                             |

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| LOADING (psf) | SPACING-             |      | CSI.      | DEFL.    | in    | (loc) | l/defl | L/d | PLATES         | GRIP     |
|---------------|----------------------|------|-----------|----------|-------|-------|--------|-----|----------------|----------|
| TCLL 20.0     | Plate Grip DOL       | 1.15 | TC 0.64   | Vert(LL) | -0.44 | 6-8   | >538   | 360 | MT20           | 244/190  |
| TCDL 10.0     | Lumber DOL           | 1.15 | BC 0.55   | Vert(CT) | -0.59 | 6-8   | >396   | 240 |                |          |
| BCLL 0.0 *    | Rep Stress Incr      | YES  | WB 0.35   | Horz(CT) | 0.01  | 6     | n/a    | n/a |                |          |
| BCDL 10.0     | Code IRC2018/TPI2014 |      | Matrix-AS | Wind(LL) | 0.04  | 6-8   | >999   | 240 |                |          |
|               |                      |      |           |          |       |       |        |     | Weight: 127 lb | FT = 20% |

#### LUMBER-

TOP CHORD 2x4 SP 2400F 2.0E  
 BOT CHORD 2x4 SP 2400F 2.0E  
 WEBS 2x4 SP No.2 \*Except\*  
 W3,W2: 2x4 SP No.3, W1: 2x6 SP No.1

#### BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals.  
 BOT CHORD Rigid ceiling directly applied.  
 WEBS 1 Row at midpt 4-6, 2-9

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

#### REACTIONS.

(lb/size) 6=785/Mechanical, 9=785/0-3-8 (min. 0-1-8)  
 Max Horz 9=312(LC 7)  
 Max Uplift 6=-67(LC 8), 9=-54(LC 8)  
 Max Grav 6=950(LC 13), 9=800(LC 13)

#### FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-612/123, 2-3=-935/144, 3-4=-829/185, 1-9=-460/109  
 BOT CHORD 8-9=-139/964, 7-8=-89/375, 7-10=-89/375, 6-10=-89/375  
 WEBS 2-8=-404/205, 4-8=-69/861, 4-6=-725/98, 2-9=-650/0

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 9.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

#### LOAD CASE(S)

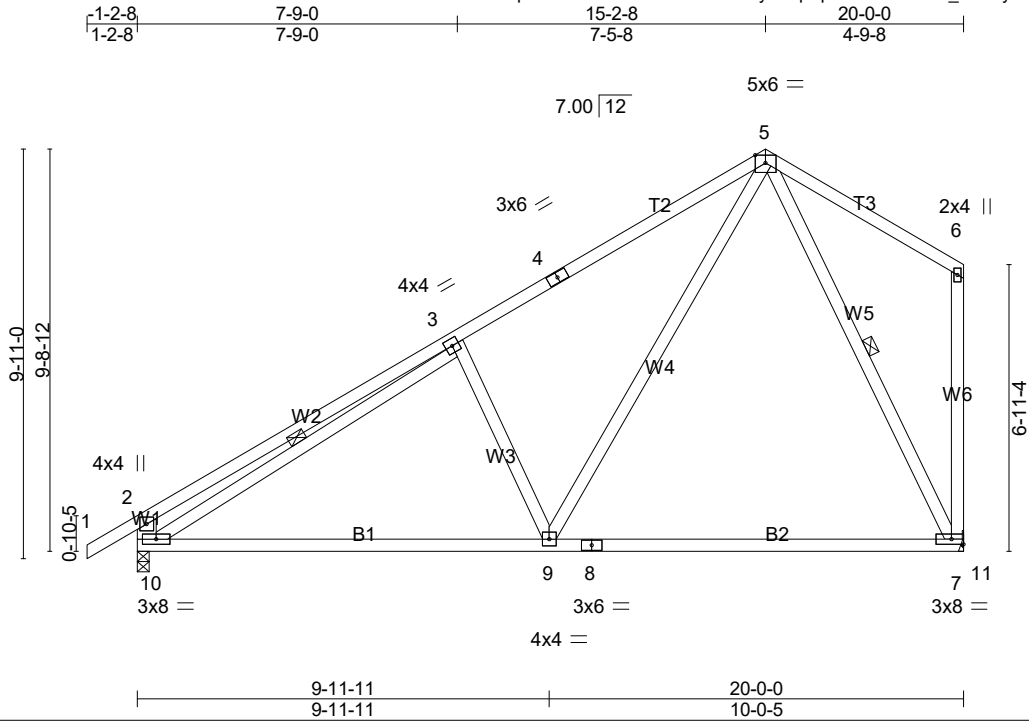
Standard

|                          |              |                      |          |          |                             |
|--------------------------|--------------|----------------------|----------|----------|-----------------------------|
| Job<br>28460             | Truss<br>T16 | Truss Type<br>Common | Qty<br>2 | Ply<br>1 | Freedom Const\Campbell Plan |
| Job Reference (optional) |              |                      |          |          |                             |

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| LOADING (psf) | SPACING-             | CSI.      | DEFL.    | in    | (loc) | l/defl | L/d | PLATES         | GRIP     |
|---------------|----------------------|-----------|----------|-------|-------|--------|-----|----------------|----------|
| TCLL 20.0     | Plate Grip DOL 1.15  | TC 0.64   | Vert(LL) | -0.44 | 7-9   | >538   | 360 | MT20           | 244/190  |
| TCDL 10.0     | Lumber DOL 1.15      | BC 0.55   | Vert(CT) | -0.59 | 7-9   | >396   | 240 |                |          |
| BCLL 0.0 *    | Rep Stress Incr YES  | WB 0.35   | Horz(CT) | 0.01  | 7     | n/a    | n/a |                |          |
| BCDL 10.0     | Code IRC2018/TPI2014 | Matrix-AS | Wind(LL) | 0.04  | 7-9   | >999   | 240 |                |          |
|               |                      |           |          |       |       |        |     | Weight: 129 lb | FT = 20% |

#### LUMBER-

TOP CHORD 2x4 SP 2400F 2.0E  
 BOT CHORD 2x4 SP 2400F 2.0E  
 WEBS 2x4 SP No.2 \*Except\*  
 W3,W2: 2x4 SP No.3, W1: 2x6 SP No.1

#### BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals.  
 BOT CHORD Rigid ceiling directly applied.  
 WEBS 1 Row at midpt 5-7, 3-10

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

#### REACTIONS.

(lb/size) 7=782/Mechanical, 10=874/0-3-8 (min. 0-1-8)  
 Max Horz 10=326(LC 7)  
 Max Uplift 7=-65(LC 8), 10=-105(LC 8)  
 Max Grav 7=947(LC 13), 10=881(LC 13)

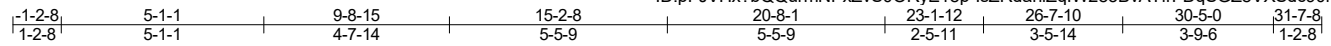
#### FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-624/128, 3-4=-926/140, 4-5=-822/181, 2-10=-561/165  
 BOT CHORD 9-10=-138/953, 8-9=-89/374, 8-11=-89/374, 7-11=-89/374  
 WEBS 3-9=-394/200, 5-9=-64/851, 5-7=-723/98, 3-10=-623/0

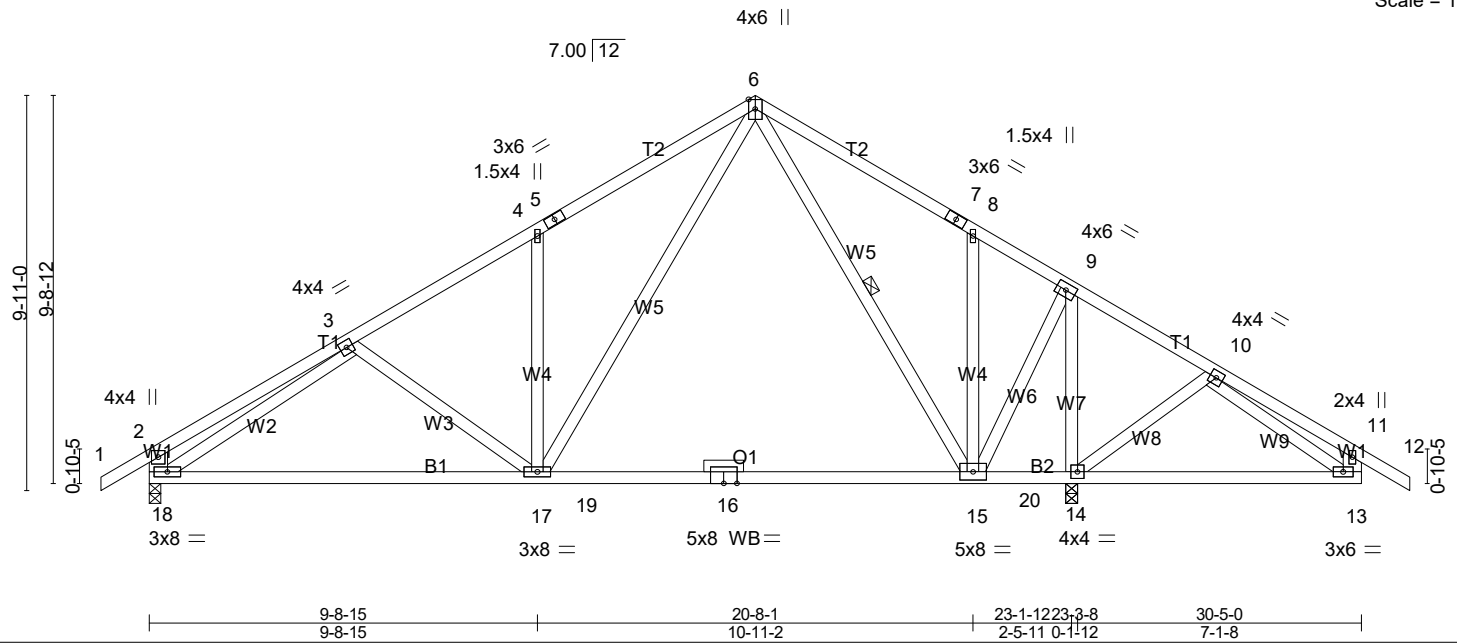
#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7 except (jt=lb) 10=105.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard



Scale = 1:57.8



|                      |                       |             |                                  |                |             |
|----------------------|-----------------------|-------------|----------------------------------|----------------|-------------|
| <b>LOADING</b> (psf) | <b>SPACING-</b> 2-0-0 | <b>CSI.</b> | <b>DEFL.</b> in (loc) l/defl L/d | <b>PLATES</b>  | <b>GRIP</b> |
| TCLL 20.0            | Plate Grip DOL 1.15   | TC 0.28     | Vert(LL) -0.46 15-17 >592 360    | MT20           | 244/190     |
| TCDL 10.0            | Lumber DOL 1.15       | BC 0.59     | Vert(CT) -0.66 15-17 >418 240    |                |             |
| BCLL 0.0 *           | Rep Stress Incr YES   | WB 0.74     | Horz(CT) 0.01 14 n/a n/a         |                |             |
| BCDL 10.0            | Code IRC2018/TPI2014  | Matrix-AS   | Wind(LL) 0.03 15-17 >999 240     | Weight: 198 lb | FT = 20%    |

**LUMBER-**

|           |                                  |
|-----------|----------------------------------|
| TOP CHORD | 2x4 SP No.2                      |
| BOT CHORD | 2x4 SP 2400F 2.0E                |
| WEBS      | 2x4 SP No.3 *Except*             |
|           | W5: 2x4 SP No.2, W1: 2x6 SP No.1 |
| OTHERS    | 2x4 SP No.3                      |

**BRACING-**

|           |                                                                      |
|-----------|----------------------------------------------------------------------|
| TOP CHORD | Structural wood sheathing directly applied, except end<br>verticals. |
| BOT CHORD | Rigid ceiling directly applied.                                      |
| WEBS      | 1 Row at midpt                      6-15                             |

|                                                                                                                                                           |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.</p> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------|

**REACTIONS.** (lb/size) 14=1679/0-3-8 (min. 0-1-8), 14=1679/0-3-8 (min. 0-1-8), 18=890/0-3-8 (min. 0-1-8)

Max Horz 18=-233(LC 6)  
Max Uplift 14=-185(LC 8), 18=-98(LC 8)  
Max Grav 14=1679(LC 1), 14=1679(LC 1), 18=946(LC 13)

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

TOP CHORD 2-3=-397/35, 3-4=-1031/92, 4-5=-1078/168, 5-6=-1067/201, 6-7=-276/181,  
7-8=-286/81, 9-10=-92/661, 2-18=-401/104  
BOT CHORD 17-18=0/1092, 17-19=0/497, 16-19=0/497, 16-20=0/497, 15-20=0/497,  
14-15=-530/219, 13-14=-299/135  
WEBS 4-17=-331/150, 6-17=-99/933, 6-15=-661/81, 8-15=-283/127, 9-15=-70/1275,  
9-14=-1594/148, 10-14=-288/105, 3-18=-888/76, 10-13=-125/428

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=30ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6'-0" between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 18 except (jt=lb) 14=185.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

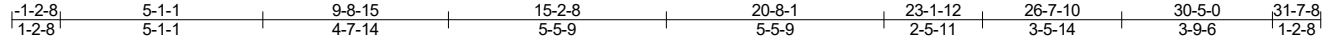
LOAD CASE(S) Standard

|                          |                     |                             |                 |                 |                             |
|--------------------------|---------------------|-----------------------------|-----------------|-----------------|-----------------------------|
| Job<br><b>28460</b>      | Truss<br><b>T18</b> | Truss Type<br><b>Common</b> | Qty<br><b>1</b> | Ply<br><b>1</b> | Freedom Const\Campbell Plan |
| Job Reference (optional) |                     |                             |                 |                 |                             |

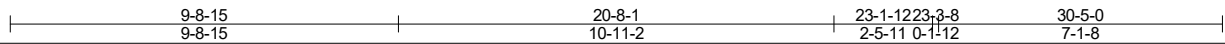
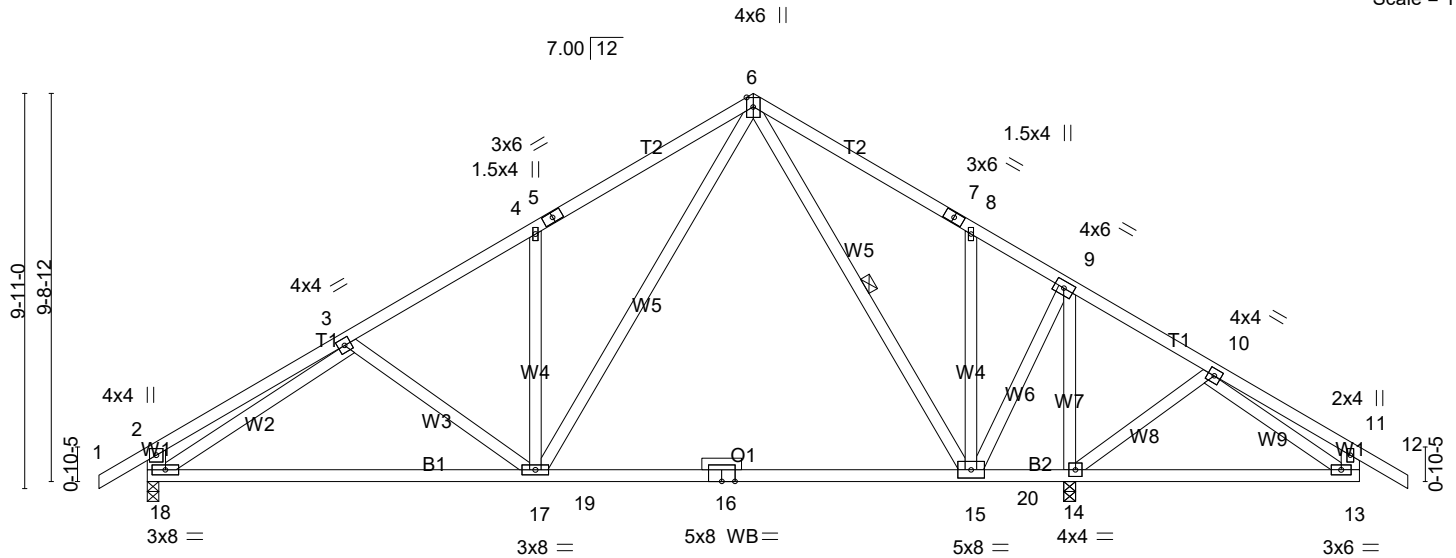
C&R Building Supply, Autryville NC

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Scale = 1:57.8



| LOADING (psf) | SPACING-             |      | CSI.      | DEFL.    | in (loc)    | l/defl | L/d | PLATES         | GRIP     |
|---------------|----------------------|------|-----------|----------|-------------|--------|-----|----------------|----------|
| TCLL 20.0     | Plate Grip DOL       | 1.15 | TC 0.28   | Vert(LL) | -0.46 15-17 | >592   | 360 | MT20           | 244/190  |
| TCDL 10.0     | Lumber DOL           | 1.15 | BC 0.59   | Vert(CT) | -0.66 15-17 | >418   | 240 |                |          |
| BCLL 0.0 *    | Rep Stress Incr      | YES  | WB 0.74   | Horz(CT) | 0.01 14     | n/a    | n/a |                |          |
| BCDL 10.0     | Code IRC2018/TPI2014 |      | Matrix-AS | Wind(LL) | 0.03 15-17  | >999   | 240 |                |          |
|               |                      |      |           |          |             |        |     | Weight: 198 lb | FT = 20% |

#### LUMBER-

TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP 2400F 2.0E  
 WEBS 2x4 SP No.3 \*Except\*  
 W5: 2x4 SP No.2, W1: 2x6 SP No.1  
 OTHERS 2x4 SP No.3

#### BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals.  
 BOT CHORD Rigid ceiling directly applied.  
 WEBS 1 Row at midpt 6-15

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

**REACTIONS.** (lb/size) 14=1679/0-3-8 (min. 0-1-8), 14=1679/0-3-8 (min. 0-1-8), 18=890/0-3-8 (min. 0-1-8)

Max Horz 18=-233(LC 6)  
 Max Uplift 14=-185(LC 8), 18=-98(LC 8)  
 Max Grav 14=1679(LC 1), 14=1679(LC 1), 18=946(LC 13)

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

TOP CHORD 2-3=-397/35, 3-4=-1031/92, 4-5=-1078/168, 5-6=-1067/201, 6-7=-276/181,  
 7-8=-286/81, 9-10=-92/661, 2-18=-401/104  
 BOT CHORD 17-18=0/1092, 17-19=0/497, 16-19=0/497, 16-20=0/497, 15-20=0/497,  
 14-15=-530/219, 13-14=-299/135  
 WEBS 4-17=-331/150, 6-17=-99/933, 6-15=-661/81, 8-15=-283/127, 9-15=-70/1275,  
 9-14=-1594/148, 10-14=-288/105, 3-18=-888/76, 10-13=-125/428

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=30ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 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) 18 except (jt=lb) 14=185.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

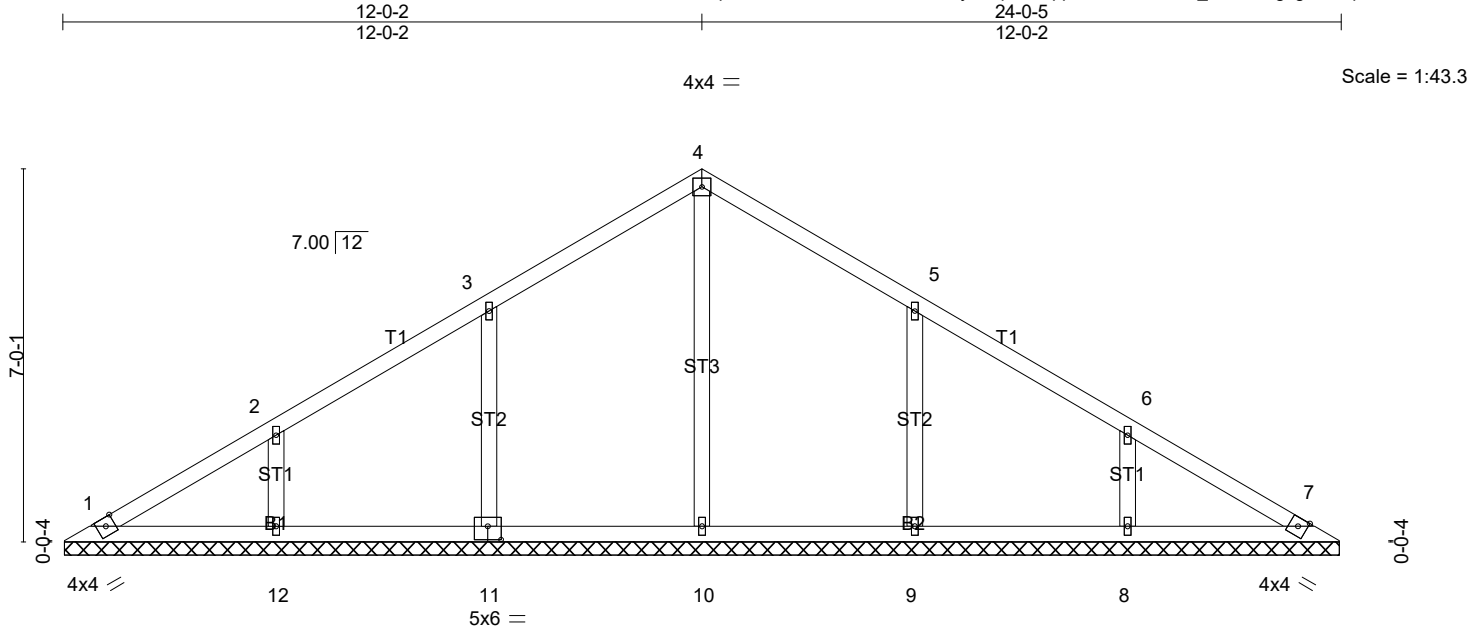
**LOAD CASE(S)** Standard

|                                    |             |                      |                          |          |                             |
|------------------------------------|-------------|----------------------|--------------------------|----------|-----------------------------|
| Job<br>28460                       | Truss<br>V1 | Truss Type<br>Valley | Qty<br>1                 | Ply<br>1 | Freedom Const\Campbell Plan |
| C&R Building Supply, Autryville NC |             |                      | Job Reference (optional) |          |                             |

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|                                        |          |        |
|----------------------------------------|----------|--------|
| Plate Offsets (X,Y)-- [11:0-3-0,0-3-0] | 23-11-14 | 24-0-5 |
|                                        | 23-11-14 | 0-0-7  |

| LOADING (psf) | SPACING-             | CSI.     | DEFL.    | in (loc) | l/defl | L/d | PLATES         | GRIP     |
|---------------|----------------------|----------|----------|----------|--------|-----|----------------|----------|
| TCLL 20.0     | Plate Grip DOL 1.15  | TC 0.19  | Vert(LL) | n/a      | -      | n/a | MT20           | 244/190  |
| TCDL 10.0     | Lumber DOL 1.15      | BC 0.19  | Vert(CT) | n/a      | -      | n/a |                |          |
| BCLL 0.0 *    | Rep Stress Incr YES  | WB 0.16  | Horz(CT) | 0.00     | 7      | n/a |                |          |
| BCDL 10.0     | Code IRC2018/TPI2014 | Matrix-S |          |          |        |     | Weight: 102 lb | FT = 20% |

|                       |                                                                           |
|-----------------------|---------------------------------------------------------------------------|
| <b>LUMBER-</b>        | <b>BRACING-</b>                                                           |
| TOP CHORD 2x4 SP No.2 | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins. |
| BOT CHORD 2x4 SP No.2 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.            |
| OTHERS 2x4 SP No.3    |                                                                           |

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

**REACTIONS.** All bearings 23-11-7.  
 (lb) - Max Horz 1=146(LC 7)  
 Max Uplift All uplift 100 lb or less at joint(s) 11, 12, 9, 8  
 Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 10=393(LC 13), 11=400(LC 13), 12=330(LC 1), 9=398(LC 14), 8=330(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**WEBS** 3-11=-263/120, 5-9=-262/120

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) All plates are 1.5x4 MT20 unless otherwise indicated.
  - 4) Gable requires continuous bottom chord bearing.
  - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11, 12, 9, 8.
  - 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

|                          |             |                      |          |          |                             |
|--------------------------|-------------|----------------------|----------|----------|-----------------------------|
| Job<br>28460             | Truss<br>V2 | Truss Type<br>Valley | Qty<br>1 | Ply<br>1 | Freedom Const\Campbell Plan |
| Job Reference (optional) |             |                      |          |          |                             |

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8.430 s Jan 20 2021 MiTek Industries, Inc. Sat Jan 18 09:38:46 2025 Page 1  
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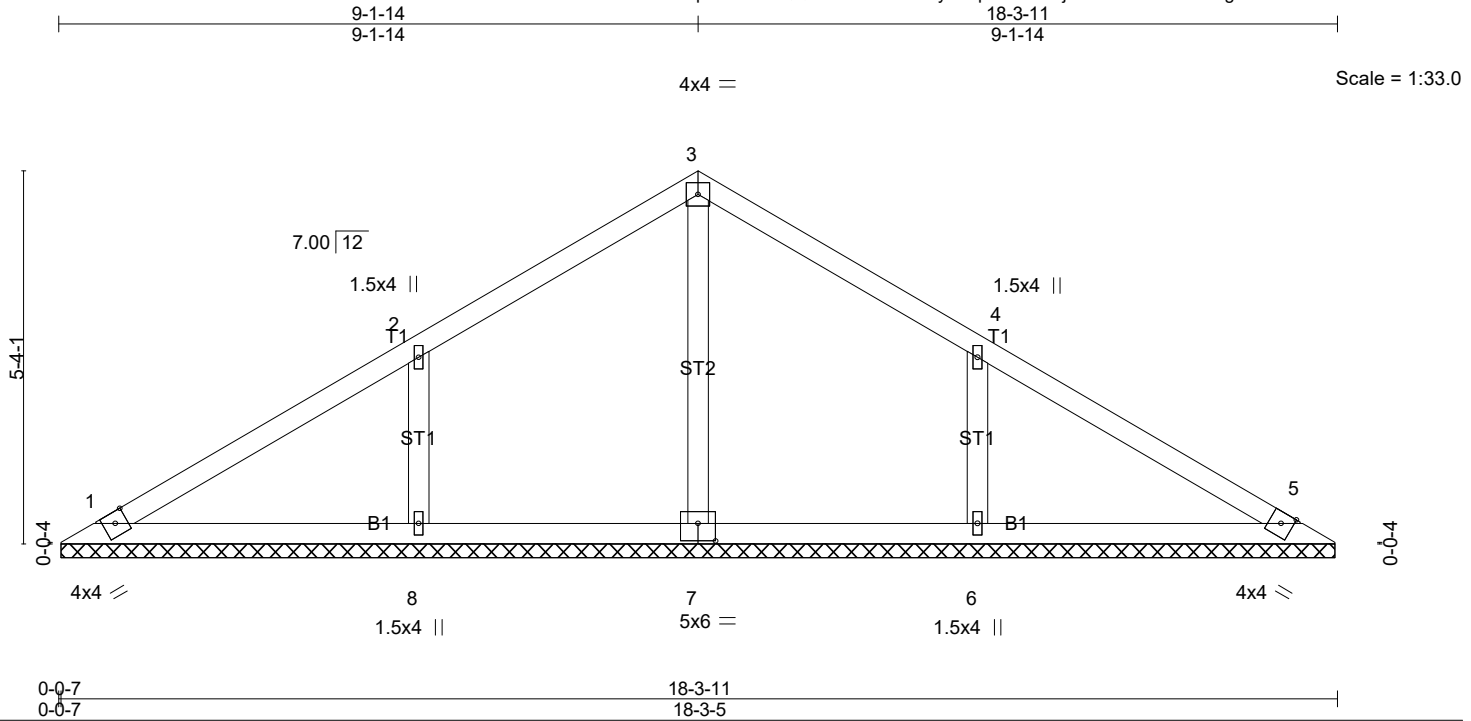


Plate Offsets (X,Y)-- [7:0-3-0,0-3-0]

| LOADING (psf) | SPACING-             | 2-0-0 | CSI.     | DEFL.    | in   | (loc) | l/defl | L/d | PLATES        | GRIP     |
|---------------|----------------------|-------|----------|----------|------|-------|--------|-----|---------------|----------|
| TCLL 20.0     | Plate Grip DOL       | 1.15  | TC 0.27  | Vert(LL) | n/a  | -     | n/a    | 999 | MT20          | 244/190  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.17  | Vert(CT) | n/a  | -     | n/a    | 999 |               |          |
| BCLL 0.0 *    | Rep Stress Incr      | YES   | WB 0.08  | Horz(CT) | 0.00 | 5     | n/a    | n/a |               |          |
| BCDL 10.0     | Code IRC2018/TPI2014 |       | Matrix-S |          |      |       |        |     | Weight: 71 lb | FT = 20% |

#### LUMBER-

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
OTHERS 2x4 SP No.3

#### BRACING-

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

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

#### REACTIONS.

All bearings 18-2-14.

(lb) - Max Horz 1=109(LC 6)

Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 8, 6

Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except  
8=424(LC 13), 6=424(LC 14)

#### FORCES.

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

WEBS

2-8=-314/141, 4-6=-314/141

#### NOTES-

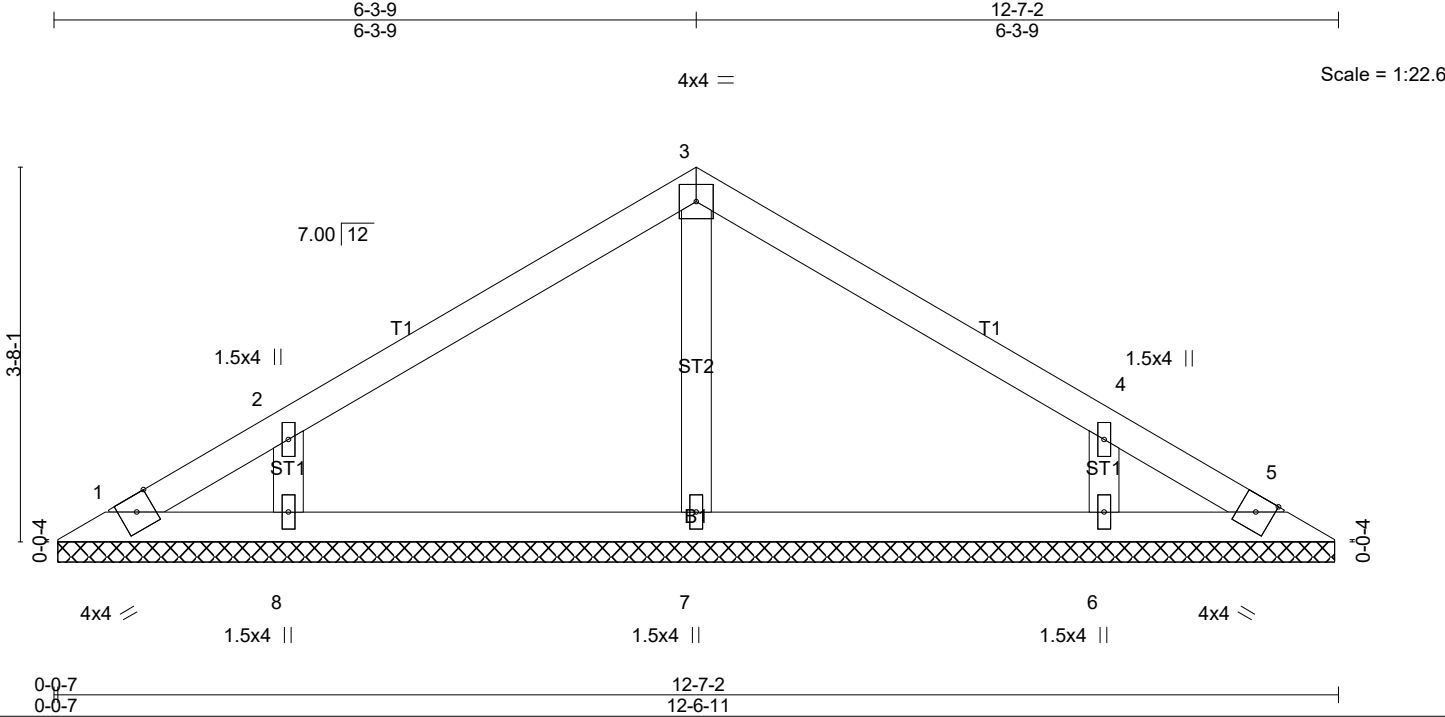
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6'-0"-0 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, 5, 8, 6.
- This truss is designed in accordance with the 2018 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 | Freedom Const\Campbell Plan |
| 28460 | V3    | Valley     | 1   | 1   | Job Reference (optional)    |

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|                      |                      |             |                         |               |             |
|----------------------|----------------------|-------------|-------------------------|---------------|-------------|
| <b>LOADING</b> (psf) | <b>SPACING-</b>      | <b>CSI.</b> | <b>DEFL.</b>            | <b>PLATES</b> | <b>GRIP</b> |
| TCLL 20.0            | Plate Grip DOL 1.15  | TC 0.17     | in (loc) l/defl L/d     | MT20          | 244/190     |
| TCDL 10.0            | Lumber DOL 1.15      | BC 0.12     | Vert(LL) n/a - n/a 999  |               |             |
| BCLL 0.0 *           | Rep Stress Incr YES  | WB 0.05     | Vert(CT) n/a - n/a 999  |               |             |
| BCDL 10.0            | Code IRC2018/TPI2014 | Matrix-S    | Horz(CT) 0.00 5 n/a n/a | Weight: 45 lb | FT = 20%    |

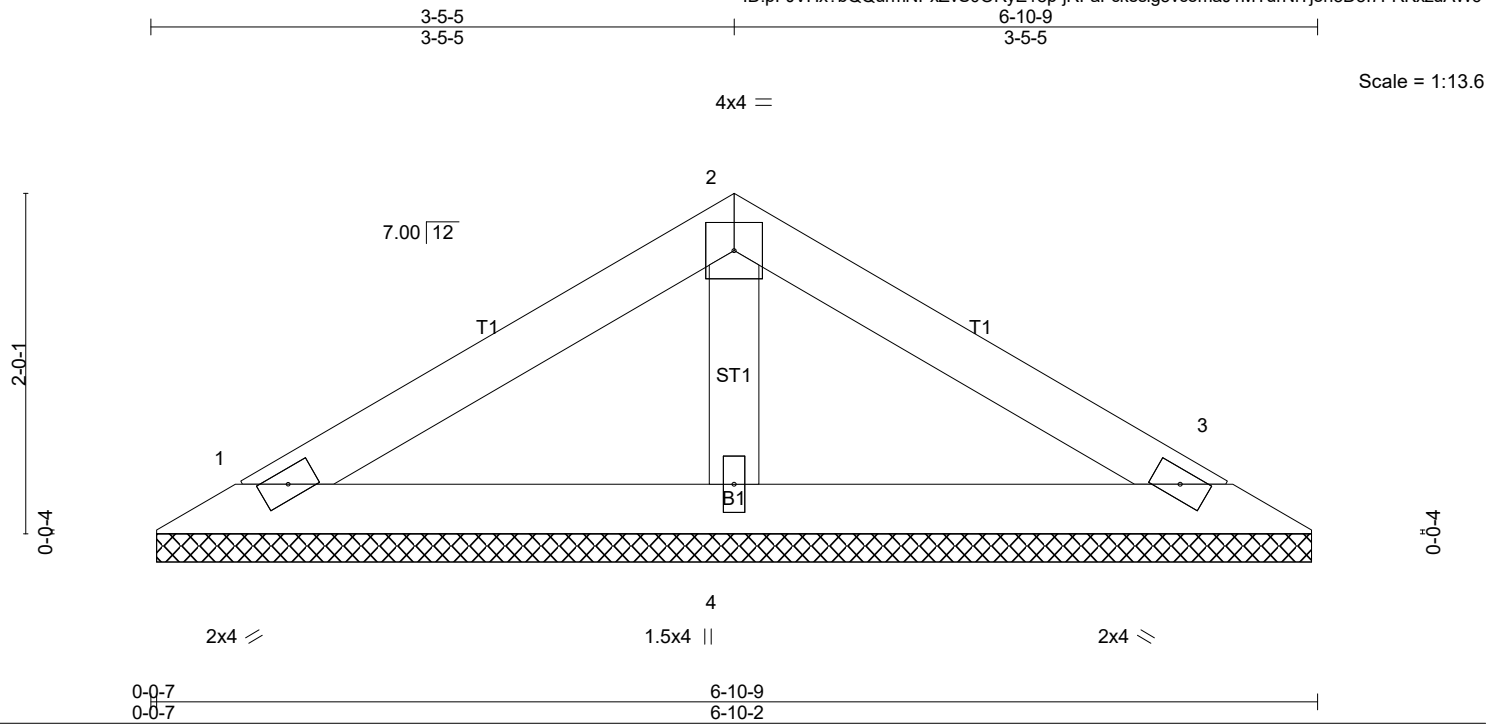
|                       |                                                                                                                                                    |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>LUMBER-</b>        | <b>BRACING-</b>                                                                                                                                    |
| TOP CHORD 2x4 SP No.2 | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.                                                                          |
| BOT CHORD 2x4 SP No.2 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.                                                                                     |
| OTHERS 2x4 SP No.3    | MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide. |

**REACTIONS.** All bearings 12-6-5.  
 (lb) - Max Horz 1=-73(LC 6)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 8, 6  
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=277(LC 1), 8=297(LC 13), 6=297(LC 14)

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - Gable requires continuous bottom chord bearing.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 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, 8, 6.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard



|                      |                       |             |                                  |               |             |
|----------------------|-----------------------|-------------|----------------------------------|---------------|-------------|
| <b>LOADING</b> (psf) | <b>SPACING-</b> 2-0-0 | <b>CSI.</b> | <b>DEFL.</b> in (loc) l/defl L/d | <b>PLATES</b> | <b>GRIP</b> |
| TCLL 20.0            | Plate Grip DOL 1.15   | TC 0.15     | Vert(LL) n/a - n/a 999           | MT20          | 244/190     |
| TCDL 10.0            | Lumber DOL 1.15       | BC 0.09     | Vert(CT) n/a - n/a 999           |               |             |
| BCLL 0.0 *           | Rep Stress Incr YES   | WB 0.03     | Horz(CT) 0.00 3 n/a n/a          |               |             |
| BCDL 10.0            | Code IRC2018/TPI2014  | Matrix-P    |                                  | Weight: 22 lb | FT = 20%    |

**LUMBER-**

|           |             |
|-----------|-------------|
| TOP CHORD | 2x4 SP No.2 |
| BOT CHORD | 2x4 SP No.2 |
| OTHERS    | 2x4 SP No.3 |

**BRACING-**

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

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

**REACTIONS.** (lb/size) 1=121/6-9-11 (min. 0-1-8), 3=121/6-9-11 (min. 0-1-8), 4=221/6-9-11 (min. 0-1-8)

Max Horz 1=-37(LC 6)  
Max Uplift1=-22(LC 8), 3=-22(LC 8)

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

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6'-0" between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

## LOAD CASE(S) Standard