

**Trenco**

818 Soundside Rd  
Edenton, NC 27932

Re: J0922-4832  
Ringled Residence

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Comtech, Inc - Fayetteville.

Pages or sheets covered by this seal: 154451859 thru 154451908

My license renewal date for the state of North Carolina is December 31, 2022.

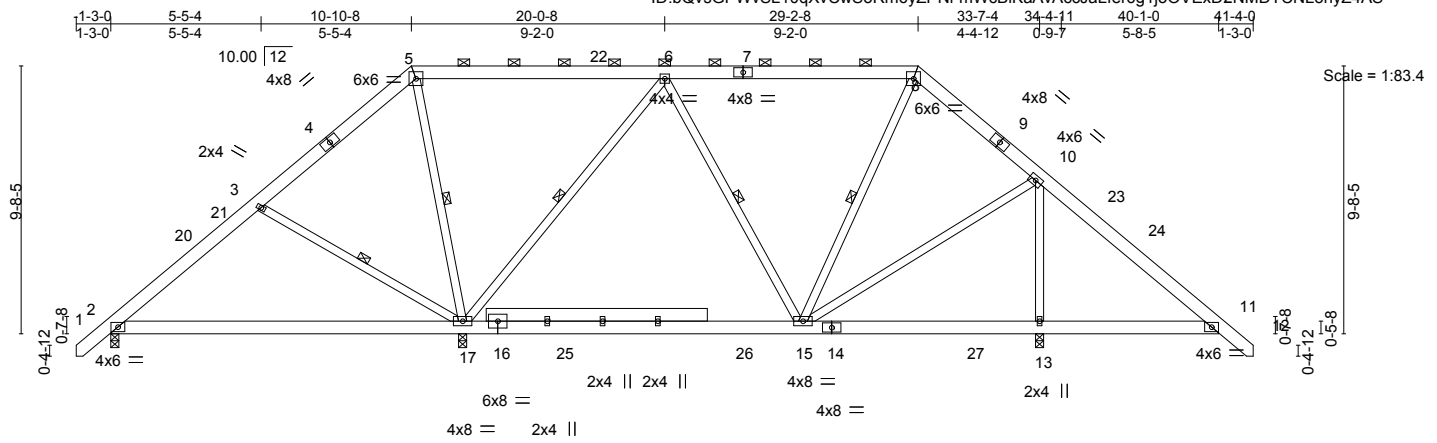
North Carolina COA: C-0844



September 29, 2022

Gilbert, Eric

**IMPORTANT NOTE:** The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which were given to MiTek or TRENCO. Any project specific information included is for MiTek's or TRENCO's customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek or TRENCO has not independently verified the applicability of the design parameters or the designs for any particular building. Before use, the building designer should verify applicability of design parameters and properly incorporate these designs into the overall building design per ANSI/TPI 1, Chapter 2.



| LOADING (psf) | SPACING-             | CSI.     | DEFL.    | in (loc)    | l/defl | L/d | PLATES         | GRIP     |
|---------------|----------------------|----------|----------|-------------|--------|-----|----------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.41  | Vert(LL) | -0.31 15-17 | >804   | 360 | MT20           | 244/190  |
| TCDL 10.0     | Plate Grip DOL 1.15  | BC 0.57  | Vert(CT) | -0.38 15-17 | >662   | 240 |                |          |
| BCLL 0.0 *    | Lumber DOL 1.15      | WB 0.62  | Horz(CT) | 0.00 13     | n/a    | n/a |                |          |
| BCDL 10.0     | Rep Stress Incr YES  | Matrix-S | Wind(LL) | 0.26 2-17   | >584   | 240 |                |          |
|               | Code IRC2015/TPI2014 |          |          |             |        |     | Weight: 324 lb | FT = 20% |

**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 5-8.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
 WEBS 1 Row at midpt 3-17, 6-17, 6-15, 8-15, 5-17

**REACTIONS.** (size) 2=0-3-8, 17=0-3-8, 13=0-3-8  
 Max Horz 2=241(LC 11)  
 Max Uplift 2=-68(LC 9), 17=-292(LC 9), 13=-89(LC 13)  
 Max Grav 2=477(LC 23), 17=1527(LC 2), 13=1453(LC 24)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-331/123, 6-8=-371/121, 8-10=-517/137, 10-11=-375/564  
 BOT CHORD 2-17=-157/253, 15-17=-78/377, 13-15=-388/432, 11-13=-388/432  
 WEBS 3-17=-432/342, 6-17=-750/201, 10-15=-174/735, 10-13=-1268/548, 5-17=-480/182

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-1-9 to 3-3-4, Interior(1) 3-3-4 to 10-11-8, Exterior(2) 10-11-8 to 17-2-3, Interior(1) 17-2-3 to 29-1-8, Exterior(2) 29-1-8 to 35-4-3, Interior(1) 35-4-3 to 41-2-9 zone; cantilever right exposed ; porch left exposed; C-C for members and forces & MWFRS for reactions shown; 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 68 lb uplift at joint 2, 292 lb uplift at joint 17 and 89 lb uplift at joint 13.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



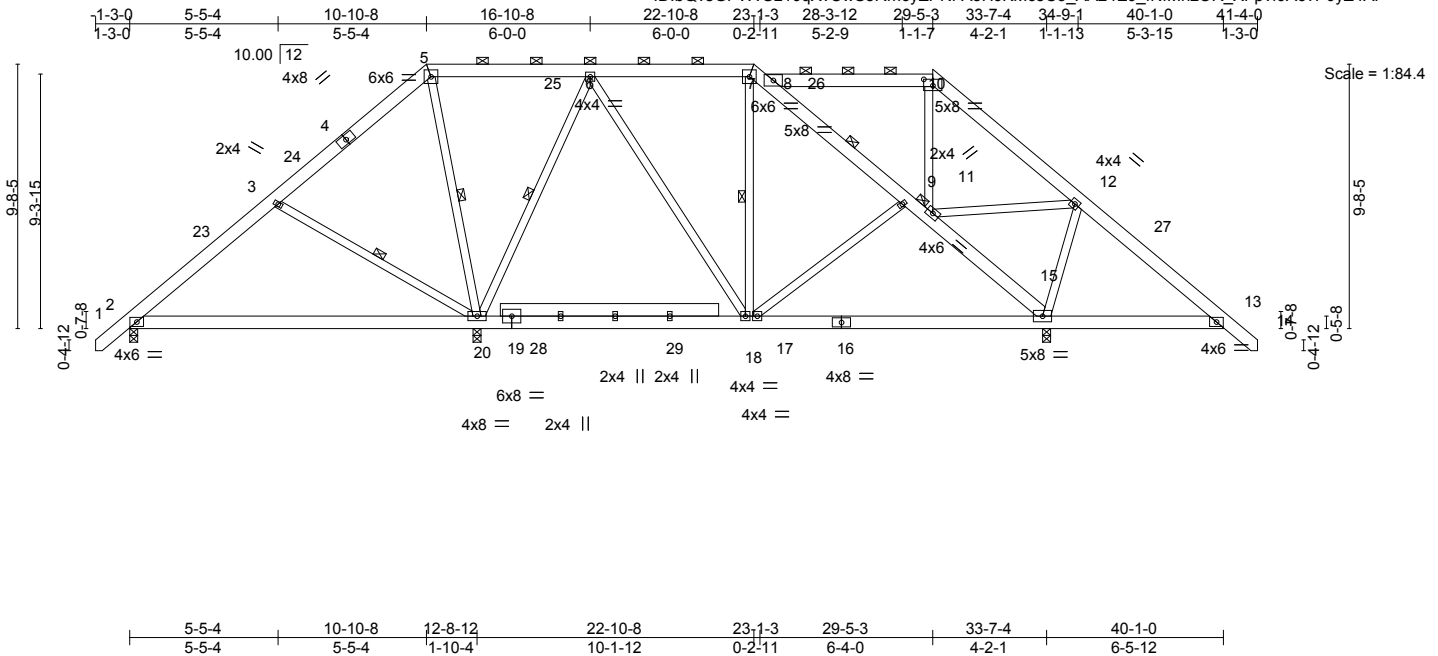




Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Sep 28 14:22:12 2022 Page 1

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|                       |                   |
|-----------------------|-------------------|
| Plate Offsets (X,Y)-- | [10:0-4-0-0-2-12] |
|-----------------------|-------------------|

| LOADING (psf) | SPACING-             | CSI.     | DEFL.                         | PLATES         | GRIP     |
|---------------|----------------------|----------|-------------------------------|----------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.18  | in (loc) l/defl L/d           | MT20           | 244/190  |
| TCDL 10.0     | Plate Grip DOL 1.15  | BC 0.40  | Vert(LL) -0.15 18-20 >999 360 |                |          |
| BCLL 0.0 *    | Lumber DOL 1.15      | WB 0.31  | Vert(CT) -0.29 2-20 >520 240  |                |          |
| BCDL 10.0     | Rep Stress Incr YES  | Matrix-S | Horz(CT) 0.01 15 n/a n/a      |                |          |
|               | Code IRC2015/TPI2014 |          | Wind(LL) 0.25 2-20 >602 240   | Weight: 362 lb | FT = 20% |

**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 5-7, 8-15, 8-10. Except: 1 Row at midpt 8-11  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 13-15.  
 WEBS 1 Row at midpt 5-20, 6-20, 7-18, 3-20  
 JOINTS 1 Brace at Jt(s): 11

**REACTIONS.** (size) 15=0-3-8, 2=0-3-8, 20=0-3-8  
 Max Horz 2=243(LC 11)  
 Max Uplift 15=-97(LC 13), 2=-69(LC 8), 20=-292(LC 9)  
 Max Grav 15=1489(LC 24), 2=512(LC 23), 20=1417(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-383/161, 6-7=-390/144, 7-8=-385/102, 8-9=-522/157, 9-11=-514/171, 11-15=-1003/377, 12-13=-357/483  
 BOT CHORD 2-20=-158/288, 17-18=-13/411, 15-17=-33/372, 13-15=-324/397  
 WEBS 5-20=-350/105, 6-20=-680/152, 6-18=0/321, 10-11=-364/213, 11-12=-108/427, 12-15=-643/363, 3-20=-438/323

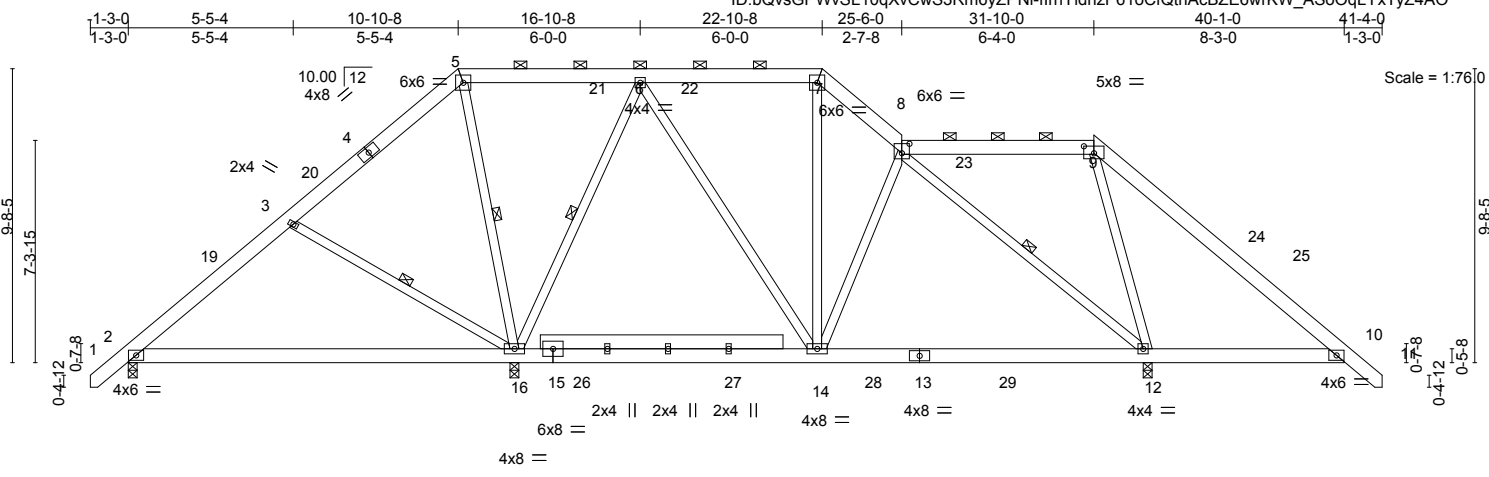
- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-1-9 to 3-3-4, Interior(1) 3-3-4 to 10-11-8, Exterior(2) 10-11-8 to 15-4-5, Interior(1) 15-4-5 to 29-5-3, Exterior(2) 22-9-8 to 23-2-12, Interior(1) 29-5-3 to 41-2-9 zone; cantilever right exposed ; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 97 lb uplift at joint 15, 69 lb uplift at joint 2 and 292 lb uplift at joint 20.
  - 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the





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

| LOADING (psf) | SPACING-             | CSI.     | DEFL.                        | PLATES         | GRIP     |
|---------------|----------------------|----------|------------------------------|----------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.32  | in (loc) l/defl L/d          | MT20           | 244/190  |
| TCDL 10.0     | Plate Grip DOL 1.15  | BC 0.42  | Vert(LL) -0.15 2-16 >999 360 |                |          |
| BCLL 0.0 *    | Lumber DOL 1.15      | WB 0.68  | Vert(CT) -0.29 2-16 >518 240 |                |          |
| BCDL 10.0     | Rep Stress Incr YES  | Matrix-S | Horz(CT) 0.01 12 n/a n/a     |                |          |
|               | Code IRC2015/TP12014 |          | Wind(LL) 0.25 2-16 >606 240  | Weight: 335 lb | FT = 20% |

| LUMBER-               | BRACING-                                                                                                                  |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------|
| TOP CHORD 2x6 SP No.1 | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 5-7, 8-9. |
| BOT CHORD 2x6 SP No.1 | BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.                                                             |
| WEBS 2x4 SP No.2      | WEBS 1 Row at midpt 5-16, 6-16, 8-12, 3-16                                                                                |

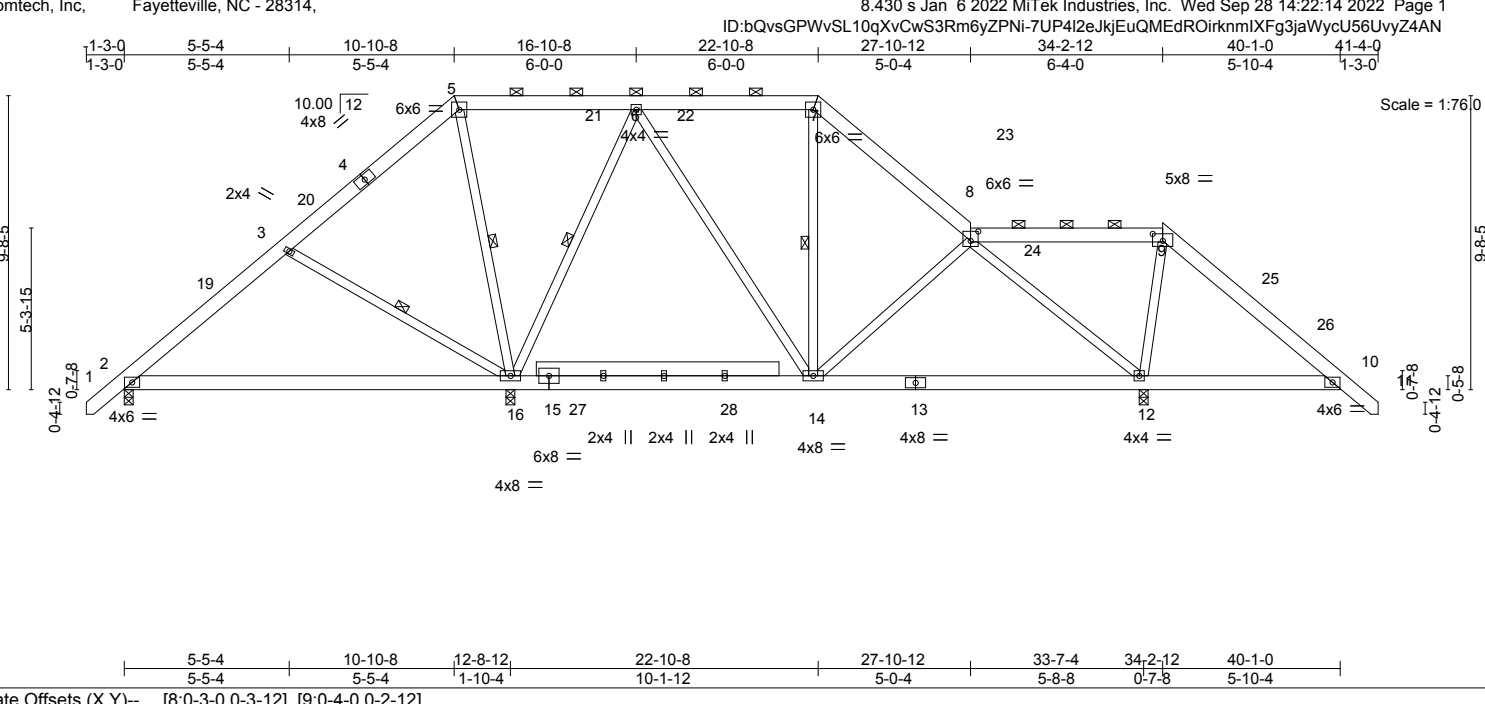
**REACTIONS.** (size) 2=0-3-8, 16=0-3-8, 12=0-3-8  
 Max Horz 2=241(LC 11)  
 Max Uplift 2=-67(LC 8), 16=-274(LC 9), 12=-142(LC 13)  
 Max Grav 2=476(LC 23), 16=1580(LC 2), 12=1450(LC 24)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-329/171, 3-5=-65/280, 6-7=-410/166, 7-8=-573/160, 9-10=-423/649  
 BOT CHORD 12-14=-2/452, 10-12=-465/501  
 WEBS 5-16=-393/106, 6-16=-799/167, 6-14=0/473, 8-12=-740/170, 9-12=-798/505, 3-16=-440/323

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-1-9 to 3-3-4, Interior(1) 3-3-4 to 10-11-8, Exterior(2) 10-11-8 to 15-4-5, Interior(1) 15-4-5 to 22-9-8, Exterior(2) 22-9-8 to 25-6-0, Interior(1) 25-6-0 to 31-10-0, Exterior(2) 31-10-0 to 36-2-12, Interior(1) 36-2-12 to 41-2-9 zone; cantilever right exposed; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 67 lb uplift at joint 2, 274 lb uplift at joint 16 and 142 lb uplift at joint 12.
  - 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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| LOADING (psf) | SPACING-             | CSI.     | DEFL.                         | PLATES         | GRIP     |
|---------------|----------------------|----------|-------------------------------|----------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.20  | in (loc) l/defl L/d           | MT20           | 244/190  |
| TCDL 10.0     | Plate Grip DOL 1.15  | BC 0.40  | Vert(LL) -0.15 14-16 >999 360 |                |          |
| BCLL 0.0 *    | Lumber DOL 1.15      | WB 0.88  | Vert(CT) -0.29 2-16 >518 240  |                |          |
| BCDL 10.0     | Rep Stress Incr YES  | Matrix-S | Horz(CT) 0.01 12 n/a n/a      |                |          |
|               | Code IRC2015/TPI2014 |          | Wind(LL) 0.25 2-16 >604 240   | Weight: 327 lb | FT = 20% |

**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 5-7, 8-9.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 10-12.  
 WEBS 1 Row at midpt 5-16, 6-16, 7-14, 3-16

**REACTIONS.** (size) 2=0-3-8, 16=0-3-8, 12=0-3-8  
 Max Horz 2=241(LC 11)  
 Max Uplift 2=-64(LC 9), 16=-245(LC 9), 12=-138(LC 13)  
 Max Grav 2=482(LC 23), 16=1479(LC 2), 12=1460(LC 24)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-338/169, 6-7=-394/165, 7-8=-507/113, 8-9=-242/396, 9-10=-392/523  
 BOT CHORD 2-16=-156/258, 12-14=0/321, 10-12=-379/442  
 WEBS 5-16=-390/106, 6-16=-712/163, 6-14=0/386, 8-12=-917/300, 9-12=-644/441, 3-16=-440/323

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-1-9 to 3-3-4, Interior(1) 3-3-4 to 10-11-8, Exterior(2) 10-11-8 to 15-4-5, Interior(1) 15-4-5 to 22-9-8, Exterior(2) 22-9-8 to 27-2-5, Interior(1) 27-2-5 to 34-2-12, Exterior(2) 34-2-12 to 38-7-9, Interior(1) 38-7-9 to 41-2-9 zone; cantilever right exposed; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 64 lb uplift at joint 2, 245 lb uplift at joint 16 and 138 lb uplift at joint 12.
  - 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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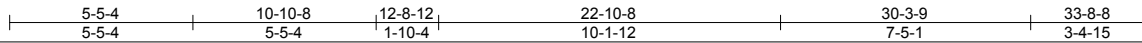
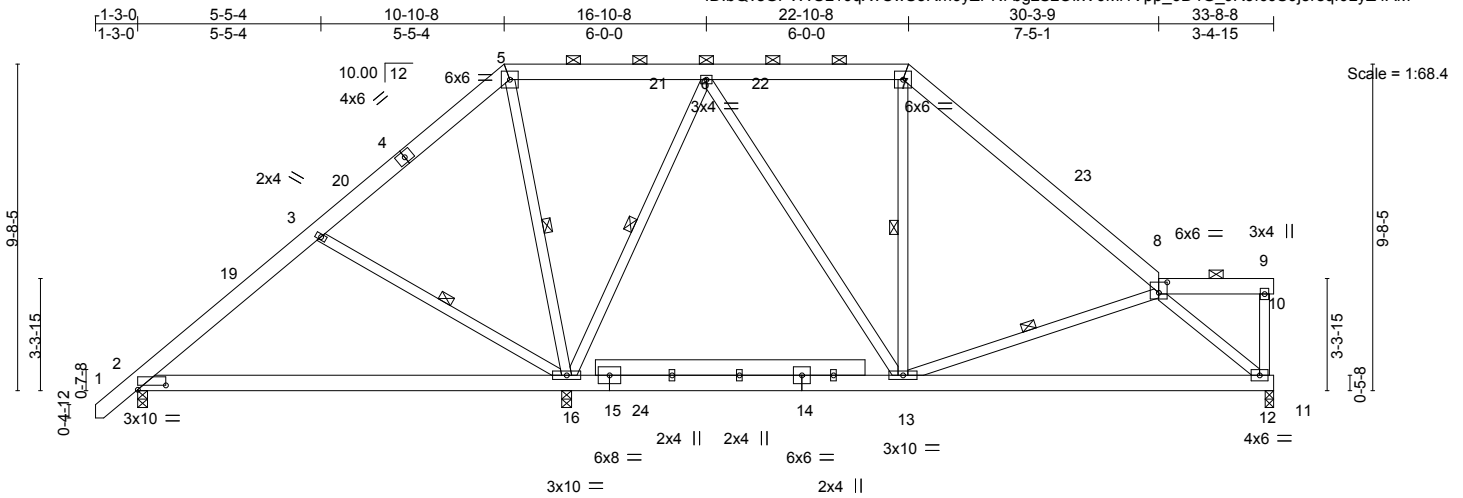


Plate Offsets (X,Y)-- [2:0-10-0,0-1-9], [8:0-3-0,0-3-12]

| 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 0.34  | Vert(LL) | -0.15 13-16 | >999   | 360 | MT20           | 244/190  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.40  | Vert(CT) | -0.30 2-16  | >510   | 240 |                |          |
| BCLL 0.0 *    | Rep Stress Incr      | YES   | WB 0.37  | Horz(CT) | 0.01 12     | n/a    | n/a |                |          |
| BCDL 10.0     | Code IRC2015/TPI2014 |       | Matrix-S | Wind(LL) | 0.27 2-16   | >557   | 240 | Weight: 284 lb | FT = 20% |

**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-7, 8-10.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 WEBS 1 Row at midpt 6-16, 7-13, 8-13, 5-16, 3-16

**REACTIONS.** (size) 12=0-3-0, 2=0-3-8, 16=0-3-8  
 Max Horz 2=230(LC 9)  
 Max Uplift 12=-44(LC 13), 2=-69(LC 9), 16=-220(LC 9)  
 Max Grav 12=785(LC 24), 2=495(LC 23), 16=1527(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-356/122, 6-7=-473/205, 7-8=-712/124  
 BOT CHORD 2-16=-169/258, 12-13=-172/696  
 WEBS 6-16=-807/238, 6-13=-48/512, 8-13=-347/242, 8-12=-908/249, 5-16=-374/147, 3-16=-440/329

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-1-9 to 3-3-4, Interior(1) 3-3-4 to 10-11-8, Exterior(2) 10-11-8 to 15-4-5, Interior(1) 15-4-5 to 22-9-8, Exterior(2) 22-9-8 to 27-2-5, Interior(1) 27-2-5 to 33-8-8 zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 44 lb uplift at joint 12, 69 lb uplift at joint 2 and 220 lb uplift at joint 16.
- 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



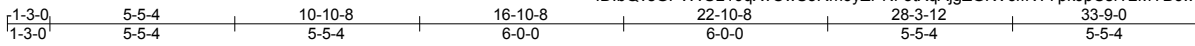
September 29, 2022

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the







Scale = 1:67.8

|                       |                                   |
|-----------------------|-----------------------------------|
| Plate Offsets (X,Y)-- | [2:0-10-0,0-1-9], [9:0-3-4,0-1-8] |
|-----------------------|-----------------------------------|

|                      |                       |             |                                  |                |             |
|----------------------|-----------------------|-------------|----------------------------------|----------------|-------------|
| <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 0.17     | Vert(LL) -0.17 10-13 >999 360    | MT20           | 244/190     |
| TCDL 10.0            | Lumber DOL 1.15       | BC 0.40     | Vert(CT) -0.30 2-13 >509 240     |                |             |
| BCLL 0.0 *           | Rep Stress Incr YES   | WB 0.37     | Horz(CT) 0.01 9 n/a n/a          |                |             |
| BCDL 10.0            | Code IRC2015/TPI2014  | Matrix-S    | Wind(LL) 0.27 2-13 >556 240      | Weight: 256 lb | FT = 20%    |

|                       |                                                                                                                      |
|-----------------------|----------------------------------------------------------------------------------------------------------------------|
| <b>LUMBER-</b>        | <b>BRACING-</b>                                                                                                      |
| TOP CHORD 2x6 SP No.1 | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 5-7. |
| BOT CHORD 2x6 SP No.1 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.                                                       |
| WEBS 2x4 SP No.2      | WEBS 1 Row at midpt 5-13, 6-13, 3-13                                                                                 |

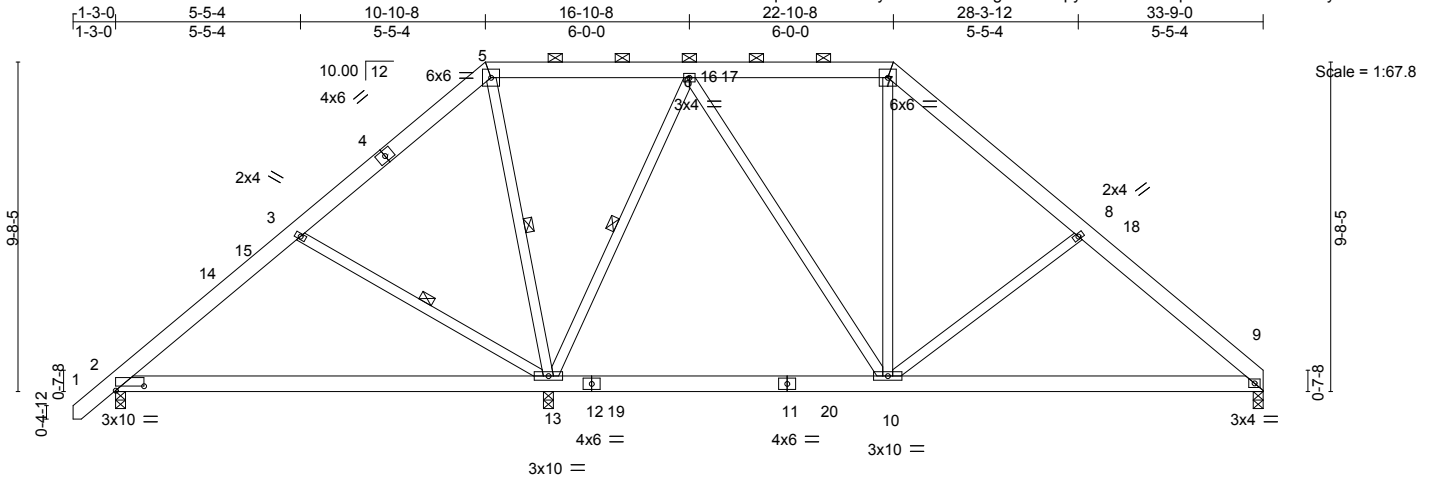
**REACTIONS.** (size) 9=0-3-8, 2=0-3-8, 13=0-3-8  
 Max Horz 2=235(LC 9)  
 Max Uplift 9=-50(LC 13), 2=-74(LC 9), 13=-203(LC 9)  
 Max Grav 9=785(LC 24), 2=499(LC 23), 13=1546(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-362/156, 6-7=-499/222, 7-8=-702/200, 8-9=-934/210  
 BOT CHORD 2-13=-179/279, 10-13=-68/254, 9-10=-65/665  
 WEBS 5-13=-364/114, 6-13=-815/234, 6-10=-23/514, 8-10=-408/264, 3-13=-440/329

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-1-9 to 3-3-4, Interior(1) 3-3-4 to 10-11-8, Exterior(2) 10-11-8 to 15-4-5, Interior(1) 15-4-5 to 22-9-8, Exterior(2) 22-9-8 to 27-2-5, Interior(1) 27-2-5 to 33-7-4 zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 50 lb uplift at joint 9, 74 lb uplift at joint 2 and 203 lb uplift at joint 13.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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Scale = 1:67.8

|                       |                  |
|-----------------------|------------------|
| Plate Offsets (X,Y)-- | [2:0-10-0,0-1-9] |
|-----------------------|------------------|

|                      |                      |       |             |              |          |        |      |                |             |
|----------------------|----------------------|-------|-------------|--------------|----------|--------|------|----------------|-------------|
| <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 0.17     | Vert(LL)     | -0.17    | 10-13  | >999 | MT20           | 244/190     |
| TCDL 10.0            | Lumber DOL           | 1.15  | BC 0.40     | Vert(CT)     | -0.30    | 2-13   | >509 |                |             |
| BCLL 0.0 *           | Rep Stress Incr      | YES   | WB 0.37     | Horz(CT)     | 0.01     | 9      | n/a  |                |             |
| BCDL 10.0            | Code IRC2015/TPI2014 |       | Matrix-S    | Wind(LL)     | 0.27     | 2-13   | >556 | Weight: 257 lb | FT = 20%    |

|                       |                                                                                                                      |
|-----------------------|----------------------------------------------------------------------------------------------------------------------|
| <b>LUMBER-</b>        | <b>BRACING-</b>                                                                                                      |
| TOP CHORD 2x6 SP No.1 | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 5-7. |
| BOT CHORD 2x6 SP No.1 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.                                                       |
| WEBS 2x4 SP No.2      | WEBS 1 Row at midpt 5-13, 6-13, 3-13                                                                                 |

**REACTIONS.** (size) 9=0-3-8, 2=0-3-8, 13=0-3-8  
 Max Horz 2=235(LC 9)  
 Max Uplift 9=-50(LC 13), 2=-74(LC 9), 13=-203(LC 9)  
 Max Grav 9=785(LC 24), 2=499(LC 23), 13=1546(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-362/158, 6-7=-499/232, 7-8=-702/204, 8-9=-934/215  
 BOT CHORD 2-13=-179/279, 10-13=-68/254, 9-10=-78/665  
 WEBS 5-13=-364/118, 6-13=-815/252, 6-10=-27/514, 8-10=-408/281, 3-13=-440/347

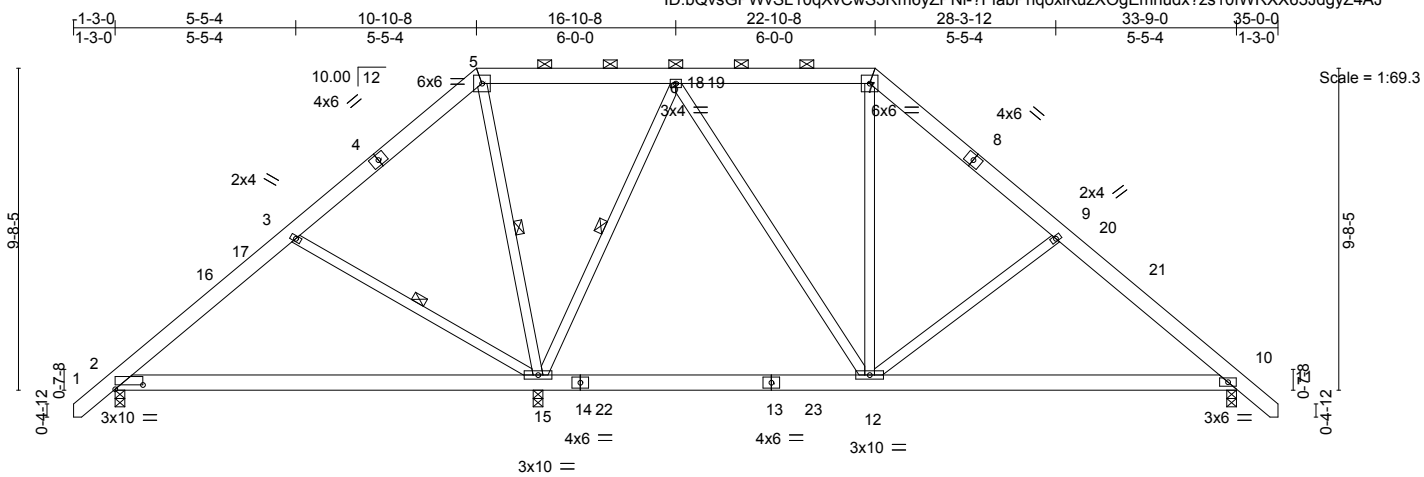
- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-1-9 to 3-3-4, Interior(1) 3-3-4 to 10-11-8, Exterior(2) 10-11-8 to 17-2-3, Interior(1) 17-2-3 to 22-9-8, Exterior(2) 22-9-8 to 29-0-3, Interior(1) 29-0-3 to 33-7-4 zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 50 lb uplift at joint 9, 74 lb uplift at joint 2 and 203 lb uplift at joint 13.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the





|                       |                |
|-----------------------|----------------|
| Plate Offsets (X,Y)-- | 2:0-10-0,0-1-9 |
|-----------------------|----------------|

|                      |                       |             |                                  |                |             |
|----------------------|-----------------------|-------------|----------------------------------|----------------|-------------|
| <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 0.17     | Vert(LL) -0.17 12-15 >999 360    | MT20           | 244/190     |
| TCDL 10.0            | Lumber DOL 1.15       | BC 0.40     | Vert(CT) -0.30 2-15 >510 240     |                |             |
| BCLL 0.0 *           | Rep Stress Incr YES   | WB 0.37     | Horz(CT) 0.01 10 n/a n/a         |                |             |
| BCDL 10.0            | Code IRC2015/TPI2014  | Matrix-S    | Wind(LL) 0.27 2-15 >557 240      | Weight: 261 lb | FT = 20%    |

|                       |                                                                                                                      |
|-----------------------|----------------------------------------------------------------------------------------------------------------------|
| <b>LUMBER-</b>        | <b>BRACING-</b>                                                                                                      |
| TOP CHORD 2x6 SP No.1 | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 5-7. |
| BOT CHORD 2x6 SP No.1 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.                                                       |
| WEBS 2x4 SP No.2      | WEBS 1 Row at midpt 5-15, 6-15, 3-15                                                                                 |

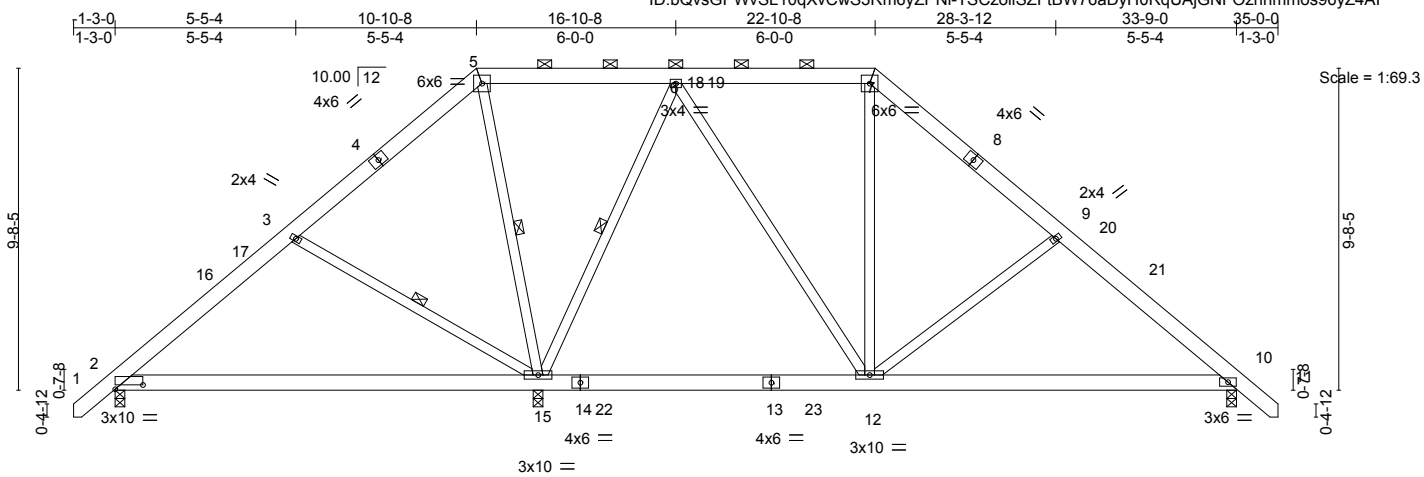
**REACTIONS.** (size) 2=0-3-8, 15=0-3-8, 10=0-3-8  
 Max Horz 2=241(LC 11)  
 Max Uplift 2=-77(LC 9), 15=-197(LC 9), 10=-72(LC 13)  
 Max Grav 2=499(LC 23), 15=1543(LC 2), 10=865(LC 24)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-362/168, 6-7=-499/236, 7-9=-699/205, 9-10=-929/217  
 BOT CHORD 2-15=-171/286, 12-15=-87/266, 10-12=-51/658  
 WEBS 5-15=-364/103, 6-15=-811/246, 6-12=-21/510, 9-12=-413/275, 3-15=-440/347

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-1-9 to 3-3-4, Interior(1) 3-3-4 to 10-11-8, Exterior(2) 10-11-8 to 17-2-3, Interior(1) 17-2-3 to 22-9-8, Exterior(2) 22-9-8 to 29-0-3, Interior(1) 29-0-3 to 34-10-9 zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 77 lb uplift at joint 2, 197 lb uplift at joint 15 and 72 lb uplift at joint 10.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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|                       |                |
|-----------------------|----------------|
| Plate Offsets (X,Y)-- | 2:0-10-0,0-1-9 |
|-----------------------|----------------|

|                      |                       |             |                                  |                |             |
|----------------------|-----------------------|-------------|----------------------------------|----------------|-------------|
| <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 0.17     | Vert(LL) -0.17 12-15 >999 360    | MT20           | 244/190     |
| TCDL 10.0            | Lumber DOL 1.15       | BC 0.40     | Vert(CT) -0.30 2-15 >510 240     |                |             |
| BCLL 0.0 *           | Rep Stress Incr YES   | WB 0.37     | Horz(CT) 0.01 10 n/a n/a         |                |             |
| BCDL 10.0            | Code IRC2015/TPI2014  | Matrix-S    | Wind(LL) 0.27 2-15 >557 240      | Weight: 261 lb | FT = 20%    |

|                       |                                                                                                                      |
|-----------------------|----------------------------------------------------------------------------------------------------------------------|
| <b>LUMBER-</b>        | <b>BRACING-</b>                                                                                                      |
| TOP CHORD 2x6 SP No.1 | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 5-7. |
| BOT CHORD 2x6 SP No.1 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.                                                       |
| WEBS 2x4 SP No.2      | WEBS 1 Row at midpt 5-15, 6-15, 3-15                                                                                 |

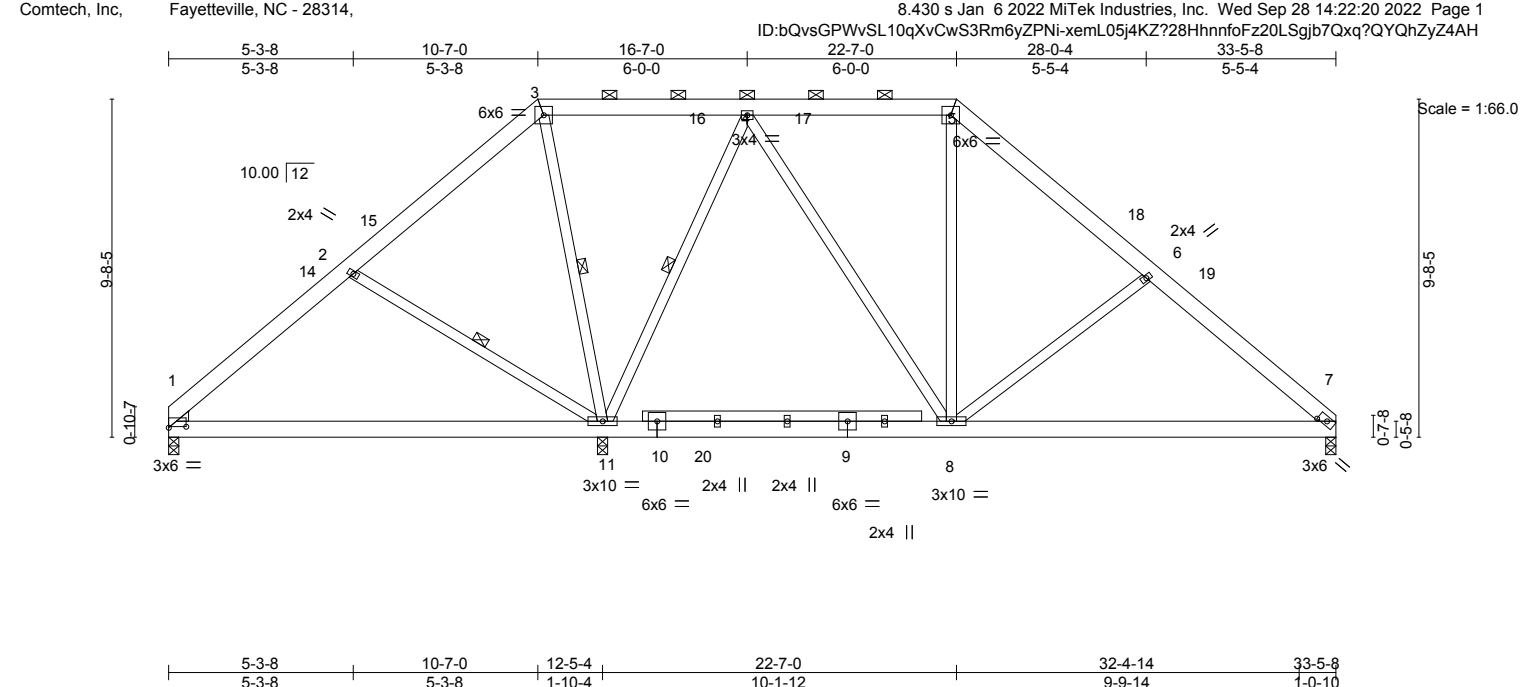
**REACTIONS.** (size) 2=0-3-8, 15=0-3-8, 10=0-3-8  
 Max Horz 2=241(LC 11)  
 Max Uplift 2=-77(LC 9), 15=-197(LC 9), 10=-72(LC 13)  
 Max Grav 2=499(LC 23), 15=1543(LC 2), 10=865(LC 24)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-362/168, 6-7=-499/236, 7-9=-699/205, 9-10=-929/217  
 BOT CHORD 2-15=-171/286, 12-15=-87/266, 10-12=-51/658  
 WEBS 5-15=-364/103, 6-15=-811/246, 6-12=-21/510, 9-12=-413/275, 3-15=-440/347

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-1-9 to 3-3-4, Interior(1) 3-3-4 to 10-11-8, Exterior(2) 10-11-8 to 17-2-3, Interior(1) 17-2-3 to 22-9-8, Exterior(2) 22-9-8 to 29-0-3, Interior(1) 29-0-3 to 34-10-9 zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 77 lb uplift at joint 2, 197 lb uplift at joint 15 and 72 lb uplift at joint 10.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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|                       |                                  |
|-----------------------|----------------------------------|
| Plate Offsets (X,Y)-- | [1:0-6-0,0-0-6], [7:0-3-4,0-1-8] |
|-----------------------|----------------------------------|

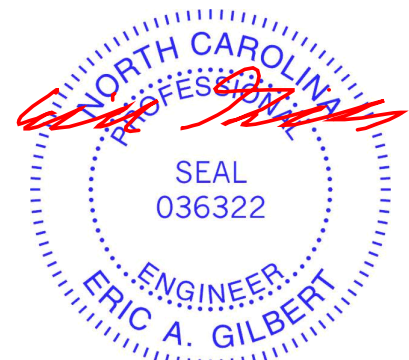
| LOADING (psf) | SPACING-             | 2-0-0 | CSI.     | DEFL.    | in (loc) | l/defl | L/d  | PLATES         | GRIP     |
|---------------|----------------------|-------|----------|----------|----------|--------|------|----------------|----------|
| TCLL 20.0     | Plate Grip DOL       | 1.15  | TC 0.17  | Vert(LL) | -0.16    | 8-11   | >999 | MT20           | 244/190  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.39  | Vert(CT) | -0.28    | 1-11   | >521 |                |          |
| BCLL 0.0 *    | Rep Stress Incr      | YES   | WB 0.37  | Horz(CT) | 0.01     | 7      | n/a  |                |          |
| BCDL 10.0     | Code IRC2015/TP12014 |       | Matrix-S | Wind(LL) | 0.27     | 1-11   | >557 | Weight: 264 lb | FT = 20% |

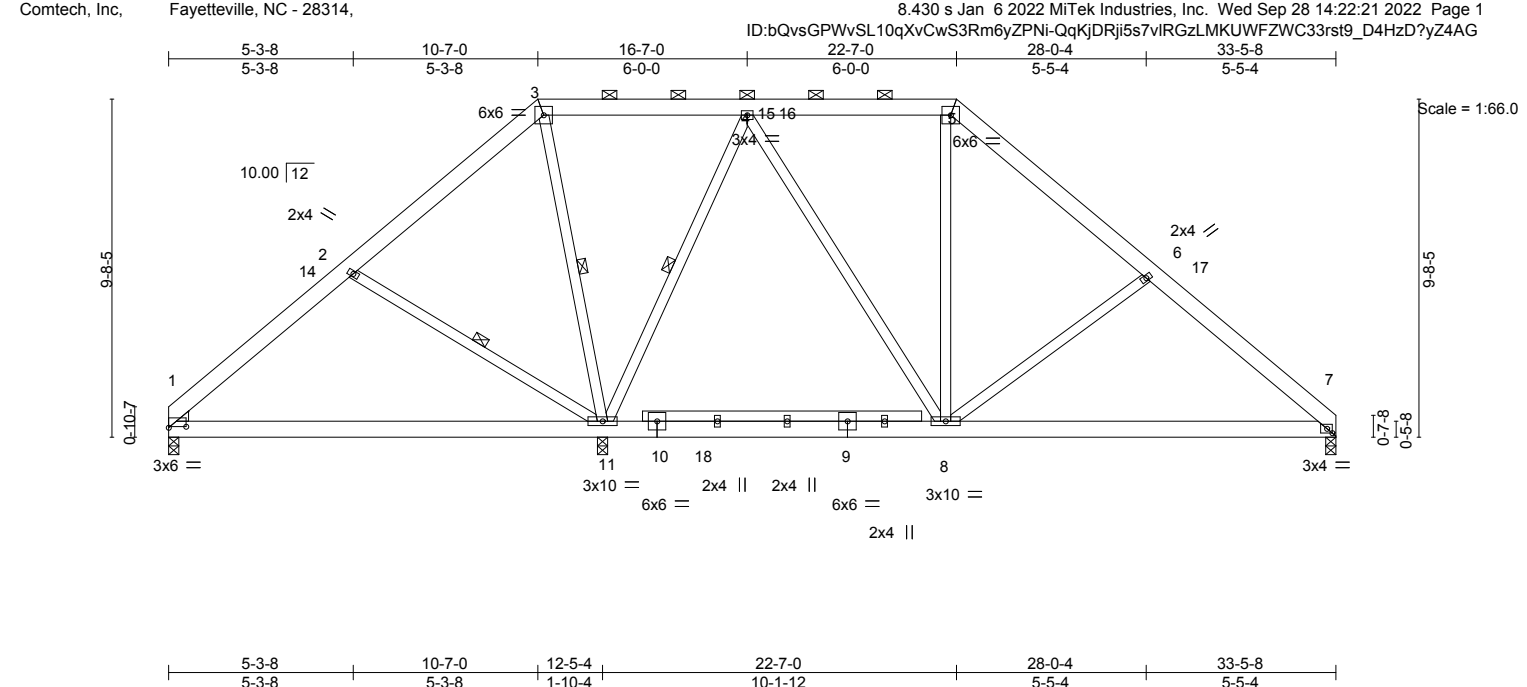
| LUMBER-                                              | BRACING-                                                                                                             |
|------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| TOP CHORD 2x6 SP No.1                                | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 3-5. |
| BOT CHORD 2x6 SP No.1 *Except*<br>12-13: 2x4 SP No.1 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.                                                       |
| WEBS 2x4 SP No.2                                     | WEBS 1 Row at midpt 3-11, 4-11, 2-11                                                                                 |
| WEDGE<br>Left: 2x4 SP No.3                           |                                                                                                                      |

**REACTIONS.** (size) 1=0-3-8, 7=0-3-8, 11=0-3-8  
 Max Horz 1=221(LC 9)  
 Max Uplift 1=66(LC 9), 7=50(LC 13), 11=198(LC 9)  
 Max Grav 1=411(LC 23), 7=787(LC 24), 11=1515(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-352/153, 4-5=-503/224, 5-6=-697/205, 6-7=-937/214  
 BOT CHORD 1-11=-176/275, 8-11=-61/257, 7-8=-66/667  
 WEBS 3-11=-354/107, 4-11=-812/235, 4-8=-22/502, 6-8=-407/264, 2-11=-418/316

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 10-8-0, Exterior(2) 10-8-0 to 15-0-13, Interior(1) 15-0-13 to 22-6-0, Exterior(2) 22-6-0 to 26-10-13, Interior(1) 26-10-13 to 33-3-12 zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 66 lb uplift at joint 1, 50 lb uplift at joint 7 and 198 lb uplift at joint 11.
  - 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.





| LOADING (psf) | SPACING-             | CSI.     | DEFL.                        | PLATES         | GRIP     |
|---------------|----------------------|----------|------------------------------|----------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.17  | in (loc) l/defl L/d          | MT20           | 244/190  |
| TCDL 10.0     | Plate Grip DOL 1.15  | BC 0.39  | Vert(LL) -0.15 8-11 >999 360 |                |          |
| BCLL 0.0 *    | Lumber DOL 1.15      | WB 0.38  | Vert(CT) -0.29 1-11 >516 240 |                |          |
| BCDL 10.0     | Rep Stress Incr YES  | Matrix-S | Horz(CT) 0.01 7 n/a n/a      |                |          |
|               | Code IRC2015/TPI2014 |          | Wind(LL) 0.27 1-11 >558 240  | Weight: 264 lb | FT = 20% |

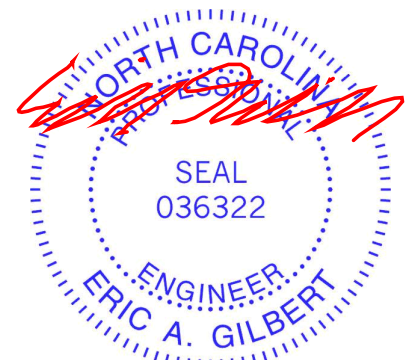
**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1 \*Except\*  
 12-13: 2x4 SP No.1  
 WEBS 2x4 SP No.2  
 WEDGE  
 Left: 2x4 SP No.3

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 3-5.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 WEBS 1 Row at midpt 3-11, 4-11, 2-11

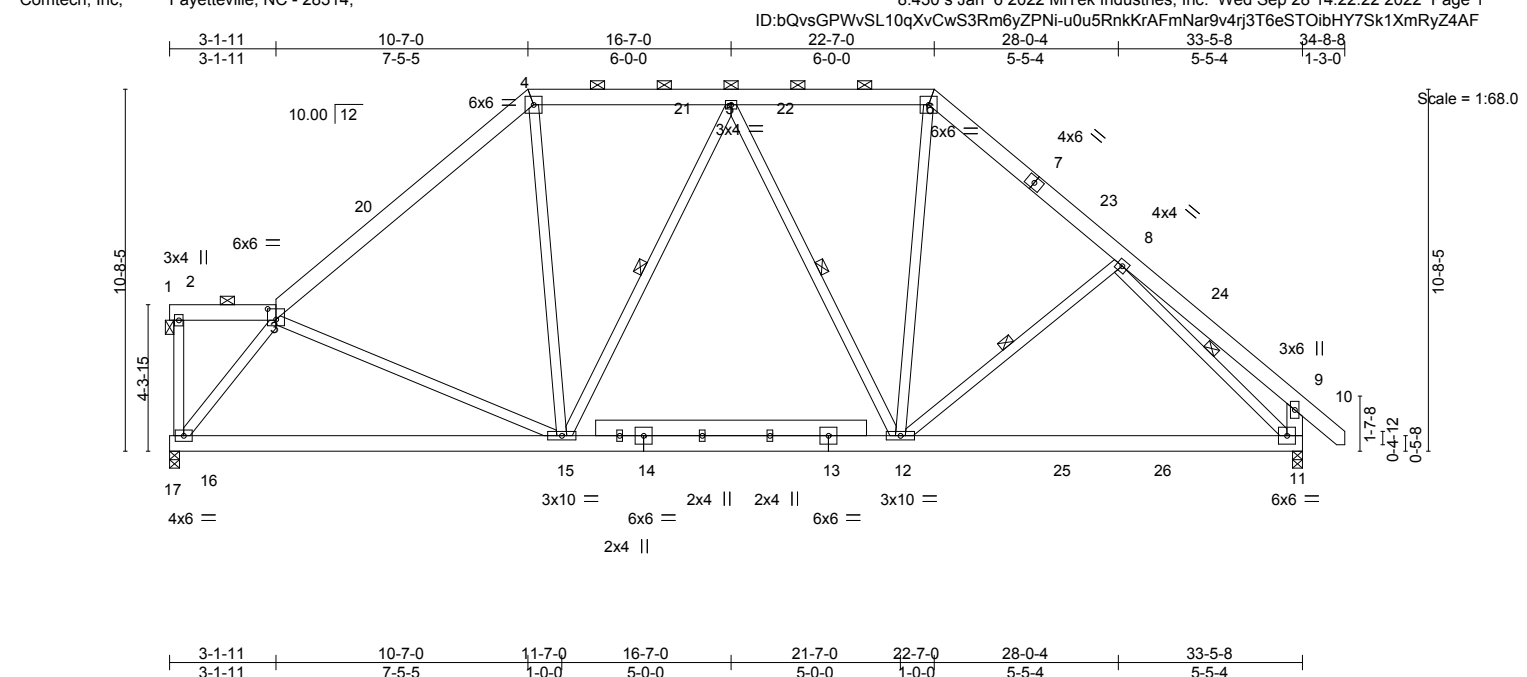
**REACTIONS.** (size) 1=0-3-8, 7=0-3-8, 11=0-3-8  
 Max Horz 1=221(LC 11)  
 Max Uplift 1=65(LC 9), 7=50(LC 13), 11=198(LC 9)  
 Max Grav 1=411(LC 23), 7=787(LC 24), 11=1514(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-352/153, 4-5=-498/231, 5-6=-691/205, 6-7=-935/219  
 BOT CHORD 1-11=-176/276, 8-11=-61/258, 7-8=-79/666  
 WEBS 3-11=-355/110, 4-11=-814/250, 4-8=-24/503, 6-8=-410/282, 2-11=-418/332

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 10-8-0, Exterior(2) 10-8-0 to 16-10-11, Interior(1) 16-10-11 to 22-6-0, Exterior(2) 22-6-0 to 28-8-11, Interior(1) 28-8-11 to 33-3-12 zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 65 lb uplift at joint 1, 50 lb uplift at joint 7 and 198 lb uplift at joint 11.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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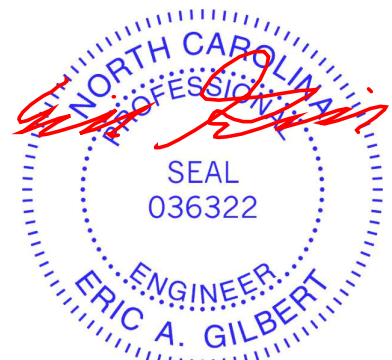
| LOADING (psf) | SPACING-             | CSI.     | DEFL.                         | PLATES         | GRIP     |
|---------------|----------------------|----------|-------------------------------|----------------|----------|
| TCLL 20.0     | Plate Grip DOL 1.15  | TC 0.33  | Vert(LL) -0.14 12-15 >999 360 | MT20           | 244/190  |
| TCDL 10.0     | Lumber DOL 1.15      | BC 0.48  | Vert(CT) -0.23 15-16 >999 240 |                |          |
| BCLL 0.0 *    | Rep Stress Incr YES  | WB 0.56  | Horz(CT) 0.03 11 n/a n/a      |                |          |
| BCDL 10.0     | Code IRC2015/TPI2014 | Matrix-S | Wind(LL) 0.02 12-15 >999 240  | Weight: 305 lb | FT = 20% |

| LUMBER-                                        | BRACING-                                                                                                                                     |
|------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| TOP CHORD 2x6 SP No.1                          | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 1-3, 4-6. |
| BOT CHORD 2x6 SP No.1                          | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.                                                                               |
| WEBS 2x4 SP No.2 *Except*<br>9-11: 2x6 SP No.1 | WEBS 1 Row at midpt 5-15, 5-12, 8-12, 8-11                                                                                                   |

**REACTIONS.** (size) 16=0-3-8, 11=0-3-8  
 Max Horz 16=-255(LC 8)  
 Max Uplift 16=-38(LC 12), 11=-48(LC 13)  
 Max Grav 16=1328(LC 1), 11=1457(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 3-4=-1409/373, 4-5=-1033/389, 5-6=-1079/395, 6-8=-1426/409, 8-9=-526/174, 9-11=-522/250  
 BOT CHORD 15-16=-170/982, 12-15=-62/1129, 11-12=-136/1054  
 WEBS 3-16=-1449/450, 5-15=-301/169, 5-12=-282/162, 4-15=-15/520, 6-12=-81/570, 8-11=-1131/237

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-0-0 to 3-1-11, Interior(1) 3-1-11 to 10-8-0, Exterior(2) 10-8-0 to 15-0-13, Interior(1) 15-0-13 to 22-6-0, Exterior(2) 22-6-0 to 26-10-13, Interior(1) 26-10-13 to 34-7-1 zone; end vertical right exposed; C-C for members and forces & MWFRS for reactions shown; 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 38 lb uplift at joint 16 and 48 lb uplift at joint 11.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

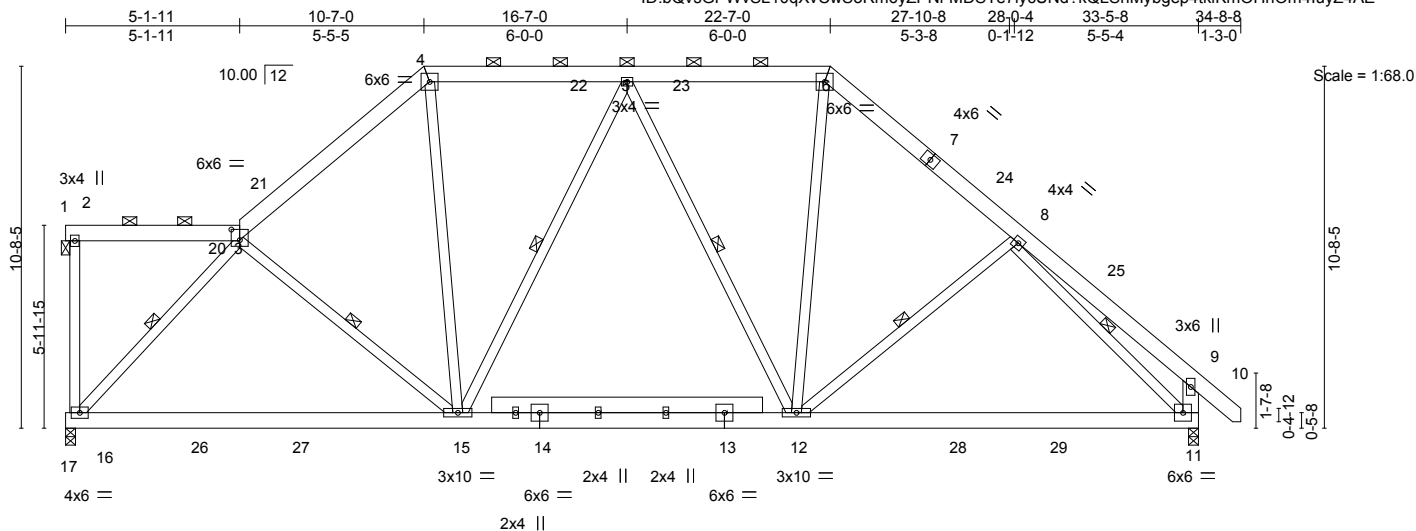


September 29, 2022

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Sep 28 14:22:23 2022 Page 1

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|                       |                  |
|-----------------------|------------------|
| Plate Offsets (X,Y)-- | [3:0-3-0,0-3-12] |
|-----------------------|------------------|

| LOADING (psf) | SPACING-             | CSI.     | DEFL.                         | PLATES         | GRIP     |
|---------------|----------------------|----------|-------------------------------|----------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.28  | in (loc) l/defl L/d           | MT20           | 244/190  |
| TCDL 10.0     | Plate Grip DOL 1.15  | BC 0.49  | Vert(LL) -0.12 15-16 >999 360 |                |          |
| BCLL 0.0 *    | Lumber DOL 1.15      | WB 0.39  | Vert(CT) -0.24 15-16 >999 240 |                |          |
| BCDL 10.0     | Rep Stress Incr YES  | Matrix-S | Horz(CT) 0.03 11 n/a n/a      |                |          |
|               | Code IRC2015/TPI2014 |          | Wind(LL) 0.02 12-15 >999 240  | Weight: 308 lb | FT = 20% |

| LUMBER-                                        | BRACING-                                                                                                                                     |
|------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| TOP CHORD 2x6 SP No.1                          | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 1-3, 4-6. |
| BOT CHORD 2x6 SP No.1                          | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.                                                                               |
| WEBS 2x4 SP No.2 *Except*<br>9-11: 2x6 SP No.1 | WEBS 1 Row at midpt 5-15, 3-16, 5-12, 8-12, 8-11, 3-15                                                                                       |

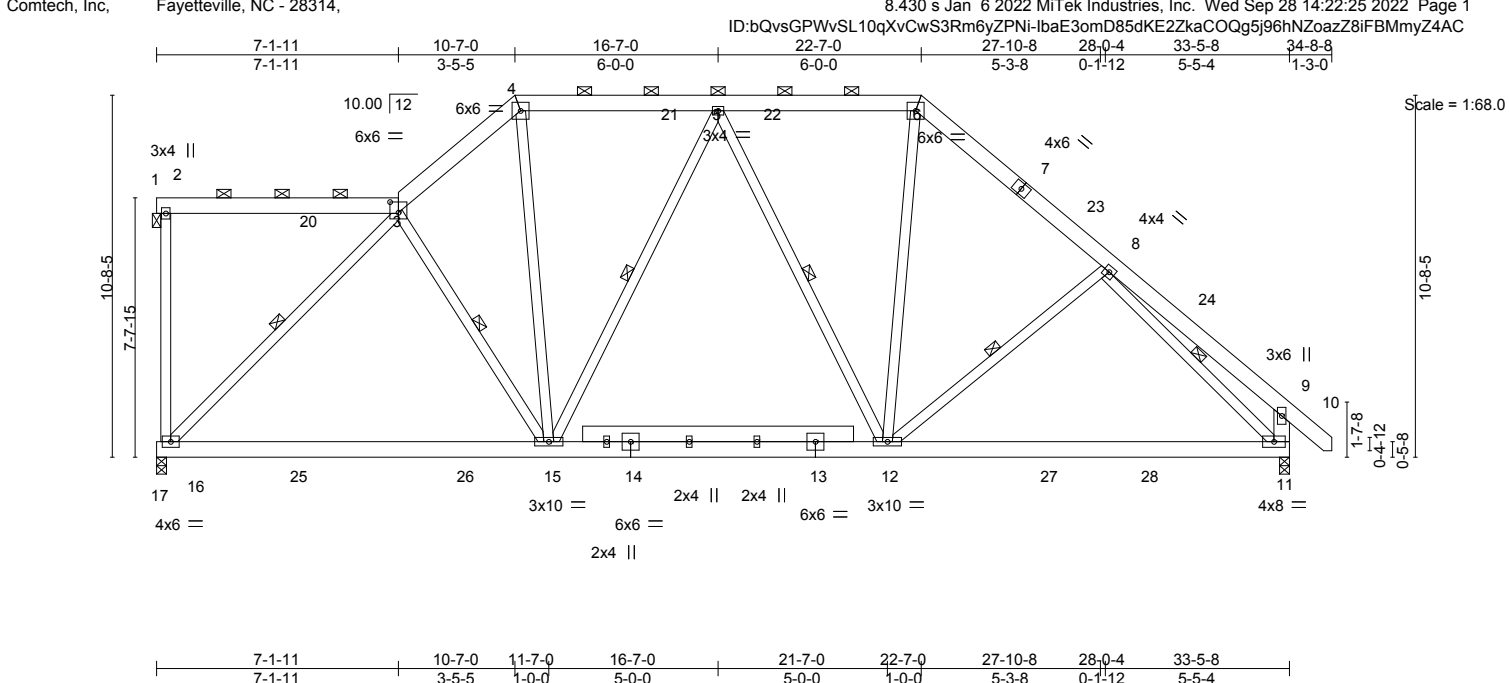
**REACTIONS.** (size) 16=0-3-8, 11=0-3-8  
 Max Horz 16=-253(LC 8)  
 Max Uplift 16=-46(LC 12), 11=-43(LC 13)  
 Max Grav 16=1422(LC 2), 11=1478(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 3-4=-1435/375, 4-5=-1087/368, 5-6=-1099/387, 6-8=-1450/399, 8-9=-537/172, 9-11=-530/249  
 BOT CHORD 15-16=-118/1062, 12-15=-53/1169, 11-12=-129/1072  
 WEBS 5-15=-304/156, 3-16=-1511/419, 5-12=-285/157, 8-12=-253/220, 4-15=-57/586, 6-12=-77/588, 8-11=-1136/230

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-0-0 to 4-4-13, Interior(1) 4-4-13 to 10-8-0, Exterior(2) 10-8-0 to 15-0-13, Interior(1) 15-0-13 to 22-6-0, Exterior(2) 22-6-0 to 26-10-13, Interior(1) 26-10-13 to 34-7-1 zone; end vertical right exposed; C-C for members and forces & MWFRS for reactions shown; 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 46 lb uplift at joint 16 and 43 lb uplift at joint 11.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.







| 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 0.31  | Vert(LL) | -0.21    | 15-16  | >999 | MT20           | 244/190  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.59  | Vert(CT) | -0.34    | 15-16  | >999 |                |          |
| BCLL 0.0 *    | Rep Stress Incr      | YES   | WB 0.71  | Horz(CT) | 0.03     | 11     | n/a  |                |          |
| BCDL 10.0     | Code IRC2015/TPI2014 |       | Matrix-S | Wind(LL) | 0.03     | 12-15  | >999 |                |          |
|               |                      |       |          |          |          |        |      | Weight: 313 lb | FT = 20% |

**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2 \*Except\*  
 9-11: 2x6 SP No.1

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 1-3, 4-6.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 WEBS 1 Row at midpt 5-15, 3-16, 5-12, 8-12, 8-11, 3-15

**REACTIONS.** (size) 16=0-3-8, 11=0-3-8  
 Max Horz 16=-251(LC 8)  
 Max Uplift 16=-74(LC 8), 11=-36(LC 13)  
 Max Grav 16=1487(LC 2), 11=1499(LC 2)

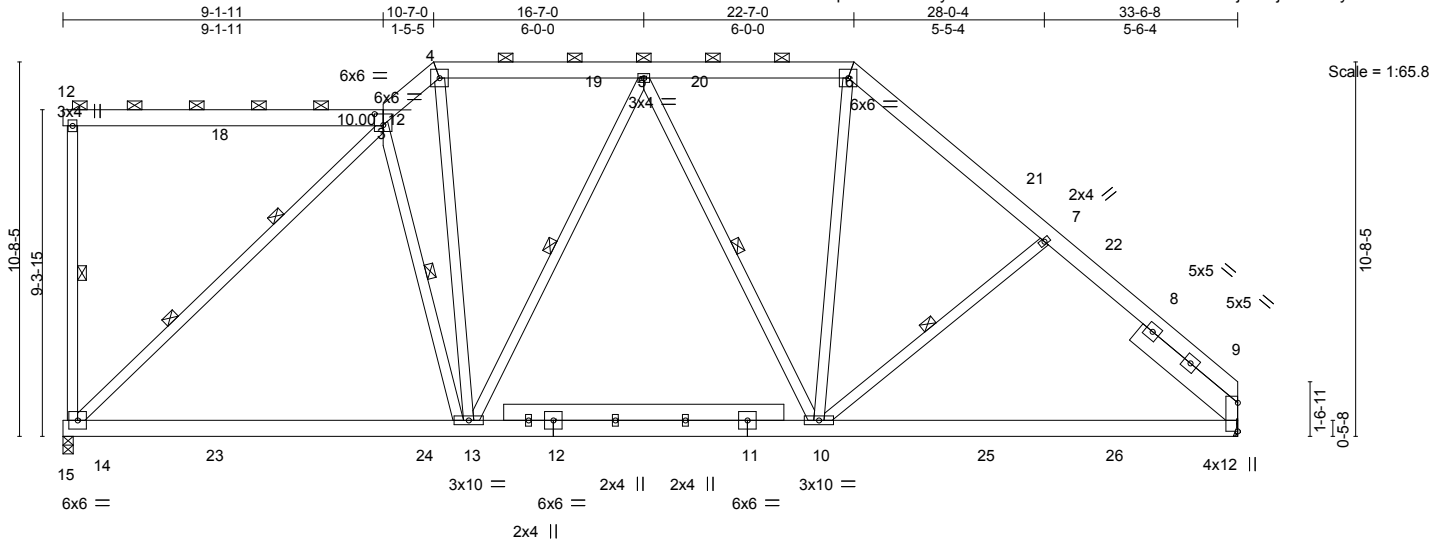
**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 3-4=-1468/376, 4-5=-1140/337, 5-6=-1122/375, 6-8=-1477/381, 8-9=-547/169, 9-11=-536/246  
 BOT CHORD 15-16=-74/1113, 12-15=-40/1208, 11-12=-118/1090  
 WEBS 5-15=-304/151, 3-16=-1567/406, 5-12=-286/148, 8-12=-257/222, 4-15=-98/691, 6-12=-68/606, 8-11=-1153/218

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-0-0 to 4-4-13, Interior(1) 4-4-13 to 10-8-0, Exterior(2) 10-8-0 to 15-0-13, Interior(1) 15-0-13 to 22-6-0, Exterior(2) 22-6-0 to 26-10-13, Interior(1) 26-10-13 to 34-7-1 zone; end vertical right exposed; C-C for members and forces & MWFRS for reactions shown; 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 74 lb uplift at joint 16 and 36 lb uplift at joint 11.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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

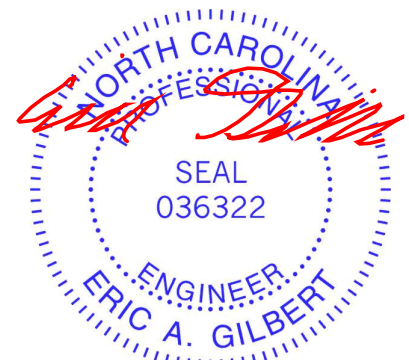
| LOADING (psf) | SPACING-             | 2-0-0 | CSI.     | DEFL.    | in (loc) | l/defl | L/d  | PLATES         | GRIP     |
|---------------|----------------------|-------|----------|----------|----------|--------|------|----------------|----------|
| TCLL 20.0     | Plate Grip DOL       | 1.15  | TC 0.42  | Vert(LL) | -0.24    | 13-14  | >999 | MT20           | 244/190  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.63  | Vert(CT) | -0.37    | 13-14  | >999 |                |          |
| BCLL 0.0 *    | Rep Stress Incr      | YES   | WB 0.86  | Horz(CT) | 0.04     | 9      | n/a  |                |          |
| BCDL 10.0     | Code IRC2015/TPI2014 |       | Matrix-S | Wind(LL) | 0.03     | 10-13  | >999 | Weight: 315 lb | FT = 20% |

| LUMBER-                         | BRACING-                                                                                                                                     |
|---------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| TOP CHORD 2x6 SP No.1           | TOP CHORD Structural wood sheathing directly applied or 5-7-2 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 1-3, 4-6. |
| BOT CHORD 2x6 SP No.1           | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.                                                                               |
| WEBS 2x4 SP No.2                | WEBS 1 Row at midpt 2-14, 3-13, 5-13, 5-10, 7-10                                                                                             |
| SLIDER Right 2x8 SP No.1 3-10-2 | 2 Rows at 1/3 pts 3-14                                                                                                                       |

**REACTIONS.** (size) 14=0-3-8, 9=Mechanical  
 Max Horz 14=-305(LC 13)  
 Max Uplift 14=-125(LC 8), 9=-11(LC 13)  
 Max Grav 14=1541(LC 2), 9=1483(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-14=-256/136, 3-4=-1532/394, 4-5=-1199/312, 5-6=-1184/364, 6-7=-1525/367, 7-9=-1739/366  
 BOT CHORD 13-14=-32/1195, 10-13=-20/1273, 9-10=-132/1173  
 WEBS 3-14=-1617/407, 5-13=-313/167, 5-10=-270/139, 7-10=-287/230, 4-13=-169/827, 6-10=-58/632

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-0-0 to 4-4-13, Interior(1) 4-4-13 to 10-8-0, Exterior(2) 10-8-0 to 15-0-13, Interior(1) 15-0-13 to 22-6-0, Exterior(2) 22-6-0 to 26-10-13, Interior(1) 26-10-13 to 33-6-8 zone; C-C for members and forces & MWFRS for reactions shown; 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, 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 125 lb uplift at joint 14 and 11 lb uplift at joint 9.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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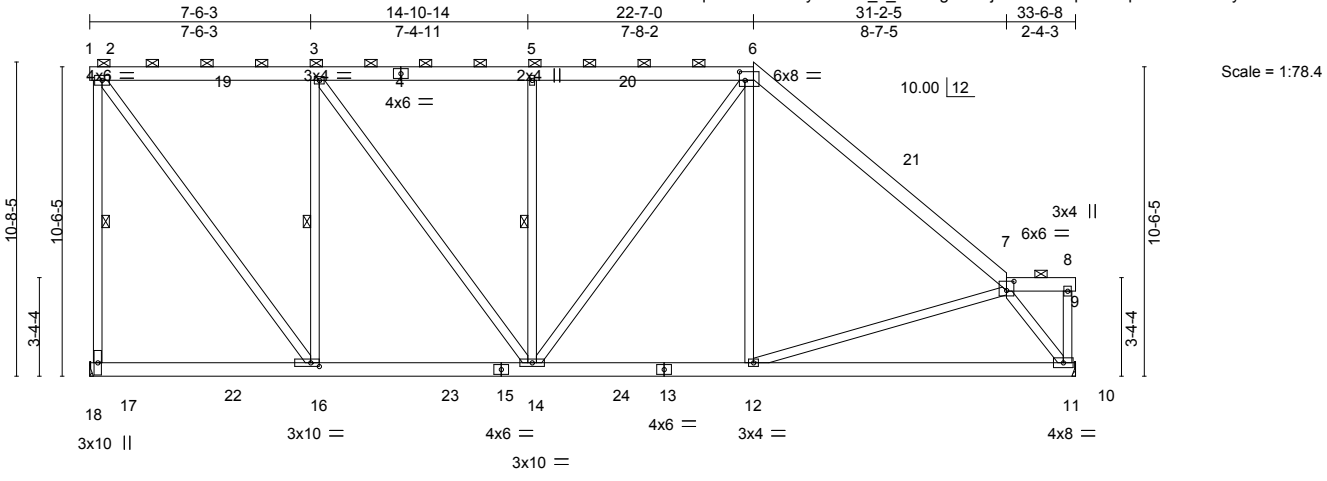


Plate Offsets (X,Y)-- [6:0-2-4,0-3-8], [7:0-3-0,0-3-12], [16:0-3-8,0-1-8]

| 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 0.65  | Vert(LL) | -0.10    | 11-12  | >999 | MT20           | 244/190  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.35  | Vert(CT) | -0.20    | 11-12  | >999 |                |          |
| BCLL 0.0 *    | Rep Stress Incr      | YES   | WB 0.96  | Horz(CT) | 0.02     | 11     | n/a  |                |          |
| BCDL 10.0     | Code IRC2015/TPI2014 |       | Matrix-S | Wind(LL) | 0.03     | 14     | >999 | Weight: 296 lb | FT = 20% |

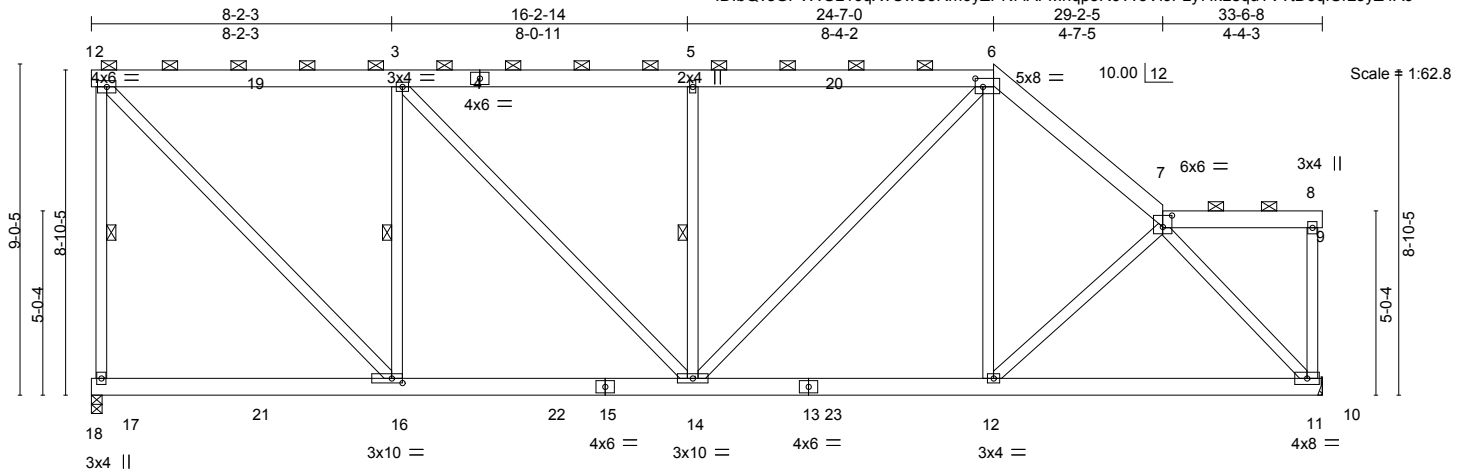
| LUMBER-               | BRACING-                                                                                                                                     |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| TOP CHORD 2x6 SP No.1 | TOP CHORD Structural wood sheathing directly applied or 5-8-3 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 1-6, 7-9. |
| BOT CHORD 2x6 SP No.1 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.                                                                               |
| WEBS 2x4 SP No.2      | WEBS 1 Row at midpt 2-17, 3-16, 5-14                                                                                                         |

**REACTIONS.** (size) 17=Mechanical, 11=Mechanical  
 Max Horz 17=-234(LC 13)  
 Max Uplift 17=-157(LC 8), 11=-15(LC 8)  
 Max Grav 17=1576(LC 2), 11=1360(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-17=-1388/392, 2-3=-908/214, 3-5=-1222/319, 5-6=-1223/320, 6-7=-1531/284  
 BOT CHORD 16-17=-260/289, 14-16=-50/931, 12-14=-57/1077, 11-12=-224/925  
 WEBS 2-16=-359/1523, 3-16=-907/393, 3-14=-184/532, 5-14=-472/213, 6-14=-130/323, 6-12=0/378, 7-11=-1554/422

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-0-0 to 4-4-13, Interior(1) 4-4-13 to 22-7-0, Exterior(2) 22-7-0 to 26-11-13, Interior(1) 26-11-13 to 33-6-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 6) Refer to girder(s) for truss to truss connections.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 157 lb uplift at joint 17 and 15 lb uplift at joint 11.
  - 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.





|                       |                                                      |         |        |        |        |
|-----------------------|------------------------------------------------------|---------|--------|--------|--------|
|                       | 8-2-3                                                | 16-2-14 | 24-7-0 | 29-2-5 | 33-6-8 |
|                       | 8-2-3                                                | 8-0-11  | 8-4-2  | 4-7-5  | 4-4-3  |
| Plate Offsets (X,Y)-- | [6:0-2-8,0-2-12], [7:0-3-0,0-3-12], [16:0-3-8,0-1-8] |         |        |        |        |

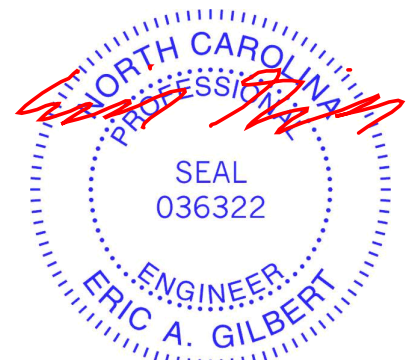
|                      |                      |       |             |              |          |        |      |                |             |
|----------------------|----------------------|-------|-------------|--------------|----------|--------|------|----------------|-------------|
| <b>LOADING</b> (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 0.40     | Vert(LL)     | -0.08    | 12-14  | >999 | MT20           | 244/190     |
| TCDL 10.0            | Lumber DOL           | 1.15  | BC 0.32     | Vert(CT)     | -0.13    | 12-14  | >999 |                |             |
| BCLL 0.0 *           | Rep Stress Incr      | YES   | WB 0.99     | Horz(CT)     | 0.03     | 11     | n/a  |                |             |
| BCDL 10.0            | Code IRC2015/TPI2014 |       | Matrix-S    | Wind(LL)     | 0.04     | 14     | >999 | Weight: 281 lb | FT = 20%    |

|                       |                                                                                                                                              |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| <b>LUMBER-</b>        | <b>BRACING-</b>                                                                                                                              |
| TOP CHORD 2x6 SP No.1 | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 1-6, 7-9. |
| BOT CHORD 2x6 SP No.1 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.                                                                               |
| WEBS 2x4 SP No.2      | WEBS 1 Row at midpt 2-17, 3-16, 5-14                                                                                                         |

**REACTIONS.** (size) 17=0-3-8, 11=Mechanical  
 Max Horz 17=-126(LC 13)  
 Max Uplift 17=-148(LC 8), 11=-40(LC 8)  
 Max Grav 17=1544(LC 2), 11=1367(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-17=-1345/372, 2-3=-1132/251, 3-5=-1457/352, 5-6=-1459/354, 6-7=-1503/317  
 BOT CHORD 14-16=-102/1132, 12-14=-162/1126, 11-12=-229/1059  
 WEBS 2-16=-359/1621, 3-16=-872/370, 3-14=-156/477, 5-14=-519/252, 6-14=-111/526, 6-12=0/311, 7-11=-1583/348

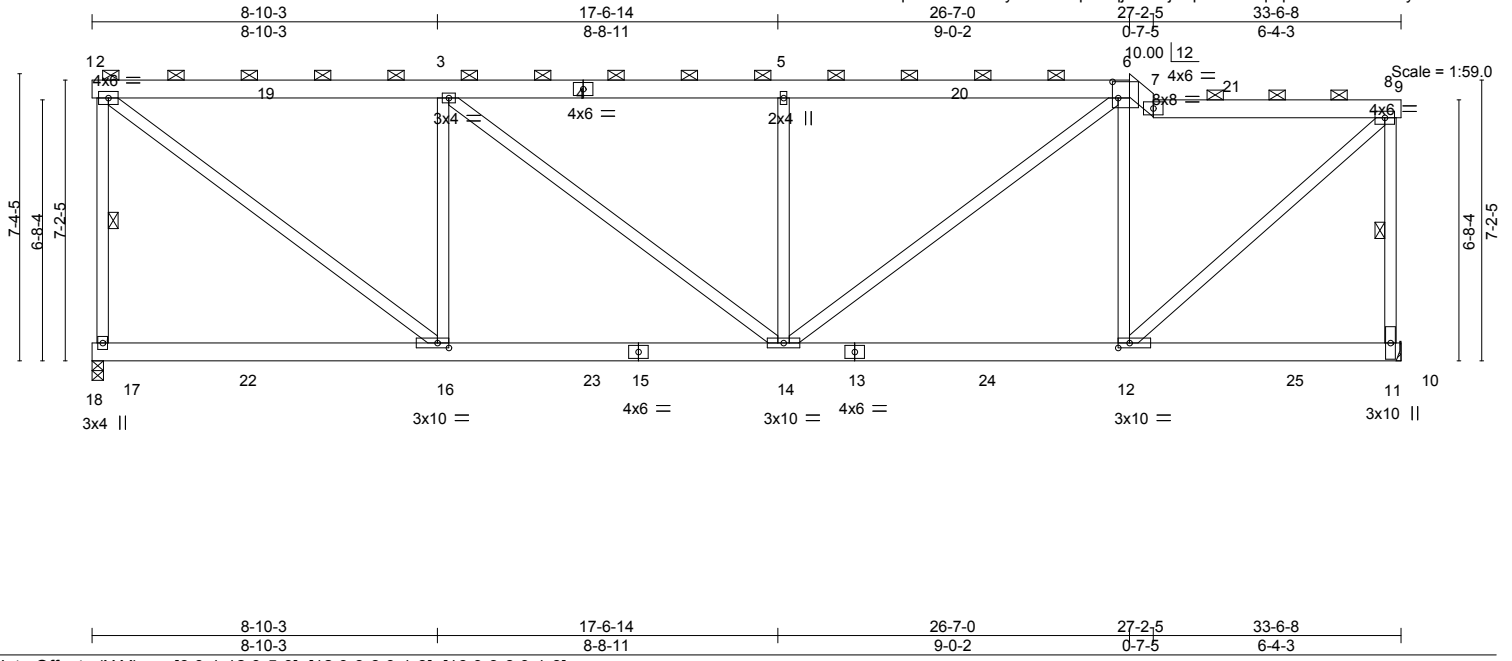
- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-0-0 to 4-4-13, Interior(1) 4-4-13 to 24-7-0, Exterior(2) 24-7-0 to 29-2-5, Interior(1) 29-2-5 to 33-6-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 6) Refer to girder(s) for truss to truss connections.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 148 lb uplift at joint 17 and 40 lb uplift at joint 11.
  - 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the





| 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 0.37  | Vert(LL) | -0.10 12-14 | >999   | 360 | MT20           | 244/190  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.35  | Vert(CT) | -0.19 12-14 | >999   | 240 |                |          |
| BCLL 0.0 *    | Rep Stress Incr      | YES   | WB 0.76  | Horz(CT) | 0.02 11     | n/a    | n/a |                |          |
| BCDL 10.0     | Code IRC2015/TPI2014 |       | Matrix-S | Wind(LL) | 0.06 14     | >999   | 240 | Weight: 264 lb | FT = 20% |

| LUMBER-               | BRACING-                                                                                                                                     |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| TOP CHORD 2x6 SP No.1 | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (5-8-5 max.): 1-6, 7-9. |
| BOT CHORD 2x6 SP No.1 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.                                                                               |
| WEBS 2x4 SP No.2      | WEBS 1 Row at midpt 2-17, 8-11                                                                                                               |

**REACTIONS.** (size) 17=0-3-8, 11=Mechanical  
 Max Horz 17=-17(LC 13)  
 Max Uplift 17=-138(LC 9), 11=-126(LC 9)  
 Max Grav 17=1483(LC 2), 11=1456(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-17=-1284/343, 2-3=-1436/294, 3-5=-1741/384, 5-6=-1742/385, 6-7=-848/140, 7-8=-1213/258, 8-11=-1311/344  
 BOT CHORD 14-16=-275/1436, 12-14=-251/1196  
 WEBS 2-16=-367/1792, 3-16=-837/342, 3-14=-114/421, 5-14=-527/259, 6-14=-151/766, 6-12=-859/338, 8-12=-343/1617

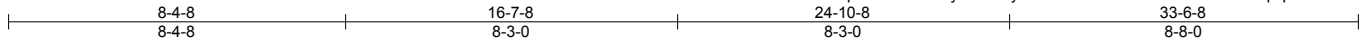
- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-0-0 to 4-4-13, Interior(1) 4-4-13 to 26-7-0, Exterior(2) 26-7-0 to 27-2-5, Interior(1) 27-2-5 to 33-6-8 zone;C-C members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 6) Refer to girder(s) for truss to truss connections.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 138 lb uplift at joint 17 and 126 lb uplift at joint 11.
  - 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



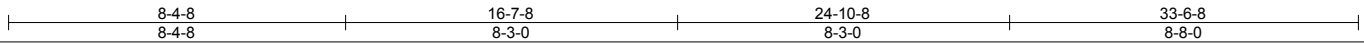
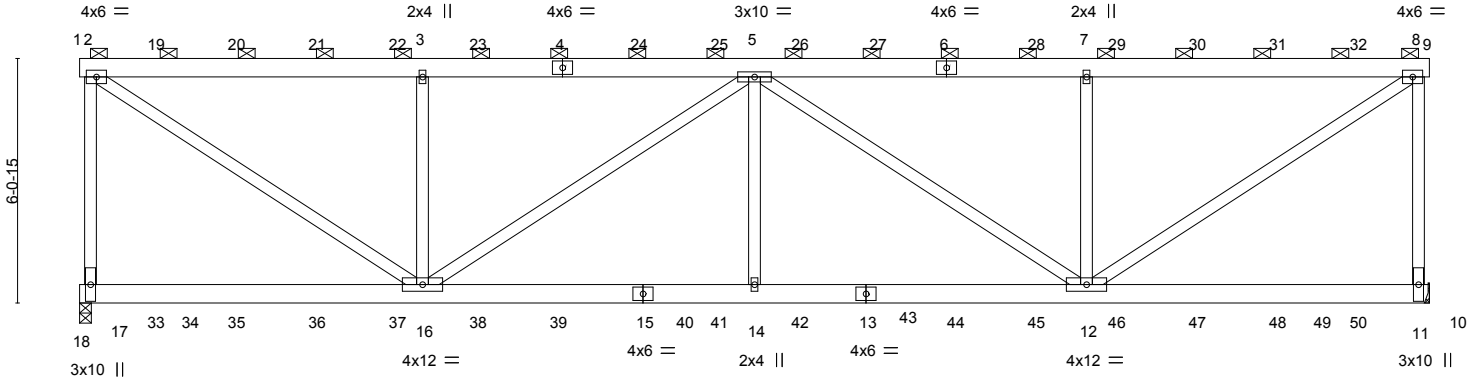
September 29, 2022

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Scale = 1:57.3



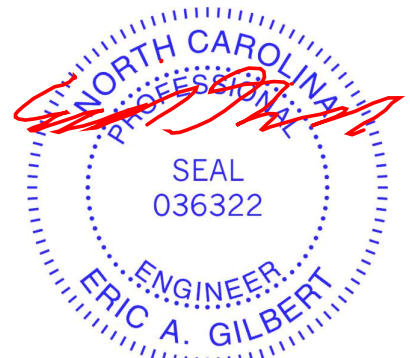
| LOADING (psf) | SPACING-             | 2-0-0 | CSI.     | DEFL.    | in (loc)    | l/defl | L/d | PLATES         | GRIP     |
|---------------|----------------------|-------|----------|----------|-------------|--------|-----|----------------|----------|
| TCLL 20.0     | Plate Grip DOL       | 1.15  | TC 0.34  | Vert(LL) | -0.08 14    | >999   | 360 | MT20           | 244/190  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.37  | Vert(CT) | -0.17 12-14 | >999   | 240 |                |          |
| BCLL 0.0 *    | Rep Stress Incr      | NO    | WB 0.46  | Horz(CT) | 0.03 11     | n/a    | n/a |                |          |
| BCDL 10.0     | Code IRC2015/TPI2014 |       | Matrix-S | Wind(LL) | 0.10 14     | >999   | 240 |                |          |
|               |                      |       |          |          |             |        |     | Weight: 503 lb | FT = 20% |

- LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2
- BRACING-**  
 TOP CHORD 2-0-0 oc purlins (6-0-0 max.): 1-9, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 17=0-3-8, 11=Mechanical  
 Max Uplift 17=-1015(LC 4), 11=-889(LC 5)  
 Max Grav 17=2913(LC 30), 11=2744(LC 29)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-17=-2674/1088, 2-3=-3192/1065, 3-5=-3192/1065, 5-7=-3196/1067, 7-8=-3196/1067, 8-11=-2506/962  
 BOT CHORD 14-16=-1395/4250, 12-14=-1395/4250  
 WEBS 2-16=-1271/3811, 3-16=-1096/731, 5-16=-1280/400, 5-14=0/659, 5-12=-1276/397, 7-12=-1100/734, 8-12=-1274/3816

- 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.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, 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 1015 lb uplift at joint 17 and 889 lb uplift at joint 11.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 177 lb down and 139 lb up at 0-3-4, 165 lb down and 141 lb up at 1-10-4, 165 lb down and 141 lb up at 3-10-4, 165 lb down and 141 lb up at 5-10-4, 165 lb down and 141 lb up at 7-10-4, 165 lb down and 141 lb up at 9-10-4, 165 lb down and 141 lb up at 11-10-4, 165 lb down and 141 lb up at 13-10-4, 165 lb down and 141 lb up at 15-10-4, 165 lb down and 141 lb up at 17-10-4, 165 lb down and 141 lb up at 19-9-8, 165 lb down and 141 lb up at 21-8-12, 165 lb down and 141 lb up at 23-8-12, 165 lb down and 141 lb up at 25-8-12, 165 lb down and 141 lb up at 27-8-12, and 165 lb down and 141 lb up at 29-8-12, and 165 lb down and 141 lb up at 31-8-12 on top chord, and 87 lb down at 1-10-4, 87 lb down at 3-10-4, 87 lb down at 5-10-4, 87 lb down at 7-10-4, 87 lb down at 9-10-4, 87 lb down at 11-10-4, 87 lb down at 13-10-4, 87 lb down at 15-10-4, 87 lb down at 17-10-4, 87 lb down at 19-9-8, 87 lb down at 21-8-12, 87 lb down at 23-8-12, 87 lb down at 25-8-12, 87 lb down at 27-8-12, and 87 lb down at 29-8-12, and 87 lb down at 31-8-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.



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**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

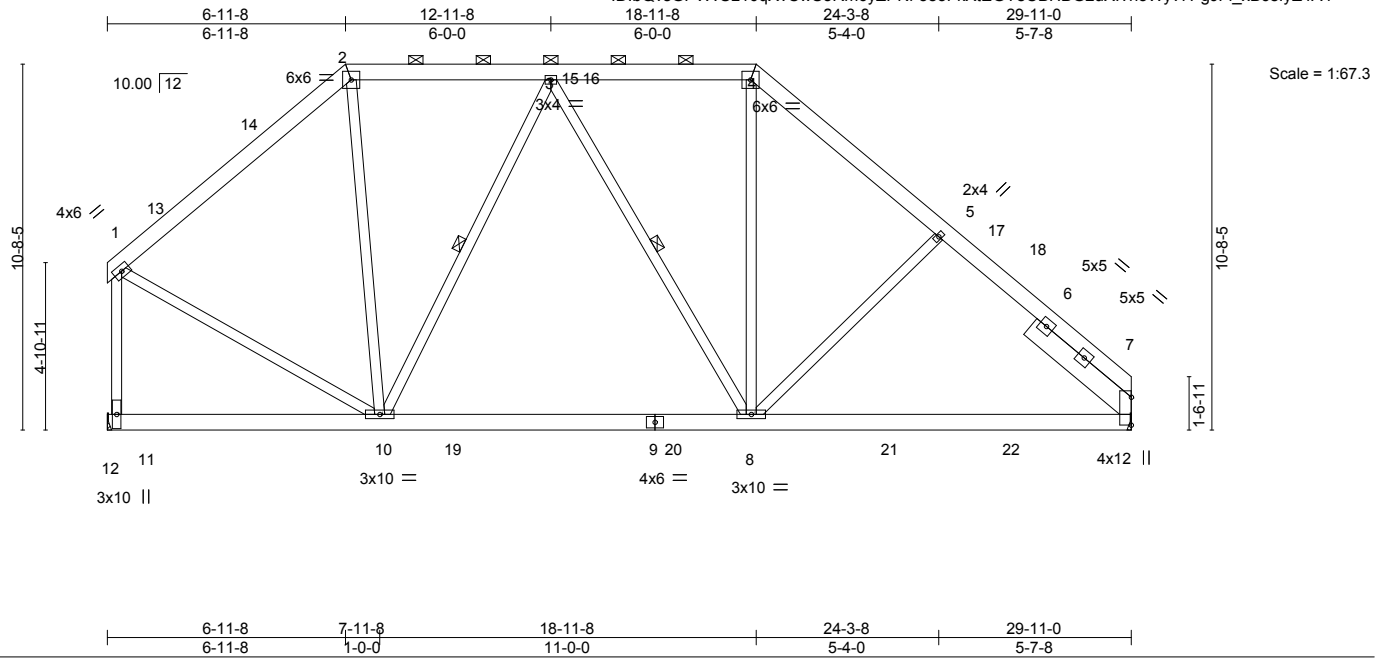
Vert: 1-2=-20, 2-8=-60, 8-9=-20, 10-18=-20

Concentrated Loads (lb)

Vert: 2=-154(F) 4=-122(F) 15=-43(F) 6=-122(F) 13=-43(F) 19=-122(F) 20=-122(F) 21=-122(F) 22=-122(F) 23=-122(F) 24=-122(F) 25=-122(F) 26=-122(F)  
27=-122(F) 28=-122(F) 29=-122(F) 30=-122(F) 31=-122(F) 32=-122(F) 33=-43(F) 35=-43(F) 36=-43(F) 37=-43(F) 38=-43(F) 39=-43(F) 41=-43(F) 42=-43(F)  
44=-43(F) 45=-43(F) 46=-43(F) 47=-43(F) 48=-43(F) 50=-43(F)

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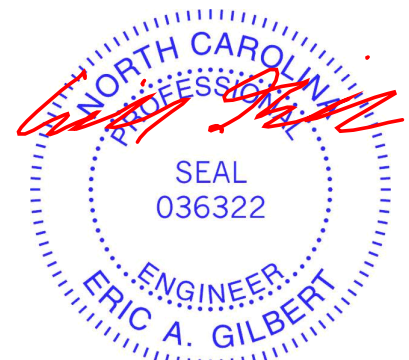
| LOADING (psf) | SPACING-             | CSI.     | DEFL.                        | PLATES         | GRIP     |
|---------------|----------------------|----------|------------------------------|----------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.38  | in (loc) l/defl L/d          | MT20           | 244/190  |
| TCDL 10.0     | Plate Grip DOL 1.15  | BC 0.53  | Vert(LL) -0.19 8-10 >999 360 |                |          |
| BCLL 0.0 *    | Lumber DOL 1.15      | WB 0.30  | Vert(CT) -0.25 8-10 >999 240 |                |          |
| BCDL 10.0     | Rep Stress Incr YES  | Matrix-S | Horz(CT) 0.02 7 n/a n/a      |                |          |
|               | Code IRC2015/TPI2014 |          | Wind(LL) 0.02 8-10 >999 240  | Weight: 258 lb | FT = 20% |

| LUMBER-                          | BRACING-                                                                                                                                |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| TOP CHORD 2x6 SP No.1            | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 2-4. |
| BOT CHORD 2x6 SP No.1            | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.                                                                          |
| WEBS 2x4 SP No.2                 | WEBS 1 Row at midpt 3-10, 3-8                                                                                                           |
| SLIDER Right 2x8 SP No.1 3-10-15 |                                                                                                                                         |

**REACTIONS.** (size) 7=Mechanical, 11=Mechanical  
 Max Horz 11=-240(LC 8)  
 Max Uplift 7=-29(LC 13), 11=-9(LC 12)  
 Max Grav 7=1296(LC 2), 11=1235(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-1055/313, 2-3=-760/336, 3-4=-958/382, 4-5=-1303/396, 5-7=-1518/375, 1-11=-1198/337  
 BOT CHORD 8-10=-67/954, 7-8=-141/1012  
 WEBS 3-10=-441/161, 5-8=-290/244, 1-10=-107/841, 2-10=-12/353, 4-8=-74/496

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-3-4 to 4-8-1, Interior(1) 4-8-1 to 7-0-8, Exterior(2) 7-0-8 to 13-3-3, Interior(1) 13-3-3 to 18-10-8, Exterior(2) 18-10-8 to 25-1-3, Interior(1) 25-1-3 to 29-11-0 zone; C-C for members and forces & MWFRS for reactions shown; 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Refer to girder(s) for truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 29 lb uplift at joint 7 and 9 lb uplift at joint 11.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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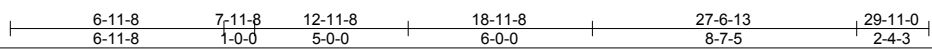
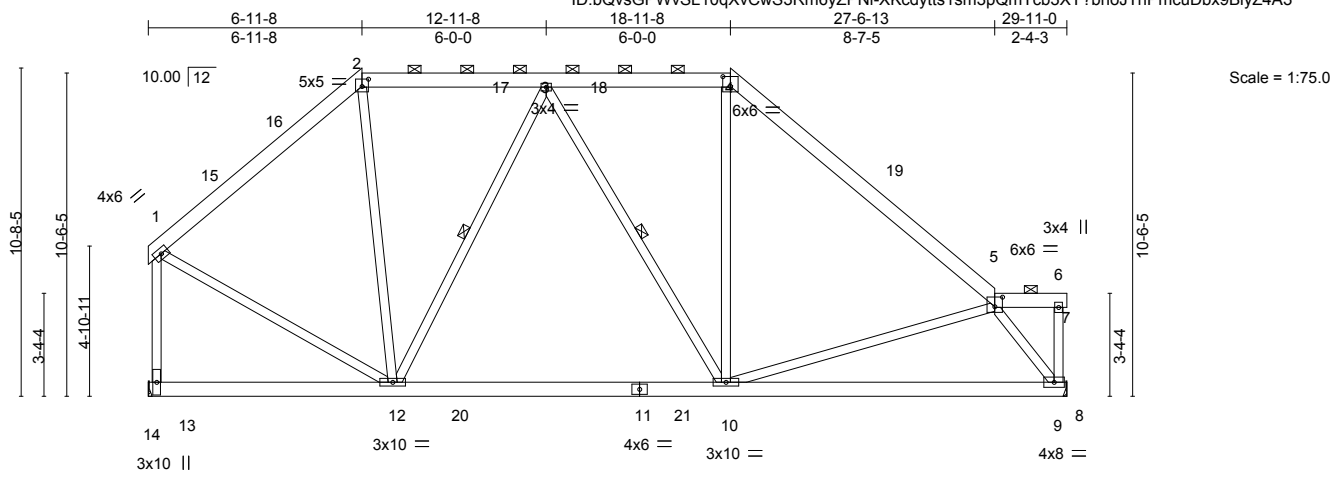


Plate Offsets (X,Y)-- [2:0-2-8,0-2-14], [4:0-3-0,0-3-14], [5:0-3-0,0-3-12]

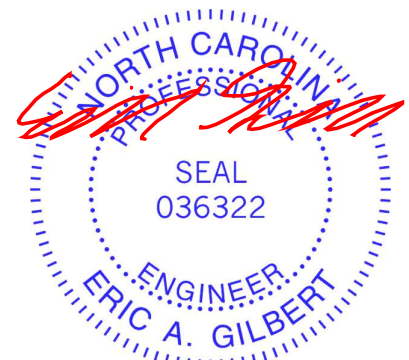
|                      |                      |       |             |              |          |        |      |                |             |
|----------------------|----------------------|-------|-------------|--------------|----------|--------|------|----------------|-------------|
| <b>LOADING</b> (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 0.37     | Vert(LL)     | -0.23    | 10-12  | >999 | MT20           | 244/190     |
| TCDL 10.0            | Lumber DOL           | 1.15  | BC 0.52     | Vert(CT)     | -0.29    | 10-12  | >999 |                |             |
| BCLL 0.0 *           | Rep Stress Incr      | YES   | WB 0.30     | Horz(CT)     | 0.02     | 9      | n/a  |                |             |
| BCDL 10.0            | Code IRC2015/TPI2014 |       | Matrix-S    | Wind(LL)     | 0.02     | 10-12  | >999 | Weight: 254 lb | FT = 20%    |

|                       |                                                                                                                                              |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| <b>LUMBER-</b>        | <b>BRACING-</b>                                                                                                                              |
| TOP CHORD 2x6 SP No.1 | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 2-4, 5-7. |
| BOT CHORD 2x6 SP No.1 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.                                                                               |
| WEBS 2x4 SP No.2      | WEBS 1 Row at midpt 3-12, 3-10                                                                                                               |

**REACTIONS.** (size) 9=Mechanical, 13=Mechanical  
 Max Horz 13=-171(LC 8)  
 Max Uplift 9=-32(LC 13), 13=-6(LC 12)  
 Max Grav 9=1186(LC 1), 13=1194(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-1002/295, 2-3=-741/319, 3-4=-889/362, 4-5=-1286/312, 1-13=-1162/318  
 BOT CHORD 10-12=-104/890, 9-10=-242/808  
 WEBS 3-12=-436/154, 5-9=-1352/450, 1-12=-96/818, 2-12=-7/334, 4-10=0/416

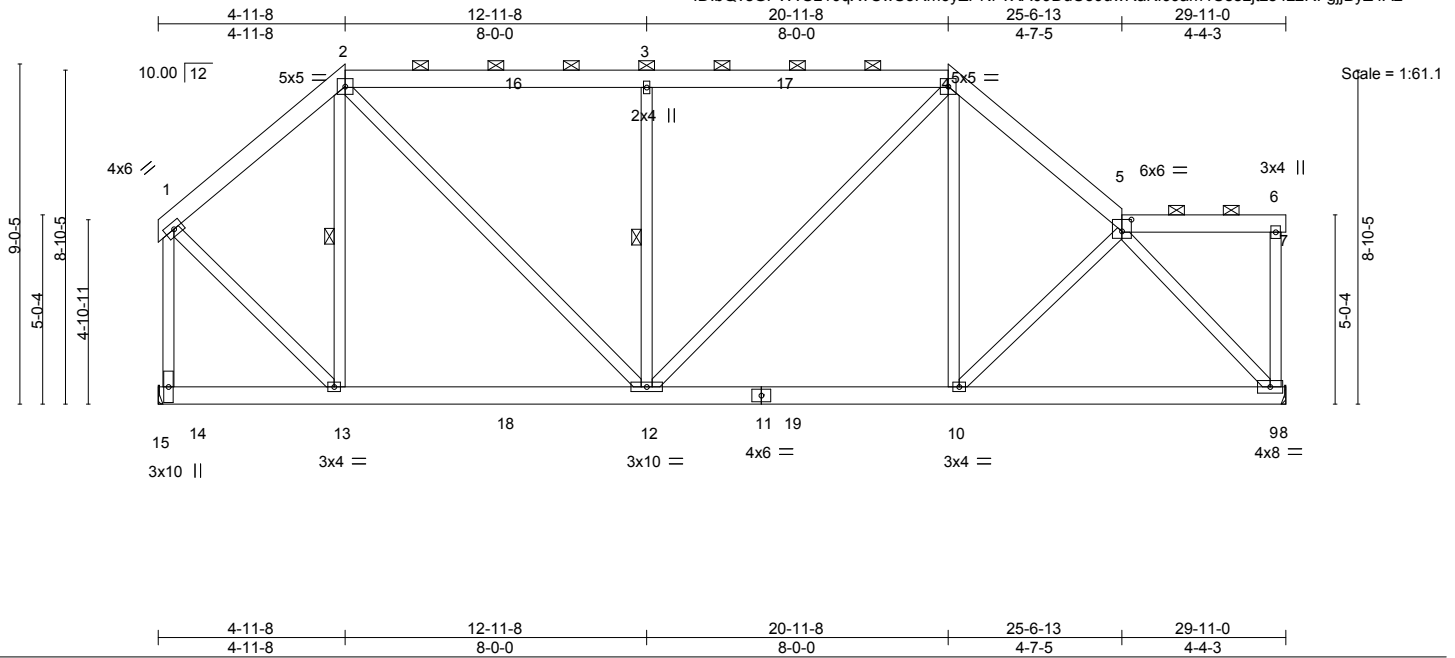
- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-3-4 to 4-8-1, Interior(1) 4-8-1 to 6-11-8, Exterior(2) 6-11-8 to 11-4-5, Interior(1) 11-4-5 to 18-11-8, Exterior(2) 18-11-8 to 23-4-5, Interior(1) 23-4-5 to 29-11-0 zone; C-C for members and forces & MWFRS for reactions shown; 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, 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 32 lb uplift at joint 9 and 6 lb uplift at joint 13.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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|                       |                       |             |                                  |                |             |
|-----------------------|-----------------------|-------------|----------------------------------|----------------|-------------|
| Plate Offsets (X,Y)-- | [5:0-3-0,0-3-12]      |             |                                  |                |             |
| <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 0.32     | Vert(LL) -0.06 10-12 >999 360    | MT20           | 244/190     |
| TCDL 10.0             | Lumber DOL 1.15       | BC 0.27     | Vert(CT) -0.10 10-12 >999 240    |                |             |
| BCLL 0.0 *            | Rep Stress Incr YES   | WB 0.86     | Horz(CT) 0.02 9 n/a n/a          |                |             |
| BCDL 10.0             | Code IRC2015/TPI2014  | Matrix-S    | Wind(LL) 0.02 12 >999 240        | Weight: 256 lb | FT = 20%    |

|                       |                                                                                                                                              |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| <b>LUMBER-</b>        | <b>BRACING-</b>                                                                                                                              |
| TOP CHORD 2x6 SP No.1 | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.); 2-4, 5-7. |
| BOT CHORD 2x6 SP No.1 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.                                                                               |
| WEBS 2x4 SP No.2      | WEBS 1 Row at midpt 2-13, 3-12                                                                                                               |

**REACTIONS.** (size) 9=Mechanical, 14=Mechanical  
 Max Horz 14=-93(LC 8)  
 Max Uplift 9=-29(LC 13), 14=-27(LC 9)  
 Max Grav 9=1207(LC 2), 14=1255(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-861/243, 2-3=-1144/377, 3-4=-1144/377, 4-5=-1307/326, 1-14=-1245/302  
 BOT CHORD 12-13=-112/634, 10-12=-168/951, 9-10=-232/922  
 WEBS 2-13=-421/179, 2-12=-158/759, 3-12=-561/268, 4-12=-115/343, 4-10=0/319, 5-9=-1377/352, 1-13=-130/887

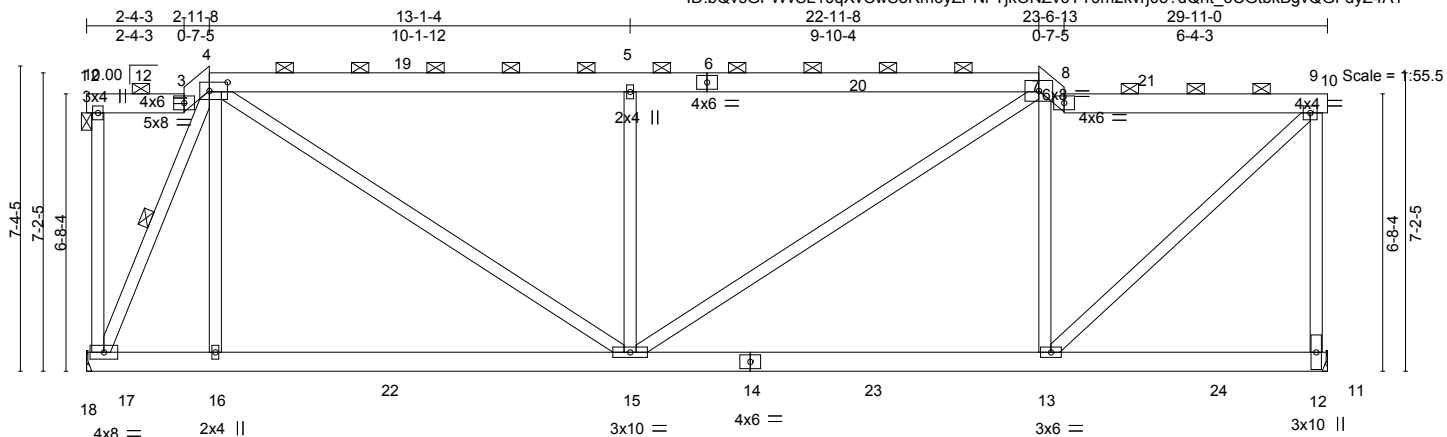
- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-3-4 to 9-4-5, Interior(1) 9-4-5 to 20-11-8, Exterior(2) 20-11-8 to 25-6-13, Interior(1) 25-6-13 to 29-11-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 6) Refer to girder(s) for truss to truss connections.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 29 lb uplift at joint 9 and 27 lb uplift at joint 14.
  - 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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

| 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 0.97  | Vert(LL) | -0.09 13-15 | >999   | 360 | MT20           | 244/190  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.33  | Vert(CT) | -0.18 13-15 | >999   | 240 |                |          |
| BCLL 0.0 *    | Rep Stress Incr      | YES   | WB 0.64  | Horz(CT) | 0.02 12     | n/a    | n/a |                |          |
| BCDL 10.0     | Code IRC2015/TPI2014 |       | Matrix-S | Wind(LL) | 0.05 13-15  | >999   | 240 | Weight: 245 lb | FT = 20% |

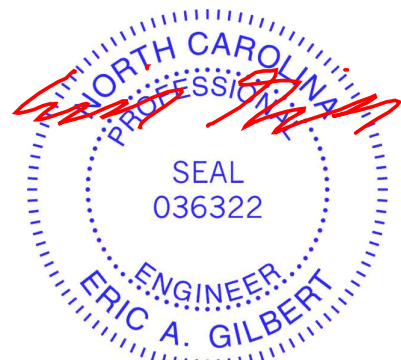
**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 1-3, 4-7, 8-10.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 WEBS 1 Row at midpt 4-17

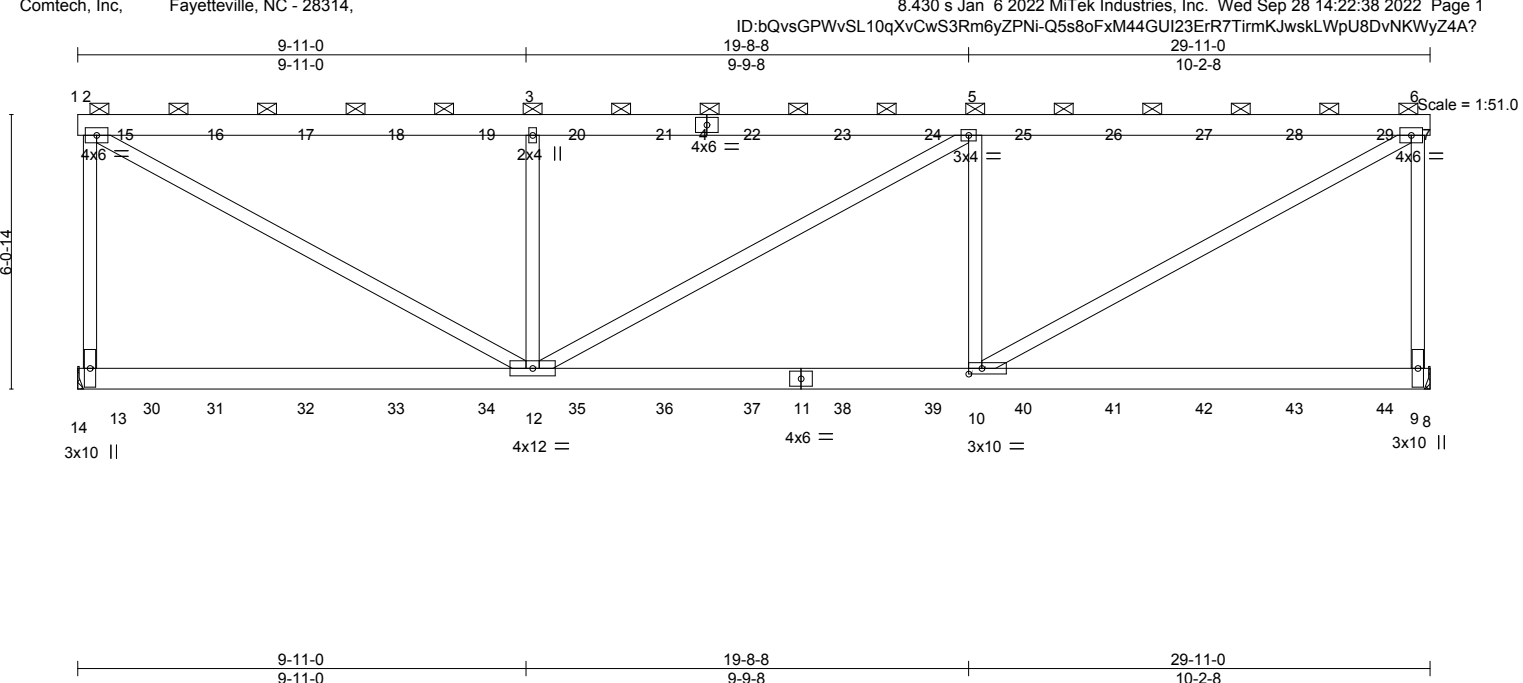
**REACTIONS.** (size) 17=Mechanical, 12=Mechanical  
 Max Horz 17=-13(LC 8)  
 Max Uplift 17=-102(LC 8), 12=-112(LC 9)  
 Max Grav 17=1255(LC 2), 12=1306(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 4-5=-1405/330, 5-7=-1403/330, 7-8=-705/109, 8-9=-1031/219, 9-12=-1179/314  
 BOT CHORD 16-17=-103/518, 15-16=-101/526, 13-15=-226/1044  
 WEBS 4-16=0/432, 4-15=-255/1087, 5-15=-676/328, 7-15=-121/557, 7-13=-722/315, 9-13=-296/1404, 4-17=-1400/289

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-0-0 to 2-4-3, Interior(1) 2-4-3 to 2-11-8, Exterior(2) 2-11-8 to 7-4-5, Interior(1) 7-4-5 to 22-11-8, Exterior(2) 22-11-8 to 23-6-13, Interior(1) 23-6-13 to 29-11-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 6) Refer to girder(s) for truss to truss connections.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 102 lb uplift at joint 17 and 112 lb uplift at joint 12.
  - 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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| LOADING (psf) | SPACING-             | CSI.     | DEFL.                         | PLATES         | GRIP     |
|---------------|----------------------|----------|-------------------------------|----------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.47  | in (loc) l/defl L/d           | MT20           | 244/190  |
| TCDL 10.0     | Plate Grip DOL 1.15  | BC 0.39  | Vert(LL) -0.08 9-10 >999 360  |                |          |
| BCLL 0.0 *    | Lumber DOL 1.15      | WB 0.54  | Vert(CT) -0.17 12-13 >999 240 |                |          |
| BCDL 10.0     | Rep Stress Incr NO   | Matrix-S | Horz(CT) 0.01 9 n/a n/a       |                |          |
|               | Code IRC2015/TPI2014 |          | Wind(LL) 0.09 10-12 >999 240  | Weight: 437 lb | FT = 20% |

**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2

**BRACING-**  
 TOP CHORD 2-0-0 oc purlins (6-0-0 max.): 1-7, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 13=Mechanical, 9=Mechanical  
 Max Uplift 13=826(LC 4), 9=826(LC 5)  
 Max Grav 13=2499(LC 30), 9=2530(LC 29)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-13=-2236/928, 2-3=-3037/1032, 3-5=-3037/1032, 5-6=-3091/1033, 6-9=-2236/928  
 BOT CHORD 10-12=-1033/3091  
 WEBS 2-12=-1165/3429, 3-12=-1278/853, 5-10=-1277/851, 6-10=-1166/3491

- 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.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, 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 826 lb uplift at joint 13 and 826 lb uplift at joint 9.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 164 lb down and 140 lb up at 1-0-4, 165 lb down and 141 lb up at 3-0-4, 165 lb down and 141 lb up at 5-0-4, 165 lb down and 141 lb up at 7-0-4, 165 lb down and 141 lb up at 9-0-4, 165 lb down and 141 lb up at 11-0-4, 165 lb down and 141 lb up at 12-11-8, 165 lb down and 141 lb up at 14-10-12, 165 lb down and 141 lb up at 16-10-12, 165 lb down and 141 lb up at 18-10-12, 165 lb down and 141 lb up at 20-10-12, 165 lb down and 141 lb up at 22-10-12, 165 lb down and 141 lb up at 24-10-12, and 165 lb down and 141 lb up at 26-10-12, and 164 lb down and 141 lb up at 28-10-12 on top chord, and 87 lb down at 1-0-4, 87 lb down at 3-0-4, 87 lb down at 5-0-4, 87 lb down at 7-0-4, 87 lb down at 9-0-4, 87 lb down at 11-0-4, 87 lb down at 12-11-8, 87 lb down at 14-10-12, 87 lb down at 16-10-12, 87 lb down at 18-10-12, 87 lb down at 20-10-12, 87 lb down at 22-10-12, 87 lb down at 24-10-12, and 87 lb down at 26-10-12, and 87 lb down at 28-10-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.



Continued on page 2

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

Vert: 1-2=-20, 2-6=-60, 6-7=-20, 8-14=-20

Concentrated Loads (lb)

Vert: 15=-127(B) 16=-122(B) 17=-122(B) 18=-122(B) 19=-122(B) 20=-122(B) 21=-122(B) 22=-122(B) 23=-122(B) 24=-122(B) 25=-122(B) 26=-122(B) 27=-122(B)

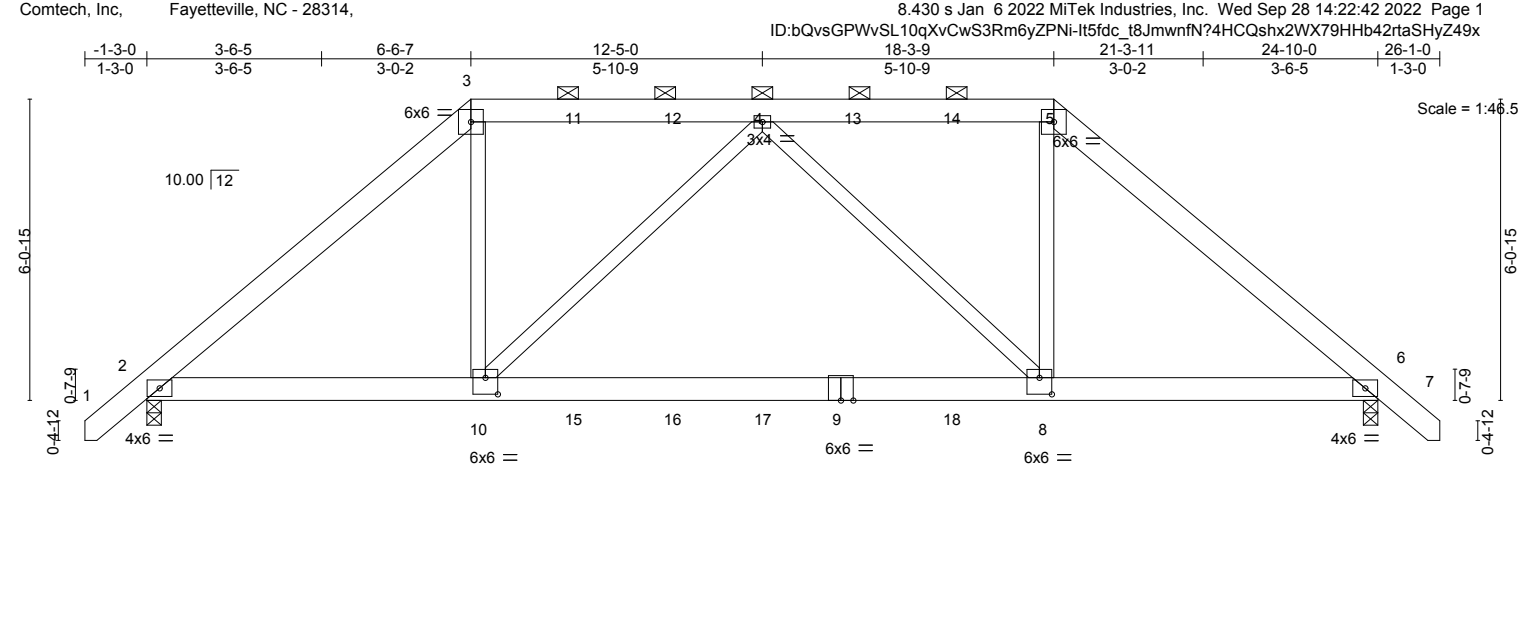
28=-122(B) 29=-127(B) 30=-43(B) 31=-43(B) 32=-43(B) 33=-43(B) 34=-43(B) 35=-43(B) 36=-43(B) 37=-43(B) 38=-43(B) 39=-43(B) 40=-43(B) 41=-43(B) 42=-43(B)

43=-43(B) 44=-43(B)

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

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|                       |                                   |
|-----------------------|-----------------------------------|
| Plate Offsets (X,Y)-- | [8:0-3-0,0-4-0], [10:0-3-0,0-4-0] |
|-----------------------|-----------------------------------|

| LOADING (psf) | SPACING-             | CSI.     | DEFL.                        | PLATES         | GRIP     |
|---------------|----------------------|----------|------------------------------|----------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.32  | in (loc) l/defl L/d          | MT20           | 244/190  |
| TCDL 10.0     | Plate Grip DOL 1.15  | BC 0.88  | Vert(LL) -0.21 8-10 >999 360 |                |          |
| BCLL 0.0 *    | Lumber DOL 1.15      | WB 0.68  | Vert(CT) -0.45 8-10 >654 240 |                |          |
| BCDL 10.0     | Rep Stress Incr NO   | Matrix-S | Horz(CT) 0.05 6 n/a n/a      |                |          |
|               | Code IRC2015/TPI2014 |          | Wind(LL) 0.07 8-10 >999 240  | Weight: 172 lb | FT = 20% |

**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2

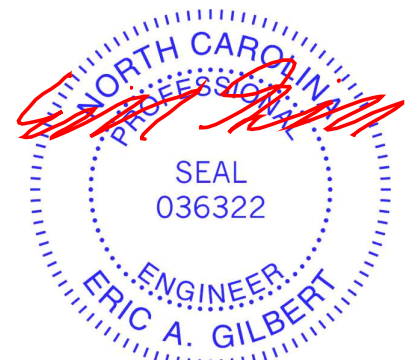
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 4-5-13 oc purlins, except 2-0-0 oc purlins (5-2-10 max.): 3-5.  
 BOT CHORD Rigid ceiling directly applied or 7-11-11 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 6=0-3-8  
 Max Horz 2=154(LC 26)  
 Max Uplift 2=-592(LC 8), 6=-593(LC 9)  
 Max Grav 2=2059(LC 33), 6=2057(LC 34)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2877/824, 3-4=-2149/701, 4-5=-2145/702, 5-6=-2872/825  
 BOT CHORD 2-10=-650/2164, 8-10=-898/2570, 6-8=-569/2120  
 WEBS 3-10=-263/1304, 4-10=-615/452, 4-8=-617/451, 5-8=-263/1300

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 592 lb uplift at joint 2 and 593 lb uplift at joint 6.
  - 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 160 lb down and 156 lb up at 6-6-7, 165 lb down and 153 lb up at 8-7-3, 165 lb down and 153 lb up at 10-7-3, 165 lb down and 153 lb up at 12-5-0, 165 lb down and 153 lb up at 14-2-13, and 165 lb down and 153 lb up at 16-2-13, and 160 lb down and 156 lb up at 18-3-9 on top chord, and 446 lb down and 187 lb up at 6-6-7, 87 lb down at 8-7-3, 87 lb down at 10-7-3, 87 lb down at 12-5-0, 87 lb down at 14-2-13, and 87 lb down at 16-2-13, and 446 lb down and 187 lb up at 18-2-13 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
  - 9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard  
 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-3=-60, 3-5=-60, 5-7=-60, 2-6=-20



Continued on page 2

**LOAD CASE(S)** Standard

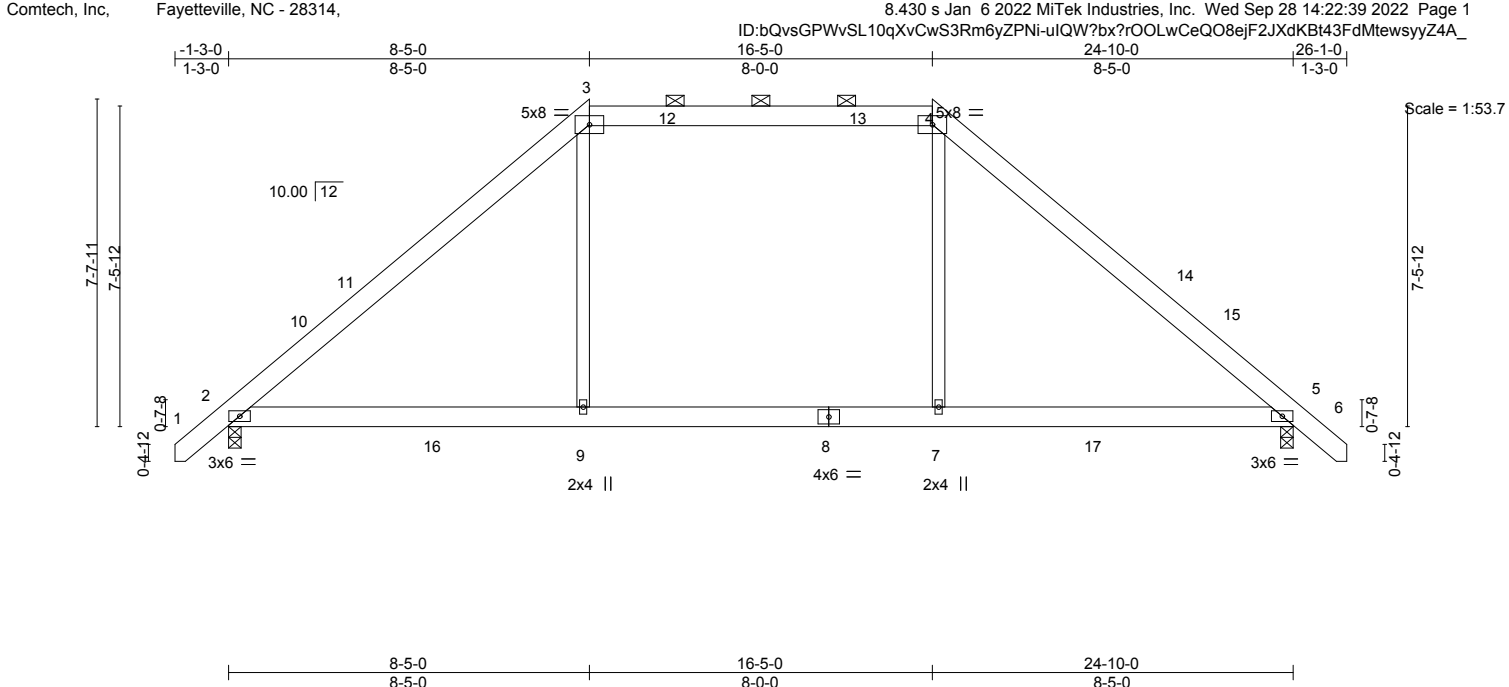
Concentrated Loads (lb)

Vert: 3=-122(B) 5=-122(B) 9=-43(B) 10=-425(B) 4=-122(B) 8=-425(B) 11=-122(B) 12=-122(B) 13=-122(B) 14=-122(B) 15=-43(B) 16=-43(B) 17=-43(B) 18=-43(B)

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| LOADING (psf) | SPACING-             | CSI.     | DEFL.    | in (loc) | l/defl | L/d  | PLATES         | GRIP     |
|---------------|----------------------|----------|----------|----------|--------|------|----------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.37  | Vert(LL) | -0.14    | 5-7    | >999 | MT20           | 244/190  |
| TCDL 10.0     | Plate Grip DOL 1.15  | BC 0.46  | Vert(CT) | -0.18    | 5-7    | >999 |                |          |
| BCLL 0.0 *    | Lumber DOL 1.15      | WB 0.14  | Horz(CT) | 0.02     | 5      | n/a  |                |          |
| BCDL 10.0     | Rep Stress Incr YES  | Matrix-S | Wind(LL) | 0.15     | 2-9    | >999 |                |          |
|               | Code IRC2015/TPI2014 |          |          |          |        |      | Weight: 156 lb | FT = 20% |

**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 5-10-15 oc purlins, except  
 2-0-0 oc purlins (6-0-0 max.): 3-4.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 5=0-3-8  
 Max Horz 2=190(LC 11)  
 Max Uplift 2=-47(LC 12), 5=-47(LC 13)  
 Max Grav 2=1269(LC 2), 5=1269(LC 2)

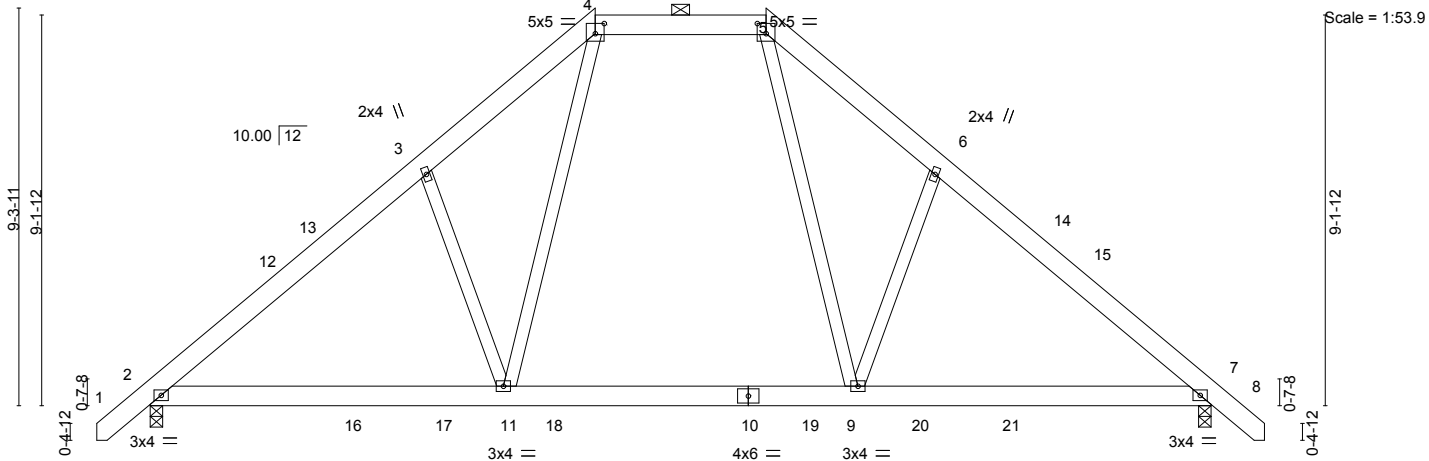
**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1584/309, 3-4=-1095/342, 4-5=-1584/309  
 BOT CHORD 2-9=-16/1112, 7-9=-17/1102, 5-7=-15/1114  
 WEBS 3-9=0/632, 4-7=0/632

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-1-9 to 3-3-4, Interior(1) 3-3-4 to 8-5-0, Exterior(2) 8-5-0 to 14-7-11, Interior(1) 14-7-11 to 16-5-0, Exterior(2) 16-5-0 to 22-7-11, Interior(1) 22-7-11 to 25-11-9 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 47 lb uplift at joint 2 and 47 lb uplift at joint 5.
  - 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.





-1-3-0 6-5-9 10-5-0 14-5-0 18-4-7 24-10-0 26-1-0  
 1-3-0 6-5-9 3-11-7 4-0-0 3-11-7 6-5-9 1-3-0



8-5-0 10-5-0 14-5-0 16-5-0 24-10-0  
 8-5-0 2-0-0 4-0-0 2-0-0 8-5-0

Plate Offsets (X,Y)-- [4:0-2-8,0-2-14], [5:0-2-8,0-2-14]

|                      |                      |       |             |              |          |        |      |                |             |
|----------------------|----------------------|-------|-------------|--------------|----------|--------|------|----------------|-------------|
| <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 0.17     | Vert(LL)     | -0.07    | 9-11   | >999 | MT20           | 244/190     |
| TCDL 10.0            | Lumber DOL           | 1.15  | BC 0.35     | Vert(CT)     | -0.10    | 9-11   | >999 |                |             |
| BCLL 0.0 *           | Rep Stress Incr      | YES   | WB 0.23     | Horz(CT)     | 0.02     | 7      | n/a  |                |             |
| BCDL 10.0            | Code IRC2015/TPI2014 |       | Matrix-S    | Wind(LL)     | 0.06     | 2-11   | >999 | Weight: 181 lb | FT = 20%    |

**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 4-5.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 7=0-3-8  
 Max Horz 2=230(LC 11)  
 Max Uplift 2=-55(LC 12), 7=-55(LC 13)  
 Max Grav 2=1179(LC 19), 7=1179(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1425/304, 3-4=-1310/422, 4-5=-797/329, 5-6=-1310/422, 6-7=-1425/304  
 BOT CHORD 2-11=-70/1130, 9-11=0/855, 7-9=-83/1020  
 WEBS 3-11=-391/290, 6-9=-391/290, 4-11=-172/709, 5-9=-172/709

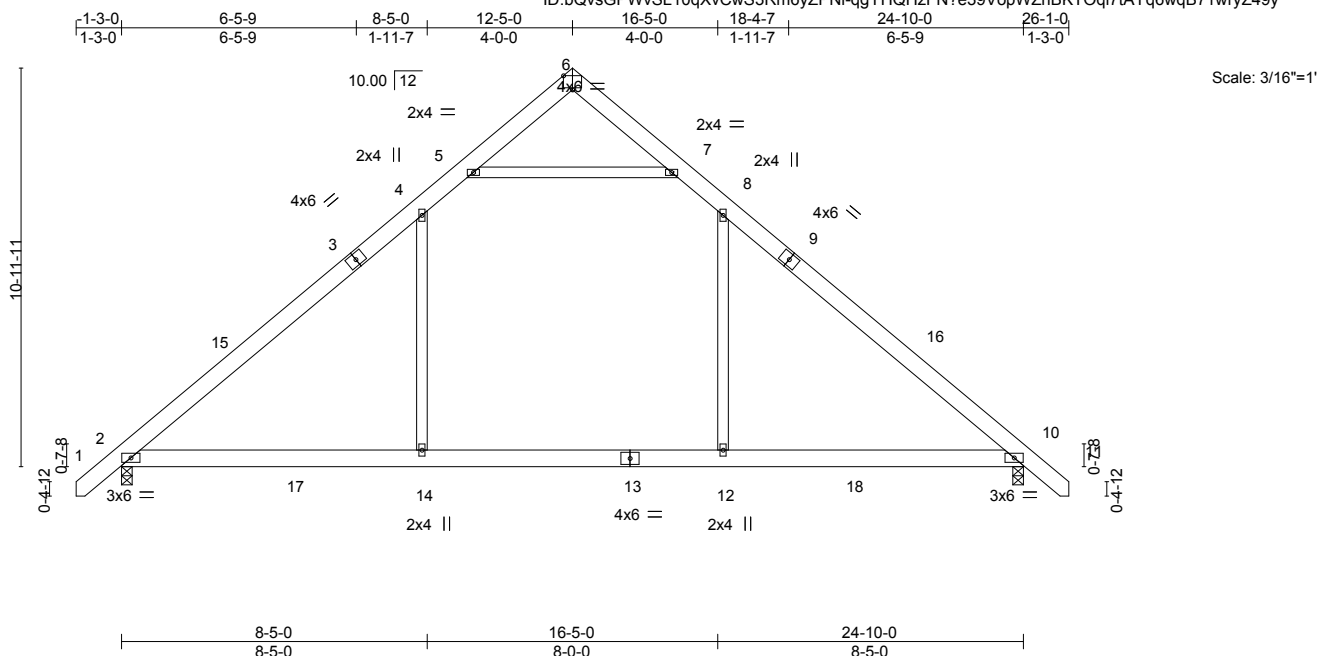
- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-1-9 to 3-3-4, Interior(1) 3-3-4 to 10-5-0, Exterior(2) 10-5-0 to 20-7-11, Interior(1) 20-7-11 to 25-11-9 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 55 lb uplift at joint 2 and 55 lb uplift at joint 7.
  - 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



September 29, 2022

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| LOADING (psf) | SPACING-             | CSI.     | DEFL.                        | PLATES         | GRIP     |
|---------------|----------------------|----------|------------------------------|----------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.52  | in (loc) l/defl L/d          | MT20           | 244/190  |
| TCDL 10.0     | Plate Grip DOL 1.15  | BC 0.48  | Vert(LL) -0.18 2-14 >999 360 |                |          |
| BCLL 0.0 *    | Lumber DOL 1.15      | WB 0.76  | Vert(CT) -0.23 2-14 >999 240 |                |          |
| BCDL 10.0     | Rep Stress Incr YES  | Matrix-S | Horz(CT) 0.02 10 n/a n/a     |                |          |
|               | Code IRC2015/TPI2014 |          | Wind(LL) 0.19 2-14 >999 240  | Weight: 171 lb | FT = 20% |

**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 5-8-1 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 10=0-3-8  
 Max Horz 2=-271(LC 10)  
 Max Uplift 2=-60(LC 12), 10=-60(LC 13)  
 Max Grav 2=1317(LC 19), 10=1317(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=-1652/249, 4-5=-1001/308, 7-8=-1000/308, 8-10=-1652/249  
 BOT CHORD 2-14=0/1177, 12-14=0/1177, 10-12=0/1177  
 WEBS 4-14=0/637, 8-12=0/637, 5-7=-1324/448

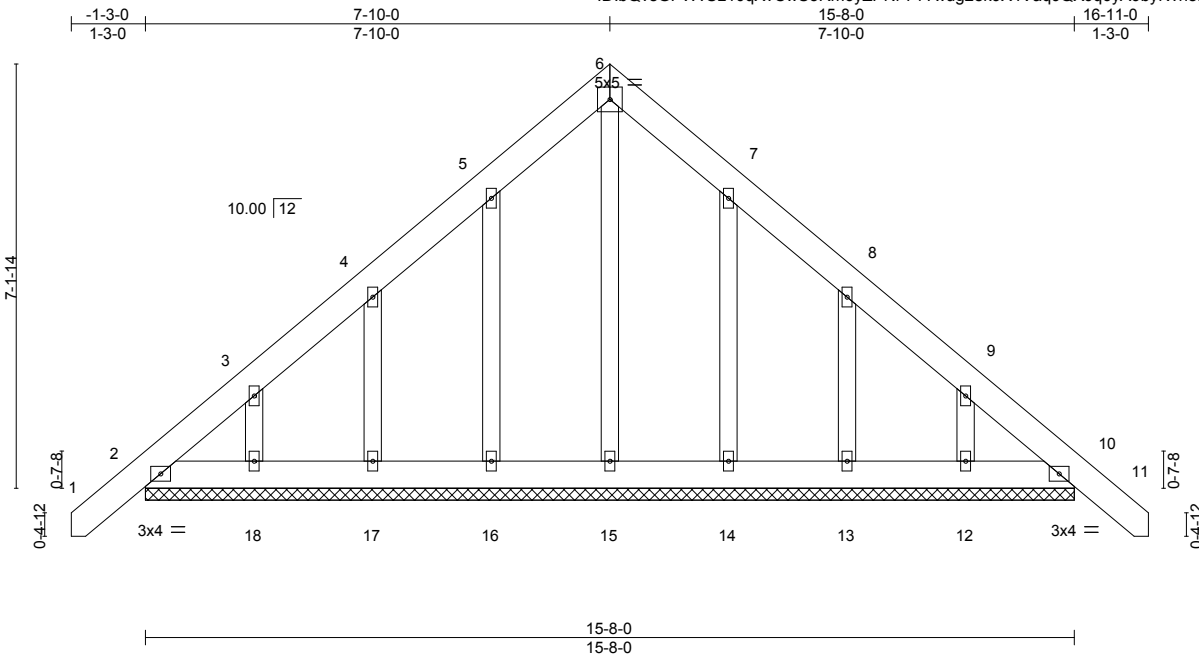
- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-1-9 to 3-3-4, Interior(1) 3-3-4 to 12-5-0, Exterior(2) 12-5-0 to 16-6-12, Interior(1) 16-6-12 to 25-11-9 zone; C-C for members and forces & MWFRS for reactions shown; 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 60 lb uplift at joint 2 and 60 lb uplift at joint 10.



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Scale = 1:38.9

| 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 0.03  | Vert(LL) | -0.00    | 10     | n/r | MT20           | 244/190  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.02  | Vert(CT) | -0.00    | 10     | n/r |                |          |
| BCLL 0.0 *    | Rep Stress Incr      | YES   | WB 0.09  | Horz(CT) | 0.00     | 10     | n/a |                |          |
| BCDL 10.0     | Code IRC2015/TPI2014 |       | Matrix-S |          |          |        |     | Weight: 128 lb | FT = 20% |

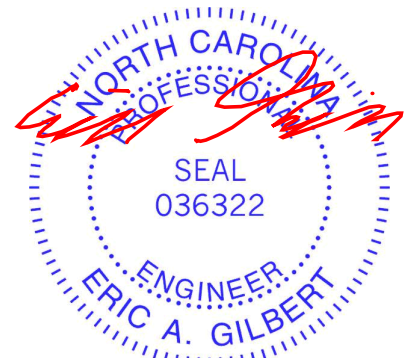
**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 OTHERS 2x4 SP No.2

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

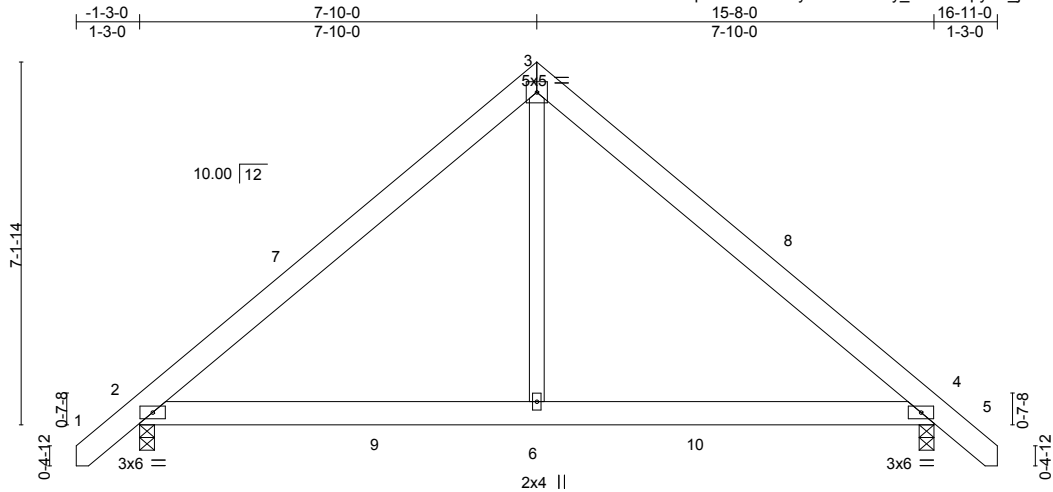
**REACTIONS.** All bearings 15-8-0.  
 (lb) - Max Horz 2=-224(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 10, 16, 14 except 17=-122(LC 12), 18=-102(LC 12), 13=-124(LC 13), 12=-100(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 2, 10, 15, 16, 17, 18, 14, 13, 12

**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 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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 requires continuous bottom chord bearing.
  - 6) Gable studs spaced at 2-0-0 oc.
  - 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 8) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 10, 16, 14 except (jt=lb) 17=122, 18=102, 13=124, 12=100.
  - 10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.



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Scale = 1:45.4

| LOADING (psf) | SPACING-             | CSI.     | DEFL.                       | PLATES         | GRIP     |
|---------------|----------------------|----------|-----------------------------|----------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.27  | in (loc) l/defl L/d         | MT20           | 244/190  |
| TCDL 10.0     | Plate Grip DOL 1.15  | BC 0.27  | Vert(LL) -0.03 4-6 >999 360 |                |          |
| BCLL 0.0 *    | Lumber DOL 1.15      | WB 0.12  | Vert(CT) -0.05 4-6 >999 240 |                |          |
| BCDL 10.0     | Rep Stress Incr YES  | Matrix-S | Horz(CT) 0.01 4 n/a n/a     |                |          |
|               | Code IRC2015/TPI2014 |          | Wind(LL) 0.02 2-6 >999 240  | Weight: 102 lb | FT = 20% |

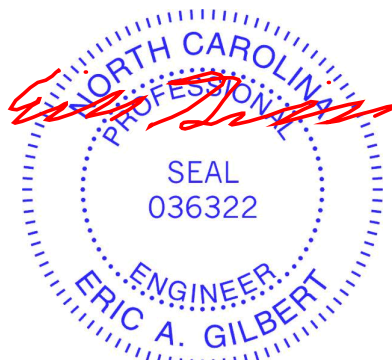
**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2

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

**REACTIONS.** (size) 2=0-3-8, 4=0-3-8  
 Max Horz 2=-179(LC 10)  
 Max Uplift 2=-44(LC 12), 4=-44(LC 13)  
 Max Grav 2=775(LC 19), 4=775(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-841/169, 3-4=-840/170  
 BOT CHORD 2-6=0/583, 4-6=0/583  
 WEBS 3-6=0/533

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-1-9 to 3-3-4, Interior(1) 3-3-4 to 7-10-0, Exterior(2) 7-10-0 to 12-2-13, Interior(1) 12-2-13 to 16-9-9 zone; C-C for members and forces & MWFRS for reactions shown; 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 44 lb uplift at joint 2 and 44 lb uplift at joint 4.



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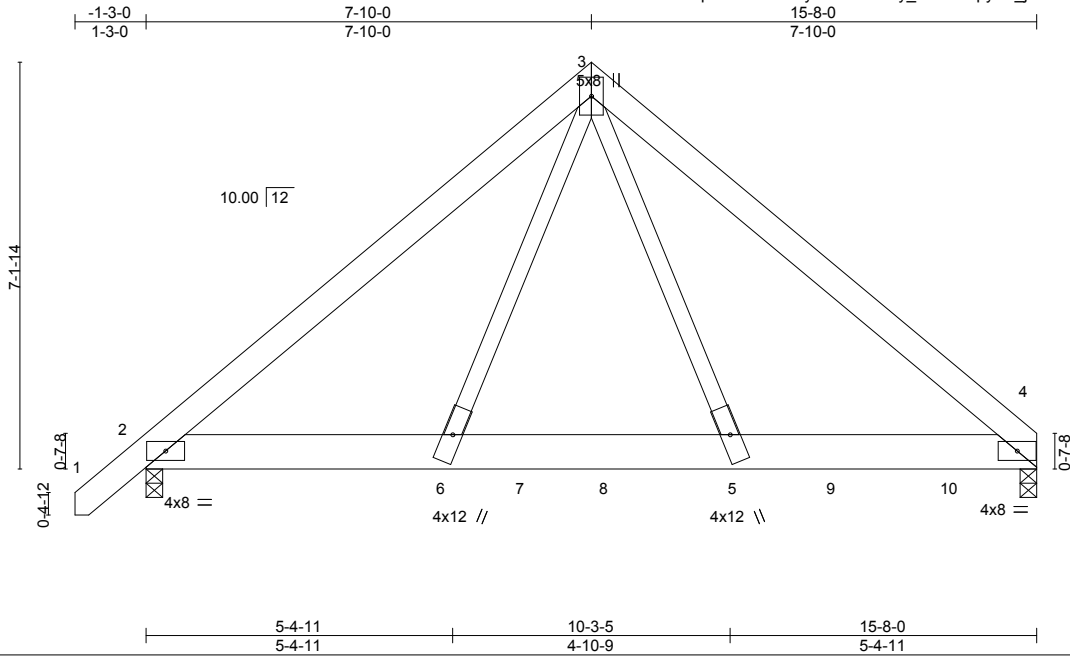
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
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Scale = 1:40.5

| LOADING (psf) | SPACING-             | CSI.            | DEFL.    | in (loc)  | l/defl | L/d | PLATES         | GRIP     |
|---------------|----------------------|-----------------|----------|-----------|--------|-----|----------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.37         | Vert(LL) | -0.06 5-6 | >999   | 360 | MT20           | 244/190  |
| TCDL 10.0     | Plate Grip DOL 1.15  | Lumber DOL 1.15 | Vert(CT) | -0.13 5-6 | >999   | 240 |                |          |
| BCLL 0.0 *    | Rep Stress Incr NO   | WB 0.62         | Horz(CT) | 0.02 4    | n/a    | n/a |                |          |
| BCDL 10.0     | Code IRC2015/TPI2014 | Matrix-S        | Wind(LL) | 0.07 5-6  | >999   | 240 |                |          |
|               |                      |                 |          |           |        |     | Weight: 241 lb | FT = 20% |

| LUMBER-               | BRACING-                                                                  |
|-----------------------|---------------------------------------------------------------------------|
| TOP CHORD 2x6 SP No.1 | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins. |
| BOT CHORD 2x8 SP No.1 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.            |
| WEBS 2x4 SP No.2      |                                                                           |

**REACTIONS.** (size) 4=0-3-8, 2=0-3-8  
 Max Horz 2=172(LC 5)  
 Max Uplift 4=-555(LC 9), 2=-656(LC 8)  
 Max Grav 4=5634(LC 2), 2=3689(LC 1)

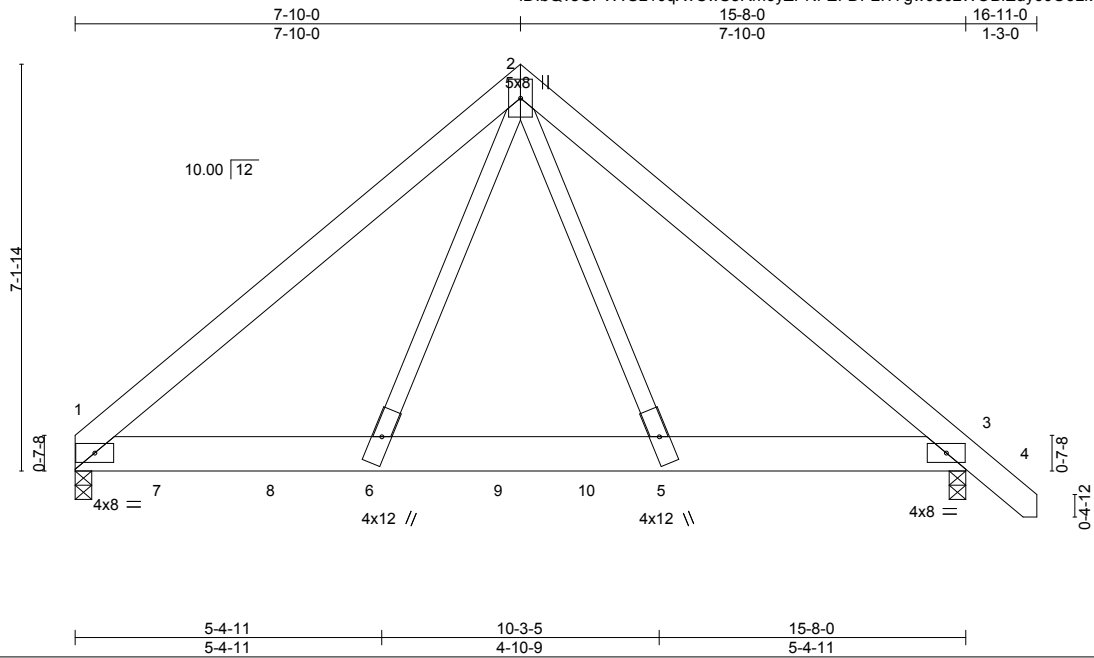
**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-5683/1107, 3-4=-6625/915  
 BOT CHORD 2-6=-767/4205, 5-6=-466/3135, 4-5=-608/4980  
 WEBS 3-5=-436/5082, 3-6=-832/2954

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
 Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-4-0 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 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 555 lb uplift at joint 4 and 656 lb uplift at joint 2.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 2636 lb down and 909 lb up at 6-7-15, 1436 lb down and 146 lb up at 8-1-10, 1347 lb down and 60 lb up at 10-1-10, and 1348 lb down and 34 lb up at 12-1-10, and 1463 lb down and 31 lb up at 14-1-10 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: 1-3=-60, 3-4=-60, 2-4=-20  
 Concentrated Loads (lb)  
 Vert: 5=-1311(B) 7=-2636(B) 8=-1311(B) 9=-1323(B) 10=-1311(B)



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Scale = 1:40.5

| 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 0.34  | Vert(LL) | -0.06 5-6 | >999   | 360 | MT20           | 244/190  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.69  | Vert(CT) | -0.12 5-6 | >999   | 240 |                |          |
| BCLL 0.0 *    | Rep Stress Incr      | NO    | WB 0.55  | Horz(CT) | 0.02 3    | n/a    | n/a |                |          |
| BCDL 10.0     | Code IRC2015/TPI2014 |       | Matrix-S | Wind(LL) | 0.06 5-6  | >999   | 240 |                |          |
|               |                      |       |          |          |           |        |     | Weight: 241 lb | FT = 20% |

**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x8 SP No.1  
 WEBS 2x4 SP No.2

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

**REACTIONS.** (size) 1=0-3-8, 3=0-3-8  
 Max Horz 1=-172(LC 25)  
 Max Uplift 1=-544(LC 8), 3=-615(LC 9)  
 Max Grav 1=5031(LC 2), 3=3394(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-5957/866, 2-3=-5198/1035  
 BOT CHORD 1-6=-576/4468, 5-6=-424/2856, 3-5=-685/3836  
 WEBS 2-5=-767/2708, 2-6=-417/4495

**NOTES-**

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
 Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-4-0 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 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 544 lb uplift at joint 1 and 615 lb uplift at joint 3.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1275 lb down and 49 lb up at 1-6-6, 1166 lb down and 52 lb up at 3-6-6, 1187 lb down and 49 lb up at 5-6-6, and 1286 lb down and 132 lb up at 7-6-6, and 2411 lb down and 846 lb up at 9-0-2 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard

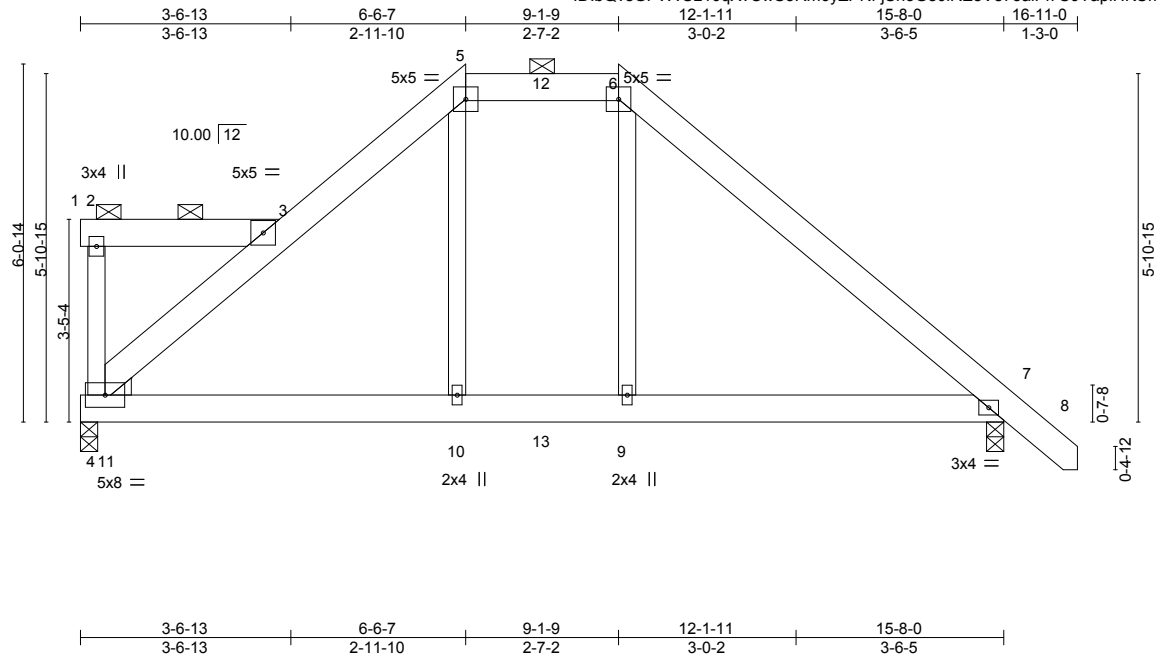
- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-2=-60, 2-4=-60, 1-3=-20  
 Concentrated Loads (lb)  
 Vert: 6=-1166(B) 7=-1166(B) 8=-1166(B) 9=-1166(B) 10=-2411(B)



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Scale = 1:39.1

| 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 0.26  | Vert(LL) | -0.04    | 7-9    | >999 | MT20           | 244/190  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.27  | Vert(CT) | -0.06    | 7-9    | >999 |                |          |
| BCLL 0.0 *    | Rep Stress Incr      | NO    | WB 0.15  | Horz(CT) | 0.02     | 7      | n/a  |                |          |
| BCDL 10.0     | Code IRC2015/TPI2014 |       | Matrix-S | Wind(LL) | 0.04     | 7-9    | >999 | Weight: 113 lb | FT = 20% |

**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2  
 WEDGE  
 Left: 2x4 SP No.3

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 5-8-9 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 1-3, 3-4, 5-6.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 4=0-3-8, 7=0-3-8  
 Max Horz 4=-149(LC 28)  
 Max Uplift 4=-382(LC 8), 7=-381(LC 9)  
 Max Grav 4=1287(LC 34), 7=1373(LC 34)

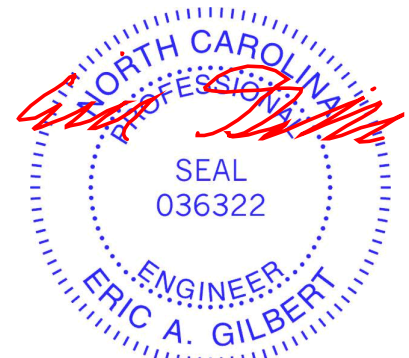
**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 3-4=-1711/574, 3-5=-1670/584, 5-6=-1232/467, 6-7=-1747/565  
 BOT CHORD 4-10=-361/1275, 9-10=-360/1259, 7-9=-363/1276  
 WEBS 5-10=-145/684, 6-9=-133/647

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 382 lb uplift at joint 4 and 381 lb uplift at joint 7.
- 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 160 lb down and 156 lb up at 6-6-7, and 165 lb down and 153 lb up at 7-10-0, and 160 lb down and 156 lb up at 9-1-9 on top chord, and 446 lb down and 187 lb up at 6-6-7, and 87 lb down at 7-10-0, and 446 lb down and 187 lb up at 9-0-13 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-2=-20, 2-3=-60, 3-5=-60, 5-6=-60, 6-8=-60, 4-11=-20, 4-7=-20  
 Concentrated Loads (lb)  
 Vert: 5=-122(B) 6=-122(B) 10=-425(B) 9=-425(B) 12=-122(B) 13=-43(B)



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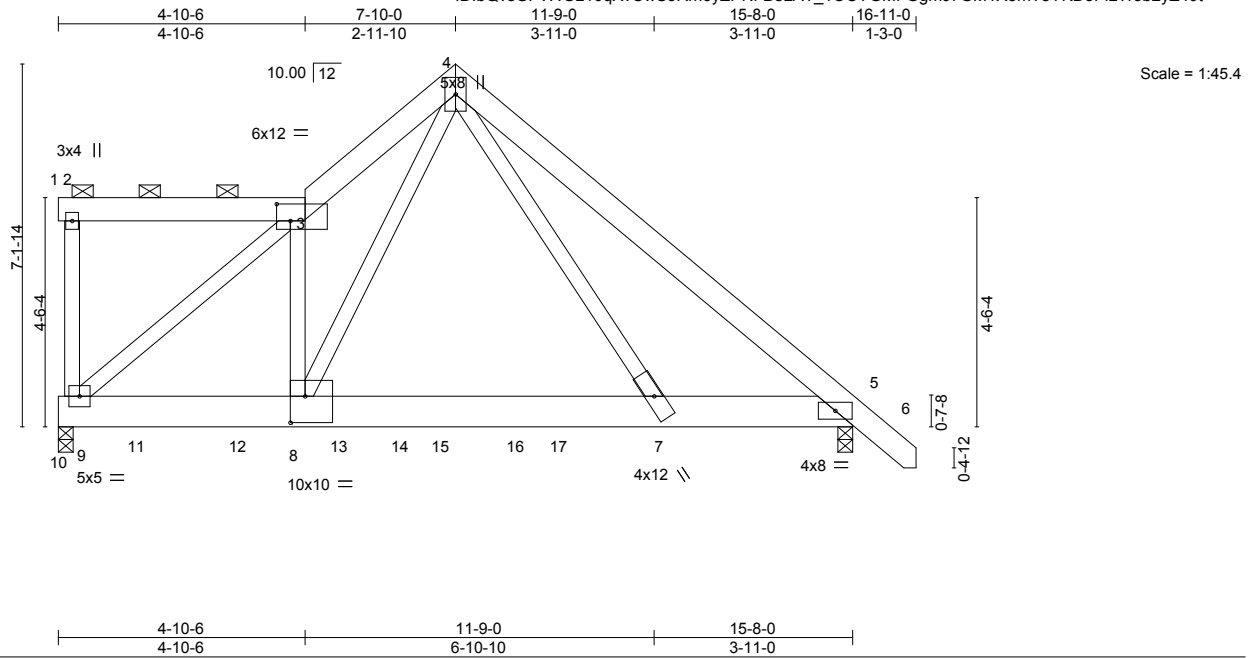


Plate Offsets (X,Y)-- [3:0-3-4,0-4-0], [8:0-3-8,0-6-4]

| 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 0.20  | Vert(LL) | -0.11    | 7-8    | >999 | MT20           | 244/190  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.60  | Vert(CT) | -0.22    | 7-8    | >837 |                |          |
| BCLL 0.0 *    | Rep Stress Incr      | NO    | WB 0.83  | Horz(CT) | 0.02     | 5      | n/a  |                |          |
| BCDL 10.0     | Code IRC2015/TPI2014 |       | Matrix-S | Wind(LL) | 0.11     | 7-8    | >999 | Weight: 273 lb | FT = 20% |

| LUMBER-                     | BRACING-                                                                                                                                |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| TOP CHORD 2x6 SP No.1       | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 1-3. |
| BOT CHORD 2x8 SP 2400F 2.0E | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.                                                                          |
| WEBS 2x4 SP No.2            |                                                                                                                                         |

**REACTIONS.** (size) 9=0-3-8, 5=0-3-8  
 Max Horz 9=-184(LC 9)  
 Max Uplift 9=-519(LC 8), 5=-588(LC 9)  
 Max Grav 9=5037(LC 2), 5=3371(LC 1)

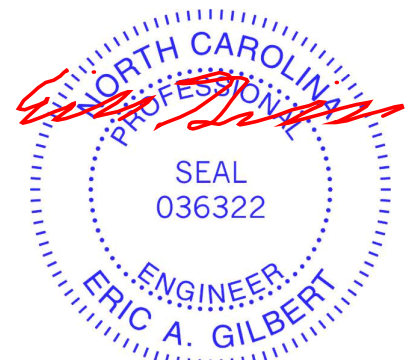
**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 3-4=-6239/911, 4-5=-5825/1137  
 BOT CHORD 8-9=-596/4800, 7-8=-346/2615, 5-7=-759/4315  
 WEBS 3-9=-6333/878, 3-8=-162/278, 4-7=-840/3211, 4-8=-602/5145

**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: 2x8 - 2 rows staggered at 0-4-0 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 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 519 lb uplift at joint 9 and 588 lb uplift at joint 5.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1215 lb down and 29 lb up at 1-6-6, 1174 lb down and 26 lb up at 3-6-6, 1235 lb down and 47 lb up at 5-6-6, and 1194 lb down and 122 lb up at 7-6-6, and 2412 lb down and 846 lb up at 9-0-2 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



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Continued on page 2

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**LOAD CASE(S)** Standard

Uniform Loads (plf)

Vert: 1-2=-20, 2-3=-60, 3-4=-60, 4-6=-60, 5-10=-20

Concentrated Loads (lb)

Vert: 11=-1171(F) 12=-1160(F) 13=-1160(F) 15=-1166(F) 16=-2412(F)

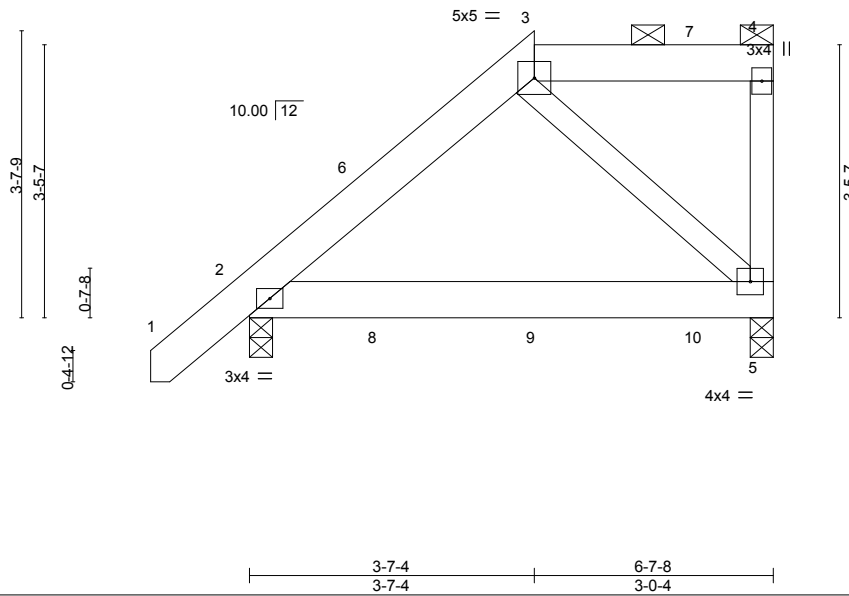
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

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Scale = 1:29.1



| 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 0.06  | Vert(LL) | -0.02 2-5 | >999   | 360 | MT20          | 244/190  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.20  | Vert(CT) | -0.05 2-5 | >999   | 240 |               |          |
| BCLL 0.0 *    | Rep Stress Incr      | NO    | WB 0.04  | Horz(CT) | -0.00 5   | n/a    | n/a |               |          |
| BCDL 10.0     | Code IRC2015/TPI2014 |       | Matrix-P | Wind(LL) | -0.00 2   | >999   | 240 |               |          |
|               |                      |       |          |          |           |        |     | Weight: 47 lb | FT = 20% |

**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-4.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 5=0-3-8, 2=0-3-8  
 Max Horz 2=120(LC 27)  
 Max Uplift 5=-112(LC 5), 2=-53(LC 8)  
 Max Grav 5=277(LC 33), 2=348(LC 1)

**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 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 5=112.
- 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 42 lb down and 52 lb up at 1-8-0, and 86 lb down and 84 lb up at 3-7-4, and 89 lb down and 81 lb up at 5-8-0 on top chord, and 16 lb down at 1-8-0, and 14 lb down at 3-8-0, and 15 lb down at 5-8-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard

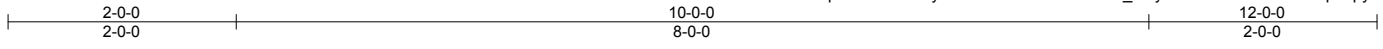
- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-3=-60, 3-4=-60, 2-5=-20  
 Concentrated Loads (lb)  
 Vert: 6=-2(B) 7=-3(B) 8=-7(B) 9=-6(B) 10=-7(B)



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Scale = 1:20.2

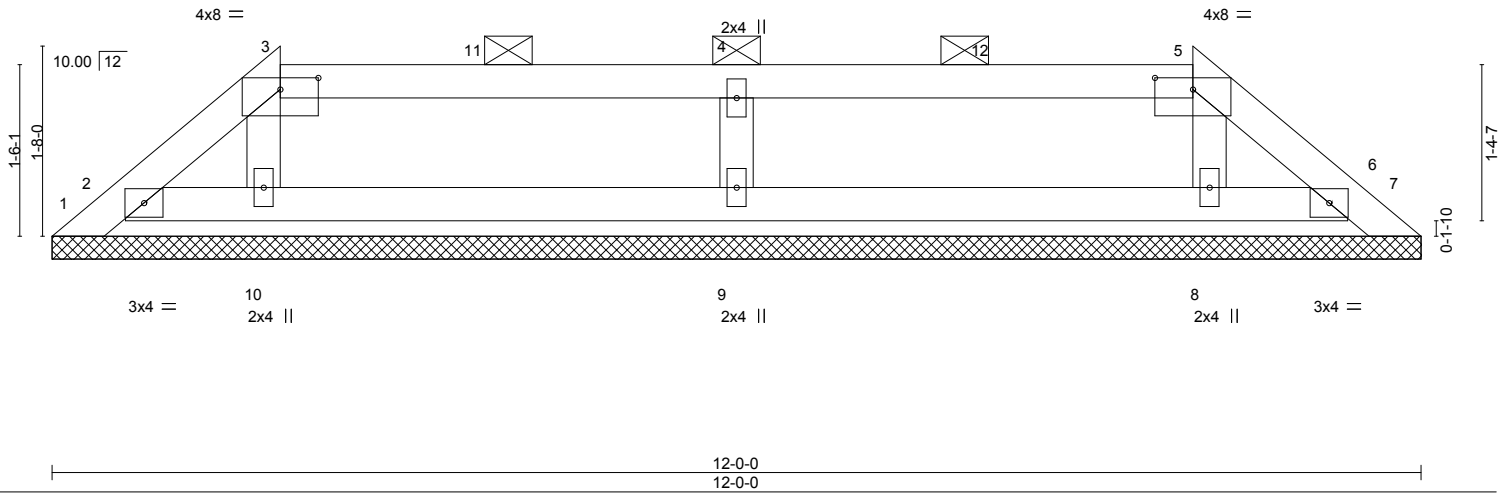


Plate Offsets (X,Y)-- [3:0-4-0,0-1-4], [5:0-4-0,0-1-4]

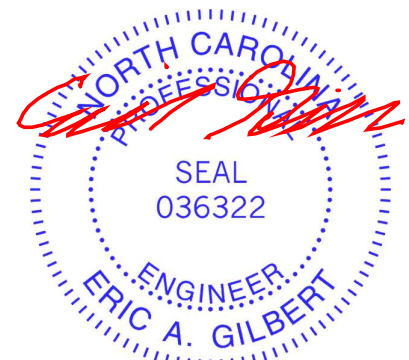
| LOADING (psf) | SPACING-        | 2-0-0           | CSI.     | DEFL.    | in (loc) | l/defl | L/d | PLATES        | GRIP     |
|---------------|-----------------|-----------------|----------|----------|----------|--------|-----|---------------|----------|
| TCLL 20.0     | Plate Grip DOL  | 1.15            | TC 0.17  | Vert(LL) | n/a      | -      | n/a | MT20          | 244/190  |
| TCDL 10.0     | Lumber DOL      | 1.15            | BC 0.09  | Vert(CT) | n/a      | -      | n/a |               |          |
| BCLL 0.0 *    | Rep Stress Incr | YES             | WB 0.04  | Horz(CT) | 0.00     | 6      | n/a |               |          |
| BCDL 10.0     | Code            | IRC2015/TPI2014 | Matrix-S |          |          |        |     | Weight: 39 lb | FT = 20% |

| LUMBER-               | BRACING-                                                                                                             |
|-----------------------|----------------------------------------------------------------------------------------------------------------------|
| TOP CHORD 2x4 SP No.1 | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 3-5. |
| BOT CHORD 2x4 SP No.1 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.                                                       |
| OTHERS 2x4 SP No.2    |                                                                                                                      |

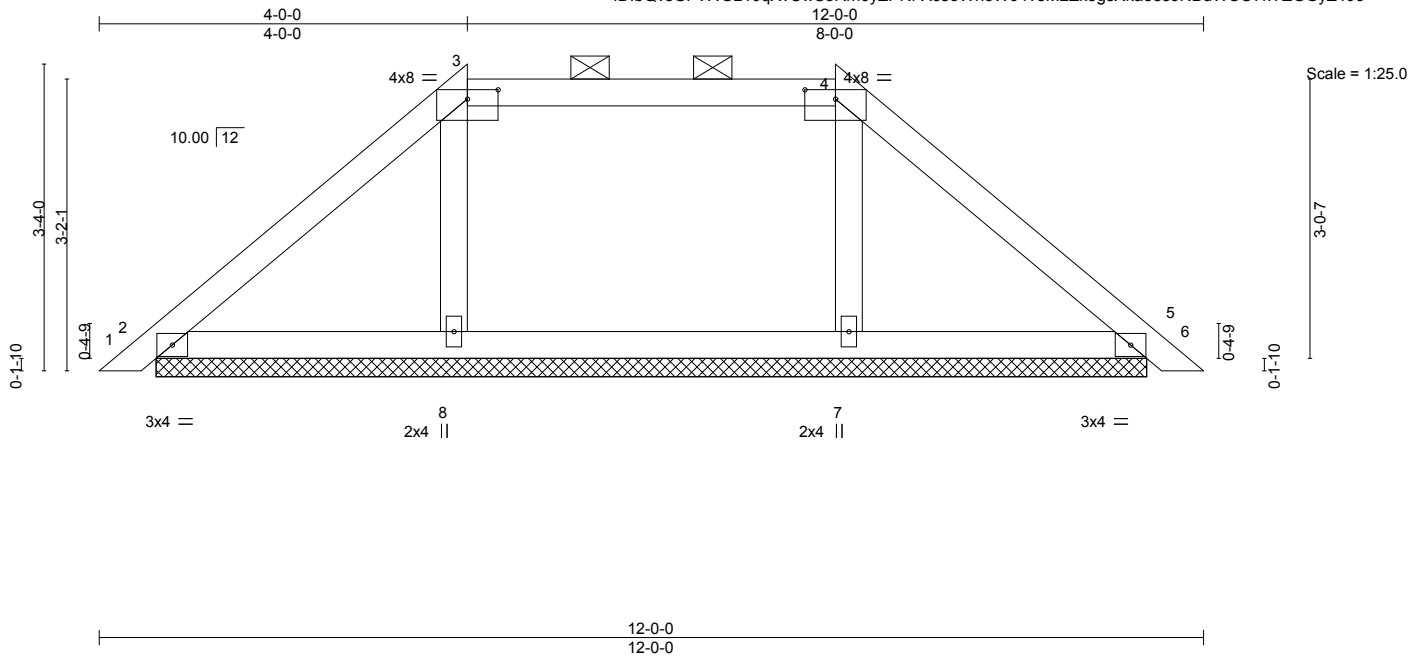
**REACTIONS.** All bearings 12-0-0.  
 (lb) - Max Horz 1=34(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 7, 2, 6, 9, 10, 8  
 Max Grav All reactions 250 lb or less at joint(s) 1, 7, 2, 6, 10, 8 except 9=367(LC 23)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 4-9=-280/211

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-2-12 to 8-2-11, Interior(1) 8-2-11 to 10-0-0, Exterior(2) 10-0-0 to 11-9-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - 4) Provide adequate drainage to prevent water ponding.
  - 5) Gable requires continuous bottom chord bearing.
  - 6) Gable studs spaced at 4-0-0 oc.
  - 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 8) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7, 2, 6, 9, 10, 8.
  - 10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
  - 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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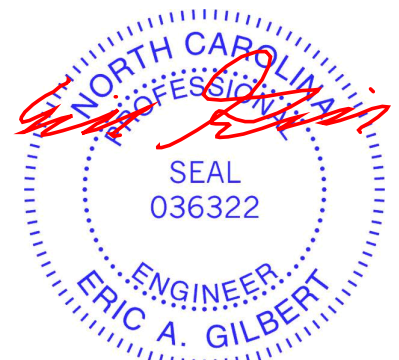
| LOADING (psf) | SPACING-             | CSI.     | DEFL.                   | PLATES        | GRIP     |
|---------------|----------------------|----------|-------------------------|---------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.16  | in (loc) l/defl L/d     | MT20          | 244/190  |
| TCDL 10.0     | Plate Grip DOL 1.15  | BC 0.11  | Vert(LL) 0.00 6 n/r 120 |               |          |
| BCLL 0.0 *    | Lumber DOL 1.15      | WB 0.02  | Vert(CT) 0.00 6 n/r 120 |               |          |
| BCDL 10.0     | Rep Stress Incr YES  | Matrix-S | Horz(CT) 0.00 5 n/a n/a |               |          |
|               | Code IRC2015/TPI2014 |          |                         | Weight: 45 lb | FT = 20% |

| LUMBER-               | BRACING-                                                                                                             |
|-----------------------|----------------------------------------------------------------------------------------------------------------------|
| TOP CHORD 2x4 SP No.1 | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 3-4. |
| BOT CHORD 2x4 SP No.1 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.                                                       |
| WEBS 2x4 SP No.2      |                                                                                                                      |
| OTHERS 2x4 SP No.2    |                                                                                                                      |

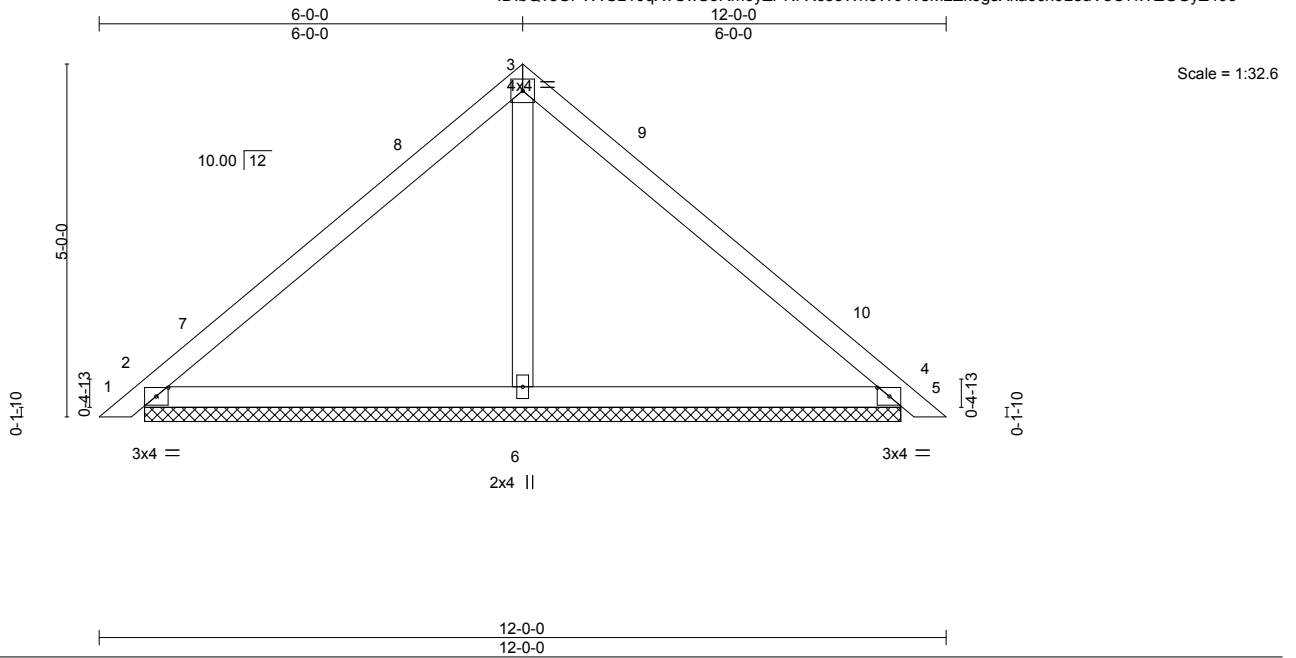
**REACTIONS.** All bearings 10-9-3.  
 (lb) - Max Horz 2=74(LC 11)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 5, 7  
 Max Grav All reactions 250 lb or less at joint(s) 8, 7 except 2=360(LC 23), 5=354(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-417/251, 3-4=-274/250, 4-5=-407/251  
 BOT CHORD 2-8=-106/273, 7-8=-106/273, 5-7=-110/276

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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.
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 4-0-0 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 5, 7.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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| Plate Offsets (X,Y)-- |                      | [2:0-2-1,0-1-8], [4:0-2-1,0-1-8] |             |              |          |        |     |               |             |
|-----------------------|----------------------|----------------------------------|-------------|--------------|----------|--------|-----|---------------|-------------|
| <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 0.29     | Vert(LL)     | 0.01     | 5      | n/r | MT20          | 244/190     |
| TCDL 10.0             | Lumber DOL           | 1.15                             | BC 0.21     | Vert(CT)     | 0.02     | 5      | n/r |               |             |
| BCLL 0.0 *            | Rep Stress Incr      | YES                              | WB 0.08     | Horz(CT)     | 0.00     | 4      | n/a |               |             |
| BCDL 10.0             | Code IRC2015/TPI2014 |                                  | Matrix-S    |              |          |        |     | Weight: 45 lb | FT = 20%    |

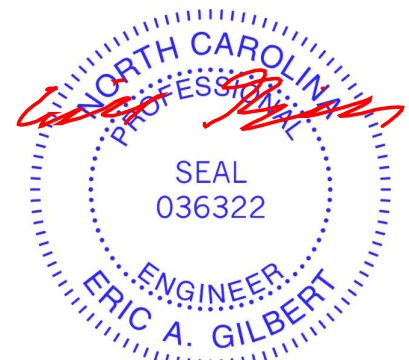
| <b>LUMBER-</b> |             | <b>BRACING-</b> |                                                                 |
|----------------|-------------|-----------------|-----------------------------------------------------------------|
| TOP CHORD      | 2x4 SP No.1 | TOP CHORD       | Structural wood sheathing directly applied or 6-0-0 oc purlins. |
| BOT CHORD      | 2x4 SP No.1 | BOT CHORD       | Rigid ceiling directly applied or 10-0-0 oc bracing.            |
| OTHERS         | 2x4 SP No.2 |                 |                                                                 |

**REACTIONS.** (size) 2=10-8-9, 4=10-8-9, 6=10-8-9  
 Max Horz 2=-115(LC 10)  
 Max Uplift 2=-30(LC 12), 4=-40(LC 13)  
 Max Grav 2=253(LC 1), 4=253(LC 1), 6=401(LC 1)

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

**NOTES-**

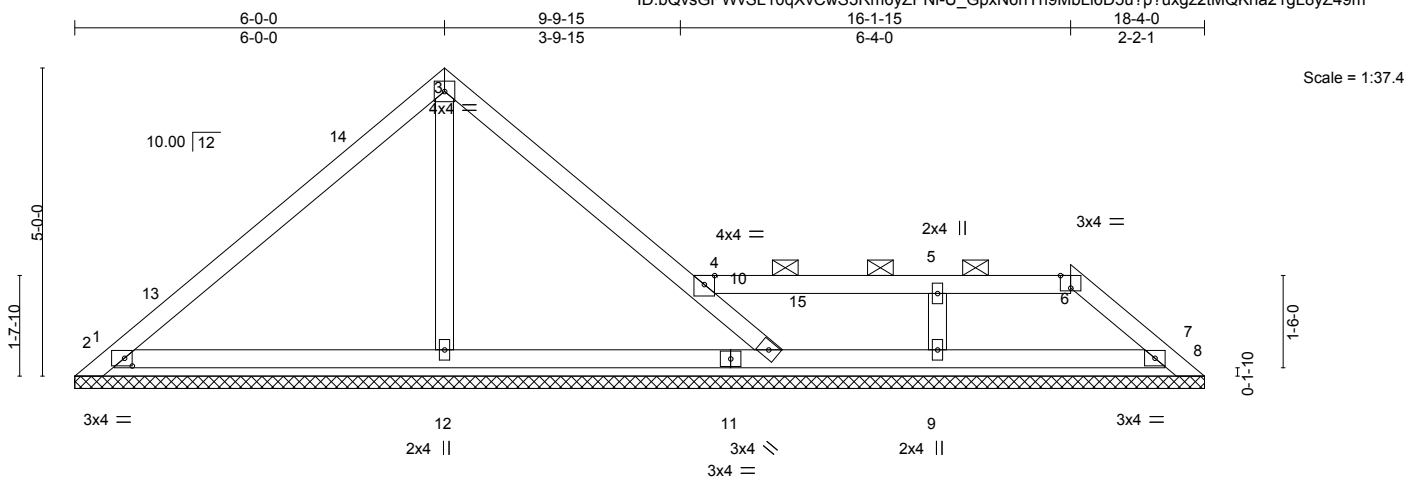
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-2-12 to 4-7-9, Interior(1) 4-7-9 to 6-0-0, Exterior(2) 6-0-0 to 10-4-13, Interior(1) 10-4-13 to 11-9-4 zone; C-C for members and forces & MWFRS for reactions shown; 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
- 7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



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| 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 0.33  | Vert(LL) | n/a      | -      | n/a | MT20          | 244/190  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.16  | Vert(CT) | n/a      | -      | n/a |               |          |
| BCLL 0.0 *    | Rep Stress Incr      | YES   | WB 0.04  | Horz(CT) | 0.00     | 10     | n/a |               |          |
| BCDL 10.0     | Code IRC2015/TPI2014 |       | Matrix-S |          |          |        |     | Weight: 68 lb | FT = 20% |

| LUMBER-               | BRACING-                                                                         |
|-----------------------|----------------------------------------------------------------------------------|
| TOP CHORD 2x4 SP No.1 | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except |
| BOT CHORD 2x4 SP No.1 | 2-0-0 oc purlins (10-0-0 max.): 4-10, 4-6.                                       |
| OTHERS 2x4 SP No.2    | BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.                    |

**REACTIONS.** All bearings 18-4-0.  
 (lb) - Max Horz 1=117(LC 9)  
 Max Uplift All uplift 100 lb or less at joint(s) 9 except 1=549(LC 19), 10=111(LC 13), 8=224(LC 24), 7=119(LC 13), 2=353(LC 12)  
 Max Grav All reactions 250 lb or less at joint(s) 8, 12 except 1=291(LC 12), 10=411(LC 24), 7=381(LC 24), 9=326(LC 24), 2=867(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-229/397, 2-3=-300/191, 3-4=-252/193, 4-10=-377/257  
 WEBS 5-9=-263/157

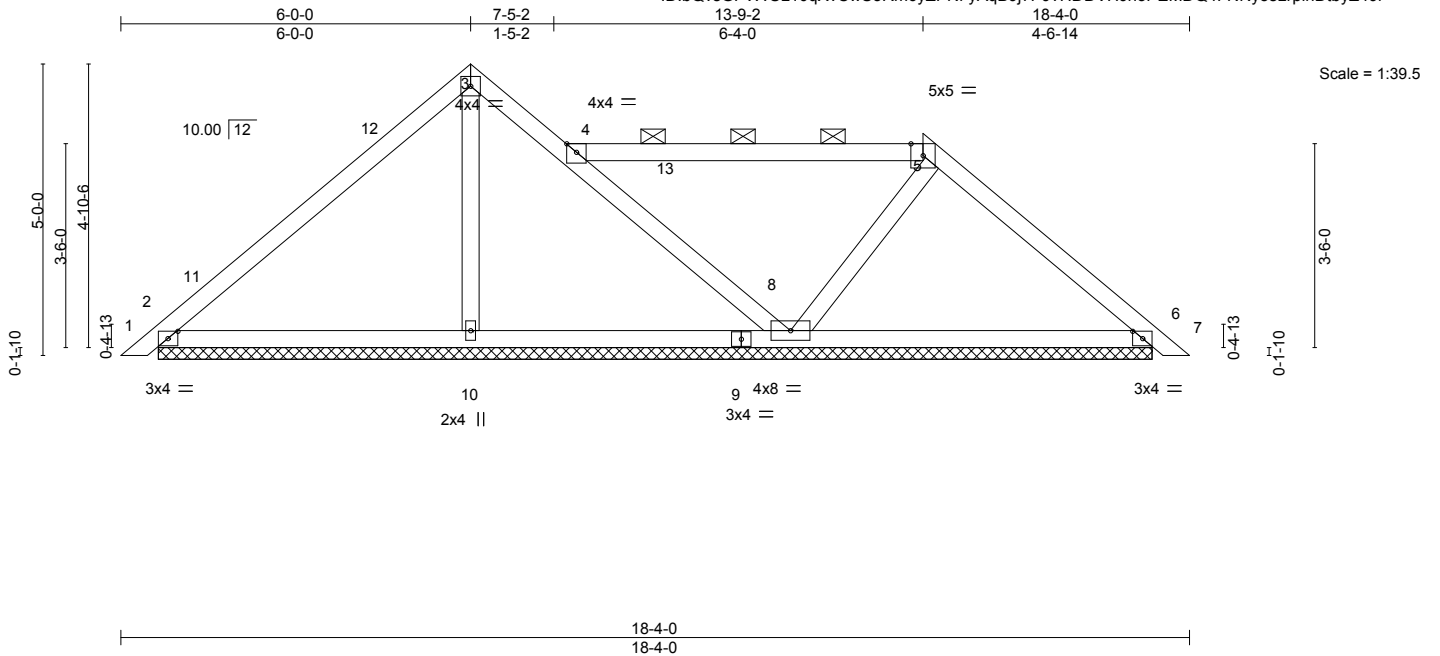
- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-2-12 to 4-7-9, Interior(1) 4-7-9 to 6-0-0, Exterior(2) 6-0-0 to 9-11-13, Interior(1) 9-11-13 to 16-1-15, Exterior(2) 16-1-15 to 18-1-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - 4) Provide adequate drainage to prevent water ponding.
  - 5) Gable requires continuous bottom chord bearing.
  - 6) Gable studs spaced at 4-0-0 oc.
  - 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 8) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9 except (jt=lb) 1=549, 10=111, 8=224, 7=119, 2=353.
  - 10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
  - 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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| Plate Offsets (X,Y)-- [2:0-2-1,0-1-8], [6:0-2-1,0-1-8] |                      | CSI.  |          | DEFL. |               | PLATES |     | GRIP          |          |
|--------------------------------------------------------|----------------------|-------|----------|-------|---------------|--------|-----|---------------|----------|
| LOADING (psf)                                          | SPACING-             | 2-0-0 | TC       | 0.40  | in (loc)      | l/defl | L/d | MT20          | 244/190  |
| TCLL 20.0                                              | Plate Grip DOL       | 1.15  | BC       | 0.24  | Vert(LL) 0.00 | 7      | n/r | 120           |          |
| TCDL 10.0                                              | Lumber DOL           | 1.15  | WB       | 0.12  | Vert(CT) 0.01 | 7      | n/r | 120           |          |
| BCLL 0.0 *                                             | Rep Stress Incr      | YES   | Matrix-S |       | Horz(CT) 0.00 | 6      | n/a | n/a           |          |
| BCDL 10.0                                              | Code IRC2015/TPI2014 |       |          |       |               |        |     |               |          |
|                                                        |                      |       |          |       |               |        |     | Weight: 77 lb | FT = 20% |

| LUMBER-   |             | BRACING-  |                                                                        |
|-----------|-------------|-----------|------------------------------------------------------------------------|
| TOP CHORD | 2x4 SP No.1 | TOP CHORD | Structural wood sheathing directly applied or 6-0-0 oc purlins, except |
| BOT CHORD | 2x4 SP No.1 | BOT CHORD | 2-0-0 oc purlins (10-0-0 max.): 4-8, 4-5.                              |
| WEBS      | 2x4 SP No.2 |           | Rigid ceiling directly applied or 6-0-0 oc bracing.                    |
| OTHERS    | 2x4 SP No.2 |           |                                                                        |

**REACTIONS.** All bearings 17-0-9.  
 (lb) - Max Horz 2=118(LC 11)  
 Max Uplift All uplift 100 lb or less at joint(s) 2 except 8=164(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 6, 2 except 8=689(LC 24), 10=356(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 4-8=-324/217, 4-5=-96/261  
 WEBS 5-8=-419/245

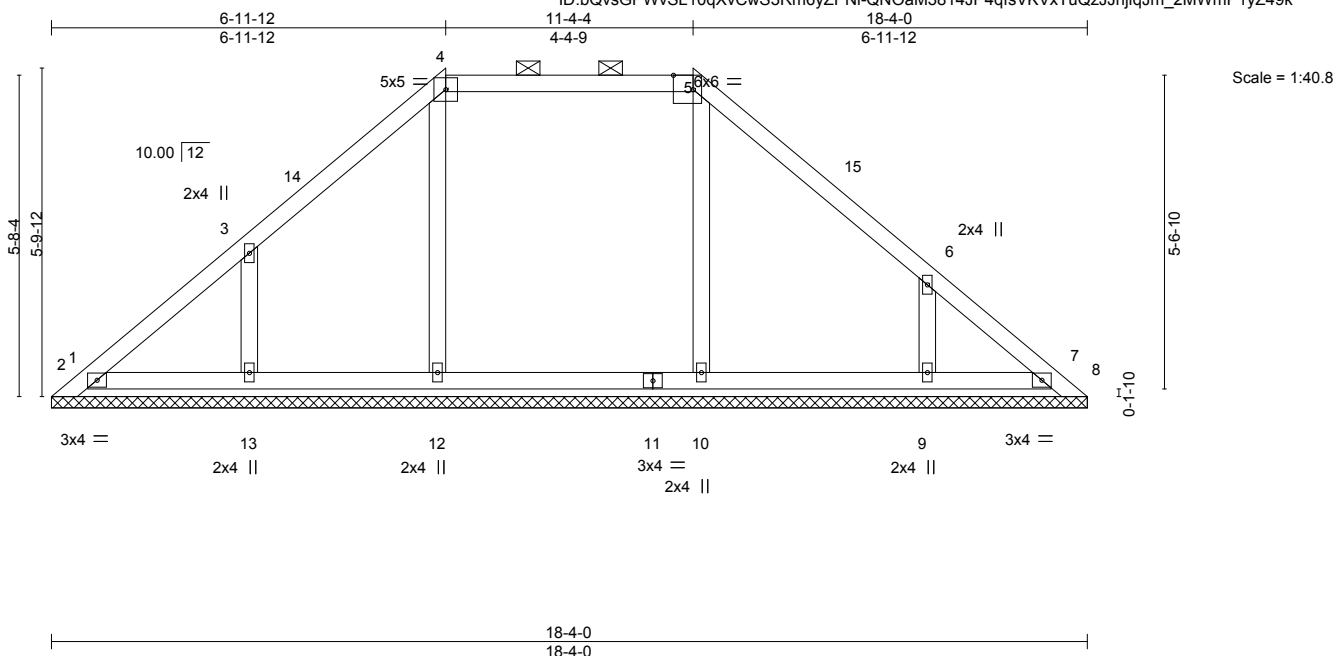
- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-2-12 to 4-7-9, Interior(1) 4-7-9 to 6-0-0, Exterior(2) 6-0-0 to 7-7-1, Interior(1) 7-7-1 to 13-9-2, Exterior(2) 13-9-2 to 18-1-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 8=164.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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| LOADING (psf) | SPACING-             | CSI.     | DEFL.                   | PLATES        | GRIP     |
|---------------|----------------------|----------|-------------------------|---------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.19  | in (loc) l/defl L/d     | MT20          | 244/190  |
| TCDL 10.0     | Plate Grip DOL 1.15  | BC 0.20  | Vert(LL) n/a - n/a 999  |               |          |
| BCLL 0.0 *    | Lumber DOL 1.15      | WB 0.11  | Vert(CT) n/a - n/a 999  |               |          |
| BCDL 10.0     | Rep Stress Incr YES  | Matrix-S | Horz(CT) 0.00 8 n/a n/a |               |          |
|               | Code IRC2015/TPI2014 |          |                         | Weight: 80 lb | FT = 20% |

**LUMBER-**  
 TOP CHORD 2x4 SP No.1  
 BOT CHORD 2x4 SP No.1  
 OTHERS 2x4 SP No.2

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 4-5.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** All bearings 18-4-0.  
 (lb) - Max Horz 1=-134(LC 8)  
 Max Uplift All uplift 100 lb or less at joint(s) 8, 2, 12, 7 except 1=-143(LC 19), 13=-120(LC 12), 9=-136(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 8, 7 except 2=264(LC 19), 10=402(LC 26), 12=388(LC 22), 13=272(LC 19), 9=308(LC 20)

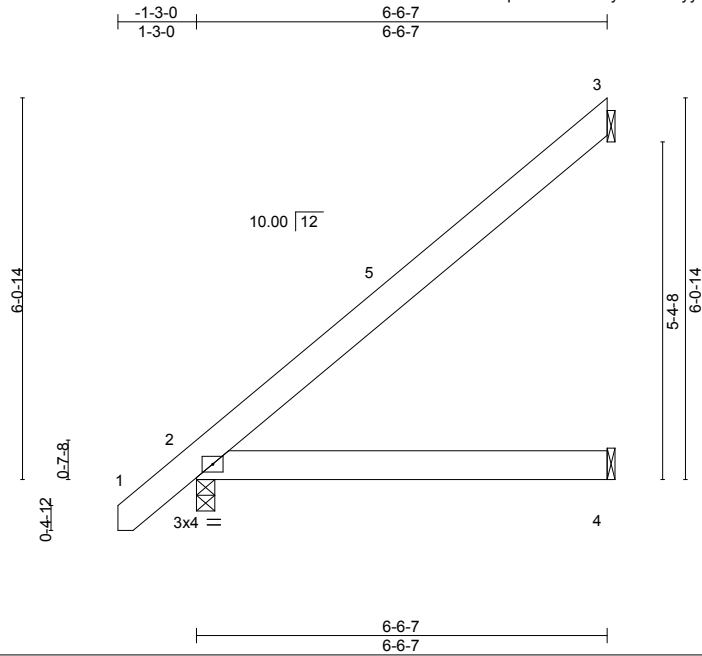
**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 3-13=-289/218, 6-9=-328/248

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-2-12 to 4-7-9, Interior(1) 4-7-9 to 6-11-12, Exterior(2) 6-11-12 to 17-8-5, Interior(1) 17-8-5 to 18-1-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - Provide adequate drainage to prevent water ponding.
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 4-0-0 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 2, 12, 7 except (jt=lb) 1=143, 13=120, 9=136.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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Scale = 1:36.7

| 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 0.30  | Vert(LL) | -0.02 2-4 | >999   | 360 | MT20          | 244/190  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.16  | Vert(CT) | -0.04 2-4 | >999   | 240 |               |          |
| BCLL 0.0 *    | Rep Stress Incr      | YES   | WB 0.00  | Horz(CT) | -0.00 3   | n/a    | n/a |               |          |
| BCDL 10.0     | Code IRC2015/TPI2014 |       | Matrix-P | Wind(LL) | 0.00 2    | ****   | 240 |               |          |
|               |                      |       |          |          |           |        |     | Weight: 40 lb | FT = 20% |

**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1

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

**REACTIONS.** (size) 3=Mechanical, 2=0-3-8, 4=Mechanical  
 Max Horz 2=201(LC 12)  
 Max Uplift 3=-140(LC 12)  
 Max Grav 3=212(LC 19), 2=337(LC 1), 4=127(LC 3)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-1-9 to 3-3-4, Interior(1) 3-3-4 to 6-5-11 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 3=140.



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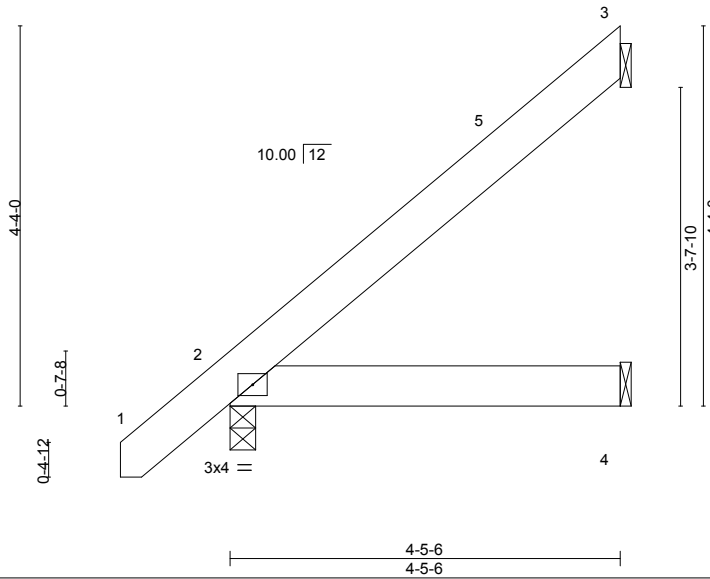
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

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Scale = 1:26.3



| 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 0.14  | Vert(LL) | -0.00 2-4 | >999   | 360 | MT20          | 244/190  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.07  | Vert(CT) | -0.01 2-4 | >999   | 240 |               |          |
| BCLL 0.0 *    | Rep Stress Incr      | YES   | WB 0.00  | Horz(CT) | -0.00 3   | n/a    | n/a |               |          |
| BCDL 10.0     | Code IRC2015/TPI2014 |       | Matrix-P | Wind(LL) | 0.00 2    | ****   | 240 | Weight: 28 lb | FT = 20% |

**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 4-5-6 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 3=Mechanical, 2=0-3-8, 4=Mechanical  
 Max Horz 2=144(LC 12)  
 Max Uplift 3=93(LC 12)  
 Max Grav 3=136(LC 19), 2=258(LC 1), 4=85(LC 3)

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

**NOTES-**

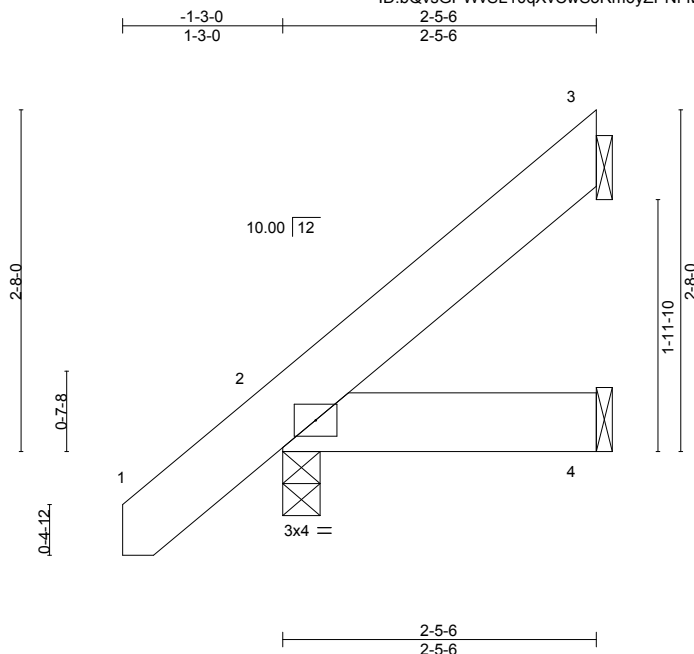
- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-1-9 to 3-3-4, Interior(1) 3-3-4 to 4-4-10 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3.



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Scale = 1:18.0

| 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 0.04  | Vert(LL) | -0.00    | 2      | >999 | MT20          | 244/190  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.02  | Vert(CT) | -0.00    | 2      | >999 |               |          |
| BCLL 0.0 *    | Rep Stress Incr      | YES   | WB 0.00  | Horz(CT) | 0.00     | 3      | n/a  |               |          |
| BCDL 10.0     | Code IRC2015/TPI2014 |       | Matrix-P | Wind(LL) | 0.00     | 2      | **** | Weight: 18 lb | FT = 20% |

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 2-5-6 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

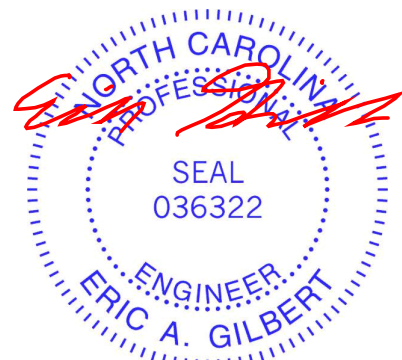
**REACTIONS.**

(size) 3=Mechanical, 2=0-3-8, 4=Mechanical  
 Max Horz 2=90(LC 12)  
 Max Uplift 3=-46(LC 12), 2=-5(LC 12)  
 Max Grav 3=58(LC 19), 2=188(LC 1), 4=45(LC 3)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2.

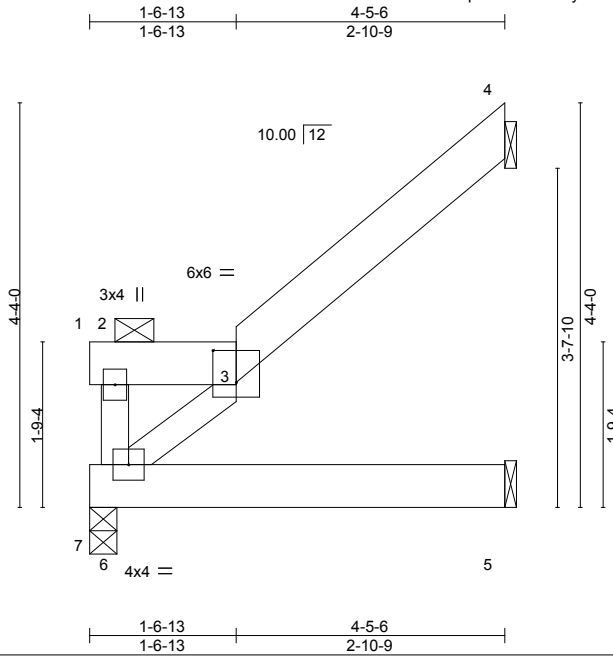


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Scale = 1:24.7

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

| 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 0.12  | Vert(LL) | -0.00    | 5-6    | >999 | MT20          | 244/190  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.06  | Vert(CT) | -0.01    | 5-6    | >999 |               |          |
| BCLL 0.0 *    | Rep Stress Incr      | YES   | WB 0.01  | Horz(CT) | 0.00     | 4      | n/a  |               |          |
| BCDL 10.0     | Code IRC2015/TPI2014 |       | Matrix-P | Wind(LL) | 0.00     | 5-6    | >999 | Weight: 27 lb | FT = 20% |

**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 4-5-6 oc purlins, except end verticals, and 2-0-0 oc purlins: 1-3.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 6=0-3-8, 4=Mechanical, 5=Mechanical  
 Max Horz 6=80(LC 12)  
 Max Uplift 4=80(LC 12)  
 Max Grav 6=176(LC 1), 4=128(LC 19), 5=78(LC 3)

**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 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-0-0 to 1-6-13, Interior(1) 1-6-13 to 4-4-10 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



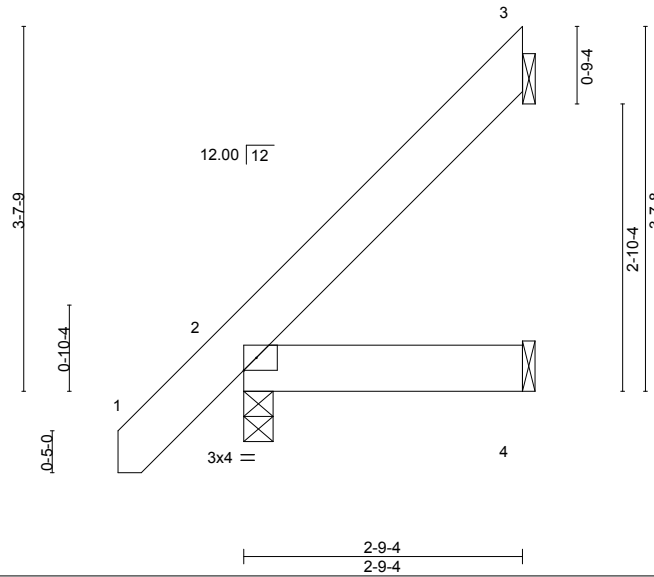
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Scale = 1:22.9



| 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 0.07  | Vert(LL) | -0.00    | 2      | >999 | MT20          | 244/190  |
| TCDL 10.0     | Lumber DOL      | 1.15            | BC 0.02  | Vert(CT) | -0.00    | 2-4    | >999 |               |          |
| BCLL 0.0 *    | Rep Stress Incr | YES             | WB 0.00  | Horz(CT) | -0.00    | 3      | n/a  |               |          |
| BCDL 10.0     | Code            | IRC2015/TPI2014 | Matrix-P | Wind(LL) | 0.00     | 2      | **** | Weight: 20 lb | FT = 20% |

**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 2-9-4 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 3=Mechanical, 2=0-3-8, 4=Mechanical  
 Max Horz 2=120(LC 12)  
 Max Uplift 3=-76(LC 12)  
 Max Grav 3=79(LC 19), 2=198(LC 1), 4=51(LC 3)

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

**NOTES-**

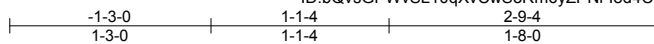
- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3.



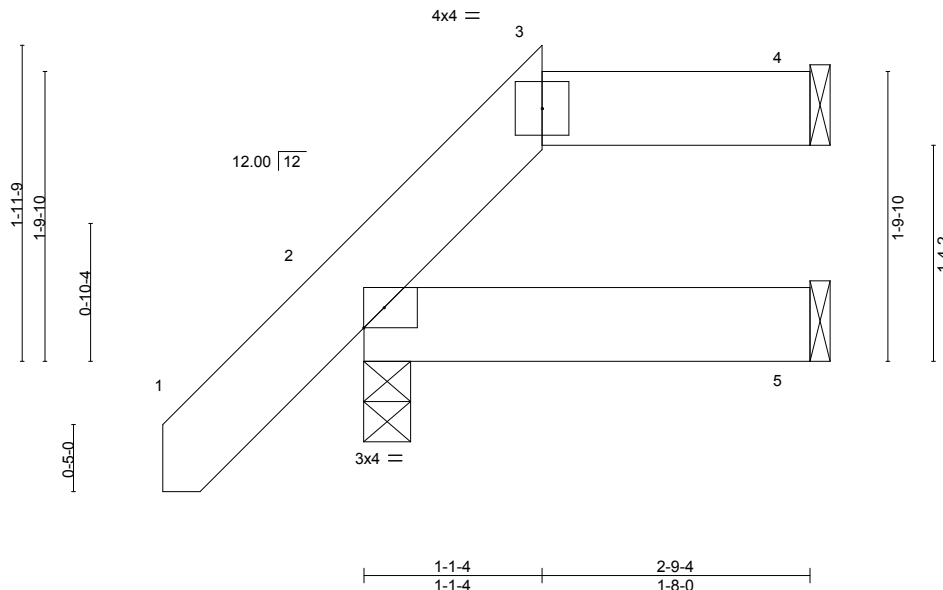
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Scale = 1:14.3



| 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 0.04  | Vert(LL) | -0.00    | 2      | >999 | MT20          | 244/190  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.02  | Vert(CT) | -0.00    | 2      | >999 |               |          |
| BCLL 0.0 *    | Rep Stress Incr      | YES   | WB 0.00  | Horz(CT) | 0.00     | 4      | n/a  |               |          |
| BCDL 10.0     | Code IRC2015/TPI2014 |       | Matrix-P | Wind(LL) | -0.00    | 2      | >999 | Weight: 19 lb | FT = 20% |

**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 2-9-4 oc purlins, except 2-0-0 oc purlins: 3-4.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 4=Mechanical, 2=0-3-8, 5=Mechanical  
 Max Horz 2=65(LC 12)  
 Max Uplift 4=-24(LC 9), 2=-19(LC 12)  
 Max Grav 4=62(LC 24), 2=198(LC 1), 5=46(LC 3)

**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 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

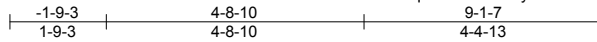


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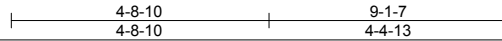
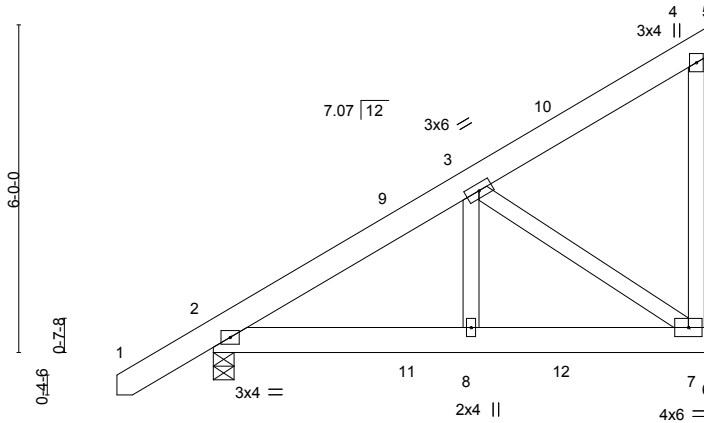
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the





Scale = 1:42.2



| 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 0.10  | Vert(LL) | -0.00    | 7-8    | >999 | MT20          | 244/190  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.10  | Vert(CT) | -0.01    | 7-8    | >999 |               |          |
| BCLL 0.0 *    | Rep Stress Incr      | NO    | WB 0.19  | Horz(CT) | 0.00     | 7      | n/a  |               |          |
| BCDL 10.0     | Code IRC2015/TPI2014 |       | Matrix-S | Wind(LL) | 0.00     | 8      | >999 |               |          |
|               |                      |       |          |          |          |        |      | Weight: 69 lb | FT = 20% |

**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2

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

**REACTIONS.** (size) 7=Mechanical, 2=0-4-9  
 Max Horz 2=200(LC 23)  
 Max Uplift 7=-176(LC 8), 2=-52(LC 8)  
 Max Grav 7=459(LC 29), 2=492(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-541/111  
 BOT CHORD 2-8=-150/383, 7-8=-150/383  
 WEBS 3-7=-463/181

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
  - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 3) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 4) Refer to girder(s) for truss to truss connections.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 7=176.
  - 6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 84 lb down and 75 lb up at 3-6-10, 84 lb down and 75 lb up at 3-6-10, and 127 lb down and 137 lb up at 6-4-9, and 127 lb down and 137 lb up at 6-4-9 on top chord, and 5 lb down at 3-6-10, 5 lb down at 3-6-10, and 28 lb down at 6-4-9, and 28 lb down at 6-4-9 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
  - 7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

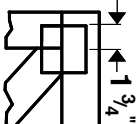
**LOAD CASE(S)** Standard  
 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-4=-60, 4-5=-20, 2-6=-20  
 Concentrated Loads (lb)  
 Vert: 10=-62(F=-31, B=-31) 12=-28(F=-14, B=-14)



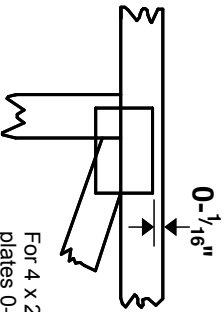
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# Symbols

## PLATE LOCATION AND ORIENTATION



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



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



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

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

## PLATE SIZE

**4 X 4**

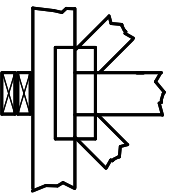
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## LATERAL BRACING LOCATION



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

## BEARING



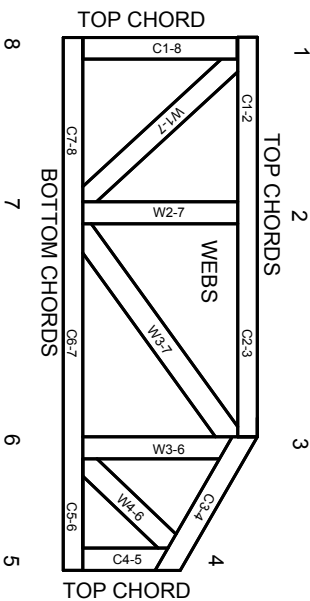
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

## Industry Standards:

ANSI/TFP 1: National Design Specification for Metal Plate Connected Wood Truss Construction.  
DSB-89: Design Standard for Bracing.  
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

# Numbering System

6-4-8 dimensions shown in ft-in-sixteenths (Drawings not to scale)



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

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

## PRODUCT CODE APPROVALS

ICC-ES Reports:

ESR-1311, ESR-1352, ESR1988  
ER-3907, ESR-2362, ESR-1397, ESR-3282

Trusses are designed for wind loads in the plane of the truss unless otherwise shown.

Lumber design values are in accordance with ANSI/TFP 1 section 6.3 These truss designs rely on lumber values established by others.

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MITek Engineering Reference Sheet: Mill-7473 rev. 5/19/2020



# General Safety Notes

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

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TFP 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TFP 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TFP 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.