

**Trenco**

818 Soundside Rd  
Edenton, NC 27932

Re: B0318-0840  
Freelance A

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: E11513721 thru E11513738

My license renewal date for the state of North Carolina is December 31, 2018.

North Carolina COA: C-0844



March 5, 2018

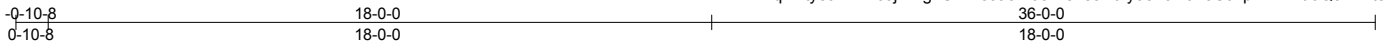
Lassiter, Frank

**IMPORTANT NOTE:** Truss Engineer's responsibility is solely for design of individual trusses based upon design parameters shown on referenced truss drawings. Parameters have not been verified as appropriate for any use. Any location identification specified is for file reference only and has not been used in preparing design. Suitability of truss designs for any particular building is the responsibility of the building designer, not the Truss Engineer, per ANSI/TPI-1, Chapter 2.

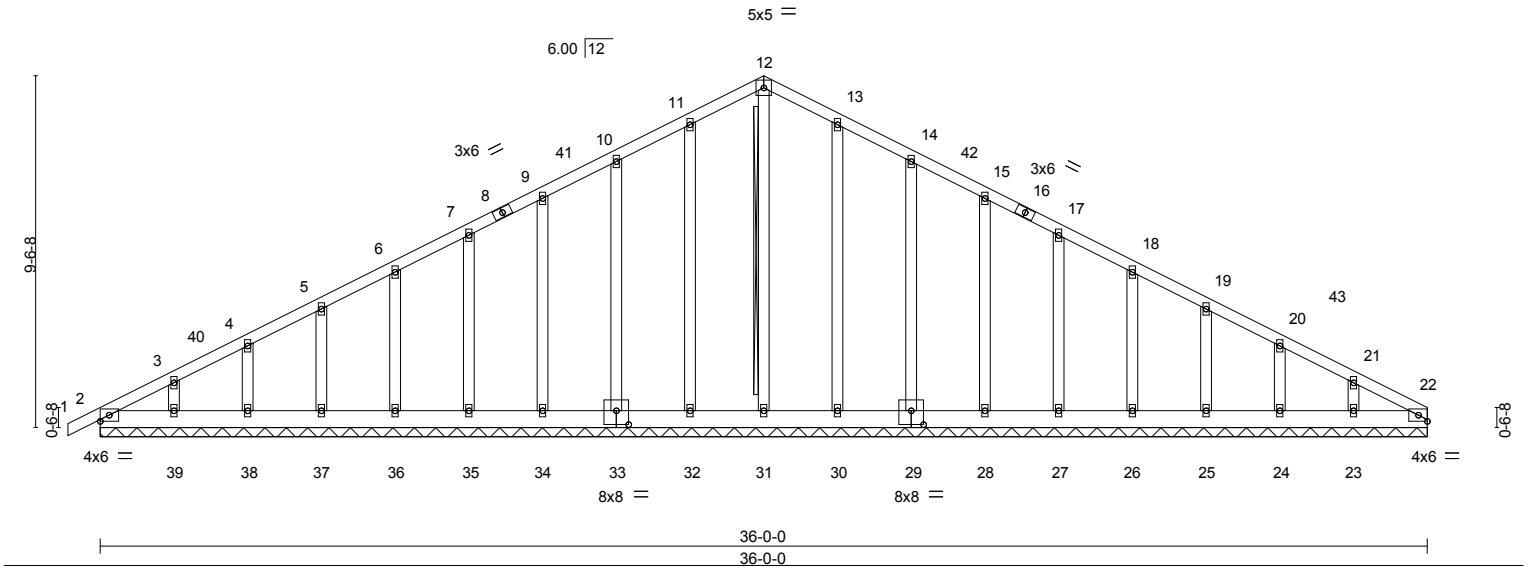
|                   |             |                                    |          |          |   |           |
|-------------------|-------------|------------------------------------|----------|----------|---|-----------|
| Job<br>B0318-0840 | Truss<br>A1 | Truss Type<br>COMMON SUPPORTED GAB | Qty<br>1 | Ply<br>1 | Freelance A<br>Job Reference (optional) | E11513721 |
|-------------------|-------------|------------------------------------|----------|----------|---|-----------|

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ID:qBVty8JxTR2c0jvIHgLUvLZeJa3-vo5W8ns3wtky98howcP9S0zpn1E?nuoQ3B72t8ze14n



Scale = 1:62.5



|  |                      |             |                |          |        |     |                |             |
|--|----------------------|-------------|----------------|----------|--------|-----|----------------|-------------|
| Plate Offsets (X,Y)-- [29:0-4-0,0-4-8], [33:0-4-0,0-4-8] |                      |             |                |          |        |     |                |             |
| <b>LOADING</b> (psf)                                     | <b>SPACING-</b>      | <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 0.09     | Vert(LL) -0.00 | 1        | n/r    | 120 | MT20           | 244/190     |
| TCDL 10.0  | Lumber DOL 1.15      | BC 0.03     | Vert(TL) -0.00 | 1        | n/r    | 120 |                |             |
| BCLL 0.0 *   | Rep Stress Incr YES  | WB 0.16     | Horz(TL) 0.01  | 22       | n/a    | n/a |                |             |
| BCDL 10.0  | Code IRC2009/TPI2007 | Matrix-S    |                |          |        |     | Weight: 262 lb | FT = 20%    |

**LUMBER-**  
TOP CHORD 2x4 SP No.1  
BOT CHORD 2x6 SP No.1  
OTHERS 2x4 SP No.3

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
WEBS T-Brace: 2x4 SPF No.2 - 12-31  
Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance.  
Brace must cover 90% of web length.

**REACTIONS.** All bearings 36-0-0.  
(lb) - Max Horz 2=178(LC 6)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 32, 34, 35, 36, 37, 38, 30, 28, 27, 26, 25, 24 except  
33=-100(LC 6), 39=-107(LC 6), 29=-101(LC 7), 23=-126(LC 7)  
Max Grav All reactions 250 lb or less at joint(s) 2, 31, 32, 33, 34, 35, 36, 37, 38, 39, 30, 29, 28, 27, 26,  
25, 24, 23, 22

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-281/27, 10-11=-43/337, 11-12=-46/442, 12-13=-46/442, 13-14=-43/337,  
21-22=-277/22  
BOT CHORD 2-39=0/285, 38-39=0/285, 37-38=0/285, 36-37=0/285, 35-36=0/285, 34-35=0/285,  
33-34=0/285, 32-33=0/285, 31-32=0/285, 30-31=0/285, 29-30=0/285, 28-29=0/285,  
27-28=0/285, 26-27=0/285, 25-26=0/285, 24-25=0/285, 23-24=0/285, 22-23=0/285  
WEBS 21-23=-128/261

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone and C-C Corner(3) -0-10-8 to 3-6-5, Exterior(2) 3-6-5 to 13-7-3, Corner(3) 13-7-3 to 18-0-0, Exterior(2) 22-4-13 to 31-7-3 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.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 32, 34, 35, 36, 37, 38, 30, 28, 27, 26, 25, 24 except (jt=lb) 33=100, 39=100, 29=101, 23=126.
  - Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.
  - Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



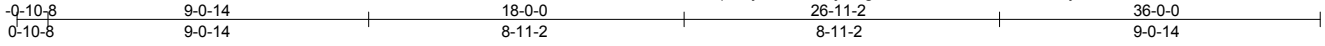
March 5, 2018

|                   |             |                      |          |          |             |           |
|-------------------|-------------|----------------------|----------|----------|-------------|-----------|
| Job<br>B0318-0840 | Truss<br>A2 | Truss Type<br>COMMON | Qty<br>4 | Ply<br>1 | Freelance A | E11513722 |
|-------------------|-------------|----------------------|----------|----------|-------------|-----------|

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Scale = 1:65.2

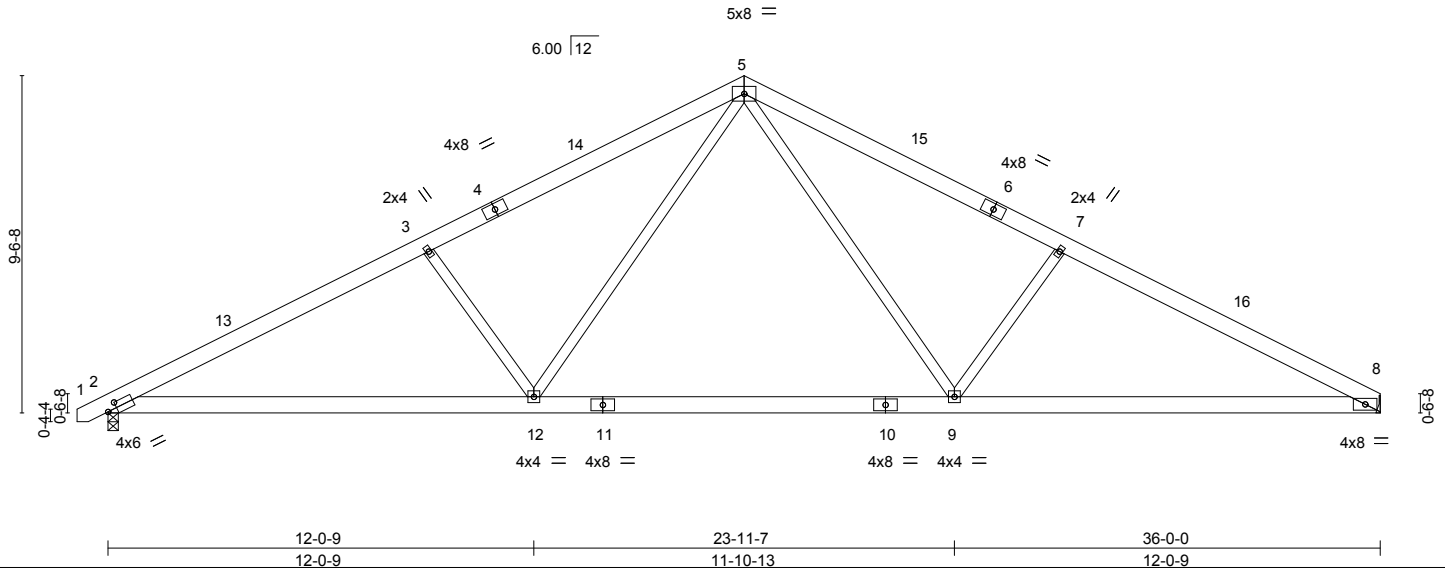


Plate Offsets (X,Y)-- [2:0-3-4,0-2-0]

|                      |                      |             |                              |                |             |
|----------------------|----------------------|-------------|------------------------------|----------------|-------------|
| <b>LOADING</b> (psf) | <b>SPACING-</b>      | <b>CSI.</b> | <b>DEFL.</b>                 | <b>PLATES</b>  | <b>GRIP</b> |
| TCLL 20.0            | 2-0-0                | TC 0.39     | in (loc) l/defl L/d          | MT20           | 244/190     |
| TCDL 10.0            | Plate Grip DOL 1.15  | BC 0.69     | Vert(LL) -0.40 9-12 >999 360 |                |             |
| BCLL 0.0 *           | Lumber DOL 1.15      | WB 0.64     | Vert(TL) -0.58 9-12 >745 240 |                |             |
| BCDL 10.0            | Rep Stress Incr YES  | Matrix-S    | Horz(TL) 0.09 8 n/a n/a      |                |             |
|                      | Code IRC2009/TP12007 |             | Wind(LL) 0.08 8-9 >999 240   | Weight: 228 lb | FT = 20%    |

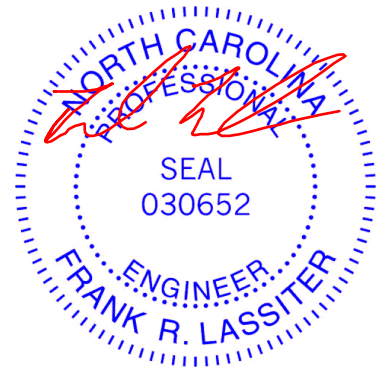
**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.3

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 3-11-12 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 9-2-1 oc bracing.

**REACTIONS.** (lb/size) 2=1723/0-3-8, 8=1669/Mechanical  
 Max Horz 2=148(LC 6)  
 Max Uplift 2=-265(LC 6), 8=-222(LC 7)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-3119/954, 3-5=-2811/948, 5-7=-2822/962, 7-8=-3111/971  
 BOT CHORD 2-12=-705/2682, 9-12=-325/1773, 8-9=-728/2703  
 WEBS 5-9=-285/1167, 7-9=-542/435, 5-12=-266/1150, 3-12=-524/413

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) -0-8-10 to 3-8-3, Interior(1) 3-8-3 to 13-7-3, Exterior(2) 13-7-3 to 18-0-0, Interior(1) 22-4-13 to 31-6-7 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=265, 8=222.



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**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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 fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TP1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



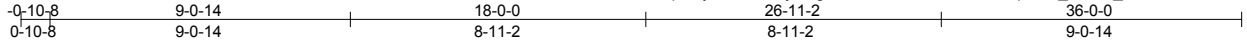
818 Soundside Road  
 Edenton, NC 27932

|                   |               |                      |          |          |             |           |
|-------------------|---------------|----------------------|----------|----------|-------------|-----------|
| Job<br>B0318-0840 | Truss<br>A2-P | Truss Type<br>COMMON | Qty<br>4 | Ply<br>1 | Freelance A | E11513723 |
|-------------------|---------------|----------------------|----------|----------|-------------|-----------|

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Scale = 1:69.6

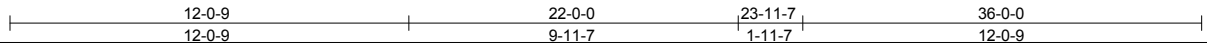
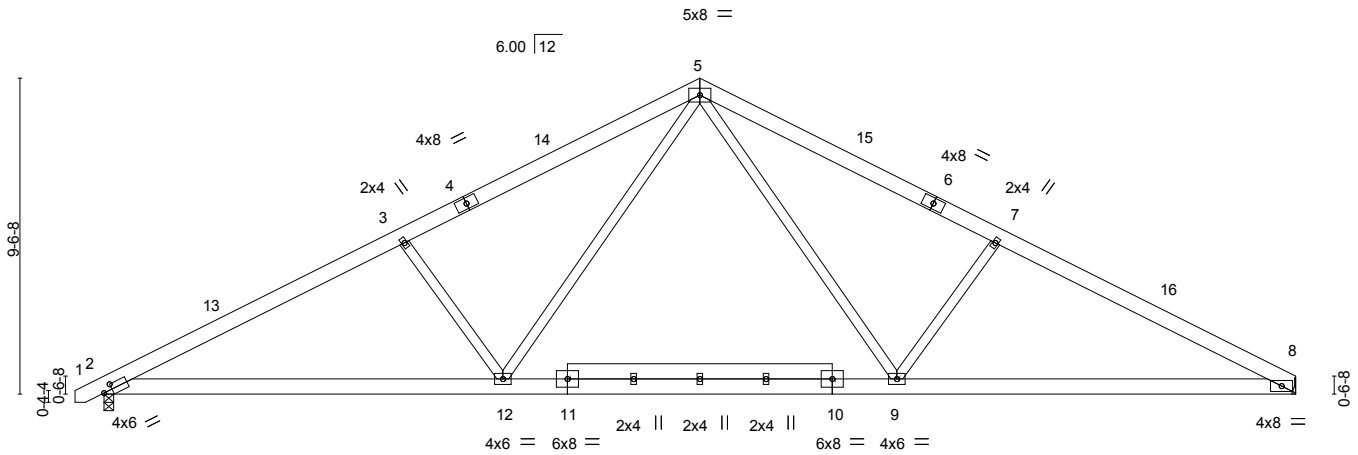


Plate Offsets (X,Y)-- [2:0-3-4-0-2-0]

|                      |                      |       |             |              |          |        |      |                |             |
|----------------------|----------------------|-------|-------------|--------------|----------|--------|------|----------------|-------------|
| <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)     | -0.56    | 9-12   | >761 | MT20           | 244/190     |
| TCDL 10.0            | Lumber DOL           | 1.15  | BC 0.91     | Vert(TL)     | -0.74    | 9-12   | >583 |                |             |
| BCLL 0.0 *           | Rep Stress Incr      | YES   | WB 0.64     | Horz(TL)     | 0.10     | 8      | n/a  |                |             |
| BCDL 10.0            | Code IRC2009/TP12007 |       | Matrix-S    | Wind(LL)     | 0.08     | 8-9    | >999 |                |             |
|                      |                      |       |             |              |          |        |      | Weight: 246 lb | FT = 20%    |

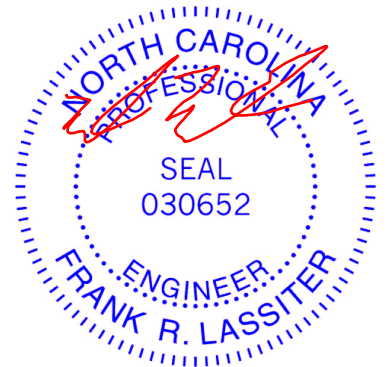
**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.3 \*Except\*  
 10-11: 2x6 SP No.1

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 3-9-7 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 9-2-1 oc bracing.

**REACTIONS.** (lb/size) 2=1842/0-3-8, 8=1787/Mechanical  
 Max Horz 2=148(LC 6)  
 Max Uplift 2=-265(LC 6), 8=-222(LC 7)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-3403/954, 3-5=-3096/948, 5-7=-3108/962, 7-8=-3419/971  
 BOT CHORD 2-12=-705/2932, 9-12=-325/1946, 8-9=-728/2955  
 WEBS 5-9=-285/1318, 7-9=-534/435, 5-12=-266/1301, 3-12=-514/413

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) -0-8-10 to 3-8-3, Interior(1) 3-8-3 to 13-7-3, Exterior(2) 13-7-3 to 18-0-0, Interior(1) 22-4-13 to 31-6-7 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 with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
  - 5) Refer to girder(s) for truss to truss connections.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=265, 8=222.



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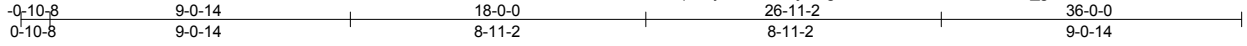
818 Soundside Road  
 Edenton, NC 27932

|                   |               |                      |          |          |             |           |
|-------------------|---------------|----------------------|----------|----------|-------------|-----------|
| Job<br>B0318-0840 | Truss<br>A3-P | Truss Type<br>COMMON | Qty<br>1 | Ply<br>1 | Freelance A | E11513724 |
|-------------------|---------------|----------------------|----------|----------|-------------|-----------|

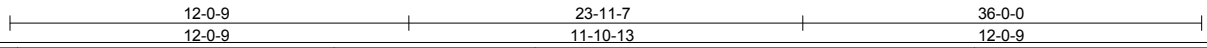
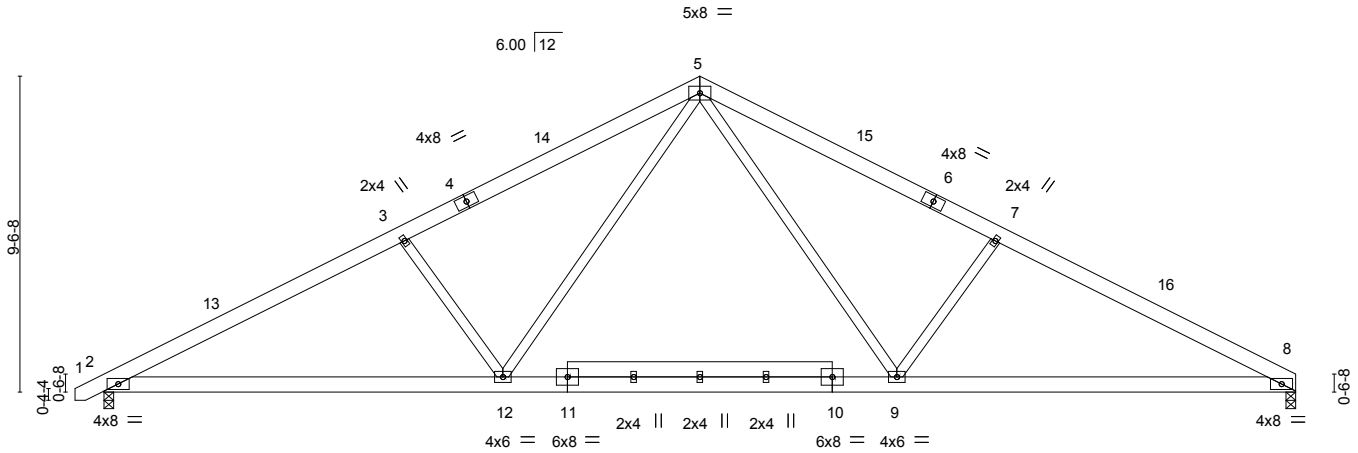
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Scale = 1:69.6



|                      |                      |             |                              |                |             |
|----------------------|----------------------|-------------|------------------------------|----------------|-------------|
| <b>LOADING</b> (psf) | <b>SPACING-</b>      | <b>CSI.</b> | <b>DEFL.</b>                 | <b>PLATES</b>  | <b>GRIP</b> |
| TCLL 20.0            | 2-3-0                | TC 0.55     | in (loc) l/defl L/d          | MT20           | 244/190     |
| TCDL 10.0            | Plate Grip DOL 1.15  | BC 0.60     | Vert(LL) -0.53 9-12 >807 360 |                |             |
| BCLL 0.0 *           | Lumber DOL 1.15      | WB 0.70     | Vert(TL) -0.70 9-12 >608 240 |                |             |
| BCDL 10.0            | Rep Stress Incr NO   | Matrix-S    | Horz(TL) 0.09 8 n/a n/a      | Weight: 246 lb | FT = 20%    |
|                      | Code IRC2009/TPI2007 |             | Wind(LL) 0.08 2-12 >999 240  |                |             |

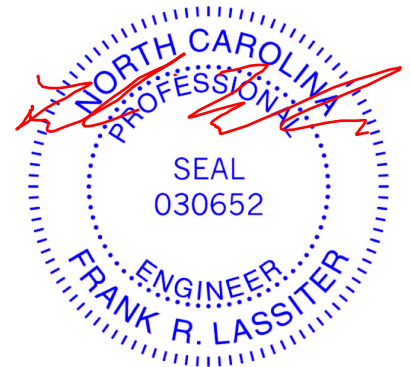
**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP 2400F 2.0E  
 WEBS 2x4 SP No.3 \*Except\*  
 10-11: 2x6 SP No.1

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 3-6-2 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 2=2067/0-3-8, 8=2008/0-3-8  
 Max Horz 2=166(LC 6)  
 Max Uplift 2=-297(LC 6), 8=-249(LC 7)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-3817/1071, 3-5=-3472/1064, 5-7=-3474/1076, 7-8=-3820/1085  
 BOT CHORD 2-12=-789/3288, 9-12=-363/2180, 8-9=-810/3294  
 WEBS 5-9=-316/1466, 7-9=-584/484, 5-12=-299/1463, 3-12=-576/463

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) -0-8-10 to 3-8-3, Interior(1) 3-8-3 to 13-7-3, Exterior(2) 13-7-3 to 18-0-0, Interior(1) 22-4-13 to 31-5-7 zone; C-C for members and forces & MWFRS for reactions shown; 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 with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=297, 8=249.



March 5, 2018

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|                   |               |                      |          |          |             |           |
|-------------------|---------------|----------------------|----------|----------|-------------|-----------|
| Job<br>B0318-0840 | Truss<br>A4-P | Truss Type<br>COMMON | Qty<br>1 | Ply<br>1 | Freelance A | E11513725 |
|-------------------|---------------|----------------------|----------|----------|-------------|-----------|

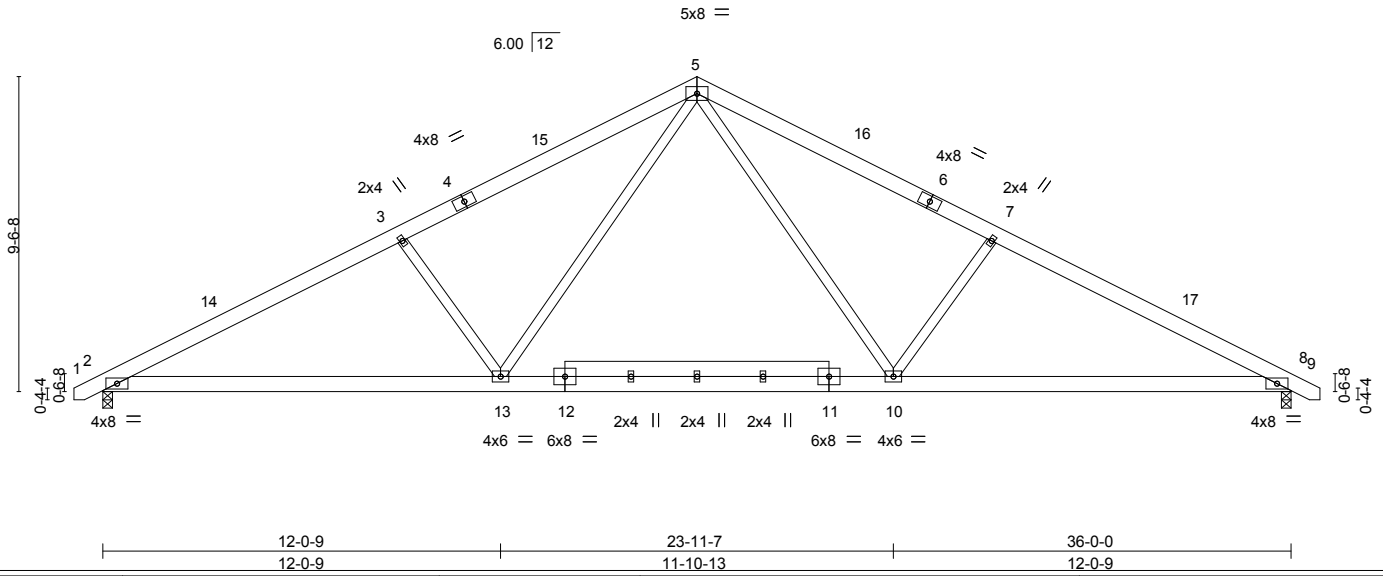
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|        |        |        |         |        |         |
|--------|--------|--------|---------|--------|---------|
| 0-10-8 | 9-0-14 | 18-0-0 | 26-11-2 | 36-0-0 | 36-10-8 |
| 0-10-8 | 9-0-14 | 8-11-2 | 8-11-2  | 9-0-14 | 0-10-8  |

Scale = 1:69.8



| LOADING (psf) | SPACING-             | CSI.     | DEFL.                         | PLATES         | GRIP     |
|---------------|----------------------|----------|-------------------------------|----------------|----------|
| TCLL 20.0     | 2-3-0                | TC 0.52  | in (loc) l/defl L/d           | MT20           | 244/190  |
| TCDL 10.0     | Plate Grip DOL 1.15  | BC 0.60  | Vert(LL) -0.53 10-13 >812 360 |                |          |
| BCLL 0.0 *    | Lumber DOL 1.15      | WB 0.66  | Vert(TL) -0.70 10-13 >610 240 |                |          |
| BCDL 10.0     | Rep Stress Incr NO   | Matrix-S | Horz(TL) 0.09 8 n/a n/a       |                |          |
|               | Code IRC2009/TPI2007 |          | Wind(LL) 0.08 8-10 >999 240   | Weight: 248 lb | FT = 20% |

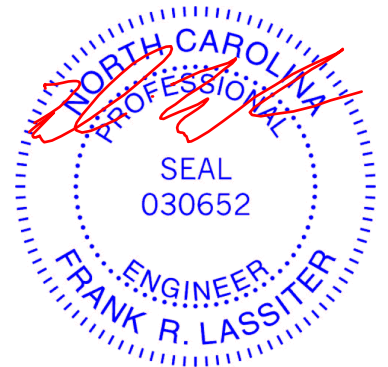
**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP 2400F 2.0E  
 WEBS 2x4 SP No.3 \*Except\*  
 11-12: 2x6 SP No.1

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 3-7-8 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 2=2067/0-3-8, 8=2067/0-3-8  
 Max Horz 2=161(LC 6)  
 Max Uplift 2=-297(LC 6), 8=-297(LC 7)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-3815/1062, 3-5=-3470/1056, 5-7=-3470/1056, 7-8=-3815/1062  
 BOT CHORD 2-13=-757/3286, 10-13=-332/2179, 8-10=-757/3286  
 WEBS 5-10=-298/1463, 7-10=-576/462, 5-13=-298/1463, 3-13=-576/462

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) -0-8-10 to 3-8-3, Interior(1) 3-8-3 to 13-7-3, Exterior(2) 13-7-3 to 18-0-0, Interior(1) 22-4-13 to 32-3-13 zone; C-C for members and forces & MWFRS for reactions shown; 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 with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=297, 8=297.



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|                   |             |                      |          |          |                          |
|-------------------|-------------|----------------------|----------|----------|--------------------------|
| Job<br>B0318-0840 | Truss<br>A5 | Truss Type<br>COMMON | Qty<br>4 | Ply<br>1 | Freelance A<br>E11513726 |
|-------------------|-------------|----------------------|----------|----------|--------------------------|

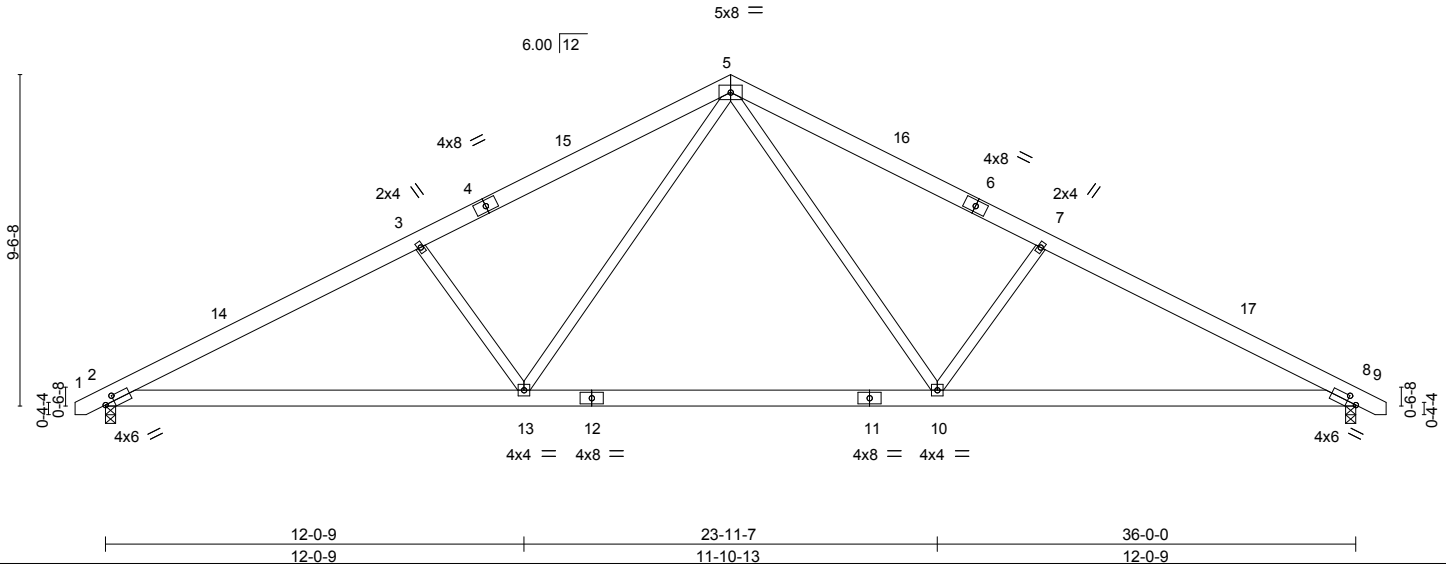
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|         |        |        |        |         |
|---------|--------|--------|--------|---------|
| -0-10-8 | 9-0-14 | 18-0-0 | 36-0-0 | 36-10-8 |
| 0-10-8  | 9-0-14 | 8-11-2 | 8-11-2 | 9-0-14  |
|         |        |        |        | 0-10-8  |

Scale = 1:66.3



|                       |                                  |             |                                  |                |             |
|-----------------------|----------------------------------|-------------|----------------------------------|----------------|-------------|
| Plate Offsets (X,Y)-- | [2:0-3-4,0-2-0], [8:0-3-4,0-2-0] |             |                                  |                |             |
| <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 0.35     | Vert(LL) -0.40 10-13 >999 360    | MT20           | 244/190     |
| TCDL 10.0             | Lumber DOL 1.15                  | BC 0.69     | Vert(TL) -0.57 10-13 >747 240    |                |             |
| BCLL 0.0 *            | Rep Stress Incr YES              | WB 0.59     | Horz(TL) 0.09 8 n/a n/a          |                |             |
| BCDL 10.0             | Code IRC2009/TPI2007             | Matrix-S    | Wind(LL) 0.08 2-13 >999 240      | Weight: 230 lb | FT = 20%    |

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 4-0-14 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 9-6-2 oc bracing.

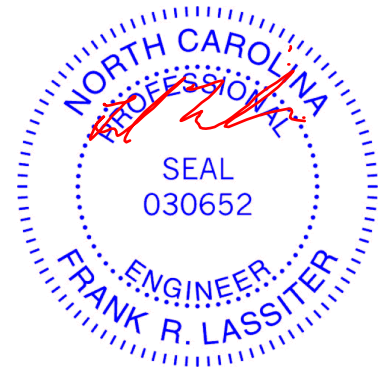
**REACTIONS.** (lb/size) 2=1718/0-3-8, 8=1718/0-3-8  
 Max Horz 2=-143(LC 7)  
 Max Uplift 2=-264(LC 6), 8=-264(LC 7)

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

TOP CHORD 2-3=-3109/945, 3-5=-2801/939, 5-7=-2801/939, 7-8=-3109/945  
 BOT CHORD 2-13=-674/2673, 10-13=-295/1764, 8-10=-674/2673  
 WEBS 5-10=-265/1150, 7-10=-524/412, 5-13=-265/1150, 3-13=-524/412

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) -0-8-10 to 3-8-3, Interior(1) 3-8-3 to 13-7-3, Exterior(2) 13-7-3 to 18-0-0, Interior(1) 22-4-13 to 32-3-13 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=264, 8=264.



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|                   |             |                                    |          |          |   |           |
|-------------------|-------------|------------------------------------|----------|----------|---|-----------|
| Job<br>B0318-0840 | Truss<br>A6 | Truss Type<br>COMMON SUPPORTED GAB | Qty<br>1 | Ply<br>1 | Freelance A<br>Job Reference (optional) | E11513727 |
|-------------------|-------------|------------------------------------|----------|----------|---|-----------|

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0-10-8 18-0-0 36-0-0 36-10-8  
0-10-8 18-0-0 18-0-0 0-10-8

Scale = 1:63.0

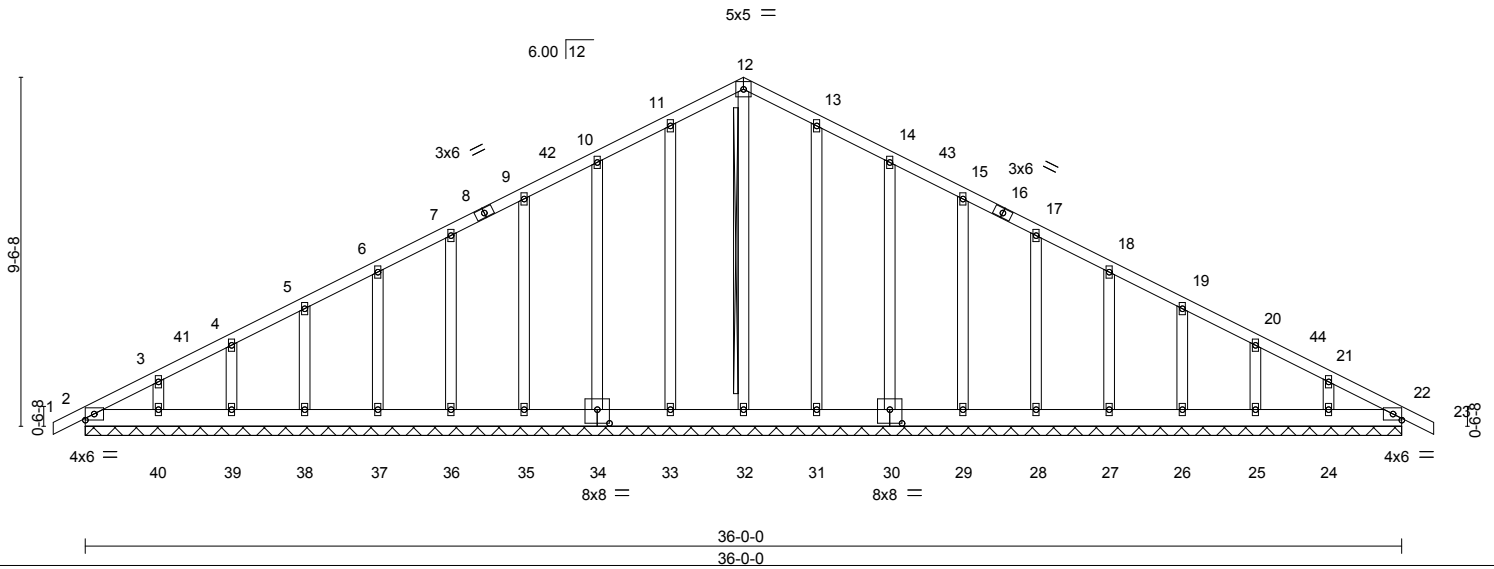


Plate Offsets (X,Y)-- [30:0-4-0-0-4-8], [34:0-4-0-0-4-8]

| LOADING (psf) | SPACING-             | CSI.     | DEFL.          | in (loc) | l/defl | L/d | PLATES         | GRIP     |
|---------------|----------------------|----------|----------------|----------|--------|-----|----------------|----------|
| TCLL 20.0     | Plate Grip DOL 1.15  | TC 0.09  | Vert(LL) -0.00 | 22       | n/r    | 120 | MT20           | 244/190  |
| TCDL 10.0     | Lumber DOL 1.15      | BC 0.03  | Vert(TL) -0.00 | 22       | n/r    | 120 |                |          |
| BCLL 0.0 *    | Rep Stress Incr YES  | WB 0.16  | Horz(TL) 0.01  | 22       | n/a    | n/a |                |          |
| BCDL 10.0     | Code IRC2009/TP12007 | Matrix-S |                |          |        |     |                |          |
|               |                      |          |                |          |        |     | Weight: 263 lb | FT = 20% |

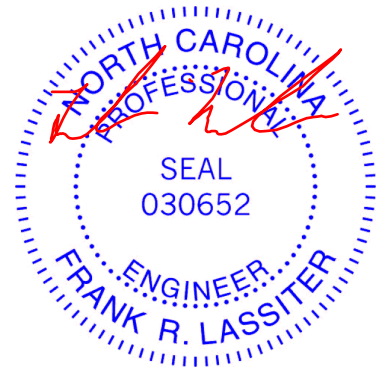
**LUMBER-**  
TOP CHORD 2x4 SP No.1  
BOT CHORD 2x6 SP No.1  
OTHERS 2x4 SP No.3

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
WEBS T-Brace: 2x4 SPF No.2 - 12-32  
Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance.  
Brace must cover 90% of web length.

**REACTIONS.** All bearings 36-0-0.  
(lb) - Max Horz 2=169(LC 6)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 33, 35, 36, 37, 38, 39, 31, 29, 28, 27, 26, 25, 22 except  
34=-100(LC 6), 40=-107(LC 6), 30=-101(LC 7), 24=-103(LC 7)  
Max Grav All reactions 250 lb or less at joint(s) 2, 32, 33, 34, 35, 36, 37, 38, 39, 40, 31, 30, 29, 28, 27,  
26, 25, 24, 22

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-279/30, 10-11=-43/341, 11-12=-46/446, 12-13=-46/446, 13-14=-43/341  
BOT CHORD 2-40=0/299, 39-40=0/299, 38-39=0/299, 37-38=0/299, 36-37=0/299, 35-36=0/299,  
34-35=0/299, 33-34=0/299, 32-33=0/299, 31-32=0/299, 30-31=0/299, 29-30=0/299,  
28-29=0/299, 27-28=0/299, 26-27=0/299, 25-26=0/299, 24-25=0/299, 22-24=0/299

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone and C-C Corner(3) -0-10-8 to 3-6-5, Exterior(2) 3-6-5 to 13-7-3, Corner(3) 13-7-3 to 18-0-0, Exterior(2) 22-4-13 to 32-5-11 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.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 33, 35, 36, 37, 38, 39, 31, 29, 28, 27, 26, 25, 22 except (jt=lb) 34=100, 40=107, 30=101, 24=103.
  - Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.
  - Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



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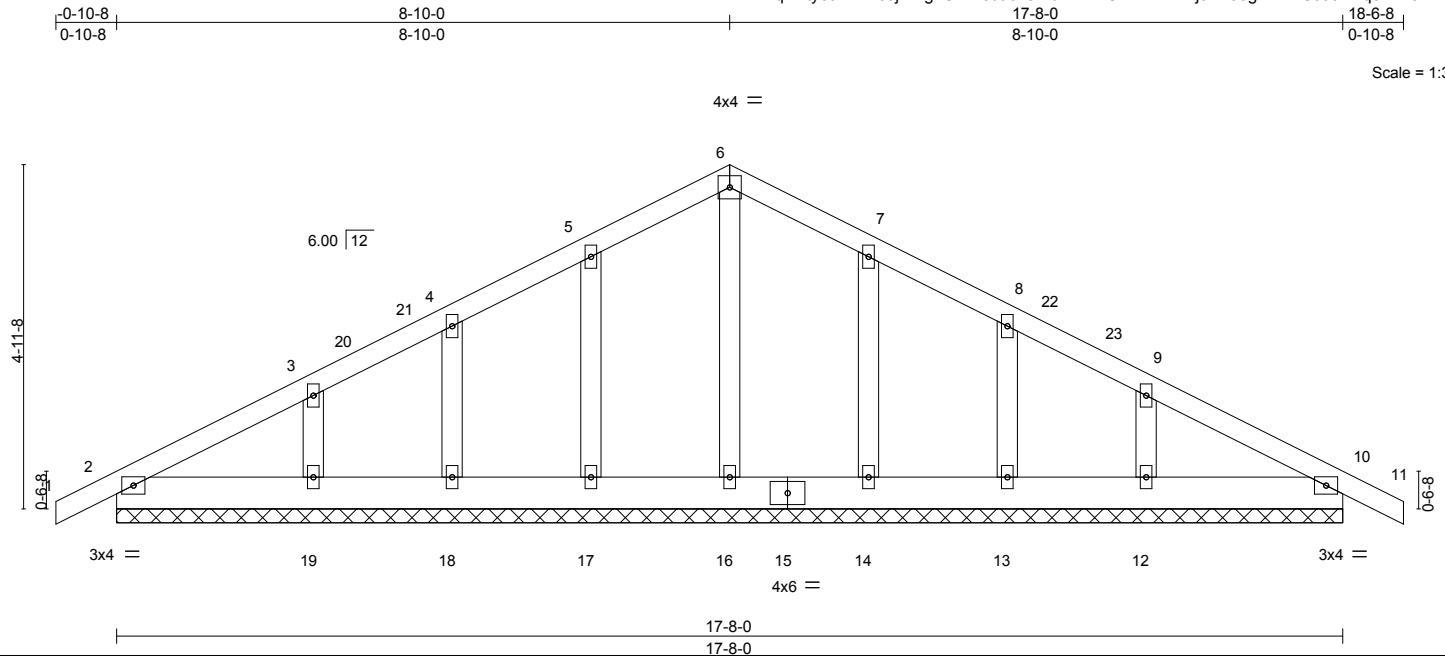
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|                   |             |                             |          |          |   |           |
|-------------------|-------------|-----------------------------|----------|----------|---|-----------|
| Job<br>B0318-0840 | Truss<br>B1 | Truss Type<br>COMMON GIRDER | Qty<br>1 | Ply<br>1 | Freelance A<br>Job Reference (optional) | E11513728 |
|-------------------|-------------|-----------------------------|----------|----------|---|-----------|

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Scale = 1:33.2

| LOADING (psf) | SPACING-             |       | CSI.     | DEFL.         | in | (loc) | l/defl | L/d | PLATES         | GRIP     |
|---------------|----------------------|-------|----------|---------------|----|-------|--------|-----|----------------|----------|
| TCLL 20.0     | Plate Grip DOL 1.15  | 2-0-0 | TC 0.10  | Vert(LL) 0.00 | 10 | n/r   | 120    |     | MT20           | 244/190  |
| TCDL 10.0     | Lumber DOL 1.15      |       | BC 0.04  | Vert(TL) 0.00 | 10 | n/r   | 120    |     |                |          |
| BCLL 0.0 *    | Rep Stress Incr NO   |       | WB 0.08  | Horz(TL) 0.00 | 10 | n/a   | n/a    |     |                |          |
| BCDL 10.0     | Code IRC2009/TPI2007 |       | Matrix-S |               |    |       |        |     | Weight: 100 lb | FT = 20% |

**LUMBER-**  
TOP CHORD 2x4 SP No.1  
BOT CHORD 2x6 SP No.1  
OTHERS 2x4 SP No.3

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

**REACTIONS.** All bearings 17-8-0.  
(lb) - Max Horz 2=91(LC 7)  
Max Uplift All uplift 100 lb or less at joint(s) 10, 18, 13, 2 except 17=102(LC 6), 19=130(LC 6), 14=101(LC 7), 12=129(LC 7)  
Max Grav All reactions 250 lb or less at joint(s) 10, 16, 17, 18, 19, 14, 13, 12, 2

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 5-6=46/265, 6-7=46/265  
WEBS 3-19=152/264, 9-12=152/264

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone and C-C Corner(3) 0-10-8 to 3-6-5, Exterior(2) 3-6-5 to 4-5-3, Corner(3) 4-5-3 to 8-10-0, Exterior(2) 13-2-13 to 14-1-11 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 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 18, 13, 2 except (jt=lb) 17=102, 19=130, 14=101, 12=129.
- 10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.



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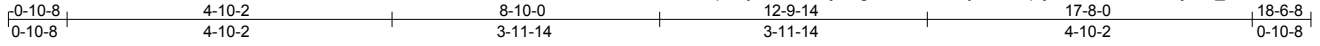


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|                   |             |                             |          |          |             |           |
|-------------------|-------------|-----------------------------|----------|----------|-------------|-----------|
| Job<br>B0318-0840 | Truss<br>B2 | Truss Type<br>COMMON GIRDER | Qty<br>1 | Ply<br>2 | Freelance A | E11513729 |
|-------------------|-------------|-----------------------------|----------|----------|-------------|-----------|

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Scale = 1:34.3

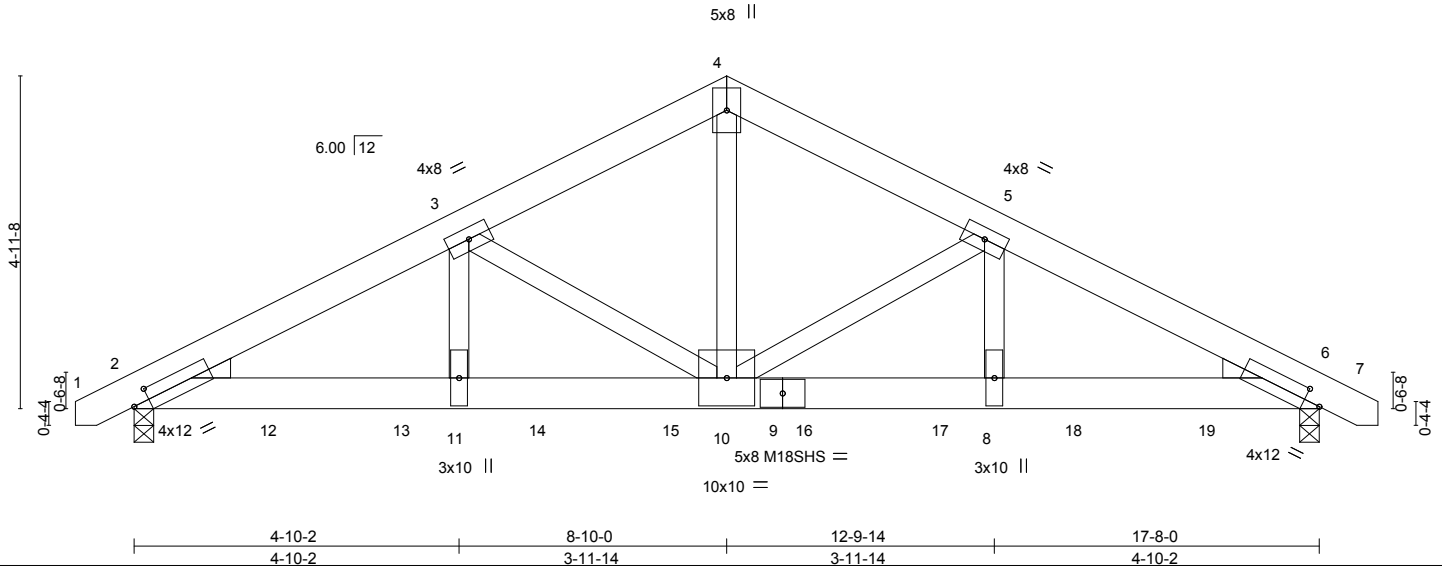


Plate Offsets (X,Y)-- [2:0-2-15,0-2-2], [6:0-2-15,0-2-2]

|                      |                      |       |             |              |          |        |      |                |             |
|----------------------|----------------------|-------|-------------|--------------|----------|--------|------|----------------|-------------|
| <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 0.53     | Vert(LL)     | -0.13    | 8-10   | >999 | MT20           | 244/190     |
| TCDL 10.0            | Lumber DOL           | 1.15  | BC 0.76     | Vert(TL)     | -0.26    | 8-10   | >804 | M18SHS         | 244/190     |
| BCLL 0.0 *           | Rep Stress Incr      | NO    | WB 0.94     | Horz(TL)     | 0.09     | 6      | n/a  |                |             |
| BCDL 10.0            | Code IRC2009/TP12007 |       | Matrix-S    | Wind(LL)     | 0.08     | 10-11  | >999 |                |             |
|                      |                      |       |             |              |          |        |      | Weight: 238 lb | FT = 20%    |

**LUMBER-**

TOP CHORD 2x6 SP No.1  
BOT CHORD 2x6 SP 2400F 2.0E  
WEBS 2x4 SP No.3 \*Except\*  
4-10: 2x4 SP No.2

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

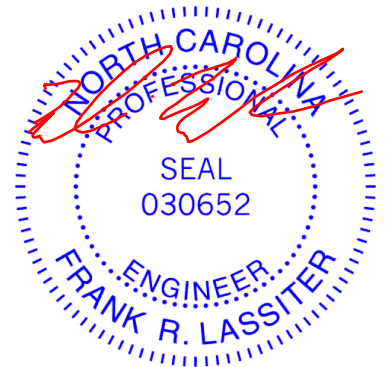
**REACTIONS.** (lb/size) 6=7868/0-3-8, 2=7288/0-3-8  
Max Horz 2=-77(LC 6)  
Max Uplift 6=-1104(LC 6), 2=-1055(LC 5)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-12796/1769, 3-4=-9115/1283, 4-5=-9116/1284, 5-6=-13171/1780  
BOT CHORD 2-11=-1568/11281, 10-11=-1568/11281, 8-10=-1502/11623, 6-8=-1502/11623  
WEBS 4-10=-1037/7660, 5-10=-4098/619, 5-8=-473/4030, 3-10=-3696/606, 3-11=-464/3665

**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: 2x6 - 2 rows staggered at 0-5-0 oc.  
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise); Lumber DOL=1.60 plate grip DOL=1.60
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=1104, 2=1055.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1649 lb down and 232 lb up at 2-0-12, 1649 lb down and 232 lb up at 4-0-12, 1649 lb down and 232 lb up at 6-0-12, 1649 lb down and 232 lb up at 8-0-12, 1767 lb down and 232 lb up at 10-0-12, 1767 lb down and 232 lb up at 12-0-12, and 1767 lb down and 232 lb up at 14-0-12, and 1767 lb down and 232 lb up at 16-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard



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Continued on page 2

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|                   |             |                             |          |                 |   |           |
|-------------------|-------------|-----------------------------|----------|-----------------|---|-----------|
| Job<br>B0318-0840 | Truss<br>B2 | Truss Type<br>COMMON GIRDER | Qty<br>1 | Ply<br><b>2</b> | Freelance A<br>Job Reference (optional) | E11513729 |
|-------------------|-------------|-----------------------------|----------|-----------------|---|-----------|

Comtech, Inc., Fayetteville, NC 28309

8.130 s Sep 15 2017 MiTek Industries, Inc. Mon Mar 5 08:27:30 2018 Page 2  
ID:qBVty8JxTR2c0jvIHgLUvLzeJa3-kySnOrxqVjU5t38xHsWZhHCjLS6\_BP6IS7aM4oze14h

**LOAD CASE(S)** Standard

1) Dead + Roof Live (balanced) + Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-4=-60, 4-7=-60, 2-6=-20

Concentrated Loads (lb)

Vert: 12=-1649(B) 13=-1649(B) 14=-1649(B) 15=-1649(B) 16=-1767(B) 17=-1767(B) 18=-1767(B) 19=-1767(B)



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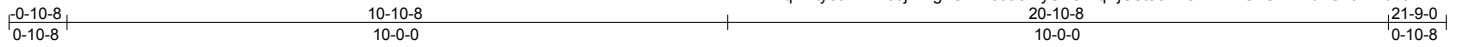


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|                   |             |                                    |          |          |             |           |
|-------------------|-------------|------------------------------------|----------|----------|-------------|-----------|
| Job<br>B0318-0840 | Truss<br>G1 | Truss Type<br>COMMON SUPPORTED GAB | Qty<br>1 | Ply<br>1 | Freelance A | E11513730 |
|-------------------|-------------|------------------------------------|----------|----------|-------------|-----------|

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8.130 s Sep 15 2017 MiTek Industries, Inc. Mon Mar 5 08:27:30 2018 Page 1  
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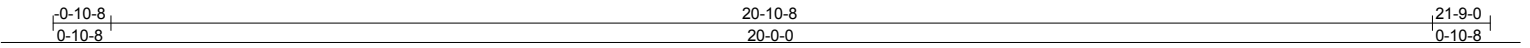
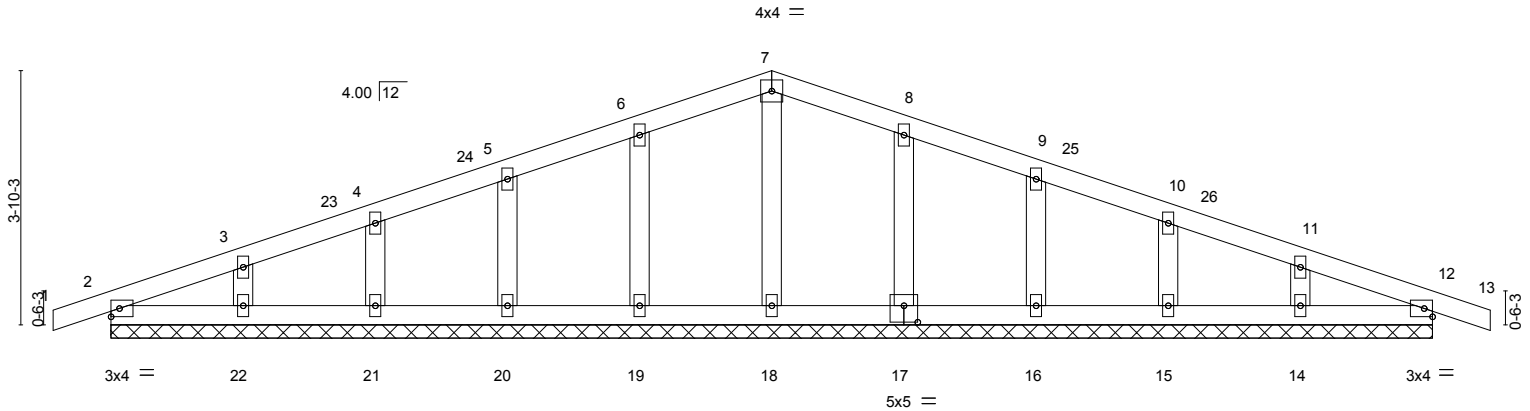


Plate Offsets (X,Y)-- [17:0-2-8,0-3-0]

|                      |                      |       |             |              |          |        |     |               |             |
|----------------------|----------------------|-------|-------------|--------------|----------|--------|-----|---------------|-------------|
| <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 0.06     | Vert(LL)     | -0.00    | 12     | n/r | MT20          | 244/190     |
| TCDL 10.0            | Lumber DOL           | 1.15  | BC 0.02     | Vert(TL)     | -0.00    | 12     | n/r |               |             |
| BCLL 0.0 *           | Rep Stress Incr      | YES   | WB 0.06     | Horz(TL)     | 0.00     | 12     | n/a |               |             |
| BCDL 10.0            | Code IRC2009/TPI2007 |       | Matrix-S    |              |          |        |     |               |             |
|                      |                      |       |             |              |          |        |     | Weight: 88 lb | FT = 20%    |

**LUMBER-**  
TOP CHORD 2x4 SP No.1  
BOT CHORD 2x4 SP No.1  
OTHERS 2x4 SP No.3

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

**REACTIONS.** All bearings 20-0-0.  
(lb) - Max Horz 2=-67(LC 5)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 19, 20, 21, 22, 17, 16, 15, 14, 12  
Max Grav All reactions 250 lb or less at joint(s) 2, 18, 19, 20, 21, 22, 17, 16, 15, 14, 12

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone and C-C Corner(3) -0-10-8 to 3-6-5, Exterior(2) 3-6-5 to 5-7-3, Corner(3) 5-7-3 to 10-0-0, Exterior(2) 14-4-13 to 16-5-11 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.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 19, 20, 21, 22, 17, 16, 15, 14, 12.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



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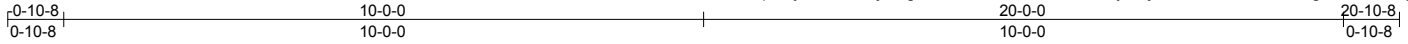


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|                   |             |                      |          |          |             |           |
|-------------------|-------------|----------------------|----------|----------|-------------|-----------|
| Job<br>B0318-0840 | Truss<br>G2 | Truss Type<br>Common | Qty<br>5 | Ply<br>1 | Freelance A | E11513731 |
|-------------------|-------------|----------------------|----------|----------|-------------|-----------|

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8.130 s Sep 15 2017 MiTek Industries, Inc. Mon Mar 5 08:27:31 2018 Page 1  
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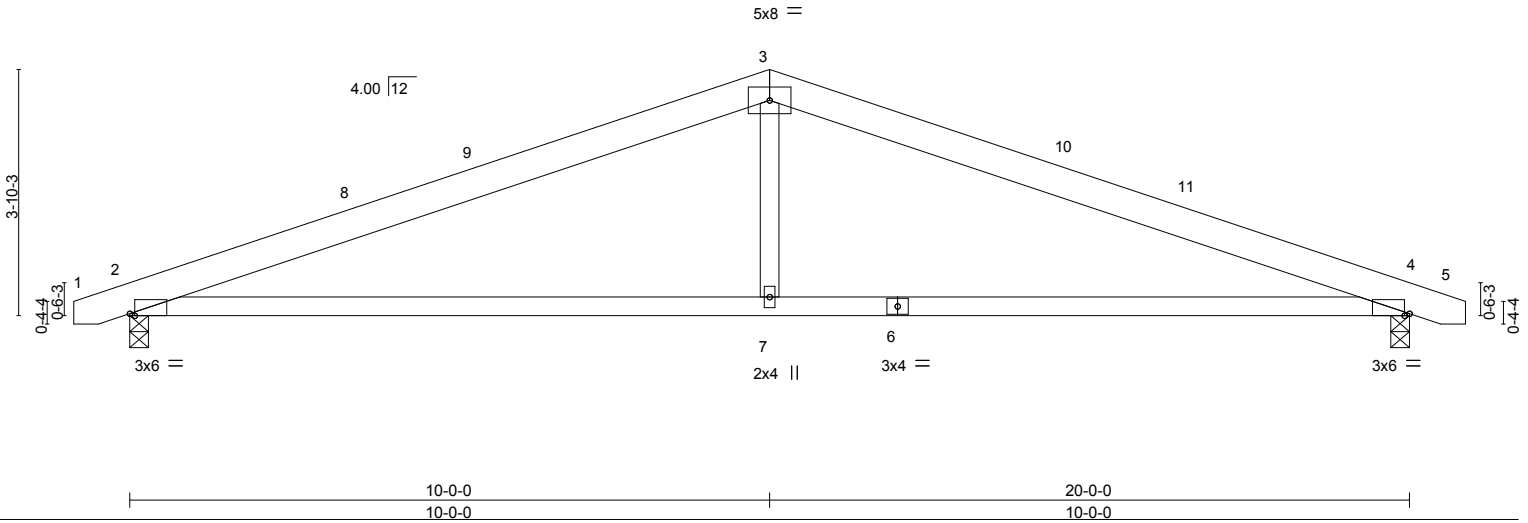


Plate Offsets (X,Y)-- [2:0-0-15,Edge], [4:0-0-15,Edge]

| LOADING (psf) | SPACING-             | CSI.     | DEFL.          | in (loc) | l/defl | L/d | PLATES        | GRIP     |
|---------------|----------------------|----------|----------------|----------|--------|-----|---------------|----------|
| TCLL 20.0     | Plate Grip DOL 1.15  | TC 0.59  | Vert(LL) -0.17 | 2-7      | >999   | 360 | MT20          | 244/190  |
| TCDL 10.0     | Lumber DOL 1.15      | BC 0.78  | Vert(TL) -0.48 | 2-7      | >491   | 240 |               |          |
| BCLL 0.0 *    | Rep Stress Incr YES  | WB 0.17  | Horz(TL) 0.05  | 4        | n/a    | n/a |               |          |
| BCDL 10.0     | Code IRC2009/TP12007 | Matrix-S | Wind(LL) 0.07  | 2-7      | >999   | 240 | Weight: 88 lb | FT = 20% |

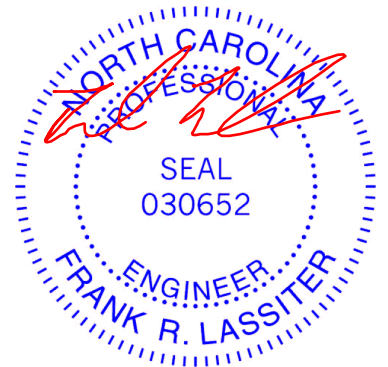
**LUMBER-**  
TOP CHORD 2x6 SP No.1  
BOT CHORD 2x4 SP No.1  
WEBS 2x4 SP No.3

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 5-0-13 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 9-1-5 oc bracing.

**REACTIONS.** (lb/size) 2=838/0-3-8, 4=838/0-3-8  
Max Horz 2=-54(LC 7)  
Max Uplift 2=-180(LC 4), 4=-180(LC 5)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1438/620, 3-4=-1438/620  
BOT CHORD 2-7=-462/1294, 4-7=-462/1294  
WEBS 3-7=0/455

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) -0-8-3 to 3-8-10, Interior(1) 3-8-10 to 5-7-3, Exterior(2) 5-7-3 to 10-0-0, Interior(1) 14-4-13 to 16-3-6 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=180, 4=180.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



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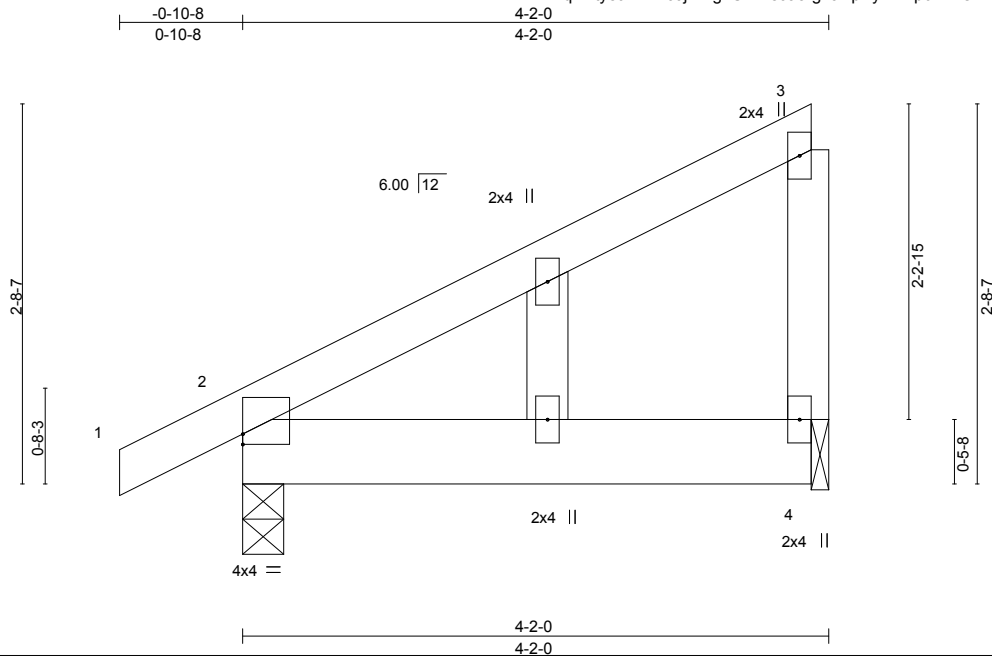
818 Soundside Road  
Edenton, NC 27932

|                   |             |                     |          |          |             |           |
|-------------------|-------------|---------------------|----------|----------|-------------|-----------|
| Job<br>B0318-0840 | Truss<br>M1 | Truss Type<br>GABLE | Qty<br>2 | Ply<br>1 | Freelance A | E11513732 |
|-------------------|-------------|---------------------|----------|----------|-------------|-----------|

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ID:qBVty8JxTR2c0jvIHgLUvLzeJa3-gLaXpXy41Klp6NIKOHY1nil6vGuzfXHbvR3T9gze14f



Scale = 1:16.4

Plate Offsets (X,Y)-- [2:Edge,0-0-14]

| LOADING (psf) | SPACING-             | CSI.     | DEFL.          | in (loc) | l/defl | L/d | PLATES        | GRIP     |
|---------------|----------------------|----------|----------------|----------|--------|-----|---------------|----------|
| TCLL 20.0     | Plate Grip DOL 1.15  | TC 0.33  | Vert(LL) -0.00 | 2-4      | >999   | 360 | MT20          | 244/190  |
| TCDL 10.0     | Lumber DOL 1.15      | BC 0.28  | Vert(TL) -0.01 | 2-4      | >999   | 240 |               |          |
| BCLL 0.0 *    | Rep Stress Incr YES  | WB 0.00  | Horz(TL) -0.00 | 4        | n/a    | n/a |               |          |
| BCDL 10.0     | Code IRC2009/TPI2007 | Matrix-P | Wind(LL) 0.00  | 2        | ****   | 240 | Weight: 22 lb | FT = 20% |

**LUMBER-**

TOP CHORD 2x4 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.3  
 OTHERS 2x4 SP No.3

**BRACING-**

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

**REACTIONS.**

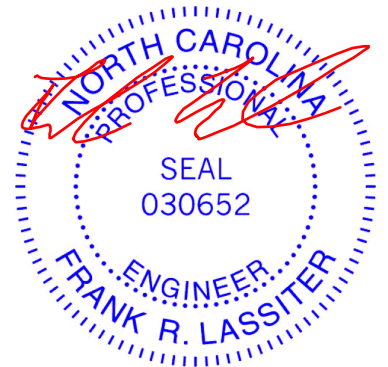
(lb/size) 2=224/0-3-8, 4=144/0-1-8  
 Max Horz 2=139(LC 6)  
 Max Uplift 2=-105(LC 6), 4=-92(LC 6)

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

TOP CHORD 3-4=-106/275

**NOTES-**

- 1) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone and C-C Corner(3) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) 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.
- 3) Gable studs spaced at 2-0-0 oc.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 6) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 2=105.
- 9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



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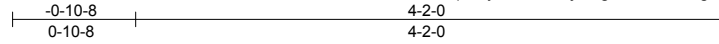


|                   |             |                         |          |          |             |           |
|-------------------|-------------|-------------------------|----------|----------|-------------|-----------|
| Job<br>B0318-0840 | Truss<br>M2 | Truss Type<br>MONOPITCH | Qty<br>3 | Ply<br>1 | Freelance A | E11513733 |
|-------------------|-------------|-------------------------|----------|----------|-------------|-----------|

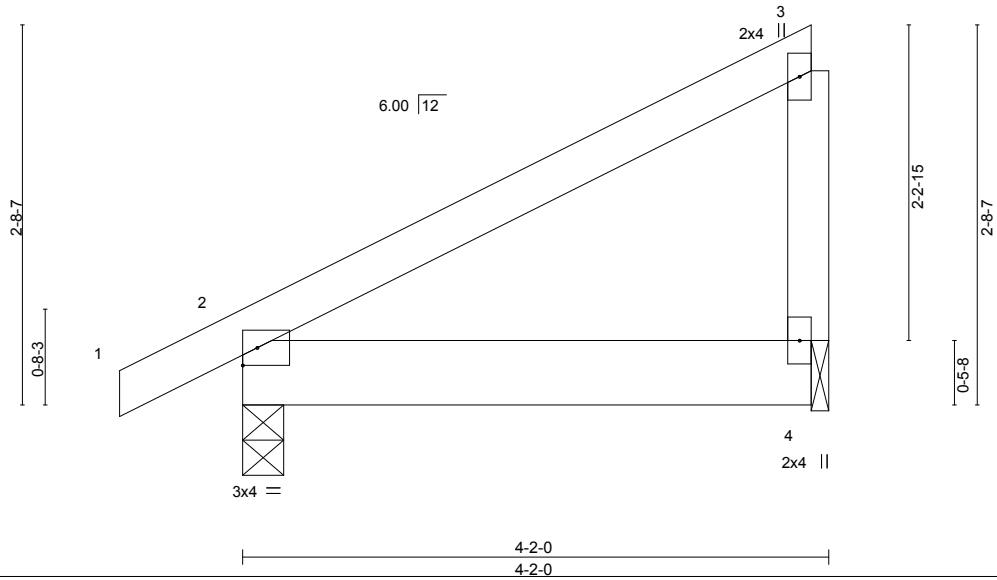
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Scale = 1:16.4



| LOADING (psf) | SPACING-             |       | CSI.     | DEFL.    | in    | (loc) | l/defl | L/d | PLATES        | GRIP     |
|---------------|----------------------|-------|----------|----------|-------|-------|--------|-----|---------------|----------|
| TCLL 20.0     | Plate Grip DOL       | 2-0-0 | TC 0.22  | Vert(LL) | -0.00 | 2-4   | >999   | 360 | MT20          | 244/190  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.18  | Vert(TL) | -0.01 | 2-4   | >999   | 240 |               |          |
| BCLL 0.0 *    | Rep Stress Incr      | YES   | WB 0.00  | Horz(TL) | -0.00 | 4     | n/a    | n/a |               |          |
| BCDL 10.0     | Code IRC2009/TPI2007 |       | Matrix-P | Wind(LL) | 0.00  | 2     | ****   | 240 | Weight: 21 lb | FT = 20% |

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

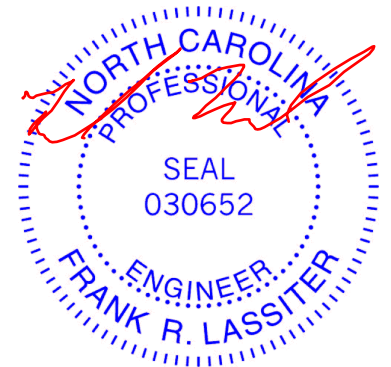
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 4-2-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 2=224/0-3-8, 4=144/0-1-8  
Max Horz 2=98(LC 6)  
Max Uplift 2=-64(LC 6), 4=-51(LC 6)

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

**NOTES-**

- 1) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) 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 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 4) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- 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.



March 5, 2018

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**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

**Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

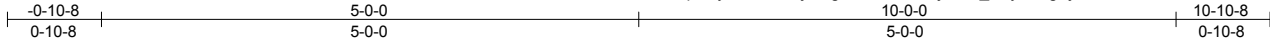


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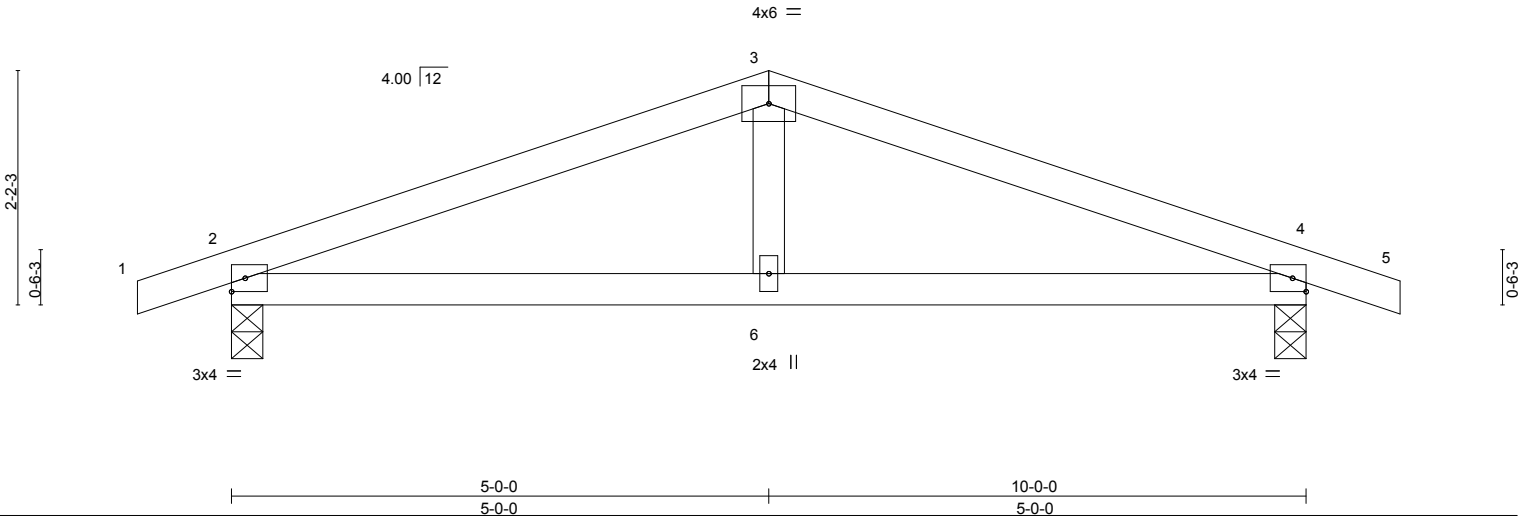
|                   |             |                      |          |          |             |           |
|-------------------|-------------|----------------------|----------|----------|-------------|-----------|
| Job<br>B0318-0840 | Truss<br>P1 | Truss Type<br>COMMON | Qty<br>1 | Ply<br>1 | Freelance A | E11513734 |
|-------------------|-------------|----------------------|----------|----------|-------------|-----------|

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ID:qBVty8JxTR2c0jvIHgLUvLzeJa3-cjhIEC\_KZy?XLgSjWibVs7NUx3bc7QQuMkYZDZze14d



Scale = 1:21.4



| LOADING (psf) | SPACING-             | CSI.     | DEFL.    | in (loc) | l/defl | L/d  | PLATES        | GRIP     |
|---------------|----------------------|----------|----------|----------|--------|------|---------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.24  | Vert(LL) | -0.01    | 2-6    | >999 | MT20          | 244/190  |
| TCDL 10.0     | Plate Grip DOL 1.15  | BC 0.21  | Vert(TL) | -0.04    | 2-6    | >999 |               |          |
| BCLL 0.0 *    | Lumber DOL 1.15      | WB 0.09  | Horz(TL) | 0.01     | 4      | n/a  |               |          |
| BCDL 10.0     | Rep Stress Incr YES  | Matrix-S | Wind(LL) | 0.01     | 2-6    | >999 | Weight: 36 lb | FT = 20% |
|               | Code IRC2009/TPI2007 |          |          |          |        |      |               |          |

**LUMBER-**  
TOP CHORD 2x4 SP No.1  
BOT CHORD 2x4 SP No.1  
WEBS 2x4 SP No.3

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

**REACTIONS.** (lb/size) 2=450/0-3-8, 4=450/0-3-8  
Max Horz 2=30(LC 6)  
Max Uplift 2=-121(LC 4), 4=-121(LC 5)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-649/368, 3-4=-649/368  
BOT CHORD 2-6=-257/557, 4-6=-257/557

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) 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
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=121, 4=121.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



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**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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 fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

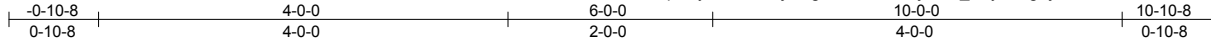


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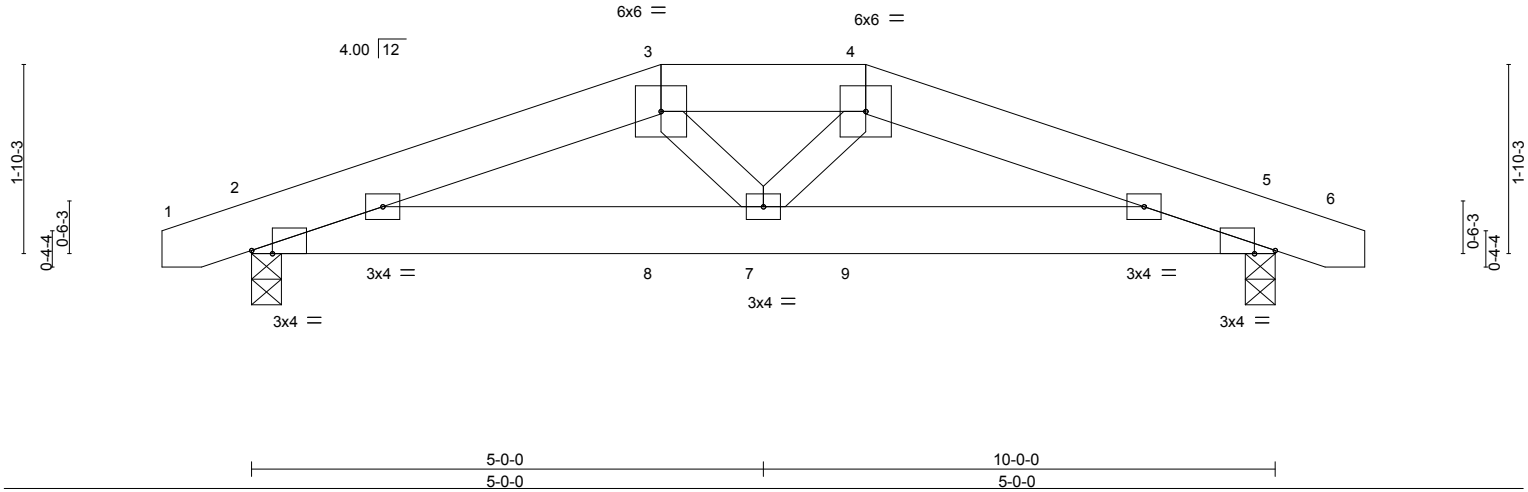
|                   |             |                          |          |          |             |           |
|-------------------|-------------|--------------------------|----------|----------|-------------|-----------|
| Job<br>B0318-0840 | Truss<br>P2 | Truss Type<br>HIP GIRDER | Qty<br>1 | Ply<br>1 | Freelance A | E11513735 |
|-------------------|-------------|--------------------------|----------|----------|-------------|-----------|

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Scale = 1:22.5



| Plate Offsets (X,Y)-- |                      | [2:0-2-7,Edge], [5:0-2-7,Edge] |                |              |          |        |               |               |             |
|-----------------------|----------------------|--------------------------------|----------------|--------------|----------|--------|---------------|---------------|-------------|
| <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 0.10                        | Vert(LL) -0.02 | 7            | >999     | 360    | MT20          | 244/190       |             |
| TCDL 10.0             | Lumber DOL 1.15      | BC 0.24                        | Vert(TL) -0.04 | 2-7          | >999     | 240    |               |               |             |
| BCLL 0.0 *            | Rep Stress Incr NO   | WB 0.13                        | Horz(TL) 0.01  | 5            | n/a      | n/a    |               |               |             |
| BCDL 10.0             | Code IRC2009/TPI2007 | Matrix-S                       | Wind(LL) 0.02  | 7            | >999     | 240    | Weight: 57 lb | FT = 20%      |             |

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

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

**REACTIONS.** (lb/size) 2=672/0-3-8, 5=669/0-3-8  
Max Horz 2=28(LC 5)  
Max Uplift 2=-194(LC 3), 5=-194(LC 4)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1324/337, 3-4=-1373/342, 4-5=-1323/337  
BOT CHORD 2-7=-292/1215, 5-7=-281/1215  
WEBS 3-7=-32/306, 4-7=-32/307

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise); Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=194, 5=194.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 64 lb down and 44 lb up at 4-0-0, and 64 lb down and 44 lb up at 6-0-0 on top chord, and 187 lb down and 47 lb up at 4-0-0, and 187 lb down and 47 lb up at 5-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
  - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-60, 3-4=-60, 4-6=-60, 2-5=-20  
Concentrated Loads (lb)  
Vert: 3=-46(B) 4=-46(B) 8=-187(B) 9=-187(B)

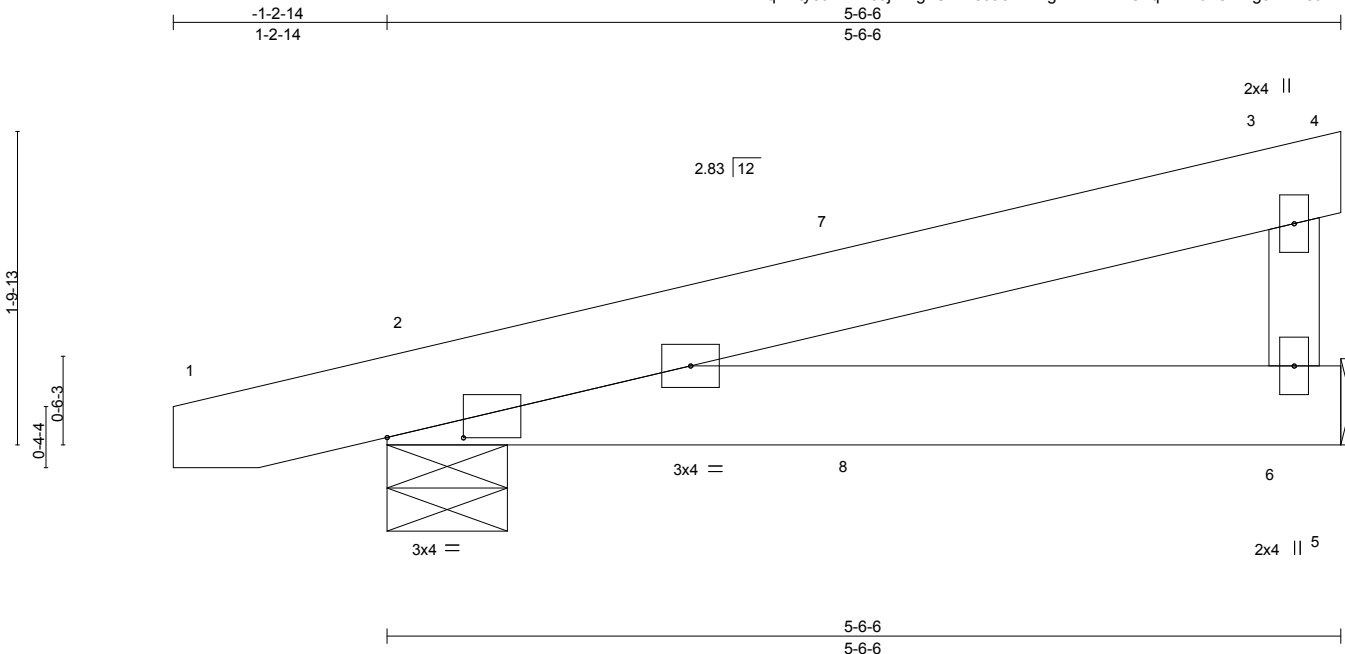


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|                   |               |                                   |          |          |             |           |
|-------------------|---------------|-----------------------------------|----------|----------|-------------|-----------|
| Job<br>B0318-0840 | Truss<br>PCJ1 | Truss Type<br>DIAGONAL HIP GIRDER | Qty<br>2 | Ply<br>1 | Freelance A | E11513736 |
|-------------------|---------------|-----------------------------------|----------|----------|-------------|-----------|

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

| LOADING (psf) | SPACING-             | CSI.     | DEFL.    | in (loc) | l/defl | L/d  | PLATES        | GRIP     |
|---------------|----------------------|----------|----------|----------|--------|------|---------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.14  | Vert(LL) | -0.01    | 2-6    | >999 | MT20          | 244/190  |
| TCDL 10.0     | Plate Grip DOL 1.15  | BC 0.10  | Vert(TL) | -0.02    | 2-6    | >999 |               |          |
| BCLL 0.0 *    | Lumber DOL 1.15      | WB 0.00  | Horz(TL) | 0.00     |        | n/a  |               |          |
| BCDL 10.0     | Rep Stress Incr NO   | Matrix-P | Wind(LL) | 0.00     | 2      | **** | Weight: 31 lb | FT = 20% |
|               | Code IRC2009/TPI2007 |          |          |          |        |      |               |          |

| LUMBER-               | BRACING-  |
|-----------------------|---|
| TOP CHORD 2x6 SP No.1 | TOP CHORD Structural wood sheathing directly applied or 5-6-6 oc purlins, except end verticals. |
| BOT CHORD 2x6 SP No.1 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.                                  |
| WEBS 2x4 SP No.3      |   |

**REACTIONS.** (lb/size) 6=198/Mechanical, 2=287/0-8-6  
Max Horz 2=63(LC 3)  
Max Uplift 6=-42(LC 3), 2=-109(LC 3)

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

- NOTES-**
- 1) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise); 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 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
  - 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) 6 except (jt=lb) 2=109.
  - 6) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
  - 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) at 2-9-8, and at 2-9-8 on top chord, and at 2-9-8, and at 2-9-8 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=-20, 2-5=-20

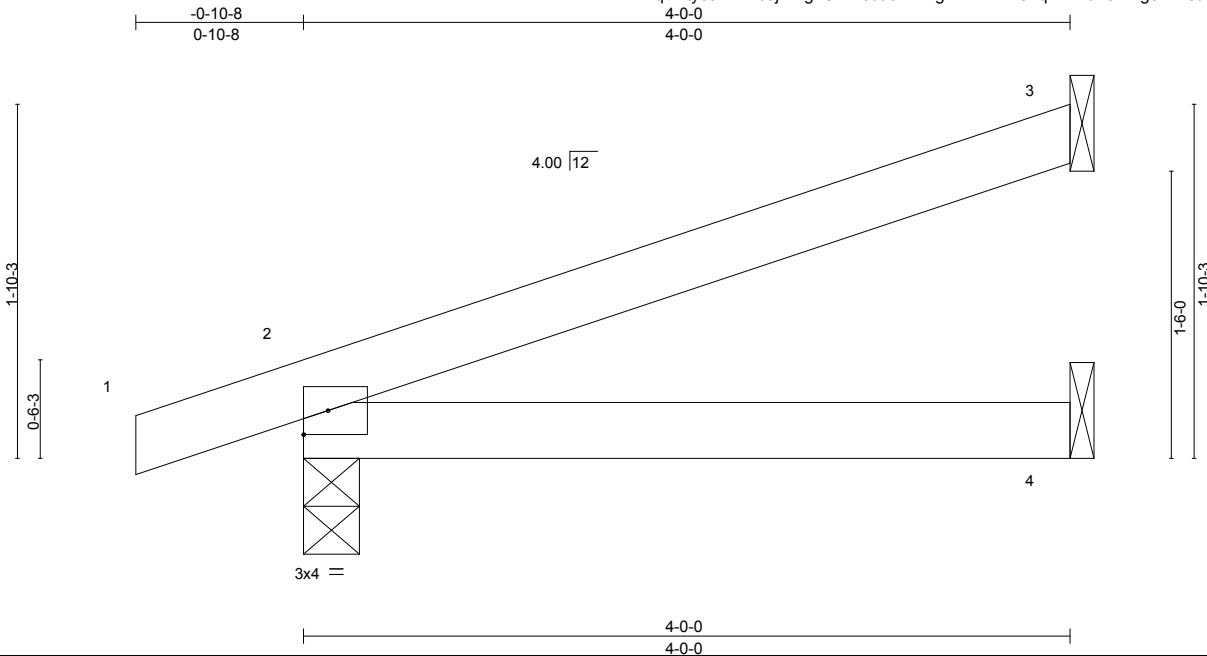


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|                   |              |                         |          |          |             |           |
|-------------------|--------------|-------------------------|----------|----------|-------------|-----------|
| Job<br>B0318-0840 | Truss<br>PJ1 | Truss Type<br>JACK-OPEN | Qty<br>2 | Ply<br>1 | Freelance A | E11513737 |
|-------------------|--------------|-------------------------|----------|----------|-------------|-----------|

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| LOADING (psf) | SPACING-             |       | CSI.     | DEFL.    | in    | (loc) | l/defl | L/d | PLATES        | GRIP     |
|---------------|----------------------|-------|----------|----------|-------|-------|--------|-----|---------------|----------|
| TCLL 20.0     | Plate Grip DOL       | 2-0-0 | TC 0.18  | Vert(LL) | -0.01 | 2-4   | >999   | 360 | MT20          | 244/190  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.13  | Vert(TL) | -0.03 | 2-4   | >999   | 240 |               |          |
| BCLL 0.0 *    | Rep Stress Incr      | YES   | WB 0.00  | Horz(TL) | -0.00 | 3     | n/a    | n/a |               |          |
| BCDL 10.0     | Code IRC2009/TPI2007 |       | Matrix-P | Wind(LL) | 0.00  | 2     | ****   | 240 | Weight: 14 lb | FT = 20% |

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

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

**REACTIONS.** (lb/size) 3=106/Mechanical, 2=221/0-3-8, 4=38/Mechanical  
Max Horz 2=64(LC 4)  
Max Uplift 3=56(LC 4), 2=77(LC 4)  
Max Grav 3=106(LC 1), 2=221(LC 1), 4=76(LC 2)

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

**NOTES-**

- 1) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) 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 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 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.
- 6) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



March 5, 2018

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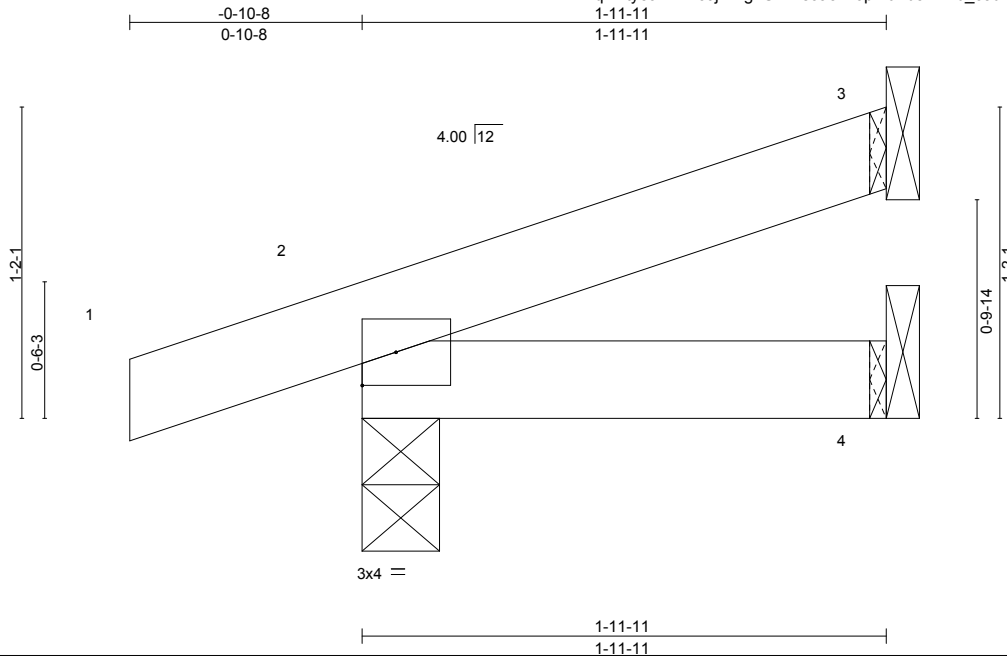


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|                   |              |                         |          |          |             |           |
|-------------------|--------------|-------------------------|----------|----------|-------------|-----------|
| Job<br>B0318-0840 | Truss<br>PJ2 | Truss Type<br>JACK-OPEN | Qty<br>4 | Ply<br>1 | Freelance A | E11513738 |
|-------------------|--------------|-------------------------|----------|----------|-------------|-----------|

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| LOADING (psf) | SPACING-             | CSI.     | DEFL.          | in (loc) | l/defl | L/d | PLATES       | GRIP     |
|---------------|----------------------|----------|----------------|----------|--------|-----|--------------|----------|
| TCLL 20.0     | Plate Grip DOL 1.15  | TC 0.04  | Vert(LL) -0.00 | 2        | >999   | 360 | MT20         | 244/190  |
| TCDL 10.0     | Lumber DOL 1.15      | BC 0.03  | Vert(TL) -0.00 | 2-4      | >999   | 240 |              |          |
| BCLL 0.0 *    | Rep Stress Incr YES  | WB 0.00  | Horz(TL) -0.00 | 3        | n/a    | n/a |              |          |
| BCDL 10.0     | Code IRC2009/TPI2007 | Matrix-P | Wind(LL) 0.00  | 2        | ****   | 240 | Weight: 8 lb | FT = 20% |

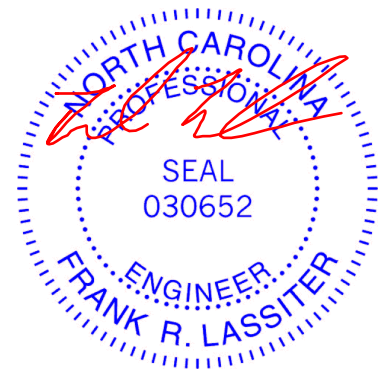
**LUMBER-**  
TOP CHORD 2x4 SP No.1  
BOT CHORD 2x4 SP No.1

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 1-11-11 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 3=45/Mechanical, 2=144/0-3-8, 4=19/Mechanical  
Max Horz 2=38(LC 4)  
Max Uplift 3=23(LC 4), 2=64(LC 4)  
Max Grav 3=45(LC 1), 2=144(LC 1), 4=39(LC 2)

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

- NOTES-**
- 1) Wind: ASCE 7-05; 110mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) 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 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
  - 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.
  - 6) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



March 5, 2018

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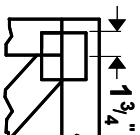


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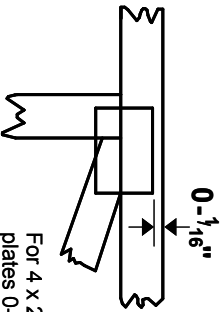


# Symbols

## 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- $\frac{1}{16}$ " from outside edge of truss.



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

\* Plate location details available in **MITek 2020 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



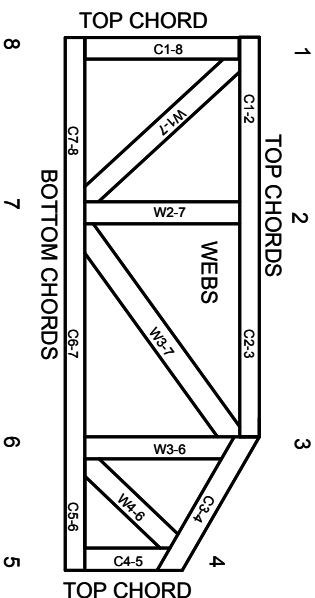
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

## Industry Standards:

ANSI/TP11: 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/TP1 section 6.3. These truss designs rely on lumber values established by others.

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MITek Engineering Reference Sheet: Mill-7473 rev. 10/03/2015

# 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/TP1 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 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/TP1 1 Quality Criteria.