

Trenco  
818 Soundside Rd  
Edenton, NC 27932

Re: MasterCraft  
Mattamy-Sequoia-Craftsman-Lot 72 Providence Creek

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Builders FirstSource-Apex,NC.

Pages or sheets covered by this seal: I53968715 thru I53968736

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

North Carolina COA: C-0844



August 31, 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.

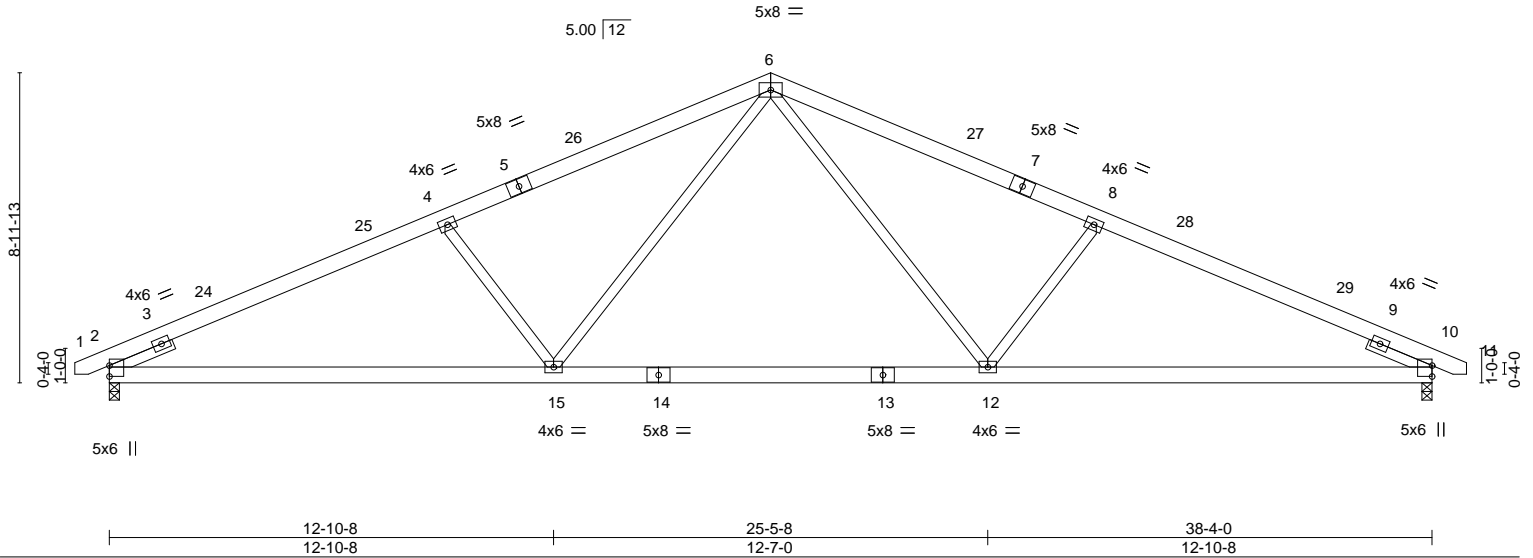
|                    |              |                      |          |          |  |
|--------------------|--------------|----------------------|----------|----------|--|
| Job<br>MASTERCRAFT | Truss<br>A01 | Truss Type<br>COMMON | Qty<br>6 | Ply<br>1 | Mattamy-Sequoia-Craftsman-Lot 72 Providence Creek<br>153968715 |
|--------------------|--------------|----------------------|----------|----------|--|

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Aug 31 12:23:38 2022 Page 1

ID:NOHDxMFxGtHiYUllGv8Cp8zfMF4-UlrMQ5ZmWIFAhRCd\_u8sVn61LXOVowxT6bF6\_syiKXZ

|       |        |        |        |        |        |
|-------|--------|--------|--------|--------|--------|
| 1-0-0 | 9-8-12 | 19-2-0 | 28-7-4 | 38-4-0 | 39-4-0 |
| 1-0-0 | 9-8-12 | 9-5-4  | 9-5-4  | 9-8-12 | 1-0-0  |

Scale = 1:66.8



|                      |                       |             |                                  |                |                   |
|----------------------|-----------------------|-------------|----------------------------------|----------------|-------------------|
|                      | 12-10-8<br>12-10-8    |             | 25-5-8<br>12-7-0                 |                | 38-4-0<br>12-10-8 |
| <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 0.68     | Vert(LL) -0.40 12-15 >999 360    | MT20           | 244/190           |
| TCDL 10.0            | Lumber DOL 1.15       | BC 0.89     | Vert(CT) -0.64 12-15 >722 240    |                |                   |
| BCLL 0.0 *           | Rep Stress Incr YES   | WB 0.36     | Horz(CT) 0.09 10 n/a n/a         |                |                   |
| BCDL 10.0            | Code IRC2015/TPI2014  | Matrix-MS   | Wind(LL) 0.09 12-15 >999 240     | Weight: 244 lb | FT = 20%          |

**LUMBER-**  
TOP CHORD 2x6 SP No.2  
BOT CHORD 2x6 SP No.2  
WEBS 2x4 SP No.3  
SLIDER Left 2x4 SP No.2 1-11-12, Right 2x4 SP No.2 1-11-12

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 3-1-15 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=99(LC 16)  
Max Grav 2=1582(LC 1), 10=1582(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-4=-2805/142, 4-6=-2506/153, 6-8=-2506/153, 8-10=-2805/142  
BOT CHORD 2-15=-50/2499, 12-15=0/1736, 10-12=-52/2499  
WEBS 6-12=0/864, 8-12=-535/168, 6-15=0/864, 4-15=-535/168

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-9-10 to 3-0-6, Interior(1) 3-0-6 to 19-2-0, Exterior(2) 19-2-0 to 24-7-1, Interior(1) 24-7-1 to 39-1-10 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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 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.



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

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



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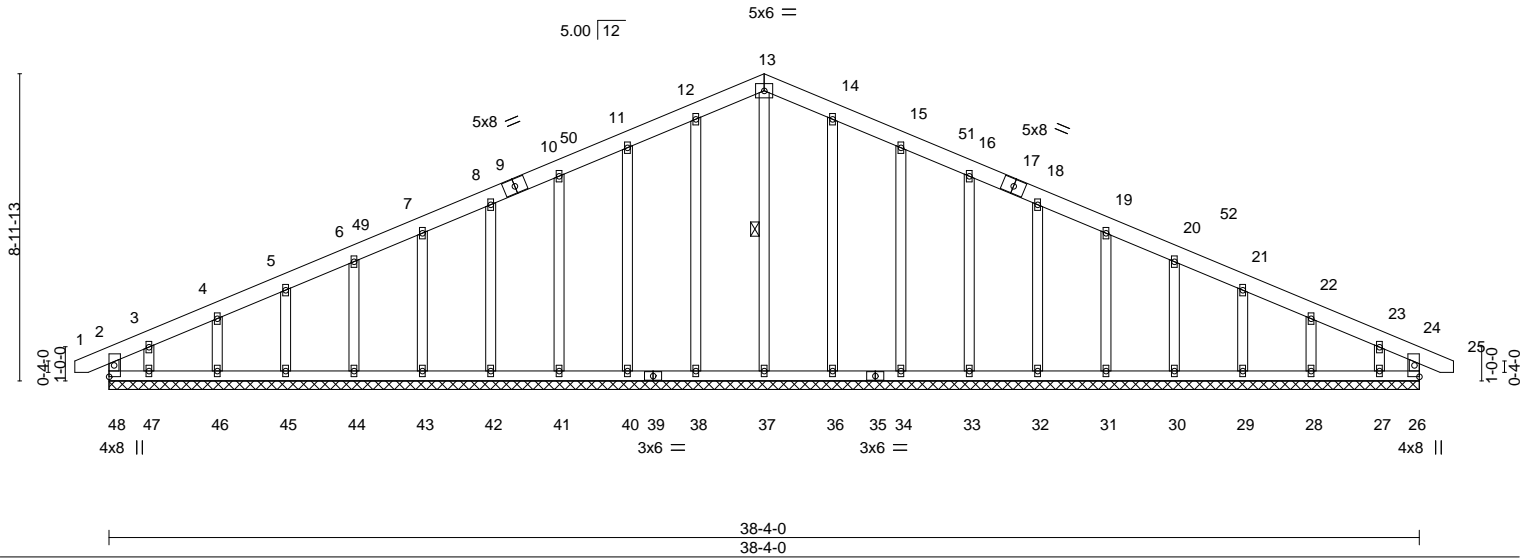
|             |       |            |     |     |   |
|-------------|-------|------------|-----|-----|---|
| Job         | Truss | Truss Type | Qty | Ply | Mattamy-Sequoia-Craftsman-Lot 72 Providence Creek |
| MASTERCRAFT | A01G  | GABLE      | 1   | 1   | 153968716   |
|             |       |            |     |     | Job Reference (optional)                          |

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Aug 31 12:23:40 2022 Page 1

ID:NOHDxMFxGtHiYullGv8Cp8zFMF4-Qgz7rma12NVtwIM06JAKaCBXTKHJGtpmZvkD2lyiKXX

1-0-0 19-2-0 38-4-0 39-4-0  
 1-0-0 19-2-0 19-2-0 1-0-0

Scale = 1:67.4



| 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 0.06  | Vert(LL) | -0.00    | 24     | n/r | MT20           | 244/190  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.03  | Vert(CT) | -0.00    | 24     | n/r |                |          |
| BCLL 0.0 *    | Rep Stress Incr      | YES   | WB 0.14  | Horz(CT) | 0.00     | 26     | n/a |                |          |
| BCDL 10.0     | Code IRC2015/TPI2014 |       | Matrix-R |          |          |        |     | Weight: 282 lb | FT = 20% |

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

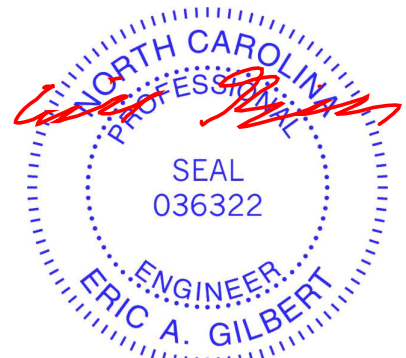
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 WEBS 1 Row at midpt 13-37

**REACTIONS.** All bearings 38-4-0.  
 (lb) - Max Horz 48=84(LC 12)  
 Max Uplift All uplift 100 lb or less at joint(s) 48, 40, 41, 42, 43, 44, 45, 46, 47, 34, 33, 32, 31, 30, 29, 28, 27  
 Max Grav All reactions 250 lb or less at joint(s) 48, 26, 37, 38, 40, 41, 42, 43, 44, 45, 46, 47, 36, 34, 33, 32, 31, 30, 29, 28, 27

**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 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-9-10 to 3-2-0, Interior(1) 3-2-0 to 19-2-0, Exterior(2) 19-2-0 to 24-7-1, Interior(1) 24-7-1 to 39-1-10 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas 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) 48, 40, 41, 42, 43, 44, 45, 46, 47, 34, 33, 32, 31, 30, 29, 28, 27.



August 31, 2022

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

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



818 Soundside Road  
 Edenton, NC 27932

|             |       |            |     |     |   |
|-------------|-------|------------|-----|-----|---|
| Job         | Truss | Truss Type | Qty | Ply | Mattamy-Sequoia-Craftsman-Lot 72 Providence Creek |
| MASTERCRAFT | A02   | COMMON     | 6   | 1   | 153968717   |

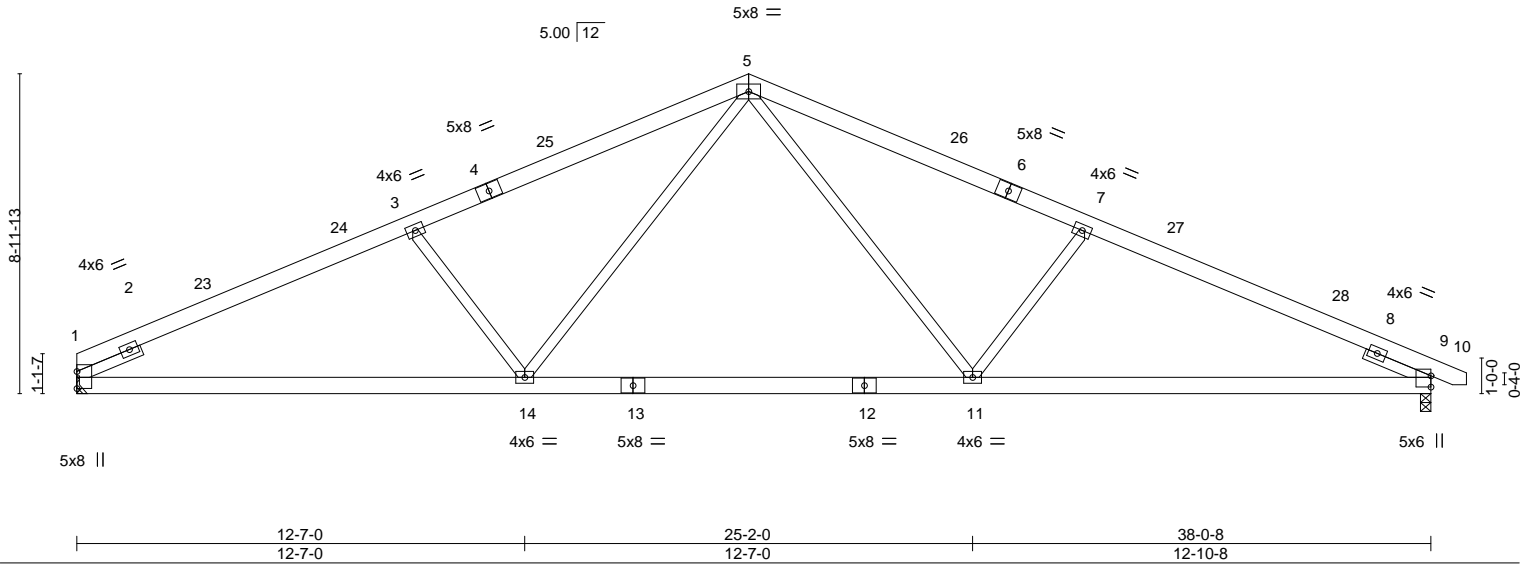
Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Aug 31 12:23:42 2022 Page 1

ID:NOHDxMFxGtHiYullGv8Cp8zfMF4-M34tGSchHa\_lbA2WODkCofdGgb8lDkv21DDK7dyiKXV

28-3-12 9-5-4 38-0-8 9-8-12 39-0-8 1-0-0

Scale = 1:64.7



| 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 0.85   | Vert(LL) | -0.42 11-14 | >999   | 360 | MT20           | 244/190  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.90   | Vert(CT) | -0.67 11-14 | >686   | 240 |                |          |
| BCLL 0.0 *    | Rep Stress Incr      | YES   | WB 0.36   | Horz(CT) | 0.09 9      | n/a    | n/a |                |          |
| BCDL 10.0     | Code IRC2015/TPI2014 |       | Matrix-MS | Wind(LL) | 0.09 11-14  | >999   | 240 | Weight: 240 lb | FT = 20% |

**LUMBER-**  
 TOP CHORD 2x6 SP No.2  
 BOT CHORD 2x6 SP No.2  
 WEBS 2x4 SP No.3  
 SLIDER Left 2x4 SP No.2 1-11-12, Right 2x4 SP No.2 1-11-12

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

**REACTIONS.** (size) 1=Mechanical, 9=0-3-8  
 Max Horz 1=-103(LC 13)  
 Max Grav 1=1521(LC 1), 9=1570(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-3=-2720/148, 3-5=-2436/158, 5-7=-2482/152, 7-9=-2780/141  
 BOT CHORD 1-14=-48/2415, 11-14=0/1710, 9-11=-54/2477  
 WEBS 5-11=0/869, 7-11=-534/168, 5-14=0/813, 3-14=-502/167

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-3-8 to 4-1-8, Interior(1) 4-1-8 to 19-2-0, Exterior(2) 19-2-0 to 24-7-1, Interior(1) 24-7-1 to 39-1-10 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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 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.



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ENGINEERING BY  
**TRENCO**  
 A MiTek Affiliate  
 818 Soundside Road  
 Edenton, NC 27932

|             |       |            |     |     |   |
|-------------|-------|------------|-----|-----|---|
| Job         | Truss | Truss Type | Qty | Ply | Mattamy-Sequoia-Craftsman-Lot 72 Providence Creek |
| MASTERCRAFT | A02G  | GABLE      | 1   | 1   | 153968718   |
|             |       |            |     |     | Job Reference (optional)                          |

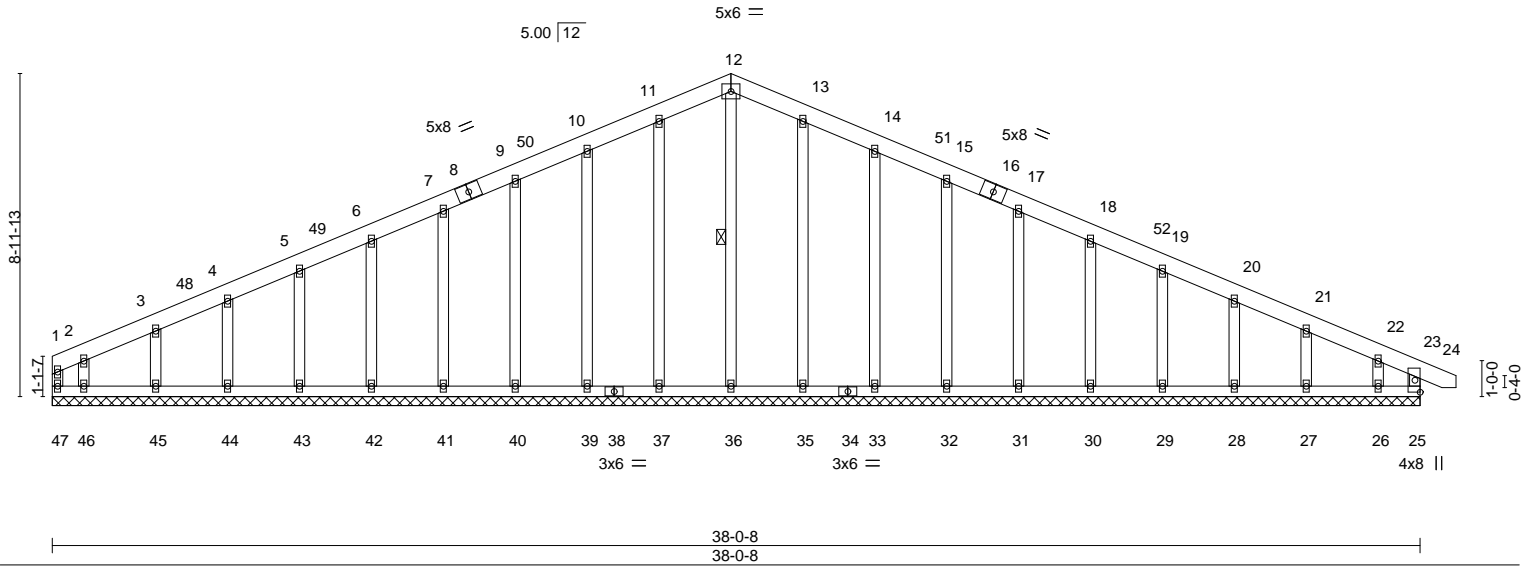
Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Aug 31 12:23:44 2022 Page 1

ID:NOHDxMFxGtHiYullGv8Cp8zfMF4-JRCeh8dX6b?JPMfnL9FGk2MDbyeBChoLUXIRCWYiKXT



Scale: 3/16"=1'



|                      |                      |       |             |              |          |        |     |                |             |
|----------------------|----------------------|-------|-------------|--------------|----------|--------|-----|----------------|-------------|
| <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 0.05     | Vert(LL)     | -0.00    | 23     | n/r | MT20           | 244/190     |
| TCDL 10.0            | Lumber DOL           | 1.15  | BC 0.04     | Vert(CT)     | -0.00    | 23     | n/r |                |             |
| BCLL 0.0 *           | Rep Stress Incr      | YES   | WB 0.14     | Horz(CT)     | 0.00     | 25     | n/a |                |             |
| BCDL 10.0            | Code IRC2015/TPI2014 |       | Matrix-R    |              |          |        |     | Weight: 279 lb | FT = 20%    |

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

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
WEBS 1 Row at midpt 12-36

**REACTIONS.** All bearings 38-0-8.  
(lb) - Max Horz 47=88(LC 13)  
Max Uplift All uplift 100 lb or less at joint(s) 47, 25, 39, 40, 41, 42, 43, 44, 45, 33, 32, 31, 30, 29, 28, 27, 26 except 46=104(LC 12)  
Max Grav All reactions 250 lb or less at joint(s) 47, 25, 36, 37, 39, 40, 41, 42, 43, 44, 45, 46, 35, 33, 32, 31, 30, 29, 28, 27, 26

**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 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-5-4 to 4-3-4, Interior(1) 4-3-4 to 19-2-0, Exterior(2) 19-2-0 to 24-7-1, Interior(1) 24-7-1 to 39-1-10 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas 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) 47, 25, 39, 40, 41, 42, 43, 44, 45, 33, 32, 31, 30, 29, 28, 27, 26 except (jt=lb) 46=104.



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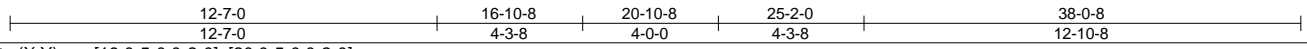
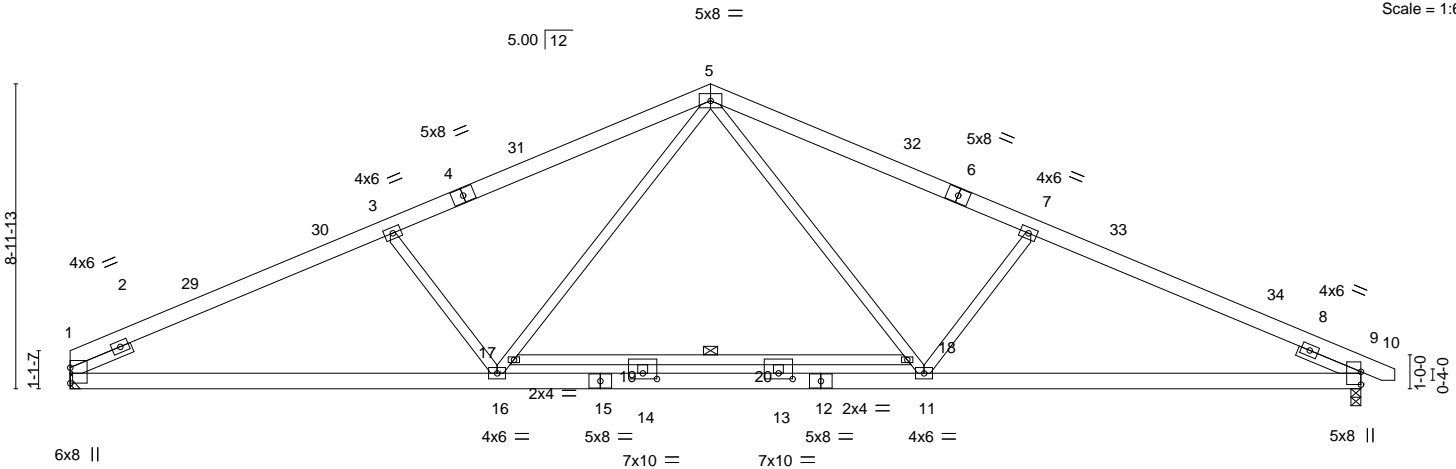
|                    |              |                      |          |          |   |           |
|--------------------|--------------|----------------------|----------|----------|---|-----------|
| Job<br>MASTERCRAFT | Truss<br>A03 | Truss Type<br>COMMON | Qty<br>7 | Ply<br>1 | Mattamy-Sequoia-Craftsman-Lot 72 Providence Creek<br>Job Reference (optional) | 153968719 |
|--------------------|--------------|----------------------|----------|----------|---|-----------|

Builders firstsource, Apex . NC

8.530 s May 26 2022 MiTek Industries, Inc. Wed Aug 31 12:44:44 2022 Page 1  
ID:NOHDxMFxGtHiYullGv8Cp8zMF4-ffd0Wvc9PopqHknyKT3f??XLPsZ8QRFpDZW6QUyikDn



Scale = 1:67.9



|                       |                                    |
|-----------------------|------------------------------------|
| Plate Offsets (X,Y)-- | [19:0-5-0,0-2-0], [20:0-5-0,0-2-0] |
|-----------------------|------------------------------------|

|                      |                      |       |             |              |          |        |      |               |                |          |
|----------------------|----------------------|-------|-------------|--------------|----------|--------|------|---------------|----------------|----------|
| <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 0.83     | Vert(LL)     | -0.47    | 13-14  | >965 | 360           | MT20           | 244/190  |
| TCDL 10.0            | Lumber DOL           | 1.15  | BC 0.54     | Vert(CT)     | -0.67    | 13-14  | >685 | 240           |                |          |
| BCLL 0.0 *           | Rep Stress Incr      | NO    | WB 0.62     | Horz(CT)     | 0.08     | 9      | n/a  | n/a           |                |          |
| BCDL 10.0            | Code IRC2015/TPI2014 |       | Matrix-MS   | Wind(LL)     | 0.08     | 13-14  | >999 | 240           |                |          |
|                      |                      |       |             |              |          |        |      |               | Weight: 258 lb | FT = 20% |

**LUMBER-**

TOP CHORD 2x6 SP No.2 \*Except\*  
1-4: 2x6 SP DSS  
BOT CHORD 2x6 SP DSS  
WEBS 2x4 SP No.3 \*Except\*  
17-18: 2x4 SP No.2  
SLIDER Left 2x4 SP No.2 1-11-12, Right 2x4 SP No.2 1-11-12

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 2-11-6 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
WEBS 1 Row at midpt 17-18

**REACTIONS.**

(size) 1=Mechanical, 9=0-3-8  
Max Horz 1=-103(LC 13)  
Max Grav 1=1521(LC 1), 9=1570(LC 1)

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

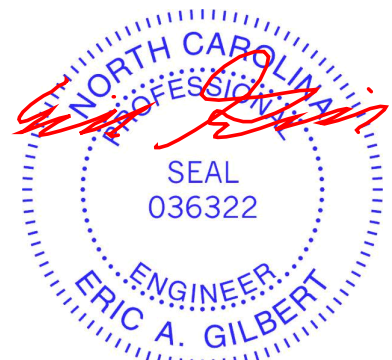
TOP CHORD 1-2=-851/0, 2-29=-2807/113, 29-30=-2762/133, 3-30=-2673/150, 3-4=-2578/120,  
4-31=-2499/135, 5-31=-2489/160, 5-32=-2527/153, 6-32=-2539/128, 6-7=-2618/113,  
7-33=-2721/142, 33-34=-2831/133, 8-34=-2860/105, 8-9=-1124/0  
BOT CHORD 1-16=-52/2501, 15-16=0/1958, 14-15=0/1958, 13-14=0/1958, 12-13=0/1958, 11-12=0/1958,  
9-11=-55/2557  
WEBS 5-18=0/1064, 11-18=0/862, 7-11=-537/169, 16-17=-2/805, 5-17=0/1006, 3-16=-512/171

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-3-8 to 4-1-8, Interior(1) 4-1-8 to 19-2-0, Exterior(2) 19-2-0 to 24-7-1, Interior(1) 24-7-1 to 39-1-10 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- N/A

**LOAD CASE(S)**

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-5=-60, 5-10=-60, 21-25=-20
- Dead + 0.75 Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15



August 31, 2022

Continued on page 2

**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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ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate  
818 Soundside Road  
Edenton, NC 27932

|             |       |            |     |     |   |           |
|-------------|-------|------------|-----|-----|---|-----------|
| Job         | Truss | Truss Type | Qty | Ply | Mattamy-Sequoia-Craftsman-Lot 72 Providence Creek | 153968719 |
| MASTERCRAFT | A03   | COMMON     | 7   | 1   | Job Reference (optional)                          |           |

Builders firstsource, Apex . NC

8:530 s May 26 2022 MiTek Industries, Inc. Wed Aug 31 12:44:44 2022 Page 2  
ID:NOHDxMFxGtHiYUllGv8Cp8zMF4-ffd0VWwC9PopqHknyKT3f??XLPsZ8QRFPdZw6QUyikDn

### LOAD CASE(S)

- Uniform Loads (plf)  
Vert: 1-5=-50, 5-10=-50, 21-25=-20, 17-18=-30
- 3) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25  
Uniform Loads (plf)  
Vert: 1-5=-20, 5-10=-20, 21-25=-40, 17-18=-40
- 4) Dead + 0.6 C-C Wind (Pos. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-29=22, 5-29=12, 5-32=22, 9-32=12, 9-10=8, 21-25=-12  
Horz: 1-29=-34, 5-29=-24, 5-32=34, 9-32=24, 9-10=20
- 5) Dead + 0.6 C-C Wind (Pos. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-31=12, 5-31=22, 5-34=12, 9-34=22, 9-10=42, 21-25=-12  
Horz: 1-31=-24, 5-31=-34, 5-34=24, 9-34=34, 9-10=54
- 6) Dead + 0.6 C-C Wind (Neg. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-5=-32, 5-9=-32, 9-10=-27, 21-25=-20  
Horz: 1-5=12, 5-9=-12, 9-10=-7
- 7) Dead + 0.6 C-C Wind (Neg. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-5=-32, 5-9=-32, 9-10=-13, 21-25=-20  
Horz: 1-5=12, 5-9=-12, 9-10=7
- 8) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-5=10, 5-9=8, 9-10=4, 21-25=-12  
Horz: 1-5=-22, 5-9=20, 9-10=16
- 9) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-5=8, 5-9=10, 9-10=20, 21-25=-12  
Horz: 1-5=-20, 5-9=22, 9-10=32
- 10) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-5=-7, 5-9=-8, 9-10=-4, 21-25=-20  
Horz: 1-5=-13, 5-9=12, 9-10=16
- 11) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-5=-8, 5-9=-7, 9-10=-2, 21-25=-20  
Horz: 1-5=-12, 5-9=13, 9-10=18
- 12) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-30=19, 5-30=9, 5-9=2, 9-10=-3, 21-25=-12  
Horz: 1-30=-31, 5-30=-21, 5-9=14, 9-10=9
- 13) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-5=2, 5-33=9, 9-33=19, 9-10=14, 21-25=-12  
Horz: 1-5=-14, 5-33=21, 9-33=31, 9-10=26
- 14) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-5=9, 5-9=2, 9-10=-3, 21-25=-12  
Horz: 1-5=-21, 5-9=14, 9-10=9
- 15) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-5=2, 5-9=9, 9-10=5, 21-25=-12  
Horz: 1-5=-14, 5-9=21, 9-10=17
- 16) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-30=2, 5-30=-7, 5-9=-15, 9-10=-11, 21-25=-20  
Horz: 1-30=-22, 5-30=-13, 5-9=5, 9-10=9
- 17) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-5=-15, 5-33=-7, 9-33=2, 9-10=6, 21-25=-20  
Horz: 1-5=-5, 5-33=13, 9-33=22, 9-10=26
- 18) Dead: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90  
Uniform Loads (plf)  
Vert: 1-5=-20, 5-10=-20, 21-25=-20, 17-18=-30
- 19) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-5=-40, 5-9=-41, 9-10=-38, 21-25=-20, 17-18=-30  
Horz: 1-5=-10, 5-9=9, 9-10=12
- 20) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-5=-41, 5-9=-40, 9-10=-37, 21-25=-20, 17-18=-30  
Horz: 1-5=-9, 5-9=10, 9-10=13

Continued on page 3

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818 Soundside Road  
Edenton, NC 27932

|             |       |            |     |     |   |           |
|-------------|-------|------------|-----|-----|---|-----------|
| Job         | Truss | Truss Type | Qty | Ply | Mattamy-Sequoia-Craftsman-Lot 72 Providence Creek | 153968719 |
| MASTERCRAFT | A03   | COMMON     | 7   | 1   | Job Reference (optional)                          |           |

Builders firstsource, Apex . NC

8:530 s May 26 2022 MiTek Industries, Inc. Wed Aug 31 12:44:44 2022 Page 3  
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**LOAD CASE(S)**

- 21) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-30=-34, 5-30=-41, 5-9=-46, 9-10=-43, 21-25=-20, 17-18=-30  
 Horz: 1-30=-16, 5-30=-9, 5-9=4, 9-10=7
- 22) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-5=-46, 5-33=-41, 9-33=-34, 9-10=-30, 21-25=-20, 17-18=-30  
 Horz: 1-5=-4, 5-33=9, 9-33=16, 9-10=20
- 23) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-5=-60, 5-10=-20, 21-25=-20
- 24) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-5=-20, 5-10=-60, 21-25=-20
- 25) 3rd Dead + 0.75 Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-5=-50, 5-10=-20, 21-25=-20, 17-18=-30
- 26) 4th Dead + 0.75 Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-5=-20, 5-10=-50, 21-25=-20, 17-18=-30

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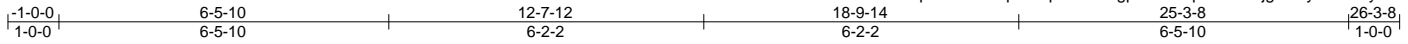
818 Soundside Road  
 Edenton, NC 27932



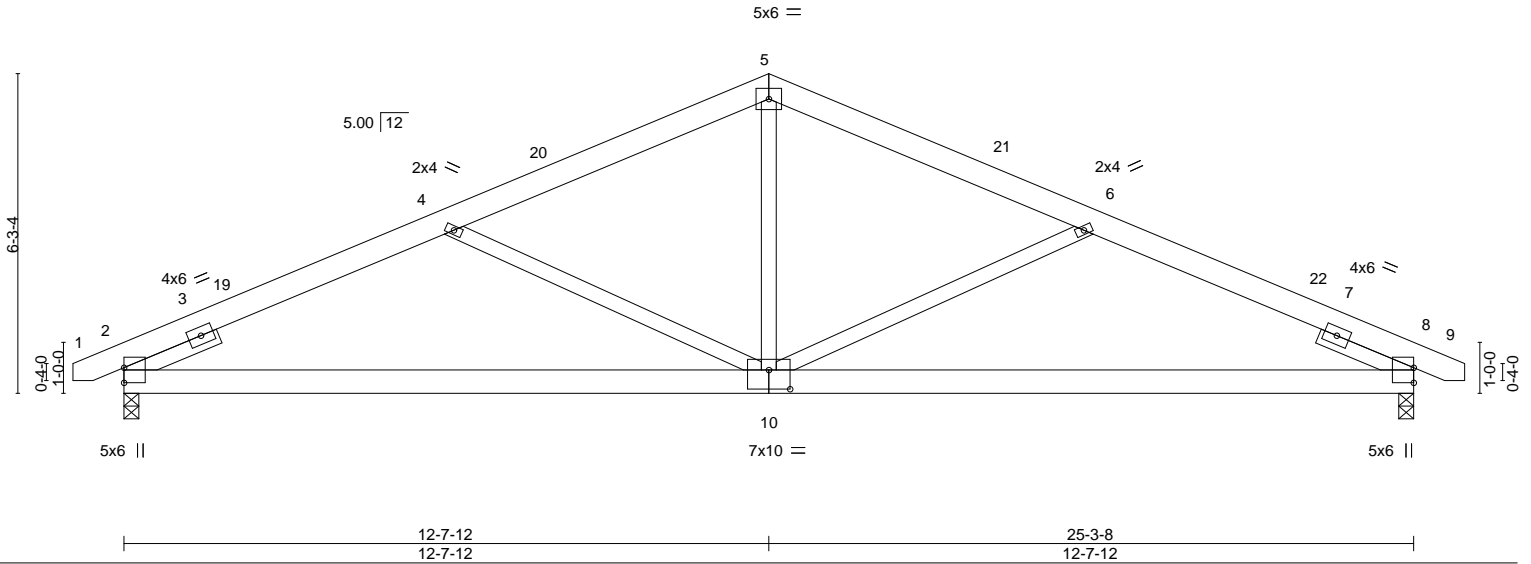
|                    |              |                      |          |          |  |
|--------------------|--------------|----------------------|----------|----------|--|
| Job<br>MASTERCRAFT | Truss<br>B01 | Truss Type<br>COMMON | Qty<br>1 | Ply<br>1 | Mattamy-Sequoia-Craftsman-Lot 72 Providence Creek<br>153968720 |
|--------------------|--------------|----------------------|----------|----------|--|

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Aug 31 12:23:46 2022 Page 1

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Scale = 1:45.2



| LOADING (psf) | SPACING-             | CSI.      | DEFL.                         | PLATES         | GRIP     |
|---------------|----------------------|-----------|-------------------------------|----------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.23   | in (loc) l/defl L/d           | MT20           | 244/190  |
| TCDL 10.0     | Plate Grip DOL 1.15  | BC 0.61   | Vert(LL) -0.09 10-17 >999 360 |                |          |
| BCLL 0.0 *    | Lumber DOL 1.15      | WB 0.40   | Vert(CT) -0.20 10-17 >999 240 |                |          |
| BCDL 10.0     | Rep Stress Incr YES  | Matrix-MS | Horz(CT) 0.04 8 n/a n/a       |                |          |
|               | Code IRC2015/TPI2014 |           | Wind(LL) 0.03 10 >999 240     | Weight: 163 lb | FT = 20% |

**LUMBER-**  
 TOP CHORD 2x6 SP No.2  
 BOT CHORD 2x6 SP No.2  
 WEBS 2x4 SP No.3  
 SLIDER Left 2x4 SP No.2 1-11-12, Right 2x4 SP No.2 1-11-12

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 5-4-8 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 8=0-3-8  
 Max Horz 2=72(LC 12)  
 Max Grav 2=1060(LC 1), 8=1060(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=-1696/123, 4-5=-1330/85, 5-6=-1330/85, 6-8=-1696/123  
 BOT CHORD 2-10=-52/1511, 8-10=-55/1511  
 WEBS 5-10=0/645, 6-10=-434/134, 4-10=-434/133

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-9-10 to 2-2-6, Interior(1) 2-2-6 to 12-7-12, Exterior(2) 12-7-12 to 16-10-11, Interior(1) 16-10-11 to 26-1-2 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.



August 31, 2022

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

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



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|                    |                  |                      |          |          |  |
|--------------------|------------------|----------------------|----------|----------|--|
| Job<br>MASTERCRAFT | Truss<br>B01-3PL | Truss Type<br>COMMON | Qty<br>1 | Ply<br>3 | Mattamy-Sequoia-Craftsman-Lot 72 Providence Creek<br>153968721 |
|--------------------|------------------|----------------------|----------|----------|--|

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Aug 31 12:23:48 2022 Page 1

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5x6 ||

Scale = 1:43.6

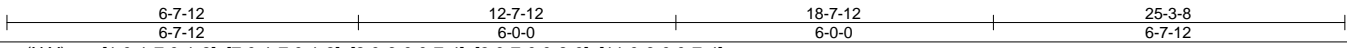
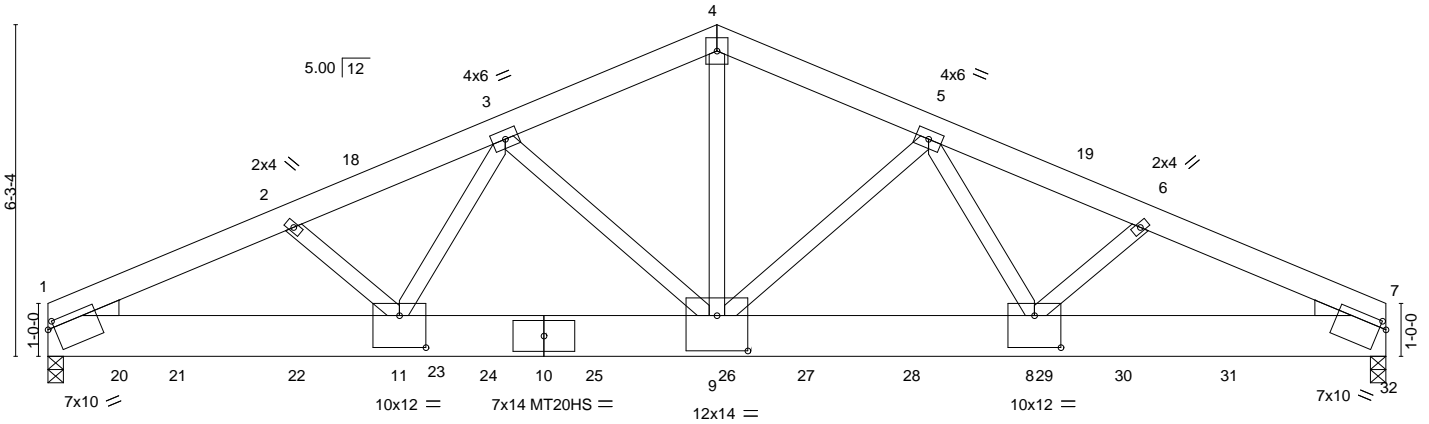


Plate Offsets (X,Y)-- [1:0-1-7,0-1-8], [7:0-1-7,0-1-8], [8:0-6-0,0-7-4], [9:0-7-0,0-8-0], [11:0-6-0,0-7-4]

| 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 0.46   | Vert(LL) | -0.15    | 9-11   | >999 | 360    | MT20           | 244/190  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.44   | Vert(CT) | -0.30    | 9-11   | >999 | 240    | MT20HS         | 187/143  |
| BCLL 0.0 *    | Rep Stress Incr      | YES   | WB 0.83   | Horz(CT) | 0.05     | 7      | n/a  | n/a    |                |          |
| BCDL 10.0     | Code IRC2015/TPI2014 |       | Matrix-MS | Wind(LL) | 0.01     | 11     | >999 | 240    |                |          |
|               |                      |       |           |          |          |        |      |        | Weight: 625 lb | FT = 20% |

| LUMBER-                                | BRACING-   |
|--|--|
| TOP CHORD 2x6 SP No.2                  | TOP CHORD Structural wood sheathing directly applied or 5-11-5 oc purlins. |
| BOT CHORD 2x10 SP DSS                  | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.             |
| WEBS 2x4 SP No.2                       |  |
| WEDGE                                  |  |
| Left: 2x4 SP No.3 , Right: 2x4 SP No.3 |  |

**REACTIONS.** (size) 1=0-3-8 (req. 0-4-5), 7=0-3-8 (req. 0-4-3)  
 Max Horz 1=65(LC 12)  
 Max Grav 1=10920(LC 1), 7=10618(LC 1)

SUPPLEMENTARY BEARING PLATES, SPECIAL ANCHORAGE, OR OTHER MEANS TO ALLOW FOR THE MINIMUM REQUIRED SUPPORT WIDTH (SUCH AS COLUMN CAPS, BEARING BLOCKS, ETC.) ARE THE RESPONSIBILITY OF THE TRUSS MANUFACTURER OR THE BUILDING DESIGNER.

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-17979/0, 2-3=-18001/0, 3-4=-13636/0, 4-5=-13636/0, 5-6=-17591/0, 6-7=-17559/0  
 BOT CHORD 1-11=0/16420, 9-11=0/14819, 8-9=0/14624, 7-8=0/16024  
 WEBS 4-9=0/10119, 5-9=-2920/0, 5-8=0/3651, 6-8=0/457, 3-9=-3196/0, 3-11=0/4052, 2-11=0/428

- NOTES-**
- 1) 3-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: 2x10 - 3 rows staggered at 0-5-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - 3) Unbalanced roof live loads have been considered for this design.
  - 4) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - 5) All plates are MT20 plates unless otherwise indicated.
  - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 8) WARNING: Required bearing size at joint(s) 1, 7 greater than input bearing size.
  - 9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1501 lb down at 1-4-4, 1501 lb down at 2-5-8, 1501 lb down at 4-8-8, 1501 lb down at 6-4-0, 1501 lb down at 8-4-0, 1501 lb down at 10-4-0, 1501 lb down at 12-4-0, 1501 lb down at 14-4-0, 1501 lb down at 16-4-0, 1501 lb down at 18-4-0, 1501 lb down at 20-4-0, and 1501 lb down at 22-4-0, and 1502 lb down at 24-4-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard



August 31, 2022

Continued on page 2

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**ENGINEERING BY**  
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 Edenton, NC 27932

|                    |                  |                      |          |                 |  |
|--------------------|------------------|----------------------|----------|-----------------|--|
| Job<br>MASTERCRAFT | Truss<br>B01-3PL | Truss Type<br>COMMON | Qty<br>1 | Ply<br><b>3</b> | Mattamy-Sequoia-Craftsman-Lot 72 Providence Creek<br>I53968721<br>Job Reference (optional) |
|--------------------|------------------|----------------------|----------|-----------------|--|

Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Aug 31 12:23:48 2022 Page 2  
ID:NOHDxMFxGHiYullGv8Cp8zfMF4-BDS8WVh29qVluzzYa\_JCvuWoHZwq8L4xP9geLHyiKXP

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

Vert: 1-4=-60, 4-7=-60, 12-15=-20

Concentrated Loads (lb)

Vert: 20=-1501(F) 21=-1501(F) 22=-1501(F) 23=-1501(F) 24=-1501(F) 25=-1501(F) 26=-1501(F) 27=-1501(F) 28=-1501(F) 29=-1501(F) 30=-1501(F) 31=-1501(F) 32=-1502(F)

**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 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, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



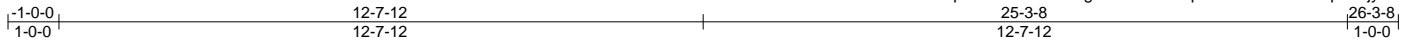
818 Soundside Road  
Edenton, NC 27932

|                    |               |                     |          |          |  |
|--------------------|---------------|---------------------|----------|----------|--|
| Job<br>MASTERCRAFT | Truss<br>B01G | Truss Type<br>GABLE | Qty<br>1 | Ply<br>1 | Mattamy-Sequoia-Craftsman-Lot 72 Providence Creek<br>153968722<br>Job Reference (optional) |
|--------------------|---------------|---------------------|----------|----------|--|

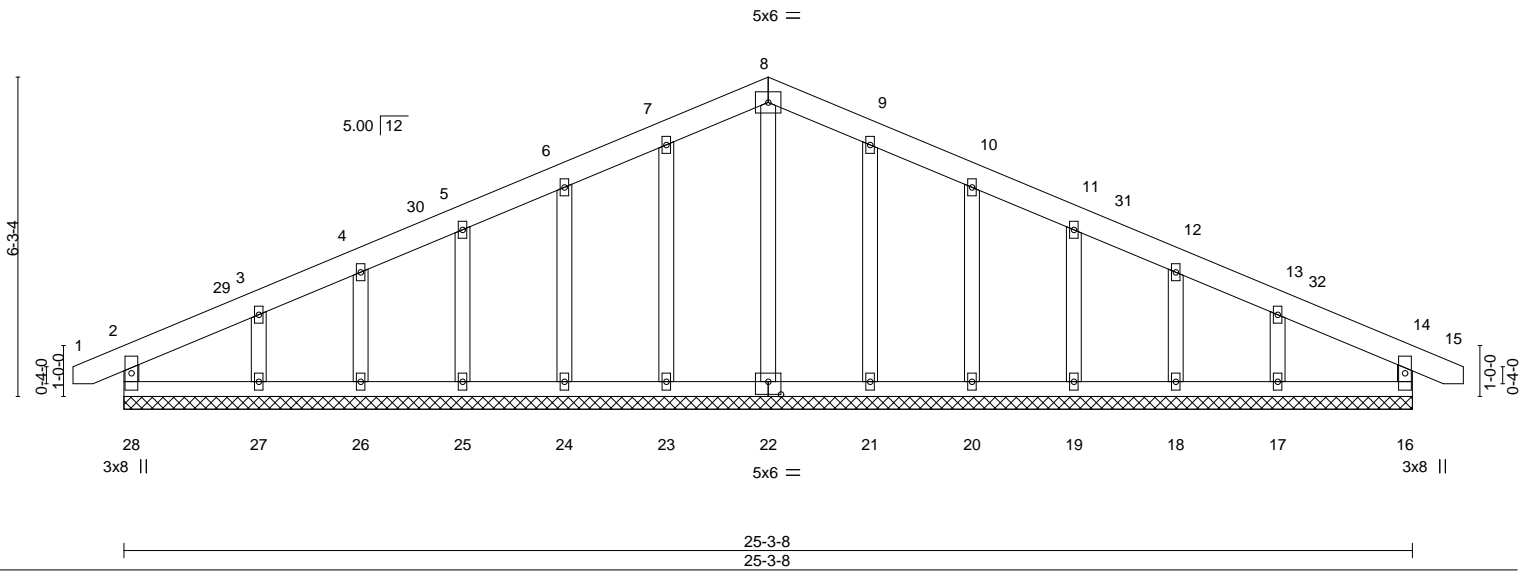
Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Aug 31 12:23:49 2022 Page 1

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Scale = 1:45.2



|                        |                       |             |                                  |                |             |
|------------------------|-----------------------|-------------|----------------------------------|----------------|-------------|
| Plate Offsets (X, Y)-- | [22:0-3-0,0-3-0]      |             |                                  |                |             |
| <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 0.04     | Vert(LL) -0.00 14 n/r 120        | MT20           | 244/190     |
| TCDL 10.0              | Lumber DOL 1.15       | BC 0.05     | Vert(CT) -0.00 14 n/r 120        |                |             |
| BCLL 0.0 *             | Rep Stress Incr YES   | WB 0.07     | Horz(CT) 0.00 16 n/a n/a         |                |             |
| BCDL 10.0              | Code IRC2015/TPI2014  | Matrix-R    |                                  | Weight: 162 lb | FT = 20%    |

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

**REACTIONS.** All bearings 25-3-8.  
 (lb) - Max Horz 28=56(LC 12)  
 Max Uplift All uplift 100 lb or less at joint(s) 28, 16, 24, 25, 26, 27, 20, 19, 18, 17  
 Max Grav All reactions 250 lb or less at joint(s) 28, 16, 22, 23, 24, 25, 26, 27, 21, 20, 19, 18, 17

**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=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-9-10 to 2-2-6, Interior(1) 2-2-6 to 12-7-12, Exterior(2) 12-7-12 to 16-7-12, Interior(1) 16-7-12 to 26-1-2 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) 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) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - 7) Gable studs spaced at 2-0-0 oc.
  - 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 9) \* This truss has been designed for a live load of 20.0psf 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.
  - 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 28, 16, 24, 25, 26, 27, 20, 19, 18, 17.



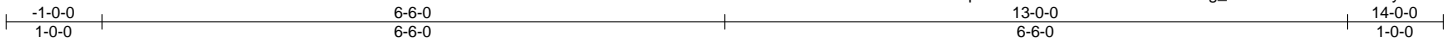
August 31, 2022

|                    |               |                     |          |          |   |
|--------------------|---------------|---------------------|----------|----------|---|
| Job<br>MASTERCRAFT | Truss<br>C01G | Truss Type<br>GABLE | Qty<br>1 | Ply<br>1 | Mattamy-Sequoia-Craftman-Lot 72 Providence Creek<br>153968723<br>Job Reference (optional) |
|--------------------|---------------|---------------------|----------|----------|---|

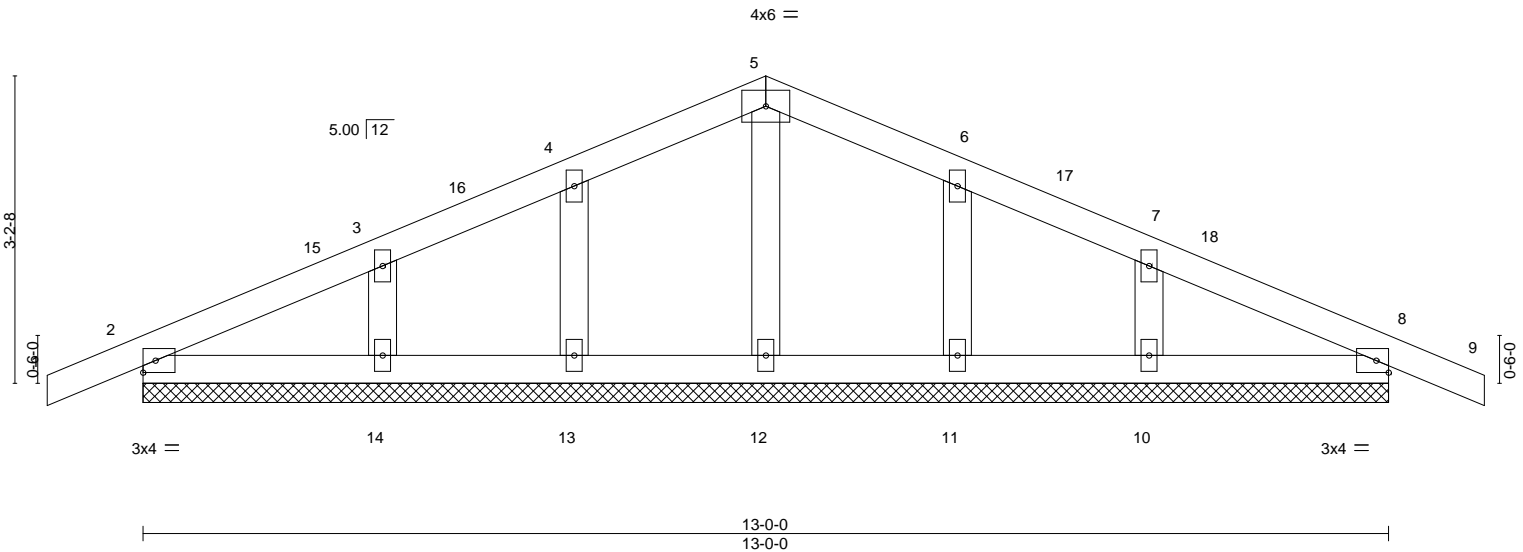
Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Aug 31 12:23:50 2022 Page 1

ID:NOHDxMFxGHiYullGv8Cp8zfMF4-7bZvxBiIhRIT7H7xhPLg\_JcEkMhQcR?EtS9IPAyikXN



Scale: 1/2"=1'



| LOADING (psf) | SPACING-             | CSI.     | DEFL.    | in (loc) | l/defl | L/d | PLATES        | GRIP     |
|---------------|----------------------|----------|----------|----------|--------|-----|---------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.07  | Vert(LL) | -0.00    | 8      | n/r | MT20          | 244/190  |
| TCDL 10.0     | Plate Grip DOL 1.15  | BC 0.05  | Vert(CT) | -0.00    | 8      | n/r |               |          |
| BCLL 0.0 *    | Lumber DOL 1.15      | WB 0.03  | Horz(CT) | 0.00     | 8      | n/a |               |          |
| BCDL 10.0     | Rep Stress Incr NO   | Matrix-S |          |          |        |     | Weight: 56 lb | FT = 20% |
|               | Code IRC2015/TPI2014 |          |          |          |        |     |               |          |

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

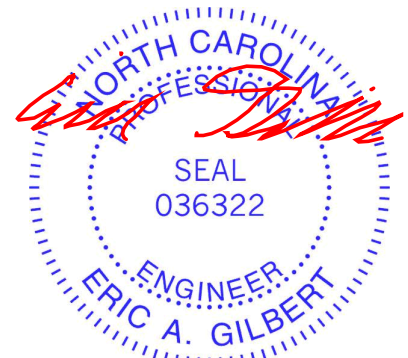
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** All bearings 13-0-0.  
 (lb) - Max Horz 2=42(LC 12)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 8, 13, 14, 11, 10  
 Max Grav All reactions 250 lb or less at joint(s) 2, 8, 12, 13, 14, 11, 10

**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=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -1-0-0 to 2-0-0, Exterior(2) 2-0-0 to 6-6-0, Corner(3) 6-6-0 to 9-6-0, Exterior(2) 9-6-0 to 14-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) 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 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, 8, 13, 14, 11, 10.



August 31, 2022

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

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



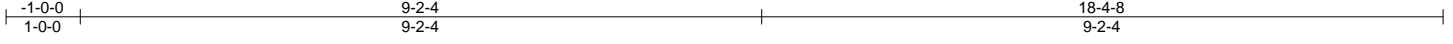
818 Soundside Road  
 Edenton, NC 27932

|                    |              |                      |          |          |   |
|--------------------|--------------|----------------------|----------|----------|---|
| Job<br>MASTERCRAFT | Truss<br>C02 | Truss Type<br>COMMON | Qty<br>1 | Ply<br>1 | Mattamy-Sequoia-Craftman-Lot 72 Providence Creek<br>153968724 |
|--------------------|--------------|----------------------|----------|----------|---|

Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Aug 31 12:23:51 2022 Page 1

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Scale = 1:31.1

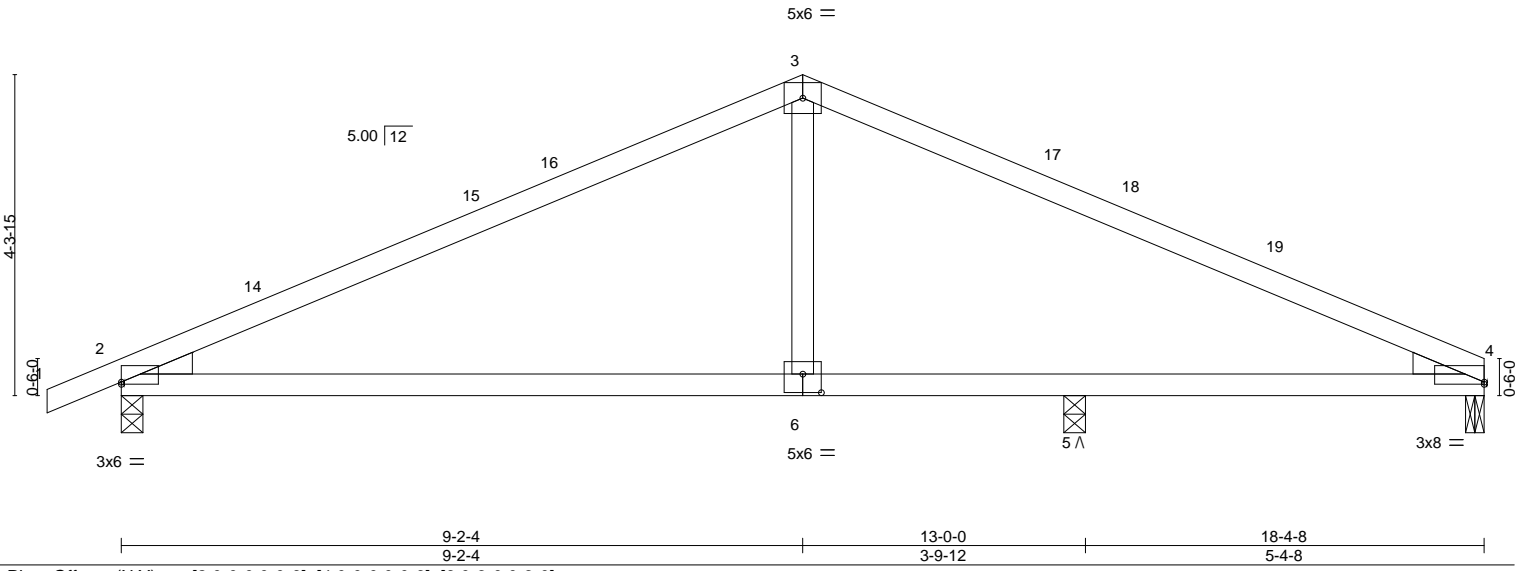


Plate Offsets (X, Y)-- [2:0-0-0,0-0-6], [4:0-0-0,0-0-6], [6:0-3-0,0-3-0]

| LOADING (psf) | SPACING-             | CSI.      | DEFL.                        | PLATES        | GRIP     |
|---------------|----------------------|-----------|------------------------------|---------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.87   | in (loc) l/defl L/d          | MT20          | 244/190  |
| TCDL 10.0     | Plate Grip DOL 1.15  | BC 0.89   | Vert(LL) -0.16 6-12 >988 360 |               |          |
| BCLL 0.0 *    | Lumber DOL 1.15      | WB 0.12   | Vert(CT) -0.37 6-12 >421 240 |               |          |
| BCDL 10.0     | Rep Stress Incr YES  | Matrix-MS | Horz(CT) 0.03 2 n/a n/a      |               |          |
|               | Code IRC2015/TPI2014 |           | Wind(LL) 0.17 5-9 >392 240   | Weight: 67 lb | FT = 20% |

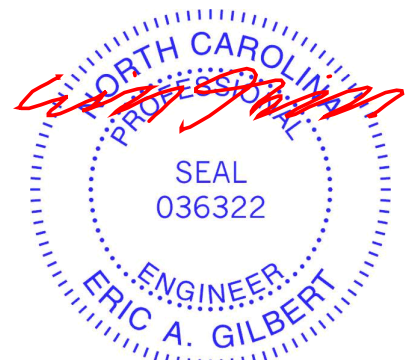
**LUMBER-**  
TOP CHORD 2x4 SP SS \*Except\*  
3-4: 2x4 SP No.1  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3  
WEDGE  
Left: 2x4 SP No.3 , Right: 2x4 SP No.3

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

**REACTIONS.** (size) 4=0-3-0, 2=0-3-8, 5=0-3-8  
Max Horz 2=65(LC 12)  
Max Uplift 4=-47(LC 9), 2=-31(LC 12), 5=REL  
Max Grav 4=646(LC 1), 2=759(LC 1), 5=170(LC 24)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1031/188, 3-4=-1035/188  
BOT CHORD 2-6=-101/859, 5-6=-101/859, 4-5=-101/859  
WEBS 3-6=0/318

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 9-2-4, Exterior(2) 9-2-4 to 13-5-3, Interior(1) 13-5-3 to 18-4-8 zone; cantilever left and right exposed ; end vertical left and right exposed; porch right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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 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) 4, 2.
  - "A" indicates Released bearing: allow for upward movement at joint(s) 5.

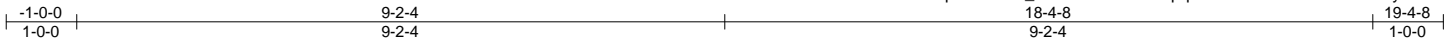


August 31, 2022

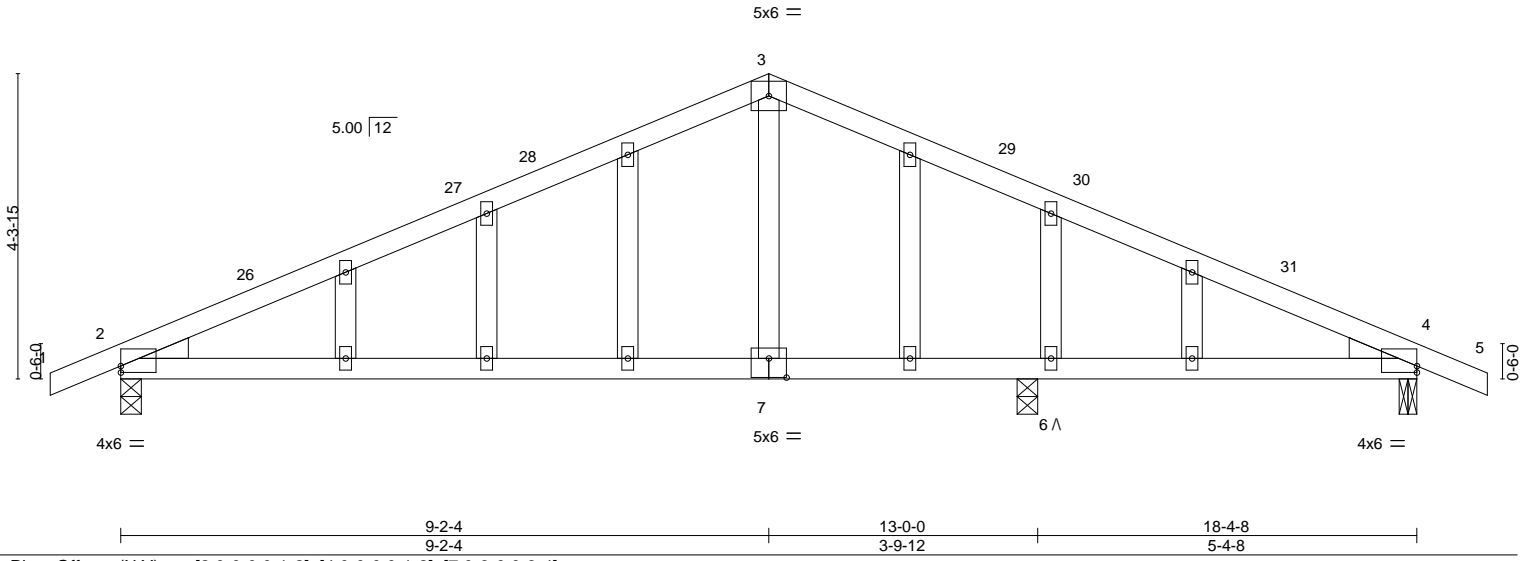
|                    |                |                     |          |          |  |
|--------------------|----------------|---------------------|----------|----------|--|
| Job<br>MASTERCRAFT | Truss<br>C02SG | Truss Type<br>GABLE | Qty<br>1 | Ply<br>1 | Mattamy-Sequoia-Craftsman-Lot 72 Providence Creek<br>153968725 |
|--------------------|----------------|---------------------|----------|----------|--|

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Aug 31 12:23:52 2022 Page 1

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Scale = 1:32.7



| LOADING (psf) | SPACING-             | CSI.      | DEFL.                        | PLATES        | GRIP     |
|---------------|----------------------|-----------|------------------------------|---------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.65   | in (loc) l/defl L/d          | MT20          | 244/190  |
| TCDL 10.0     | Plate Grip DOL 1.15  | BC 0.82   | Vert(LL) -0.16 7-21 >999 360 |               |          |
| BCLL 0.0 *    | Lumber DOL 1.15      | WB 0.12   | Vert(CT) -0.37 7-21 >432 240 |               |          |
| BCDL 10.0     | Rep Stress Incr YES  | Matrix-MS | Horz(CT) 0.03 2 n/a n/a      |               |          |
|               | Code IRC2015/TPI2014 |           | Wind(LL) 0.14 6-24 >437 240  | Weight: 87 lb | FT = 20% |

**LUMBER-**  
TOP CHORD 2x4 SP SS  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3  
OTHERS 2x4 SP No.3  
WEDGE  
Left: 2x4 SP No.3 , Right: 2x4 SP No.3

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 4-10-1 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 6=0-3-8, 4=0-3-0  
Max Horz 2=61(LC 12)  
Max Uplift 2=-30(LC 12), 6=REL, 4=-65(LC 9)  
Max Grav 2=761(LC 1), 6=162(LC 24), 4=709(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1037/174, 3-4=-1041/168  
BOT CHORD 2-7=-68/864, 6-7=-68/864, 4-6=-68/864  
WEBS 3-7=0/323

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 9-2-4, Exterior(2) 9-2-4 to 13-5-3, Interior(1) 13-5-3 to 19-4-8 zone; cantilever left and right exposed ; end vertical left and right exposed; porch right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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 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 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, 4.
  - "Λ" indicates Released bearing: allow for upward movement at joint(s) 6.

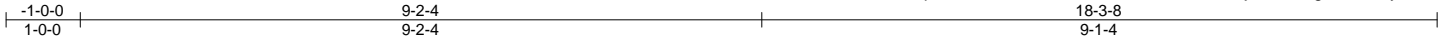


August 31, 2022

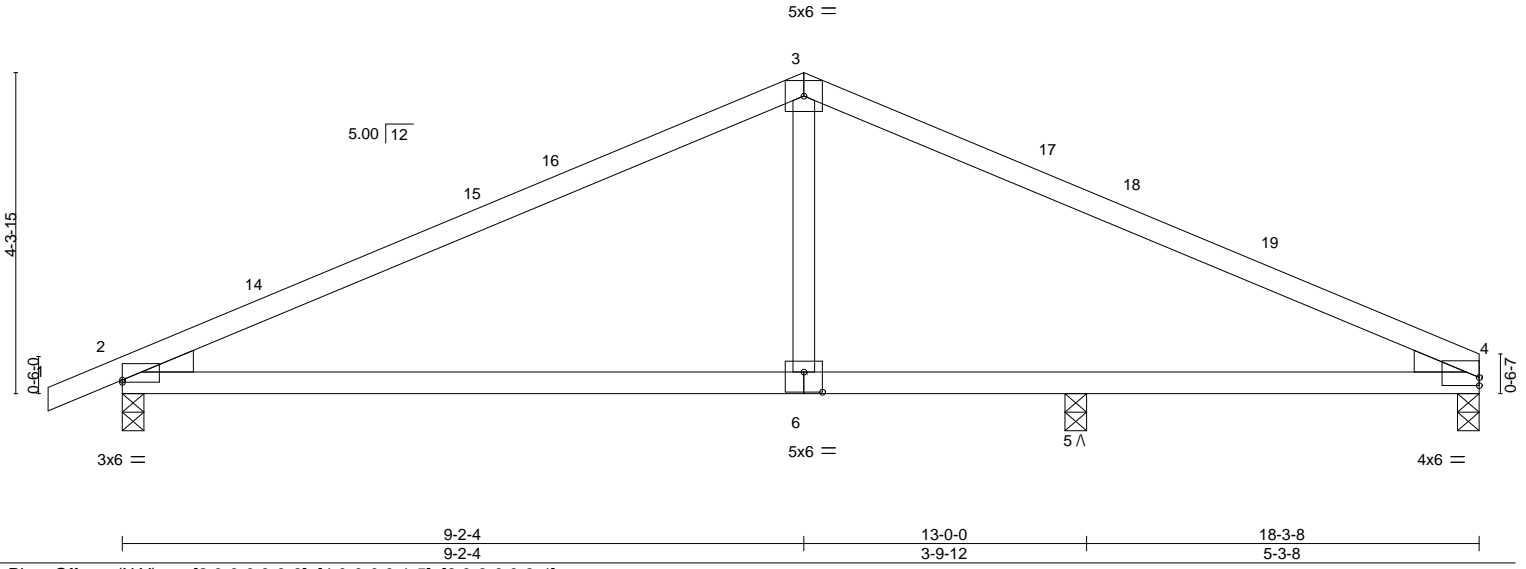
|                    |              |                      |          |          |   |
|--------------------|--------------|----------------------|----------|----------|---|
| Job<br>MASTERCRAFT | Truss<br>C03 | Truss Type<br>COMMON | Qty<br>2 | Ply<br>1 | Mattamy-Sequoia-Craftman-Lot 72 Providence Creek<br>153968726 |
|--------------------|--------------|----------------------|----------|----------|---|

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Aug 31 12:23:53 2022 Page 1

ID:NOHDxMFxGtHiYulGv8Cp8zfMF4-YAF1ZDKB\_M71\_krWMXvNcxDYjaXFomKgZQNP0VyiKXK



Scale = 1:31.1



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

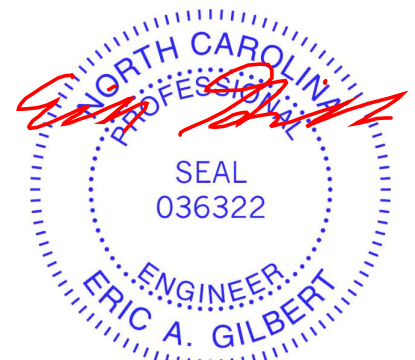
| LOADING (psf) | SPACING-             | CSI.      | DEFL.                        | PLATES        | GRIP     |
|---------------|----------------------|-----------|------------------------------|---------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.86   | in (loc) l/defl L/d          | MT20          | 244/190  |
| TCDL 10.0     | Plate Grip DOL 1.15  | BC 0.81   | Vert(LL) -0.16 6-12 >987 360 |               |          |
| BCLL 0.0 *    | Lumber DOL 1.15      | WB 0.12   | Vert(CT) -0.37 6-12 >421 240 |               |          |
| BCDL 10.0     | Rep Stress Incr YES  | Matrix-MS | Horz(CT) 0.03 2 n/a n/a      |               |          |
|               | Code IRC2015/TPI2014 |           | Wind(LL) 0.12 6-12 >999 240  | Weight: 66 lb | FT = 20% |

| LUMBER-  | BRACING-  |
|--|---|
| TOP CHORD 2x4 SP SS *Except*<br>3-4: 2x4 SP No.1 | TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins. |
| BOT CHORD 2x4 SP No.2                            | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.            |
| WEBS 2x4 SP No.3                                 |   |
| WEDGE<br>Left: 2x4 SP No.3, Right: 2x4 SP No.3   |   |

**REACTIONS.** (size) 4=0-3-8, 2=0-3-8, 5=0-3-8  
 Max Horz 2=65(LC 12)  
 Max Uplift 2=-31(LC 12), 5=REL  
 Max Grav 4=652(LC 1), 2=760(LC 1), 5=157(LC 24)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1034/92, 3-4=-1039/104  
 BOT CHORD 2-6=-19/862, 5-6=-19/862, 4-5=-19/862  
 WEBS 3-6=0/321

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 9-2-4, Exterior(2) 9-2-4 to 13-5-3, Interior(1) 13-5-3 to 18-3-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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 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.
  - "A" indicates Released bearing: allow for upward movement at joint(s) 5.



August 31, 2022

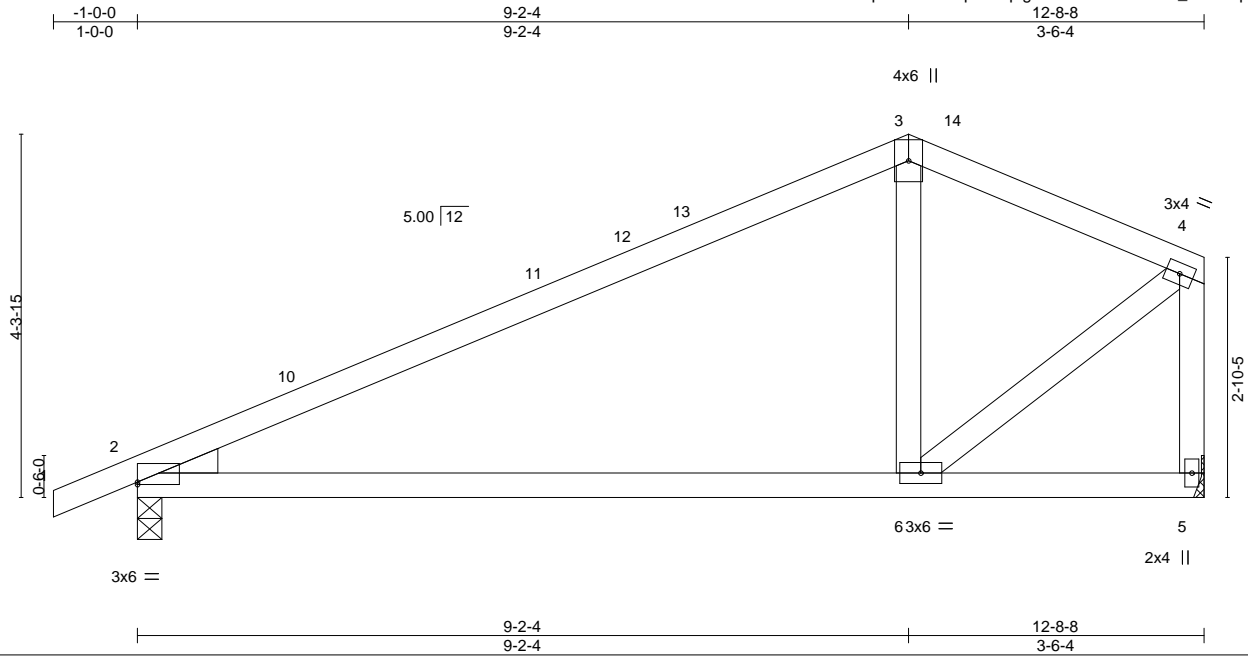
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| <p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and 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 <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p> | <p>ENGINEERING BY<br/><b>TRENCO</b><br/>A MiTek Affiliate</p> <p>818 Soundside Road<br/>Edenton, NC 27932</p> |
|--|---|



|                    |              |                      |          |          |  |
|--------------------|--------------|----------------------|----------|----------|--|
| Job<br>MASTERCRAFT | Truss<br>C04 | Truss Type<br>COMMON | Qty<br>2 | Ply<br>1 | Mattamy-Sequoia-Craftsman-Lot 72 Providence Creek<br>153968727 |
|--------------------|--------------|----------------------|----------|----------|--|

Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Aug 31 12:23:54 2022 Page 1  
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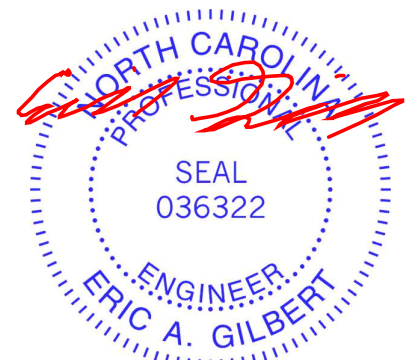
|                       |                       |             |                                  |               |             |
|-----------------------|-----------------------|-------------|----------------------------------|---------------|-------------|
| Plate Offsets (X,Y)-- | [2:0-0-0,0-0-6]       |             |                                  |               |             |
| <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 0.91     | Vert(LL) -0.15 6-9 >973 360      | MT20          | 244/190     |
| TCDL 10.0             | Lumber DOL 1.15       | BC 0.76     | Vert(CT) -0.38 6-9 >401 240      |               |             |
| BCLL 0.0 *            | Rep Stress Incr YES   | WB 0.23     | Horz(CT) 0.03 2 n/a n/a          |               |             |
| BCDL 10.0             | Code IRC2015/TPI2014  | Matrix-MS   | Wind(LL) 0.13 6-9 >999 240       | Weight: 57 lb | FT = 20%    |

|  |   |
|--|---|
| <b>LUMBER-</b>                                     | <b>BRACING-</b>   |
| TOP CHORD 2x4 SP No.1 *Except*<br>3-4: 2x4 SP No.2 | TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals. |
| BOT CHORD 2x4 SP No.2                              | BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.                                   |
| WEBS 2x4 SP No.3 *Except*<br>4-5: 2x4 SP No.2      |   |
| WEDGE<br>Left: 2x4 SP No.3                         |   |

**REACTIONS.** (size) 5=Mechanical, 2=0-3-8  
 Max Horz 2=88(LC 11)  
 Max Uplift 2=30(LC 12)  
 Max Grav 5=500(LC 1), 2=565(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-555/62, 3-4=-457/66, 4-5=-542/89  
 BOT CHORD 2-6=-81/417  
 WEBS 4-6=-72/545

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 9-2-4, Exterior(2) 9-2-4 to 12-6-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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 where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2.



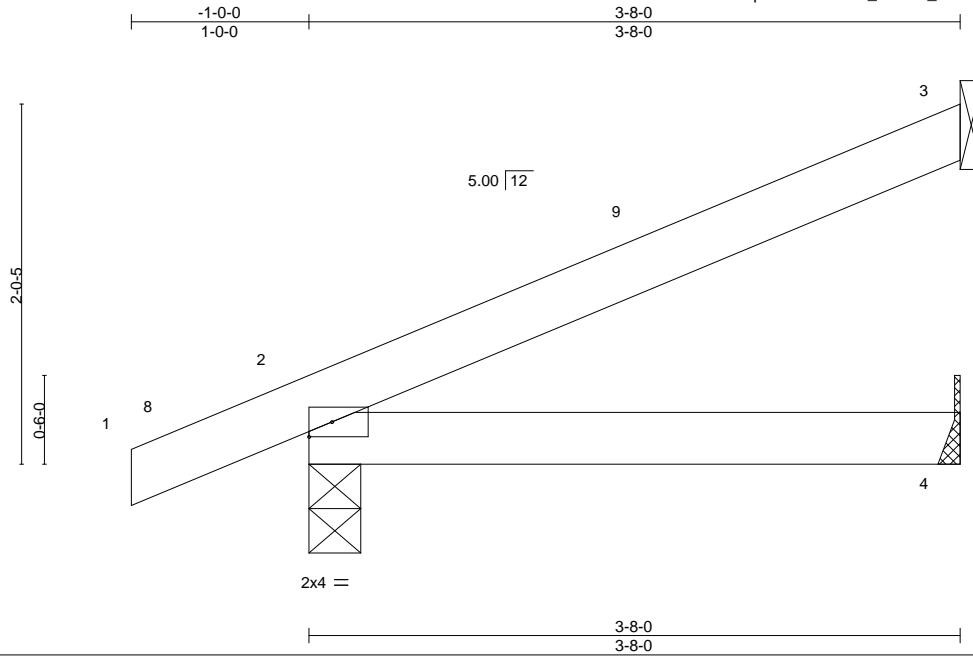
|             |       |            |     |     |   |
|-------------|-------|------------|-----|-----|---|
| Job         | Truss | Truss Type | Qty | Ply | Mattamy-Sequoia-Craftsman-Lot 72 Providence Creek |
| MASTERCRAFT | G01   | JACK       | 9   | 1   | 153968728   |

Builders FirstSource (Apex, NC),

Apex, NC - 27523,

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Aug 31 12:23:55 2022 Page 1

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Scale = 1:13.0

| LOADING (psf) | SPACING-             | CSI.      | DEFL.    | in (loc) | l/defl | L/d  | PLATES        | GRIP     |
|---------------|----------------------|-----------|----------|----------|--------|------|---------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.18   | Vert(LL) | -0.01    | 4-7    | >999 | MT20          | 244/190  |
| TCDL 10.0     | Plate Grip DOL 1.15  | BC 0.13   | Vert(CT) | -0.02    | 4-7    | >999 |               |          |
| BCLL 0.0 *    | Lumber DOL 1.15      | WB 0.00   | Horz(CT) | 0.00     | 2      | n/a  |               |          |
| BCDL 10.0     | Rep Stress Incr YES  | Matrix-MP | Wind(LL) | 0.01     | 4-7    | >999 |               |          |
|               | Code IRC2015/TPI2014 |           |          |          |        |      | Weight: 13 lb | FT = 20% |

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 3-8-0 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=57(LC 12)  
 Max Uplift 3=-34(LC 12), 2=-17(LC 12)  
 Max Grav 3=93(LC 1), 2=212(LC 1), 4=66(LC 3)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 3-7-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 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) 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) 3, 2.



August 31, 2022

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

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



818 Soundside Road  
 Edenton, NC 27932

|                    |               |                     |          |          |  |
|--------------------|---------------|---------------------|----------|----------|--|
| Job<br>MASTERCRAFT | Truss<br>G01G | Truss Type<br>GABLE | Qty<br>1 | Ply<br>1 | Mattamy-Sequoia-Craftsman-Lot 72 Providence Creek<br>I53968729 |
|--------------------|---------------|---------------------|----------|----------|--|

Builders FirstSource (Apex, NC),

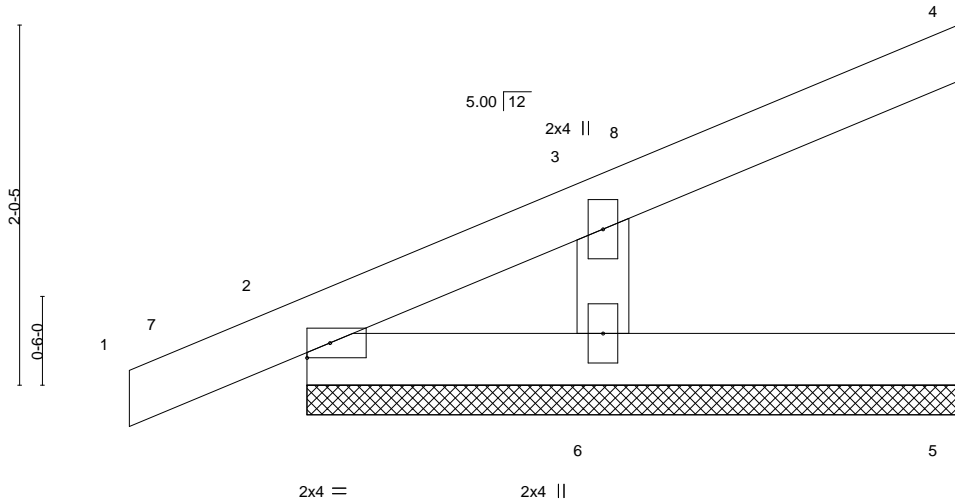
Apex, NC - 27523,

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Aug 31 12:23:55 2022 Page 1

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Scale = 1:13.0



| 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 0.07  | Vert(LL) | 0.00     | 1      | n/r | MT20          | 244/190  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.03  | Vert(CT) | -0.00    | 1      | n/r |               |          |
| BCLL 0.0 *    | Rep Stress Incr      | YES   | WB 0.03  | Horz(CT) | -0.00    | 4      | n/a |               |          |
| BCDL 10.0     | Code IRC2015/TPI2014 |       | Matrix-P |          |          |        |     | Weight: 14 lb | FT = 20% |

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

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

**REACTIONS.** All bearings 3-8-0.  
 (lb) - Max Horz 2=59(LC 12)  
 Max Uplift All uplift 100 lb or less at joint(s) 4, 2, 6  
 Max Grav All reactions 250 lb or less at joint(s) 4, 2, 5, 6

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 3-8-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 requires continuous bottom chord bearing.
- 4) Gable studs spaced at 2-0-0 oc.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2, 6.



August 31, 2022

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

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



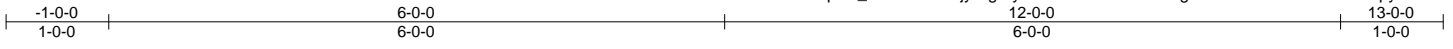
818 Soundside Road  
 Edenton, NC 27932

|             |       |            |     |     |   |
|-------------|-------|------------|-----|-----|---|
| Job         | Truss | Truss Type | Qty | Ply | Mattamy-Sequoia-Craftsman-Lot 72 Providence Creek |
| MASTERCRAFT | SP01  | COMMON     | 4   | 1   | 153968730   |
|             |       |            |     |     | Job Reference (optional)                          |

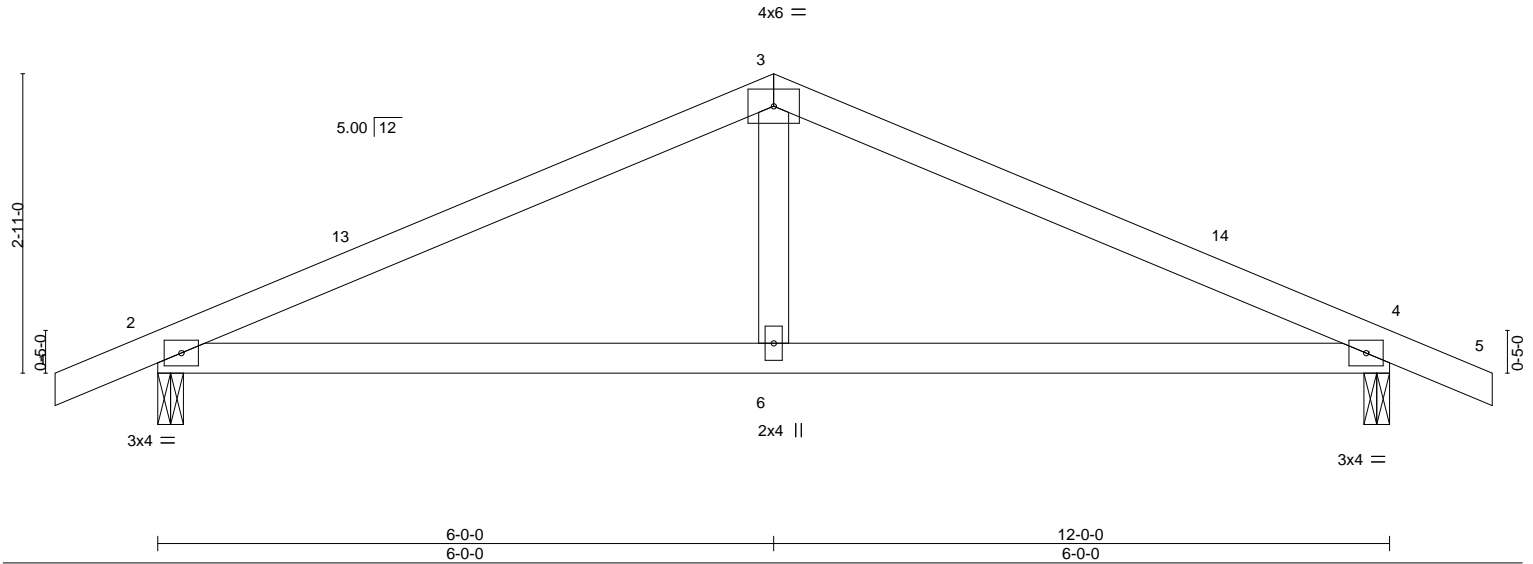
Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Aug 31 12:23:56 2022 Page 1

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Scale = 1:22.4



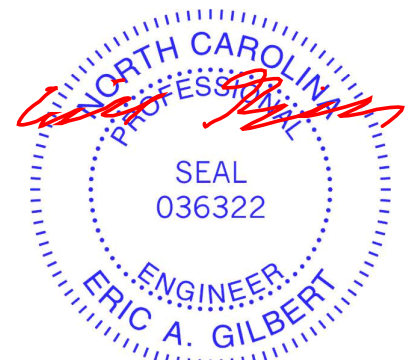
| LOADING (psf) | SPACING-             | 2-0-0 | CSI.      | DEFL.    | in (loc)   | l/defl | L/d | PLATES        | GRIP     |
|---------------|----------------------|-------|-----------|----------|------------|--------|-----|---------------|----------|
| TCLL 20.0     | Plate Grip DOL       | 1.15  | TC 0.44   | Vert(LL) | -0.04 6-12 | >999   | 360 | MT20          | 244/190  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.39   | Vert(CT) | -0.08 6-12 | >999   | 240 |               |          |
| BCLL 0.0 *    | Rep Stress Incr      | YES   | WB 0.10   | Horz(CT) | 0.01 4     | n/a    | n/a |               |          |
| BCDL 10.0     | Code IRC2015/TPI2014 |       | Matrix-MS | Wind(LL) | 0.06 6-12  | >999   | 240 |               |          |
|               |                      |       |           |          |            |        |     | Weight: 44 lb | FT = 20% |

| LUMBER-               | BRACING-  |
|-----------------------|---|
| TOP CHORD 2x4 SP No.2 | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins. |
| BOT CHORD 2x4 SP No.2 | BOT CHORD Rigid ceiling directly applied or 9-9-15 oc bracing.            |
| WEBS 2x4 SP No.3      |   |

**REACTIONS.** (size) 2=0-3-0, 4=0-3-0  
 Max Horz 2=-50(LC 13)  
 Max Uplift 2=-95(LC 8), 4=-95(LC 9)  
 Max Grav 2=540(LC 1), 4=540(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-739/443, 3-4=-739/439  
 BOT CHORD 2-6=-336/625, 4-6=-336/625  
 WEBS 3-6=-203/271

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 6-0-0, Exterior(2) 6-0-0 to 10-2-15, Interior(1) 10-2-15 to 13-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.



August 31, 2022

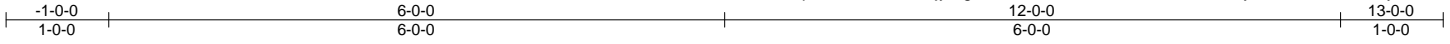
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| <p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and 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 <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p> | <p>818 Soundside Road<br/>Edenton, NC 27932</p> |
|--|---|

|                    |                |                     |          |          |  |
|--------------------|----------------|---------------------|----------|----------|--|
| Job<br>MASTERCRAFT | Truss<br>SP01G | Truss Type<br>GABLE | Qty<br>1 | Ply<br>1 | Mattamy-Sequoia-Craftsman-Lot 72 Providence Creek<br>153968731<br>Job Reference (optional) |
|--------------------|----------------|---------------------|----------|----------|--|

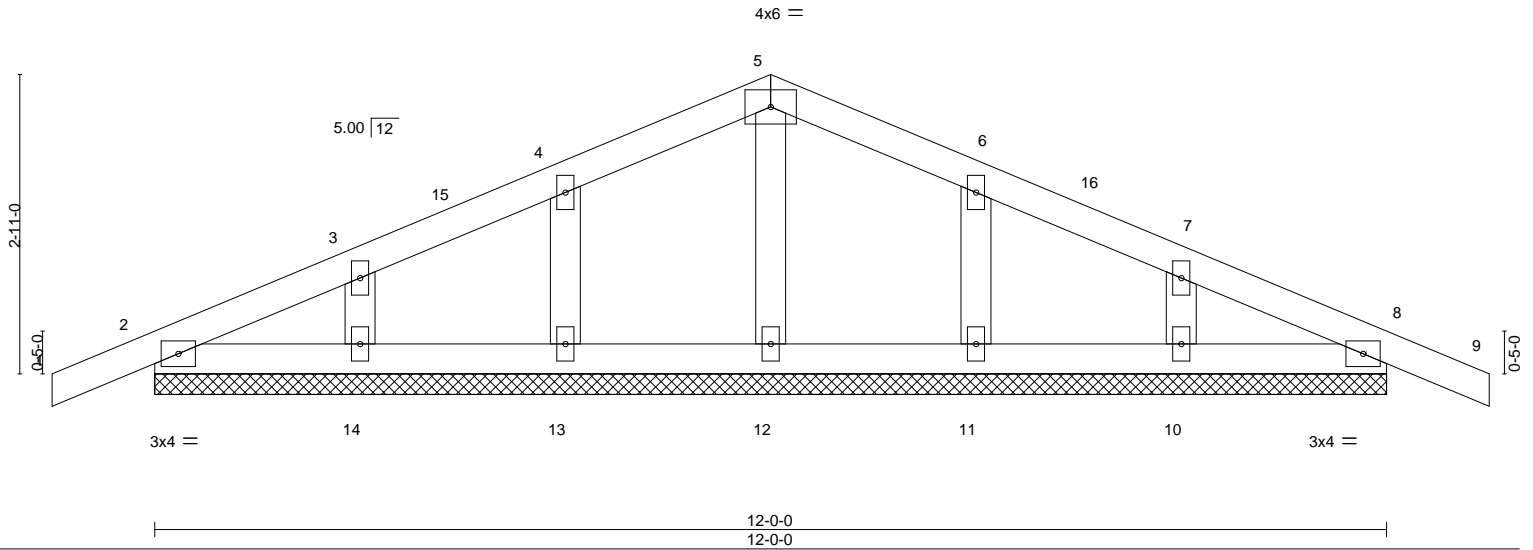
Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Aug 31 12:23:57 2022 Page 1

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Scale = 1:22.4



| 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 0.08  | Vert(LL) | -0.00    | 9      | n/r | MT20          | 244/190  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.03  | Vert(CT) | -0.00    | 9      | n/r |               |          |
| BCLL 0.0 *    | Rep Stress Incr      | NO    | WB 0.03  | Horz(CT) | 0.00     | 8      | n/a |               |          |
| BCDL 10.0     | Code IRC2015/TPI2014 |       | Matrix-S |          |          |        |     | Weight: 51 lb | FT = 20% |

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

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

**REACTIONS.** All bearings 12-0-0.  
 (lb) - Max Horz 2=-39(LC 13)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 8, 13, 14, 11, 10  
 Max Grav All reactions 250 lb or less at joint(s) 2, 8, 12, 13, 14, 11, 10

**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=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -1-0-0 to 2-0-0, Exterior(2) 2-0-0 to 6-0-0, Corner(3) 6-0-0 to 9-0-0, Exterior(2) 9-0-0 to 13-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 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, 8, 13, 14, 11, 10.



August 31, 2022

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**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



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 Edenton, NC 27932

|                    |              |                     |          |          |   |
|--------------------|--------------|---------------------|----------|----------|---|
| Job<br>MASTERCRAFT | Truss<br>V01 | Truss Type<br>GABLE | Qty<br>1 | Ply<br>1 | Mattamy-Sequoia-Craftman-Lot 72 Providence Creek<br>I53968732 |
|--------------------|--------------|---------------------|----------|----------|---|

Builders FirstSource (Apex, NC), Apex, NC - 27523,

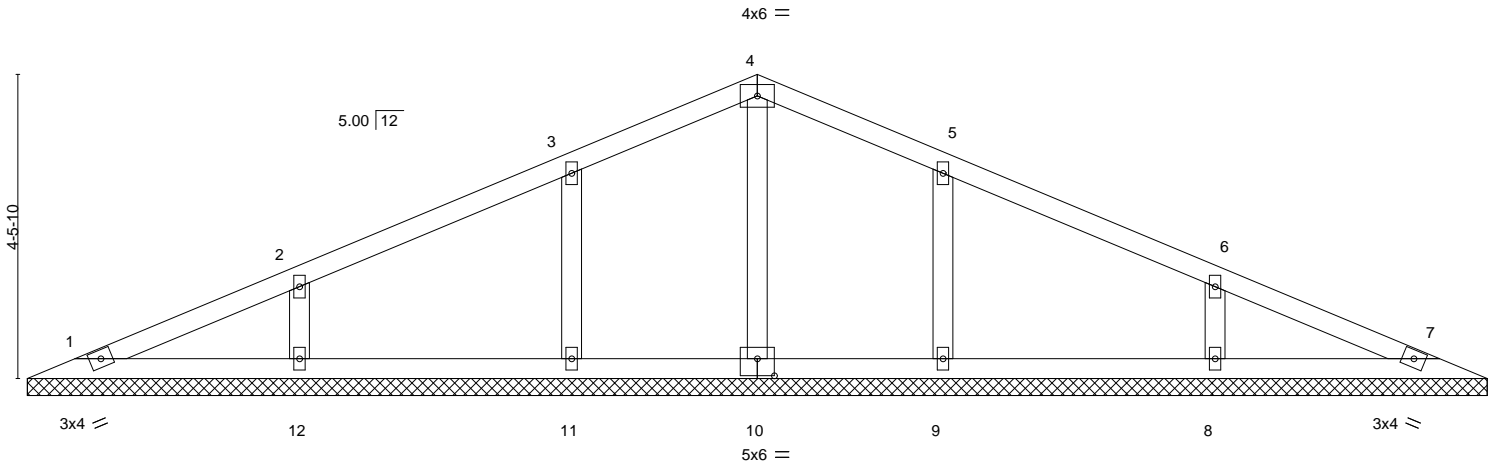
8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Aug 31 12:23:58 2022 Page 1

ID:NOHDxMFxGtHiYullGv8Cp8zfMF4-u82wdwoJpvmK5Wkt95VYJ?xa6bPJT2cPii5AhiyiKXF

10-8-12  
10-8-12

21-5-8  
10-8-12

Scale = 1:33.9



21-5-8  
21-5-8

|                       |                      |       |             |              |          |        |                        |
|-----------------------|----------------------|-------|-------------|--------------|----------|--------|------------------------|
| Plate Offsets (X,Y)-- | [10:0-3-0-0-3-0]     |       |             |              |          |        |                        |
| <b>LOADING</b> (psf)  | <b>SPACING-</b>      | 2-0-0 | <b>CSI.</b> | <b>DEFL.</b> | in (loc) | l/defl | L/d                    |
| TCLL 20.0             | Plate Grip DOL       | 1.15  | TC 0.18     | Vert(LL)     | n/a      | -      | n/a 999                |
| TCDL 10.0             | Lumber DOL           | 1.15  | BC 0.11     | Vert(CT)     | n/a      | -      | n/a 999                |
| BCLL 0.0 *            | Rep Stress Incr      | YES   | WB 0.06     | Horz(CT)     | 0.00     | 7      | n/a n/a                |
| BCDL 10.0             | Code IRC2015/TPI2014 |       | Matrix-S    |              |          |        |                        |
|                       |                      |       |             |              |          |        | <b>PLATES</b> MT20     |
|                       |                      |       |             |              |          |        | <b>GRIP</b> 244/190    |
|                       |                      |       |             |              |          |        | Weight: 82 lb FT = 20% |

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

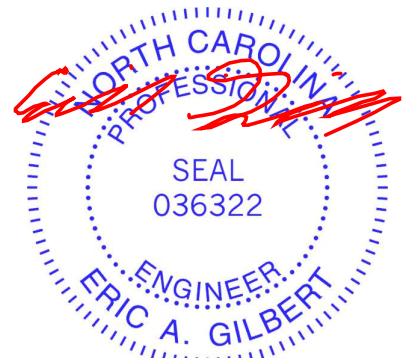
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** All bearings 21-5-8.  
(lb) - Max Horz 1=55(LC 12)  
Max Uplift All uplift 100 lb or less at joint(s) 8, 9, 12, 11  
Max Grav All reactions 250 lb or less at joint(s) 1, 7, 10 except 8=331(LC 1), 9=289(LC 24), 12=331(LC 1), 11=289(LC 23)

**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=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-8-12 to 4-0-0, Interior(1) 4-0-0 to 10-8-12, Exterior(2) 10-8-12 to 13-5-8, Interior(1) 13-5-8 to 20-8-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 9, 12, 11.



August 31, 2022

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

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

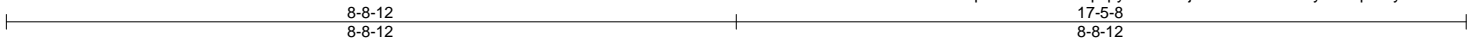


818 Soundside Road  
Edenton, NC 27932

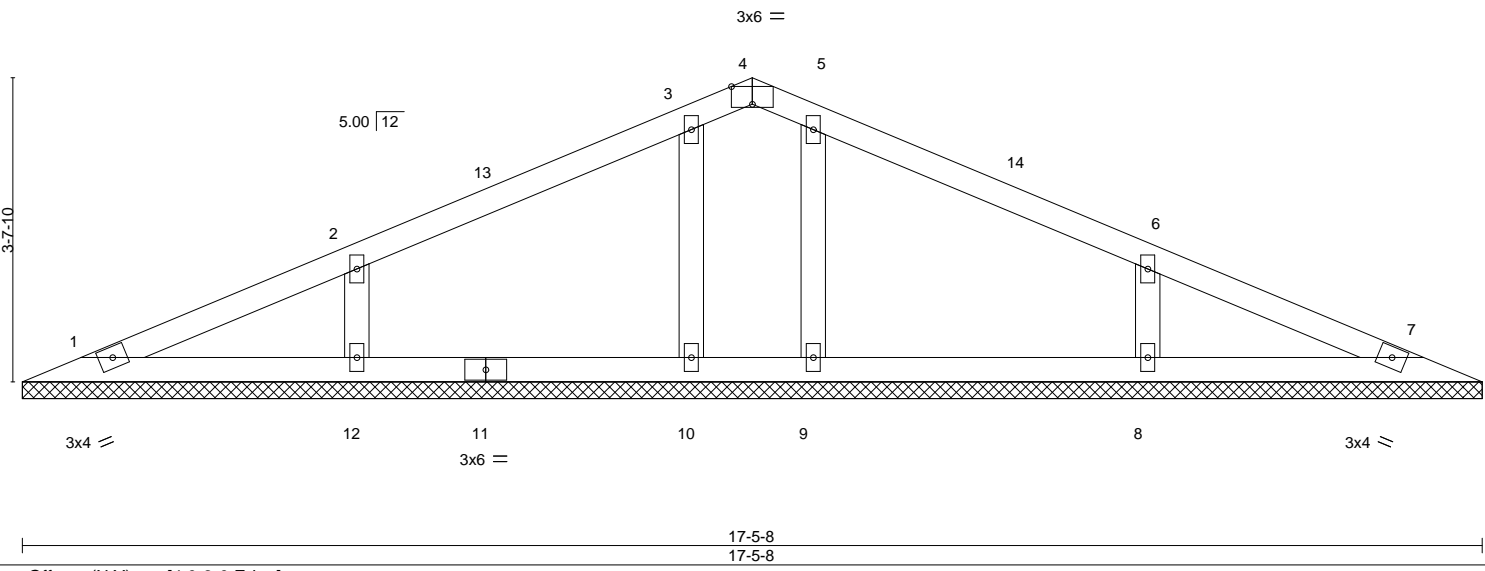
|                    |              |                     |          |          |   |
|--------------------|--------------|---------------------|----------|----------|---|
| Job<br>MASTERCRAFT | Truss<br>V02 | Truss Type<br>GABLE | Qty<br>1 | Ply<br>1 | Mattamy-Sequoia-Craftman-Lot 72 Providence Creek<br>153968733 |
|--------------------|--------------|---------------------|----------|----------|---|

Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Aug 31 12:23:59 2022 Page 1  
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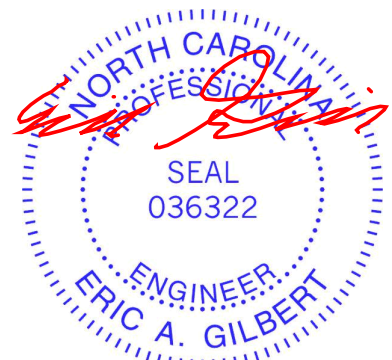
|                       |                      |       |             |               |          |        |     |               |             |
|-----------------------|----------------------|-------|-------------|---------------|----------|--------|-----|---------------|-------------|
| Plate Offsets (X,Y)-- | [4:0-3:0,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 0.20     | Vert(LL) n/a  | -        | n/a    | 999 | MT20          | 244/190     |
| TCDL 10.0             | Lumber DOL 1.15      |       | BC 0.11     | Vert(CT) n/a  | -        | n/a    | 999 |               |             |
| BCLL 0.0 *            | Rep Stress Incr YES  |       | WB 0.05     | Horz(CT) 0.00 | 7        | n/a    | n/a |               |             |
| BCDL 10.0             | Code IRC2015/TPI2014 |       | Matrix-S    |               |          |        |     | Weight: 63 lb | FT = 20%    |

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

**REACTIONS.** All bearings 17-5-8.  
 (lb) - Max Horz 1=44(LC 12)  
 Max Uplift All uplift 100 lb or less at joint(s) 8, 9, 12, 10  
 Max Grav All reactions 250 lb or less at joint(s) 1, 7, 9, 10 except 8=338(LC 1), 12=338(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=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-8-12 to 4-0-0, Interior(1) 4-0-0 to 8-8-12, Exterior(2) 8-8-12 to 11-8-12, Interior(1) 11-8-12 to 16-8-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) All plates are 2x4 MT20 unless otherwise indicated.
  - 4) Gable requires continuous bottom chord bearing.
  - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 9, 12, 10.



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|  |   |
|--|---|
| <p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b></p> <p>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 <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p> | <p>ENGINEERING BY<br/><b>TRENCO</b><br/>A MiTek Affiliate</p> <p>818 Soundside Road<br/>Edenton, NC 27932</p> |
|--|---|

|                    |              |                     |          |          |   |
|--------------------|--------------|---------------------|----------|----------|---|
| Job<br>MASTERCRAFT | Truss<br>V03 | Truss Type<br>GABLE | Qty<br>1 | Ply<br>1 | Mattamy-Sequoia-Craftman-Lot 72 Providence Creek<br>153968734<br>Job Reference (optional) |
|--------------------|--------------|---------------------|----------|----------|---|

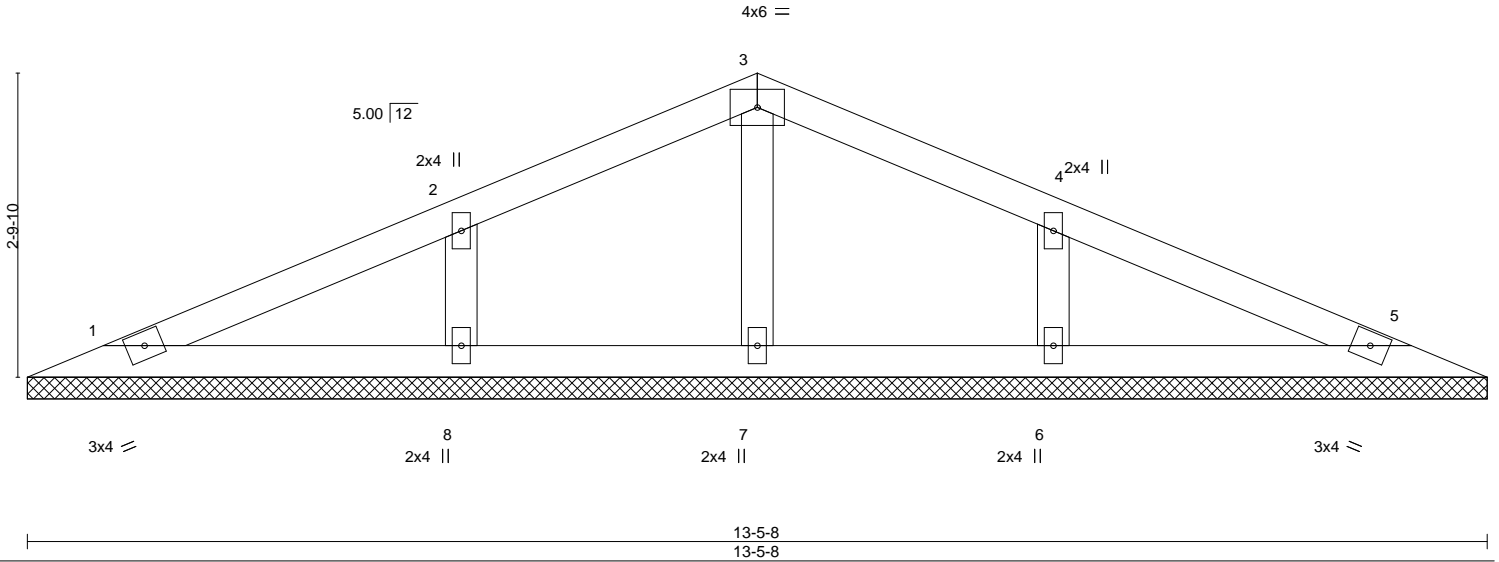
Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Aug 31 12:24:00 2022 Page 1

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Scale = 1:21.2



| LOADING (psf) | SPACING-             | CSI.     | DEFL.    | in (loc) | l/defl | L/d | PLATES        | GRIP     |
|---------------|----------------------|----------|----------|----------|--------|-----|---------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.13  | Vert(LL) | n/a      | -      | n/a | MT20          | 244/190  |
| TCDL 10.0     | Plate Grip DOL 1.15  | BC 0.08  | Vert(CT) | n/a      | -      | n/a |               |          |
| BCLL 0.0 *    | Lumber DOL 1.15      | WB 0.04  | Horz(CT) | 0.00     | 5      | n/a |               |          |
| BCDL 10.0     | Rep Stress Incr YES  | Matrix-S |          |          |        |     | Weight: 46 lb | FT = 20% |
|               | Code IRC2015/TPI2014 |          |          |          |        |     |               |          |

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

**REACTIONS.** All bearings 13-5-8.  
 (lb) - Max Horz 1=33(LC 12)  
 Max Uplift All uplift 100 lb or less at joint(s) 5, 6, 8  
 Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 6=293(LC 24), 8=293(LC 23)

**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=115mph Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-8-12 to 4-0-0, Interior(1) 4-0-0 to 6-8-12, Exterior(2) 6-8-12 to 9-5-8, Interior(1) 9-5-8 to 12-8-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Gable requires continuous bottom chord bearing.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas 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) 5, 6, 8.



August 31, 2022



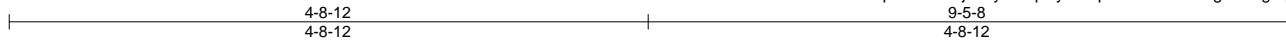
|                    |              |                     |          |          |   |
|--------------------|--------------|---------------------|----------|----------|---|
| Job<br>MASTERCRAFT | Truss<br>V04 | Truss Type<br>GABLE | Qty<br>1 | Ply<br>1 | Mattamy-Sequoia-Craftman-Lot 72 Providence Creek<br>153968735 |
|--------------------|--------------|---------------------|----------|----------|---|

Builders FirstSource (Apex, NC),

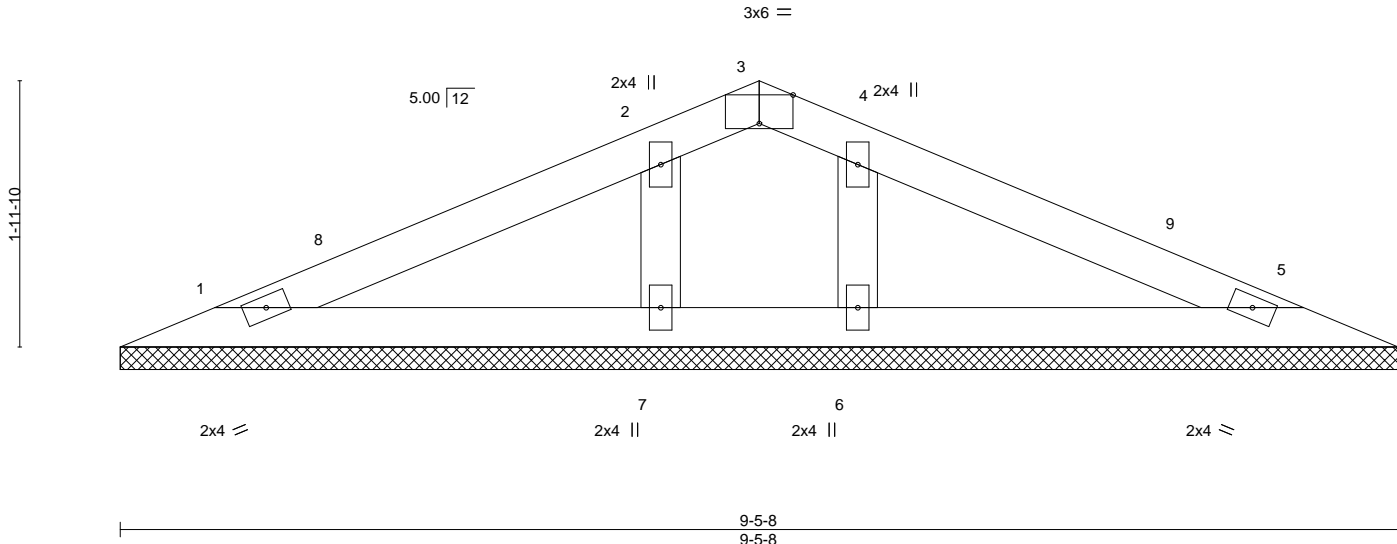
Apex, NC - 27523,

8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Aug 31 12:24:01 2022 Page 1

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Scale = 1:17.1



|                       |                      |       |             |              |          |        |     |               |
|-----------------------|----------------------|-------|-------------|--------------|----------|--------|-----|---------------|
| Plate Offsets (X,Y)-- | [3:0-3-0,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> |
| TCLL 20.0             | Plate Grip DOL       | 1.15  | TC 0.14     | Vert(LL)     | n/a      | -      | n/a | 999           |
| TCDL 10.0             | Lumber DOL           | 1.15  | BC 0.08     | Vert(CT)     | n/a      | -      | n/a | 999           |
| BCLL 0.0 *            | Rep Stress Incr      | YES   | WB 0.04     | Horz(CT)     | -0.00    | 5      | n/a | n/a           |
| BCDL 10.0             | Code IRC2015/TPI2014 |       | Matrix-S    |              |          |        |     |               |
|                       |                      |       |             |              |          |        |     | <b>GRIP</b>   |
|                       |                      |       |             |              |          |        |     | MT20          |
|                       |                      |       |             |              |          |        |     | 244/190       |
|                       |                      |       |             |              |          |        |     | Weight: 30 lb |
|                       |                      |       |             |              |          |        |     | FT = 20%      |

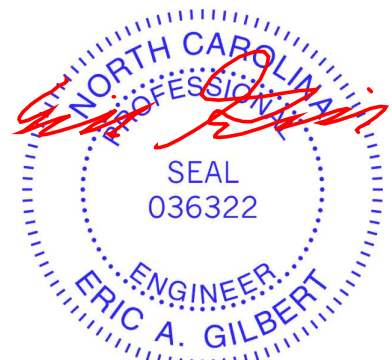
|                |             |                 |   |
|----------------|-------------|-----------------|---|
| <b>LUMBER-</b> |             | <b>BRACING-</b> |   |
| TOP CHORD      | 2x4 SP No.2 | TOP CHORD       | Structural wood sheathing directly applied or 9-5-8 oc purlins. |
| BOT CHORD      | 2x4 SP No.2 | BOT CHORD       | Rigid ceiling directly applied or 6-0-0 oc bracing.             |
| OTHERS         | 2x4 SP No.3 |                 |   |

**REACTIONS.** All bearings 9-5-8.  
 (lb) - Max Horz 1=22(LC 16)  
 Max Uplift All uplift 100 lb or less at joint(s) 6, 7  
 Max Grav All reactions 250 lb or less at joint(s) 1, 5, 6, 7

**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=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-8-12 to 4-0-0, Interior(1) 4-0-0 to 4-8-12, Exterior(2) 4-8-12 to 7-8-12, Interior(1) 7-8-12 to 8-8-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas 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) 6, 7.



August 31, 2022

|  |   |
|--|---|
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|--|---|

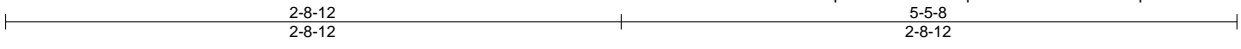
|                    |              |                     |          |          |  |
|--------------------|--------------|---------------------|----------|----------|--|
| Job<br>MASTERCRAFT | Truss<br>V05 | Truss Type<br>GABLE | Qty<br>1 | Ply<br>1 | Mattamy-Sequoia-Craftsman-Lot 72 Providence Creek<br>I53968736<br>Job Reference (optional) |
|--------------------|--------------|---------------------|----------|----------|--|

Builders FirstSource (Apex, NC),

Apex, NC - 27523,

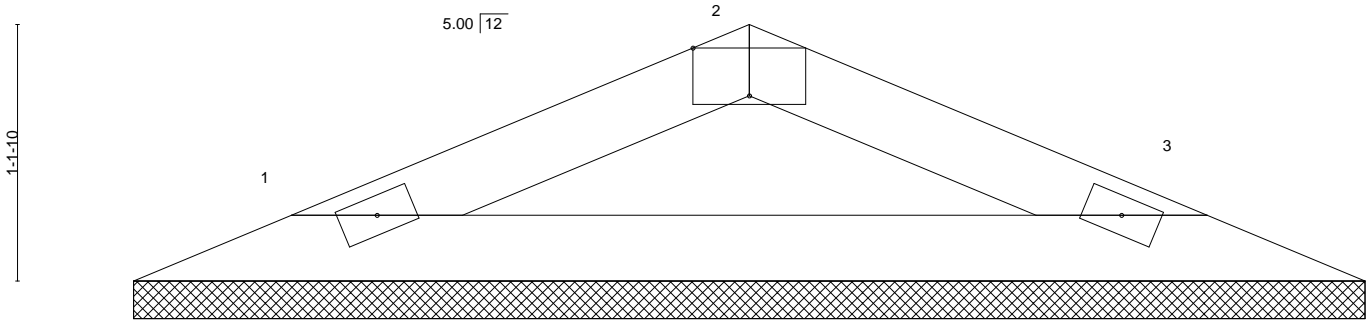
8.530 s Aug 11 2022 MiTek Industries, Inc. Wed Aug 31 12:24:02 2022 Page 1

ID:NOHDxMFxGtHiYullGv8Cp8zfMF4-nvIRSlrqs7GmZ71EOwZUTr5HpCkrPsT?dK3OqTyiKXB



3x6 =

Scale = 1:10.2



2x4 =

2x4 =

5-5-8

5-5-8

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

| 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) | n/a      | -      | n/a | MT20          | 244/190  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.20  | Vert(CT) | n/a      | -      | n/a |               |          |
| 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 |          |          |        |     | Weight: 15 lb | FT = 20% |

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

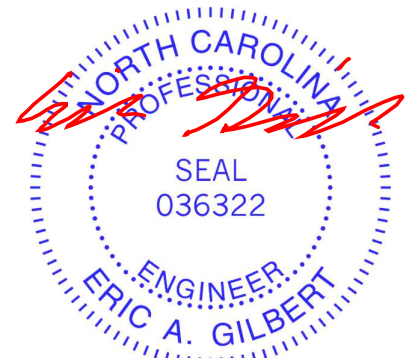
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 5-5-8 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=5-5-8, 3=5-5-8  
Max Horz 1=11(LC 16)  
Max Uplift 1=6(LC 12), 3=6(LC 13)  
Max Grav 1=160(LC 1), 3=160(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=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas 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) 1, 3.



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

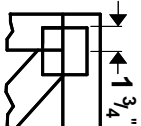
**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



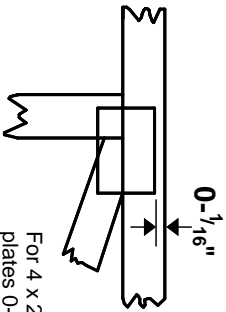
818 Soundside Road  
Edenton, NC 27932

# 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 **MITek 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, 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: MII-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. Rewriting 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.