

10401 Chapel Hill Rd  
 Morrisville, NC 27560  
 Ph. 919-467-9988  
 Fax. 919-481-3255

DO210933  
 GFD BUILDERS  
 STACEY WALKER RESID.  
 BUNN LEVEL, NC

**Trenco**  
818 Soundside Rd  
Edenton, NC 27932

Re: DO210933  
DON GILMORE

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

Pages or sheets covered by this seal: I48157169 thru I48157194

My license renewal date for the state of North Carolina is December 31, 2021.

North Carolina COA: C-0844



October 1, 2021

Sevier, Scott

**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.

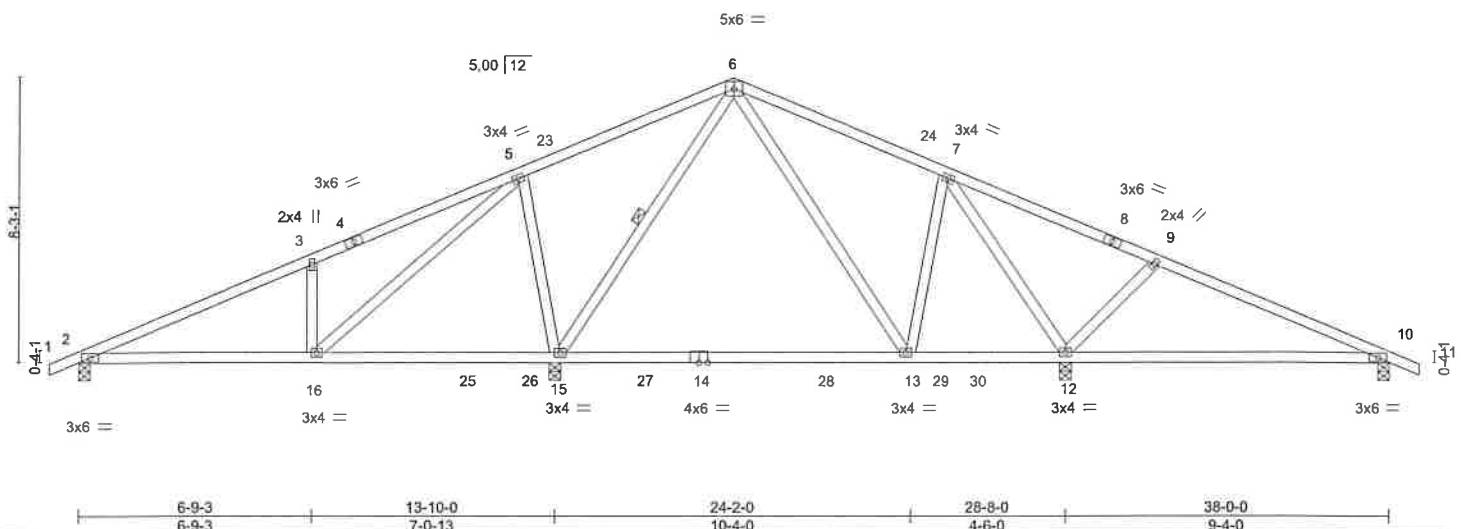
|          |       |            |     |     |             |           |
|----------|-------|------------|-----|-----|-------------|-----------|
| Job      | Truss | Truss Type | Qty | Ply | DON GILMORE | 148157169 |
| DO210933 | CT1   | Common     | 3   | 1   |             |           |

Truss Builders, Inc., Morrisville, NC - 27560, 8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 30 10:14:33 2021 Page 1

ID:9lbiProxNuxtwwrUdbBCXyYoO9-ndMJAZYr6SAMcTY7z6ufQdsRQvFbXkBeCIka0yYTca



Scale: 3/16"=1'



|                      |                      |             |                               |                |             |
|----------------------|----------------------|-------------|-------------------------------|----------------|-------------|
| <b>LOADING (psf)</b> | <b>SPACING-</b>      | <b>CSI.</b> | <b>DEFL.</b>                  | <b>PLATES</b>  | <b>GRIP</b> |
| TCLL (roof) 20.0     | 2-0-0                | TC 0.58     | in (loc) l/defl L/d           | MT20           | 244/190     |
| Snow (Pf) 15.0       | Plate Grip DOL 1.15  | BC 0.92     | Vert(LL) -0.37 13-15 >484 240 |                |             |
| TCDL 10.0            | Lumber DOL 1.15      | WB 0.51     | Vert(CT) -0.61 13-15 >291 180 |                |             |
| BCLL 0.0             | Rep Stress Incr YES  | Matrix-MR   | Horz(CT) 0.01 10 n/a n/a      |                |             |
| BCDL 10.0            | Code IBC2015/TPI2014 |             |                               | Weight: 194 lb | FT = 6%     |

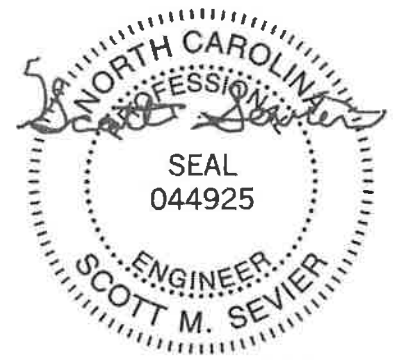
**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.  
WEBS 1 Row at midpt 6-15

**REACTIONS.** All bearings 0-4-0.  
(lb) - Max Horz 2=-108(LC 13)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 12, 15, 10  
Max Grav All reactions 250 lb or less at joint(s) except 2=469(LC 30), 12=967(LC 31), 15=1375(LC 3), 10=361(LC 31)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-528/33, 3-5=-556/96, 5-6=0/404, 6-7=-342/129  
BOT CHORD 2-16=-51/447  
WEBS 3-16=-408/147, 7-12=-642/66, 9-12=-434/138, 6-15=-685/18, 5-15=-633/182, 5-16=-127/850

- 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=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
  - 3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=15.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
  - 4) Unbalanced snow loads have been considered for this design.
  - 5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.0 psf on overhangs non-concurrent with other live loads.
  - 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 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 12, 15, 10.
  - 9) This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.



October 1, 2021

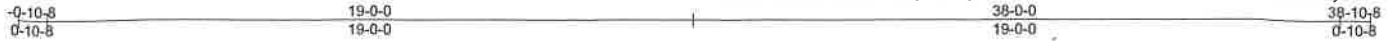
|          |       |                        |     |     |             |           |
|----------|-------|------------------------|-----|-----|-------------|-----------|
| Job      | Truss | Truss Type             | Qty | Ply | DON GILMORE | 148157170 |
| DO210933 | CT1GE | Common Supported Gable | 1   | 1   |             |           |

Job Reference (optional)

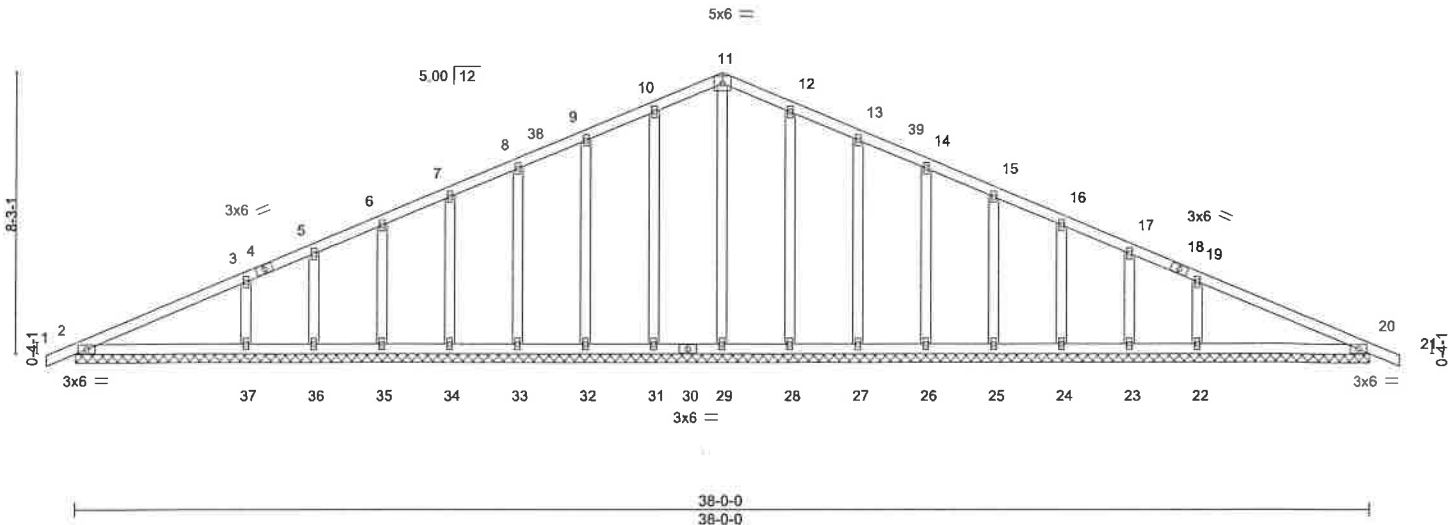
Truss Builders, Inc., Morrisville, NC - 27560,

8.430 s Aug 16 2021 MITek Industries, Inc. Thu Sep 30 10:14:35 2021 Page 1

ID:9lbiProxNuxtvvurUdbBCXyYoO9-j?T3b6boNkiubwdxFO9MkriHxDmB3WmU5WnRevyYTcy



Scale: 3/16"=1'



|                      |                      |             |                          |                |             |
|----------------------|----------------------|-------------|--------------------------|----------------|-------------|
| <b>LOADING (psf)</b> | <b>SPACING-</b>      | <b>CSI.</b> | <b>DEFL.</b>             | <b>PLATES</b>  | <b>GRIP</b> |
| TCLL (roof) 20.0     | 2-0-0                | TC 0.26     | in (loc) l/defl L/d      | MT20           | 244/190     |
| Snow (Pf) 15.0       | Plate Grip DOL 1.15  | BC 0.19     | Vert(LL) 0.01 21 n/r 120 |                |             |
| TCDL 10.0            | Lumber DOL 1.15      | WB 0.16     | Vert(CT) 0.02 21 n/r 120 |                |             |
| BCLL 0.0             | Rep Stress Incr YES  | Matrix-R    | Horz(CT) 0.01 20 n/a n/a |                |             |
| BCDL 10.0            | Code IBC2015/TPI2014 |             |                          | Weight: 223 lb | FT = 6%     |

**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 38-0-0.  
(lb) - Max Horz 2=-108(LC 13)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 31, 32, 33, 34, 35, 36, 37, 28, 27, 26, 25, 24, 23, 22, 20  
Max Grav All reactions 250 lb or less at joint(s) 2, 29, 31, 32, 33, 34, 35, 36, 28, 27, 26, 25, 24, 23, 20  
except 37=409(LC 30), 22=409(LC 31)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**WEBS** 3-37=-283/101, 19-22=-283/101

- 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=25ft; Cal. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=15.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
  - Unbalanced snow loads have been considered for this design.
  - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.0 psf on overhangs non-concurrent with other live loads.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 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 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 31, 32, 33, 34, 35, 36, 37, 28, 27, 26, 25, 24, 23, 22, 20.
  - Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 20.
  - This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.



October 1, 2021

**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>DO210933 | Truss<br>CT1GT | Truss Type<br>Common Girder | Qty<br>1 | Ply<br>3 | DON GILMORE | 148157171 |
|-----------------|----------------|-----------------------------|----------|----------|-------------|-----------|

Truss Builders, Inc., Morrisville, NC - 27560, 8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 30 10:14:39 2021 Page 1  
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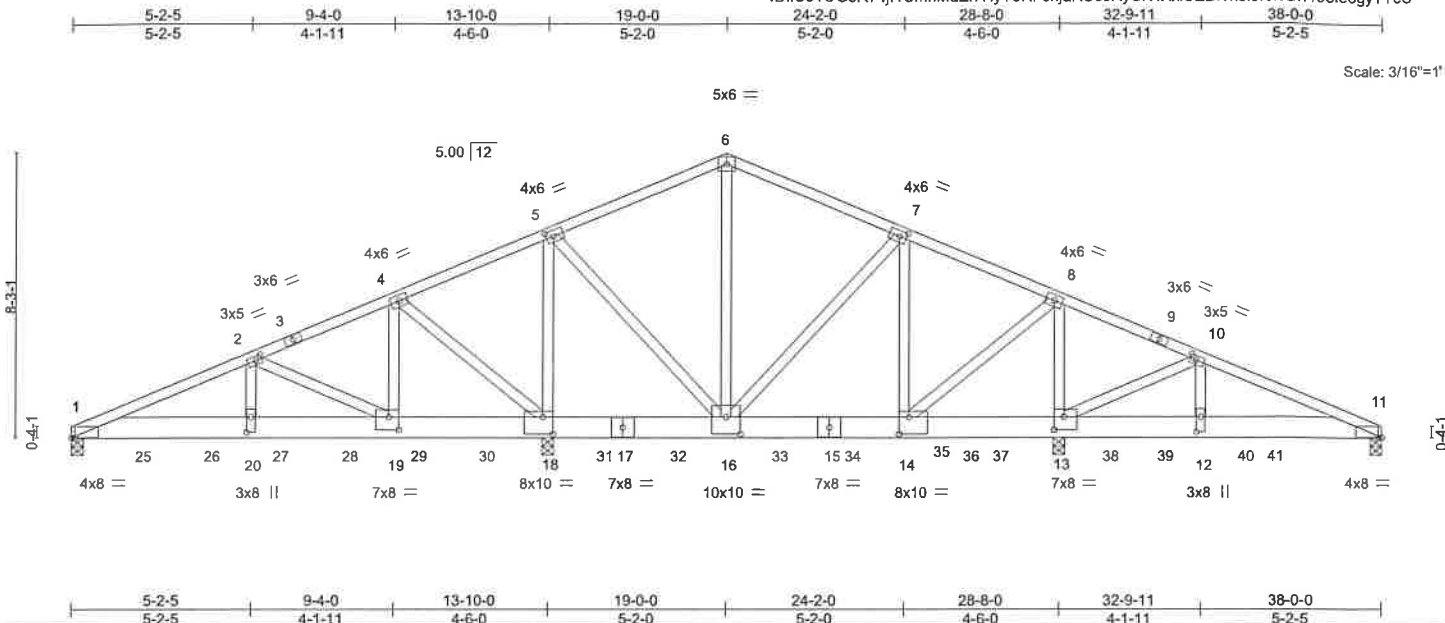


Plate Offsets (X,Y) - [1:0-1-2,0-0-2], [2:0-2-0,0-1-8], [5:0-2-8,0-2-0], [7:0-2-8,0-2-0], [10:0-2-0,0-1-8], [11:0-1-2,0-0-2], [12:0-5-4,0-1-8], [13:0-3-8,0-4-8], [14:0-3-8,0-6-0], [16:0-5-0,0-6-0], [18:0-3-8,0-6-0], [19:0-3-8,0-4-8], [20:0-5-4,0-1-8]

|                      |                      |             |                               |                |             |
|----------------------|----------------------|-------------|-------------------------------|----------------|-------------|
| <b>LOADING (psf)</b> | <b>SPACING-</b>      | <b>CSI.</b> | <b>DEFL.</b>                  | <b>PLATES</b>  | <b>GRIP</b> |
| TCLL (roof) 20.0     | 2-0-0                | TC 0.38     | in (loc) l/defl L/d           | MT20           | 244/190     |
| Snow (Pf) 15.0       | Plate Grip DOL 1.15  | BC 0.66     | Vert(LL) -0.04 14-16 >999 240 |                |             |
| TCDL 10.0            | Lumber DOL 1.15      | WB 0.73     | Vert(CT) -0.08 20-22 >999 180 |                |             |
| BCLL 0.0             | Rep Stress Incr NO   | Matrix-MR   | Horz(CT) 0.01 11 n/a n/a      |                |             |
| BCDL 10.0            | Code IBC2015/TPI2014 |             |                               | Weight: 809 lb | FT = 6%     |

**LUMBER-**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x8 SP No.2  
 WEBS 2x4 SP No.3

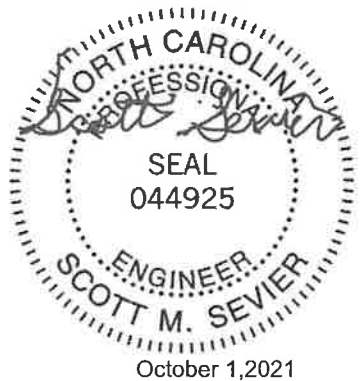
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 16-18,13-14.

**REACTIONS.** All bearings 0-4-0 except (l=length) 18=0-4-2 (input: 0-4-0), 13=0-4-6 (input: 0-4-0).  
 (lb) - Max Horz 1=103(LC 37)  
 Max Uplift All uplift 100 lb or less at joint(s) except 1=-137(LC 12)  
 Max Grav All reactions 250 lb or less at joint(s) except 1=2983(LC 29), 18=10446(LC 3), 13=11189(LC 3), 11=2315(LC 32)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-5070/259, 2-4=-1049/156, 4-5=-59/3123, 5-6=-877/0, 6-7=-888/0, 7-8=-1478/0, 8-10=0/2822, 10-11=-2068/0  
 BOT CHORD 1-20=-296/4666, 19-20=-296/4666, 18-19=-120/927, 16-18=-2839/143, 14-16=0/1322, 13-14=-2569/0, 12-13=0/1909, 11-12=0/1909  
 WEBS 5-18=-5660/0, 5-16=0/5302, 6-16=-30/555, 8-13=-5075/0, 10-13=-4968/0, 10-12=0/3765, 7-14=-57/731, 7-16=-835/43, 8-14=0/5047, 4-19=-160/4402, 4-18=-4822/266, 2-20=-61/3164, 2-19=-4172/196

- NOTES-**
- 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.  
 Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-5-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
  - TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=15.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
  - Unbalanced snow loads have been considered for this design.
  - 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 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - WARNING: Required bearing size at joint(s) 18, 13 greater than input bearing size.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 137 lb uplift at joint 1.
  - This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.

Continued on page 2



**WARNING** - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MI-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/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

**ENGINEERING BY**  
**TRENCO**  
 A MiTek Affiliate

818 Soundside Road  
 Edenton, NC 27932

|          |       |               |     |     |                          |           |
|----------|-------|---------------|-----|-----|--------------------------|-----------|
| Job      | Truss | Truss Type    | Qty | Ply | DON GILMORE              | I48157171 |
| DO210933 | CT1GT | Common Girder | 1   | 3   | Job Reference (optional) |           |

Truss Builders, Inc., Morrisville, NC - 27560,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 30 10:14:39 2021 Page 2  
 ID:iC31OG5R74jf1UmnMaZf7HyYoRf-cnjaRUeJRyCK4XxiUEDlvhtx5r0l?Bn408leogyYTcU

**NOTES-**

12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1250 lb down and 53 lb up at 2-0-0, 1250 lb down and 53 lb up at 4-0-0, 1250 lb down and 53 lb up at 6-0-0, 1250 lb down and 53 lb up at 8-0-0, 1250 lb down and 53 lb up at 10-0-0, 1250 lb down and 53 lb up at 12-0-0, 194 lb down and 163 lb up at 13-11-4, 1217 lb down at 17-6-8, 1285 lb down at 18-10-12, 1285 lb down at 20-5-15, 1280 lb down at 22-1-2, 1268 lb down at 23-8-5, 1285 lb down at 25-3-8, 1285 lb down at 26-10-11, 1285 lb down at 28-5-14, 1285 lb down at 30-1-1, 1285 lb down at 31-8-4, 1285 lb down at 33-3-7, and 1285 lb down at 34-10-10, and 1285 lb down at 36-5-13 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S) Standard**

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

Uniform Loads (plf)

Vert: 1-6=-50, 6-11=-50, 1-11=-20

Concentrated Loads (lb)

Vert: 18=-40 16=-875(F) 13=-875(F) 15=-875(F) 24=-875(F) 25=-1074(F) 26=-1074(F) 27=-1074(F) 28=-1074(F) 29=-1074(F) 30=-1074(F) 32=-875(F) 33=-875(F) 35=-875(F) 36=-875(F) 37=-875(F) 38=-875(F) 39=-875(F) 40=-875(F) 41=-875(F)

**WARNING** - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MI-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 | DON GILMORE | 148157172 |
| DO210933 | CT2   | Roof Special | 5   | 1   |             |           |

Truss Builders, Inc., Morrisville, NC - 27560, 8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 30 10:14:40 2021 Page 1  
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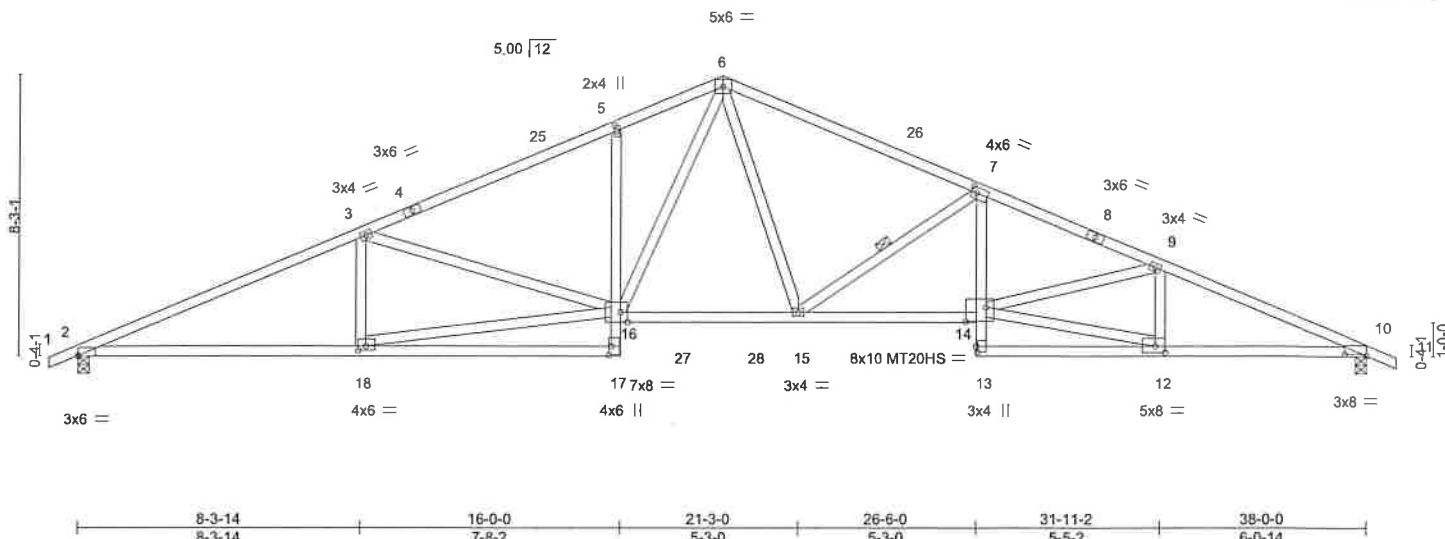
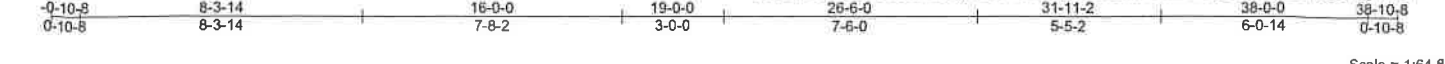


Plate Offsets (X,Y)-- [2:0-0-2,Edge], [5:0-2-0,0-0-12], [7:0-1-12,0-2-0], [10:0-8-0,0-0-10], [12:0-3-8,0-2-4], [13:0-2-0,0-0-8], [14:0-7-4,0-5-0], [16:0-2-8,Edge], [17:0-3-0,0-0-12], [18:0-2-12,0-1-8]

|                      |                      |             |                               |                |             |
|----------------------|----------------------|-------------|-------------------------------|----------------|-------------|
| <b>LOADING (psf)</b> | <b>SPACING-</b>      | <b>CSI.</b> | <b>DEFL.</b>                  | <b>PLATES</b>  | <b>GRIP</b> |
| TCLL (roof) 20.0     | 2-0-0                | TC 0.85     | in (loc) l/defl L/d           | MT20           | 244/190     |
| Snow (Pf) 15.0       | Plate Grip DOL 1.15  | BC 0.99     | Vert(LL) -0.26 14-15 >999 240 | MT20HS         | 187/143     |
| TCDL 10.0            | Lumber DOL 1.15      | WB 0.71     | Vert(CT) -0.54 14-15 >843 180 |                |             |
| BCLL 0.0             | Rep Stress Incr YES  | Matrix-MR   | Horz(CT) 0.21 10 n/a n/a      |                |             |
| BCDL 10.0            | Code IBC2015/TPI2014 |             |                               | Weight: 213 lb | FT = 6%     |

|  |   |
|--|---|
| <b>LUMBER-</b>   | <b>BRACING-</b>   |
| TOP CHORD 2x4 SP No.2 *Except*<br>1-4: 2x4 SP No.1D                          | TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins.<br>BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except: |
| BOT CHORD 2x4 SP No.2 *Except*<br>2-17: 2x4 SP No.1D, 5-17,7-13: 2x4 SP No.3 | 2-2-0 oc bracing: 14-15,10-12.  |
| WEBS 2x4 SP No.3 *Except*<br>16-18,12-14: 2x4 SP No.2                        | WEBS 1 Row at midpt 7-15  |

**REACTIONS.** (size) 2=0-4-0, 10=0-4-0  
 Max Horz 2=108(LC 12)  
 Max Uplift 2=58(LC 12), 10=58(LC 13)  
 Max Grav 2=1573(LC 2), 10=1573(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-3254/94, 3-5=-2803/79, 5-6=-2715/131, 6-7=-2648/56, 7-9=-3693/73,  
 9-10=-3391/95  
 BOT CHORD 2-18=-115/2952, 17-18=0/257, 5-16=-339/120, 15-16=0/2101, 14-15=0/3422, 7-14=0/755,  
 10-12=-26/3078  
 WEBS 16-18=-150/2728, 3-16=-561/120, 6-16=-112/975, 6-15=-13/842, 7-15=-1292/143,  
 12-14=-22/2901, 9-14=-5/298, 9-12=-52/165

- 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=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
  - TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=15.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
  - Unbalanced snow loads have been considered for this design.
  - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.0 psf on overhangs non-concurrent with other live loads.
  - All plates are MT20 plates unless otherwise indicated.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 58 lb uplift at joint 2 and 58 lb uplift at joint 10.
  - This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.



**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MI-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

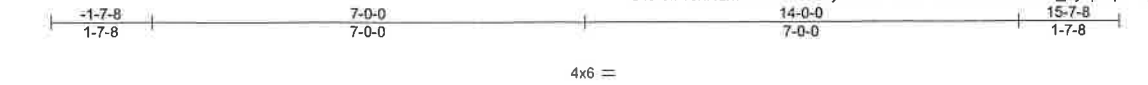
**ENGINEERING BY**  
**TRENCO**  
 A MiTek Affiliate  
 818 Soundside Road  
 Edenton, NC 27932

|          |       |                        |     |     |             |           |
|----------|-------|------------------------|-----|-----|-------------|-----------|
| Job      | Truss | Truss Type             | Qty | Ply | DON GILMORE | 148157173 |
| DO210933 | CT2GE | Common Supported Gable | 2   | 1   |             |           |

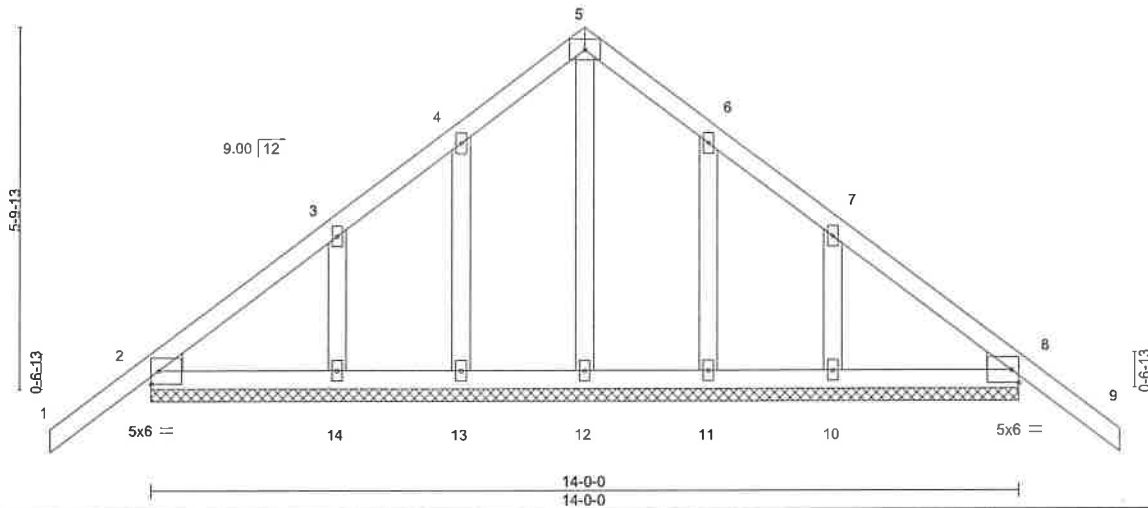
Job Reference (optional)

Truss Builders, Inc., Morrisville, NC - 27560,

8.430 s Aug 16 2021 MITek Industries, Inc. Thu Sep 30 10:14:41 2021 Page 1  
ID:9IbiProxNuxtvvurUdbBCXyYoO9-Y9rKrAfZzaS2Jr54bfGm\_6yJpeqdTGjMTSElsZyYTcS



Scale = 1:35.4



|                      |                      |             |                          |               |             |
|----------------------|----------------------|-------------|--------------------------|---------------|-------------|
| <b>LOADING (psf)</b> | <b>SPACING-</b>      | <b>CSI.</b> | <b>DEFL.</b>             | <b>PLATES</b> | <b>GRIP</b> |
| TCLL (roof) 20.0     | 1-11-4               | TC 0.24     | in (loc) l/defl L/d      | MT20          | 244/190     |
| Snow (Pf) 15.0       | Plate Grip DOL 1.15  | BC 0.12     | Vert(LL) -0.01 9 n/r 120 |               |             |
| TCDL 10.0            | Lumber DOL 1.15      | WB 0.06     | Vert(CT) -0.01 9 n/r 120 |               |             |
| BCLL 0.0             | Rep Stress Incr YES  | Matrix-R    | Horz(CT) 0.00 8 n/a n/a  |               |             |
| BCDL 10.0            | Code IBC2015/TPI2014 |             |                          | Weight: 80 lb | FT = 6%     |

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

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

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

**REACTIONS.** All bearings 14-0-0.  
(lb) - Max Horz 2=121(LC 9)  
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-**

- 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=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=15.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.0 psf on overhangs non-concurrent with other live loads.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 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 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8, 13, 14, 11, 10.
- This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.



October 1, 2021

**WARNING** - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MH-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      | Truss | Truss Type    | Qty | Ply | DON GILMORE              | 148157174 |
| DO210933 | CT2GT | Common Girder | 2   | 2   | Job Reference (optional) |           |

Truss Builders, Inc., Morrisville, NC - 27560, 8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 30 10:14:43 2021 Page 1  
 ID:iC31OG5R74j1UmnMaZ77HyYoRF-UyY5GrhpVBjIz9ETj4IE3X2IGSNZxxxrxmjsxRyYTcQ



4x6 =

Scale = 1:37.6

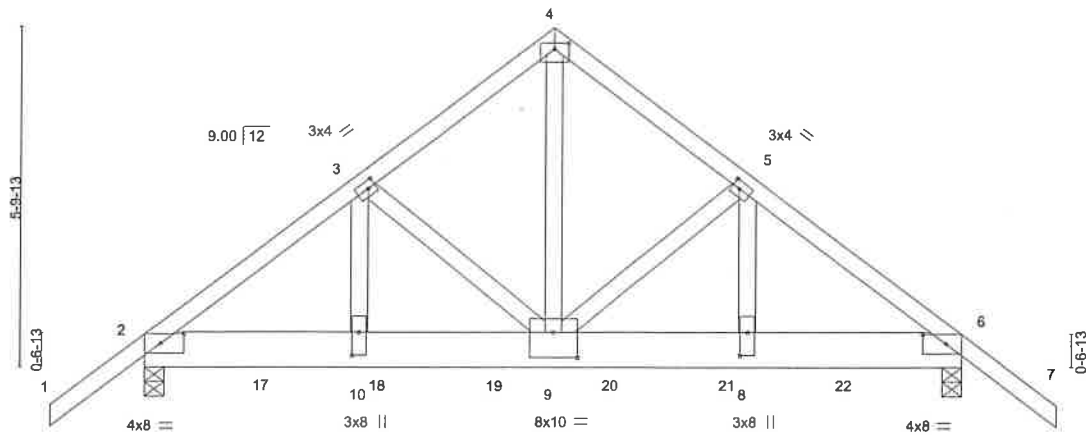


Plate Offsets (X,Y)-- [2:0-4-13,0-2-0], [3:0-1-8,0-1-8], [4:0-3-0,0-1-4], [5:0-1-8,0-1-8], [6:0-4-13,0-1-15], [8:0-4-12,0-1-8], [9:0-5-0,0-5-4], [10:0-4-12,0-1-8]

| LOADING (psf)    | SPACING-             | CSL       | DEFL.    | in (loc) | l/defl | L/d  | PLATES         | GRIP    |
|------------------|----------------------|-----------|----------|----------|--------|------|----------------|---------|
| TCLL (roof) 20.0 | 1-11-4               | TC 0.24   | Vert(LL) | -0.05    | 8-9    | >999 | MT20           | 244/190 |
| Snow (Pf) 15.0   | Plate Grip DOL 1.15  | BC 0.67   | Vert(CT) | -0.10    | 8-9    | >999 |                |         |
| TCDL 10.0        | Lumber DOL 1.15      | WB 0.98   | Horz(CT) | 0.02     | 6      | n/a  |                |         |
| BCLL 0.0         | Rep Stress Incr NO   | Matrix-MR |          |          |        |      |                |         |
| BCDL 10.0        | Code IBC2015/TPI2014 |           |          |          |        |      | Weight: 204 lb | FT = 6% |

**LUMBER-**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x8 SP No.2  
 WEBS 2x4 SP No.3

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

**REACTIONS.** (size) 2=0-4-0, 6=0-4-0  
 Max Horz 2=-121(LC 32)  
 Max Uplift 2=-135(LC 10), 6=-135(LC 11)  
 Max Grav 2=4352(LC 3), 6=4352(LC 3)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-5797/156, 3-4=-4148/157, 4-5=-4148/157, 5-6=-5797/154  
 BOT CHORD 2-10=-119/4604, 9-10=-119/4604, 8-9=-73/4604, 6-8=-73/4604  
 WEBS 4-9=-125/4716, 5-9=-1713/110, 5-8=-23/1982, 3-9=-1713/108, 3-10=-21/1982

**NOTES-**

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.  
 Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-7-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- TCLL: ASCE 7-10; Pr=20.0 psf (roof live load); Lumber DOL=1.15 Plate DOL=1.15; Pf=15.0 psf (flat roof snow); Lumber DOL=1.15 Plate DOL=1.15; Category II; Exp B; Fully Exp.; Ct=1.10
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.0 psf on overhangs non-concurrent with other live loads.
- 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 1-0-0 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) except (jt=lb) 2=135, 6=135.
- This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1266 lb down and 42 lb up at 2-0-0, 1266 lb down and 42 lb up at 4-0-0, 1266 lb down and 42 lb up at 6-0-0, 1266 lb down and 42 lb up at 8-0-0, and 1266 lb down and 42 lb up at 10-0-0, and 1266 lb down and 42 lb up at 12-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.



October 1, 2021

**LOAD CASE(S)** Standard

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

|          |       |               |     |     |                          |           |
|----------|-------|---------------|-----|-----|--------------------------|-----------|
| Job      | Truss | Truss Type    | Qty | Ply | DON GILMORE              | I48157174 |
| DO210933 | CT2GT | Common Girder | 2   | 2   | Job Reference (optional) |           |

Truss Builders, Inc., Morrisville, NC - 27560,

8.430 s Aug 16 2021 MITek Industries, Inc. Thu Sep 30 10:14:43 2021 Page 2  
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**LOAD CASE(S) Standard**

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

Uniform Loads (plf)

Vert: 1-4=-48, 4-7=-48, 11-14=-19

Concentrated Loads (lb)

Vert: 17=-1074(B) 18=-1074(B) 19=-1074(B) 20=-1074(B) 21=-1074(B) 22=-1074(B)

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 Edenton, NC 27932

|          |       |            |     |     |                          |           |
|----------|-------|------------|-----|-----|--------------------------|-----------|
| Job      | Truss | Truss Type | Qty | Ply | DON GILMORE              | 148157175 |
| DO210933 | CT3   | Common     | 2   | 1   | Job Reference (optional) |           |

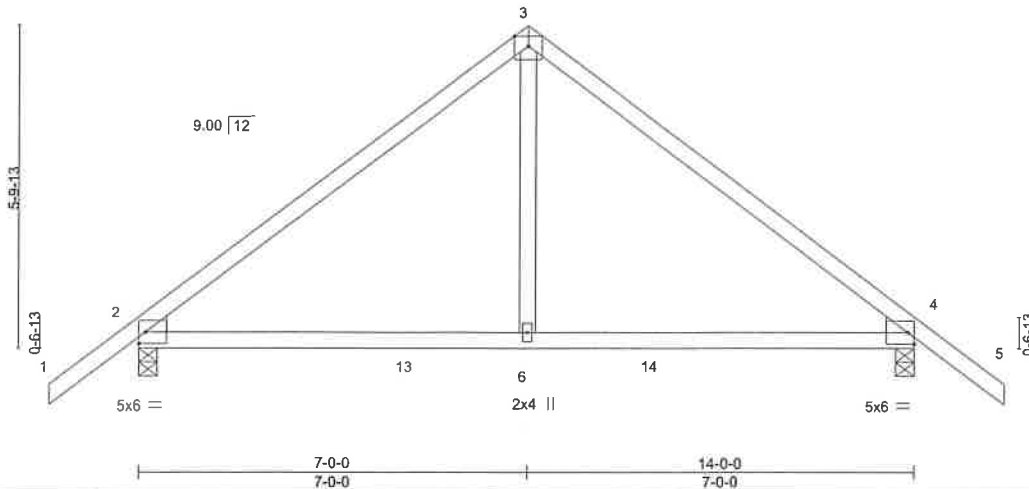
Truss Builders, Inc., Morrisville, NC - 27560.

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 30 10:14:44 2021 Page 1  
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5x6 MT20HS =

Scale = 1:39.6



| LOADING (psf)    | SPACING-             | CSI.      | DEFL.                        | PLATES        | GRIP    |
|------------------|----------------------|-----------|------------------------------|---------------|---------|
| TCLL (roof) 20.0 | 1-11-4               | TC 0.54   | in (loc) l/defl L/d          | MT20          | 244/190 |
| Snow (Pf) 15.0   | Plate Grip DOL 1.15  | BC 0.45   | Vert(LL) -0.06 6-12 >999 240 | MT20HS        | 187/143 |
| TCDL 10.0        | Lumber DOL 1.15      | WB 0.12   | Vert(CT) -0.10 6-12 >999 180 |               |         |
| BCLL 0.0 *       | Rep Stress Incr YES  | Matrix-MR | Horz(CT) 0.01 2 n/a n/a      |               |         |
| BCDL 10.0        | Code IBC2015/TPI2014 |           |                              | Weight: 62 lb | FT = 6% |

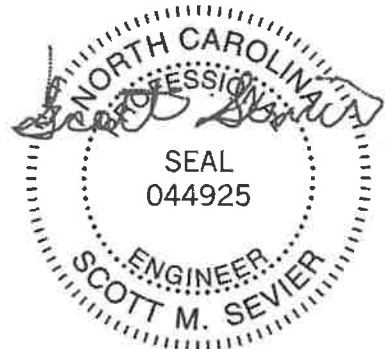
**LUMBER-**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2  
 WEBS 2x4 SP No.3  
 WEDGE  
 Left: 2x4 SP No.3 , Right: 2x4 SP No.3

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

**REACTIONS.** (size) 2=0-4-0, 4=0-4-0  
 Max Horz 2=121(LC 9)  
 Max Uplift 2=-30(LC 10), 4=-30(LC 11)  
 Max Grav 2=643(LC 22), 4=643(LC 23)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-646/56, 3-4=-646/56  
 BOT CHORD 2-6=0/482, 4-6=0/482  
 WEBS 3-6=0/309

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TC DL=6.0psf; BC DL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
  - TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=15.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
  - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.0 psf on overhangs non-concurrent with other live loads.
  - All plates are MT20 plates unless otherwise indicated.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BC DL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
  - This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.



October 1, 2021

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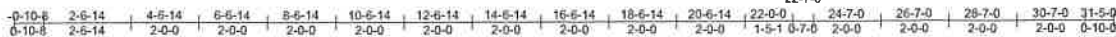
818 Soundside Road  
 Edenton, NC 27932

|          |       |  |     |     |             |          |
|----------|-------|--|-----|-----|-------------|----------|
| Job      | Truss | Truss Type                             | Qty | Ply | DON GILMORE | 48157176 |
| DO210933 | CT3GE | Piggyback Base Structural Gable COMMON | 1   | 1   |             |          |

Job Reference (optional)

Truss Builders, Inc., Morrisville, NC - 27560,

8,430 s Aug 16 2021 MITek Industries, Inc. Thu Sep 30 10:14:46 2021 Page 1  
 ID:iC31OG5R74j1UmnMaz7fHyYoRF-v7eDvtjn65KQcz2OCrxh9g7AF88VT6dkxWxmyYtCN  
 22-7-0



Scale: 3/16"=1'

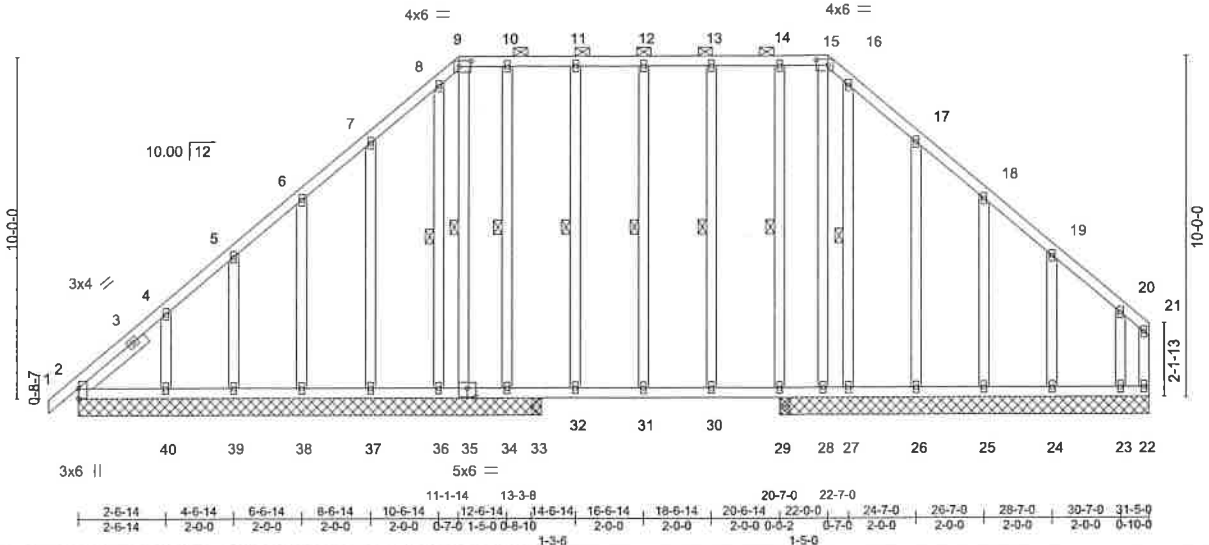


Plate Offsets (X,Y)-- [2:Edge,0-0-0], [9:0-4-4,0-2-0], [15:0-4-4,0-2-0], [35:0-3-0,0-3-0]

| LOADING (psf)    | SPACING-             | CSI.      | DEFL.    | in (loc) | l/defl | L/d  | PLATES         | GRIP    |
|------------------|----------------------|-----------|----------|----------|--------|------|----------------|---------|
| TCLL (roof) 20.0 | 2-0-0                | TC 0.39   | Vert(LL) | -0.07    | 30-31  | >999 | MT20           | 244/190 |
| Snow (Pf) 15.0   | Lumber DOL 1.15      | BC 0.68   | Vert(CT) | -0.12    | 30-31  | >715 |                |         |
| TCDL 10.0        | Rep Stress Incr YES  | WB 0.16   | Horz(CT) | 0.00     | 22     | n/a  |                |         |
| BCLL 0.0         | Code IBC2015/TPI2014 | Matrix-MR |          |          |        |      |                |         |
| BCDL 10.0        |                      |           |          |          |        |      | Weight: 293 lb | FT = 6% |

**LUMBER-**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2  
 WEBS 2x4 SP No.3  
 SLIDER Left 2x4 SP No.3 2-6-0

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.); 9-15.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
 WEBS 1 Row at midpt 9-35, 12-31, 13-30, 14-29, 10-34, 11-32, 8-36, 16-27

**REACTIONS.** All bearings 13-7-0 except (jt=length) 28=10-10-0, 22=10-10-0, 27=10-10-0, 26=10-10-0, 25=10-10-0, 24=10-10-0, 23=10-10-0, 33=0-3-8, 29=0-3-8, 29=0-3-8.  
 (lb) - Max Horz 2=214(LC 9)  
 Max Uplift All uplift 100 lb or less at joint(s) 35, 22, 39, 38, 37, 36, 26, 25, 24, 33, 29 except 2=-104(LC 6), 28=-408(LC 28), 34=-329(LC 3), 40=-102(LC 10), 23=-159(LC 11)  
 Max Grav All reactions 250 lb or less at joint(s) 2, 35, 28, 22, 34, 40, 39, 38, 37, 36, 27, 26, 25, 24, 23, 2 except 33=798(LC 3), 29=755(LC 28), 29=538(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 14-29=315/50

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
  - 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.
  - TCCL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); PF=15.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
  - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.0 psf on overhangs non-concurrent with other live loads.
  - Provide adequate drainage to prevent water ponding.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* 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 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 35, 22, 39, 38, 37, 36, 26, 25, 24, 33, 29 except (jt=length) 2=104, 28=408, 34=329, 40=102, 23=159, 2=104.
  - This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



October 1, 2021

**WARNING -** Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MIT-7473 rev. 5/18/2020 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

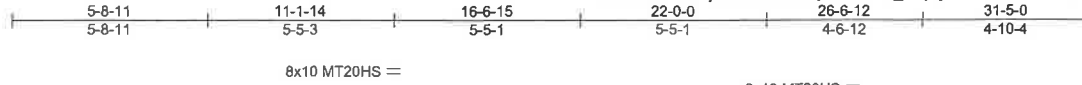


|          |        |            |     |     |             |           |
|----------|--------|------------|-----|-----|-------------|-----------|
| Job      | Truss  | Truss Type | Qty | Ply | DON GILMORE | 148157177 |
| DO210933 | CT3SGE | GABLE      | 1   | 1   |             |           |

Truss Builders, Inc., Morrisville, NC - 27560,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 30 10:14:48 2021 Page 1

ID:IC31OG5R74jf1UmnMaZf7HyYoRf-rVm\_JZlyJl2fw7QVduPmalQJT2ucLlO42QdcfyYTcl



Scale: 3/16"=1'

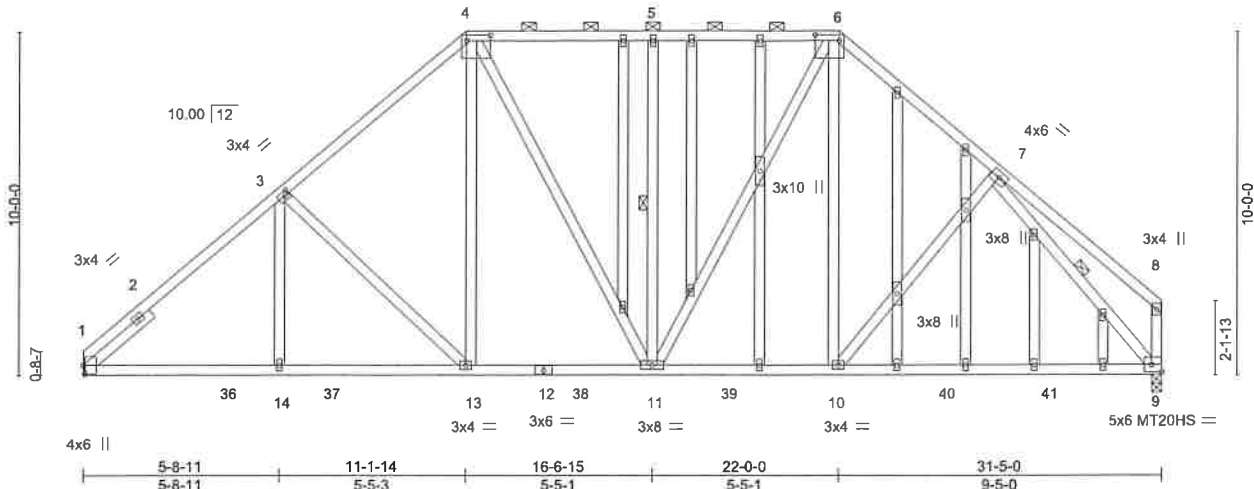


Plate Offsets (X,Y)-- [1:0-3-0,0-0-8], [3:0-1-8,0-1-8], [4:0-8-4,0-2-0], [6:0-8-4,0-2-0], [9:Edge,0-2-8]

| LOADING (psf)    | SPACING-             | CSI.      | DEFL.          | in (loc) | l/defl | L/d | PLATES         | GRIP    |
|------------------|----------------------|-----------|----------------|----------|--------|-----|----------------|---------|
| TCLL (roof) 20.0 | Plate Grip DOL 1.15  | TC 0.61   | Vert(LL) -0.16 | 9-10     | >999   | 240 | MT20           | 244/190 |
| Snow (Pf) 15.0   | Lumber DOL 1.15      | BC 0.79   | Vert(CT) -0.32 | 9-10     | >999   | 180 | MT20HS         | 187/143 |
| TCDL 10.0        | Rep Stress Incr YES  | WB 0.43   | Horz(CT) 0.05  | 9        | n/a    | n/a |                |         |
| BCLL 0.0 *       | Code IBC2015/TPI2014 | Matrix-MR |                |          |        |     |                |         |
| BCDL 10.0        |                      |           |                |          |        |     | Weight: 289 lb | FT = 6% |

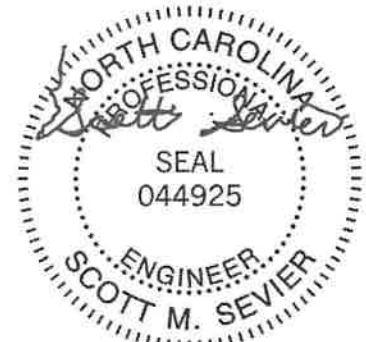
**LUMBER-**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2  
 WEBS 2x4 SP No.3 \*Except\*  
 8-9: 2x4 SP No.2  
 OTHERS 2x4 SP No.3  
 SLIDER Left 2x4 SP No.3 2-6-0

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 4-4-10 oc purlins, except end verticals, and 2-0-0 oc purlins (5-6-1 max.): 4-6.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 WEBS 1 Row at midpt 5-11, 7-9

**REACTIONS.** (size) 1=Mechanical, 9=0-3-8  
 Max Horz 1=204(LC 9)  
 Max Uplift 1=-33(LC 10), 9=-23(LC 11)  
 Max Grav 1=1270(LC 3), 9=1286(LC 3)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-3=-1635/73, 3-4=-1359/127, 4-5=-1057/114, 5-6=-1057/114, 6-7=-1255/114, 7-8=-369/46, 8-9=-325/54  
 BOT CHORD 1-14=-90/1269, 13-14=-90/1269, 11-13=-57/988, 10-11=0/911, 9-10=-10/872  
 WEBS 3-13=-392/142, 4-13=-22/458, 4-11=-115/254, 5-11=-338/114, 6-11=-104/388, 6-10=-11/304, 7-9=-1134/33

- 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=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=15.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
  - Provide adequate drainage to prevent water ponding.
  - All plates are MT20 plates unless otherwise indicated.
  - 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 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 9.
  - This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



October 1, 2021

**WARNING** - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MI-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/TPH 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  
 Eden, NC 27932

|          |       |                |     |     |             |           |
|----------|-------|----------------|-----|-----|-------------|-----------|
| Job      | Truss | Truss Type     | Qty | Ply | DON GILMORE | 148157178 |
| DO210933 | CT5   | Piggyback Base | 6   | 1   |             |           |

Truss Builders, Inc., Morrisville, NC - 27560, 8,430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 30 10:14:50 2021 Page 1  
 ID:IC31OG5R74jflUmnMaz77HyYoRF-nutkkEmCrLbmuEHpd2wtr7qmpGkX4EJhYMvkgXyYtCj

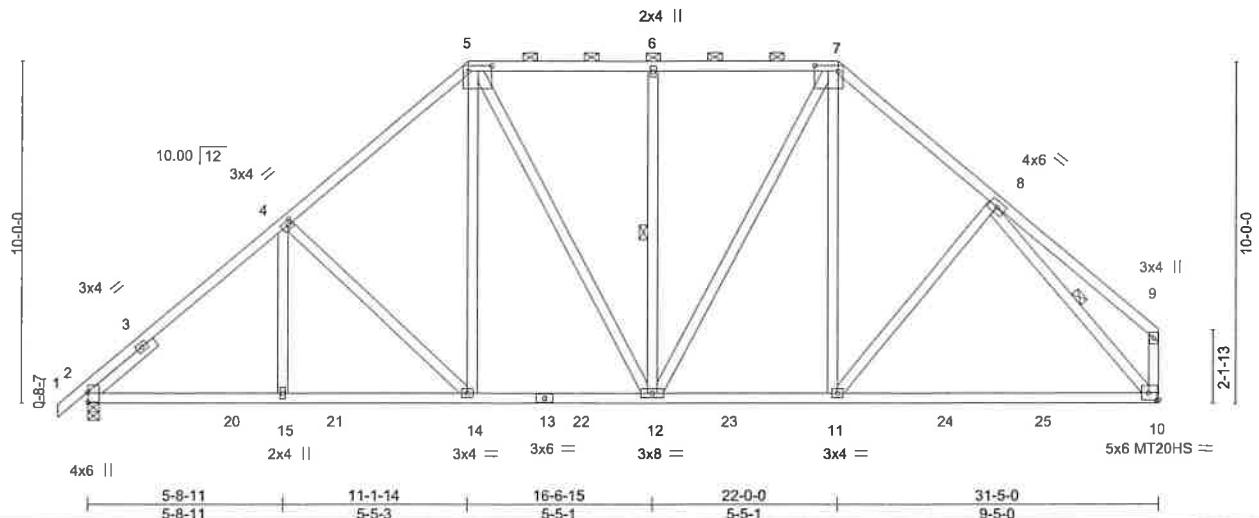


Plate Offsets (X,Y)-- [2:Edge,0-0-0], [4:0-1-8,0-1-8], [5:0-8-4,0-2-0], [7:0-8-4,0-2-0], [10:Edge,0-2-8]

| LOADING (psf)    | SPACING-             | CSI.      | DEFL.    | in (loc)    | l/defl | L/d | PLATES         | GRIP    |
|------------------|----------------------|-----------|----------|-------------|--------|-----|----------------|---------|
| TCLL (roof) 20.0 | 2-0-0                | TC 0.61   | Vert(LL) | -0.16 10-11 | >999   | 240 | MT20           | 244/190 |
| Snow (Pf) 15.0   | Plate Grip DOL 1.15  | BC 0.77   | Vert(CT) | -0.32 10-11 | >999   | 180 | MT20HS         | 187/143 |
| TCDL 10.0        | Lumber DOL 1.15      | WB 0.42   | Horz(CT) | 0.05 10     | n/a    | n/a |                |         |
| BCLL 0.0         | Rep Stress Incr YES  | Matrix-MR |          |             |        |     |                |         |
| BCDL 10.0        | Code IBC2015/TPI2014 |           |          |             |        |     | Weight: 224 lb | FT = 6% |

| LUMBER-  | BRACING-  |
|--|---|
| TOP CHORD 2x4 SP No.2                          | TOP CHORD Structural wood sheathing directly applied or 4-4-7 oc purlins, except end verticals, and 2-0-0 oc purlins (5-6-1 max.); 5-7. |
| BOT CHORD 2x4 SP No.2                          | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  |
| WEBS 2x4 SP No.3 *Except*<br>9-10: 2x4 SP No.2 | WEBS 1 Row at midpt 6-12, 8-10  |
| SLIDER Left 2x4 SP No.3 2-6-0                  |   |

**REACTIONS.** (size) 2=0-4-0, 10=Mechanical  
 Max Horz 2=214(LC 9)  
 Max Uplift 2=-45(LC 10), 10=-23(LC 11)  
 Max Grav 2=1314(LC 3), 10=1282(LC 3)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=-1631/72, 4-5=-1357/127, 5-6=-1056/114, 6-7=-1056/114, 7-8=-1253/114, 8-9=-365/46, 9-10=-323/54  
 BOT CHORD 2-15=-88/1265, 14-15=-88/1265, 12-14=-57/986, 11-12=0/909, 10-11=-10/870  
 WEBS 4-14=-388/141, 5-14=-22/456, 5-12=-115/254, 6-12=-338/114, 7-12=-104/387, 7-11=-11/302, 8-10=-1133/33

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
  - TCCL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=15.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
  - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.0 psf on overhangs non-concurrent with other live loads.
  - Provide adequate drainage to prevent water ponding.
  - All plates are MT20 plates unless otherwise indicated.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 10.
  - This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



October 1, 2021

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

|          |       |                |     |     |             |          |
|----------|-------|----------------|-----|-----|-------------|----------|
| Job      | Truss | Truss Type     | Qty | Ply | DON GILMORE | 48157179 |
| DO210933 | CT5A  | Piggyback Base | 6   | 1   |             |          |

Truss Builders, Inc., Morrisville, NC - 27560, 8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 30 10:14:51 2021 Page 1  
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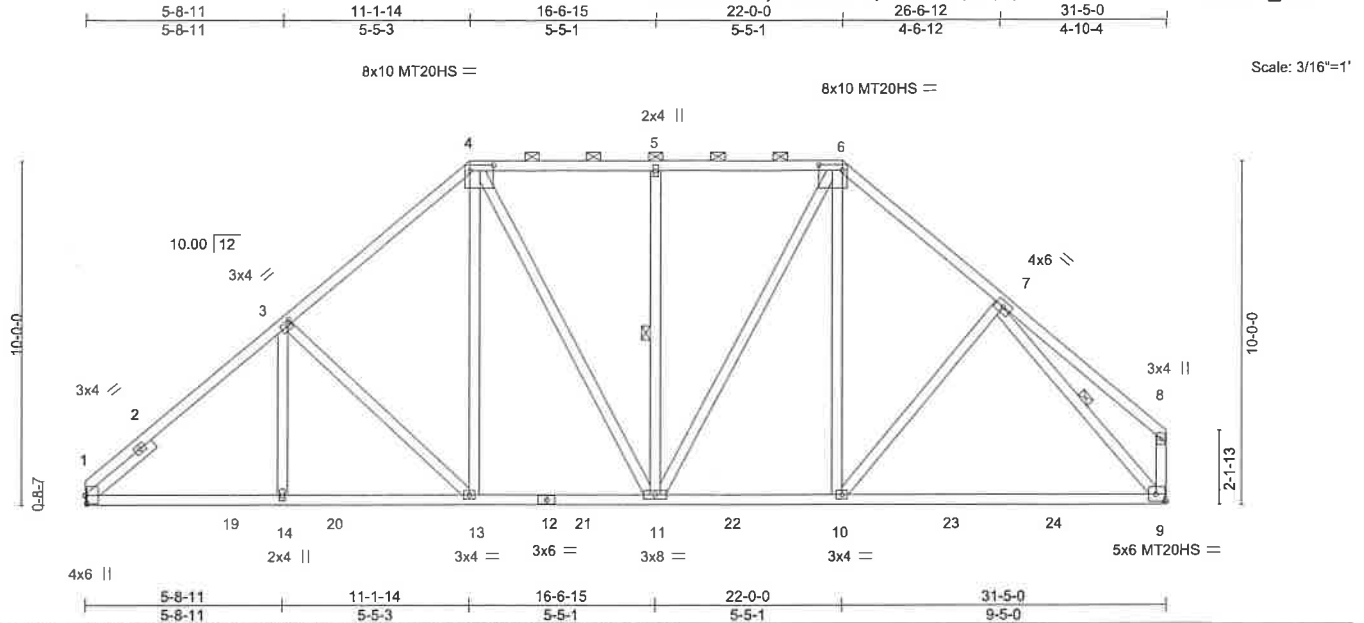


Plate Offsets (X,Y)-- [1:0-3-0,0-0-8], [3:0-1-8,0-1-8], [4:0-8-4,0-2-0], [6:0-8-4,0-2-0], [9:Edge,0-2-8]

| LOADING (psf) | SPACING- | 2-0-0 | CSI.      | DEFL.    | in (loc) | l/defl | L/d  | PLATES | GRIP           |         |
|---------------|----------|-------|-----------|----------|----------|--------|------|--------|----------------|---------|
| TCLL (roof)   | 20.0     |       | TC        | Vert(LL) | -0.16    | 9-10   | >999 | 240    | MT20           | 244/190 |
| Snow (Pf)     | 15.0     |       | BC        | Vert(CT) | -0.32    | 9-10   | >999 | 180    | MT20HS         | 187/143 |
| TCDL          | 10.0     |       | WB        | Horz(CT) | 0.05     | 9      | n/a  | n/a    |                |         |
| BCLL          | 0.0 *    |       | Matrix-MR |          |          |        |      |        |                |         |
| BCDL          | 10.0     |       |           |          |          |        |      |        | Weight: 222 lb | FT = 6% |

**LUMBER-**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2  
 WEBS 2x4 SP No.3 \*Except\*  
 8-9: 2x4 SP No.2  
 SLIDER Left 2x4 SP No.3 2-6-0

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 4-4-10 oc purlins, except end verticals, and 2-0-0 oc purlins (5-6-1 max.): 4-6.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 WEBS 1 Row at midpt 5-11, 7-9

**REACTIONS.** (size) 1=Mechanical, 9=Mechanical  
 Max Horz 1=204(LC 9)  
 Max Uplift 1=-33(LC 10), 9=-23(LC 11)  
 Max Grav 1=1270(LC 3), 9=1286(LC 3)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-3=-1635/73, 3-4=-1359/127, 4-5=-1057/114, 5-6=-1057/114, 6-7=-1255/114,  
 7-8=-369/46, 8-9=-325/54  
 BOT CHORD 1-14=-90/1269, 13-14=-90/1269, 11-13=-57/988, 10-11=0/911, 9-10=-10/872  
 WEBS 3-13=-392/142, 4-13=-22/458, 4-11=-115/254, 5-11=-338/114, 6-11=-104/388,  
 6-10=-11/304, 7-9=-1134/33

**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=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- TCLL: ASCE 7-10; Pr=20.0 psf (roof live load; Lumber DOL=1.15 Plate DOL=1.15); Pf=15.0 psf (flat roof snow; Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 9.
- This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



October 1, 2021

**WARNING -** Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MH-7473 rev. 5/19/2020 BEFORE USE.  
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818 Soundside Road  
 Edenton, NC 27932

|                 |              |                              |          |          |             |           |
|-----------------|--------------|------------------------------|----------|----------|-------------|-----------|
| Job<br>DO210933 | Truss<br>CT6 | Truss Type<br>Piggyback Base | Qty<br>9 | Ply<br>1 | DON GILMORE | 148157180 |
|-----------------|--------------|------------------------------|----------|----------|-------------|-----------|

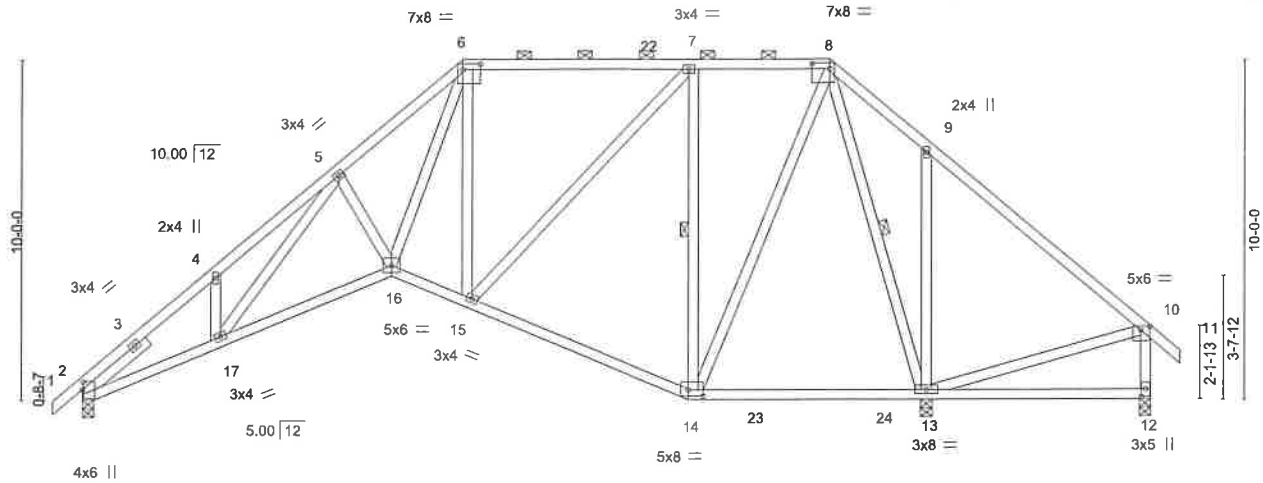
Job Reference (optional)

Truss Builders, Inc., Morrisville, NC - 27560,

8.430 s Aug 16 2021 MITek Industries, Inc. Thu Sep 30 10:14:54 2021 Page 1  
ID:iC310G5R74jflUmnMaZf7HyYoRF-g77FacpVZ5CNraast?porQRu7w0\_0HTztxplyYtCf



Scale: 3/16"=1'



|                       |   |
|-----------------------|---|
| Plate Offsets (X,Y)-- | [2:0-2-11,0-0-6], [6:0-6-4,0-2-0], [8:0-6-4,0-2-0], [10:0-3-4,0-1-4], [12:0-2-12,0-1-8], [14:0-5-4,0-2-4] |
|-----------------------|---|

| LOADING (psf)    | SPACING-             | 2-0-0 | CSI.      | DEFL.          | in (loc) | l/defl | L/d | PLATES         | GRIP    |
|------------------|----------------------|-------|-----------|----------------|----------|--------|-----|----------------|---------|
| TCLL (roof) 20.0 | Plate Grip DOL 1.15  |       | TC 0.69   | Vert(LL) -0.11 | 13-14    | >999   | 240 | MT20           | 244/190 |
| Snow (Pf) 15.0   | Lumber DOL 1.15      |       | BC 0.68   | Vert(CT) -0.19 | 16-17    | >999   | 180 |                |         |
| TCDL 10.0        | Rep Stress Incr YES  |       | WB 0.70   | Horz(CT) 0.13  | 12       | n/a    | n/a |                |         |
| BCLL 0.0 *       | Code IBC2015/TPI2014 |       | Matrix-MR |                |          |        |     |                |         |
| BCDL 10.0        |                      |       |           |                |          |        |     | Weight: 228 lb | FT = 6% |

**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3  
SLIDER Left 2x4 SP No.3 2-6-0

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 3-11-8 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-8.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 6-0-0 oc bracing: 13-14.  
WEBS 1 Row at midpt 7-14, 8-13

**REACTIONS.** (size) 2=0-4-0, 12=0-4-0, 13=0-4-0  
Max Horz 2=219(LC 9)  
Max Uplift 2=-35(LC 10), 12=-355(LC 26), 13=-48(LC 10)  
Max Grav 2=911(LC 2), 12=99(LC 7), 13=1904(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-4=-1721/129, 4-5=-1673/250, 5-6=-1422/154, 6-7=-684/122, 7-8=-302/127, 8-9=-65/585, 9-10=-57/675, 10-12=-62/411  
BOT CHORD 2-17=-198/1382, 16-17=-185/1270, 15-16=-117/755, 14-15=-72/341  
WEBS 6-15=-501/123, 7-15=-70/580, 7-14=-799/165, 9-13=-360/217, 10-13=-554/108, 8-14=-63/888, 8-13=-1316/109, 5-16=-266/150, 6-16=-113/1125

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TC DL=6.Opsf; BCDL=6.Opsf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
  - TCLL: ASCE 7-10; Pr=20.0 psf (roof live load; Lumber DOL=1.15 Plate DOL=1.15); Pf=15.0 psf (flat roof snow; Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
  - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.0 psf on overhangs non-concurrent with other live loads.
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 13 except (jt=lb) 12=355.
  - This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



October 1, 2021

**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

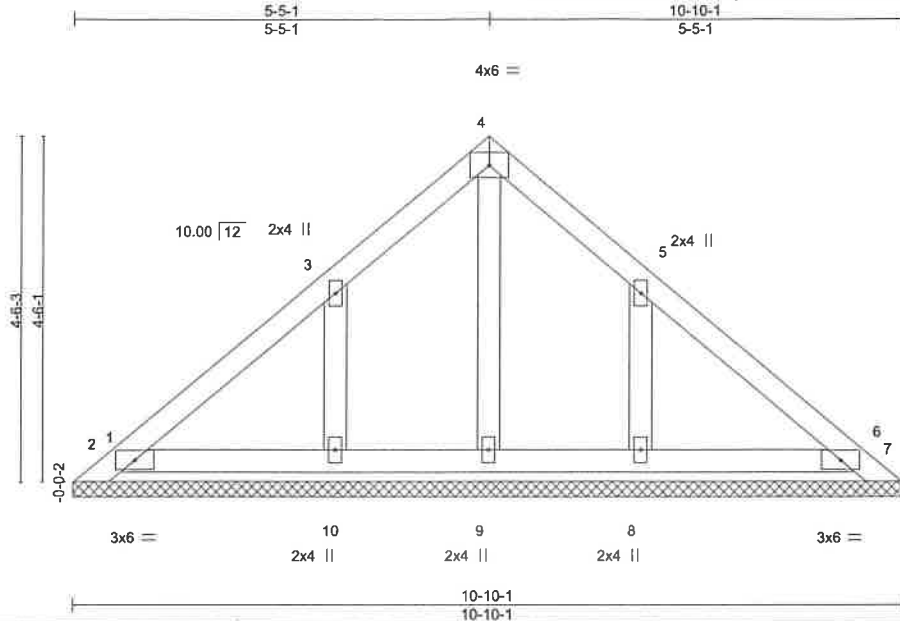
ENGINEERING BY  
**TRENCO**  
A MITEK Affiliate  
818 Soundside Road  
Edenton, NC 27932



|          |       |            |     |     |                          |           |
|----------|-------|------------|-----|-----|--------------------------|-----------|
| Job      | Truss | Truss Type | Qty | Ply | DON GILMORE              | 148157181 |
| DO210933 | PB1GE | GABLE      | 2   | 1   | Job Reference (optional) |           |

Truss Builders, Inc., Morrisville, NC - 27560,

8.430 s Aug 16 2021 Mitek Industries, Inc. Thu Sep 30 10:14:56 2021 Page 1  
ID:9IbiProxNuxtvrUdbBCXyYoO9-c2F??lrzRBLvd9kz11H5G4v5hzJU2sawHM2uByYtCd



Scale = 1:28.7

| LOADING (psf)    | SPACING-             | CSI,     | DEFL.                   | PLATES        | GRIP    |
|------------------|----------------------|----------|-------------------------|---------------|---------|
| TCLL (roof) 20.0 | 2-0-0                | TC 0.11  | in (loc) l/defl L/d     | MT20          | 244/190 |
| Snow (Pf) 15.0   | Plate Grip DOL 1.15  | BC 0.05  | Vert(LL) n/a - n/a 999  |               |         |
| TCDL 10.0        | Lumber DOL 1.15      | WB 0.04  | Vert(CT) n/a - n/a 999  |               |         |
| BCLL 0.0 *       | Rep Stress Incr YES  | Matrix-R | Horz(CT) 0.00 6 n/a n/a |               |         |
| BCDL 10.0        | Code IBC2015/TPI2014 |          |                         | Weight: 47 lb | FT = 6% |

**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 10-10-1.  
 (lb) - Max Horz 1=-83(LC 6)  
 Max Uplift All uplift 100 lb or less at joint(s) 7, 2, 6, 10, 8 except 1=-138(LC 22)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 7, 6, 9, 10, 8 except 2=265(LC 22)

**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=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=15.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 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) 7, 2, 6, 10, 8 except (jt=lb) 1=138.
- This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



October 1, 2021

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 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



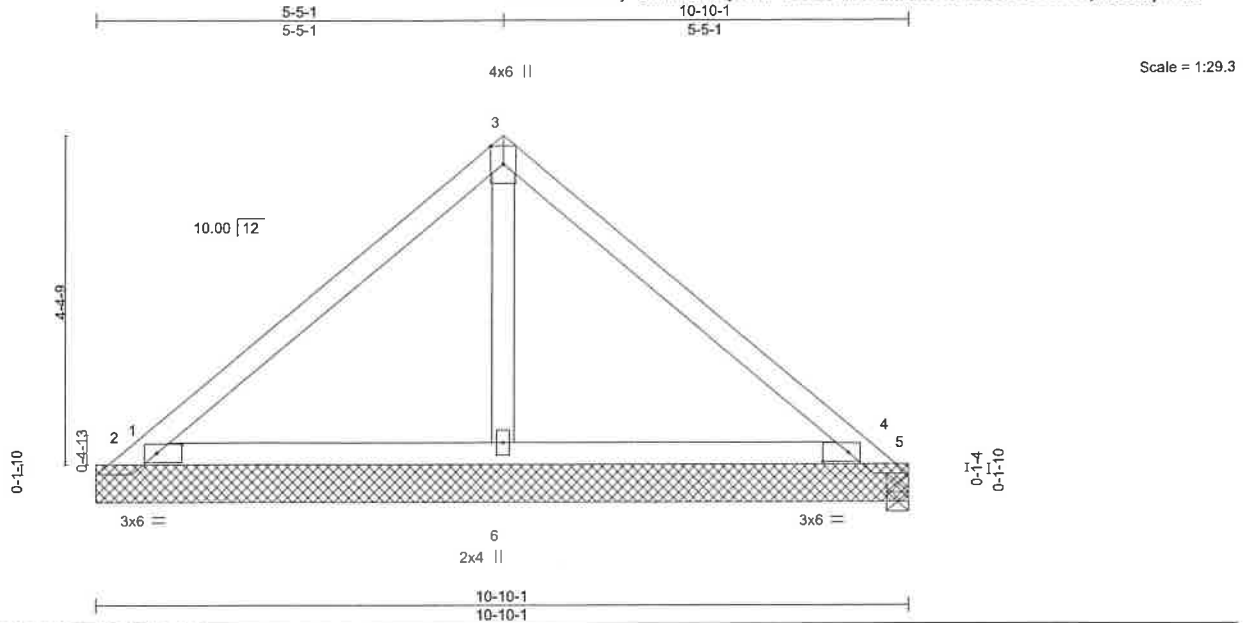
818 Soundside Road  
 Edenton, NC 27932

|          |       |            |     |     |             |           |
|----------|-------|------------|-----|-----|-------------|-----------|
| Job      | Truss | Truss Type | Qty | Ply | DON GILMORE | 148157182 |
| DO210933 | PB2   | Piggyback  | 21  | 1   |             |           |

Truss Builders, Inc., Morrisville, NC - 27560,

8.430 s Aug 16 2021 Mitek Industries, Inc. Thu Sep 30 10:14:57 2021 Page 1

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| Plate Offsets (X,Y)-- |       | [2-0-4-1,0-1-8], [4-0-4-1,0-1-8] |                 |             |      |              |          |        |      |               |               |         |
|-----------------------|-------|----------------------------------|-----------------|-------------|------|--------------|----------|--------|------|---------------|---------------|---------|
| <b>LOADING (psf)</b>  |       | <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 (roof)           | 20.0  | Plate Grip DOL                   | 1.15            | TC          | 0.34 | Vert(LL)     | -0.01    | 4-6    | >999 | 240           | MT20          | 244/190 |
| Snow (Pf)             | 15.0  | Lumber DOL                       | 1.15            | BC          | 0.17 | Vert(CT)     | -0.01    | 4-6    | >999 | 180           |               |         |
| TCDL                  | 10.0  | Rep Stress Incr                  | YES             | WB          | 0.07 | Horz(CT)     | 0.00     | 5      | n/a  | n/a           |               |         |
| BCLL                  | 0.0 * | Code                             | IBC2015/TPI2014 | Matrix-R    |      |              |          |        |      |               | Weight: 41 lb | FT = 6% |
| BCDL                  | 10.0  |                                  |                 |             |      |              |          |        |      |               |               |         |

**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 10-10-1.  
 (lb) - Max Horz 1=-84(LC 6)  
 Max Uplift All uplift 100 lb or less at joint(s) except 1=-384(LC 22), 5=-278(LC 27), 5=-211(LC 1), 2=-191(LC 10), 4=-140(LC 11)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 2=620(LC 22), 4=540(LC 27), 6=315(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-139/282

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCCL=6.0psf; BCCL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
  - TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=15.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
  - 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 1-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 384 lb uplift at joint 1, 278 lb uplift at joint 5, 191 lb uplift at joint 2 and 140 lb uplift at joint 4.
  - This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



**WARNING** - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MH-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 | DON GILMORE              | 148157183 |
| DO210933 | PB3   | Piggyback  | 12  | 1   | Job Reference (optional) |           |

Truss Builders, Inc., Morrisville, NC - 27560.

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 30 10:14:58 2021 Page 1  
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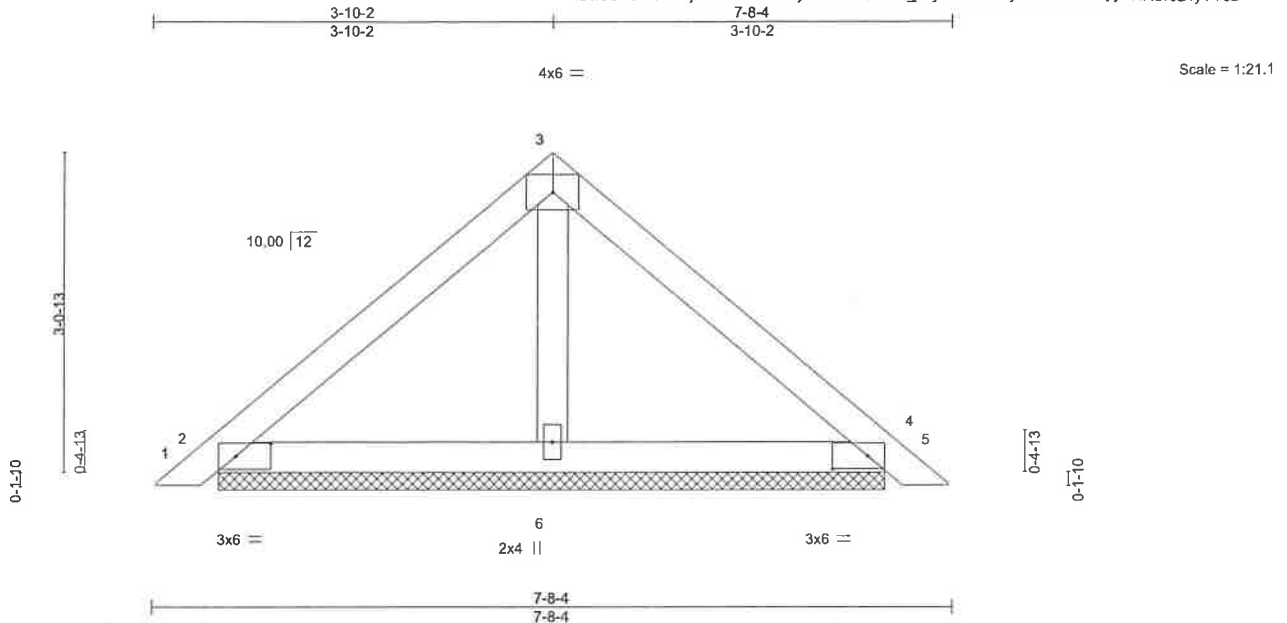


Plate Offsets (X,Y)-- [2:0-4-1,0-1-8], [4:0-4-1,0-1-8]

| LOADING (psf)    | SPACING-             | CSI.     | DEFL.    | in (loc) | l/defl | L/d | PLATES        | GRIP    |
|------------------|----------------------|----------|----------|----------|--------|-----|---------------|---------|
| TCLL (roof) 20.0 | 1-7-3                | TC 0.15  | Vert(LL) | 0.00     | 5      | n/r | MT20          | 244/190 |
| Snow (Pf) 15.0   | Plate Grip DOL 1.15  | BC 0.08  | Vert(CT) | 0.01     | 5      | n/r |               |         |
| TCDL 10.0        | Lumber DOL 1.15      | WB 0.03  | Horz(CT) | 0.00     | 4      | n/a |               |         |
| BCLL 0.0         | Rep Stress Incr YES  | Matrix-P |          |          |        |     | Weight: 28 lb | FT = 6% |
| BCDL 10.0        | Code IBC2015/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.** (size) 2=6-4-13, 4=6-4-13, 6=6-4-13  
Max Horz 2=-46(LC 8)  
Max Uplift 2=-17(LC 10), 4=-23(LC 11)  
Max Grav 2=138(LC 2), 4=138(LC 2), 6=172(LC 2)

**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=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=15.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.0 psf on overhangs non-concurrent with other live loads.
- 5) Gable requires continuous bottom chord bearing.
- 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 1-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 17 lb uplift at joint 2 and 23 lb uplift at joint 4.
- 9) This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
- 10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



October 1, 2021

**WARNING -** Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MTK7473 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

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

|          |       |            |     |     |             |           |
|----------|-------|------------|-----|-----|-------------|-----------|
| Job      | Truss | Truss Type | Qty | Ply | DON GILMORE | 148157184 |
| DO210933 | PB3GE | Piggyback  | 1   | 1   |             |           |

Truss Builders, Inc., Morrisville, NC - 27560.

8,430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 30 10:14:59 2021 Page 1  
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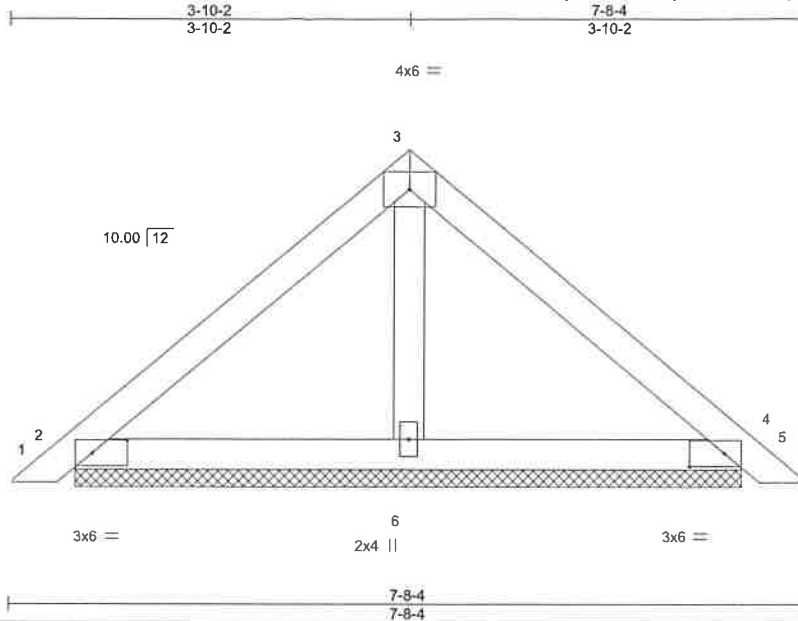


Plate Offsets (X,Y)- [2:0-4-1,0-1-8], [4:0-4-1,0-1-8]

| LOADING (psf)    | SPACING-             | CSI.     | DEFL.    | in (loc) | l/defl | L/d | PLATES        | GRIP    |
|------------------|----------------------|----------|----------|----------|--------|-----|---------------|---------|
| TCLL (roof) 20.0 | 1-7-3                | TC 0.15  | Vert(LL) | 0.00     | 5      | n/r | MT20          | 244/190 |
| Snow (Pf) 15.0   | Plate Grip DOL 1.15  | BC 0.08  | Vert(CT) | 0.01     | 5      | n/r |               |         |
| TCDL 10.0        | Lumber DOL 1.15      | WB 0.03  | Horz(CT) | 0.00     | 4      | n/a |               |         |
| BCLL 0.0 *       | Rep Stress Incr YES  | Matrix-P |          |          |        |     |               |         |
| BCDL 10.0        | Code IBC2015/TPI2014 |          |          |          |        |     | Weight: 28 lb | FT = 6% |

**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.** (size) 2=6-4-13, 4=6-4-13, 6=6-4-13  
 Max Horz 2=-46(LC 8)  
 Max Uplift 2=-17(LC 10), 4=-23(LC 11)  
 Max Grav 2=138(LC 2), 4=138(LC 2), 6=172(LC 2)

**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=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=15.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.0 psf on overhangs non-concurrent with other live loads.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 17 lb uplift at joint 2 and 23 lb uplift at joint 4.
- This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



October 1, 2021

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818 Soundside Road  
 Edenton, NC 27932

|          |       |            |     |     |                          |           |
|----------|-------|------------|-----|-----|--------------------------|-----------|
| Job      | Truss | Truss Type | Qty | Ply | DON GILMORE              | 148157185 |
| DO210933 | PB4   | Piggyback  | 1   | 2   | Job Reference (optional) |           |

Truss Builders, Inc., Morrisville, NC - 27560,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 30 10:15:00 2021 Page 1  
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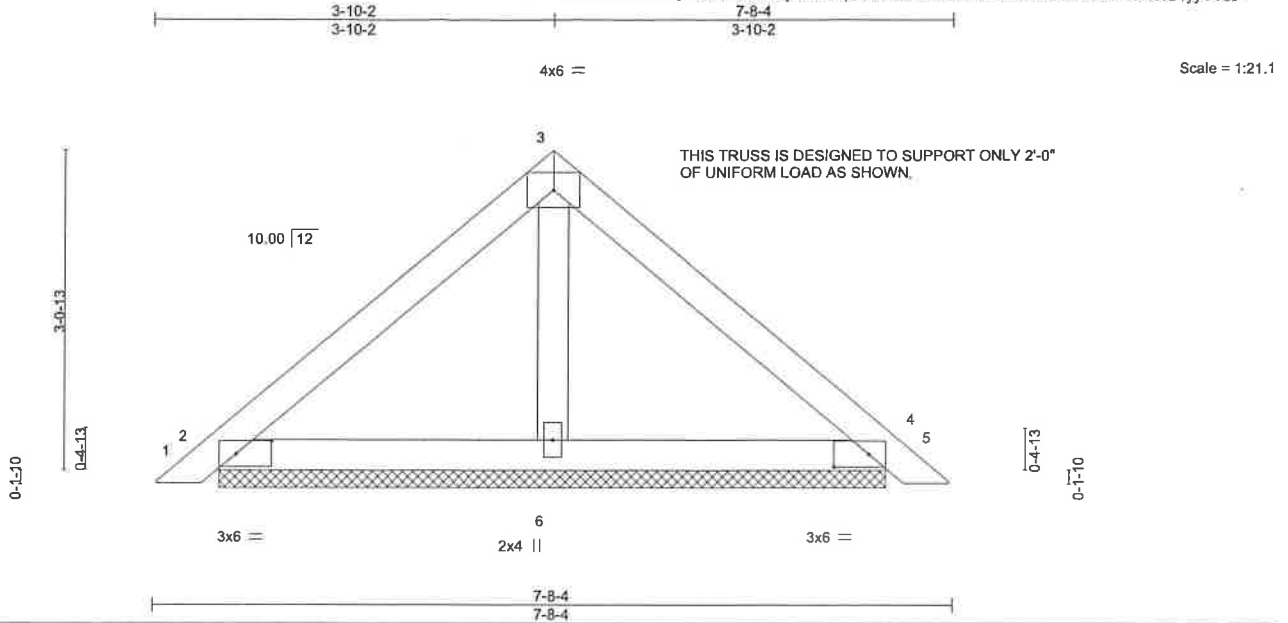


Plate Offsets (X,Y)-- [2:0-4-1,0-1-8], [4:0-4-1,0-1-8]

| LOADING (psf)    | SPACING-             | CSI.     | DEFL.    | in (loc) | l/defl | L/d | PLATES        | GRIP    |
|------------------|----------------------|----------|----------|----------|--------|-----|---------------|---------|
| TCLL (roof) 20.0 | 1-7-3                | TC 0.07  | Vert(LL) | 0.00     | 5      | n/r | MT20          | 244/190 |
| Snow (Pf) 15.0   | Plate Grip DOL 1.15  | BC 0.04  | Vert(CT) | 0.00     | 5      | n/r |               |         |
| TCDL 10.0        | Lumber DOL 1.15      | WB 0.01  | Horz(CT) | 0.00     | 4      | n/a |               |         |
| BCLL 0.0 *       | Rep Stress Incr YES  | Matrix-P |          |          |        |     | Weight: 56 lb | FT = 6% |
| BCDL 10.0        | Code IBC2015/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.** (size) 2=6-4-13, 4=6-4-13, 6=6-4-13  
Max Horz 2=-46(LC 8)  
Max Uplift 2=-17(LC 10), 4=-23(LC 11)  
Max Grav 2=138(LC 2), 4=138(LC 2), 6=172(LC 2)

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

**NOTES-**

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.  
Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- TCLL: ASCE 7-10; Pr=20.0 psf (roof live load; Lumber DOL=1.15 Plate DOL=1.15); Pf=15.0 psf (flat roof snow; Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.0 psf on overhangs non-concurrent with other live loads.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 17 lb uplift at joint 2 and 23 lb uplift at joint 4.
- This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



October 1, 2021

**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/TPH Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

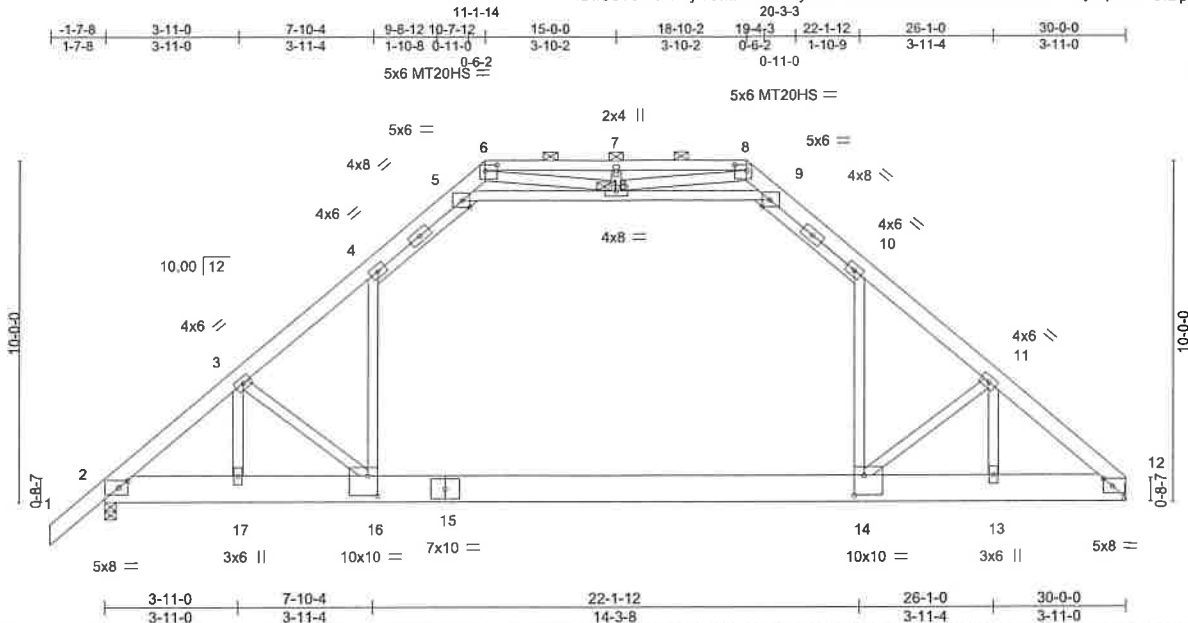
|          |       |            |     |     |             |           |
|----------|-------|------------|-----|-----|-------------|-----------|
| Job      | Truss | Truss Type | Qty | Ply | DON GILMORE | 148157186 |
| DO210933 | T1    | Attic      | 12  | 1   |             |           |

Job Reference (optional)

Truss Builders, Inc., Morrisville, NC - 27560,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 30 10:15:02 2021 Page 1

ID:IC31OG5R74j1UmnMaZf7HyYoRf-RcCHFLWk0163L4B7KZ8hKXkmy6qYuXPSIDpM6ryYTc7



Scale: 3/16"=1'

Plate Offsets (X,Y)- [2:0-3-3,0-2-8], [5:Edge,0-2-4], [6:0-4-4,0-2-0], [8:0-4-4,0-2-0], [9:Edge,0-2-4], [9:0-0-0,0-0-0], [10:0-0-0,0-0-0], [11:0-0-0,0-0-0], [12:0-3-3,0-2-8], [14:0-3-8,0-7-0], [16:0-3-8,0-7-0]

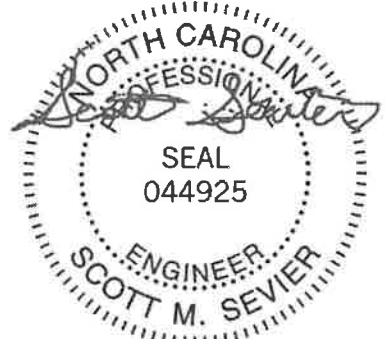
| LOADING (psf)    | SPACING-             | CSI.      | DEFL.    | in (loc) | l/defl | L/d  | PLATES         | GRIP    |
|------------------|----------------------|-----------|----------|----------|--------|------|----------------|---------|
| TCLL (roof) 20.0 | 1-7-3                | TC 0.79   | Vert(LL) | -0.32    | 14-16  | >999 | MT20           | 244/190 |
| Snow (Pf) 15.0   | Plate Grip DOL 1.15  | BC 0.83   | Vert(CT) | -0.45    | 14-16  | >801 | MT20HS         | 187/143 |
| TCDL 10.0        | Lumber DOL 1.15      | WB 0.99   | Horz(CT) | 0.02     | 12     | n/a  |                |         |
| BCLL 0.0 *       | Rep Stress Incr YES  | Matrix-MR | Attic    | -0.19    | 14-16  | 923  |                |         |
| BCDL 10.0        | Code IBC2015/TPI2014 |           |          |          |        |      | Weight: 280 lb | FT = 6% |

| LUMBER-  | BRACING-   |
|--|--|
| TOP CHORD 2x4 SP No.2 *Except*<br>1-6,8-12: 2x6 SP No.1D | TOP CHORD Structural wood sheathing directly applied or 4-3-8 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 6-8. |
| BOT CHORD 2x10 SP No.2                                   | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.   |
| WEBS 2x4 SP No.3 *Except*<br>5-9: 2x4 SP No.2            | JOINTS 1 Brace at Jt(s): 18  |

**REACTIONS.** (size) 12=Mechanical, 2=0-4-0  
 Max Horz 2=160(LC 9)  
 Max Uplift 2=-5(LC 10)  
 Max Grav 12=1238(LC 3), 2=1306(LC 3)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1685/1, 3-4=-1789/0, 4-5=-1135/50, 5-6=-25/698, 6-7=-22/1219, 7-8=-22/1219,  
 8-9=-23/697, 9-10=-1135/49, 10-11=-1791/0, 11-12=-1705/15  
 BOT CHORD 2-17=-50/1399, 16-17=-50/1399, 14-16=0/1192, 13-14=0/1337, 12-13=0/1337  
 WEBS 4-16=0/967, 5-18=-2136/109, 9-18=-2129/103, 10-14=0/968, 3-17=-401/69,  
 3-16=-322/163, 11-13=-392/71, 11-14=-346/176, 8-18=-261/382, 6-18=-257/384

- 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=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
  - 3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=15.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
  - 4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.0 psf on overhangs non-concurrent with other live loads.
  - 5) Provide adequate drainage to prevent water ponding.
  - 6) All plates are MT20 plates unless otherwise indicated.
  - 7) This truss has been designed for a 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 1-0-0 wide will fit between the bottom chord and any other members.
  - 9) Ceiling dead load (5.0 psf) on member(s). 4-5, 9-10, 5-18, 9-18
  - 10) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 14-16
  - 11) Refer to girder(s) for truss connections.
  - 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 5 lb uplift at joint 2.
  - 13) This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
  - 14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - 15) Attic room checked for L/360 deflection.



October 1, 2021

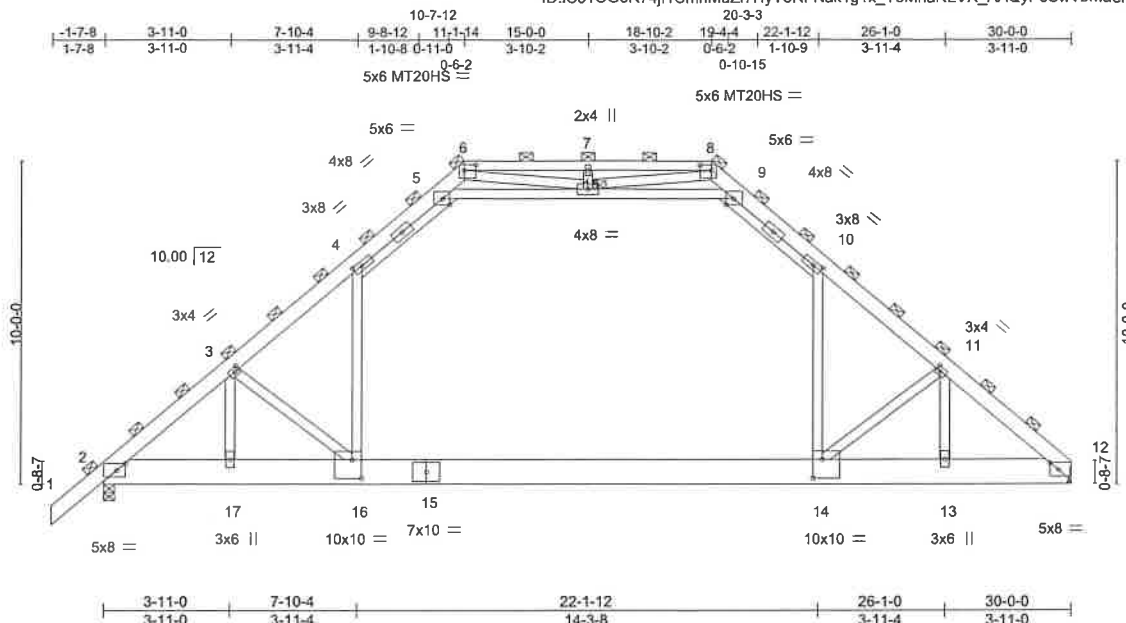
**WARNING -** Verify design parameters and READ NOTES ON THIS AND INCLUDED MITTEK REFERENCE PAGE Mil-7473 rev. 5/19/2020 BEFORE USE.  
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before 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



|                 |              |                     |          |          |             |           |
|-----------------|--------------|---------------------|----------|----------|-------------|-----------|
| Job<br>DO210933 | Truss<br>TG1 | Truss Type<br>ATTIC | Qty<br>1 | Ply<br>2 | DON GILMORE | 148157187 |
|-----------------|--------------|---------------------|----------|----------|-------------|-----------|

Truss Builders, Inc., Morrisville, NC - 27560,

8:430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 30 10:15:04 2021 Page 1  
ID:IC31OG5R74j1UmnMaZf7HyYoRf-Nak1g1x\_YeMnaNLVR\_AAQyP5SwVbMaelmXITajYtC5



Scale = 1:68.0

Plate Offsets (X,Y)-- [2:0-3-3,0-2-8], [3:0-1-8,0-1-8], [4:0-3-8,0-1-8], [5:Edge,0-2-4], [6:0-4-4,0-2-0], [8:0-4-4,0-2-0], [9:Edge,0-2-4], [10:0-3-8,0-1-8], [11:0-1-8,0-1-8], [12:0-3-3-0-2-8], [14:0-3-8,0-7-0], [16:0-3-8,0-7-0]

| LOADING (psf)    | SPACING-             | CSI.      | DEFL.          | in (loc) | l/defl | L/d | PLATES         | GRIP    |
|------------------|----------------------|-----------|----------------|----------|--------|-----|----------------|---------|
| TCLL (roof) 20.0 | Plate Grip DOL 1.15  | TC 0.85   | Vert(LL) -0.30 | 14-16    | >999   | 240 | MT20           | 244/190 |
| Snow (Pf) 15.0   | Lumber DOL 1.15      | BC 0.85   | Vert(CT) -0.42 | 14-16    | >854   | 180 | MT20HS         | 187/143 |
| TCDL 10.0        | Rep Stress Incr NO   | WB 0.43   | Horz(CT) 0.02  | 12       | n/a    | n/a |                |         |
| BCLL 0.0 *       | Code IBC2015/TP12014 | Matrix-MR | Attic -0.17    | 14-16    | 984    | 360 |                |         |
| BCDL 10.0        |                      |           |                |          |        |     | Weight: 560 lb | FT = 6% |

**LUMBER-**

TOP CHORD 2x4 SP No.2 \*Except\*  
1-6,8-12: 2x6 SP No.1D  
BOT CHORD 2x10 SP No.2  
WEBS 2x4 SP No.3 \*Except\*  
5-9: 2x4 SP No.2

**BRACING-**

TOP CHORD 2-0-0 occ purlins (6-0-0 max.)  
(Switched from sheeted: Spacing > 2-8-0).  
BOT CHORD Rigid ceiling directly applied or 10-0-0 occ bracing.  
JOINTS 1 Brace at Jt(s): 6, 8, 18

**REACTIONS.**

(size) 12=Mechanical, 2=0-4-0  
Max Horz 2=300(LC 9)  
Max Uplift 2=-9(LC 10)  
Max Grav 12=2322(LC 3), 2=2451(LC 3)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-3162/0, 3-4=-3355/0, 4-5=-2130/94, 5-6=-47/1309, 6-7=-42/2286, 7-8=-42/2286,  
8-9=-43/1309, 9-10=-2129/91, 10-11=-3358/0, 11-12=-3197/27  
BOT CHORD 2-17=-93/2623, 16-17=-93/2623, 14-16=0/2236, 13-14=0/2504, 12-13=0/2504  
WEBS 4-16=0/1812, 5-18=-4008/204, 9-18=-3993/194, 10-14=0/1815, 3-17=-748/130,  
3-16=-602/305, 11-13=-732/133, 11-14=-645/331, 7-18=-290/79, 8-18=-490/717,  
6-18=-481/721

**NOTES-**

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.  
Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-9-0 oc.  
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=15.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.0 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
- Ceiling dead load (5.0 psf) on member(s). 4-5, 9-10, 5-18, 9-18
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 14-16



October 1, 2021

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818 Soundside Road  
Edenton, NC 27932

|          |       |            |     |     |                          |           |
|----------|-------|------------|-----|-----|--------------------------|-----------|
| Job      | Truss | Truss Type | Qty | Ply | DON GILMORE              | 148157187 |
| DO210933 | TG1   | ATTIC      | 1   | 2   | Job Reference (optional) |           |

Truss Builders, Inc., Morrisville, NC - 27560.

8.430 s Aug 16 2021 MITek Industries, Inc. Thu Sep 30 10:15:04 2021 Page 2  
 ID:iC31OG5R74jf1UmnMaZf7HyYoRf-Nak1g1x\_YeMnaNLVR\_AAQyP5SwVbMaeImXITAjyYtC5

**NOTES-**

- 13) Refer to girder(s) for truss to truss connections.
- 14) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 9 lb uplift at joint 2.
- 15) This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
- 16) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 17) Attic room checked for L/360 deflection.

**▲ WARNING** - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MH-7473 rev. 5/19/2020 BEFORE USE  
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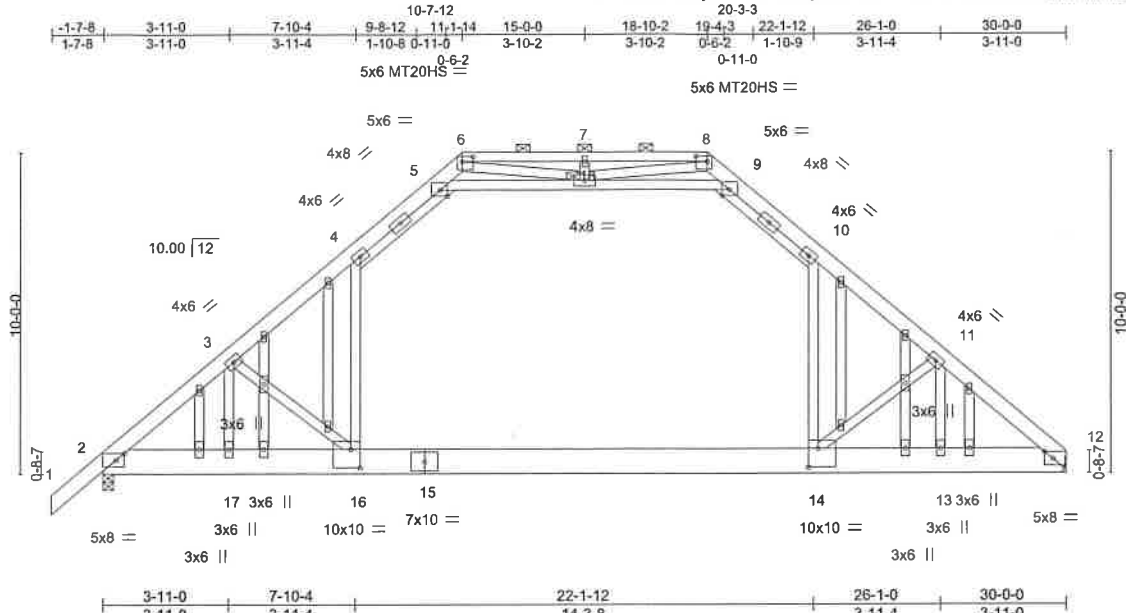
818 Soundside Road  
 Edenton, NC 27932



|          |       |            |     |     |             |           |
|----------|-------|------------|-----|-----|-------------|-----------|
| Job      | Truss | Truss Type | Qty | Ply | DON GILMORE | 148157188 |
| DO210933 | TGE1  | GABLE      | 1   | 1   |             |           |

Job Reference (optional)

Truss Builders, Inc., Morrisville, NC - 27560, 8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 30 10:15:07 2021 Page 1  
 ID:IC31OG5R74jf1UmnMaZf7HyYoRf-n9PAJ2\_trZkLRr4476kt1b1dh7xiZofBSVX7n2yYTc2



Scale = 1:68.4

Plate Offsets (X,Y)-- [2:0-3-3,0-2-8], [5:Edge,0-2-4], [6:0-4-4,0-2-0], [8:0-4-4,0-2-0], [9:Edge,0-2-4], [9:0-0-0,0-0-0], [10:0-0-0,0-0-0], [11:0-0-0,0-0-0], [12:0-3-3,0-2-8], [14:0-3-8,0-7-0], [16:0-3-8,0-7-0], [26:0-0-0,0-0-0], [27:0-0-0,0-0-0], [28:0-0-0,0-0-0], [30:0-0-0,0-0-0], [32:0-0-0,0-0-0]

| LOADING (psf)    | SPACING-             | CSI.      | DEFL.    | in (loc)    | l/defl | L/d | PLATES         | GRIP    |
|------------------|----------------------|-----------|----------|-------------|--------|-----|----------------|---------|
| TCLL (roof) 20.0 | 1-7-3                | TC 0.79   | Vert(LL) | -0.32 14-16 | >999   | 240 | MT20           | 244/190 |
| Snow (Pf) 15.0   | Plate Grip DOL 1.15  | BC 0.83   | Vert(CT) | -0.45 14-16 | >801   | 180 | MT20HS         | 187/143 |
| TCDL 10.0        | Lumber DOL 1.15      | WB 0.99   | Horz(CT) | 0.02 12     | n/a    | n/a |                |         |
| BCLL 0.0 *       | Rep Stress Incr YES  | Matrix-MR | Attic    | -0.19 14-16 | 923    | 360 |                |         |
| BCDL 10.0        | Code IBC2015/TPI2014 |           |          |             |        |     | Weight: 310 lb | FT = 6% |

| LUMBER-  | BRACING-   |
|--|--|
| TOP CHORD 2x4 SP No.2 *Except*<br>1-6,8-12: 2x6 SP No.1D | TOP CHORD Structural wood sheathing directly applied or 4-3-8 oc purlins, except 2-0-0 oc purlins (6-0-0 max.); 6-8. |
| BOT CHORD 2x10 SP No.2                                   | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.   |
| WEBS 2x4 SP No.3 *Except*<br>5-9: 2x4 SP No.2            | JOINTS 1 Brace at Jt(s): 18  |
| OTHERS 2x4 SP No.3                                       |  |

REACTIONS. (size) 12=Mechanical, 2=0-4-0  
 Max Horz 2=160(LC 9)  
 Max Uplift 2=-5(LC 10)  
 Max Grav 12=1238(LC 3), 2=1306(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1685/1, 3-4=-1789/0, 4-5=-1135/50, 5-6=-25/698, 6-7=-22/1219, 7-8=-22/1219,  
 8-9=-23/697, 9-10=-1135/49, 10-11=-1791/0, 11-12=-1705/15  
 BOT CHORD 2-17=-50/1399, 16-17=-50/1399, 14-16=0/1192, 13-14=0/1337, 12-13=0/1337  
 WEBS 4-16=0/967, 5-18=-2136/109, 9-18=-2129/103, 10-14=0/968, 3-17=-401/69,  
 3-16=-322/163, 11-13=-392/71, 11-14=-346/176, 8-18=-261/382, 6-18=-257/384

- 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=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=15.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
  - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.0 psf on overhangs non-concurrent with other live loads.
  - Provide adequate drainage to prevent water ponding.
  - All plates are MT20 plates unless otherwise indicated.
  - 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 1-0-0 wide will fit between the bottom chord and any other members.
  - Ceiling dead load (5.0 psf) on member(s). 4-5, 9-10, 5-18, 9-18
  - Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 14-16
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 5 lb uplift at joint 2.



October 1, 2021

|          |       |            |     |     |                          |           |
|----------|-------|------------|-----|-----|--------------------------|-----------|
| Job      | Truss | Truss Type | Qty | Ply | DON GILMORE              | I48157188 |
| DO210933 | TGE1  | GABLE      | 1   | 1   | Job Reference (optional) |           |

Truss Builders, Inc., Morrisville, NC - 27560,

8.430 s Aug 16 2021 MITek Industries, Inc. Thu Sep 30 10:15:07 2021 Page 2  
 ID:iC31OG5R74jf1UmnMaZi7HyYoRF-n9PAJ2\_trZkLRr4476kt1b1dh7XiZofBSVX7n2yYTc2

**NOTES-**

- 16) This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
- 17) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 18) Attic room checked for L/360 deflection.

**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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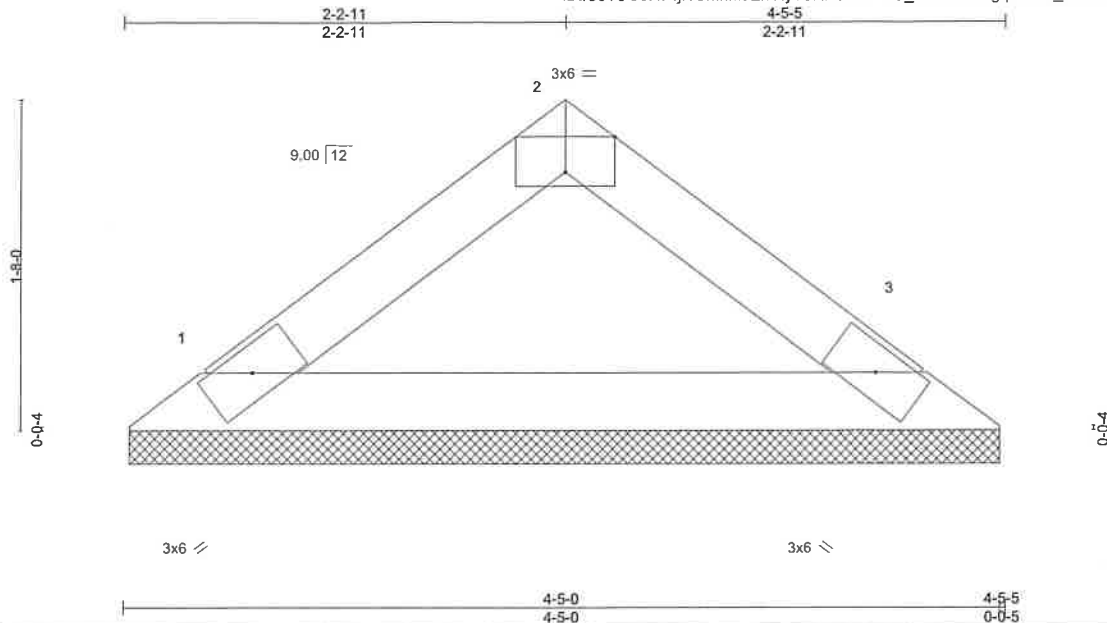
|          |       |            |     |     |             |           |
|----------|-------|------------|-----|-----|-------------|-----------|
| Job      | Truss | Truss Type | Qty | Ply | DON GILMORE | 148157189 |
| DO210933 | V1    | Valley     | 2   | 1   |             |           |

Job Reference (optional)

Truss Builders, Inc., Morrisville, NC - 27560,

8,430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 30 10:15:08 2021 Page 1

ID:iC31OG5R74jf1UmnMaZf7HyYoRF-GMzYWO\_VctsC37fGgqF6aoa\_uX1QITNLh9GhJvYtCt



Scale = 1:11.1

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

| LOADING (psf)    | SPACING-             | CSI.     | DEFL.    | in (loc) | l/defl | L/d | PLATES        | GRIP    |
|------------------|----------------------|----------|----------|----------|--------|-----|---------------|---------|
| TCLL (roof) 20.0 | 2-0-0                | TC 0.05  | Vert(LL) | n/a      | -      | n/a | MT20          | 244/190 |
| Snow (Pf) 15.0   | Plate Grip DOL 1.15  | BC 0.15  | Vert(CT) | n/a      | -      | n/a |               |         |
| TCDL 10.0        | Lumber DOL 1.15      | WB 0.00  | Horz(CT) | 0.00     | 3      | n/a |               |         |
| BCLL 0.0 *       | Rep Stress Incr YES  | Matrix-P |          |          |        |     | Weight: 13 lb | FT = 6% |
| BCDL 10.0        | Code IBC2015/TPI2014 |          |          |          |        |     |               |         |

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.**

(size) 1=4-4-11, 3=4-4-11  
Max Horz 1=-26(LC 6)  
Max Uplift 1=-2(LC 10), 3=-2(LC 11)  
Max Grav 1=143(LC 2), 3=143(LC 2)

**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; BC DL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=15.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- 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 1-0-0 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 2 lb uplift at joint 1 and 2 lb uplift at joint 3.
- 8) This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.



October 1, 2021

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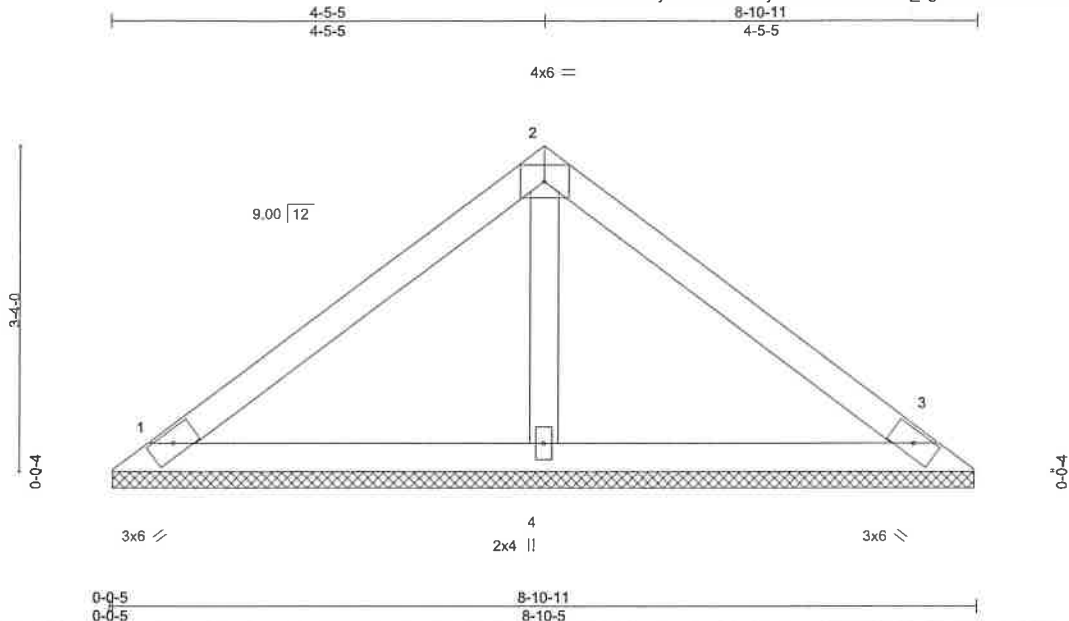


818 Soundside Road  
Edenton, NC 27932

|          |       |            |     |     |                          |           |
|----------|-------|------------|-----|-----|--------------------------|-----------|
| Job      | Truss | Truss Type | Qty | Ply | DON GILMORE              | 148157190 |
| DO210933 | V2    | Valley     | 2   | 1   | Job Reference (optional) |           |

Truss Builders, Inc., Morrisville, NC - 27560,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 30 10:15:09 2021 Page 1  
ID:IC310GSR74j1UmnMaZf7HyYoRf-kYXwkk?7NA\_3g8ETEXmL7064cxNX1wwUvp0ExyYtCo



Scale = 1:22.5

| LOADING (psf)    | SPACING-             | CSI.     | DEFL.                   | PLATES        | GRIP    |
|------------------|----------------------|----------|-------------------------|---------------|---------|
| TCLL (roof) 20.0 | 2-0-0                | TC 0.31  | in (loc) l/def L/d      | MT20          | 244/190 |
| Snow (Pf) 15.0   | Plate Grip DOL 1.15  | BC 0.16  | Vert(LL) n/a - n/a 999  |               |         |
| TCDL 10.0        | Lumber DOL 1.15      | WB 0.05  | Vert(CT) n/a - n/a 999  |               |         |
| BCLL 0.0         | Rep Stress Incr YES  | Matrix-P | Horz(CT) 0.00 3 n/a n/a |               |         |
| BCDL 10.0        | Code IBC2015/TPI2014 |          |                         | Weight: 32 lb | FT = 6% |

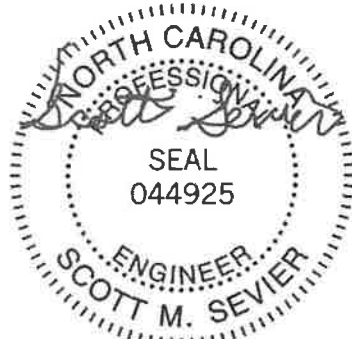
**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
OTHERS 2x4 SP No.3

**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.** (size) 1=8-10-0, 3=8-10-0, 4=8-10-0  
Max Horz 1=-58(LC 6)  
Max Uplift 1=-20(LC 10), 3=-27(LC 11)  
Max Grav 1=179(LC 2), 3=179(LC 2), 4=284(LC 2)

**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; TCCL=6.0psf; BCCL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
  - TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=15.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
  - Gable requires continuous bottom chord bearing.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 20 lb uplift at joint 1 and 27 lb uplift at joint 3.
  - This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.



October 1,2021

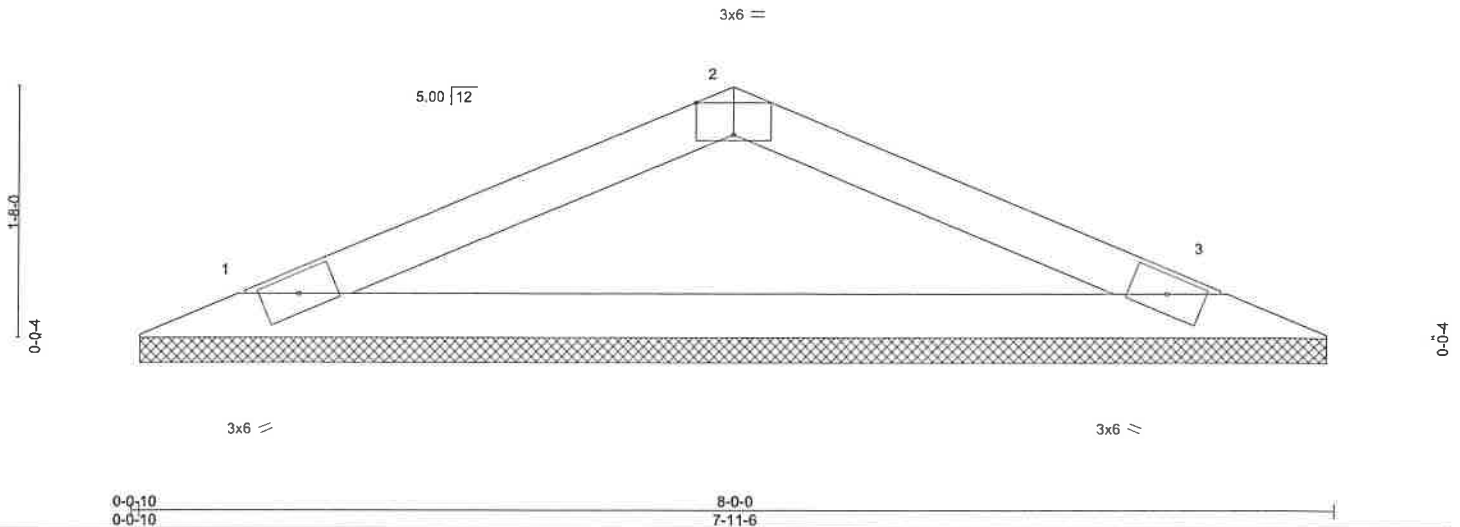
|          |       |            |     |     |             |           |
|----------|-------|------------|-----|-----|-------------|-----------|
| Job      | Truss | Truss Type | Qty | Ply | DON GILMORE | 148157191 |
| DO210933 | V3    | Valley     | 1   | 1   |             |           |

Truss Builders, Inc., Morrisville, NC - 27560.

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 30 10:15:10 2021 Page 1  
ID:iC31OG5R74j1UmnMaZf7HyYgRf-Ck5lx40l8U6wllfofoEHalDfGBKdUmNte8TinONyYTc?



Scale = 1:14.6



| Plate Offsets (X,Y)-- [2:0-3-0,Edge] |      | 8-0-0                |       | 7-11-6      |      | 0-0-10       |          | 0-0-10 |     |               |               |         |
|--------------------------------------|------|----------------------|-------|-------------|------|--------------|----------|--------|-----|---------------|---------------|---------|
| <b>LOADING (psf)</b>                 |      | <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 (roof)                          | 20.0 | Plate Grip DOL       | 1.15  | TC          | 0.19 | Vert(LL)     | n/a      | -      | n/a | 999           | MT20          | 244/190 |
| Snow (Pf)                            | 15.0 | Lumber DOL           | 1.15  | BC          | 0.56 | Vert(CT)     | n/a      | -      | n/a | 999           |               |         |
| TCDL                                 | 10.0 | Rep Stress Incr      | YES   | WB          | 0.00 | Horz(CT)     | 0.00     | 3      | n/a | n/a           |               |         |
| BCLL                                 | 0.0  | Code IBC2015/TPI2014 |       | Matrix-P    |      |              |          |        |     |               |               |         |
| BCDL                                 | 10.0 |                      |       |             |      |              |          |        |     |               | Weight: 22 lb | FT = 6% |

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.**

(size) 1=7-10-13, 3=7-10-13  
Max Horz 1=18(LC 17)  
Max Uplift 1=8(LC 12), 3=8(LC 13)  
Max Grav 1=260(LC 2), 3=260(LC 2)

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

TOP CHORD 1-2=282/60, 2-3=282/60

**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=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=15.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 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 1-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 8 lb uplift at joint 1 and 8 lb uplift at joint 3.
- This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.



October 1, 2021

**WARNING -** Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MH-7473 rev. 5/19/2020 BEFORE USE  
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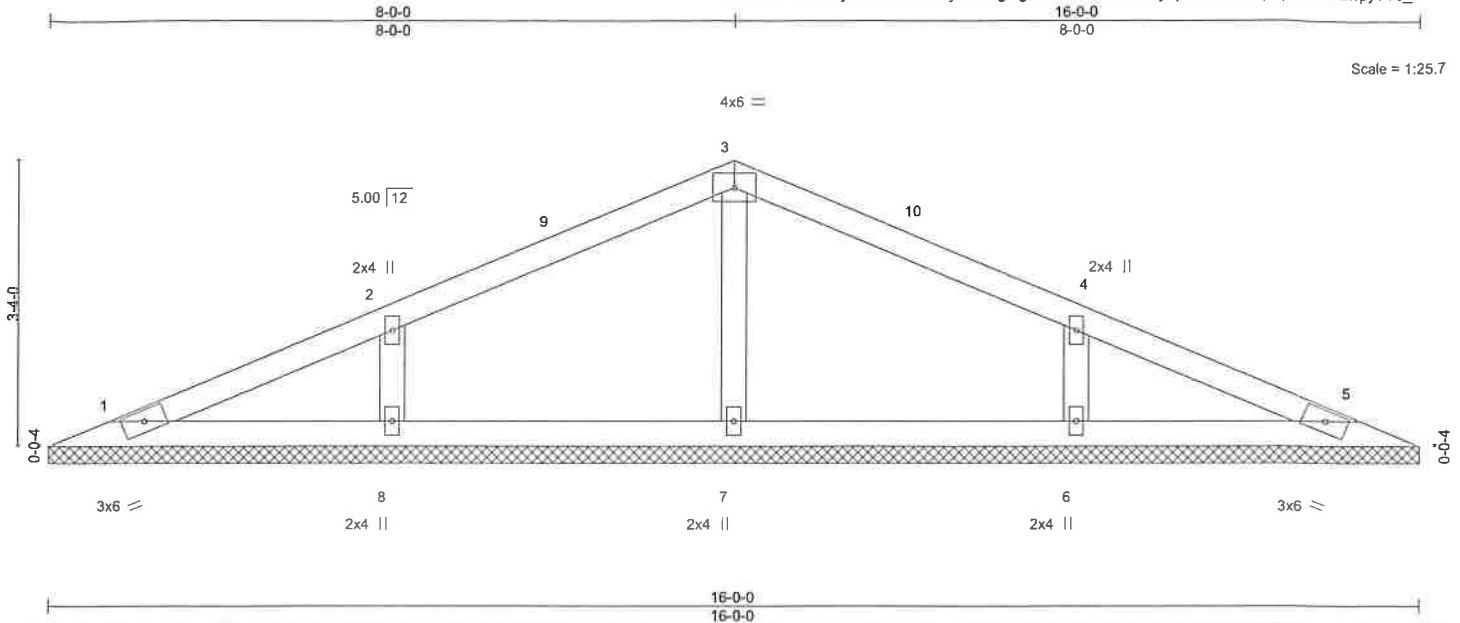
|          |       |            |     |     |             |           |
|----------|-------|------------|-----|-----|-------------|-----------|
| Job      | Truss | Truss Type | Qty | Ply | DON GILMORE | 148157192 |
| DO210933 | V4    | GABLE      | 1   | 1   |             |           |

Truss Builders, Inc., Morrisville, NC - 27560,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Sep 30 10:15:11 2021 Page 1

ID:iC31OG5R74jff1UmnMaZi7HyYoRf-gxfg8Q1NuoEnwSNrMyopCRCSEk4qVqEnN7VLwpyYtC\_

Scale = 1:25.7



| LOADING (psf)    | SPACING-             | CSI.     | DEFL.                   | PLATES        | GRIP    |
|------------------|----------------------|----------|-------------------------|---------------|---------|
| TCLL (roof) 20.0 | 2-0-0                | TC 0.18  | in (loc) l/defl L/d     | MT20          | 244/190 |
| Snow (Pf) 15.0   | Plate Grip DOL 1.15  | BC 0.11  | Vert(LL) n/a - n/a 999  |               |         |
| TCDL 10.0        | Lumber DOL 1.15      | WB 0.06  | Vert(CT) n/a - n/a 999  |               |         |
| BCLL 0.0 *       | Rep Stress Incr YES  | Matrix-R | Horz(CT) 0.00 5 n/a n/a |               |         |
| BCDL 10.0        | Code IBC2015/TPI2014 |          |                         | Weight: 54 lb | FT = 6% |

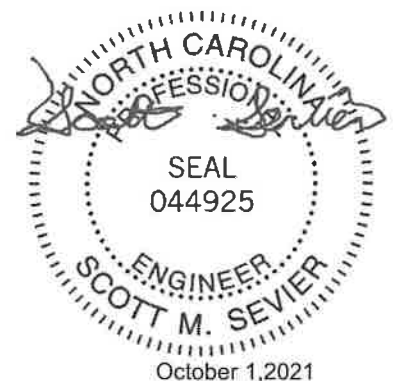
**LUMBER-**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2  
 OTHERS 2x4 SP No.3

**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 16-0-0.  
 (lb) - Max Horz 1=-40(LC 17)  
 Max Uplift All uplift 100 lb or less at joint(s) 5, 8, 6  
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=303(LC 2), 8=333(LC 29), 6=333(LC 30)

**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=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
  - TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=15.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
  - Unbalanced snow loads have been considered for this design.
  - Gable requires continuous bottom chord bearing.
  - This truss has been designed for a 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 1-0-0 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) 5, 8, 6.
  - This truss is designed in accordance with the 2015 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.



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

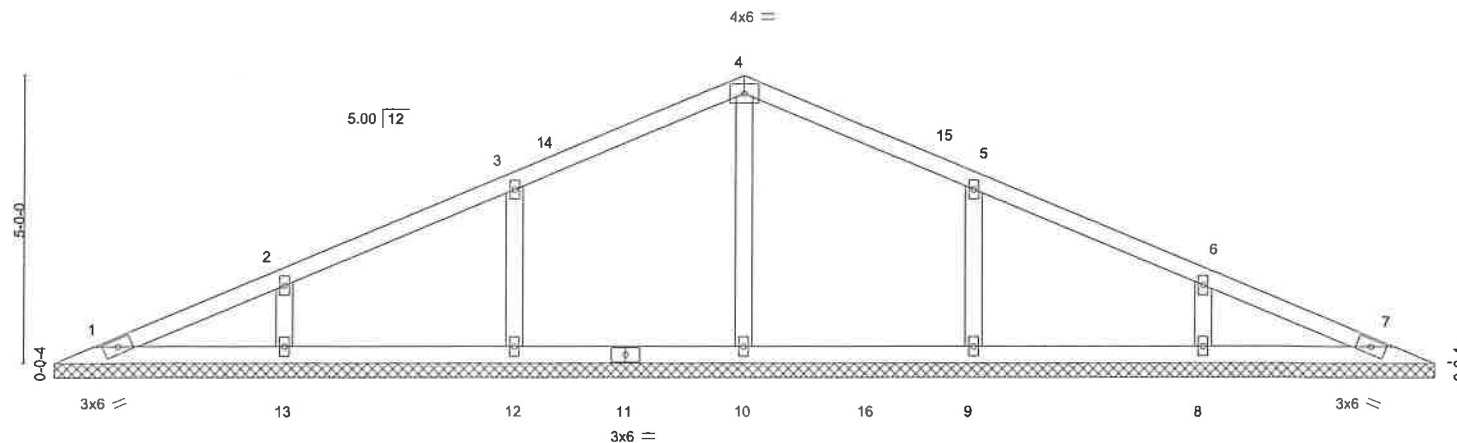
|                 |             |                     |          |          |             |          |
|-----------------|-------------|---------------------|----------|----------|-------------|----------|
| Job<br>DO210933 | Truss<br>V5 | Truss Type<br>GABLE | Qty<br>1 | Ply<br>1 | DON GILMORE | 48157193 |
|-----------------|-------------|---------------------|----------|----------|-------------|----------|

Truss Builders, Inc., Morrisville, NC 8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Oct 1 13:37:13 2021 Page 1

ID:IC310G5R74f1UmnMaZi7HyYoRF-IsMDWJkW89LdSPwzFEXJF6JWwgT1Fwh7KexSSyXmSa

12-0-0 12-0-0 24-0-0 24-0-0 12-0-0

Scale = 1:38.2



|               |       |                      |                |          |      |          |      |       |        |        |               |         |  |
|---------------|-------|----------------------|----------------|----------|------|----------|------|-------|--------|--------|---------------|---------|--|
| LOADING (psf) |       | SPACING-             |                | CSI.     |      | DEFL.    |      |       |        | PLATES |               | GRIP    |  |
| TCLL (roof)   | 20.0  | 2-0-0                | Plate Grip DOL | 1.15     | TC   | 0.18     | in   | (loc) | l/defl | L/d    | MT20          | 244/190 |  |
| Snow (Pf)     | 15.0  | Lumber DOL           | 1.15           | BC       | 0.14 | Vert(LL) | n/a  | -     | n/a    | 999    |               |         |  |
| TCDL          | 10.0  | Rep Stress Incr      | YES            | WB       | 0.10 | Vert(CT) | n/a  | -     | n/a    | 999    |               |         |  |
| BCLL          | 0.0 * | Code IBC2015/TPI2014 |                | Matrix-R |      | Horz(CT) | 0.00 | 7     | n/a    | n/a    |               |         |  |
| BCDL          | 10.0  |                      |                |          |      |          |      |       |        |        | Weight: 90 lb | FT = 6% |  |

**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 purfins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** All bearings 24-0-0.  
(lb) - Max Horz 1=61(LC 13)  
Max Uplift All uplift 100 lb or less at joint(s) 12, 13, 9, 8  
Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 10=372(LC 3), 12=331(LC 29), 13=322(LC 2), 9=331(LC 30), 8=322(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**WEBS** 3-12=252/99, 5-9=-252/99

- 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=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
  - 3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=15.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
  - 4) Unbalanced snow loads have been considered for this design.
  - 5) All plates are 2x4 MT20 unless otherwise indicated.
  - 6) Gable requires continuous bottom chord bearing.
  - 7) This truss has been designed for a 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 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12, 13, 9, 8.

- LOAD CASE(S)**
- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-4=-50, 4-7=-50, 1-7=-20
  - 2) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-4=-60, 4-7=-60, 1-7=-20
  - 3) Dead + 0.75 Roof Live (balanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-4=-50, 4-7=-50, 1-11=-20, 11-16=-50, 7-16=-20
  - 4) Dead + 0.75 Snow (balanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-4=-42, 4-7=-43, 1-11=-20, 11-16=-50, 7-16=-20



Continued on page 2

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Edenton, NC 27932

|          |       |            |     |     |             |           |
|----------|-------|------------|-----|-----|-------------|-----------|
| Job      | Truss | Truss Type | Qty | Ply | DON GILMORE | 148157193 |
| DO210933 | V5    | GABLE      | 1   | 1   |             |           |

Truss Builders, Inc., Morrisville, NC

Job Reference (optional)

**LOAD CASE(S)**

- 5) Dead + 0.75 Snow (Unbal. Left) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-14=-42, 4-14=-55, 4-7=-27, 1-11=-20, 11-16=-50, 7-16=-20
- 6) Dead + 0.75 Snow (Unbal. Right) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-4=-27, 4-15=-55, 7-15=-43, 1-11=-20, 11-16=-50, 7-16=-20
- 7) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25  
Uniform Loads (plf)  
Vert: 1-4=-20, 4-7=-20, 1-7=-40
- 8) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.33, Plate Increase=1.33  
Uniform Loads (plf)  
Vert: 1-4=10, 4-7=8, 1-7=-12  
Horz: 1-4=-22, 4-7=20
- 9) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.33, Plate Increase=1.33  
Uniform Loads (plf)  
Vert: 1-4=8, 4-7=10, 1-7=-12  
Horz: 1-4=-20, 4-7=22
- 10) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.33, Plate Increase=1.33  
Uniform Loads (plf)  
Vert: 1-4=7, 4-7=-9, 1-7=-20  
Horz: 1-4=-13, 4-7=11
- 11) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.33, Plate Increase=1.33  
Uniform Loads (plf)  
Vert: 1-4=9, 4-7=-7, 1-7=-20  
Horz: 1-4=-11, 4-7=13
- 12) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.33, Plate Increase=1.33  
Uniform Loads (plf)  
Vert: 1-4=18, 4-7=5, 1-7=-12  
Horz: 1-4=-30, 4-7=17
- 13) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.33, Plate Increase=1.33  
Uniform Loads (plf)  
Vert: 1-4=5, 4-7=18, 1-7=-12  
Horz: 1-4=-17, 4-7=30
- 14) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.33, Plate Increase=1.33  
Uniform Loads (plf)  
Vert: 1-4=9, 4-7=1, 1-7=-12  
Horz: 1-4=-21, 4-7=13
- 15) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.33, Plate Increase=1.33  
Uniform Loads (plf)  
Vert: 1-4=1, 4-7=9, 1-7=-12  
Horz: 1-4=-13, 4-7=21
- 16) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.33, Plate Increase=1.33  
Uniform Loads (plf)  
Vert: 1-4=2, 4-7=-12, 1-7=-20  
Horz: 1-4=-22, 4-7=8
- 17) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.33, Plate Increase=1.33  
Uniform Loads (plf)  
Vert: 1-4=-12, 4-7=2, 1-7=-20  
Horz: 1-4=8, 4-7=22
- 18) Dead + Snow (Unbal. Left): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-14=-50, 4-14=-67, 4-7=-29, 1-7=-20
- 19) Dead + Snow (Unbal. Right): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-4=-29, 4-15=-67, 7-15=-50, 1-7=-20
- 20) Dead + Uninhabitable Attic Storage: Lumber Increase=1.25, Plate Increase=1.25  
Uniform Loads (plf)  
Vert: 1-4=-20, 4-7=-20, 1-11=-20, 11-16=-60, 7-16=-20
- 21) Dead + 0.75 Snow (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.33, Plate Increase=1.33  
Uniform Loads (plf)  
Vert: 1-4=-33, 4-7=-34, 1-11=-20, 11-16=-50, 7-16=-20  
Horz: 1-4=-10, 4-7=8
- 22) Dead + 0.75 Snow (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.33, Plate Increase=1.33  
Uniform Loads (plf)  
Vert: 1-4=-34, 4-7=-33, 1-11=-20, 11-16=-50, 7-16=-20  
Horz: 1-4=8, 4-7=10
- 23) Dead + 0.75 Snow (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.33, Plate Increase=1.33  
Uniform Loads (plf)  
Vert: 1-4=-26, 4-7=-36, 1-11=-20, 11-16=-50, 7-16=-20  
Horz: 1-4=-16, 4-7=6
- 24) Dead + 0.75 Snow (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.33, Plate Increase=1.33

Continued on page 3

**WARNING** - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MI-7473 rev. 5/19/2020 BEFORE USE.  
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818 Soundside Road  
Edenton, NC 27932



|          |       |            |     |     |                          |           |
|----------|-------|------------|-----|-----|--------------------------|-----------|
| Job      | Truss | Truss Type | Qty | Ply | DON GILMORE              | 148157193 |
| DO210933 | V5    | GABLE      | 1   | 1   | Job Reference (optional) |           |

Truss Builders, Inc., Morrisville, NC

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Oct 1 13:37:13 2021 Page 3  
 ID:C31OG5R74jf1UmnMaZf7HyYoRf-tsMDWJkKw89LdSPwzFEXJF6JWwgT1Fwh7KexSSyXmSa

**LOAD CASE(S)**

- Uniform Loads (plf)
  - Vert: 1-4=-36, 4-7=-26, 1-11=-20, 11-16=-50, 7-16=-20
  - Horz: 1-4=-6, 4-7=16
- 25) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.33, Plate Increase=1.33
  - Uniform Loads (plf)
    - Vert: 1-4=-40, 4-7=-42, 1-11=-20, 11-16=-50, 7-16=-20
    - Horz: 1-4=-10, 4-7=8
- 26) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.33, Plate Increase=1.33
  - Uniform Loads (plf)
    - Vert: 1-4=-42, 4-7=-40, 1-11=-20, 11-16=-50, 7-16=-20
    - Horz: 1-4=-8, 4-7=10
- 27) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.33, Plate Increase=1.33
  - Uniform Loads (plf)
    - Vert: 1-4=-34, 4-7=-44, 1-11=-20, 11-16=-50, 7-16=-20
    - Horz: 1-4=-16, 4-7=6
- 28) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.33, Plate Increase=1.33
  - Uniform Loads (plf)
    - Vert: 1-4=-44, 4-7=-34, 1-11=-20, 11-16=-50, 7-16=-20
    - Horz: 1-4=-6, 4-7=16
- 29) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
  - Uniform Loads (plf)
    - Vert: 1-4=-60, 4-7=-20, 1-7=-20
- 30) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
  - Uniform Loads (plf)
    - Vert: 1-4=-20, 4-7=-60, 1-7=-20
- 31) 3rd Dead + 0.75 Roof Live (unbalanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15
  - Uniform Loads (plf)
    - Vert: 1-4=-50, 4-7=-20, 1-11=-20, 11-16=-50, 7-16=-20
- 32) 4th Dead + 0.75 Roof Live (unbalanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15
  - Uniform Loads (plf)
    - Vert: 1-4=-20, 4-7=-50, 1-11=-20, 11-16=-50, 7-16=-20

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|                 |             |                     |          |          |             |           |
|-----------------|-------------|---------------------|----------|----------|-------------|-----------|
| Job<br>DO210933 | Truss<br>V6 | Truss Type<br>GABLE | Qty<br>1 | Ply<br>1 | DON GILMORE | I48157194 |
|-----------------|-------------|---------------------|----------|----------|-------------|-----------|

Truss Builders, Inc., Morrisville, NC  
 8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Oct 1 13:38:02 2021 Page 1  
 ID:iC31OG5R74j1UmnMaZ7HyYoRf-xHpko3LT\_CK00\_eLL2c0aeh8gOV00tuOS01f7yXmRp



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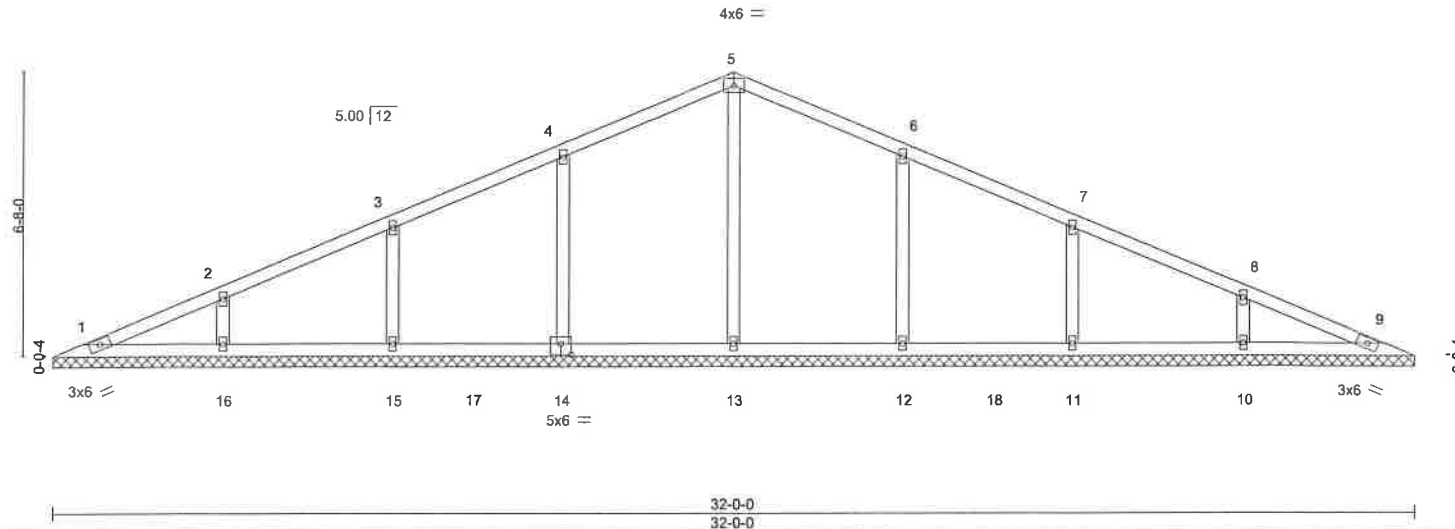


Plate Offsets (X,Y)- [14:0-3-0,0-3-0]

| LOADING (psf)    | SPACING-             | CSI.     | DEFL.                   | PLATES         | GRIP    |
|------------------|----------------------|----------|-------------------------|----------------|---------|
| TCLL (roof) 20.0 | 2-0-0                | TC 0.18  | in (loc) l/defl L/d     | MT20           | 244/190 |
| Snow (Pf) 15.0   | Plate Grip DOL 1.15  | BC 0.17  | Vert(LL) n/a - n/a 999  |                |         |
| TCDL 10.0        | Lumber DOL 1.15      | WB 0.18  | Vert(CT) n/a - n/a 999  |                |         |
| BCLL 0.0 *       | Rep Stress Incr YES  | Matrix-R | Horz(CT) 0.00 9 n/a n/a |                |         |
| BCDL 10.0        | Code IBC2015/TPI2014 |          |                         | Weight: 130 lb | FT = 6% |

**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 32-0-0.  
 (lb) - Max Horz 1=83(LC 13)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 14, 15, 16, 12, 11, 10  
 Max Grav All reactions 250 lb or less at joint(s) 1, 9 except 13=392(LC 28), 14=406(LC 5), 15=319(LC 2), 16=323(LC 29), 12=405(LC 6), 11=320(LC 2), 10=323(LC 30)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**WEBS** 4-14=257/97, 6-12=256/97

- 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=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
  - 3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=15.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
  - 4) Unbalanced snow loads have been considered for this design.
  - 5) All plates are 2x4 MT20 unless otherwise indicated.
  - 6) Gable requires continuous bottom chord bearing.
  - 7) This truss has been designed for a 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 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 14, 15, 16, 12, 11, 10.

- LOAD CASE(S)**
- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-5=-50, 5-9=-50, 1-9=-20
  - 2) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-5=-60, 5-9=-60, 1-9=-20
  - 3) Dead + 0.75 Roof Live (balanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-5=-50, 5-9=-50, 1-17=-20, 17-18=-50, 9-18=-20
  - 4) Dead + 0.75 Snow (balanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15

October 1, 2021



|                 |             |                     |          |          |             |           |
|-----------------|-------------|---------------------|----------|----------|-------------|-----------|
| Job<br>DO210933 | Truss<br>V6 | Truss Type<br>GABLE | Qty<br>1 | Ply<br>1 | DON GILMORE | I48157194 |
|-----------------|-------------|---------------------|----------|----------|-------------|-----------|

Truss Builders, Inc., Morrisville, NC

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Oct 1 13:38:02 2021 Page 2  
ID:IC31OG5R74jf1UmnMaZf7HyYoRf-xHpko3LT\_CK00\_eLL2c0aah8gOV00tuOS01f7yXmRp

**LOAD CASE(S)**

- Uniform Loads (plf)  
Vert: 1-5=-43, 5-9=-43, 1-17=-20, 17-18=-50, 9-18=-20
- 5) Dead + 0.75 Snow (Unbal. Left) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-4=-43, 4-5=-59, 5-9=-27, 1-17=-20, 17-18=-50, 9-18=-20
- 6) Dead + 0.75 Snow (Unbal. Right) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-5=-27, 5-6=-59, 6-9=-42, 1-17=-20, 17-18=-50, 9-18=-20
- 7) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25  
Uniform Loads (plf)  
Vert: 1-5=-20, 5-9=-20, 1-9=-40
- 8) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.33, Plate Increase=1.33  
Uniform Loads (plf)  
Vert: 1-5=10, 5-9=8, 1-9=-12  
Horz: 1-5=-22, 5-9=20
- 9) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.33, Plate Increase=1.33  
Uniform Loads (plf)  
Vert: 1-5=8, 5-9=10, 1-9=-12  
Horz: 1-5=-20, 5-9=22
- 10) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.33, Plate Increase=1.33  
Uniform Loads (plf)  
Vert: 1-5=-7, 5-9=-9, 1-9=-20  
Horz: 1-5=13, 5-9=11
- 11) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.33, Plate Increase=1.33  
Uniform Loads (plf)  
Vert: 1-5=-9, 5-9=-7, 1-9=-20  
Horz: 1-5=-11, 5-9=13
- 12) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.33, Plate Increase=1.33  
Uniform Loads (plf)  
Vert: 1-5=18, 5-9=5, 1-9=-12  
Horz: 1-5=30, 5-9=17
- 13) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.33, Plate Increase=1.33  
Uniform Loads (plf)  
Vert: 1-5=5, 5-9=18, 1-9=-12  
Horz: 1-5=17, 5-9=30
- 14) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.33, Plate Increase=1.33  
Uniform Loads (plf)  
Vert: 1-5=9, 5-9=1, 1-9=-12  
Horz: 1-5=-21, 5-9=13
- 15) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.33, Plate Increase=1.33  
Uniform Loads (plf)  
Vert: 1-5=1, 5-9=9, 1-9=-12  
Horz: 1-5=-13, 5-9=21
- 16) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.33, Plate Increase=1.33  
Uniform Loads (plf)  
Vert: 1-5=2, 5-9=-12, 1-9=-20  
Horz: 1-5=-22, 5-9=8
- 17) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.33, Plate Increase=1.33  
Uniform Loads (plf)  
Vert: 1-5=-12, 5-9=2, 1-9=-20  
Horz: 1-5=8, 5-9=22
- 18) Dead + Snow (Unbal. Left): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-4=-50, 4-5=-72, 5-9=-29, 1-9=-20
- 19) Dead + Snow (Unbal. Right): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-5=-29, 5-6=-72, 6-9=-50, 1-9=-20
- 20) Dead + Uninhabitable Attic Storage: Lumber Increase=1.25, Plate Increase=1.25  
Uniform Loads (plf)  
Vert: 1-5=-20, 5-9=-20, 1-17=-20, 17-18=-60, 9-18=-20
- 21) Dead + 0.75 Snow (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.33, Plate Increase=1.33  
Uniform Loads (plf)  
Vert: 1-5=-33, 5-9=-34, 1-17=-20, 17-18=-50, 9-18=-20  
Horz: 1-5=-10, 5-9=8
- 22) Dead + 0.75 Snow (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.33, Plate Increase=1.33  
Uniform Loads (plf)  
Vert: 1-5=-34, 5-9=-33, 1-17=-20, 17-18=-50, 9-18=-20  
Horz: 1-5=8, 5-9=10
- 23) Dead + 0.75 Snow (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.33, Plate Increase=1.33  
Uniform Loads (plf)  
Vert: 1-5=-26, 5-9=-36, 1-17=-20, 17-18=-50, 9-18=-20  
Horz: 1-5=-16, 5-9=6

Continued on page 3

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|                 |             |                     |          |          |   |           |
|-----------------|-------------|---------------------|----------|----------|---|-----------|
| Job<br>DO210933 | Truss<br>V6 | Truss Type<br>GABLE | Qty<br>1 | Ply<br>1 | DON GILMORE<br>Job Reference (optional) | 148157194 |
|-----------------|-------------|---------------------|----------|----------|---|-----------|

Truss Builders, Inc., Morrisville, NC

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Oct 1 13:38:02 2021 Page 3  
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**LOAD CASE(S)**

- 24) Dead + 0.75 Snow (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.33, Plate Increase=1.33  
Uniform Loads (plf)  
Vert: 1-5=-36, 5-9=-26, 1-17=-20, 17-18=-50, 9-18=-20  
Horz: 1-5=-6, 5-9=16
- 25) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.33, Plate Increase=1.33  
Uniform Loads (plf)  
Vert: 1-5=-40, 5-9=-42, 1-17=-20, 17-18=-50, 9-18=-20  
Horz: 1-5=-10, 5-9=8
- 26) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.33, Plate Increase=1.33  
Uniform Loads (plf)  
Vert: 1-5=-42, 5-9=-40, 1-17=-20, 17-18=-50, 9-18=-20  
Horz: 1-5=-8, 5-9=10
- 27) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.33, Plate Increase=1.33  
Uniform Loads (plf)  
Vert: 1-5=-34, 5-9=-44, 1-17=-20, 17-18=-50, 9-18=-20  
Horz: 1-5=-16, 5-9=6
- 28) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.33, Plate Increase=1.33  
Uniform Loads (plf)  
Vert: 1-5=-44, 5-9=-34, 1-17=-20, 17-18=-50, 9-18=-20  
Horz: 1-5=-6, 5-9=16
- 29) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-5=-60, 5-9=-20, 1-9=-20
- 30) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-5=-20, 5-9=-60, 1-9=-20
- 31) 3rd Dead + 0.75 Roof Live (unbalanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-5=-50, 5-9=-20, 1-17=-20, 17-18=-50, 9-18=-20
- 32) 4th Dead + 0.75 Roof Live (unbalanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-5=-20, 5-9=-50, 1-17=-20, 17-18=-50, 9-18=-20

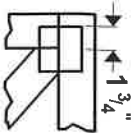
**WARNING** - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MI-7473 rev. 5/19/2020 BEFORE USE  
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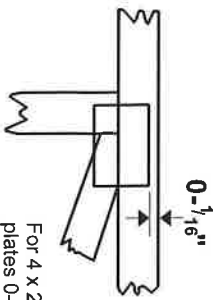
818 Soundside Road  
Edenton, NC 27932

# 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

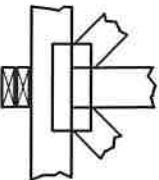
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## 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



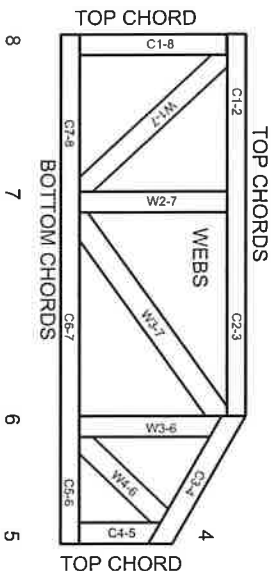
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

## Industry Standards:

ANSI/TP1: National Design Specification for Metal Plate Connected Wood Truss Construction.  
DSB-89: Design Standard for Bracing.  
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

# Numbering System

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



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

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

## PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

Lumber design values are in accordance with ANSI/TP1 1 section 6.3 These truss designs rely on lumber values established by others.

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# General Safety Notes

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

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TP1 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TP1 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.