

RE: 23-7318-A  
 RVF-LOT #26 ROOF

Trenco  
 818 Soundside Rd  
 Edenton, NC 27932

**Site Information:**

Customer: Project Name: 23-7318-A  
 Lot/Block: Model:  
 Address: Subdivision:  
 City: State:

**General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):**

Design Code: IRC2018/TPI2014 Design Program: MiTek 20/20 8.5  
 Wind Code: ASCE 7-16 Wind Speed: 130 mph  
 Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 24 individual, dated Truss Design Drawings and 0 Additional Drawings.

| No. | Seal#     | Truss Name | Date      | No. | Seal#     | Truss Name | Date      |
|-----|-----------|------------|-----------|-----|-----------|------------|-----------|
| 1   | I58636608 | CJ01       | 5/31/2023 | 21  | I58636628 | V01        | 5/31/2023 |
| 2   | I58636609 | J01        | 5/31/2023 | 22  | I58636629 | V02        | 5/31/2023 |
| 3   | I58636610 | J02        | 5/31/2023 | 23  | I58636630 | V03        | 5/31/2023 |
| 4   | I58636611 | M01        | 5/31/2023 | 24  | I58636631 | V04        | 5/31/2023 |
| 5   | I58636612 | M01G       | 5/31/2023 |     |           |            |           |
| 6   | I58636613 | M01GE      | 5/31/2023 |     |           |            |           |
| 7   | I58636614 | M02        | 5/31/2023 |     |           |            |           |
| 8   | I58636615 | M03        | 5/31/2023 |     |           |            |           |
| 9   | I58636616 | SM01G      | 5/31/2023 |     |           |            |           |
| 10  | I58636617 | T01        | 5/31/2023 |     |           |            |           |
| 11  | I58636618 | T01GE      | 5/31/2023 |     |           |            |           |
| 12  | I58636619 | T02G       | 5/31/2023 |     |           |            |           |
| 13  | I58636620 | T02GE      | 5/31/2023 |     |           |            |           |
| 14  | I58636621 | T03        | 5/31/2023 |     |           |            |           |
| 15  | I58636622 | T03G       | 5/31/2023 |     |           |            |           |
| 16  | I58636623 | T03GE      | 5/31/2023 |     |           |            |           |
| 17  | I58636624 | T04        | 5/31/2023 |     |           |            |           |
| 18  | I58636625 | T04GE      | 5/31/2023 |     |           |            |           |
| 19  | I58636626 | T05        | 5/31/2023 |     |           |            |           |
| 20  | I58636627 | T05A       | 5/31/2023 |     |           |            |           |

The truss drawing(s) referenced above have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Riverside Roof Truss.

Truss Design Engineer's Name: Gilbert, Eric

My license renewal date for the state of North Carolina is December 31, 2023.

North Carolina COA: C-0844

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 TRENCO. Any project specific information included is for TRENCO customers file reference purpose only, and was not taken into account in the preparation of these designs. 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.

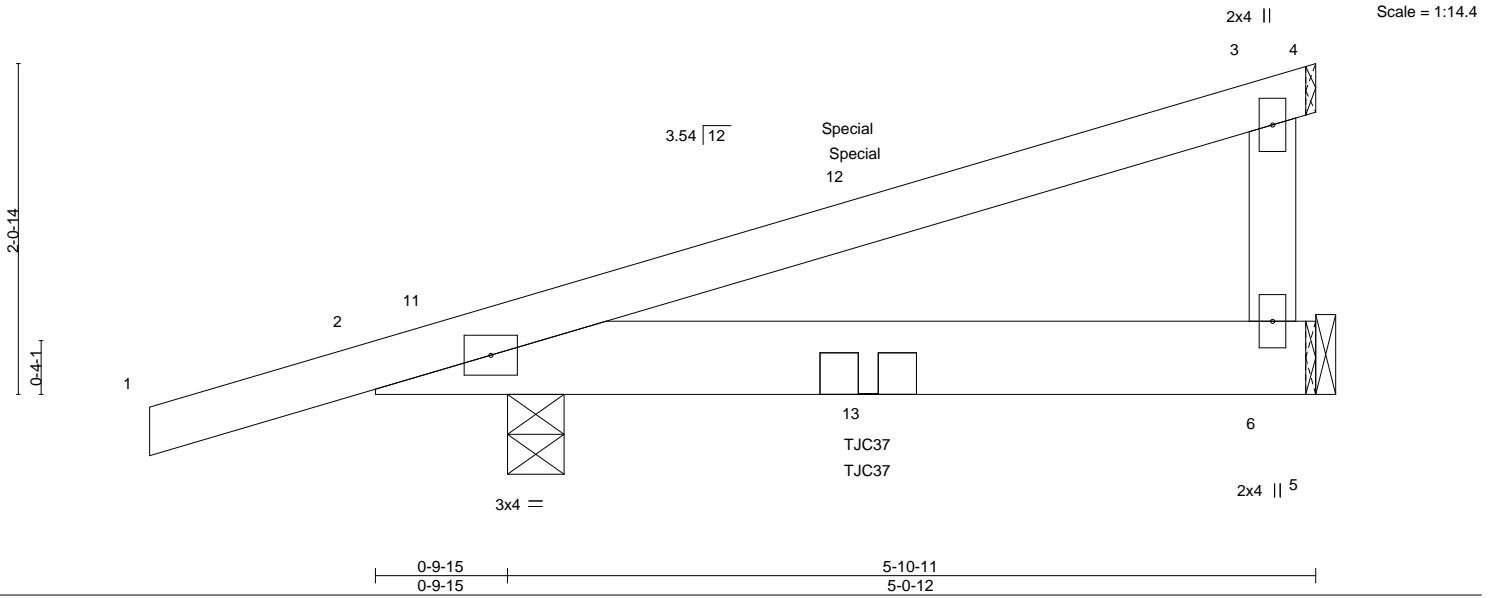


May 31, 2023

|                  |               |                                   |          |          |  |           |
|------------------|---------------|-----------------------------------|----------|----------|--|-----------|
| Job<br>23-7318-A | Truss<br>CJ01 | Truss Type<br>Diagonal Hip Girder | Qty<br>1 | Ply<br>1 | RVF-LOT #26 ROOF<br>Job Reference (optional) | 158636608 |
|------------------|---------------|-----------------------------------|----------|----------|--|-----------|

Riverside Roof Truss, LLC, Danville, Va - 24541,

8,530 s Mar 9 2023 MiTek Industries, Inc. Tue May 30 15:47:33 2023 Page 1  
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| LOADING (psf)          | SPACING-             | CSI.      | DEFL.                        | PLATES        | GRIP     |
|------------------------|----------------------|-----------|------------------------------|---------------|----------|
| TCLL (roof) 20.0       | 2-0-0                | TC 0.27   | in (loc) l/defl L/d          | MT20          | 244/190  |
| Snow (Pf/Pg) 11.6/15.0 | Plate Grip DOL 1.15  | BC 0.11   | Vert(LL) -0.01 6-10 >999 240 |               |          |
| TCDL 10.0              | Lumber DOL 1.15      | WB 0.00   | Vert(CT) -0.01 6-10 >999 180 |               |          |
| BCLL 0.0 *             | Rep Stress Incr NO   | Matrix-MP | Horz(CT) 0.00 6 n/a n/a      | Weight: 27 lb | FT = 20% |
| BCDL 10.0              | Code IRC2018/TPI2014 |           |                              |               |          |

| LUMBER-               | BRACING-  |
|-----------------------|---|
| TOP CHORD 2x4 SP No.2 | TOP CHORD Structural wood sheathing directly applied or 5-10-11 oc purlins, except end verticals. |
| BOT CHORD 2x6 SP No.2 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.                                    |
| WEBS 2x4 SP No.3      |   |

**REACTIONS.** (size) 6=Mechanical, 2=0-4-4  
 Max Horz 2=65(LC 9)  
 Max Uplift 2=-76(LC 12)  
 Max Grav 6=182(LC 17), 2=390(LC 2)

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

- NOTES-**
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; 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 1.00 times flat roof load of 11.6 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 2-0-0 wide will fit between the bottom chord and any other members.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - Use Simpson Strong-Tie TJC37 (4 nail, 30-90) or equivalent at 3-1-1 from the left end to connect truss(es) to front face of bottom chord, skewed 45.0 deg.to the left, sloping 0.0 deg. down.
  - Use Simpson Strong-Tie TJC37 (4 nail 90-150) or equivalent at 3-1-1 from the left end to connect truss(es) to back face of bottom chord, skewed 45.0 deg.to the right, sloping 0.0 deg. down.
  - Fill all nail holes where hanger is in contact with Lumber.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 48 lb down and 11 lb up at 3-1-1, and 48 lb down and 11 lb up at 3-1-1 on top chord. The design/selection of such connection device(s) is the responsibility of others.
  - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard  
 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15



|           |       |                     |     |     |                          |           |
|-----------|-------|---------------------|-----|-----|--------------------------|-----------|
| Job       | Truss | Truss Type          | Qty | Ply | RVF-LOT #26 ROOF         | I58636608 |
| 23-7318-A | CJ01  | Diagonal Hip Girder | 1   | 1   | Job Reference (optional) |           |

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8.530 s Mar 9 2023 MiTek Industries, Inc. Tue May 30 15:47:34 2023 Page 2  
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**LOAD CASE(S)** Standard

Uniform Loads (plf)

Vert: 1-3=-43, 3-4=-43, 2-5=-20

Concentrated Loads (lb)

Vert: 13=2(F=1, B=1)

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TP1 Quality Criteria and DSB-22** available from Truss Plate Institute ([www.tpinst.org](http://www.tpinst.org)) and **BCSI Building Component Safety Information** available from the Structural Building Component Association ([www.sbcacomponents.com](http://www.sbcacomponents.com))



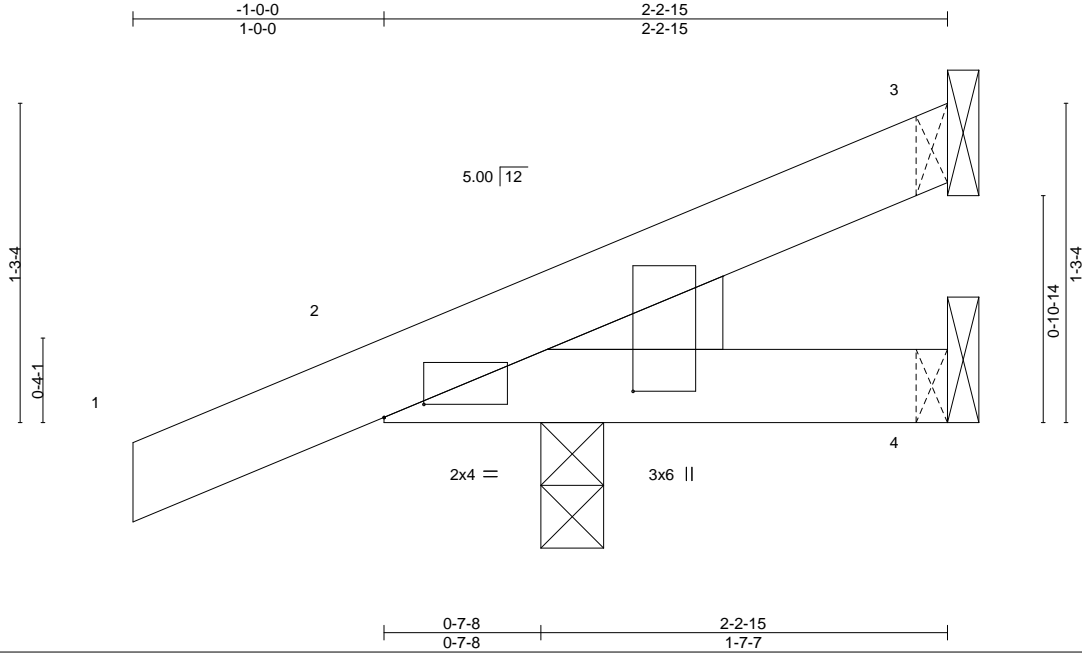
818 Soundside Road  
 Edenton, NC 27932

|           |       |            |     |     |                          |           |
|-----------|-------|------------|-----|-----|--------------------------|-----------|
| Job       | Truss | Truss Type | Qty | Ply | RVF-LOT #26 ROOF         | 158636609 |
| 23-7318-A | J01   | Jack-Open  | 1   | 1   | Job Reference (optional) |           |

Riverside Roof Truss, LLC,

Danville, Va - 24541,

8.530 s Mar 9 2023 MiTek Industries, Inc. Tue May 30 15:47:35 2023 Page 1  
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Scale = 1:9.2

|                       |                                      |
|-----------------------|--------------------------------------|
| Plate Offsets (X,Y)-- | [2:0-1-14,0-0-10], [2:0-1-4,0-11-14] |
|-----------------------|--------------------------------------|

| LOADING (psf)          | SPACING-             | CSI.      | DEFL.                     | PLATES        | GRIP     |
|------------------------|----------------------|-----------|---------------------------|---------------|----------|
| TCLL (roof) 20.0       | 2-0-0                | TC 0.09   | in (loc) l/defl L/d       | MT20          | 244/190  |
| Snow (Pf/Pg) 11.6/15.0 | Plate Grip DOL 1.15  | BC 0.07   | Vert(LL) -0.00 5 >999 240 |               |          |
| TCDL 10.0              | Lumber DOL 1.15      | WB 0.00   | Vert(CT) -0.00 5 >999 180 |               |          |
| BCLL 0.0 *             | Rep Stress Incr YES  | Matrix-MP | Horz(CT) -0.00 3 n/a n/a  |               |          |
| BCDL 10.0              | Code IRC2018/TPI2014 |           |                           | Weight: 10 lb | FT = 20% |

| LUMBER-               | BRACING-   |
|-----------------------|--|
| TOP CHORD 2x4 SP No.2 | TOP CHORD Structural wood sheathing directly applied or 2-2-15 oc purlins. |
| BOT CHORD 2x4 SP No.2 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.             |
| WEDGE                 |  |
| Left: 2x4 SP No.3     |  |

**REACTIONS.** (size) 3=Mechanical, 2=0-3-0, 4=Mechanical  
 Max Horz 2=44(LC 16)  
 Max Uplift 3=4(LC 13), 2=56(LC 16), 4=3(LC 20)  
 Max Grav 3=12(LC 28), 2=229(LC 21), 4=16(LC 7)

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

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
  - 3) Unbalanced snow loads have been considered for this design.
  - 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
  - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 7) Refer to girder(s) for truss to truss connections.
  - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2, 4.
  - 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



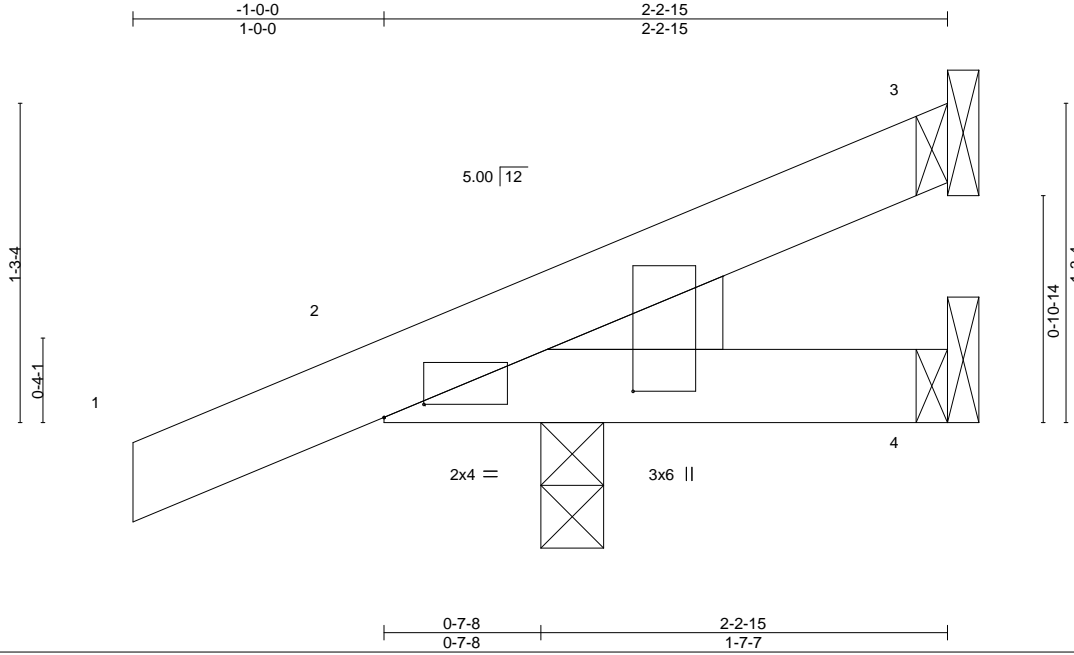
May 31, 2023

|           |       |            |     |     |                          |           |
|-----------|-------|------------|-----|-----|--------------------------|-----------|
| Job       | Truss | Truss Type | Qty | Ply | RVF-LOT #26 ROOF         | 158636610 |
| 23-7318-A | J02   | Jack-Open  | 1   | 1   | Job Reference (optional) |           |

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Scale = 1:9.2

|                       |                                      |
|-----------------------|--------------------------------------|
| Plate Offsets (X,Y)-- | [2:0-1-14,0-0-10], [2:0-1-4,0-11-14] |
|-----------------------|--------------------------------------|

| LOADING (psf)          | SPACING-             | CSI.      | DEFL.                     | PLATES        | GRIP     |
|------------------------|----------------------|-----------|---------------------------|---------------|----------|
| TCLL (roof) 20.0       | 2-0-0                | TC 0.09   | in (loc) l/defl L/d       | MT20          | 244/190  |
| Snow (Pf/Pg) 11.6/15.0 | Plate Grip DOL 1.15  | BC 0.07   | Vert(LL) -0.00 5 >999 240 |               |          |
| TCDL 10.0              | Lumber DOL 1.15      | WB 0.00   | Vert(CT) -0.00 5 >999 180 |               |          |
| BCLL 0.0 *             | Rep Stress Incr YES  | Matrix-MP | Horz(CT) -0.00 3 n/a n/a  |               |          |
| BCDL 10.0              | Code IRC2018/TPI2014 |           |                           | Weight: 10 lb | FT = 20% |

| LUMBER-               | BRACING-   |
|-----------------------|--|
| TOP CHORD 2x4 SP No.2 | TOP CHORD Structural wood sheathing directly applied or 2-2-15 oc purlins. |
| BOT CHORD 2x4 SP No.2 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.             |
| WEDGE                 |  |
| Left: 2x4 SP No.3     |  |

**REACTIONS.** (size) 3=Mechanical, 2=0-3-0, 4=Mechanical  
 Max Horz 2=44(LC 16)  
 Max Uplift 3=-4(LC 13), 2=-56(LC 16), 4=-3(LC 20)  
 Max Grav 3=12(LC 28), 2=229(LC 21), 4=16(LC 7)

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

**NOTES-**

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2, 4.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 31, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.**

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818 Soundside Road  
Edenton, NC 27932

|                  |              |                         |          |          |  |           |
|------------------|--------------|-------------------------|----------|----------|--|-----------|
| Job<br>23-7318-A | Truss<br>M01 | Truss Type<br>Monopitch | Qty<br>5 | Ply<br>1 | RVF-LOT #26 ROOF<br>Job Reference (optional) | 158636611 |
|------------------|--------------|-------------------------|----------|----------|--|-----------|

Riverside Roof Truss, LLC,

Danville, Va - 24541,

8.530 s Mar 9 2023 MiTek Industries, Inc. Tue May 30 15:47:37 2023 Page 1  
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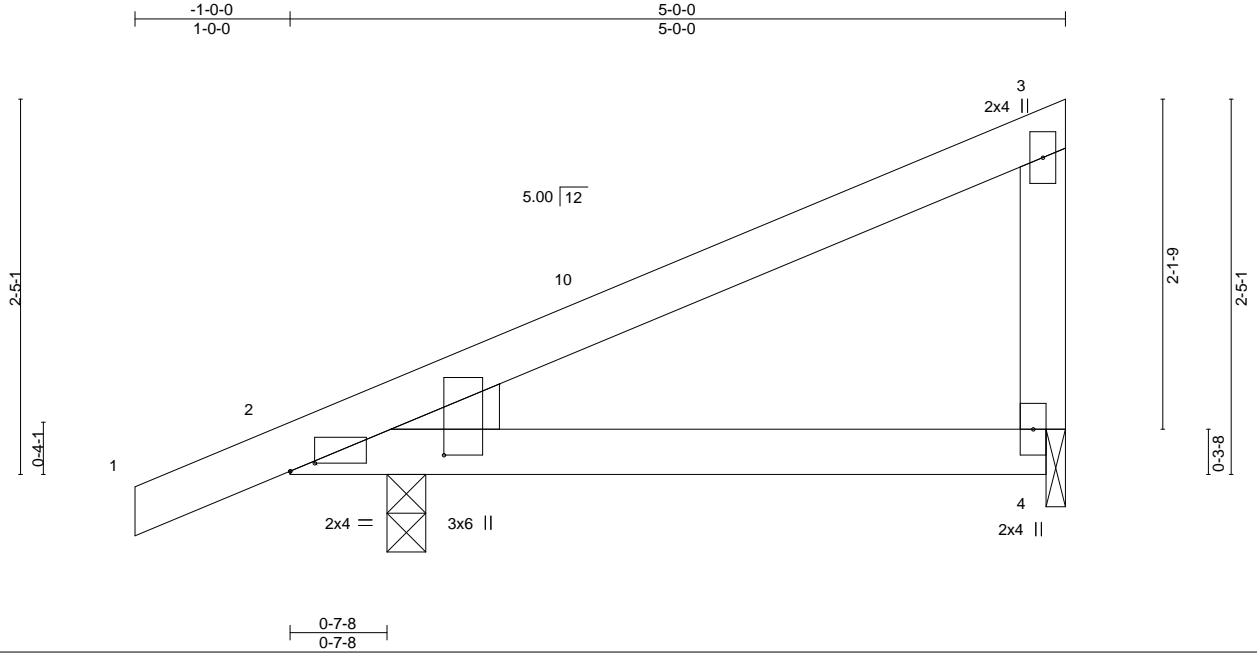


Plate Offsets (X,Y)-- [2:0-1-14,0-0-10], [2:0-1-4,0-11-14]

| LOADING (psf)          | SPACING-             | CSI.      | DEFL.                       | PLATES        | GRIP     |
|------------------------|----------------------|-----------|-----------------------------|---------------|----------|
| TCLL (roof) 20.0       | 2-0-0                | TC 0.24   | in (loc) l/defl L/d         | MT20          | 244/190  |
| Snow (Pf/Pg) 11.6/15.0 | Plate Grip DOL 1.15  | BC 0.18   | Vert(LL) 0.02 4-9 >999 240  |               |          |
| TCDL 10.0              | Lumber DOL 1.15      | WB 0.00   | Vert(CT) -0.03 4-9 >999 180 |               |          |
| BCLL 0.0 *             | Rep Stress Incr YES  | Matrix-MP | Horz(CT) 0.00 2 n/a n/a     |               |          |
| BCDL 10.0              | Code IRC2018/TPI2014 |           |                             | Weight: 21 lb | FT = 20% |

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

**REACTIONS.** (size) 2=0-3-0, 4=0-1-8  
 Max Horz 2=78(LC 15)  
 Max Uplift 2=-51(LC 16), 4=-9(LC 13)  
 Max Grav 2=299(LC 2), 4=166(LC 21)

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

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 4-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
  - 3) Unbalanced snow loads have been considered for this design.
  - 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
  - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 7) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - 8) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
  - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
  - 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 31, 2023

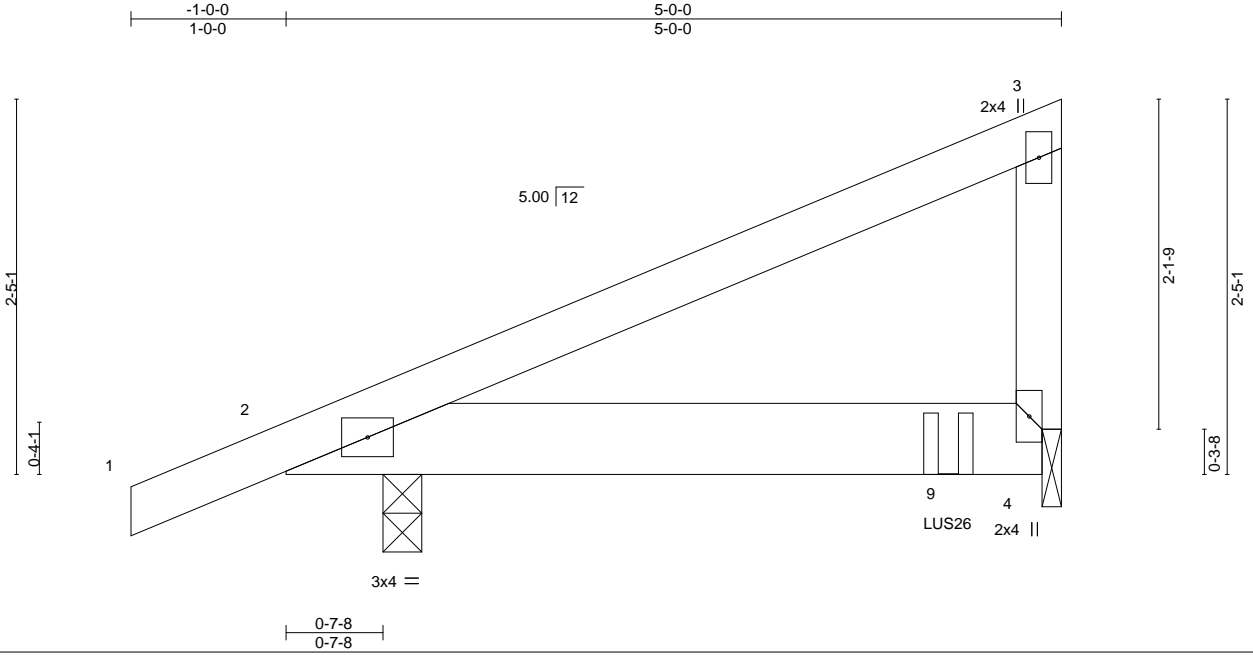


|           |       |                  |     |     |                          |           |
|-----------|-------|------------------|-----|-----|--------------------------|-----------|
| Job       | Truss | Truss Type       | Qty | Ply | RVF-LOT #26 ROOF         | 158636612 |
| 23-7318-A | M01G  | Monopitch Girder | 1   | 1   | Job Reference (optional) |           |

Riverside Roof Truss, LLC,

Danville, Va - 24541,

8.530 s Mar 9 2023 MiTek Industries, Inc. Tue May 30 15:47:38 2023 Page 1  
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Scale = 1:14.9

| LOADING (psf)          | SPACING-             | CSI.      | DEFL.          | in (loc) | l/defl | L/d | PLATES        | GRIP     |
|------------------------|----------------------|-----------|----------------|----------|--------|-----|---------------|----------|
| TCLL (roof) 20.0       | 2-0-0                | TC 0.25   | Vert(LL) -0.01 | 4-8      | >999   | 240 | MT20          | 244/190  |
| Snow (Pf/Pg) 11.6/15.0 | Plate Grip DOL 1.15  | BC 0.21   | Vert(CT) -0.02 | 4-8      | >999   | 180 |               |          |
| TCDL 10.0              | Lumber DOL 1.15      | WB 0.00   | Horz(CT) 0.00  | 4        | n/a    | n/a |               |          |
| BCLL 0.0 *             | Rep Stress Incr NO   | Matrix-MP |                |          |        |     |               |          |
| BCDL 10.0              | Code IRC2018/TPI2014 |           |                |          |        |     | Weight: 24 lb | FT = 20% |

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

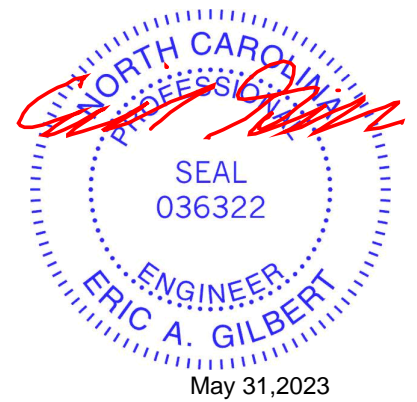
**REACTIONS.** (size) 2=0-3-0, 4=0-1-8  
 Max Horz 2=74(LC 9)  
 Max Uplift 2=-56(LC 12), 4=-32(LC 9)  
 Max Grav 2=348(LC 2), 4=461(LC 17)

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

- NOTES-**
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; 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 1.00 times flat roof load of 11.6 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 2-0-0 wide will fit between the bottom chord and any other members.
  - Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
  - 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 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - Use Simpson Strong-Tie LUS26 (4-10d Girder, 3-10d Truss, Single Ply Girder) or equivalent at 4-3-4 from the left end to connect truss(es) to back face of bottom chord.
  - Fill all nail holes where hanger is in contact with lumber.
  - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard

- Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-3=-43, 2-4=-20  
 Concentrated Loads (lb)  
 Vert: 9=-347(B)



|           |       |                            |     |     |                          |           |
|-----------|-------|----------------------------|-----|-----|--------------------------|-----------|
| Job       | Truss | Truss Type                 | Qty | Ply | RVF-LOT #26 ROOF         | I58636613 |
| 23-7318-A | M01GE | Monopitch Structural Gable | 1   | 1   | Job Reference (optional) |           |

Riverside Roof Truss, LLC,

Danville, Va - 24541,

8.530 s Mar 9 2023 MiTek Industries, Inc. Tue May 30 15:47:39 2023 Page 1  
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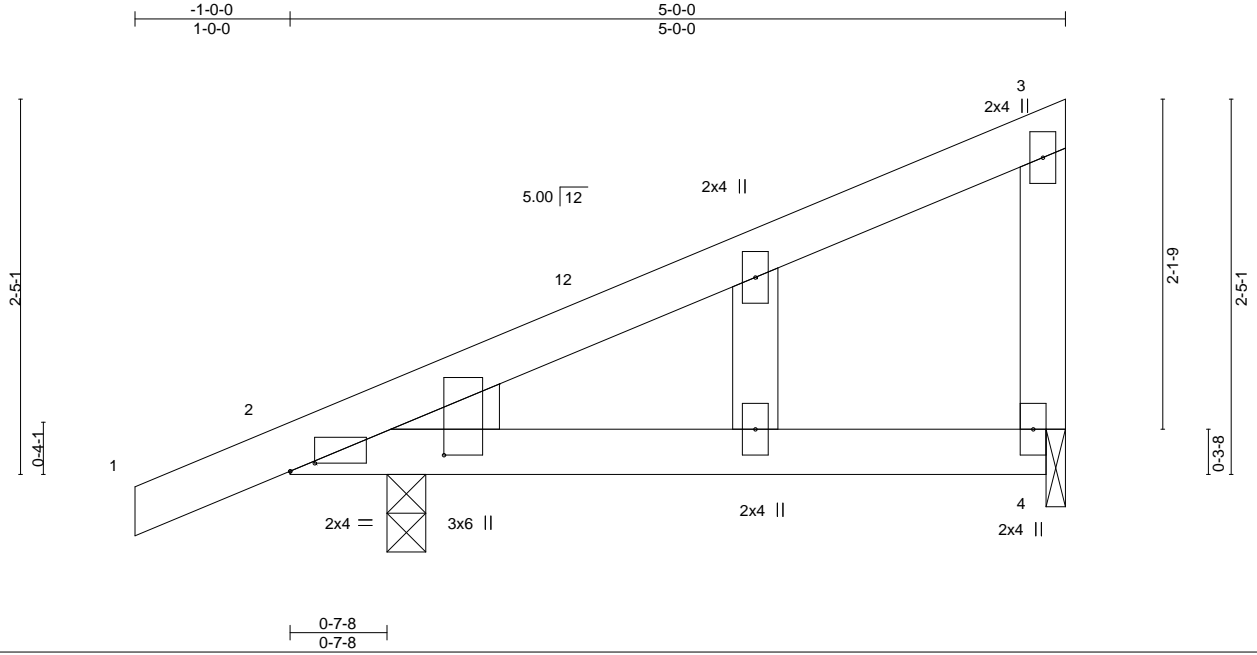


Plate Offsets (X,Y)-- [2:0-1-14,0-0-10], [2:0-1-4,0-11-14]

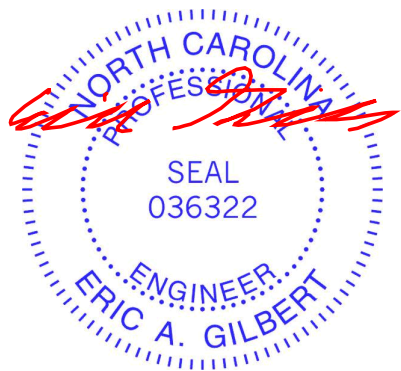
| LOADING (psf)          | SPACING-             | CSI.      | DEFL.                        | PLATES        | GRIP     |
|------------------------|----------------------|-----------|------------------------------|---------------|----------|
| TCLL (roof) 20.0       | 2-0-0                | TC 0.24   | in (loc) l/defl L/d          | MT20          | 244/190  |
| Snow (Pf/Pg) 11.6/15.0 | Plate Grip DOL 1.15  | BC 0.18   | Vert(LL) 0.02 4-11 >999 240  |               |          |
| TCDL 10.0              | Lumber DOL 1.15      | WB 0.00   | Vert(CT) -0.03 4-11 >999 180 |               |          |
| BCLL 0.0 *             | Rep Stress Incr YES  | Matrix-MP | Horz(CT) 0.00 2 n/a n/a      |               |          |
| BCDL 10.0              | Code IRC2018/TPI2014 |           |                              | Weight: 22 lb | FT = 20% |

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

**REACTIONS.** (size) 2=0-3-0, 4=0-1-8  
 Max Horz 2=78(LC 15)  
 Max Uplift 2=-51(LC 16), 4=-9(LC 13)  
 Max Grav 2=299(LC 2), 4=166(LC 21)

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

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 4-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; 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 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
  - 6) Gable studs spaced at 2-0-0 oc.
  - 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 9) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - 10) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
  - 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
  - 12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 31, 2023



|                  |              |                         |          |          |  |           |
|------------------|--------------|-------------------------|----------|----------|--|-----------|
| Job<br>23-7318-A | Truss<br>M02 | Truss Type<br>Monopitch | Qty<br>4 | Ply<br>1 | RVF-LOT #26 ROOF<br>Job Reference (optional) | 158636614 |
|------------------|--------------|-------------------------|----------|----------|--|-----------|

Riverside Roof Truss, LLC, Danville, VA. 24541

8.530 s Mar 9 2023 MiTek Industries, Inc. Wed May 31 07:25:19 2023 Page 1  
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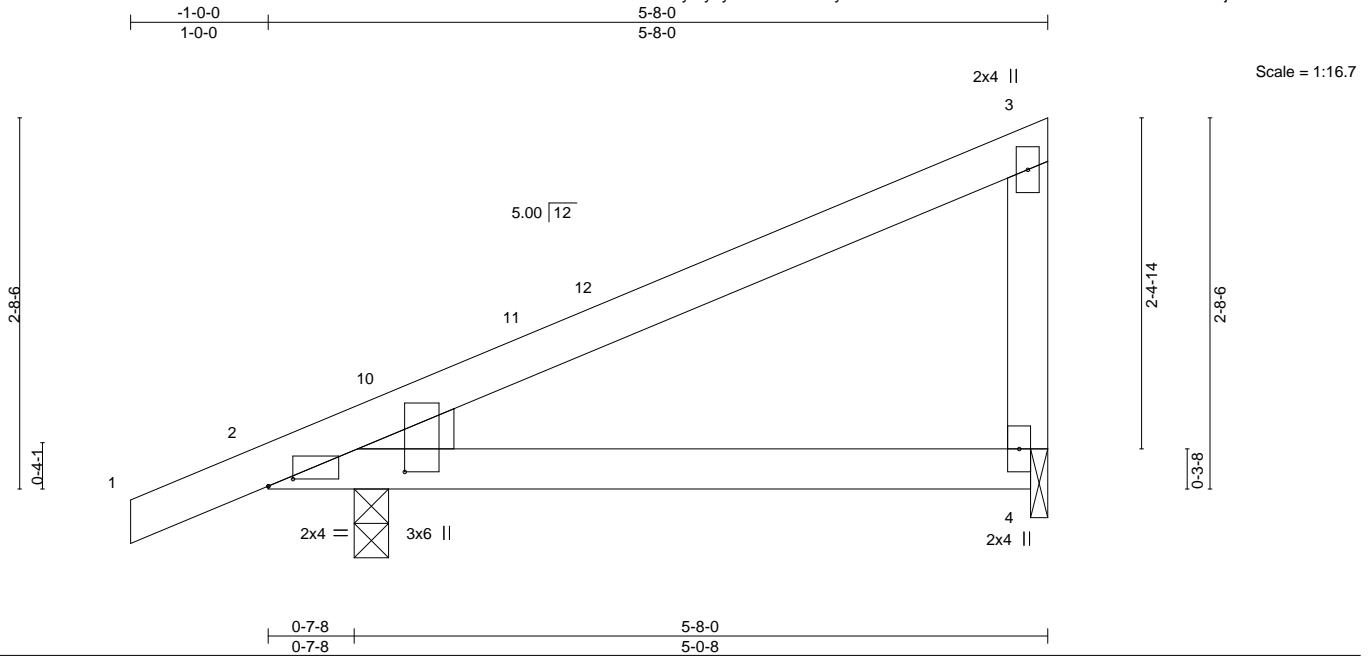


Plate Offsets (X,Y)-- [2:0-2-2,0-0-10], [2:0-1-4,0-11-14]

| LOADING (psf)          | SPACING-             | CSI.      | DEFL.                       | PLATES        | GRIP     |
|------------------------|----------------------|-----------|-----------------------------|---------------|----------|
| TCLL (roof) 20.0       | 2-0-0                | TC 0.35   | in (loc) l/defl L/d         | MT20          | 244/190  |
| Snow (Pf/Pg) 11.6/15.0 | Plate Grip DOL 1.15  | BC 0.27   | Vert(LL) -0.03 4-9 >999 240 |               |          |
| TCDL 10.0              | Lumber DOL 1.15      | WB 0.00   | Vert(CT) -0.06 4-9 >999 180 |               |          |
| BCLL 0.0 *             | Rep Stress Incr YES  | Matrix-MP | Horz(CT) 0.00 2 n/a n/a     |               |          |
| BCDL 10.0              | Code IRC2018/TPI2014 |           |                             | Weight: 23 lb | FT = 20% |

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

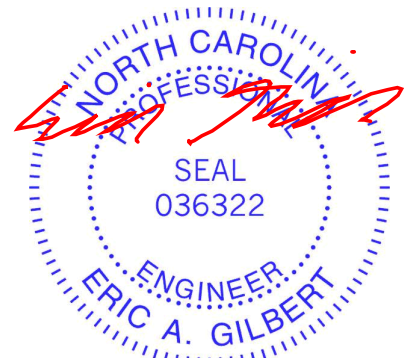
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 5-8-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 2=0-3-0, 4=0-1-8  
 Max Horz 2=87(LC 15)  
 Max Uplift 2=51(LC 16), 4=9(LC 13)  
 Max Grav 2=323(LC 2), 4=198(LC 21)

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

**NOTES-**

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 5-6-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 51 lb uplift at joint 2 and 9 lb uplift at joint 4.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 31, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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 and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)



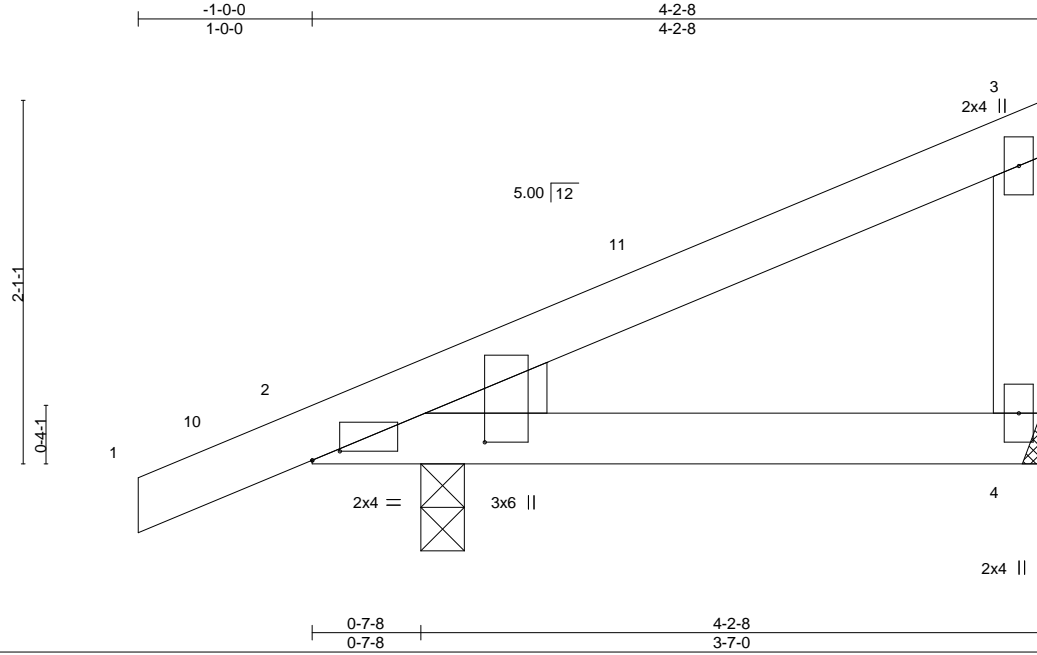
818 Soundside Road  
 Edenton, NC 27932

|                  |              |                         |          |          |  |           |
|------------------|--------------|-------------------------|----------|----------|--|-----------|
| Job<br>23-7318-A | Truss<br>M03 | Truss Type<br>Monopitch | Qty<br>1 | Ply<br>1 | RVF-LOT #26 ROOF<br>Job Reference (optional) | 158636615 |
|------------------|--------------|-------------------------|----------|----------|--|-----------|

Riverside Roof Truss, LLC,

Danville, Va - 24541,

8.530 s Mar 9 2023 MiTek Industries, Inc. Tue May 30 15:47:41 2023 Page 1  
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Scale = 1:13.2

Plate Offsets (X,Y)-- [2:0-1-14,0-0-10], [2:0-1-4,0-11-14]

| LOADING (psf)          | SPACING-             | CSI.      | DEFL.                       | PLATES        | GRIP     |
|------------------------|----------------------|-----------|-----------------------------|---------------|----------|
| TCLL (roof) 20.0       | 2-0-0                | TC 0.13   | in (loc) l/defl L/d         | MT20          | 244/190  |
| Snow (Pf/Pg) 11.6/15.0 | Plate Grip DOL 1.15  | BC 0.10   | Vert(LL) 0.01 4-9 >999 240  |               |          |
| TCDL 10.0              | Lumber DOL 1.15      | WB 0.00   | Vert(CT) -0.01 4-9 >999 180 |               |          |
| BCLL 0.0 *             | Rep Stress Incr YES  | Matrix-MP | Horz(CT) 0.00 2 n/a n/a     |               |          |
| BCDL 10.0              | Code IRC2018/TPI2014 |           |                             | Weight: 18 lb | FT = 20% |

**LUMBER-**

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3  
WEDGE  
Left: 2x4 SP No.3

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 4-2-8 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 4=Mechanical, 2=0-3-0  
Max Horz 2=66(LC 15)  
Max Uplift 4=8(LC 13), 2=52(LC 16)  
Max Grav 4=126(LC 21), 2=275(LC 21)

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

**NOTES-**

- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 4-0-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; 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 1.00 times flat roof load of 11.6 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 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 31, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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 and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)



818 Soundside Road  
Edenton, NC 27932

|           |       |                 |     |     |                          |           |
|-----------|-------|-----------------|-----|-----|--------------------------|-----------|
| Job       | Truss | Truss Type      | Qty | Ply | RVF-LOT #26 ROOF         | 158636616 |
| 23-7318-A | SM01G | Half Hip Girder | 1   | 1   | Job Reference (optional) |           |

Riverside Roof Truss, LLC, Danville, Va - 24541,

8.530 s Mar 9 2023 MiTek Industries, Inc. Tue May 30 15:47:43 2023 Page 1  
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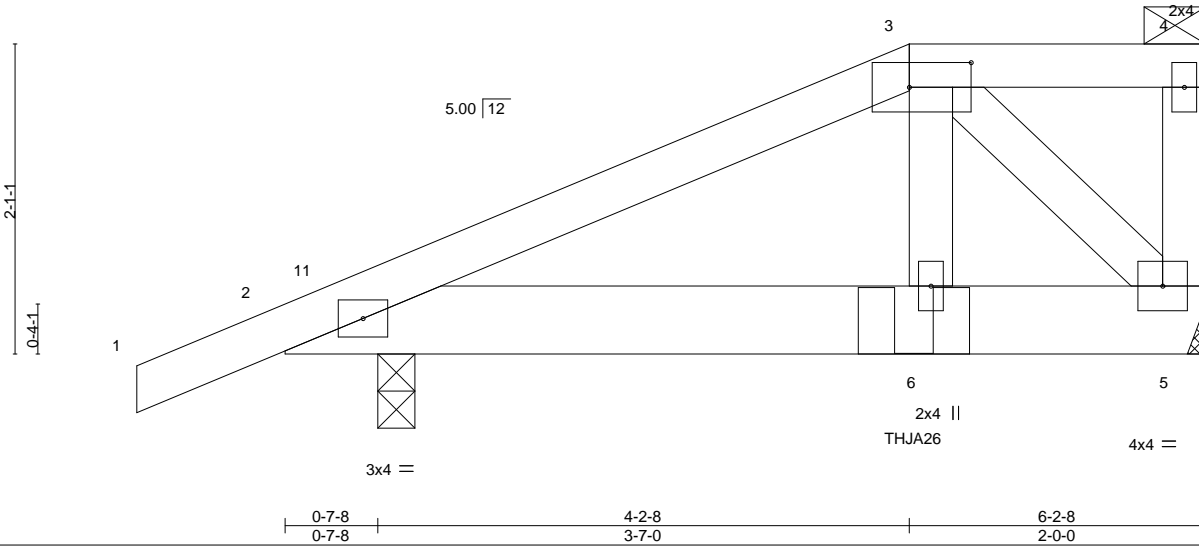


Plate Offsets (X,Y)-- [3:0-5-0,0-2-0]

| LOADING (psf)          | SPACING-             | CSI.      | DEFL.                     | PLATES        | GRIP     |
|------------------------|----------------------|-----------|---------------------------|---------------|----------|
| TCLL (roof) 20.0       | 2-0-0                | TC 0.20   | in (loc) l/defl L/d       | MT20          | 244/190  |
| Snow (Pf/Pg) 16.5/15.0 | Plate Grip DOL 1.15  | BC 0.09   | Vert(LL) -0.00 6 >999 240 |               |          |
| TCDL 10.0              | Lumber DOL 1.15      | WB 0.11   | Vert(CT) -0.01 6 >999 180 |               |          |
| BCLL 0.0 *             | Rep Stress Incr NO   | Matrix-MP | Horz(CT) 0.00 5 n/a n/a   |               |          |
| BCDL 10.0              | Code IRC2018/TPI2014 |           |                           | Weight: 33 lb | FT = 20% |

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.**

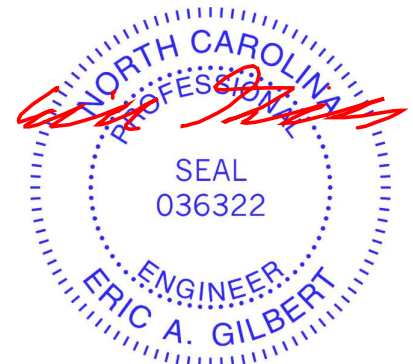
(size) 5=Mechanical, 2=0-3-0  
Max Horz 2=67(LC 9)  
Max Uplift 5=-15(LC 9), 2=-49(LC 12)  
Max Grav 5=362(LC 31), 2=480(LC 32)

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

TOP CHORD 2-3=-345/0  
BOT CHORD 2-6=-16/267, 5-6=-12/290  
WEBS 3-6=0/276, 3-5=-395/0

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 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 1.00 times flat roof load of 11.6 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 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 2.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Use Simpson Strong-Tie THJA26 (THJA26 on 1 ply, Left Hand Hip) or equivalent at 4-2-14 from the left end to connect truss(es) to front face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).



May 31, 2023

**LOAD CASE(S)** Standard

Continued on page 2

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.**

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|           |       |                 |     |     |                          |           |
|-----------|-------|-----------------|-----|-----|--------------------------|-----------|
| Job       | Truss | Truss Type      | Qty | Ply | RVF-LOT #26 ROOF         | I58636616 |
| 23-7318-A | SM01G | Half Hip Girder | 1   | 1   | Job Reference (optional) |           |

Riverside Roof Truss, LLC, Danville, Va - 24541,

8.530 s Mar 9 2023 MiTek Industries, Inc. Tue May 30 15:47:43 2023 Page 2  
 ID:InVYNKydfynyZ5DaPQ61KbyAhdz-RFC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

Vert: 1-3=-43, 3-4=-53, 2-5=-20

Concentrated Loads (lb)

Vert: 6=-259(F)

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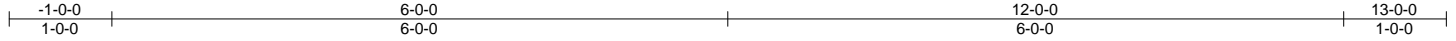


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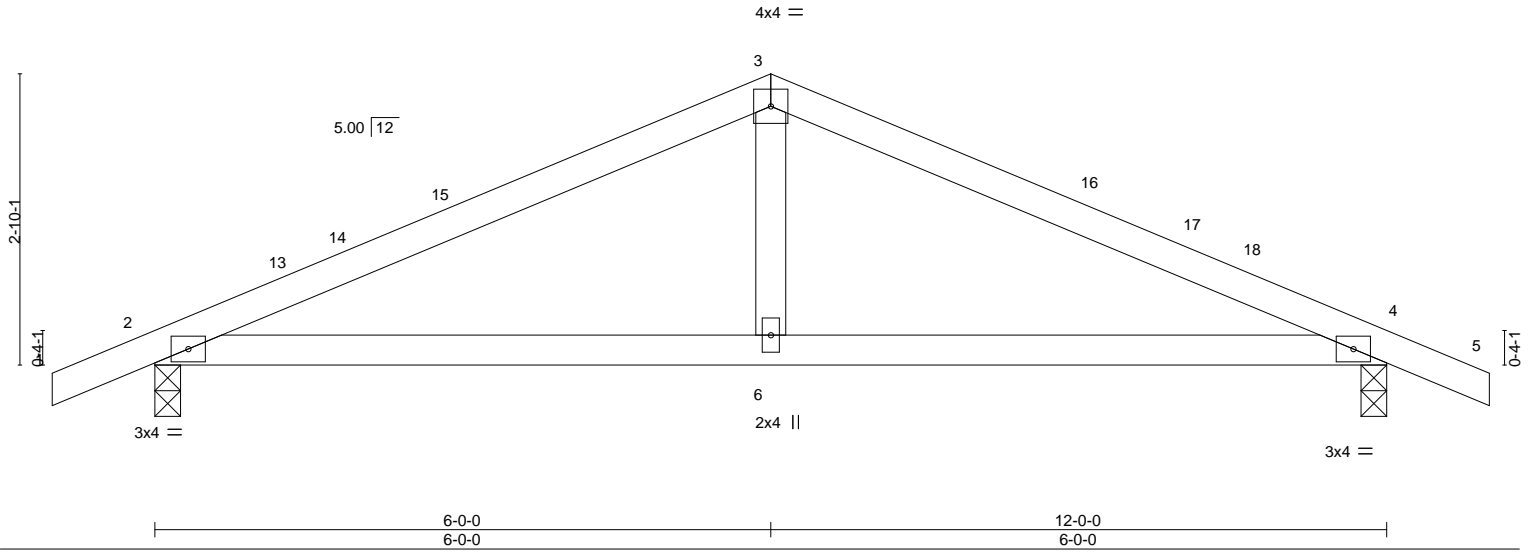
|                  |              |                      |          |          |  |           |
|------------------|--------------|----------------------|----------|----------|--|-----------|
| Job<br>23-7318-A | Truss<br>T01 | Truss Type<br>Common | Qty<br>5 | Ply<br>1 | RVF-LOT #26 ROOF<br>Job Reference (optional) | 158636617 |
|------------------|--------------|----------------------|----------|----------|--|-----------|

Riverside Roof Truss, LLC, Danville, Va - 24541,

8.530 s Mar 9 2023 MiTek Industries, Inc. Tue May 30 15:47:45 2023 Page 1  
ID:InVYNKydfynyZ5DaPQ61KbyAhdz-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f



Scale = 1:22.4



| LOADING (psf)          | SPACING-             | CSI.      | DEFL.                        | PLATES        | GRIP     |
|------------------------|----------------------|-----------|------------------------------|---------------|----------|
| TCLL (roof) 20.0       | 2-0-0                | TC 0.47   | in (loc) l/defl L/d          | MT20          | 244/190  |
| Snow (Pf/Pg) 11.6/15.0 | Plate Grip DOL 1.15  | BC 0.47   | Vert(LL) -0.05 6-12 >999 240 |               |          |
| TCDL 10.0              | Lumber DOL 1.15      | WB 0.11   | Vert(CT) -0.09 6-12 >999 180 |               |          |
| BCLL 0.0 *             | Rep Stress Incr YES  | Matrix-MS | Horz(CT) 0.01 4 n/a n/a      |               |          |
| BCDL 10.0              | Code IRC2018/TPI2014 |           |                              | Weight: 44 lb | FT = 20% |

**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 10-0-0 oc bracing.

**REACTIONS.**

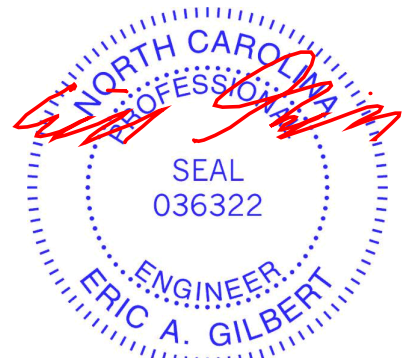
(size) 2=0-3-0, 4=0-3-0  
Max Horz 2=-37(LC 14)  
Max Uplift 2=-61(LC 16), 4=-61(LC 16)  
Max Grav 2=540(LC 2), 4=540(LC 2)

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

TOP CHORD 2-3=-763/235, 3-4=-763/235  
BOT CHORD 2-6=-115/652, 4-6=-115/652  
WEBS 3-6=0/280

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 6-0-0, Exterior(2R) 6-0-0 to 9-0-0, Interior(1) 9-0-0 to 13-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; 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 1.00 times flat roof load of 11.6 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 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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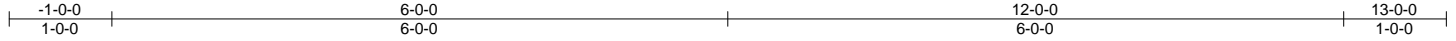


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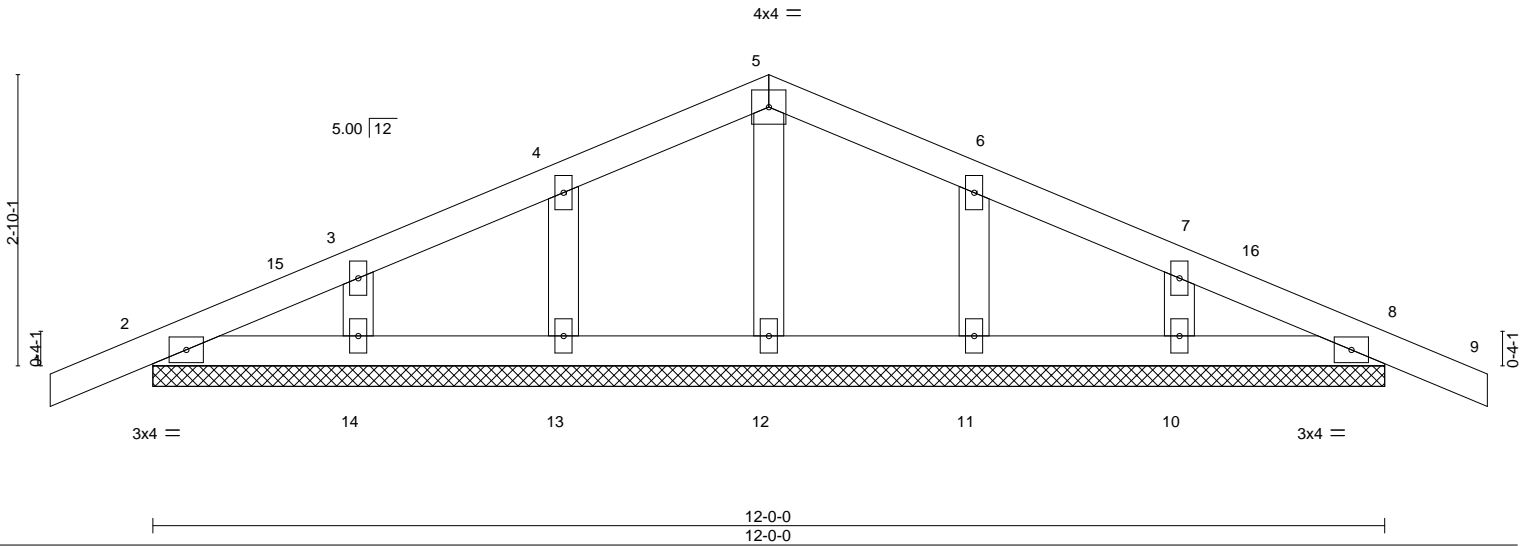
|                  |                |                     |          |          |  |           |
|------------------|----------------|---------------------|----------|----------|--|-----------|
| Job<br>23-7318-A | Truss<br>T01GE | Truss Type<br>GABLE | Qty<br>1 | Ply<br>1 | RVF-LOT #26 ROOF<br>Job Reference (optional) | 158636618 |
|------------------|----------------|---------------------|----------|----------|--|-----------|

Riverside Roof Truss, LLC, Danville, Va - 24541,

8.530 s Mar 9 2023 MiTek Industries, Inc. Tue May 30 15:47:46 2023 Page 1  
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Scale = 1:22.4



| LOADING (psf)          | SPACING-             | CSI.     | DEFL.                    | PLATES        | GRIP     |
|------------------------|----------------------|----------|--------------------------|---------------|----------|
| TCLL (roof) 20.0       | 2-0-0                | TC 0.07  | in (loc) l/defl L/d      | MT20          | 244/190  |
| Snow (Pf/Pg) 11.6/15.0 | Plate Grip DOL 1.15  | BC 0.03  | Vert(LL) -0.00 9 n/r 120 |               |          |
| TCDL 10.0              | Lumber DOL 1.15      | WB 0.03  | Vert(CT) -0.00 9 n/r 120 |               |          |
| BCLL 0.0 *             | Rep Stress Incr YES  | Matrix-S | Horz(CT) 0.00 8 n/a n/a  |               |          |
| BCDL 10.0              | Code IRC2018/TPI2014 |          |                          | Weight: 50 lb | FT = 20% |

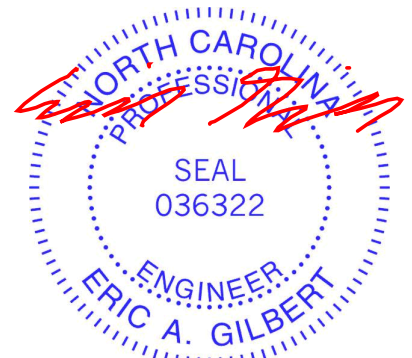
**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
OTHERS 2x4 SP No.3

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

**REACTIONS.** All bearings 12-0-0.  
(lb) - Max Horz 2=-37(LC 14)  
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 7-16; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) -1-0-0 to 2-0-0, Exterior(2N) 2-0-0 to 6-0-0, Corner(3R) 6-0-0 to 9-0-0, Exterior(2N) 9-0-0 to 13-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; 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 1.00 times flat roof load of 11.6 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 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8, 13, 14, 11, 10.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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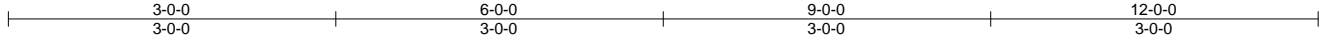
818 Soundside Road  
Edenton, NC 27932



|                  |               |                             |          |          |  |           |
|------------------|---------------|-----------------------------|----------|----------|--|-----------|
| Job<br>23-7318-A | Truss<br>T02G | Truss Type<br>Common Girder | Qty<br>1 | Ply<br>2 | RVF-LOT #26 ROOF<br>Job Reference (optional) | 158636619 |
|------------------|---------------|-----------------------------|----------|----------|--|-----------|

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.530 s Mar 9 2023 MiTek Industries, Inc. Tue May 30 15:47:48 2023 Page 1

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4x5 ||

Scale = 1:21.1

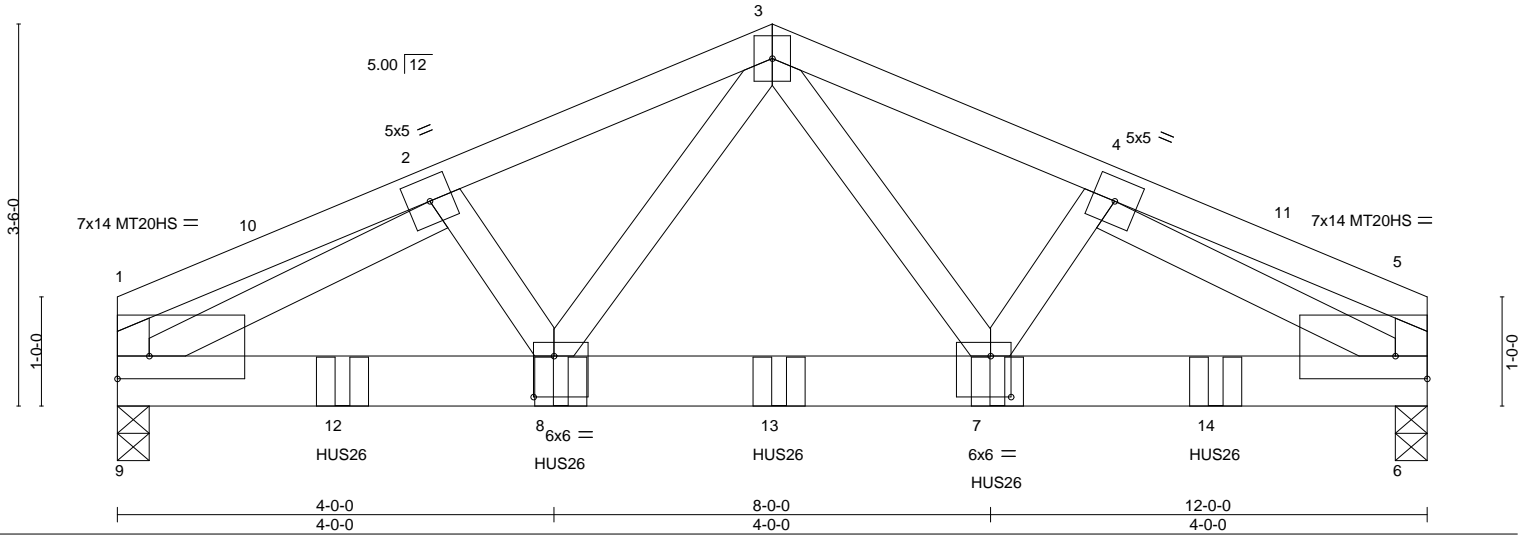


Plate Offsets (X,Y)-- [1:Edge,0-2-8], [5:Edge,0-2-8], [7:0-2-4,0-4-8], [8:0-2-4,0-4-8]

| LOADING (psf)          | SPACING-             | CSI.      | DEFL.                       | PLATES         | GRIP     |
|------------------------|----------------------|-----------|-----------------------------|----------------|----------|
| TCLL (roof) 20.0       | 2-0-0                | TC 0.62   | in (loc) l/defl L/d         | MT20           | 244/190  |
| Snow (Pf/Pg) 11.6/15.0 | Plate Grip DOL 1.15  | BC 0.41   | Vert(LL) -0.06 7-8 >999 240 | MT20HS         | 187/143  |
| TCDL 10.0              | Lumber DOL 1.15      | WB 0.59   | Vert(CT) -0.11 7-8 >999 180 |                |          |
| BCLL 0.0 *             | Rep Stress Incr NO   | Matrix-MS | Horz(CT) 0.02 6 n/a n/a     |                |          |
| BCDL 10.0              | Code IRC2018/TPI2014 |           |                             | Weight: 146 lb | FT = 20% |

**LUMBER-**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x6 SP 2400F 2.0E  
 WEBS 2x4 SP No.3 \*Except\*  
 1-9,5-6: 2x4 SP No.2

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 4-7-7 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 9=0-3-8, 6=0-3-8  
 Max Horz 9=-53(LC 10)  
 Max Uplift 9=-283(LC 12), 6=-286(LC 12)  
 Max Grav 9=4424(LC 3), 6=4476(LC 3)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-1155/100, 2-3=-6583/455, 3-4=-6580/455, 4-5=-1164/100, 1-9=-589/60, 5-6=-592/61  
 BOT CHORD 8-9=-342/5535, 7-8=-253/4534, 6-7=-342/5534  
 WEBS 3-7=-173/2862, 4-7=-97/1107, 3-8=-173/2867, 2-8=-97/1109, 2-9=-5430/346, 4-6=-5419/345

- 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: 2x6 - 2 rows staggered at 0-6-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
  - Unbalanced snow loads have been considered for this design.
  - 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 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=283, 6=286.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - Use Simpson Strong-Tie HUS26 (14-10d Girder, 4-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 2-0-12 from the left



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Continued on Page 2 to connect truss(es) to back face of bottom chord.

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|           |       |               |     |     |                          |           |
|-----------|-------|---------------|-----|-----|--------------------------|-----------|
| Job       | Truss | Truss Type    | Qty | Ply | RVF-LOT #26 ROOF         | I58636619 |
| 23-7318-A | T02G  | Common Girder | 1   | 2   | Job Reference (optional) |           |

Riverside Roof Truss, LLC, Danville, Va - 24541,

8.530 s Mar 9 2023 MiTek Industries, Inc. Tue May 30 15:47:48 2023 Page 2  
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**NOTES-**

13) Fill all nail holes where hanger is in contact with lumber.

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

Vert: 1-3=-43, 3-5=-43, 6-9=-20

Concentrated Loads (lb)

Vert: 7=-1160(B) 8=-1160(B) 12=-1160(B) 13=-1160(B) 14=-1160(B)

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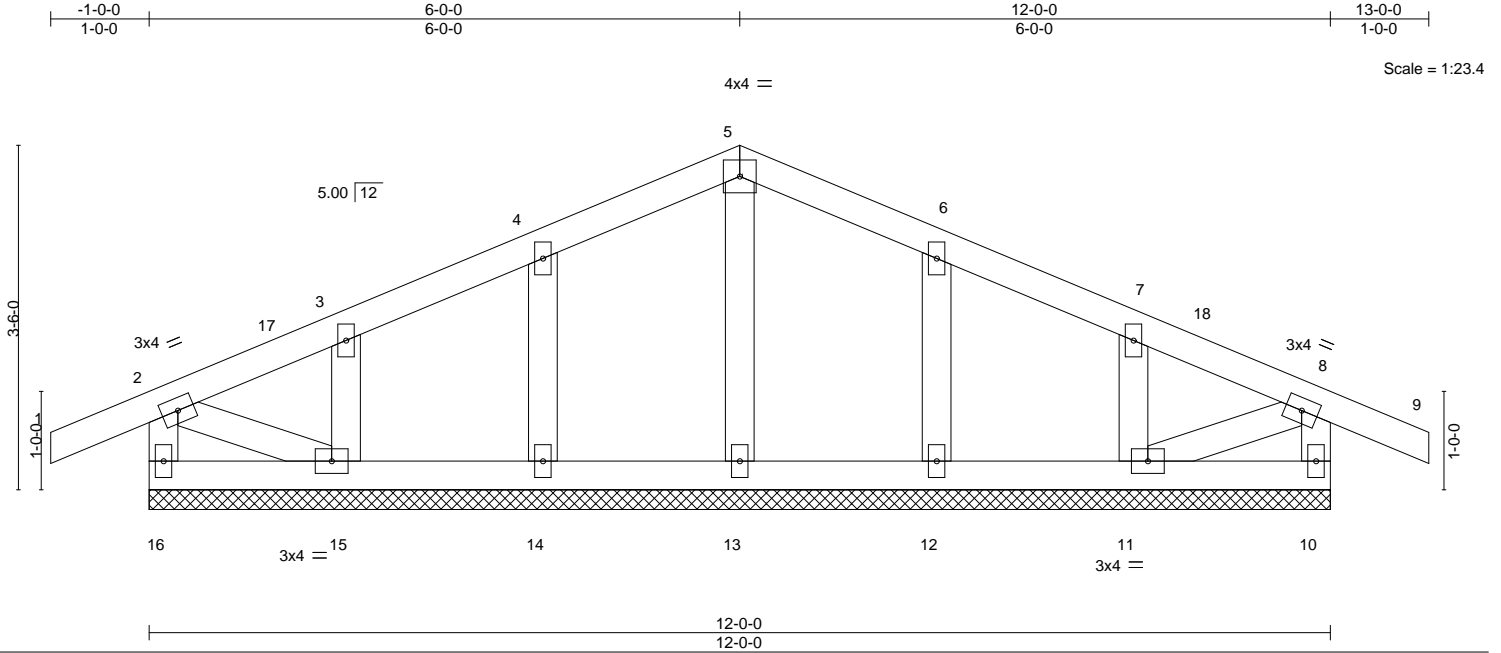


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|                  |                |                                      |          |          |  |           |
|------------------|----------------|--------------------------------------|----------|----------|--|-----------|
| Job<br>23-7318-A | Truss<br>T02GE | Truss Type<br>Common Supported Gable | Qty<br>1 | Ply<br>1 | RVF-LOT #26 ROOF<br>Job Reference (optional) | 158636620 |
|------------------|----------------|--------------------------------------|----------|----------|--|-----------|

Riverside Roof Truss, LLC, Danville, Va - 24541,

8.530 s Mar 9 2023 MiTek Industries, Inc. Tue May 30 15:47:50 2023 Page 1  
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| 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 0.09  | Vert(LL) -0.00 | 9        | n/r    | 120 | MT20          | 244/190  |
| Snow (Pf/Pg) 11.6/15.0 | Lumber DOL 1.15      |       | BC 0.03  | Vert(CT) -0.00 | 9        | n/r    | 120 |               |          |
| TCDL 10.0              | Rep Stress Incr YES  |       | WB 0.03  | Horz(CT) 0.00  | 10       | n/a    | n/a |               |          |
| BCLL 0.0 *             | Code IRC2018/TPI2014 |       | Matrix-S |                |          |        |     | Weight: 62 lb | FT = 20% |
| BCDL 10.0              |                      |       |          |                |          |        |     |               |          |

**LUMBER-**

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

**BRACING-**

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

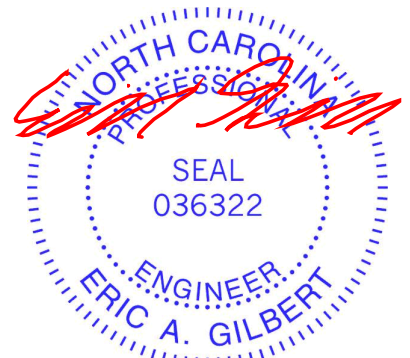
**REACTIONS.**

All bearings 12-0-0.  
(lb) - Max Horz 16=-62(LC 14)  
Max Uplift All uplift 100 lb or less at joint(s) 16, 10, 14, 15, 12, 11  
Max Grav All reactions 250 lb or less at joint(s) 16, 10, 13, 14, 15, 12, 11

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

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) -1-0-0 to 2-0-0, Exterior(2N) 2-0-0 to 6-0-0, Corner(3R) 6-0-0 to 9-0-0, Exterior(2N) 9-0-0 to 13-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; 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 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 10, 14, 15, 12, 11.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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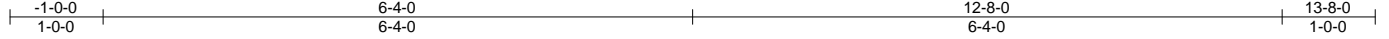


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|                  |              |                      |          |          |  |           |
|------------------|--------------|----------------------|----------|----------|--|-----------|
| Job<br>23-7318-A | Truss<br>T03 | Truss Type<br>Common | Qty<br>3 | Ply<br>1 | RVF-LOT #26 ROOF<br>Job Reference (optional) | 158636621 |
|------------------|--------------|----------------------|----------|----------|--|-----------|

Riverside Roof Truss, LLC, Danville, Va - 24541,

8.530 s Mar 9 2023 MiTek Industries, Inc. Tue May 30 15:47:51 2023 Page 1  
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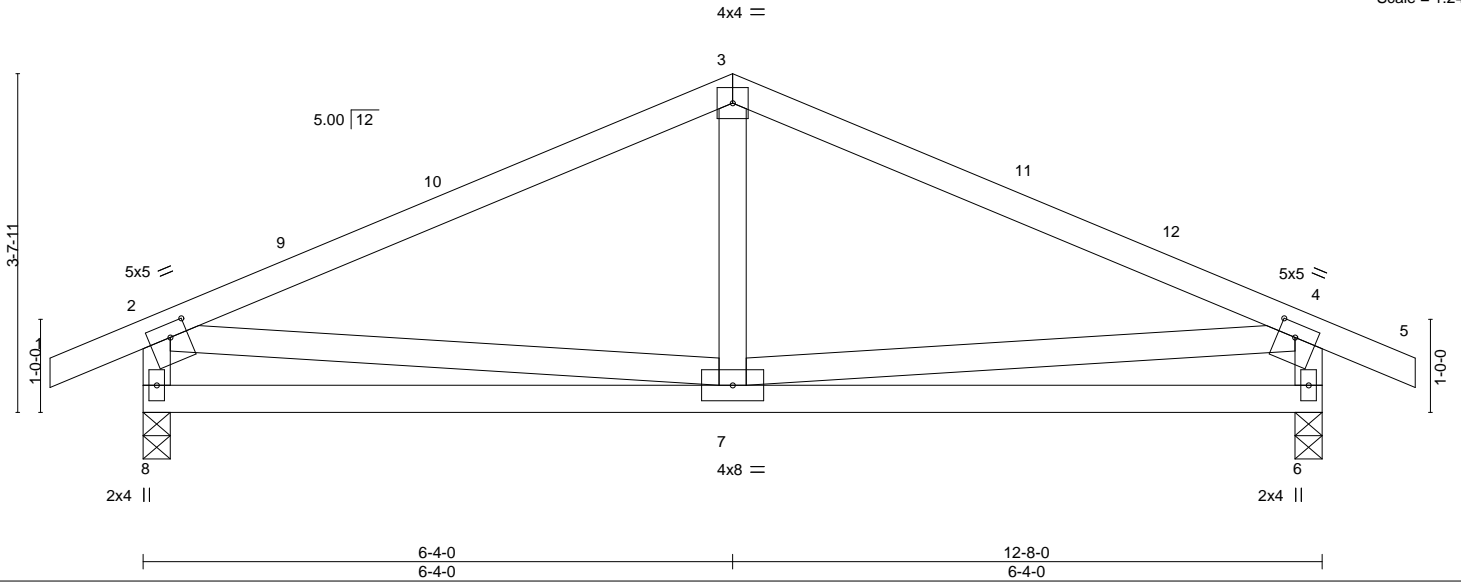


Plate Offsets (X,Y)-- [2:0-2-4,0-1-12], [4:0-2-4,0-1-12]

| LOADING (psf)          | SPACING-             | CSI.      | DEFL.          | in (loc) | l/defl | L/d | PLATES        | GRIP     |
|------------------------|----------------------|-----------|----------------|----------|--------|-----|---------------|----------|
| TCLL (roof) 20.0       | 2-0-0                | TC 0.68   | Vert(LL) -0.03 | 6-7      | >999   | 240 | MT20          | 244/190  |
| Snow (Pf/Pg) 11.6/15.0 | Plate Grip DOL 1.15  | BC 0.34   | Vert(CT) -0.06 | 6-7      | >999   | 180 |               |          |
| TCDL 10.0              | Lumber DOL 1.15      | WB 0.12   | Horz(CT) 0.01  | 6        | n/a    | n/a |               |          |
| BCLL 0.0 *             | Rep Stress Incr YES  | Matrix-MS |                |          |        |     |               |          |
| BCDL 10.0              | Code IRC2018/TPI2014 |           |                |          |        |     | Weight: 66 lb | FT = 20% |

**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, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 8=0-3-8, 6=0-3-8  
Max Horz 8=64(LC 14)  
Max Uplift 8=66(LC 16), 6=66(LC 16)  
Max Grav 8=564(LC 2), 6=564(LC 2)

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

TOP CHORD 2-3=-619/185, 3-4=-619/185, 2-8=-508/232, 4-6=-508/232  
BOT CHORD 7-8=-166/288, 6-7=-122/288  
WEBS 2-7=0/287, 4-7=0/287

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 6-4-0, Exterior(2R) 6-4-0 to 9-4-0, Interior(1) 9-4-0 to 13-8-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; 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 1.00 times flat roof load of 11.6 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 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 6.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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|                  |               |                             |          |          |  |           |
|------------------|---------------|-----------------------------|----------|----------|--|-----------|
| Job<br>23-7318-A | Truss<br>T03G | Truss Type<br>Common Girder | Qty<br>1 | Ply<br>2 | RVF-LOT #26 ROOF<br>Job Reference (optional) | 158636622 |
|------------------|---------------|-----------------------------|----------|----------|--|-----------|

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8.530 s Mar 9 2023 MiTek Industries, Inc. Tue May 30 15:47:53 2023 Page 1  
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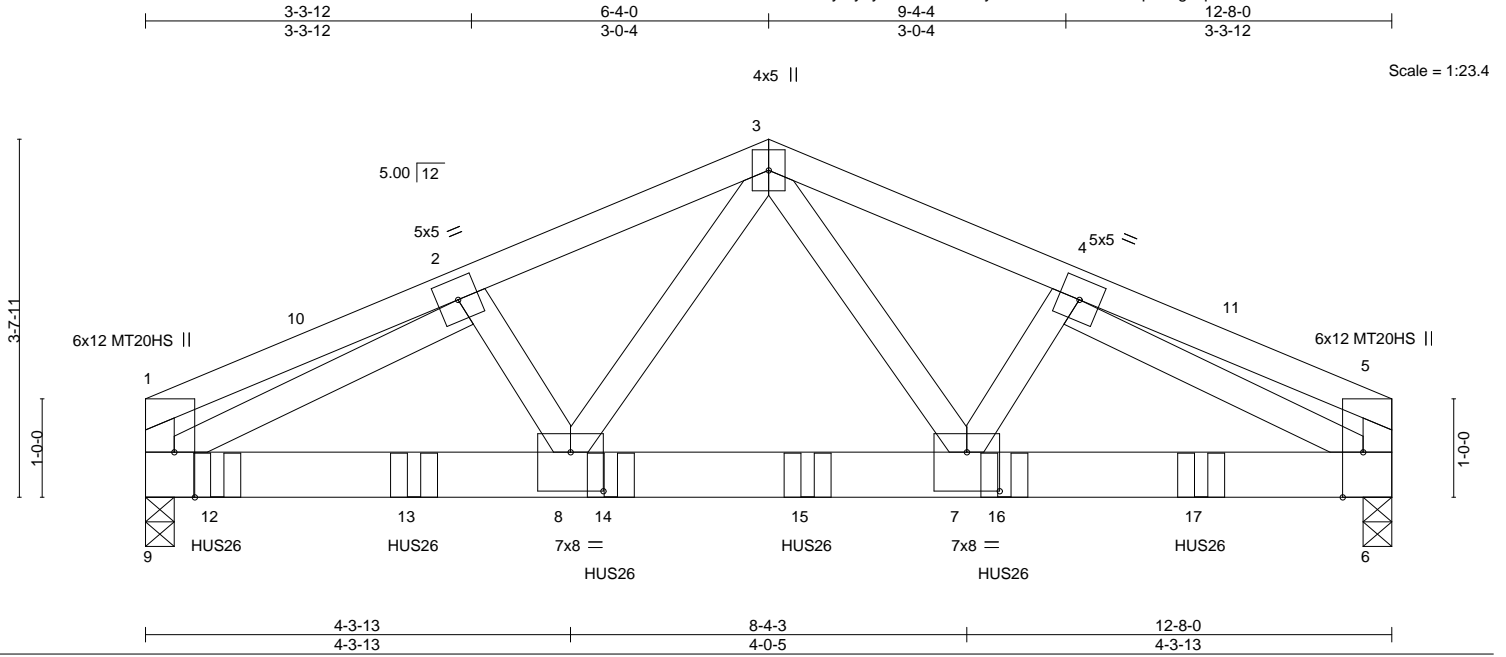


Plate Offsets (X,Y)-- [1:0-5-8,Edge], [5:0-5-8,Edge], [7:0-4-0,0-4-12], [8:0-4-0,0-4-12]

| LOADING (psf)          | SPACING-             | CSI.      | DEFL.                       | PLATES         | GRIP     |
|------------------------|----------------------|-----------|-----------------------------|----------------|----------|
| TCLL (roof) 20.0       | 2-0-0                | TC 0.82   | in (loc) l/defl L/d         | MT20           | 244/190  |
| Snow (Pf/Pg) 11.6/15.0 | Plate Grip DOL 1.15  | BC 0.47   | Vert(LL) -0.06 7-8 >999 240 | MT20HS         | 187/143  |
| TCDL 10.0              | Lumber DOL 1.15      | WB 0.64   | Vert(CT) -0.12 7-8 >999 180 |                |          |
| BCLL 0.0 *             | Rep Stress Incr NO   | Matrix-MS | Horz(CT) 0.03 6 n/a n/a     |                |          |
| BCDL 10.0              | Code IRC2018/TPI2014 |           |                             | Weight: 155 lb | FT = 20% |

**LUMBER-**

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x6 SP 2400F 2.0E  
WEBS 2x4 SP No.3 \*Except\*  
1-9,5-6: 2x4 SP No.2

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 4-4-13 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

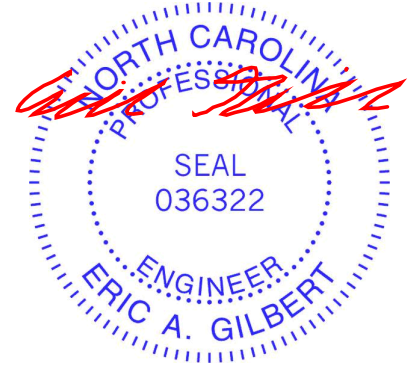
(size) 9=0-3-8, 6=0-3-8  
Max Horz 9=55(LC 36)  
Max Uplift 9=365(LC 12), 6=307(LC 12)  
Max Grav 9=5759(LC 3), 6=4808(LC 3)

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

TOP CHORD 1-2=-1456/121, 2-3=-7130/492, 3-4=-7085/489, 4-5=-1359/116, 1-9=-706/71, 5-6=-668/69  
BOT CHORD 8-9=-376/6096, 7-8=-276/4950, 6-7=-373/6050  
WEBS 3-7=-186/3032, 4-7=-100/1061, 3-8=-190/3110, 2-8=-99/1052, 2-9=-5704/361, 4-6=-5756/365

**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: 2x6 - 2 rows staggered at 0-5-0 oc.  
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- 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 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=365, 6=307.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Use Simpson Strong-Tie HUS26 (14-10d Girder, 4-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 0-8-12 from the left



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Continued on Page 2 to connect truss(es) to back face of bottom chord.

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|           |       |               |     |          |                          |           |
|-----------|-------|---------------|-----|----------|--------------------------|-----------|
| Job       | Truss | Truss Type    | Qty | Ply      | RVF-LOT #26 ROOF         | I58636622 |
| 23-7318-A | T03G  | Common Girder | 1   | <b>2</b> | Job Reference (optional) |           |

Riverside Roof Truss, LLC, Danville, Va - 24541,

8.530 s Mar 9 2023 MiTek Industries, Inc. Tue May 30 15:47:53 2023 Page 2  
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**NOTES-**

13) Fill all nail holes where hanger is in contact with lumber.

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

Vert: 1-3=-43, 3-5=-43, 6-9=-20

Concentrated Loads (lb)

Vert: 12=-1164(B) 13=-1160(B) 14=-1160(B) 15=-1160(B) 16=-1160(B) 17=-1160(B)

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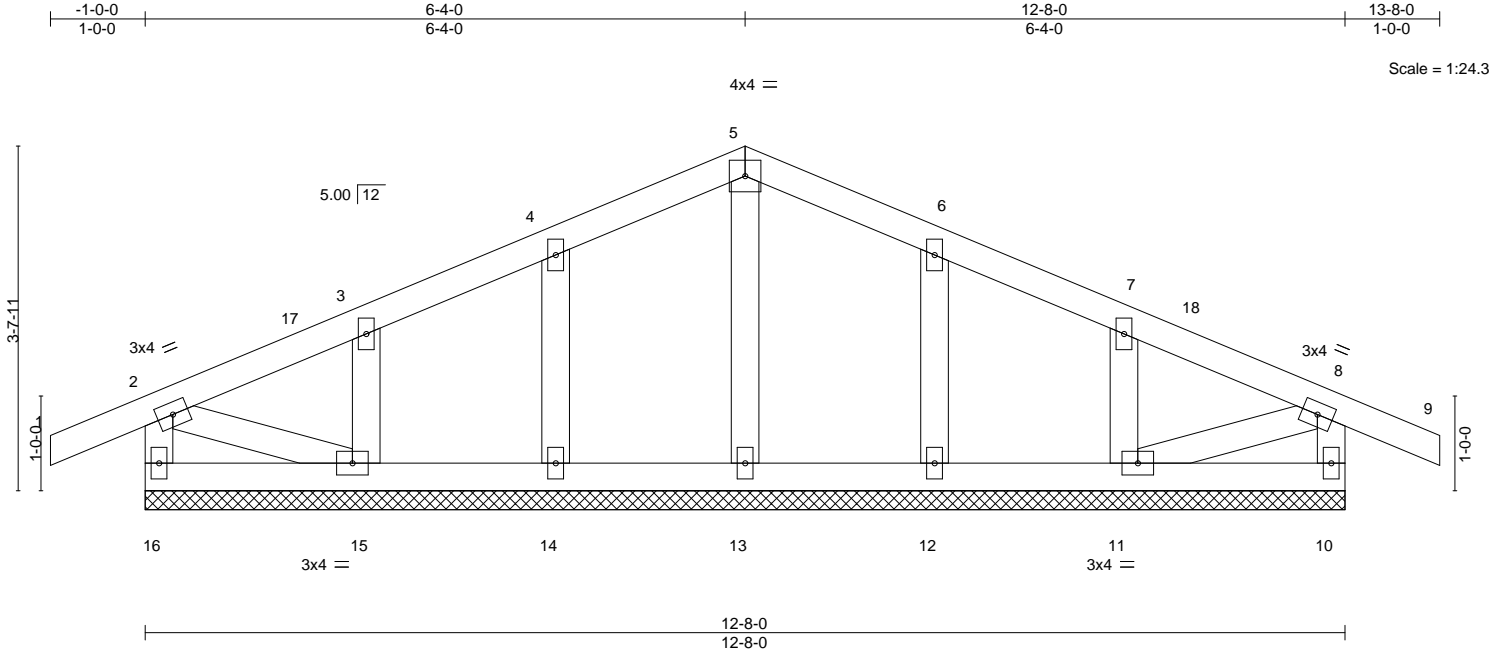
818 Soundside Road  
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|                  |                |                                      |          |          |  |           |
|------------------|----------------|--------------------------------------|----------|----------|--|-----------|
| Job<br>23-7318-A | Truss<br>T03GE | Truss Type<br>Common Supported Gable | Qty<br>1 | Ply<br>1 | RVF-LOT #26 ROOF<br>Job Reference (optional) | 158636623 |
|------------------|----------------|--------------------------------------|----------|----------|--|-----------|

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8.530 s Mar 9 2023 MiTek Industries, Inc. Tue May 30 15:47:55 2023 Page 1  
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| 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 0.09  | Vert(LL) -0.00 | 9        | n/r    | 120 | MT20          | 244/190  |
| Snow (Pf/Pg) 11.6/15.0 | Lumber DOL 1.15      |       | BC 0.04  | Vert(CT) -0.00 | 9        | n/r    | 120 |               |          |
| TCDL 10.0              | Rep Stress Incr YES  |       | WB 0.03  | Horz(CT) 0.00  | 10       | n/a    | n/a |               |          |
| BCLL 0.0 *             | Code IRC2018/TPI2014 |       | Matrix-S |                |          |        |     |               |          |
| BCDL 10.0              |                      |       |          |                |          |        |     | Weight: 66 lb | FT = 20% |

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.**

All bearings 12-8-0.  
(lb) - Max Horz 16=-64(LC 14)  
Max Uplift All uplift 100 lb or less at joint(s) 16, 10, 14, 15, 12, 11  
Max Grav All reactions 250 lb or less at joint(s) 16, 10, 13, 14, 15, 12, 11

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

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) -1-0-0 to 2-0-0, Exterior(2N) 2-0-0 to 6-4-0, Corner(3R) 6-4-0 to 9-4-0, Exterior(2N) 9-4-0 to 13-8-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; 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 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 10, 14, 15, 12, 11.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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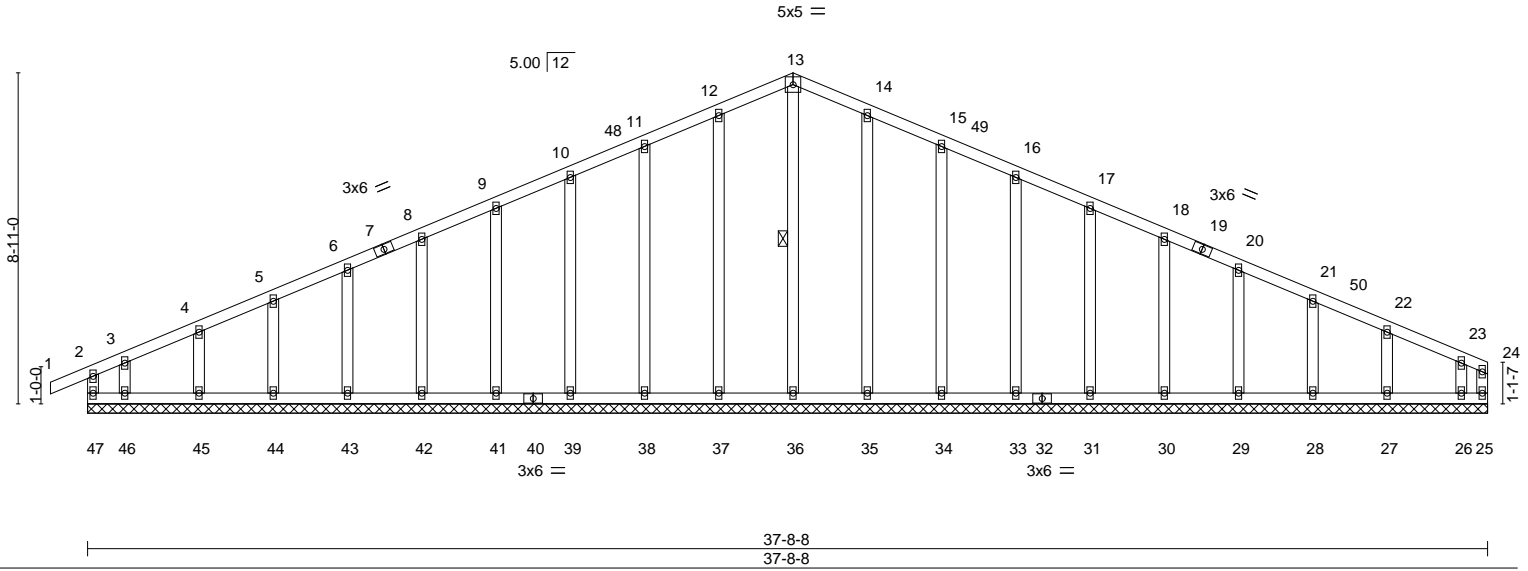
|                  |                |                                      |          |          |  |           |
|------------------|----------------|--------------------------------------|----------|----------|--|-----------|
| Job<br>23-7318-A | Truss<br>T04GE | Truss Type<br>Common Supported Gable | Qty<br>2 | Ply<br>1 | RVF-LOT #26 ROOF<br>Job Reference (optional) | 158636625 |
|------------------|----------------|--------------------------------------|----------|----------|--|-----------|

Riverside Roof Truss, LLC, Danville, Va - 24541,

8.530 s Mar 9 2023 MiTek Industries, Inc. Tue May 30 15:47:59 2023 Page 1  
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Scale = 1:62.1



| LOADING (psf)          | SPACING-             | CSI.     | DEFL.                     | PLATES         | GRIP     |
|------------------------|----------------------|----------|---------------------------|----------------|----------|
| TCLL (roof) 20.0       | 2-0-0                | TC 0.12  | in (loc) l/defl L/d       | MT20           | 244/190  |
| Snow (Pf/Pg) 11.6/15.0 | Plate Grip DOL 1.15  | BC 0.06  | Vert(LL) -0.00 1 n/r 120  |                |          |
| TCDL 10.0              | Lumber DOL 1.15      | WB 0.17  | Vert(CT) -0.00 1 n/r 120  |                |          |
| BCLL 0.0 *             | Rep Stress Incr YES  | Matrix-R | Horz(CT) -0.00 25 n/a n/a |                |          |
| BCDL 10.0              | Code IRC2018/TPI2014 |          |                           | Weight: 245 lb | FT = 20% |

| LUMBER-               | BRACING-  |
|-----------------------|---|
| TOP CHORD 2x4 SP No.2 | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. |
| BOT CHORD 2x4 SP No.2 | BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.                                   |
| WEBS 2x4 SP No.3      | WEBS 1 Row at midpt 13-36   |
| OTHERS 2x4 SP No.3    |   |

**REACTIONS.** All bearings 37-8-8.  
 (lb) - Max Horz 47=160(LC 15)  
 Max Uplift All uplift 100 lb or less at joint(s) 47, 25, 37, 38, 39, 41, 42, 43, 44, 45, 46, 35, 34, 33, 31, 30, 29, 28, 27, 26  
 Max Grav All reactions 250 lb or less at joint(s) 47, 25, 36, 37, 38, 39, 41, 42, 43, 44, 45, 46, 35, 34, 33, 31, 30, 29, 28, 27, 26

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 11-12=-97/252, 12-13=-109/286, 13-14=-109/286, 14-15=-97/252

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=38ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) -1-0-0 to 3-0-0, Exterior(2N) 3-0-0 to 19-0-0, Corner(3R) 19-0-0 to 23-0-0, Exterior(2N) 23-0-0 to 37-6-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; 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 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 47, 25, 37, 38, 39, 41, 42, 43, 44, 45, 46, 35, 34, 33, 31, 30, 29, 28, 27, 26.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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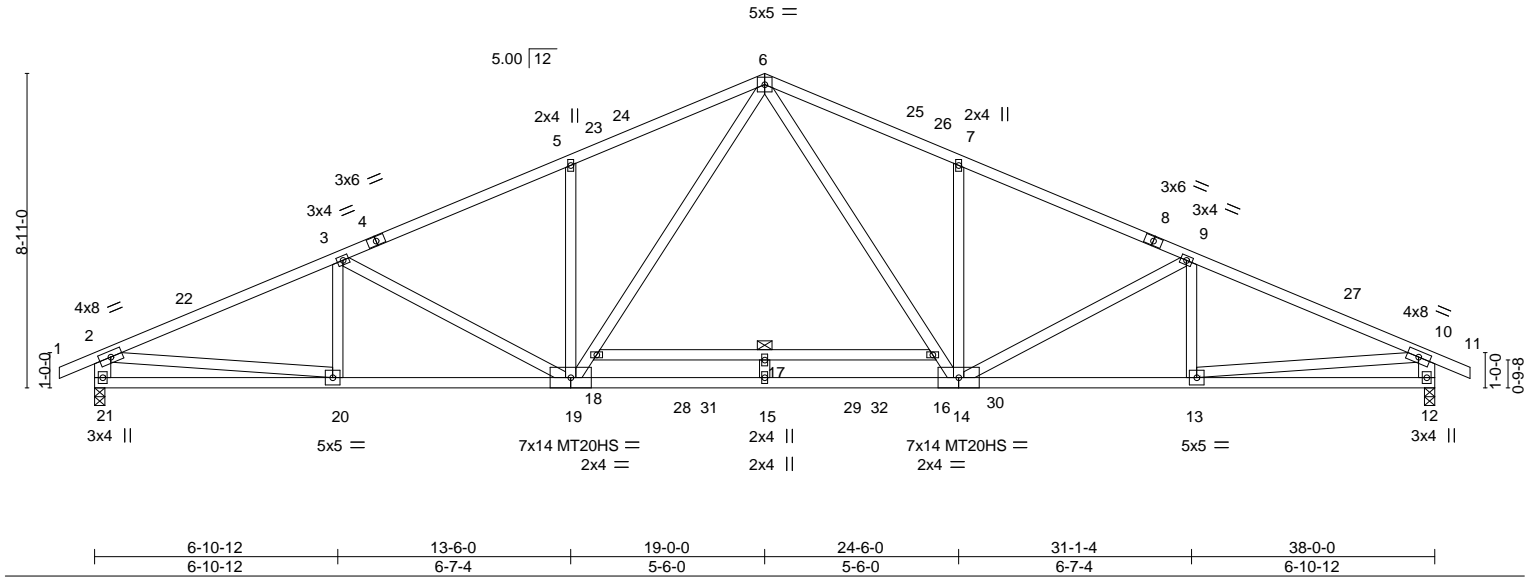
|                  |              |                      |          |          |  |           |
|------------------|--------------|----------------------|----------|----------|--|-----------|
| Job<br>23-7318-A | Truss<br>T05 | Truss Type<br>Common | Qty<br>7 | Ply<br>1 | RVF-LOT #26 ROOF<br>Job Reference (optional) | 158636626 |
|------------------|--------------|----------------------|----------|----------|--|-----------|

Riverside Roof Truss, LLC, Danville, Va - 24541,

8.530 s Mar 9 2023 MiTek Industries, Inc. Tue May 30 15:48:01 2023 Page 1  
ID:InVYNKydfnyZ5DaPQ61KbyAhdz-RfC?PsB70Hq3NSgPqnL8w3ulITXbGKwRCDoi7J4zJC?f

|       |         |        |        |        |        |         |        |
|-------|---------|--------|--------|--------|--------|---------|--------|
| 1-0-0 | 6-10-12 | 13-6-0 | 19-0-0 | 24-6-0 | 31-1-4 | 38-0-0  | 39-0-0 |
| 1-0-0 | 6-10-12 | 6-7-4  | 5-6-0  | 5-6-0  | 6-7-4  | 6-10-12 | 1-0-0  |

Scale = 1:65.3



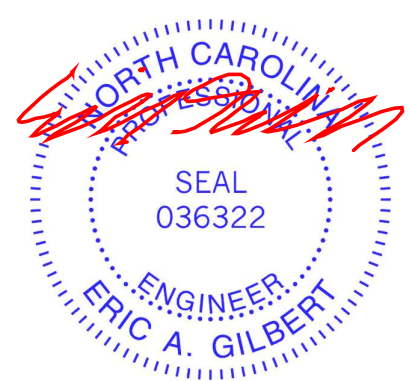
| LOADING (psf)          | SPACING-             | CSI.      | DEFL.                      | PLATES         | GRIP     |
|------------------------|----------------------|-----------|----------------------------|----------------|----------|
| TCLL (roof) 20.0       | 2-0-0                | TC 0.65   | in (loc) l/defl L/d        | MT20           | 244/190  |
| Snow (Pf/Pg) 11.6/15.0 | Plate Grip DOL 1.15  | BC 0.86   | Vert(LL) -0.68 17 >665 240 | MT20HS         | 187/143  |
| TCDL 10.0              | Lumber DOL 1.15      | WB 0.62   | Vert(CT) -1.16 17 >388 180 |                |          |
| BCLL 0.0 *             | Rep Stress Incr YES  | Matrix-MS | Horz(CT) 0.08 12 n/a n/a   |                |          |
| BCDL 10.0              | Code IRC2018/TPI2014 |           |                            | Weight: 237 lb | FT = 20% |

| LUMBER-   | BRACING-  |
|---|---|
| TOP CHORD 2x4 SP No.2   | TOP CHORD Structural wood sheathing directly applied or 2-7-1 oc purlins, except end verticals.   |
| BOT CHORD 2x4 SP DSS *Except*<br>16-18: 2x4 SP No.1                           | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:<br>6-0-0 oc bracing: 16-18 |
| WEBS 2x4 SP No.3 *Except*<br>2-21,10-12: 2x6 SP No.2, 2-20,10-13: 2x4 SP No.2 |   |

**REACTIONS.** (size) 21=0-3-8, 12=0-3-8  
 Max Horz 21=160(LC 15)  
 Max Uplift 21=-70(LC 16), 12=-70(LC 16)  
 Max Grav 21=1925(LC 28), 12=1925(LC 29)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-3277/119, 3-5=-3084/112, 5-6=-3083/194, 6-7=-3083/194, 7-9=-3084/112,  
 9-10=-3277/119, 2-21=-1786/167, 10-12=-1786/167  
 BOT CHORD 20-21=-72/585, 19-20=-52/3059, 15-19=0/2162, 14-15=0/2162, 13-14=-39/2967,  
 12-13=-33/470  
 WEBS 6-16=-31/1294, 14-16=-86/1160, 7-14=-391/161, 9-14=-313/105, 18-19=-87/1161,  
 6-18=-31/1294, 5-19=-391/161, 3-19=-313/105, 2-20=-5/2519, 10-13=-6/2519

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=38ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-0-0 to 2-9-10, Interior(1) 2-9-10 to 19-0-0, Exterior(2R) 19-0-0 to 22-9-10, Interior(1) 22-9-10 to 39-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; 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 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
  - 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 2-0-0 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) 21, 12.
  - 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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|  |   |
|--|---|
| <p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPH Quality Criteria and DSB-22</b> available from Truss Plate Institute (www.tpinst.org) and <b>BCSI Building Component Safety Information</b> available from the Structural Building Component Association (www.sbcacomponents.com)</p> | <p>ENGINEERING BY</p> <p><b>TRENCO</b></p> <p>A MiTek Affiliate</p> <p>818 Soundside Road<br/>Edenton, NC 27932</p> |
|--|---|

|                  |               |                      |          |          |  |           |
|------------------|---------------|----------------------|----------|----------|--|-----------|
| Job<br>23-7318-A | Truss<br>T05A | Truss Type<br>Common | Qty<br>1 | Ply<br>1 | RVF-LOT #26 ROOF<br>Job Reference (optional) | 158636627 |
|------------------|---------------|----------------------|----------|----------|--|-----------|

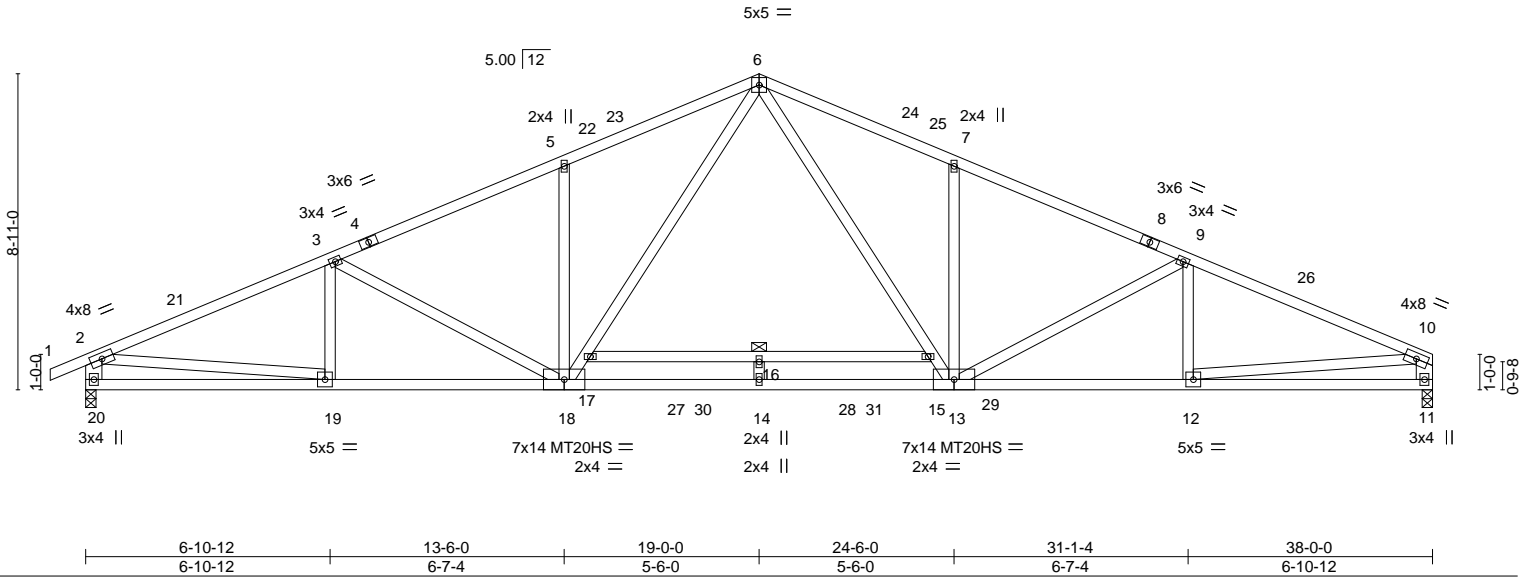
Riverside Roof Truss, LLC, Danville, Va - 24541,

8.530 s Mar 9 2023 MiTek Industries, Inc. Tue May 30 15:48:03 2023 Page 1

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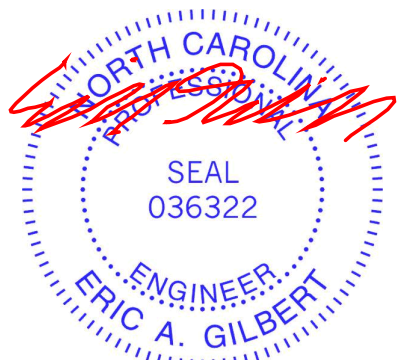
| LOADING (psf)          | SPACING-             | CSI.      | DEFL.                      | PLATES         | GRIP     |
|------------------------|----------------------|-----------|----------------------------|----------------|----------|
| TCLL (roof) 20.0       | 2-0-0                | TC 0.77   | in (loc) l/defl L/d        | MT20           | 244/190  |
| Snow (Pf/Pg) 11.6/15.0 | Plate Grip DOL 1.15  | BC 0.86   | Vert(LL) -0.68 16 >665 240 | MT20HS         | 187/143  |
| TCDL 10.0              | Lumber DOL 1.15      | WB 0.64   | Vert(CT) -1.16 16 >388 180 |                |          |
| BCLL 0.0 *             | Rep Stress Incr YES  | Matrix-MS | Horz(CT) 0.08 11 n/a n/a   |                |          |
| BCDL 10.0              | Code IRC2018/TPI2014 |           |                            | Weight: 235 lb | FT = 20% |

| LUMBER-  | BRACING-  |
|--|---|
| TOP CHORD 2x4 SP No.2  | TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals. |
| BOT CHORD 2x4 SP DSS *Except* 15-17: 2x4 SP No.1                           | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 6-0-0 oc bracing: 15-17  |
| WEBS 2x4 SP No.3 *Except* 2-20,10-11: 2x6 SP No.2, 2-19,10-12: 2x4 SP No.2 |   |

**REACTIONS.** (size) 20=0-3-8, 11=0-3-8  
 Max Horz 20=159(LC 15)  
 Max Uplift 20=-71(LC 16), 11=-31(LC 16)  
 Max Grav 20=1926(LC 28), 11=1861(LC 29)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-3279/119, 3-5=-3087/112, 5-6=-3085/197, 6-7=-3084/194, 7-9=-3089/118, 9-10=-3287/131, 2-20=-1787/167, 10-11=-1722/115  
 BOT CHORD 19-20=-98/580, 18-19=-81/3054, 14-18=0/2158, 13-14=0/2158, 12-13=-82/2982, 11-12=-42/374  
 WEBS 6-15=-31/1294, 13-15=-86/1160, 7-13=-383/158, 9-13=-330/112, 17-18=-87/1160, 6-17=-31/1293, 5-18=-391/160, 3-18=-313/105, 2-19=-5/2521, 10-12=-40/2626

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=38ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-0-0 to 2-9-10, Interior(1) 2-9-10 to 19-0-0, Exterior(2R) 19-0-0 to 22-9-10, Interior(1) 22-9-10 to 37-9-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; 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 1.00 times flat roof load of 11.6 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 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 20, 11.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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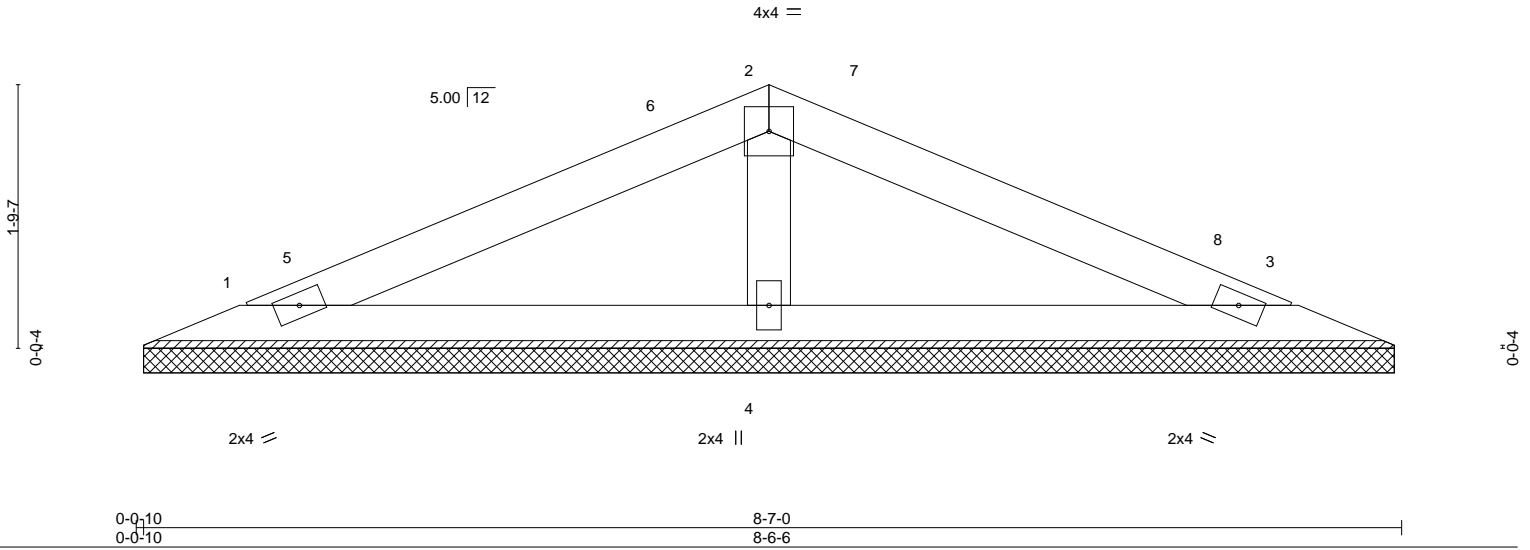
|           |       |            |     |     |                          |           |
|-----------|-------|------------|-----|-----|--------------------------|-----------|
| Job       | Truss | Truss Type | Qty | Ply | RVF-LOT #26 ROOF         | 158636628 |
| 23-7318-A | V01   | Valley     | 1   | 1   | Job Reference (optional) |           |

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8.530 s Mar 9 2023 MiTek Industries, Inc. Tue May 30 15:48:04 2023 Page 1  
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Scale = 1:15.6



| LOADING (psf)          | SPACING-             | CSI.     | DEFL.                   | PLATES        | GRIP     |
|------------------------|----------------------|----------|-------------------------|---------------|----------|
| TCLL (roof) 20.0       | 2-0-0                | TC 0.24  | in (loc) l/defl L/d     | MT20          | 244/190  |
| Snow (Pf/Pg) 11.6/15.0 | Plate Grip DOL 1.15  | BC 0.13  | 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-P | Horz(CT) 0.00 3 n/a n/a |               |          |
| BCDL 10.0              | Code IRC2018/TPI2014 |          |                         | Weight: 26 lb | FT = 20% |

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

**REACTIONS.** (size) 1=8-5-13, 3=8-5-13, 4=8-5-13  
 Max Horz 1=-19(LC 14)  
 Max Uplift 1=-20(LC 16), 3=-20(LC 16)  
 Max Grav 1=141(LC 20), 3=141(LC 21), 4=287(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 7-16; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-9-1 to 3-9-1, Interior(1) 3-9-1 to 4-3-8, Exterior(2R) 4-3-8 to 7-3-8, Interior(1) 7-3-8 to 7-9-15 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; 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 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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|           |       |            |     |     |                          |           |
|-----------|-------|------------|-----|-----|--------------------------|-----------|
| Job       | Truss | Truss Type | Qty | Ply | RVF-LOT #26 ROOF         | 158636629 |
| 23-7318-A | V02   | Valley     | 1   | 1   | Job Reference (optional) |           |

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8.530 s Mar 9 2023 MiTek Industries, Inc. Tue May 30 15:48:05 2023 Page 1  
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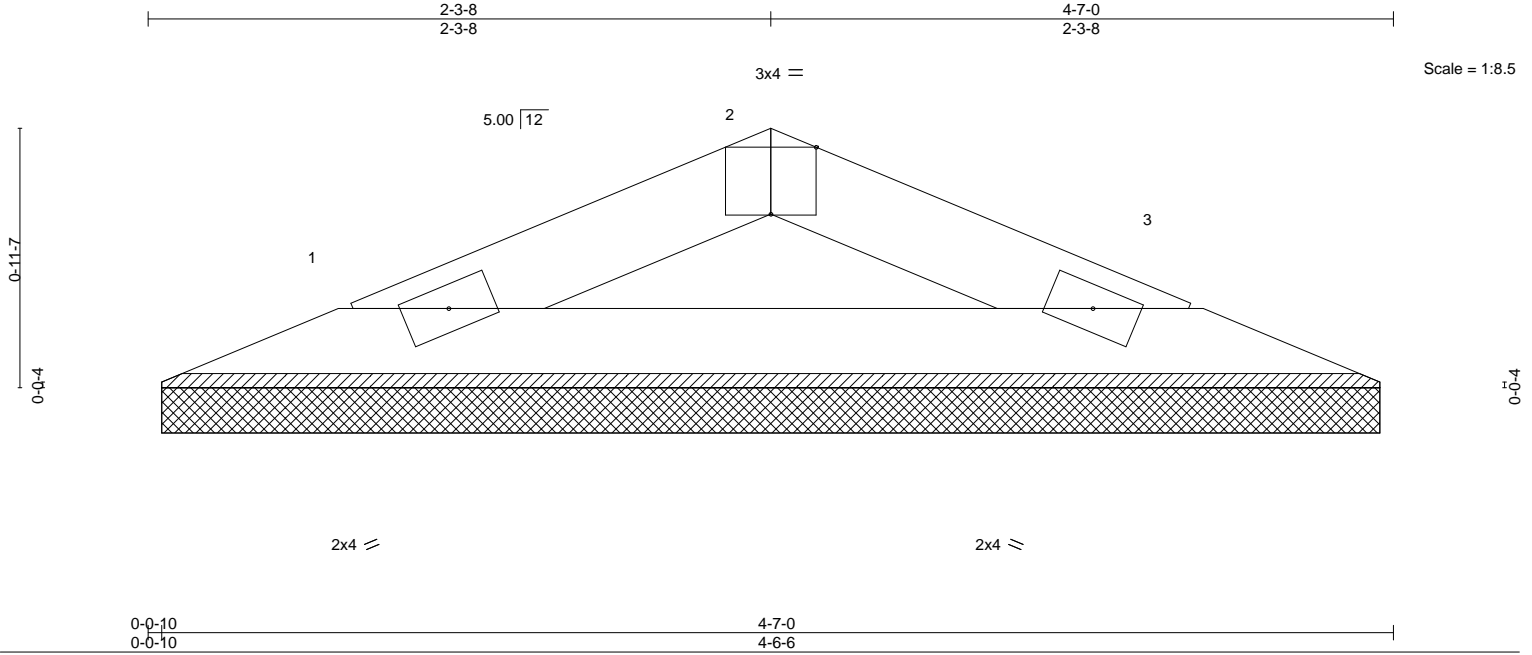


Plate Offsets (X,Y)-- [2:0-2-0,Edge] 0-0-10 0-0-10 4-7-0 4-6-6

| LOADING (psf)          | SPACING-             | CSI.     | DEFL.                   | PLATES        | GRIP     |
|------------------------|----------------------|----------|-------------------------|---------------|----------|
| TCLL (roof) 20.0       | 2-0-0                | TC 0.06  | in (loc) l/defl L/d     | MT20          | 244/190  |
| Snow (Pf/Pg) 11.6/15.0 | Plate Grip DOL 1.15  | BC 0.12  | Vert(LL) n/a - n/a 999  |               |          |
| TCDL 10.0              | Lumber DOL 1.15      | WB 0.00  | 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 IRC2018/TPI2014 |          |                         | Weight: 12 lb | FT = 20% |

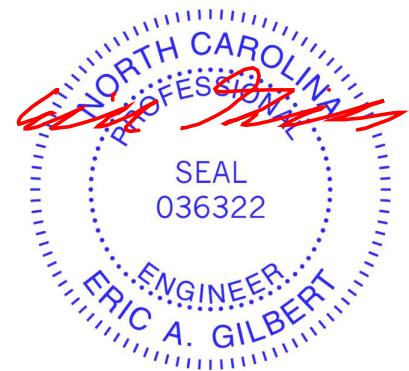
**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 4-7-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=4-5-13, 3=4-5-13  
Max Horz 1=-8(LC 14)  
Max Uplift 1=-7(LC 16), 3=-7(LC 16)  
Max Grav 1=123(LC 2), 3=123(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 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; 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 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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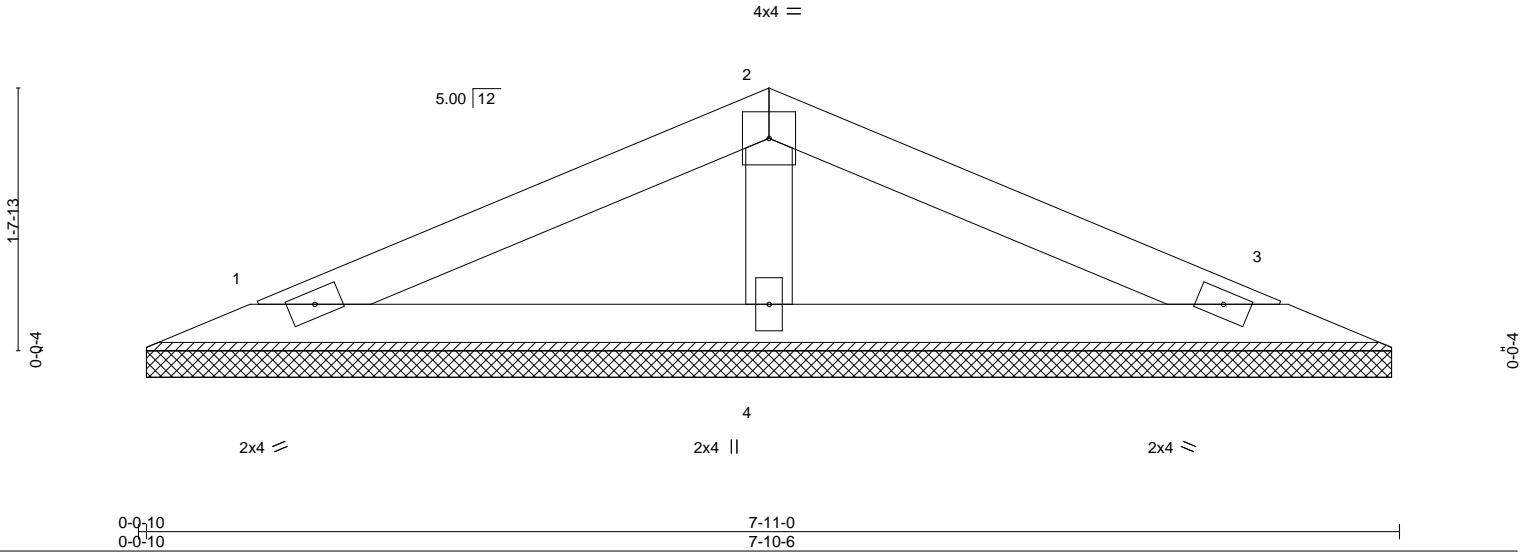
|           |       |            |     |     |                          |           |
|-----------|-------|------------|-----|-----|--------------------------|-----------|
| Job       | Truss | Truss Type | Qty | Ply | RVF-LOT #26 ROOF         | 158636630 |
| 23-7318-A | V03   | Valley     | 1   | 1   | Job Reference (optional) |           |

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8.530 s Mar 9 2023 MiTek Industries, Inc. Tue May 30 15:48:06 2023 Page 1  
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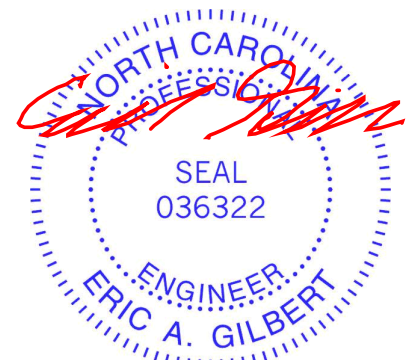
| LOADING (psf)          | SPACING-             | CSI.     | DEFL.                   | PLATES        | GRIP     |
|------------------------|----------------------|----------|-------------------------|---------------|----------|
| TCLL (roof) 20.0       | 2-0-0                | TC 0.19  | in (loc) l/defl L/d     | MT20          | 244/190  |
| Snow (Pf/Pg) 11.6/15.0 | Plate Grip DOL 1.15  | BC 0.10  | 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-P | Horz(CT) 0.00 3 n/a n/a |               |          |
| BCDL 10.0              | Code IRC2018/TPI2014 |          |                         | Weight: 24 lb | FT = 20% |

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

**REACTIONS.** (size) 1=7-9-13, 3=7-9-13, 4=7-9-13  
 Max Horz 1=17(LC 15)  
 Max Uplift 1=18(LC 16), 3=18(LC 16)  
 Max Grav 1=126(LC 2), 3=126(LC 2), 4=260(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 7-16; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; 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 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

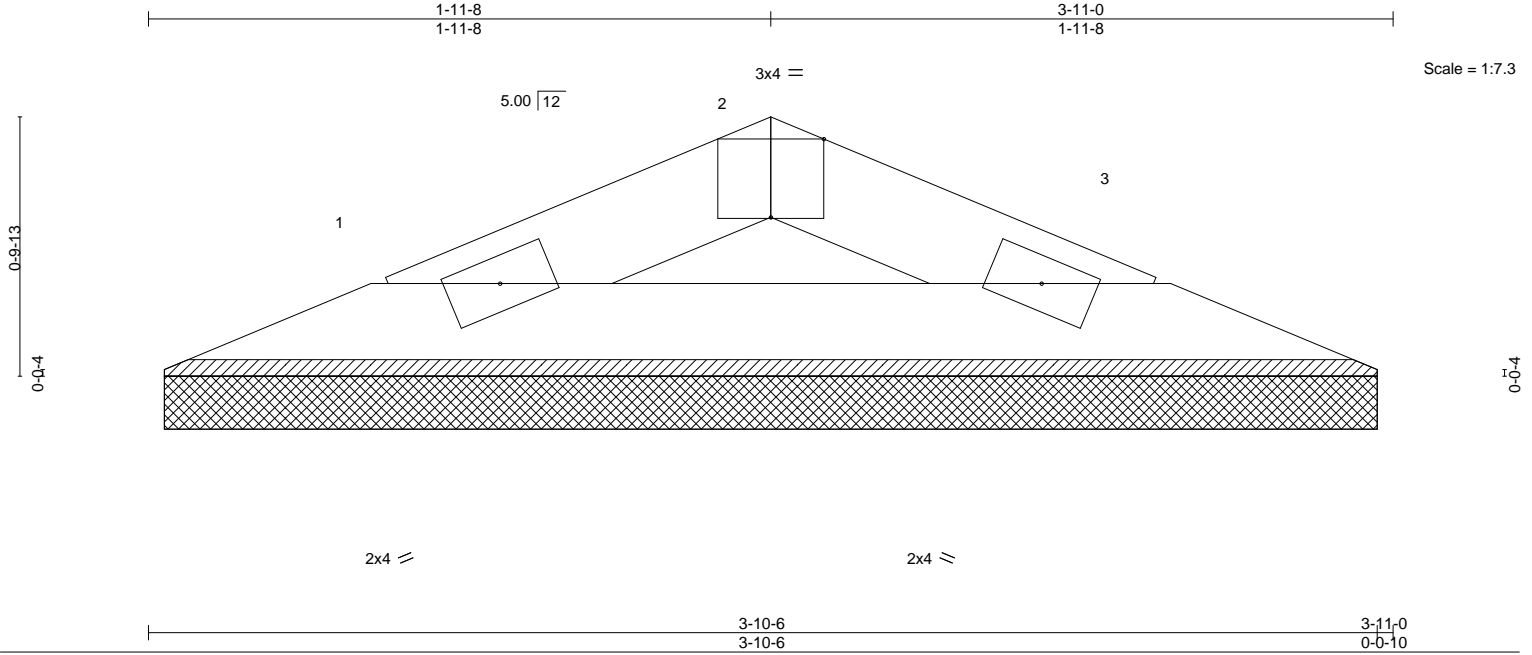


May 31, 2023

|           |       |            |     |     |                          |           |
|-----------|-------|------------|-----|-----|--------------------------|-----------|
| Job       | Truss | Truss Type | Qty | Ply | RVF-LOT #26 ROOF         | 158636631 |
| 23-7318-A | V04   | Valley     | 1   | 1   | Job Reference (optional) |           |

Riverside Roof Truss, LLC, Danville, Va - 24541,

8.530 s Mar 9 2023 MiTek Industries, Inc. Tue May 30 15:48:07 2023 Page 1  
ID:InVYNKydfynyZ5DaPQ61KbyAhdz-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



|                                      |        |        |
|--------------------------------------|--------|--------|
| Plate Offsets (X,Y)-- [2:0-2:0,Edge] | 3-10-6 | 3-11-0 |
|                                      | 3-10-6 | 0-0-10 |

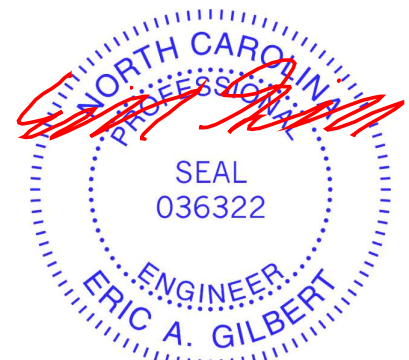
| LOADING (psf)          | SPACING-             | CSI.     | DEFL.                   | PLATES        | GRIP     |
|------------------------|----------------------|----------|-------------------------|---------------|----------|
| TCLL (roof) 20.0       | 2-0-0                | TC 0.04  | in (loc) l/defl L/d     | MT20          | 244/190  |
| Snow (Pf/Pg) 11.6/15.0 | Plate Grip DOL 1.15  | BC 0.07  | Vert(LL) n/a - n/a 999  |               |          |
| TCDL 10.0              | Lumber DOL 1.15      | WB 0.00  | 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 IRC2018/TPI2014 |          |                         | Weight: 10 lb | FT = 20% |

| LUMBER-               | BRACING-   |
|-----------------------|--|
| TOP CHORD 2x4 SP No.2 | TOP CHORD Structural wood sheathing directly applied or 3-11-0 oc purlins. |
| BOT CHORD 2x4 SP No.2 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.             |

**REACTIONS.** (size) 1=3-9-13, 3=3-9-13  
 Max Horz 1=7(LC 15)  
 Max Uplift 1=6(LC 16), 3=6(LC 16)  
 Max Grav 1=96(LC 2), 3=96(LC 2)

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

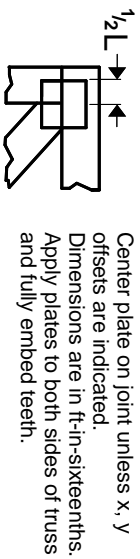
- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; 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 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



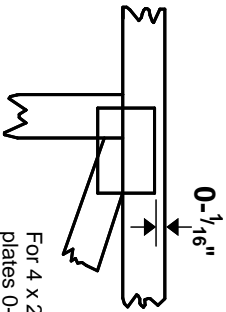
May 31, 2023

# 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 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

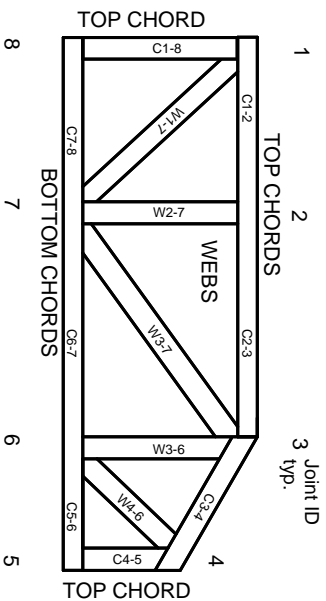


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

## Industry Standards:

ANSI/TP1: National Design Specification for Metal Plate Connected Wood Truss Construction.  
DSB-22: Design Standard for Bracing.  
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses.

# Numbering System



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

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

# Product Code Approvals

ICC-ES Reports:

ESR-1988, ESR-2362, ESR-2685, ESR-3282  
ESR-4722, ESL-1388

# Design General Notes

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

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

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**MITek**

ENGINEERING BY  
**TRENGO**  
A MITek Affiliate

MITek Engineering Reference Sheet: MIL-7473 rev. 1/2/2023

# 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.