

Trenco  
818 Soundside Rd  
Edenton, NC 27932

Re: 24-5743-A  
RVF-LOT 60

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

Pages or sheets covered by this seal: I76976974 thru I76977006

My license renewal date for the state of North Carolina is December 31, 2025.

North Carolina COA: C-0844



October 11, 2025

Gilbert, Eric

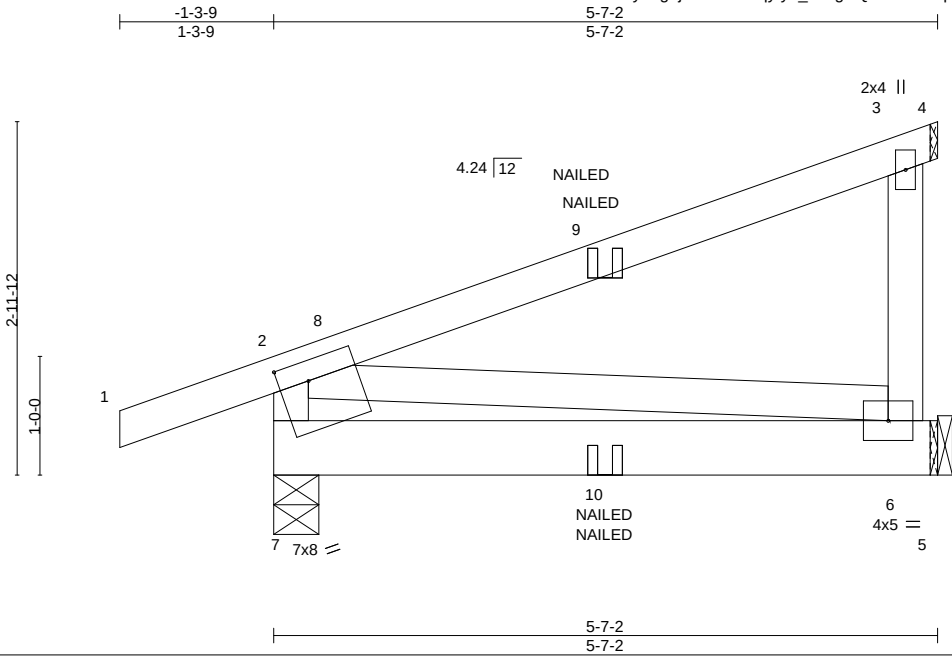
**IMPORTANT NOTE:** The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes),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

|                          |       |                     |     |     |            |           |
|--------------------------|-------|---------------------|-----|-----|------------|-----------|
| Job                      | Truss | Truss Type          | Qty | Ply | RVF-LOT 60 | 176976974 |
| 24-5743-A                | CJ01  | DIAGONAL HIP GIRDER | 2   | 1   |            |           |
| Job Reference (optional) |       |                     |     |     |            |           |

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

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Scale = 1:19.4

|                                       |           |                      |       |             |      |              |                 |               |          |
|---------------------------------------|-----------|----------------------|-------|-------------|------|--------------|-----------------|---------------|----------|
| Plate Offsets (X,Y)-- [7:0-3-0,0-2-0] |           |                      |       |             |      |              |                 |               |          |
| <b>LOADING</b> (psf)                  |           | <b>SPACING-</b>      |       | <b>CSI.</b> |      | <b>DEFL.</b> |                 | <b>PLATES</b> |          |
| TCLL (roof)                           | 20.0      | Plate Grip DOL       | 2-0-0 | TC          | 0.58 | in (loc)     | l/defl          | MT20          | GRIP     |
| Snow (Pf/Pg)                          | 11.6/15.0 | Lumber DOL           | 1.15  | BC          | 0.15 | Vert(LL)     | -0.01 6-7 >999  |               | 244/190  |
| TCDL                                  | 10.0      | Rep Stress Incr      | NO    | WB          | 0.02 | Vert(CT)     | -0.02 6-7 >999  |               |          |
| BCLL                                  | 0.0 *     | Code IRC2018/TPI2014 |       | Matrix-MP   |      | Horz(CT)     | -0.00 6 n/a n/a |               |          |
| BCDL                                  | 10.0      |                      |       |             |      |              |                 | Weight: 35 lb | FT = 20% |

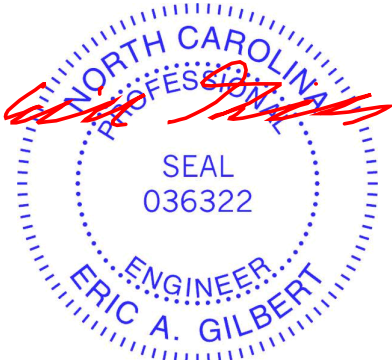
|                |             |                 |                                                                                       |
|----------------|-------------|-----------------|---------------------------------------------------------------------------------------|
| <b>LUMBER-</b> |             | <b>BRACING-</b> |                                                                                       |
| TOP CHORD      | 2x4 SP No.2 | TOP CHORD       | Structural wood sheathing directly applied or 5-7-2 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) 7=0-4-9, 6=Mechanical  
Max Horz 7=95(LC 9)  
Max Uplift 7=-82(LC 12), 6=-37(LC 12)  
Max Grav 7=305(LC 2), 6=232(LC 17)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-7=-254/89

- 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); cantilever left and right exposed ; end vertical left and right exposed; 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 82 lb uplift at joint 7 and 37 lb uplift at joint 6.
  - 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.
  - 10) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidelines.
  - 11) 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  
Uniform Loads (plf)  
Vert: 1-2=-43, 2-3=-43, 3-4=-43, 5-7=-20



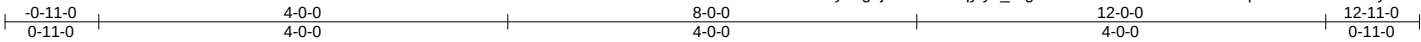
October 11,2025

|           |       |            |     |     |                          |           |
|-----------|-------|------------|-----|-----|--------------------------|-----------|
| Job       | Truss | Truss Type | Qty | Ply | RVF-LOT 60               | 176976975 |
| 24-5743-A | HG01  | HIP GIRDER | 1   | 2   | Job Reference (optional) |           |

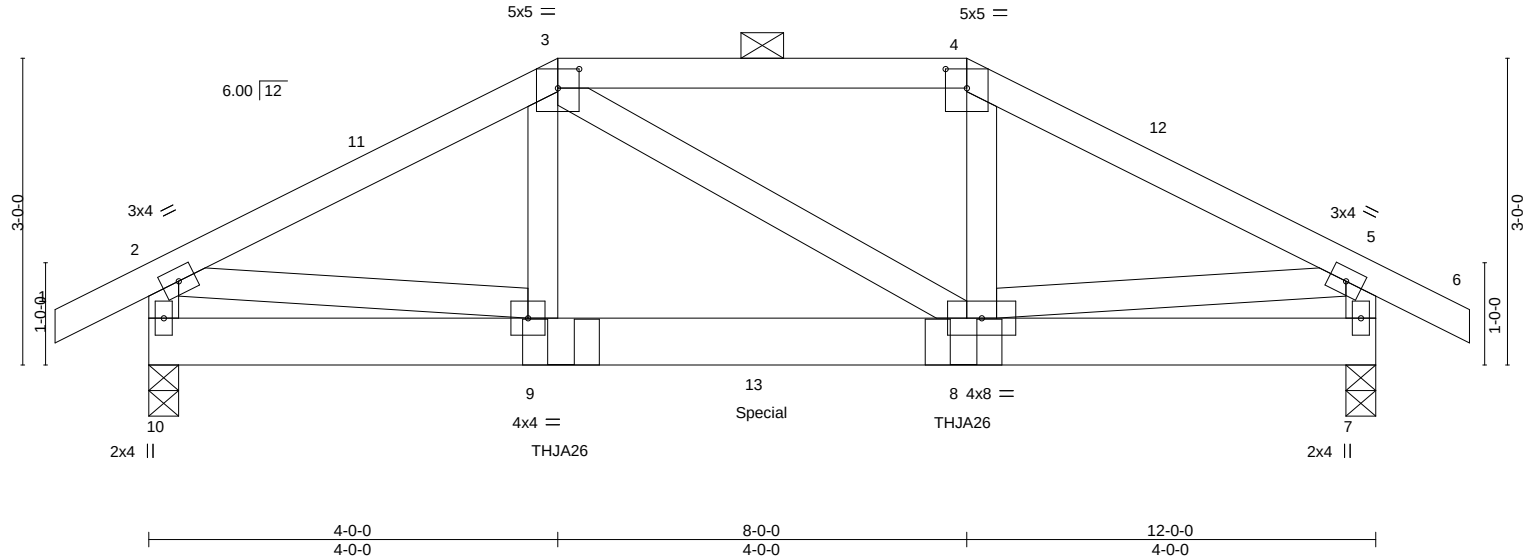
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Scale = 1:22.5



| Plate Offsets (X,Y)-- [3:0-2-8,0-2-4], [4:0-2-8,0-2-4] |           |                      |      |           |          |                           |          |                |          |
|--------------------------------------------------------|-----------|----------------------|------|-----------|----------|---------------------------|----------|----------------|----------|
| LOADING (psf)                                          |           | SPACING- 2-0-0       |      | CSI.      |          | DEFL. in (loc) l/defl L/d |          | PLATES GRIP    |          |
| TCLL (roof)                                            | 20.0      | Plate Grip DOL       | 1.15 | TC 0.17   | Vert(LL) | -0.01 8-9                 | >999 240 | MT20           | 244/190  |
| Snow (Pf/Pg)                                           | 16.5/15.0 | Lumber DOL           | 1.15 | BC 0.18   | Vert(CT) | -0.02 8-9                 | >999 180 |                |          |
| TCDL                                                   | 10.0      | Rep Stress Incr      | NO   | WB 0.19   | Horz(CT) | 0.00 7                    | n/a n/a  |                |          |
| BCLL                                                   | 0.0 *     | Code IRC2018/TPI2014 |      | Matrix-MS |          |                           |          |                |          |
| BCDL                                                   | 10.0      |                      |      |           |          |                           |          | Weight: 151 lb | FT = 20% |

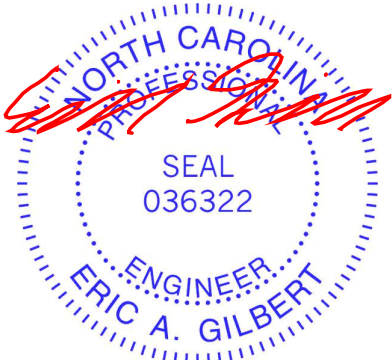
|                       |                                                                                                                                         |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| LUMBER-               | BRACING-                                                                                                                                |
| TOP CHORD 2x4 SP No.2 | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-4. |
| 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) 10=0-3-8, 7=0-3-8                 |
|            | Max Horz 10=63(LC 57)                    |
|            | Max Uplift 10=-174(LC 12), 7=-172(LC 12) |
|            | Max Grav 10=953(LC 35), 7=945(LC 35)     |

|           |                                                                              |
|-----------|------------------------------------------------------------------------------|
| FORCES.   | (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. |
| TOP CHORD | 2-3=-1205/233, 3-4=-1027/223, 4-5=-1199/231, 2-10=-909/192, 5-7=-899/190     |
| BOT CHORD | 8-9=-172/1014                                                                |
| WEBS      | 3-9=-59/335, 4-8=-67/363, 2-9=-161/921, 5-8=-161/912                         |

- 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 0-9-0 oc.  
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; 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 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 174 lb uplift at joint 10 and 172 lb uplift at joint 7.
  - 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.

Continued on page 2



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**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](http://www.tpinst.org)) and **BCSI Building Component Safety Information** available from the Structural Building Component Association ([www.sbcacomponents.com](http://www.sbcacomponents.com))

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Edenton, NC 27932

|           |       |            |     |     |                          |           |
|-----------|-------|------------|-----|-----|--------------------------|-----------|
| Job       | Truss | Truss Type | Qty | Ply | RVF-LOT 60               | 176976975 |
| 24-5743-A | HG01  | HIP GIRDER | 1   | 2   | Job Reference (optional) |           |

- NOTES-**
- 14) Use Simpson Strong-Tie THJA26 (THJA26 on 2 ply, Right Hand Hip) or equivalent at 4-0-6 from the left end to connect truss(es) to back face of bottom chord.
  - 15) Use Simpson Strong-Tie THJA26 (THJA26 on 2 ply, Left Hand Hip) or equivalent at 7-11-10 from the left end to connect truss(es) to back face of bottom chord.
  - 16) Fill all nail holes where hanger is in contact with lumber.
  - 17) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 135 lb down and 46 lb up at 6-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

Vert: 1-2=-43, 2-3=-43, 3-4=-53, 4-5=-43, 5-6=-43, 7-10=-20

Concentrated Loads (lb)

Vert: 9=-339(B) 8=-339(B) 13=-135(B)

|           |       |            |     |     |                          |           |
|-----------|-------|------------|-----|-----|--------------------------|-----------|
| Job       | Truss | Truss Type | Qty | Ply | RVF-LOT 60               | 176976976 |
| 24-5743-A | J01   | JACK-OPEN  | 4   | 1   | Job Reference (optional) |           |

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Scale = 1:12.9

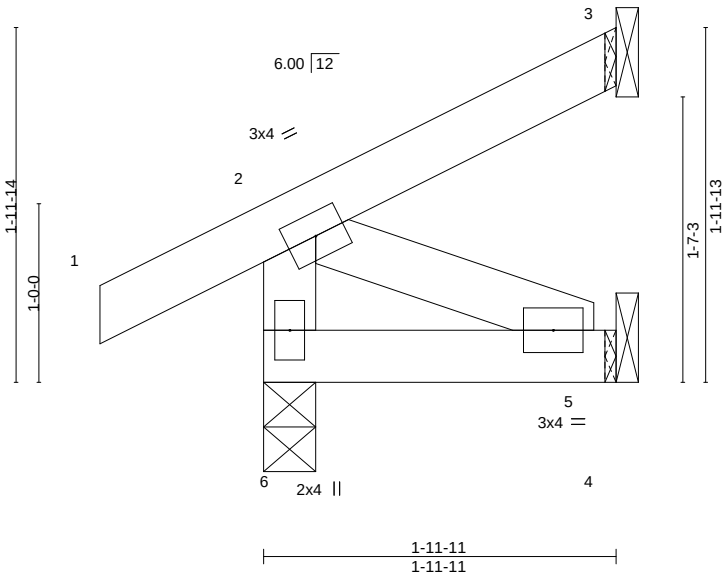


Plate Offsets (X,Y)-- [5:0-0-0,0-0-0]

| LOADING (psf) |           | SPACING-        |                 | CSI.      |      | DEFL.    | in    | (loc) | l/defl | L/d | PLATES        | GRIP     |
|---------------|-----------|-----------------|-----------------|-----------|------|----------|-------|-------|--------|-----|---------------|----------|
| TCLL (roof)   | 20.0      | Plate Grip DOL  | 2-0-0           | TC        | 0.08 | Vert(LL) | -0.00 | 6     | >999   | 240 | MT20          | 244/190  |
| Snow (Pf/Pg)  | 11.6/15.0 | Lumber DOL      | 1.15            | BC        | 0.03 | Vert(CT) | -0.00 | 5-6   | >999   | 180 |               |          |
| TCDL          | 10.0      | Rep Stress Incr | YES             | WB        | 0.03 | Horz(CT) | -0.00 | 3     | n/a    | n/a |               |          |
| BCLL          | 0.0 *     | Code            | IRC2018/TPI2014 | Matrix-MP |      |          |       |       |        |     | Weight: 11 lb | FT = 20% |
| BCDL          | 10.0      |                 |                 |           |      |          |       |       |        |     |               |          |

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 1-11-11 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 6=0-3-8, 3=Mechanical, 4=Mechanical  
Max Horz 6=67(LC 16)  
Max Uplift 6=-20(LC 16), 3=-10(LC 13), 4=-14(LC 16)  
Max Grav 6=159(LC 21), 3=37(LC 21), 4=36(LC 7)

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.
- 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 20 lb uplift at joint 6, 10 lb uplift at joint 3 and 14 lb uplift at joint 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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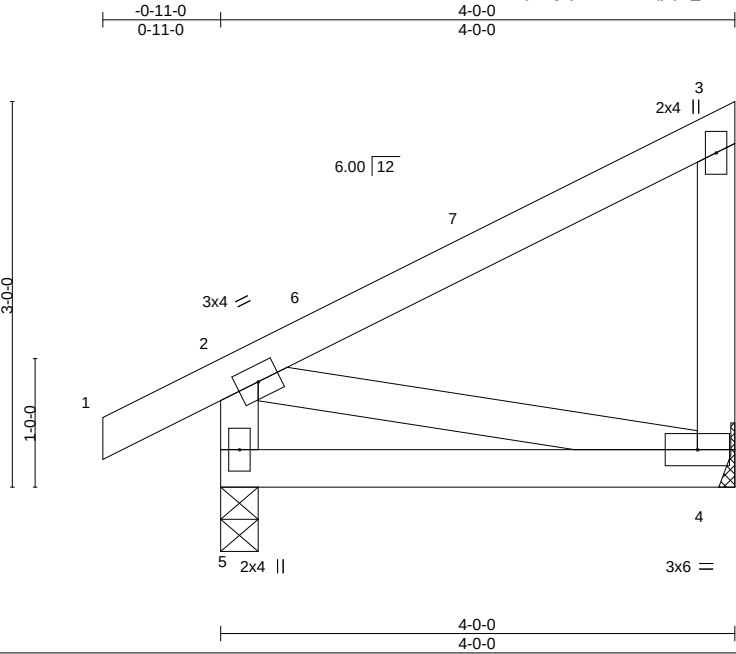




|           |       |            |     |     |                          |           |
|-----------|-------|------------|-----|-----|--------------------------|-----------|
| Job       | Truss | Truss Type | Qty | Ply | RVF-LOT 60               | 176976979 |
| 24-5743-A | M03   | MONOPITCH  | 3   | 1   | Job Reference (optional) |           |

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Scale = 1:17.9

| LOADING (psf)          | SPACING-             | CSI.      | DEFL.    | in (loc) | l/defl | L/d  | PLATES        | GRIP     |
|------------------------|----------------------|-----------|----------|----------|--------|------|---------------|----------|
| TCLL (roof) 20.0       | 2-0-0                | TC 0.26   | Vert(LL) | -0.01    | 4-5    | >999 | MT20          | 244/190  |
| Snow (Pf/Pg) 11.6/15.0 | Plate Grip DOL 1.15  | BC 0.16   | Vert(CT) | -0.02    | 4-5    | >999 |               |          |
| TCDL 10.0              | Lumber DOL 1.15      | WB 0.06   | Horz(CT) | -0.00    | 4      | n/a  |               |          |
| BCLL 0.0 *             | Rep Stress Incr YES  | Matrix-MP |          |          |        |      |               |          |
| BCDL 10.0              | Code IRC2018/TPI2014 |           |          |          |        |      | Weight: 24 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 4-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 5=0-3-8, 4=Mechanical  
Max Horz 5=97(LC 13)  
Max Uplift 5=-39(LC 16), 4=-26(LC 13)  
Max Grav 5=221(LC 2), 4=155(LC 21)

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

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; 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) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 3-10-4 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
- 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Refer to girder(s) for truss to truss connections.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 39 lb uplift at joint 5 and 26 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.



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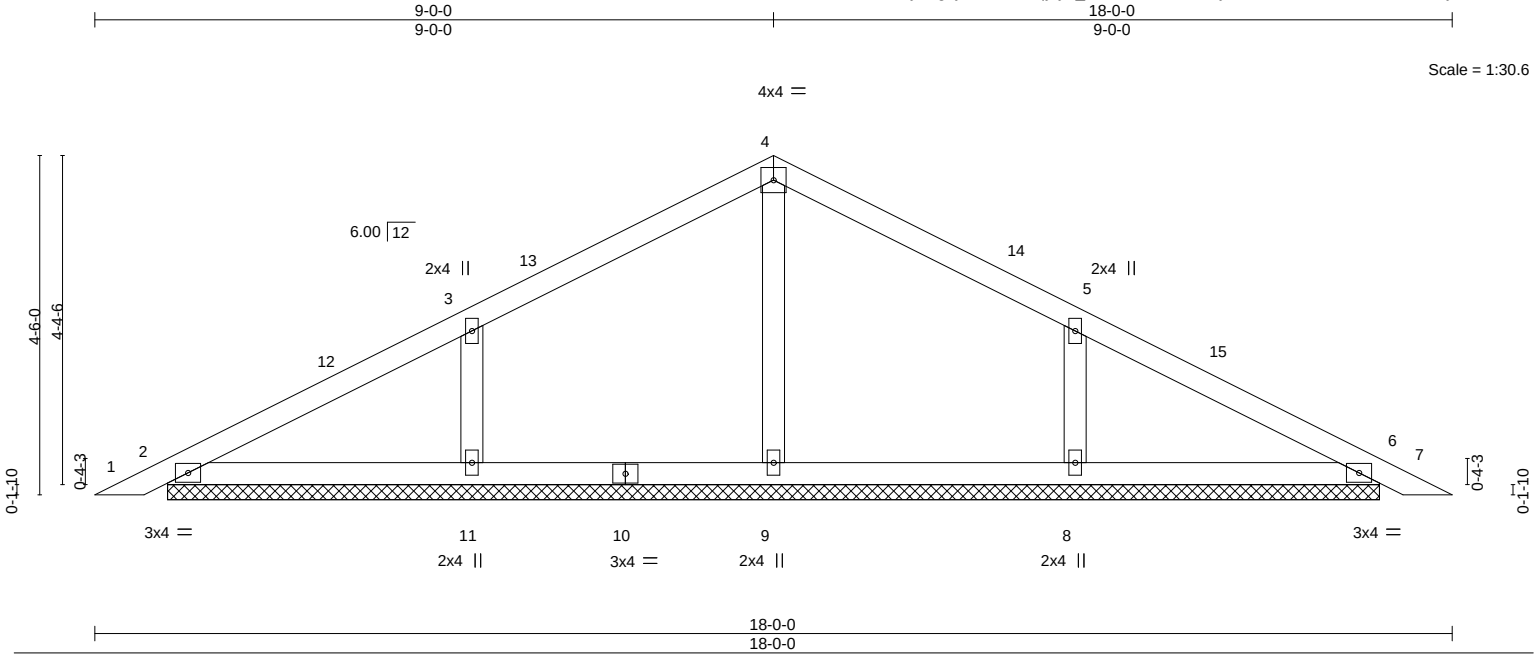
818 Soundside Road  
Edenton, NC 27932



|           |       |            |     |     |                          |           |
|-----------|-------|------------|-----|-----|--------------------------|-----------|
| Job       | Truss | Truss Type | Qty | Ply | RVF-LOT 60               | 176976980 |
| 24-5743-A | PB01  | Piggyback  | 19  | 1   | Job Reference (optional) |           |

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

8.830 s Sep 3 2025 MiTek Industries, Inc. Fri Oct 10 07:21:53 2025 Page 1  
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| LOADING (psf) |           | SPACING-             |      | CSI.     |      | DEFL.    |      | PLATES |         | GRIP |  |
|---------------|-----------|----------------------|------|----------|------|----------|------|--------|---------|------|--|
| TCLL (roof)   | 20.0      | Plate Grip DOL       | 1.15 | TC       | 0.23 | Vert(LL) | 0.00 | MT20   | 244/190 |      |  |
| Snow (Pf/Pg)  | 11.6/15.0 | Lumber DOL           | 1.15 | BC       | 0.13 | Vert(CT) | 0.01 |        |         |      |  |
| TCDL          | 10.0      | Rep Stress Incr      | YES  | WB       | 0.07 | Horz(CT) | 0.00 |        |         |      |  |
| BCLL          | 0.0 *     | Code IRC2018/TPI2014 |      | Matrix-S |      |          |      |        |         |      |  |
| BCDL          | 10.0      |                      |      |          |      |          |      |        |         |      |  |

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

| REACTIONS.      |                                                                                               |
|-----------------|-----------------------------------------------------------------------------------------------|
| All bearings    | 16-0-14.                                                                                      |
| (lb) - Max Horz | 2=-72(LC 14)                                                                                  |
| Max Uplift      | All uplift 100 lb or less at joint(s) 2, 11, 8, 6                                             |
| Max Grav        | All reactions 250 lb or less at joint(s) 2, 6 except 9=256(LC 2), 11=379(LC 34), 8=379(LC 35) |

| FORCES.                     |                                                  |
|-----------------------------|--------------------------------------------------|
| (lb) - Max. Comp./Max. Ten. | - All forces 250 (lb) or less except when shown. |
| WEBS                        | 3-11=-281/179, 5-8=-281/179                      |

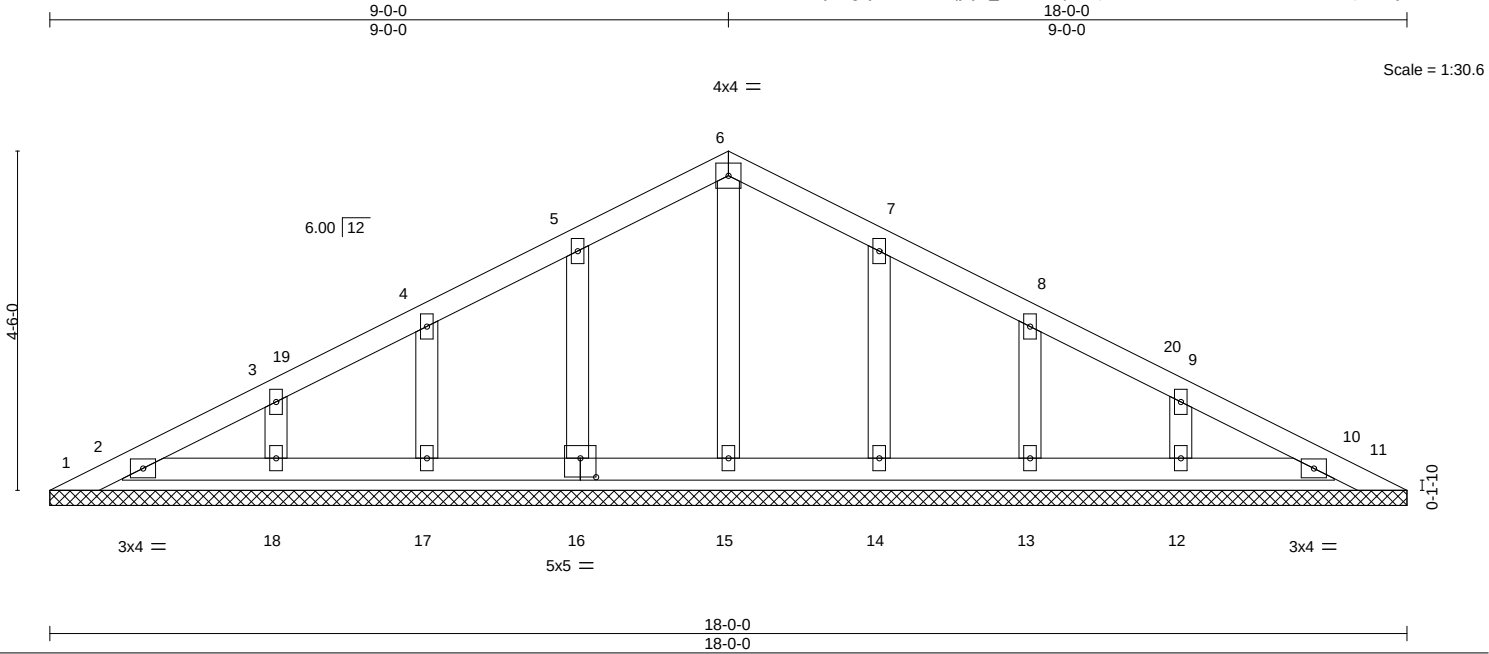
- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-3-15 to 3-3-15, Interior(1) 3-3-15 to 9-0-0, Exterior(2R) 9-0-0 to 12-0-0, Interior(1) 12-0-0 to 17-8-1 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.
  - 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) 2, 11, 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.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



October 11,2025

|           |        |            |     |     |                          |           |
|-----------|--------|------------|-----|-----|--------------------------|-----------|
| Job       | Truss  | Truss Type | Qty | Ply | RVF-LOT 60               | 176976981 |
| 24-5743-A | PB01GE | GABLE      | 2   | 1   | Job Reference (optional) |           |

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|                                        |                      |                  |                          |
|----------------------------------------|----------------------|------------------|--------------------------|
| Plate Offsets (X,Y)-- [16:0-2-8,0-3-0] |                      | 18-0-0<br>18-0-0 |                          |
| <b>LOADING</b> (psf)                   | <b>SPACING-</b>      | <b>CSI.</b>      | <b>DEFL.</b>             |
| TCLL (roof) 20.0                       | Plate Grip DOL 1.15  | TC 0.06          | in (loc) l/defl L/d      |
| Snow (Pf/Pg) 11.6/15.0                 | Lumber DOL 1.15      | BC 0.03          | Vert(LL) n/a - n/a 999   |
| TCDL 10.0                              | Rep Stress Incr YES  | WB 0.04          | Vert(CT) n/a - n/a 999   |
| BCLL 0.0 *                             | Code IRC2018/TPI2014 | Matrix-S         | Horz(CT) 0.00 11 n/a n/a |
| BCDL 10.0                              |                      |                  |                          |
|                                        |                      |                  | <b>PLATES</b> MT20       |
|                                        |                      |                  | <b>GRIP</b> 244/190      |
|                                        |                      |                  | Weight: 76 lb FT = 20%   |

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

**REACTIONS.** All bearings 18'-0-0.  
(lb) - Max Horz 1=72(LC 15)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 11, 2, 16, 17, 18, 14, 13, 12, 10  
Max Grav All reactions 250 lb or less at joint(s) 1, 11, 2, 15, 16, 17, 18, 14, 13, 12, 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; TCDL=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) 0-3-15 to 3-3-15, Exterior(2N) 3-3-15 to 9-0-0, Corner(3R) 9-0-0 to 12-0-0, Exterior(2N) 12-0-0 to 17-8-1 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.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 2'-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" tall by 2'-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, 11, 2, 16, 17, 18, 14, 13, 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.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



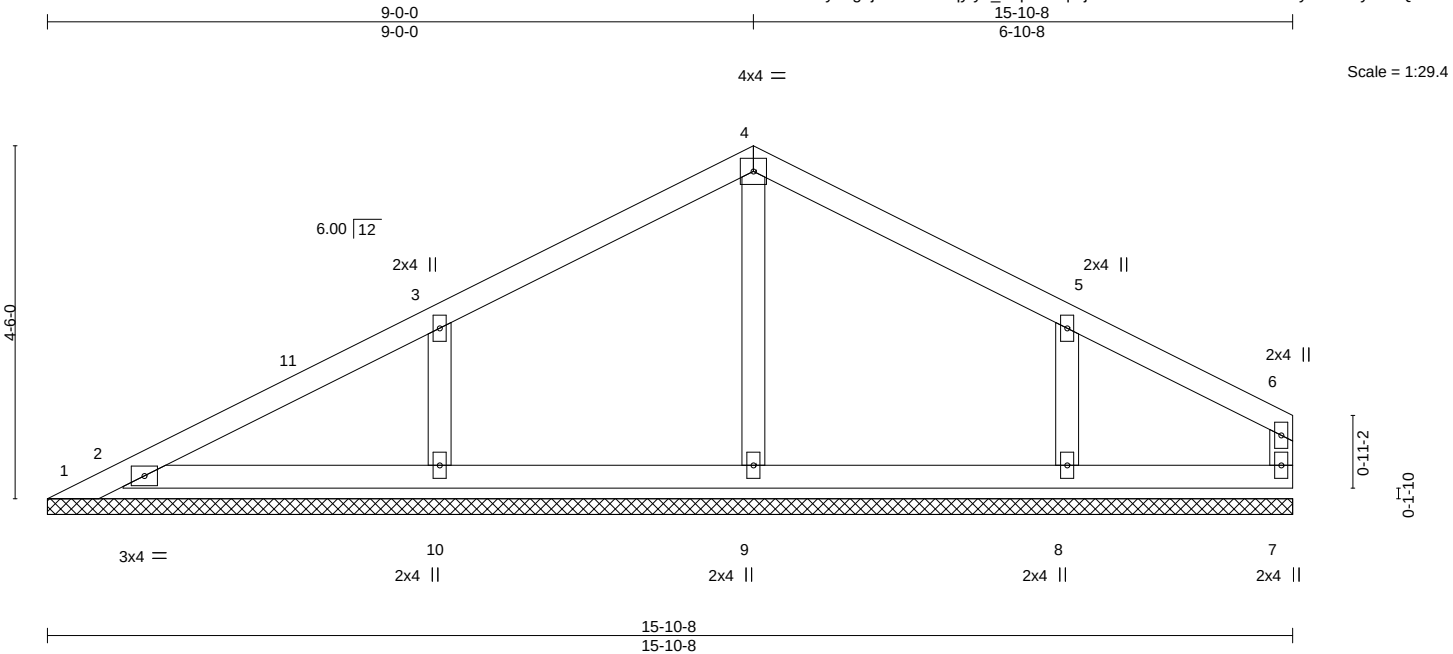
|           |       |            |     |     |                          |           |
|-----------|-------|------------|-----|-----|--------------------------|-----------|
| Job       | Truss | Truss Type | Qty | Ply | RVF-LOT 60               | 176976982 |
| 24-5743-A | PB02  | GABLE      | 5   | 1   | Job Reference (optional) |           |

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15-10-8  
6-10-8



| LOADING (psf)          | SPACING-             | CSI.     | DEFL.         | in (loc) | l/defl | L/d | PLATES        | GRIP     |
|------------------------|----------------------|----------|---------------|----------|--------|-----|---------------|----------|
| TCLL (roof) 20.0       | 2-0-0                | TC 0.21  | Vert(LL) n/a  | -        | n/a    | 999 | MT20          | 244/190  |
| Snow (Pf/Pg) 11.6/15.0 | Plate Grip DOL 1.15  | BC 0.12  | Vert(CT) n/a  | -        | n/a    | 999 |               |          |
| TCDL 10.0              | Lumber DOL 1.15      | WB 0.07  | Horz(CT) 0.00 | 7        | n/a    | n/a |               |          |
| BCLL 0.0 *             | Rep Stress Incr YES  | Matrix-S |               |          |        |     |               |          |
| BCDL 10.0              | Code IRC2018/TPI2014 |          |               |          |        |     | Weight: 60 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 10-0-0 oc bracing.

**REACTIONS.**

All bearings 15-10-8.  
(lb) - Max Horz 1=82(LC 15)  
Max Uplift All uplift 100 lb or less at joint(s) 7, 2, 10, 8 except 1=104(LC 28)  
Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 2=298(LC 2), 9=279(LC 2), 10=354(LC 34), 8=316(LC 35)

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

WEBS 3-10=267/226

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) 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) 0-3-15 to 3-3-15, Exterior(2N) 3-3-15 to 9-0-0, Corner(3R) 9-0-0 to 12-0-0, Exterior(2N) 12-0-0 to 15-8-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) 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
- 5) Unbalanced snow loads have been considered for this design.
- 6) Gable requires continuous bottom chord bearing.
- 7) Gable studs spaced at 4-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 2, 10, 8 except (jt=lb) 1=104.
- 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.
- 12) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



October 11, 2025

**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.sbcacompoments.com)

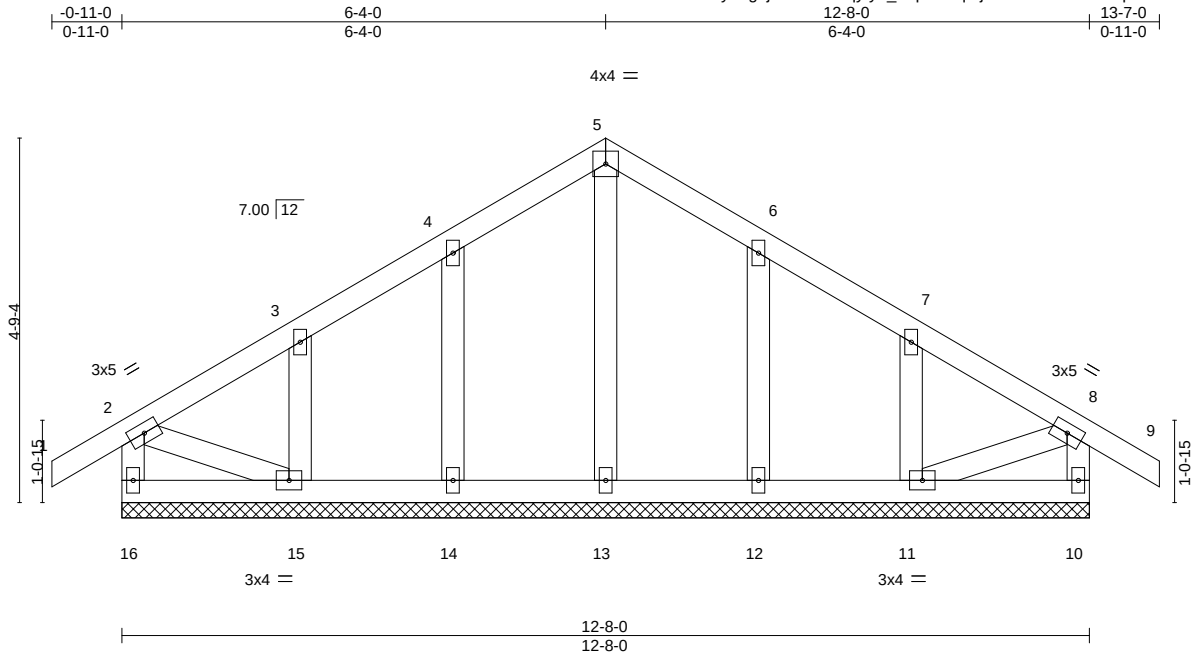
ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

|           |       |                      |     |     |                          |           |
|-----------|-------|----------------------|-----|-----|--------------------------|-----------|
| Job       | Truss | Truss Type           | Qty | Ply | RVF-LOT 60               | 176976983 |
| 24-5743-A | T01GE | COMMON SUPPORTED GAB | 1   | 1   | Job Reference (optional) |           |

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| LOADING (psf)          | SPACING-             | CSI.     | DEFL.          | in (loc) | l/defl | L/d | PLATES        | GRIP     |
|------------------------|----------------------|----------|----------------|----------|--------|-----|---------------|----------|
| TCLL (roof) 20.0       | 2-0-0                | TC 0.08  | Vert(LL) -0.00 | 9        | n/r    | 120 | MT20          | 244/190  |
| Snow (Pf/Pg) 11.6/15.0 | Plate Grip DOL 1.15  | BC 0.04  | Vert(CT) -0.00 | 9        | n/r    | 120 |               |          |
| TCDL 10.0              | Lumber DOL 1.15      | WB 0.04  | Horz(CT) 0.00  | 10       | n/a    | n/a |               |          |
| BCLL 0.0 *             | Rep Stress Incr YES  | Matrix-S |                |          |        |     |               |          |
| BCDL 10.0              | Code IRC2018/TPI2014 |          |                |          |        |     | Weight: 73 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.

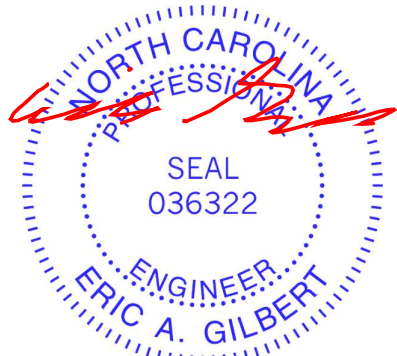
**REACTIONS.**

All bearings 12-8-0.  
(lb) - Max Horz 16=112(LC 15)  
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; TCDL=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) -0-11-0 to 2-4-0, Exterior(2N) 2-4-0 to 6-4-0, Corner(3R) 6-4-0 to 9-4-0, Exterior(2N) 9-4-0 to 13-7-0 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.



October 11, 2025

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

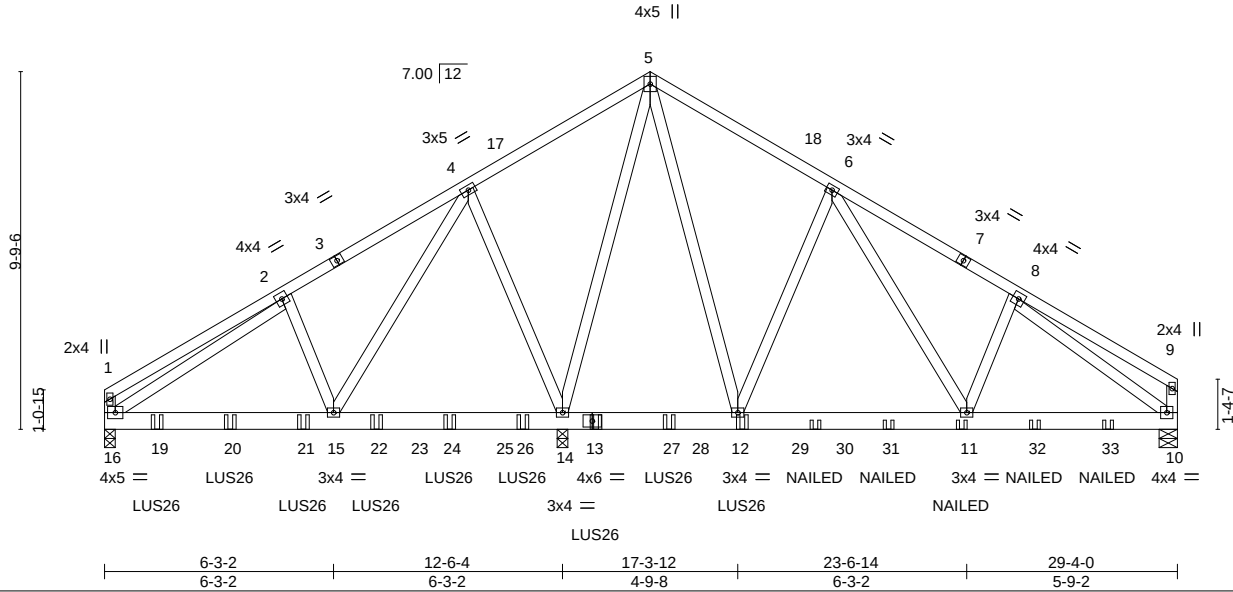
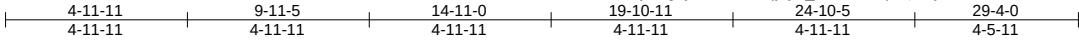
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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)

ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

|           |       |               |     |     |                          |           |
|-----------|-------|---------------|-----|-----|--------------------------|-----------|
| Job       | Truss | Truss Type    | Qty | Ply | RVF-LOT 60               | 176976984 |
| 24-5743-A | T02G  | COMMON GIRDER | 1   | 3   | Job Reference (optional) |           |

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|                      |           |                      |       |             |      |              |             |        |     |                |             |
|----------------------|-----------|----------------------|-------|-------------|------|--------------|-------------|--------|-----|----------------|-------------|
| <b>LOADING (psf)</b> |           | <b>SPACING-</b>      | 2-0-0 | <b>CSI.</b> |      | <b>DEFL.</b> | in (loc)    | l/defl | L/d | <b>PLATES</b>  | <b>GRIP</b> |
| TCLL (roof)          | 20.0      | Plate Grip DOL       | 1.15  | TC          | 0.47 | Vert(LL)     | -0.04 14-15 | >999   | 240 | MT20           | 244/190     |
| Snow (Pf/Pg)         | 11.6/15.0 | Lumber DOL           | 1.15  | BC          | 0.57 | Vert(CT)     | -0.07 14-15 | >999   | 180 |                |             |
| TCDL                 | 10.0      | Rep Stress Incr      | NO    | WB          | 0.39 | Horz(CT)     | 0.01 10     | n/a    | n/a |                |             |
| BCLL                 | 0.0 *     | Code IRC2018/TPI2014 |       | Matrix-MS   |      |              |             |        |     | Weight: 648 lb | FT = 20%    |
| BCDL                 | 10.0      |                      |       |             |      |              |             |        |     |                |             |

|                |             |                 |                                                                                       |
|----------------|-------------|-----------------|---------------------------------------------------------------------------------------|
| <b>LUMBER-</b> |             | <b>BRACING-</b> |                                                                                       |
| TOP CHORD      | 2x4 SP No.2 | TOP CHORD       | Structural wood sheathing directly applied or 6-0-0 oc purlins, 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) 14=0-3-8, 16=0-3-8, 10=0-6-0  
Max Horz 16=201(LC 11)  
Max Uplift 16=126(LC 12)  
Max Grav 14=5790(LC 3), 16=1811(LC 29), 10=1166(LC 30)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-725/160, 2-4=-1651/123, 4-5=0/841, 5-6=-397/134, 6-8=-1259/0, 8-9=-258/42, 1-16=-469/106  
BOT CHORD 15-16=-79/1436, 11-12=0/536, 10-11=0/1044  
WEBS 4-15=-52/2843, 4-14=-1707/150, 5-14=-2071/0, 5-12=0/1537, 6-12=-793/77, 6-11=0/996, 2-16=-1063/0, 8-10=-1136/0

- NOTES-**
- 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.  
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - 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=29ft; 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 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) except (jt=lb) 16=126.
  - 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) or equivalent spaced at 6-0-0 oc max. starting at 1-5-4 from the left end to 17-5-4 to connect truss(es) to back face of bottom chord.
  - Use Simpson Strong-Tie LUS26 (4-10d Girder, 3-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 9-5-4 from the left end to 11-5-4 to connect truss(es) to back face of bottom chord.
- Continued on page 2 where hanger is in contact with lumber.



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|           |       |               |     |     |                          |           |
|-----------|-------|---------------|-----|-----|--------------------------|-----------|
| Job       | Truss | Truss Type    | Qty | Ply | RVF-LOT 60               | 176976984 |
| 24-5743-A | T02G  | COMMON GIRDER | 1   | 3   | Job Reference (optional) |           |

**NOTES-**  
14) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.

**LOAD CASE(S)** Standard  
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-5=-43, 5-9=-43, 10-16=-20  
Concentrated Loads (lb)  
Vert: 13=-300(B) 12=-300(B) 11=-134(B) 19=-501(B) 20=-501(B) 21=-501(B) 22=-499(B) 24=-686(B) 26=-686(B) 27=-300(B) 30=-135(B) 31=-134(B) 32=-134(B) 33=-134(B)

 **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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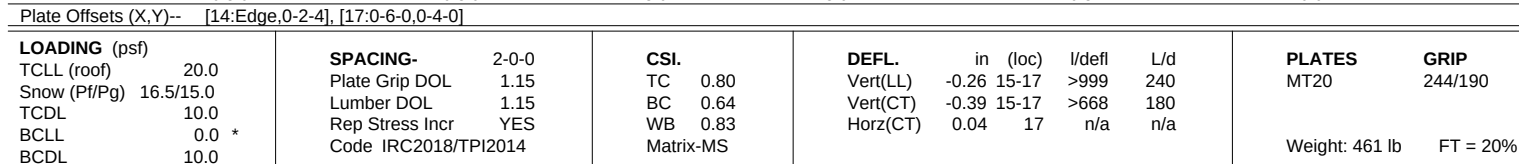


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0-11-0 10-3-0 20-6-0 28-6-2 36-6-4 38-6-0 48-6-12 58-7-8

0-11-0 10-3-0 10-3-0 8-0-2 8-0-2 1-11-12 10-0-12 10-0-12

Scale = 1:102.2



**REACTIONS.** (size) 2=0-3-8, 14=Mechanical, 17=0-3-8  
 Max Horz 2=236(LC 15)  
 Max Uplift 2=-115(LC 16), 14=-49(LC 16), 17=-147(LC 16)  
 Max Grav 2=1562(LC 28), 14=643(LC 29), 17=3386(LC 30)

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

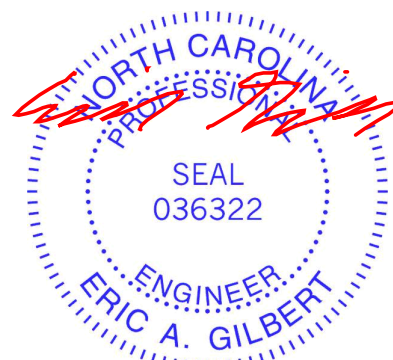
**TOP CHORD** 2-4=-2258/236, 4-6=-1298/246, 6-7=-477/239, 7-9=-477/239, 9-10=0/853,  
 10-12=-746/306, 12-13=-682/121, 13-14=-522/110

**BOT CHORD** 2-22=-136/2151, 20-22=-136/2151, 18-20=0/1131, 17-18=-867/182, 15-17=-622/150,  
 14-15=-85/358

**WEBS** 4-22=0/507, 4-20=-1169/190, 6-20=0/963, 6-18=-1188/80, 7-18=-667/168,  
 9-18=-144/2020, 9-17=-1917/233, 10-17=-1356/175, 10-15=-204/1587, 12-15=-696/302,  
 13-15=-121/258

- NOTES-**

  - 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=59ft; eave=7ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 4-11-6, Interior(1) 4-11-6 to 20-6-0, Exterior(2R) 20-6-0 to 28-6-2, Interior(1) 28-6-2 to 38-6-0, Exterior(2R) 38-6-0 to 46-9-8, Interior(1) 46-9-8 to 58-5-12 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) 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.
  - 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) Provide adequate drainage to prevent water ponding.
  - 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) Refer to girder(s) for truss to truss connections.
  - 10) Bearing at joint(s) 17 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14 except (jt=lb)



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|           |       |                |     |     |                          |           |
|-----------|-------|----------------|-----|-----|--------------------------|-----------|
| Job       | Truss | Truss Type     | Qty | Ply | RVF-LOT 60               | 176976986 |
| 24-5743-A | T03   | PIGGYBACK BASE | 3   | 1   | Job Reference (optional) |           |

- NOTES-**
- 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.
  - 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

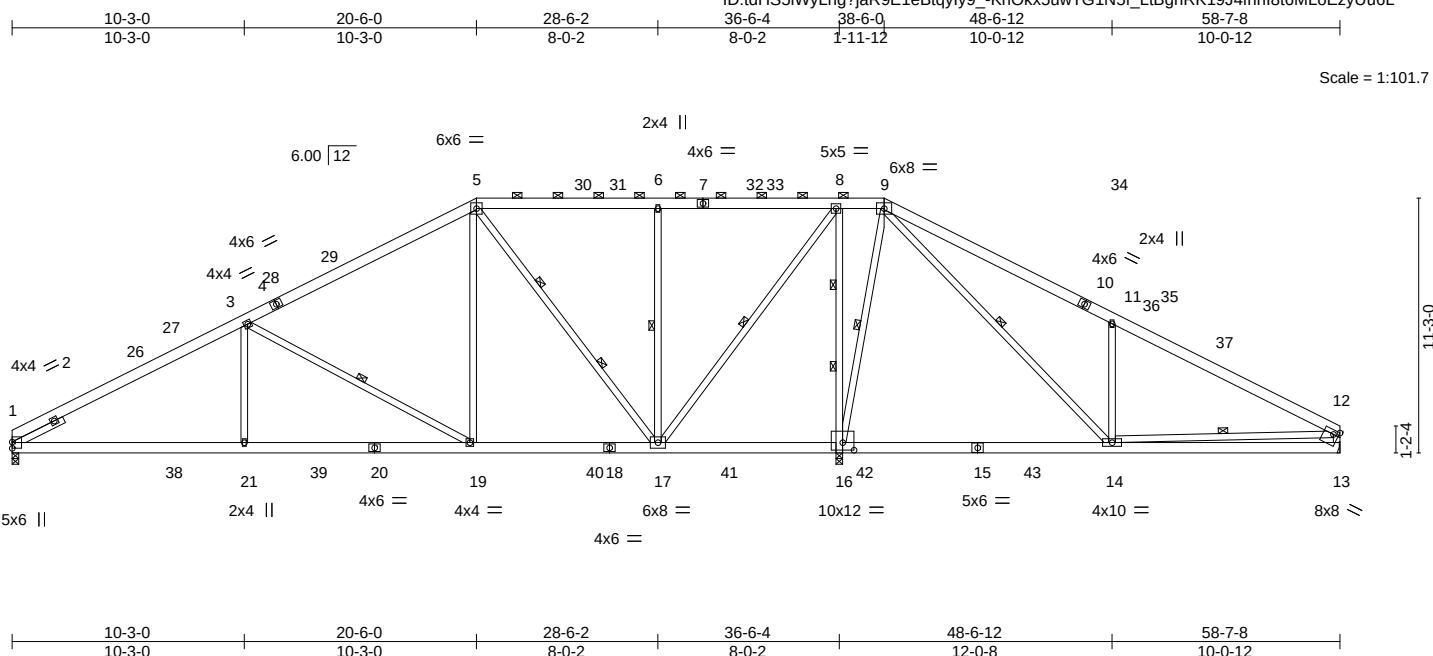
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|                                                         |           |  |                      |       |             |  |                |                      |
|---------------------------------------------------------|-----------|--|----------------------|-------|-------------|--|----------------|----------------------|
| Plate Offsets (X,Y)-- [13;Edge,0-2-4], [16:0-6-0,0-4-0] |           |  |                      |       |             |  |                |                      |
| <b>LOADING</b>                                          | (psf)     |  | <b>SPACING-</b>      | 2-0-0 | <b>CSI.</b> |  | <b>DEFL.</b>   | in (loc) l/defl L/d  |
| TCLL (roof)                                             | 20.0      |  | Plate Grip DOL       | 1.15  | TC 0.80     |  | Vert(LL)       | -0.26 14-16 >999 240 |
| Snow (Pf/Pg)                                            | 16.5/15.0 |  | Lumber DOL           | 1.15  | BC 0.64     |  | Vert(CT)       | -0.39 14-16 >668 180 |
| TCDL                                                    | 10.0      |  | Rep Stress Incr      | YES   | WB 0.83     |  | Horz(CT)       | 0.04 16 n/a n/a      |
| BCLL                                                    | 0.0 *     |  | Code IRC2018/TPI2014 |       | Matrix-MS   |  |                |                      |
| BCDL                                                    | 10.0      |  |                      |       |             |  |                |                      |
|                                                         |           |  |                      |       |             |  | <b>PLATES</b>  | <b>GRIP</b>          |
|                                                         |           |  |                      |       |             |  | MT20           | 244/190              |
|                                                         |           |  |                      |       |             |  | Weight: 458 lb | FT = 20%             |

|                |                        |                 |                                                                                                                               |
|----------------|------------------------|-----------------|-------------------------------------------------------------------------------------------------------------------------------|
| <b>LUMBER-</b> |                        | <b>BRACING-</b> |                                                                                                                               |
| TOP CHORD      | 2x6 SP No.2            | TOP CHORD       | Structural wood sheathing directly applied or 4-1-9 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-9. |
| BOT CHORD      | 2x6 SP No.2            |                 |                                                                                                                               |
| WEBS           | 2x4 SP No.3            | BOT CHORD       | Rigid ceiling directly applied or 6-0-0 oc bracing.                                                                           |
| SLIDER         | Left 2x4 SP No.3 2-6-0 | WEBS            | 1 Row at midpt 3-19, 6-17, 8-17, 9-16, 9-14, 12-14                                                                            |
|                |                        |                 | 2 Rows at 1/3 pts 5-17, 8-16                                                                                                  |

**REACTIONS.** (size) 1=0-3-8, 13=Mechanical, 16=0-3-8  
 Max Horz 1=229(LC 15)  
 Max Uplift 1=-86(LC 16), 13=-50(LC 16), 16=-147(LC 16)  
 Max Grav 1=1513(LC 27), 13=644(LC 28), 16=3384(LC 29)

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

|           |                                                                                                                                                                            |
|-----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TOP CHORD | 1-3=-225/245, 3-5=-1301/251, 5-6=-479/242, 6-8=-479/242, 8-9=0/851, 9-11=-748/309,<br>11-12=-683/124, 12-13=-523/110                                                       |
| BOT CHORD | 1-21=-136/2156, 19-21=-136/2156, 17-19=0/1133, 16-17=-865/179, 14-16=-620/147,<br>13-14=-85/358                                                                            |
| WEBS      | 3-21=0/507, 3-19=-1171/191, 5-19=0/964, 5-17=-1187/80, 6-17=-667/168,<br>8-17=-144/2020, 8-16=-1916/233, 9-16=-1355/174, 9-14=-204/1587, 11-14=-696/302,<br>12-14=-119/254 |

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCdL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=59ft; eave=7ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 5-10-6, Interior(1) 5-10-6 to 20-6-0, Exterior(2R) 20-6-0 to 28-6-2, Interior(1) 28-6-2 to 38-6-0, Exterior(2R) 38-6-0 to 46-9-8, Interior(1) 46-9-8 to 58-5-12 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) 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.
- 4) Unbalanced snow loads have been considered for this design.
- 5) Provide adequate drainage to prevent water ponding.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 8) Refer to girder(s) for truss to truss connections.
- 9) Bearing at joint(s) 16 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 capable of withstanding 100 lb uplift at joint(s) 1, 13 except (jt=lb) 16=147.
- 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 60               | 176976987 |
| 24-5743-A | T03A  | PIGGYBACK BASE | 1   | 1   | Job Reference (optional) |           |

**NOTES-**  
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

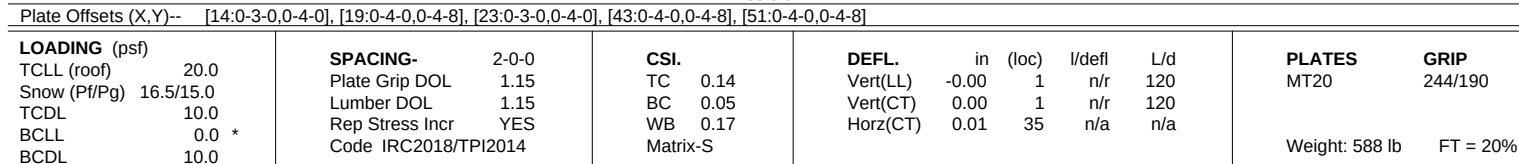
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ID:tdHS5IWyLng?jaR9E1eBtqly9\_-GAWUMnvA?th5Lz8j?ciFWl6f2tY9YM?AZgqulsyUu6J  
0-11-0 20-6-0 38-6-0 58-6-0  
0-11-0 20-6-0 18-0-0 20-0-0  
Scale = 1:102.4



**REACTIONS.** All bearings 58-6-0.  
(lb) - Max Horz 2=234(LC 15)  
Max Uplift All uplift 100 lb or less at joint(s) 35, 2, 46, 47, 48, 49, 50, 51, 52, 55, 56, 58, 59, 60, 61, 62,  
63, 64, 44, 43, 42, 41, 40, 39, 38, 37, 36  
Max Grav All reactions 250 lb or less at joint(s) 35, 2, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 58,  
59, 60, 61, 62, 63, 64, 44, 43, 42, 41, 40, 39, 38, 37, 36

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCFL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=59ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) -0-11-0 to 4-11-6, Exterior(2N) 4-11-6 to 20-6-0, Corner(3R) 20-6-0 to 26-6-0, Exterior(2N) 26-6-0 to 38-6-0, Corner(3R) 38-6-0 to 44-6-0, Exterior(2N) 44-6-0 to 58-4-4 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
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TP1 1.
- 4) 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.
- 5) Unbalanced snow loads have been considered for this design.
- 6) 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.
- 7) Provide adequate drainage to prevent water ponding.
- 8) All plates are 2x4 MT20 unless otherwise indicated.
- 9) Gable requires continuous bottom chord bearing.
- 10) Gable studs spaced at 2-0-0 oc.
- 11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 12) \* 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.



|           |       |                      |     |     |                          |           |
|-----------|-------|----------------------|-----|-----|--------------------------|-----------|
| Job       | Truss | Truss Type           | Qty | Ply | RVF-LOT 60               | 176976988 |
| 24-5743-A | T03GE | PIGGYBACK BASE SUPPO | 1   | 1   | Job Reference (optional) |           |

- NOTES-**
- 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 35, 2, 46, 47, 48, 49, 50, 51, 52, 55, 56, 58, 59, 60, 61, 62, 63, 64, 44, 43, 42, 41, 40, 39, 38, 37, 36.
  - 14) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.
  - 15) 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.
  - 16) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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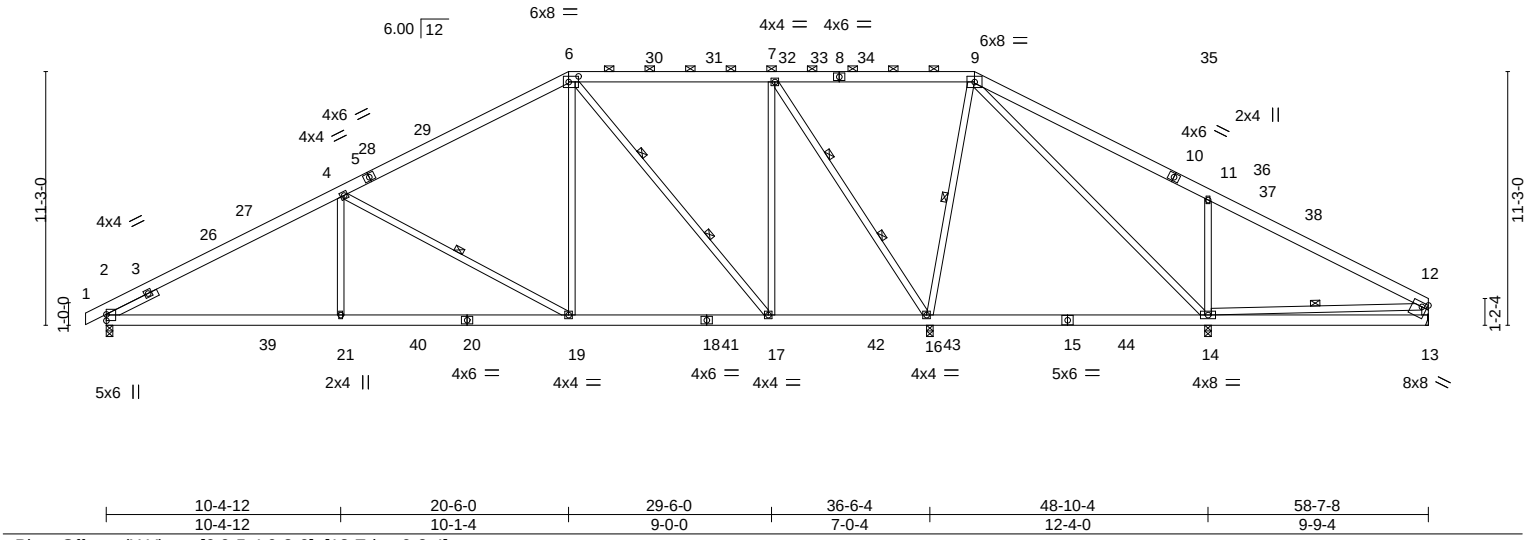
|           |       |                |     |     |                          |           |
|-----------|-------|----------------|-----|-----|--------------------------|-----------|
| Job       | Truss | Truss Type     | Qty | Ply | RVF-LOT 60               | 176976989 |
| 24-5743-A | T04   | PIGGYBACK BASE | 4   | 1   | Job Reference (optional) |           |

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ID:tdHSS5IWYLnG?jaR9E1eBtqly9\_kM4ta7womBPpy7jwZJDU3yfgHgyudEKoKaSqlyUu6l

|         |         |        |        |        |         |        |
|---------|---------|--------|--------|--------|---------|--------|
| -0-11-0 | 10-4-12 | 20-6-0 | 29-6-0 | 38-6-0 | 48-10-4 | 58-7-8 |
| 0-11-0  | 10-4-12 | 10-1-4 | 9-0-0  | 9-0-0  | 10-4-4  | 9-9-4  |

Scale = 1:102.2



|                        |           |                                  |  |           |  |                      |  |        |  |                |  |
|------------------------|-----------|----------------------------------|--|-----------|--|----------------------|--|--------|--|----------------|--|
| Plate Offsets (X, Y)-- |           | [6:0-5-4,0-3-0], [13:Edge,0-2-4] |  |           |  |                      |  |        |  |                |  |
| LOADING (psf)          |           | SPACING-                         |  | CSI.      |  | DEFL.                |  |        |  | PLATES         |  |
| TCLL (roof)            | 20.0      | 2-0-0                            |  | TC 0.79   |  | in (loc)             |  | l/defl |  | MT20           |  |
| Snow (Pf/Pg)           | 16.5/15.0 | Plate Grip DOL 1.15              |  | BC 0.68   |  | Vert(LL) -0.21 14-16 |  | >693   |  | 244/190        |  |
| TCDL                   | 10.0      | Lumber DOL 1.15                  |  | WB 0.94   |  | Vert(CT) -0.31 14-16 |  | >477   |  |                |  |
| BCLL                   | 0.0 *     | Rep Stress Incr YES              |  | Matrix-MS |  | Horz(CT) 0.06 16     |  | n/a    |  |                |  |
| BCDL                   | 10.0      | Code IRC2018/TPI2014             |  |           |  |                      |  |        |  | Weight: 445 lb |  |
|                        |           |                                  |  |           |  |                      |  |        |  | FT = 20%       |  |

|           |                        |           |                                                                                                                                 |
|-----------|------------------------|-----------|---------------------------------------------------------------------------------------------------------------------------------|
| LUMBER-   |                        | BRACING-  |                                                                                                                                 |
| TOP CHORD | 2x6 SP No.2            | TOP CHORD | Structural wood sheathing directly applied or 3-11-15 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-9. |
| BOT CHORD | 2x6 SP No.2            | BOT CHORD | Rigid ceiling directly applied or 10-0-0 oc bracing, Except:                                                                    |
| WEBS      | 2x4 SP No.3 *Except*   |           | 6-0-0 oc bracing: 14-16.                                                                                                        |
|           | 7-16: 2x4 SP No.1      |           | 1 Row at midpt                                                                                                                  |
| SLIDER    | Left 2x4 SP No.3 2-6-0 | WEBS      | 2 Rows at 1/3 pts                                                                                                               |

|                                                                                                           |  |  |  |
|-----------------------------------------------------------------------------------------------------------|--|--|--|
| REACTIONS.                                                                                                |  |  |  |
| All bearings 0-3-8 except (jt=length) 13=Mechanical.                                                      |  |  |  |
| (lb) - Max Horz 2=236(LC 15)                                                                              |  |  |  |
| Max Uplift All uplift 100 lb or less at joint(s) 16 except 2=-124(LC 16), 14=-135(LC 16)                  |  |  |  |
| Max Grav All reactions 250 lb or less at joint(s) 13 except 2=1623(LC 28), 16=2882(LC 28), 14=1062(LC 49) |  |  |  |

|                                                                                                                                                      |  |  |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
| FORCES.                                                                                                                                              |  |  |  |
| (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.                                                                         |  |  |  |
| TOP CHORD 2-4=-2368/257, 4-6=-1404/268, 6-7=-517/265, 7-9=0/641, 9-11=-42/489, 11-12=-83/412                                                         |  |  |  |
| BOT CHORD 2-21=-150/2245, 19-21=-150/2245, 17-19=0/1253, 16-17=0/546, 14-16=-465/137                                                                 |  |  |  |
| WEBS 4-21=0/508, 4-19=-1168/190, 6-19=0/998, 6-17=-1214/61, 7-17=0/1209, 7-16=-1980/179, 9-16=-769/135, 9-14=-24/274, 11-14=-714/307, 12-14=-496/170 |  |  |  |

- 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=59ft; eave=7ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 4-11-6, Interior(1) 4-11-6 to 20-6-0, Exterior(2R) 20-6-0 to 28-9-8, Interior(1) 28-9-8 to 38-6-0, Exterior(2R) 38-6-0 to 46-9-8, Interior(1) 46-9-8 to 58-5-12 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=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, with BCDL = 10.0psf.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16 except (jt=lb) 2=124, 14=135.
  - 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.



October 11,2025

**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.sbcacompnents.com)

ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

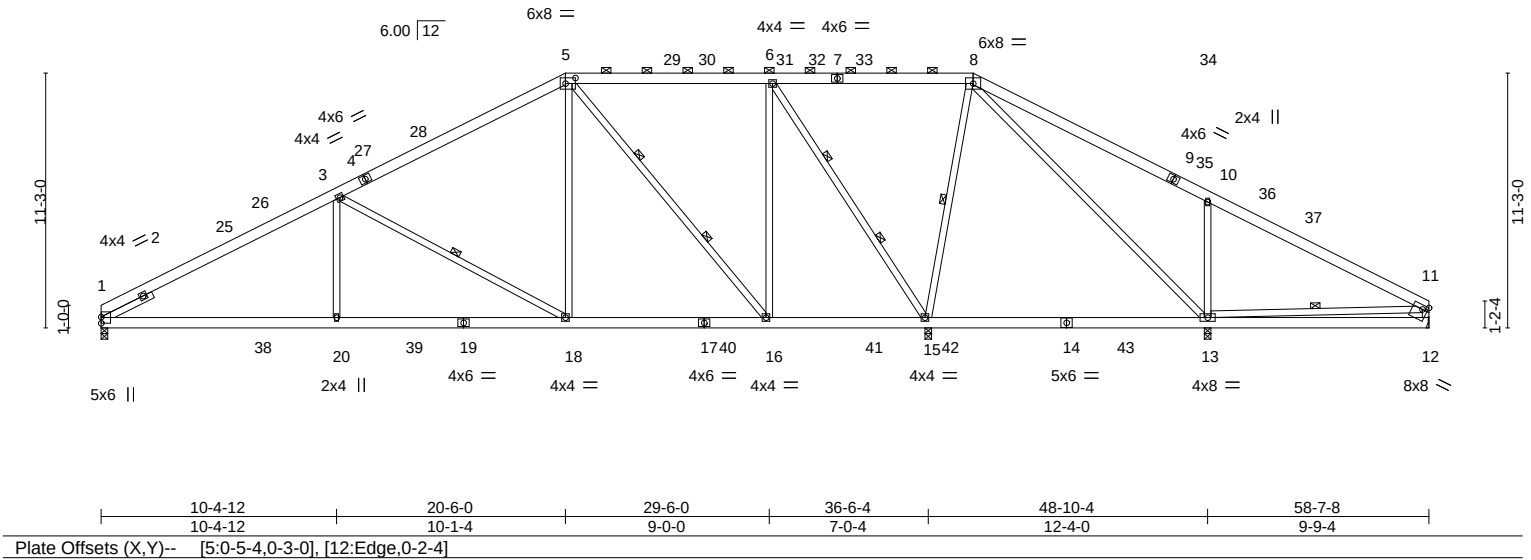
818 Soundside Road  
Edenton, NC 27932

|           |       |                |     |     |                          |           |
|-----------|-------|----------------|-----|-----|--------------------------|-----------|
| Job       | Truss | Truss Type     | Qty | Ply | RVF-LOT 60               | 176976990 |
| 24-5743-A | T04A  | PIGGYBACK BASE | 1   | 1   | Job Reference (optional) |           |

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

8.830 s Sep 3 2025 MiTek Industries, Inc. Fri Oct 10 07:22:04 2025 Page 1  
ID:tdHSS5IWYLnG?jaR9E1eBtqly9\_-DZeFnTxQUXpaGI661kjcABrOh0Gd3TT1\_J?NkyUu6H

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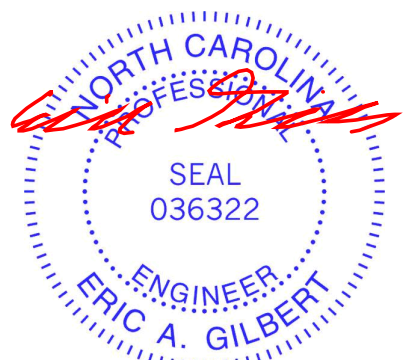
| LOADING (psf) |           | SPACING-             |      | CSI.      |      | DEFL.    |                  | PLATES |         | GRIP |  |
|---------------|-----------|----------------------|------|-----------|------|----------|------------------|--------|---------|------|--|
| TCLL (roof)   | 20.0      | Plate Grip DOL       | 1.15 | TC        | 0.79 | Vert(LL) | -0.21 13-15 >693 | MT20   | 244/190 |      |  |
| Snow (Pf/Pg)  | 16.5/15.0 | Lumber DOL           | 1.15 | BC        | 0.67 | Vert(CT) | -0.31 13-15 >477 |        |         |      |  |
| TCDL          | 10.0      | Rep Stress Incr      | YES  | WB        | 0.94 | Horz(CT) | 0.06 15 n/a      |        |         |      |  |
| BCLL          | 0.0 *     | Code IRC2018/TPI2014 |      | Matrix-MS |      |          |                  |        |         |      |  |
| BCDL          | 10.0      |                      |      |           |      |          |                  |        |         |      |  |

| LUMBER-   |                        | BRACING-  |                                                                                                                                 |
|-----------|------------------------|-----------|---------------------------------------------------------------------------------------------------------------------------------|
| TOP CHORD | 2x6 SP No.2            | TOP CHORD | Structural wood sheathing directly applied or 3-11-15 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-8. |
| BOT CHORD | 2x6 SP No.2            | BOT CHORD | Rigid ceiling directly applied or 10-0-0 oc bracing, Except:                                                                    |
| WEBS      | 2x4 SP No.3 *Except*   |           | 6-0-0 oc bracing: 13-15.                                                                                                        |
|           | 6-15: 2x4 SP No.1      |           | 1 Row at midpt 3-18, 8-15, 11-13                                                                                                |
| SLIDER    | Left 2x4 SP No.3 2-6-0 | WEBS      | 2 Rows at 1/3 pts 5-16, 6-15                                                                                                    |

**REACTIONS.** All bearings 0-3-8 except (jt=length) 12=Mechanical.  
(lb) - Max Horz 1=229(LC 15)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 15 except 13=-135(LC 16)  
Max Grav All reactions 250 lb or less at joint(s) 12 except 1=1573(LC 27), 15=2879(LC 27), 13=1063(LC 48)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-3=-2362/267, 3-5=-1407/273, 5-6=-518/269, 6-8=0/638, 8-10=-41/487, 10-11=-83/410  
BOT CHORD 1-20=-150/2251, 18-20=-150/2251, 16-18=0/1255, 15-16=0/547, 13-15=-462/133  
WEBS 3-20=0/508, 3-18=-1171/190, 5-18=0/999, 5-16=-1214/61, 6-16=0/1209, 6-15=-1980/179, 8-15=-766/134, 8-13=-24/272, 10-13=-714/307, 11-13=-495/170

- 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=59ft; eave=7ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 5-10-6, Interior(1) 5-10-6 to 20-6-0, Exterior(2R) 20-6-0 to 28-9-8, Interior(1) 28-9-8 to 38-6-0, Exterior(2R) 38-6-0 to 46-9-8, Interior(1) 46-9-8 to 58-5-12 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=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.
  - 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, with BCDL = 10.0psf.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 15 except (jt=lb) 13=135.
  - 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.



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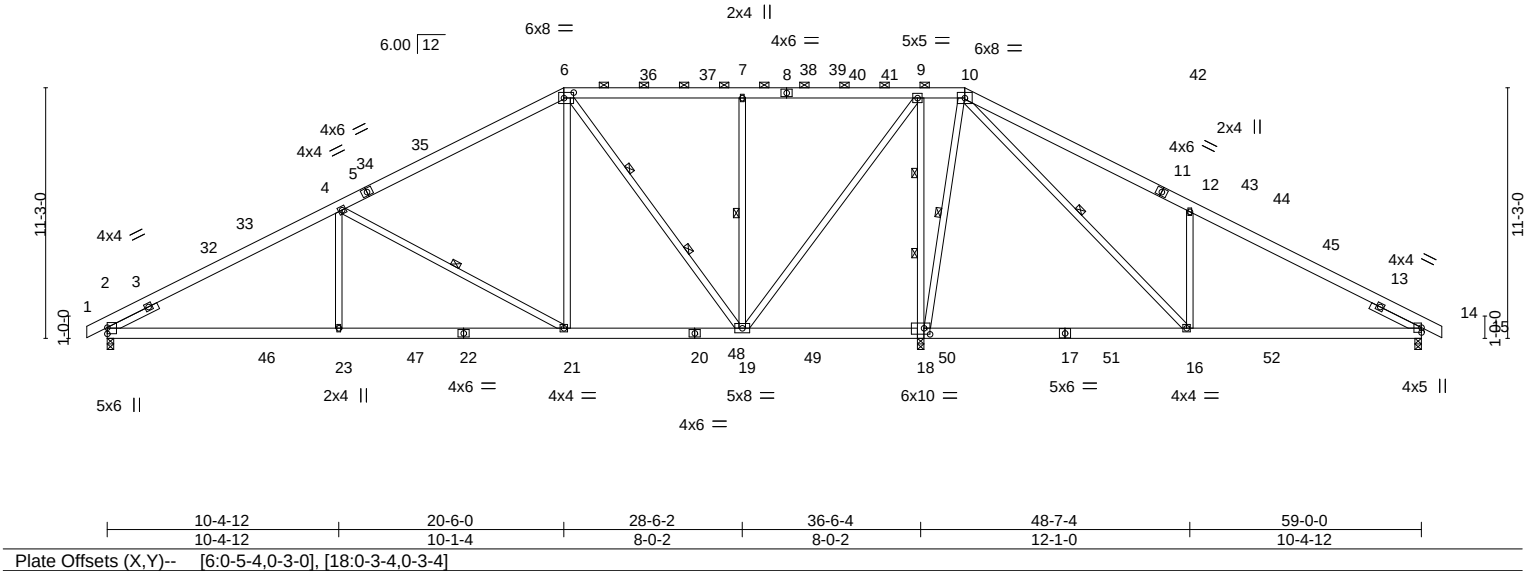
|           |       |                |     |     |                          |           |
|-----------|-------|----------------|-----|-----|--------------------------|-----------|
| Job       | Truss | Truss Type     | Qty | Ply | RVF-LOT 60               | 176976991 |
| 24-5743-A | T05   | PIGGYBACK BASE | 1   | 1   | Job Reference (optional) |           |

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

8.830 s Sep 3 2025 MiTek Industries, Inc. Fri Oct 10 07:22:05 2025 Page 1  
ID:tdHS5WylNg?jaR9E1eBtqly9\_hlBd?px2lofgCQtlgkFy8Nk0Q5MXMX?dGe3ZvByUu6G

-0-11-0 10-4-12 20-6-0 28-6-2 36-6-4 38-6-0 48-7-4 59-0-0 59-11-0  
0-11-0 10-4-12 10-1-4 8-0-2 8-0-2 1-11-12 10-1-4 10-4-12 0-11-0

Scale = 1:103.4



| LOADING (psf) | SPACING-  | 2-0-0 | CSI.      | DEFL.    | in (loc)    | l/defl | L/d | PLATES | GRIP    |
|---------------|-----------|-------|-----------|----------|-------------|--------|-----|--------|---------|
| TCLL (roof)   | 20.0      |       | TC 0.77   | Vert(LL) | -0.26 16-18 | >999   | 240 | MT20   | 244/190 |
| Snow (Pf/Pg)  | 16.5/15.0 |       | BC 0.67   | Vert(CT) | -0.40 16-18 | >682   | 180 |        |         |
| TCDL          | 10.0      |       | WB 0.86   | Horz(CT) | 0.05 18     | n/a    | n/a |        |         |
| BCLL          | 0.0 *     |       | Matrix-MS |          |             |        |     |        |         |
| BCDL          | 10.0      |       |           |          |             |        |     |        |         |

| LUMBER-   | BRACING-                                        |
|-----------|-------------------------------------------------|
| TOP CHORD | 2x6 SP No.2                                     |
| BOT CHORD | 2x6 SP No.2                                     |
| WEBS      | 2x4 SP No.3                                     |
| SLIDER    | Left 2x4 SP No.3 2-6-0, Right 2x4 SP No.3 2-6-0 |

| REACTIONS. | (size)     | 2=0-3-8, 14=0-3-8, 18=0-3-8                   |
|------------|------------|-----------------------------------------------|
|            | Max Horz   | 2=222(LC 15)                                  |
|            | Max Uplift | 2=-130(LC 16), 14=-104(LC 16), 18=-109(LC 16) |
|            | Max Grav   | 2=1598(LC 28), 14=828(LC 29), 18=3321(LC 28)  |

| FORCES.   | (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.                                                                           |
|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| TOP CHORD | 2-4=-2320/271, 4-6=-1345/276, 6-7=-532/276, 7-9=-532/276, 9-10=0/797, 10-12=-989/349, 12-14=-810/170                                                   |
| BOT CHORD | 2-23=-128/2207, 21-23=-128/2207, 19-21=0/1203, 18-19=-771/137, 16-18=-527/115, 14-16=-38/702                                                           |
| WEBS      | 4-23=0/521, 4-21=-1184/185, 6-21=0/964, 6-19=-1174/46, 7-19=-667/170, 9-19=-124/1978, 9-18=-1897/208, 10-18=-1353/166, 10-16=-213/1706, 12-16=-698/297 |

- 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=59ft; eave=7ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 4-11-13, Interior(1) 4-11-13 to 20-6-0, Exterior(2R) 20-6-0 to 28-10-2, Interior(1) 28-10-2 to 38-6-0, Exterior(2R) 38-6-0 to 46-10-2, Interior(1) 46-10-2 to 59-11-0 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=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, with BCDL = 10.0psf.
  - Bearing at joint(s) 18 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=130, 14=104, 18=109.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and conforms to standard ANSI/TPI 1.



October 11,2025

|           |       |                |     |     |                          |           |
|-----------|-------|----------------|-----|-----|--------------------------|-----------|
| Job       | Truss | Truss Type     | Qty | Ply | RVF-LOT 60               | 176976991 |
| 24-5743-A | T05   | PIGGYBACK BASE | 1   | 1   | Job Reference (optional) |           |

**NOTES-**  
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

 **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       | Truss | Truss Type     | Qty | Ply | RVF-LOT 60 | 176976992 |
| 24-5743-A | T05A  | PIGGYBACK BASE | 1   | 1   |            |           |

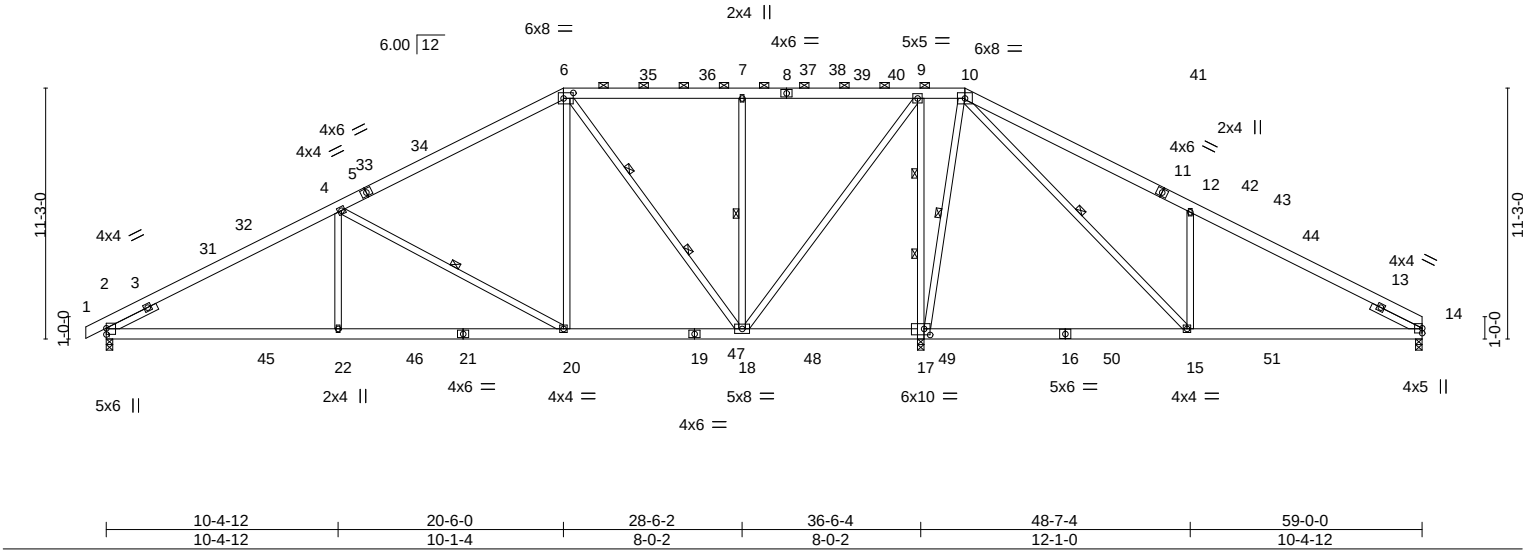
Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s Sep 3 2025 MiTek Industries, Inc. Fri Oct 10 07:22:06 2025 Page 1

ID:tdHS5iWylng?jaR9E1eBtqly9\_-9xl?C9yh36nXpaSVERnChbHB9Vij5\_FmUlo6RdyUu6F

-0-11-0 10-4-12 20-6-0 28-6-2 36-6-4 38-6-0 48-7-4 59-0-0

0-11-0 10-4-12 10-1-4 8-0-2 8-0-2 1-11-12 10-1-4 10-4-12

Scale = 1:103.3



|                                                          |           |                      |      |             |      |              |             |                         |      |
|----------------------------------------------------------|-----------|----------------------|------|-------------|------|--------------|-------------|-------------------------|------|
| Plate Offsets (X, Y)-- [6:0-5-4,0-3-0], [17:0-3-4,0-3-4] |           |                      |      |             |      |              |             |                         |      |
| <b>LOADING</b> (psf)                                     |           | <b>SPACING-</b>      |      | <b>CSI.</b> |      | <b>DEFL.</b> |             | <b>PLATES</b>           |      |
| TCLL (roof)                                              | 20.0      | 2-0-0                |      | TC          | 0.77 | in (loc)     | l/defl      | L/d                     | GRIP |
| Snow (Pf/Pg)                                             | 16.5/15.0 | Plate Grip DOL       | 1.15 | BC          | 0.67 | Vert(LL)     | -0.26 15-17 | >999                    | 240  |
| TCDL                                                     | 10.0      | Lumber DOL           | 1.15 | WB          | 0.86 | Vert(CT)     | -0.40 15-17 | >683                    | 180  |
| BCLL                                                     | 0.0 *     | Rep Stress Incr      | YES  | Matrix-MS   |      | Horz(CT)     | 0.05 17     | n/a                     | n/a  |
| BCDL                                                     | 10.0      | Code IRC2018/TPI2014 |      |             |      |              |             |                         |      |
|                                                          |           |                      |      |             |      |              |             | Weight: 452 lb FT = 20% |      |

|                |                                                 |                 |                                                                        |
|----------------|-------------------------------------------------|-----------------|------------------------------------------------------------------------|
| <b>LUMBER-</b> |                                                 | <b>BRACING-</b> |                                                                        |
| TOP CHORD      | 2x6 SP No.2                                     | TOP CHORD       | Structural wood sheathing directly applied or 4-5-7 oc purlins, except |
| BOT CHORD      | 2x6 SP No.2                                     |                 | 2-0-0 oc purlins (6-0-0 max.): 6-10.                                   |
| WEBS           | 2x4 SP No.3                                     | BOT CHORD       | Rigid ceiling directly applied or 6-0-0 oc bracing.                    |
| SLIDER         | Left 2x4 SP No.3 2-6-0, Right 2x4 SP No.3 2-6-0 | WEBS            | 1 Row at midpt 4-20, 7-18, 10-17, 10-15                                |
|                |                                                 |                 | 2 Rows at 1/3 pts 6-18, 9-17                                           |

|                   |                                              |
|-------------------|----------------------------------------------|
| <b>REACTIONS.</b> |                                              |
| (size)            | 2=0-3-8, 14=0-3-8, 17=0-3-8                  |
| Max Horz          | 2=220(LC 15)                                 |
| Max Uplift        | 2=-128(LC 16), 14=-72(LC 16), 17=-114(LC 16) |
| Max Grav          | 2=1600(LC 28), 14=779(LC 29), 17=3317(LC 28) |

|                                                                              |                                                                                                                                                        |
|------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>FORCES.</b>                                                               |                                                                                                                                                        |
| (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. |                                                                                                                                                        |
| TOP CHORD                                                                    | 2-4=-2324/268, 4-6=-1349/274, 6-7=-534/273, 7-9=-534/273, 9-10=0/792, 10-12=-997/351, 12-14=-818/171                                                   |
| BOT CHORD                                                                    | 2-22=-150/2206, 20-22=-150/2206, 18-20=0/1201, 17-18=-766/131, 15-17=-522/100, 14-15=-45/711                                                           |
| WEBS                                                                         | 4-22=0/521, 4-20=-1183/185, 6-20=0/964, 6-18=-1172/47, 7-18=-667/170, 9-18=-125/1975, 9-17=-1896/210, 10-17=-1352/168, 10-15=-213/1709, 12-15=-699/297 |

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDD=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=59ft; eave=7ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 4-11-13, Interior(1) 4-11-13 to 20-6-0, Exterior(2R) 20-6-0 to 28-10-2, Interior(1) 28-10-2 to 38-6-0, Exterior(2R) 38-6-0 to 46-10-2, Interior(1) 46-10-2 to 59-0-0 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=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, with BCDL = 10.0psf.
  - Bearing at joint(s) 17 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14 except (jt=lb) 2=128, 17=114.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and Contr to meet standard ANSI/TPI 1.



October 11,2025



|           |       |                |     |     |                          |           |
|-----------|-------|----------------|-----|-----|--------------------------|-----------|
| Job       | Truss | Truss Type     | Qty | Ply | RVF-LOT 60               | 176976992 |
| 24-5743-A | T05A  | PIGGYBACK BASE | 1   | 1   | Job Reference (optional) |           |

**NOTES-**  
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

 **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](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

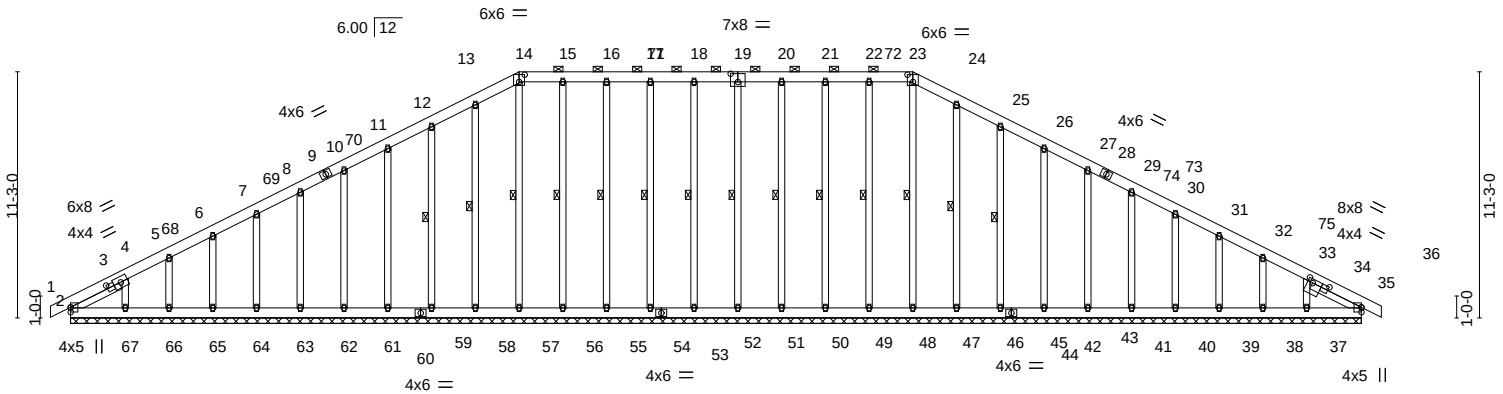
|           |       |                      |     |     |                          |           |
|-----------|-------|----------------------|-----|-----|--------------------------|-----------|
| Job       | Truss | Truss Type           | Qty | Ply | RVF-LOT 60               | 176976993 |
| 24-5743-A | T05GE | PIGGYBACK BASE SUPPO | 1   | 1   | Job Reference (optional) |           |

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

8.830 s Sep 3 2025 MiTek Industries, Inc. Fri Oct 10 07:22:08 2025 Page 1  
ID:tdHS5WylNg?jaR9E1eBtqly9\_-5Ktmdq\_xbj2F3ubtLspgm0Miy1YLZ3U3ycHDWVyUu6D

-0-11-0 20-6-0 38-6-0 59-0-0 59-11-0  
0-11-0 20-6-0 18-0-0 20-6-0 0-11-0

Scale = 1:105.3



|                                                                                                                                     |           |                      |       |             |              |          |         |                |             |
|-------------------------------------------------------------------------------------------------------------------------------------|-----------|----------------------|-------|-------------|--------------|----------|---------|----------------|-------------|
| Plate Offsets (X,Y)-- [2:1-10-12,0-2-0], [14:0-3-0,0-4-0], [19:0-4-0,0-4-8], [23:0-3-0,0-4-0], [33:0-2-12,0-2-1], [35:1-8-10,0-2-0] |           |                      |       |             |              |          |         |                |             |
| <b>LOADING</b> (psf)                                                                                                                |           | <b>SPACING-</b>      | 2-0-0 | <b>CSI.</b> | <b>DEFL.</b> |          |         | <b>PLATES</b>  | <b>GRIP</b> |
| TCLL (roof)                                                                                                                         | 20.0      | Plate Grip DOL       | 1.15  | TC 0.05     | in (loc)     | l/defl   | L/d     | MT20           | 244/190     |
| Snow (Pf/Pg)                                                                                                                        | 16.5/15.0 | Lumber DOL           | 1.15  | BC 0.02     | Vert(LL)     | -0.00 35 | n/r 120 |                |             |
| TCDL                                                                                                                                | 10.0      | Rep Stress Incr      | YES   | WB 0.17     | Vert(CT)     | -0.00 35 | n/r 120 |                |             |
| BCLL                                                                                                                                | 0.0 *     | Code IRC2018/TPI2014 |       | Matrix-S    | Horz(CT)     | 0.01 35  | n/a n/a |                |             |
| BCDL                                                                                                                                | 10.0      |                      |       |             |              |          |         | Weight: 597 lb | FT = 20%    |

|                                                        |                                                                                                                        |
|--------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|
| <b>LUMBER-</b>                                         | <b>BRACING-</b>                                                                                                        |
| TOP CHORD 2x6 SP No.2                                  | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 14-23. |
| BOT CHORD 2x6 SP No.2                                  | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.                                                         |
| OTHERS 2x4 SP No.3                                     | WEBS 1 Row at midpt 23-47, 22-48, 21-49, 20-50, 19-51, 18-52, 17-54, 16-55, 15-56, 14-57, 13-58, 12-59, 24-46, 25-45   |
| SLIDER Left 2x4 SP No.3 2-6-0, Right 2x4 SP No.3 2-6-0 |                                                                                                                        |

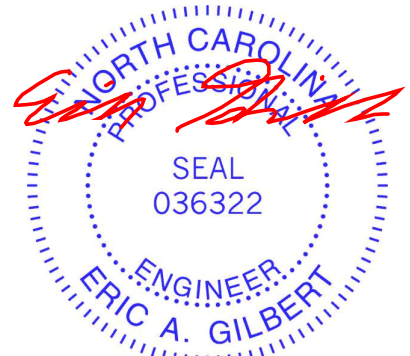
**REACTIONS.** All bearings 59-0-0.  
(lb) - Max Horz 2=-216(LC 14)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 48, 49, 50, 51, 52, 54, 55, 58, 59, 61, 62, 63, 64, 65, 66, 67, 46, 45, 43, 42, 41, 40, 39, 38, 37  
Max Grav All reactions 250 lb or less at joint(s) 2, 47, 48, 49, 50, 51, 52, 54, 55, 56, 57, 58, 59, 61, 62, 63, 64, 65, 66, 67, 46, 45, 43, 42, 41, 40, 39, 38, 37, 35

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 12-13=-104/261, 13-14=-120/300, 14-15=-112/289, 15-16=-112/289, 16-17=-112/289, 17-18=-112/289, 18-19=-112/289, 19-20=-112/289, 20-21=-112/289, 21-22=-112/289, 22-23=-112/289, 23-24=-120/300, 24-25=-104/261

**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=59ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) -0-11-0 to 4-11-13, Exterior(2N) 4-11-13 to 20-6-0, Corner(3R) 20-6-0 to 26-6-0, Exterior(2N) 26-6-0 to 38-6-0, Corner(3R) 38-6-0 to 44-6-0, Exterior(2N) 44-6-0 to 59-11-0 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=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.
- 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.

Continued on page 2



October 11, 2025

**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.sbcacompnents.com)

ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

|           |       |                      |     |     |                          |           |
|-----------|-------|----------------------|-----|-----|--------------------------|-----------|
| Job       | Truss | Truss Type           | Qty | Ply | RVF-LOT 60               | 176976993 |
| 24-5743-A | T05GE | PIGGYBACK BASE SUPPO | 1   | 1   | Job Reference (optional) |           |

- NOTES-**
- 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 48, 49, 50, 51, 52, 54, 55, 58, 59, 61, 62, 63, 64, 65, 66, 67, 46, 45, 43, 42, 41, 40, 39, 38, 37.
- 14) 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.
- 15) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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

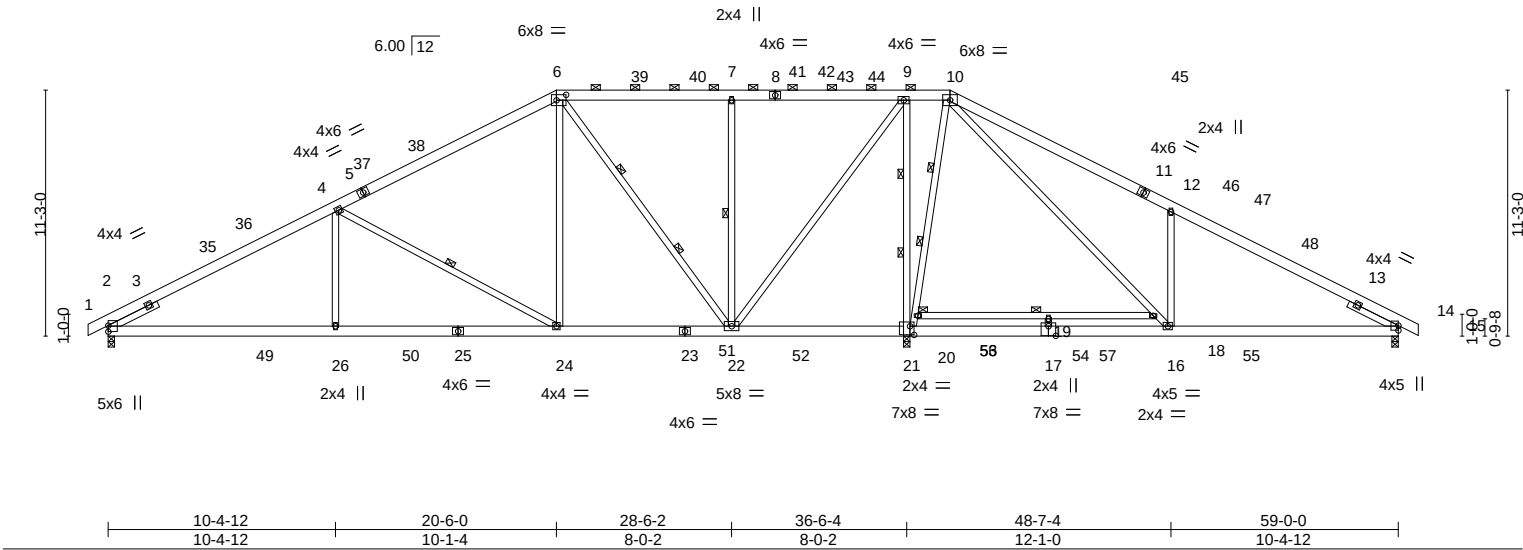
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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](http://www.tpinst.org)) and **BCSI Building Component Safety Information** available from the Structural Building Component Association ([www.sbcacomponents.com](http://www.sbcacomponents.com))



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Edenton, NC 27932

|           |       |                |     |     |            |           |
|-----------|-------|----------------|-----|-----|------------|-----------|
| Job       | Truss | Truss Type     | Qty | Ply | RVF-LOT 60 | 176976994 |
| 24-5743-A | T05S  | PIGGYBACK BASE | 8   | 1   |            |           |

Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s Sep 3 2025 MiTek Industries, Inc. Fri Oct 10 07:22:10 2025 Page 1  
ID:tdHS5lWyLNg?jaR9E1eBtqly9\_-1i?W2W?B7KlylBIGTHr8rRRtM60a1m3MPwmKaOyUu6B  
-0-11-0 10-4-12 20-6-0 28-6-2 36-6-4 38-6-0 48-7-4 59-0-0 59-11-0  
0-11-0 10-4-12 10-1-4 8-0-2 8-0-2 1-11-12 10-1-4 10-4-12 0-11-0  
Scale = 1:105.4



|                                                                            |  |                      |  |       |  |           |  |          |  |             |  |        |  |     |  |                |  |          |  |
|----------------------------------------------------------------------------|--|----------------------|--|-------|--|-----------|--|----------|--|-------------|--|--------|--|-----|--|----------------|--|----------|--|
| Plate Offsets (X,Y)-- [6:0-5-4,0-3-0], [17:0-4-0,0-5-4], [21:0-2-4,0-4-12] |  |                      |  |       |  |           |  |          |  |             |  |        |  |     |  |                |  |          |  |
| 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 0.76   |  | Vert(LL) |  | -0.37 19-20 |  | >720   |  | 240 |  | MT20           |  | 244/190  |  |
| Snow (Pf/Pg) 16.5/15.0                                                     |  | Lumber DOL           |  | 1.15  |  | BC 0.87   |  | Vert(CT) |  | -0.58 19-20 |  | >462   |  | 180 |  |                |  |          |  |
| TCDL 10.0                                                                  |  | Rep Stress Incr      |  | YES   |  | WB 1.00   |  | Horz(CT) |  | 0.03 21     |  | n/a    |  | n/a |  |                |  |          |  |
| BCLL 0.0 *                                                                 |  | Code IRC2018/TPI2014 |  |       |  | Matrix-MS |  |          |  |             |  |        |  |     |  |                |  |          |  |
| BCDL 10.0                                                                  |  |                      |  |       |  |           |  |          |  |             |  |        |  |     |  | Weight: 471 lb |  | FT = 20% |  |

|                                                        |                                                                                  |
|--------------------------------------------------------|----------------------------------------------------------------------------------|
| LUMBER-                                                | BRACING-                                                                         |
| TOP CHORD 2x6 SP No.2                                  | TOP CHORD Structural wood sheathing directly applied or 4-6-8 oc purlins, except |
| BOT CHORD 2x6 SP 2400F 2.0E *Except*                   | 2-0-0 oc purlins (6-0-0 max.): 6-10.                                             |
| 21-23,23-25: 2x6 SP No.2, 18-20: 2x4 SP No.1           | BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. Except:            |
| WEBS 2x4 SP No.3 *Except*                              | 6-0-0 oc bracing: 18-20                                                          |
| 10-21,10-16: 2x4 SP No.2                               | WEBS 1 Row at midpt 4-24, 7-22                                                   |
| SLIDER Left 2x4 SP No.3 2-6-0, Right 2x4 SP No.3 2-6-0 | 2 Rows at 1/3 pts 6-22, 9-21, 10-20                                              |

|            |                                                                                                                                                                                                       |
|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| REACTIONS. | (size) 2=0-3-8, 14=0-3-8, 21=0-3-8                                                                                                                                                                    |
|            | Max Horz 2=222(LC 15)                                                                                                                                                                                 |
|            | Max Uplift 2=-141(LC 16), 14=-87(LC 16)                                                                                                                                                               |
|            | Max Grav 2=1584(LC 28), 14=923(LC 29), 21=3717(LC 28)                                                                                                                                                 |
| FORCES.    | (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.                                                                                                                          |
| TOP CHORD  | 2-4=-2291/291, 4-6=-1315/299, 6-7=-512/305, 7-9=-512/305, 9-10=0/801, 10-12=-1220/310, 12-14=-1048/121                                                                                                |
| BOT CHORD  | 2-26=-146/2182, 24-26=-146/2182, 22-24=0/1176, 21-22=-775/99, 17-21=-257/107, 16-17=-257/107, 14-16=-2/910, 19-20=-353/0, 18-19=-353/0                                                                |
| WEBS       | 4-26=0/523, 4-24=-1184/183, 6-24=0/970, 6-22=-1193/31, 7-22=-661/169, 9-22=-114/1951, 9-21=-1922/204, 20-21=-1645/66, 10-20=-1418/106, 10-18=-117/2036, 16-18=-142/1738, 12-16=-689/300, 17-19=-292/0 |

- 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=59ft; eave=7ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 4-11-13, Interior(1) 4-11-13 to 20-6-0, Exterior(2R) 20-6-0 to 28-10-2, Interior(1) 28-10-2 to 38-6-0, Exterior(2R) 38-6-0 to 46-10-2, Interior(1) 46-10-2 to 59-11-0 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=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, with BCDL = 10.0psf.
  - Bearing at joint(s) 21 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

|           |       |                |     |     |            |
|-----------|-------|----------------|-----|-----|------------|
| Job       | Truss | Truss Type     | Qty | Ply | RVF-LOT 60 |
| 24-5743-A | T05S  | PIGGYBACK BASE | 8   | 1   | 176976994  |

- NOTES-**
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14 except (jt=lb) 2=141.
  - 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.
  - 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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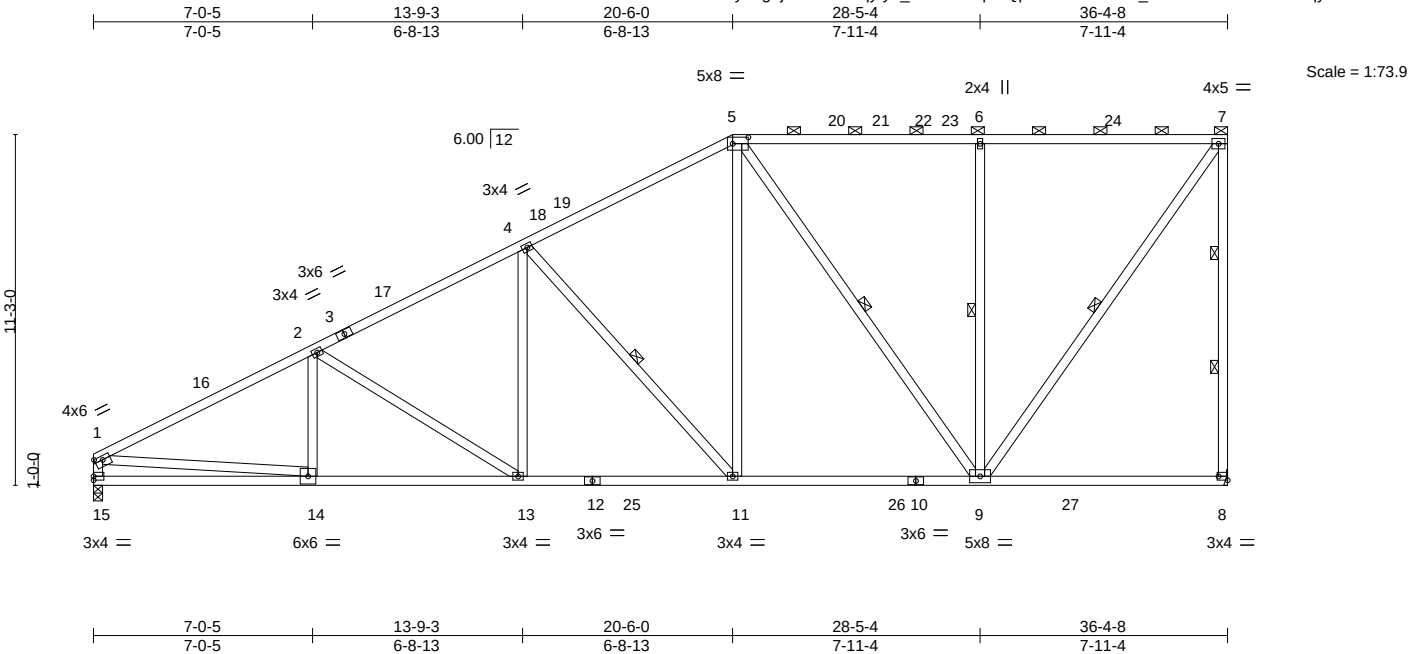


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|           |       |                |     |     |            |           |
|-----------|-------|----------------|-----|-----|------------|-----------|
| Job       | Truss | Truss Type     | Qty | Ply | RVF-LOT 60 | 176976995 |
| 24-5743-A | T06   | PIGGYBACK BASE | 5   | 1   |            |           |

Riverside Roof Truss, LLC,
Danville, Va - 24541,
8.830 s Sep 3 2025 MiTek Industries, Inc. Fri Oct 10 07:22:11 2025 Page 1

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|                                                                        |  |                      |  |           |  |                             |  |       |  |                     |  |                |  |          |  |
|------------------------------------------------------------------------|--|----------------------|--|-----------|--|-----------------------------|--|-------|--|---------------------|--|----------------|--|----------|--|
| Plate Offsets (X,Y)-- [1:0-3-0,0-1-8], [5:0-6-0,0-2-8], [8:Edge,0-1-8] |  |                      |  |           |  |                             |  |       |  |                     |  |                |  |          |  |
| 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 0.91   |  | Vert(LL) -0.18 8-9 >999 240 |  | MT20  |  | 244/190             |  |                |  |          |  |
| Snow (Pf/Pg) 16.5/15.0                                                 |  | Lumber DOL 1.15      |  | BC 0.89   |  | Vert(CT) -0.30 8-9 >999 180 |  |       |  |                     |  |                |  |          |  |
| TCDL 10.0                                                              |  | Rep Stress Incr YES  |  | WB 0.79   |  | Horz(CT) 0.07 8 n/a n/a     |  |       |  |                     |  |                |  |          |  |
| BCLL 0.0 *                                                             |  | Code IRC2018/TPI2014 |  | Matrix-MS |  |                             |  |       |  |                     |  |                |  |          |  |
| BCDL 10.0                                                              |  |                      |  |           |  |                             |  |       |  |                     |  | Weight: 252 lb |  | FT = 20% |  |

|                                                    |                                                                                                                                         |
|----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| <b>LUMBER-</b>                                     | <b>BRACING-</b>                                                                                                                         |
| TOP CHORD 2x4 SP No.2 *Except*<br>5-7: 2x4 SP No.1 | TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (5-4-3 max.): 5-7. |
| BOT CHORD 2x4 SP No.2                              | BOT CHORD Rigid ceiling directly applied or 9-11-9 oc bracing.                                                                          |
| WEBS 2x4 SP No.3 *Except*<br>7-8: 2x4 SP No.1      | WEBS 1 Row at midpt 4-11, 5-9, 6-9, 7-9<br>2 Rows at 1/3 pts 7-8                                                                        |

**REACTIONS.** (size) 8=Mechanical, 15=0-3-8  
Max Horz 15=311(LC 16)  
Max Uplift 8=-135(LC 16), 15=-39(LC 16)  
Max Grav 8=1732(LC 38), 15=1685(LC 27)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-2672/108, 2-4=-2277/131, 4-5=-1667/145, 5-6=-1012/102, 6-7=-1012/102, 7-8=-1570/211, 1-15=-1566/106  
BOT CHORD 14-15=-344/402, 13-14=-337/2383, 11-13=-263/2004, 9-11=-167/1440  
WEBS 2-13=-446/99, 4-13=0/508, 4-11=-913/143, 5-11=-20/993, 5-9=-783/111, 6-9=-702/176, 7-9=-174/1725, 1-14=0/1993

- 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=36ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-9-6, Interior(1) 3-9-6 to 20-6-0, Exterior(2R) 20-6-0 to 25-7-12, Interior(1) 25-7-12 to 36-2-12 zone; cantilever left and right exposed ; end vertical left 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=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.
  - 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, with BCDL = 10.0psf.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 15 except (jt=lb) 8=135.
  - 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.



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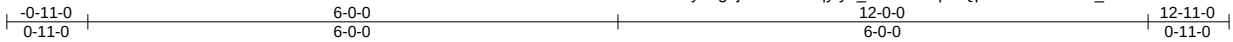


|           |       |            |     |     |            |           |
|-----------|-------|------------|-----|-----|------------|-----------|
| Job       | Truss | Truss Type | Qty | Ply | RVF-LOT 60 | 176976996 |
| 24-5743-A | T07   | COMMON     | 3   | 1   |            |           |

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

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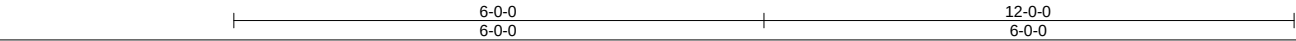
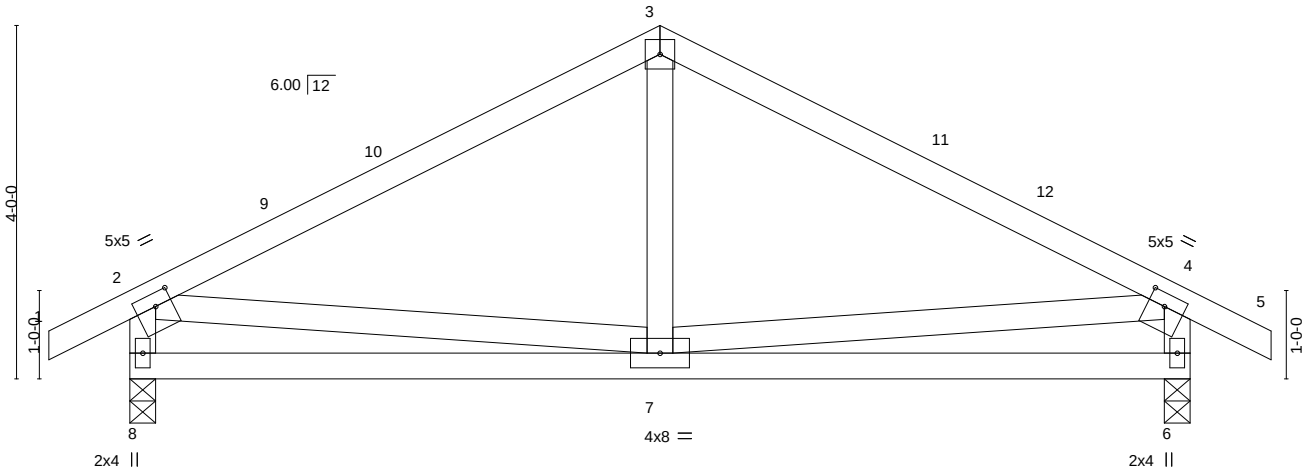


Plate Offsets (X,Y)-- [2:0-2-4,0-1-12], [4:0-2-4,0-1-12]

| LOADING (psf)          | SPACING-             | CSI.      | DEFL.    | in (loc) | l/defl | L/d  | PLATES | GRIP    |
|------------------------|----------------------|-----------|----------|----------|--------|------|--------|---------|
| TCLL (roof) 20.0       | 2-0-0                | TC 0.62   | Vert(LL) | -0.02    | 7-8    | >999 | MT20   | 244/190 |
| Snow (Pf/Pg) 11.6/15.0 | Plate Grip DOL 1.15  | BC 0.31   | Vert(CT) | -0.05    | 7-8    | >999 |        |         |
| TCDL 10.0              | Lumber DOL 1.15      | WB 0.10   | Horz(CT) | 0.00     | 6      | n/a  |        |         |
| BCLL 0.0 *             | Rep Stress Incr YES  | Matrix-MS |          |          |        |      |        |         |
| BCDL 10.0              | Code IRC2018/TPI2014 |           |          |          |        |      |        |         |

Weight: 64 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=-82(LC 14)  
Max Uplift 8=-62(LC 16), 6=-62(LC 16)  
Max Grav 8=532(LC 2), 6=532(LC 2)

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

TOP CHORD 2-3=-538/176, 3-4=-538/176, 2-8=-479/228, 4-6=-479/228  
BOT CHORD 7-8=-170/276, 6-7=-124/257

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) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 6-0-0, Exterior(2R) 6-0-0 to 9-0-0, Interior(1) 9-0-0 to 12-11-0 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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**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](http://www.tpinst.org)) and **BCSI Building Component Safety Information** available from the Structural Building Component Association ([www.sbcacompoments.com](http://www.sbcacompoments.com))

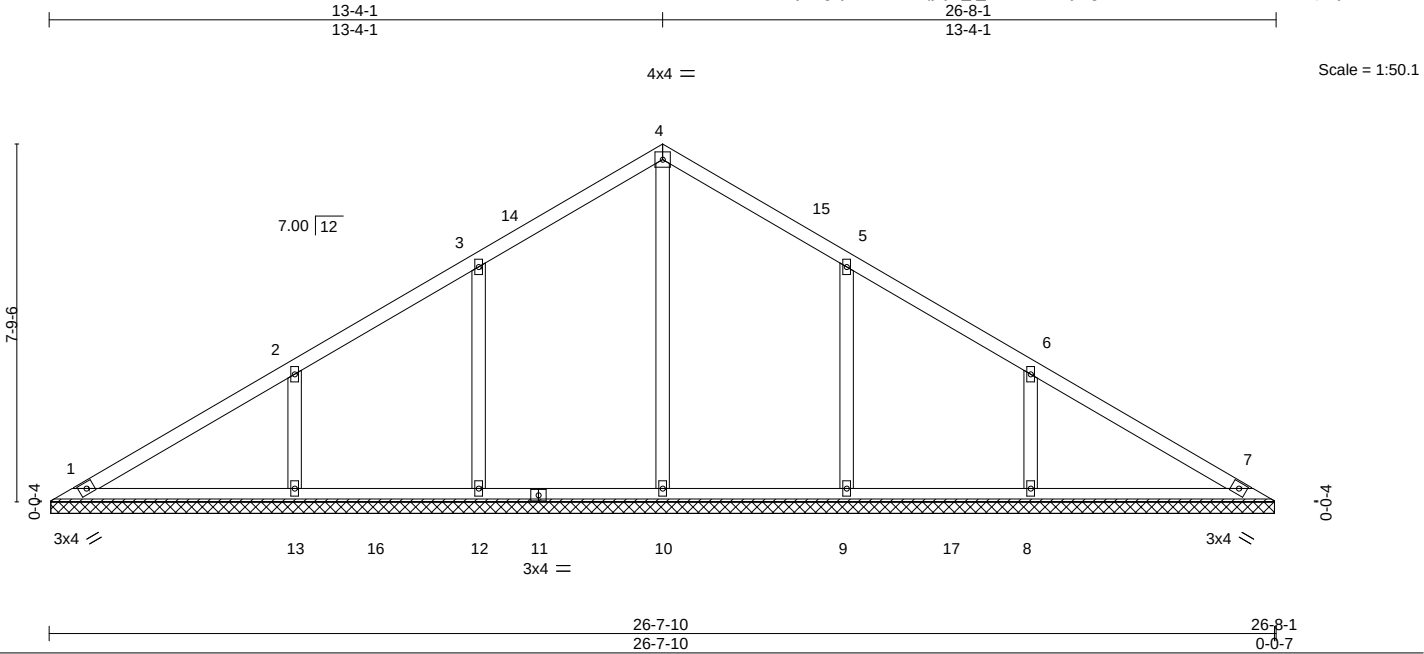
ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

|           |       |            |     |     |                          |           |
|-----------|-------|------------|-----|-----|--------------------------|-----------|
| Job       | Truss | Truss Type | Qty | Ply | RVF-LOT 60               | 176976997 |
| 24-5743-A | V01   | Valley     | 1   | 1   | Job Reference (optional) |           |

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

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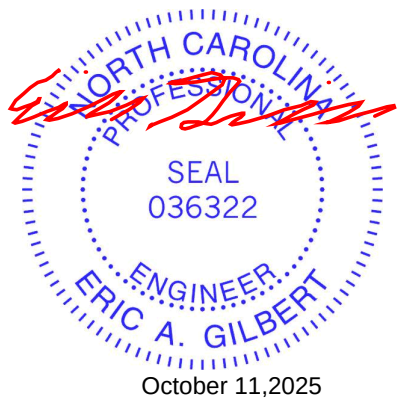
| LOADING (psf) |           | SPACING-             |      | CSI.     |      | DEFL.    |      | PLATES |  | GRIP    |  |
|---------------|-----------|----------------------|------|----------|------|----------|------|--------|--|---------|--|
| TCLL (roof)   | 20.0      | Plate Grip DOL       | 1.15 | TC       | 0.27 | Vert(LL) | n/a  | MT20   |  | 244/190 |  |
| Snow (Pf/Pg)  | 11.6/15.0 | Lumber DOL           | 1.15 | BC       | 0.20 | Vert(CT) | n/a  |        |  |         |  |
| TCDL          | 10.0      | Rep Stress Incr      | YES  | WB       | 0.21 | Horz(CT) | 0.00 |        |  |         |  |
| BCLL          | 0.0 *     | Code IRC2018/TPI2014 |      | Matrix-S |      |          |      |        |  |         |  |
| BCDL          | 10.0      |                      |      |          |      |          |      |        |  |         |  |

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

| REACTIONS.           |                                                                                                                              |
|----------------------|------------------------------------------------------------------------------------------------------------------------------|
| All bearings 26-7-3. |                                                                                                                              |
| (lb) - Max Horz      | 1=-149(LC 14)                                                                                                                |
| Max Uplift           | All uplift 100 lb or less at joint(s) 12, 13, 9, 8                                                                           |
| Max Grav             | All reactions 250 lb or less at joint(s) 1, 7 except 10=390(LC 27), 12=422(LC 27), 13=493(LC 27), 9=422(LC 28), 8=493(LC 28) |

| FORCES.                                                                      |                             |
|------------------------------------------------------------------------------|-----------------------------|
| (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. |                             |
| WEBS                                                                         | 2-13=-299/128, 6-8=-299/128 |

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=27ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-6-8 to 3-6-8, Interior(1) 3-6-8 to 13-4-1, Exterior(2R) 13-4-1 to 16-4-1, Interior(1) 16-4-1 to 26-1-9 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) All plates are 2x4 MT20 unless otherwise indicated.
  - 6) Gable requires continuous bottom chord bearing.
  - 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 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) 12, 13, 9, 8.
  - 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.

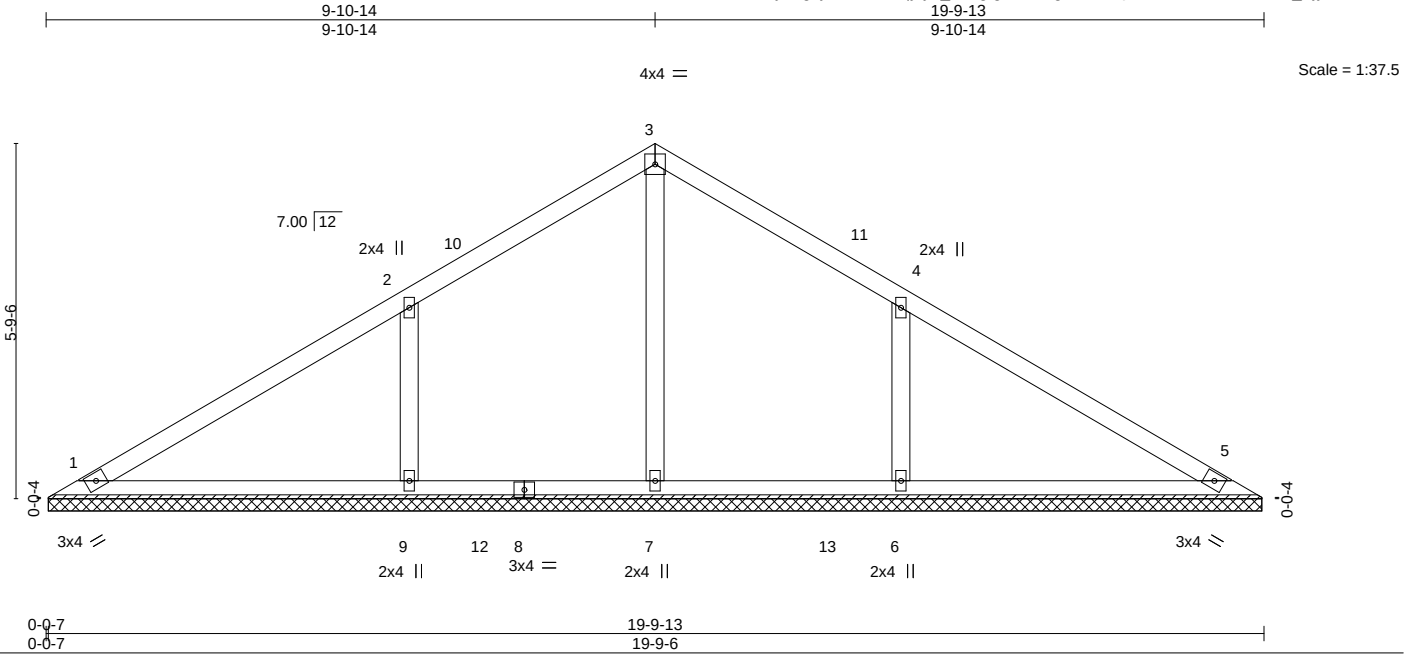




|           |       |            |     |     |                          |           |
|-----------|-------|------------|-----|-----|--------------------------|-----------|
| Job       | Truss | Truss Type | Qty | Ply | RVF-LOT 60               | 176976999 |
| 24-5743-A | V03   | Valley     | 1   | 1   | Job Reference (optional) |           |

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

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| LOADING (psf) |           | SPACING-             |      | CSI.     |      | DEFL.    |            | PLATES |               | GRIP     |  |
|---------------|-----------|----------------------|------|----------|------|----------|------------|--------|---------------|----------|--|
| TCLL (roof)   | 20.0      | Plate Grip DOL       | 1.15 | TC       | 0.36 | Vert(LL) | n/a - n/a  | 999    | MT20          | 244/190  |  |
| Snow (Pf/Pg)  | 11.6/15.0 | Lumber DOL           | 1.15 | BC       | 0.25 | Vert(CT) | n/a - n/a  | 999    |               |          |  |
| TCDL          | 10.0      | Rep Stress Incr      | YES  | WB       | 0.09 | Horz(CT) | 0.00 5 n/a | n/a    |               |          |  |
| BCLL          | 0.0 *     | Code IRC2018/TPI2014 |      | Matrix-S |      |          |            |        |               |          |  |
| BCDL          | 10.0      |                      |      |          |      |          |            |        | Weight: 78 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.      |                                                                                               |
|-----------------|-----------------------------------------------------------------------------------------------|
| All bearings    | 19-8-15.                                                                                      |
| (lb) - Max Horz | 1=109(LC 15)                                                                                  |
| Max Uplift      | All uplift 100 lb or less at joint(s) 9, 6                                                    |
| Max Grav        | All reactions 250 lb or less at joint(s) 1, 5 except 7=298(LC 27), 9=566(LC 27), 6=566(LC 28) |

| FORCES.                     |                                                  |
|-----------------------------|--------------------------------------------------|
| (lb) - Max. Comp./Max. Ten. | - All forces 250 (lb) or less except when shown. |
| WEBS                        | 2-9=-346/156, 4-6=-346/156                       |

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) 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) 0-6-8 to 3-6-8, Interior(1) 3-6-8 to 9-10-14, Exterior(2R) 9-10-14 to 12-10-14, Interior(1) 12-10-14 to 19-3-5 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) Gable requires continuous bottom chord bearing.
  - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 6.
  - 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.

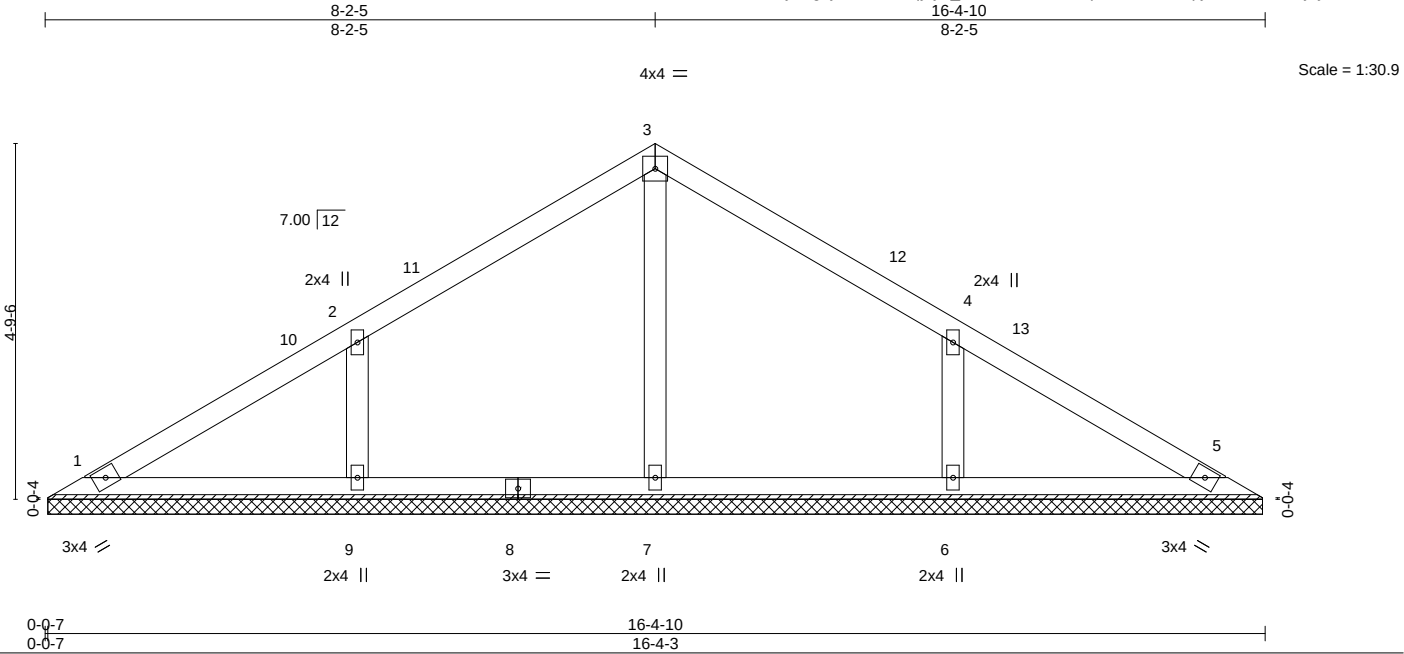


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|           |       |            |     |     |                          |           |
|-----------|-------|------------|-----|-----|--------------------------|-----------|
| Job       | Truss | Truss Type | Qty | Ply | RVF-LOT 60               | 176977000 |
| 24-5743-A | V04   | Valley     | 1   | 1   | Job Reference (optional) |           |

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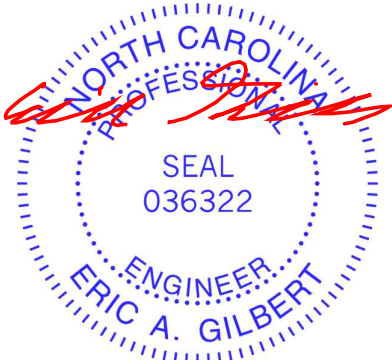
| LOADING (psf)          | SPACING-             | CSI.     | DEFL.         | in (loc) | l/defl | L/d | PLATES        | GRIP     |
|------------------------|----------------------|----------|---------------|----------|--------|-----|---------------|----------|
| TCLL (roof) 20.0       | 2-0-0                | TC 0.22  | Vert(LL) n/a  | -        | n/a    | 999 | MT20          | 244/190  |
| Snow (Pf/Pg) 11.6/15.0 | Plate Grip DOL 1.15  | BC 0.12  | Vert(CT) n/a  | -        | n/a    | 999 |               |          |
| TCDL 10.0              | Lumber DOL 1.15      | WB 0.07  | Horz(CT) 0.00 | 5        | n/a    | n/a |               |          |
| BCLL 0.0 *             | Rep Stress Incr YES  | Matrix-S |               |          |        |     |               |          |
| BCDL 10.0              | Code IRC2018/TPI2014 |          |               |          |        |     | Weight: 62 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.** All bearings 16-3-13.  
(lb) - Max Horz 1--89(LC 14)  
Max Uplift All uplift 100 lb or less at joint(s) 9, 6  
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=255(LC 2), 9=363(LC 33), 6=363(LC 34)

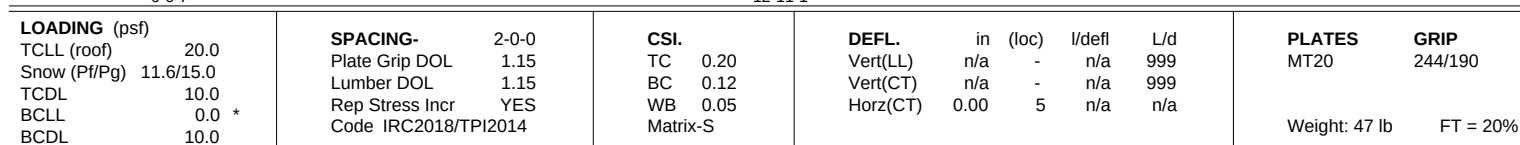
**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**WEBS** 2-9=-272/134, 4-6=-272/134

- 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) 0-6-8 to 3-6-8, Interior(1) 3-6-8 to 8-2-5, Exterior(2R) 8-2-5 to 11-2-5, Interior(1) 11-2-5 to 15-10-2 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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) 9, 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.



October 11,2025

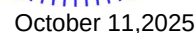
Riverside Roof Truss, LLC, Danville, Va - 24541, 8.830 s Sep 3 2025 MiTek Industries, Inc. Fri Oct 10 07:22:14 2025 Page 1  
ID:tdHS5WYlNg?jaR9E1eBtqly9\_-wUE1tu2IAZoNp31i7w4?Hch4jaEzplxKXkj9yUu67  
6-5-12 12-11-8  
6-5-12 6-5-12  
4x4 = Scale = 1:24.0



**REACTIONS.** All bearings 12-10-10.  
(lb) - Max Horz 1=69(LC 14)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 8, 6  
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=277(LC 2), 8=307(LC 20), 6=307(LC 21)

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) 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) 0-6-8 to 3-6-8, Interior(1) 3-6-8 to 6-5-12, Exterior(2R) 6-5-12 to 9-5-12, Interior(1) 9-5-12 to 12-5-0 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) Gable requires continuous bottom chord bearing.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 8, 6.
- 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.



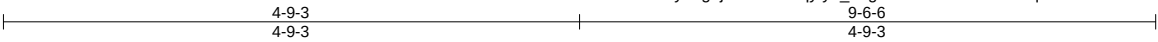


|           |       |            |     |     |                          |           |
|-----------|-------|------------|-----|-----|--------------------------|-----------|
| Job       | Truss | Truss Type | Qty | Ply | RVF-LOT 60               | 176977002 |
| 24-5743-A | V06   | Valley     | 1   | 1   | Job Reference (optional) |           |

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

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Scale = 1:19.1

| LOADING (psf) |           | SPACING-             |      | CSI.     |      | DEFL.    |      | PLATES |  | GRIP    |  |
|---------------|-----------|----------------------|------|----------|------|----------|------|--------|--|---------|--|
| TCLL (roof)   | 20.0      | Plate Grip DOL       | 1.15 | TC       | 0.27 | Vert(LL) | n/a  | MT20   |  | 244/190 |  |
| Snow (Pf/Pg)  | 11.6/15.0 | Lumber DOL           | 1.15 | BC       | 0.18 | Vert(CT) | n/a  |        |  |         |  |
| TCDL          | 10.0      | Rep Stress Incr      | YES  | WB       | 0.05 | Horz(CT) | 0.00 |        |  |         |  |
| BCLL          | 0.0 *     | Code IRC2018/TPI2014 |      | Matrix-S |      |          |      |        |  |         |  |
| BCDL          | 10.0      |                      |      |          |      |          |      |        |  |         |  |

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=9-5-8, 3=9-5-8, 4=9-5-8  
Max Horz 1=-49(LC 14)  
Max Uplift 1=-20(LC 16), 3=-20(LC 16)  
Max Grav 1=160(LC 2), 3=160(LC 2), 4=356(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) 0-6-8 to 3-6-8, Interior(1) 3-6-8 to 4-9-3, Exterior(2R) 4-9-3 to 7-9-3, Interior(1) 7-9-3 to 8-11-14 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.



October 11, 2025

**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](http://www.tpinst.org)) and **BCSI Building Component Safety Information** available from the Structural Building Component Association ([www.sbcacomponents.com](http://www.sbcacomponents.com))

ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

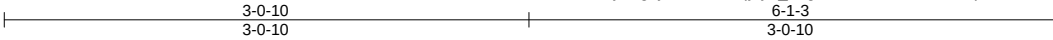
|           |       |            |     |     |                          |           |
|-----------|-------|------------|-----|-----|--------------------------|-----------|
| Job       | Truss | Truss Type | Qty | Ply | RVF-LOT 60               | 176977003 |
| 24-5743-A | V07   | Valley     | 1   | 1   | Job Reference (optional) |           |

Riverside Roof Truss, LLC,

Danville, Va - 24541,

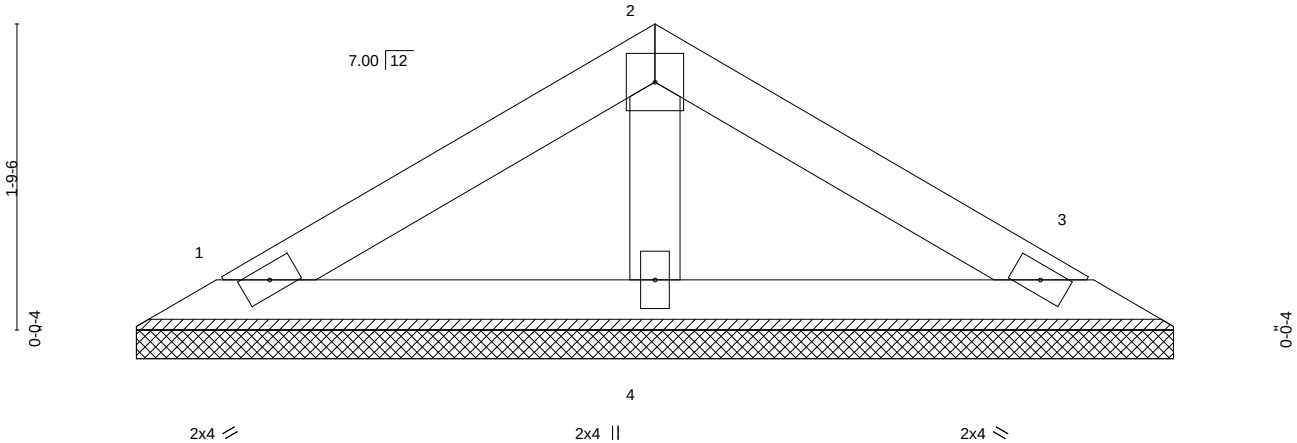
8.830 s Sep 3 2025 MiTek Industries, Inc. Fri Oct 10 07:22:15 2025 Page 1

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4x4 =

Scale = 1:13.4



| LOADING (psf) |           | SPACING-             |      | CSI.     |      | DEFL.    |      | PLATES |  | GRIP    |  |
|---------------|-----------|----------------------|------|----------|------|----------|------|--------|--|---------|--|
| TCLL (roof)   | 20.0      | Plate Grip DOL       | 1.15 | TC       | 0.12 | Vert(LL) | n/a  | MT20   |  | 244/190 |  |
| Snow (Pf/Pg)  | 11.6/15.0 | Lumber DOL           | 1.15 | BC       | 0.06 | Vert(CT) | n/a  |        |  |         |  |
| TCDL          | 10.0      | Rep Stress Incr      | YES  | WB       | 0.03 | Horz(CT) | 0.00 |        |  |         |  |
| BCLL          | 0.0 *     | Code IRC2018/TPI2014 |      | Matrix-P |      |          |      |        |  |         |  |
| BCDL          | 10.0      |                      |      |          |      |          |      |        |  |         |  |

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=6-0-6, 3=6-0-6, 4=6-0-6  
Max Horz 1=-29(LC 14)  
Max Uplift 1=-17(LC 16), 3=-17(LC 16)  
Max Grav 1=105(LC 2), 3=105(LC 2), 4=192(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.



October 11,2025

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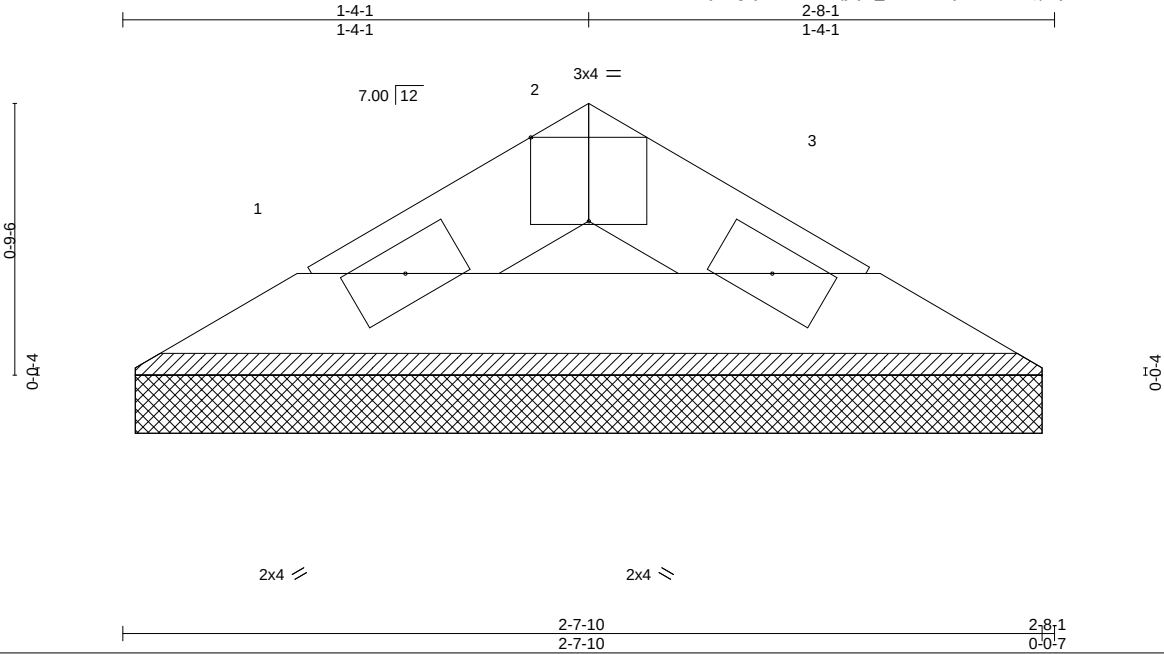
ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

|           |       |            |     |     |                          |           |
|-----------|-------|------------|-----|-----|--------------------------|-----------|
| Job       | Truss | Truss Type | Qty | Ply | RVF-LOT 60               | 176977004 |
| 24-5743-A | V08   | Valley     | 1   | 1   | Job Reference (optional) |           |

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

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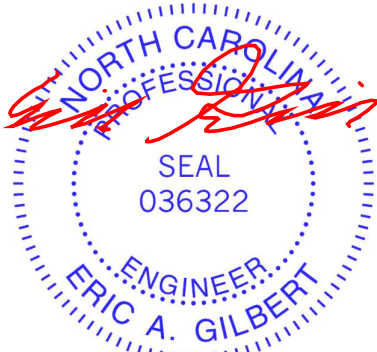
|                                      |           |                       |      |                         |      |
|--------------------------------------|-----------|-----------------------|------|-------------------------|------|
| Plate Offsets (X,Y)-- [2:0-2-0,Edge] |           | 2-7-10                |      | 2-8-1                   |      |
|                                      |           | 2-7-10                |      | 0-0-7                   |      |
| <b>LOADING</b> (psf)                 |           | <b>SPACING-</b> 2-0-0 |      | <b>CSI.</b>             |      |
| TCLL (roof)                          | 20.0      | Plate Grip DOL        | 1.15 | TC                      | 0.01 |
| Snow (Pf/Pg)                         | 11.6/15.0 | Lumber DOL            | 1.15 | BC                      | 0.03 |
| TCDL                                 | 10.0      | Rep Stress Incr       | YES  | WB                      | 0.00 |
| BCLL                                 | 0.0 *     | Code IRC2018/TPI2014  |      | Matrix-P                |      |
| BCDL                                 | 10.0      |                       |      |                         |      |
|                                      |           |                       |      | <b>DEFL.</b>            |      |
|                                      |           |                       |      | in (loc) l/defl L/d     |      |
|                                      |           |                       |      | Vert(LL) n/a - n/a 999  |      |
|                                      |           |                       |      | Vert(CT) n/a - n/a 999  |      |
|                                      |           |                       |      | Horz(CT) 0.00 3 n/a n/a |      |
|                                      |           |                       |      | <b>PLATES</b> MT20      |      |
|                                      |           |                       |      | <b>GRIP</b> 244/190     |      |
|                                      |           |                       |      | Weight: 7 lb            |      |
|                                      |           |                       |      | FT = 20%                |      |

|                |             |                 |                                                                 |
|----------------|-------------|-----------------|-----------------------------------------------------------------|
| <b>LUMBER-</b> |             | <b>BRACING-</b> |                                                                 |
| TOP CHORD      | 2x4 SP No.2 | TOP CHORD       | Structural wood sheathing directly applied or 2-8-1 oc purlins. |
| BOT CHORD      | 2x4 SP No.2 | BOT CHORD       | Rigid ceiling directly applied or 10-0-0 oc bracing.            |

**REACTIONS.** (size) 1=2-7-3, 3=2-7-3  
 Max Horz 1=9(LC 15)  
 Max Uplift 1=4(LC 16), 3=4(LC 16)  
 Max Grav 1=64(LC 2), 3=64(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.

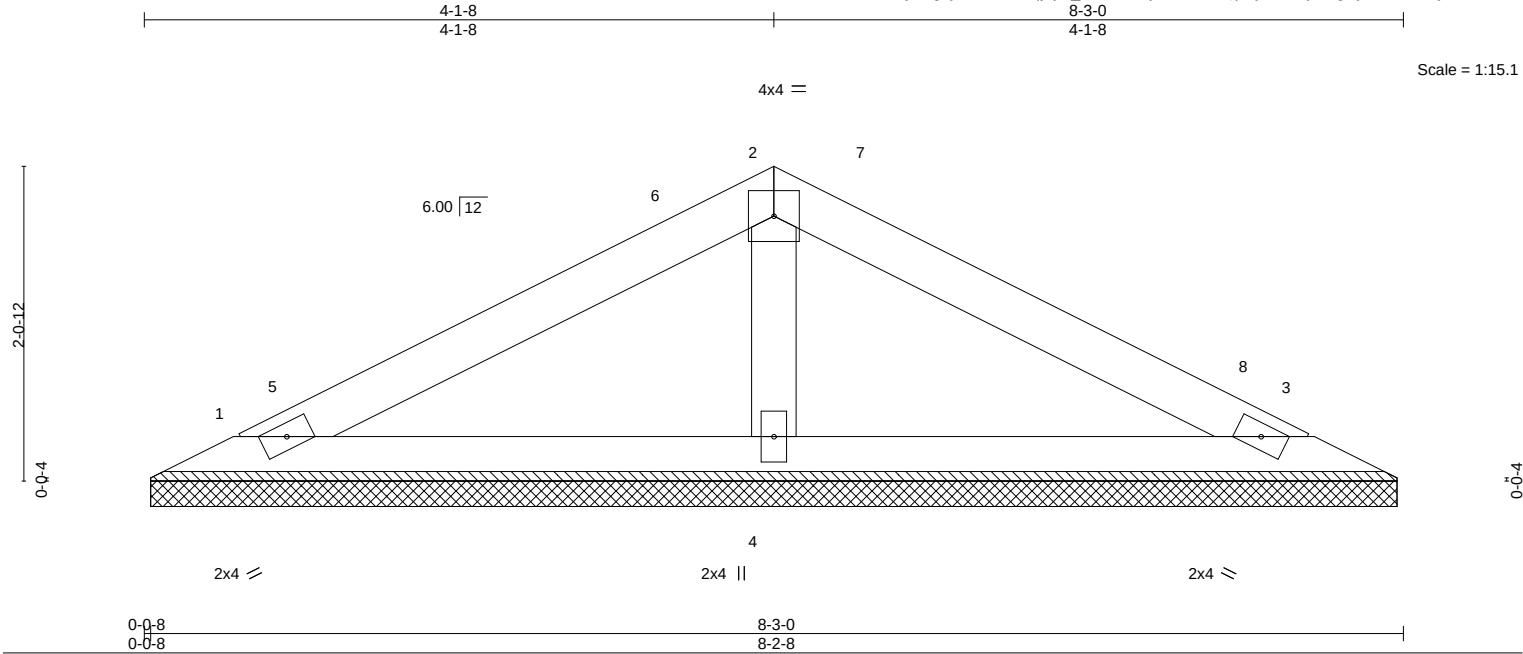


October 11,2025

|           |       |            |     |     |                          |           |
|-----------|-------|------------|-----|-----|--------------------------|-----------|
| Job       | Truss | Truss Type | Qty | Ply | RVF-LOT 60               | 176977005 |
| 24-5743-A | V09   | Valley     | 1   | 1   | Job Reference (optional) |           |

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

8.830 s Sep 3 2025 MiTek Industries, Inc. Fri Oct 10 07:22:16 2025 Page 1  
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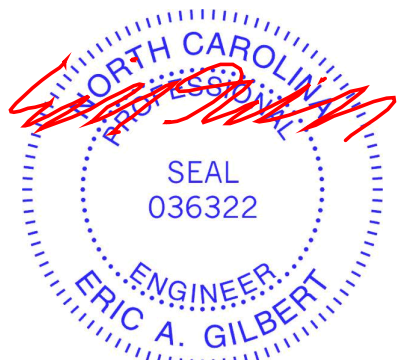
| LOADING (psf)          | SPACING-             | CSL      | DEFL.    | in   | (loc) | l/defl | L/d | PLATES | GRIP    |
|------------------------|----------------------|----------|----------|------|-------|--------|-----|--------|---------|
| TCLL (roof) 20.0       | 2-0-0                | TC 0.24  | Vert(LL) | n/a  | -     | n/a    | 999 | MT20   | 244/190 |
| Snow (Pf/Pg) 11.6/15.0 | Plate Grip DOL 1.15  | BC 0.12  | Vert(CT) | n/a  | -     | n/a    | 999 |        |         |
| TCDL 10.0              | Lumber DOL 1.15      | WB 0.04  | Horz(CT) | 0.00 | 3     | n/a    | n/a |        |         |
| BCLL 0.0 *             | Rep Stress Incr YES  | Matrix-P |          |      |       |        |     |        |         |
| BCDL 10.0              | Code IRC2018/TPI2014 |          |          |      |       |        |     |        |         |

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

|                   |                                                  |
|-------------------|--------------------------------------------------|
| <b>REACTIONS.</b> | (size) 1=8-2-0, 3=8-2-0, 4=8-2-0                 |
|                   | Max Horz 1=29(LC 15)                             |
|                   | Max Uplift 1=-21(LC 16), 3=-21(LC 16)            |
|                   | Max Grav 1=145(LC 20), 3=145(LC 21), 4=276(LC 2) |

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

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCCL=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) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 4-1-8, Exterior(2R) 4-1-8 to 7-1-8, Interior(1) 7-1-8 to 7-7-7 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) Gable requires continuous bottom chord bearing.
  - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
  - 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.



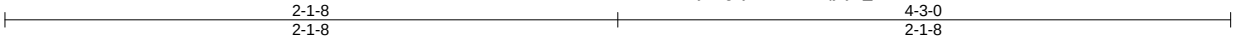
October 11, 2025

|           |       |            |     |     |                          |           |
|-----------|-------|------------|-----|-----|--------------------------|-----------|
| Job       | Truss | Truss Type | Qty | Ply | RVF-LOT 60               | 176977006 |
| 24-5743-A | V10   | Valley     | 1   | 1   | Job Reference (optional) |           |

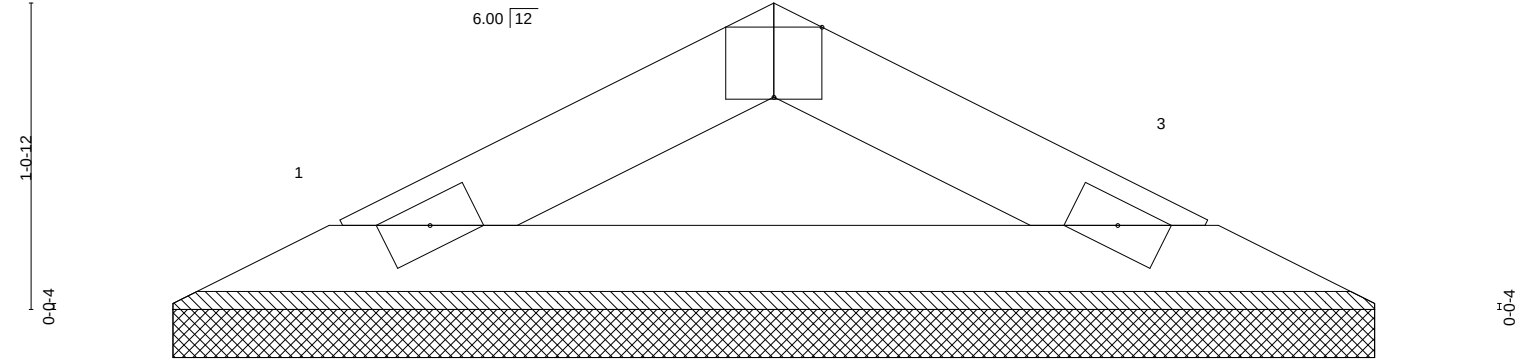
Riverside Roof Truss, LLC, Danville, Va - 24541,

8.830 s Sep 3 2025 MiTek Industries, Inc. Fri Oct 10 07:22:17 2025 Page 1

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Scale: 1.5"=1'



|       |       |
|-------|-------|
| 0-0-8 | 4-3-0 |
| 0-0-8 | 4-2-8 |

| Plate Offsets (X,Y)-- [2:0-2-0,Edge] |           |                      |      |          |      |                           |      |   |     |        |               |          |
|--------------------------------------|-----------|----------------------|------|----------|------|---------------------------|------|---|-----|--------|---------------|----------|
| 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       | 0.05 | Vert(LL)                  | n/a  | - | n/a | 999    | MT20          | 244/190  |
| Snow (Pf/Pg)                         | 11.6/15.0 | Lumber DOL           | 1.15 | BC       | 0.11 | Vert(CT)                  | n/a  | - | n/a | 999    |               |          |
| TCDL                                 | 10.0      | Rep Stress Incr      | YES  | WB       | 0.00 | Horz(CT)                  | 0.00 | 3 | n/a | n/a    |               |          |
| BCLL                                 | 0.0 *     | Code IRC2018/TPI2014 |      | Matrix-P |      |                           |      |   |     |        | Weight: 11 lb | FT = 20% |
| BCDL                                 | 10.0      |                      |      |          |      |                           |      |   |     |        |               |          |

|                       |                                                                           |
|-----------------------|---------------------------------------------------------------------------|
| LUMBER-               | BRACING-                                                                  |
| TOP CHORD 2x4 SP No.2 | TOP CHORD Structural wood sheathing directly applied or 4-3-0 oc purlins. |
| BOT CHORD 2x4 SP No.2 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.            |

|            |                                     |
|------------|-------------------------------------|
| REACTIONS. | (size) 1=4-2-0, 3=4-2-0             |
|            | Max Horz 1=-12(LC 14)               |
|            | Max Uplift 1=-7(LC 16), 3=-7(LC 16) |
|            | Max Grav 1=120(LC 2), 3=120(LC 2)   |

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

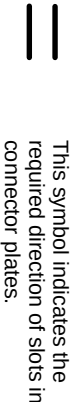
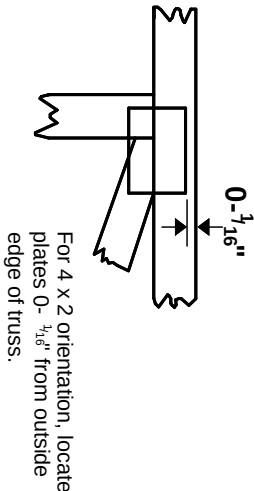
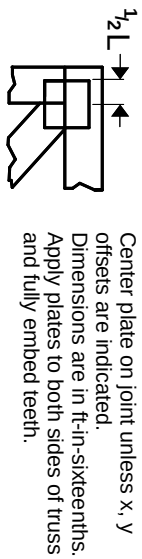
- NOTES-
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) zone; cantilever left and right exposed ; 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.





# Symbols

## PLATE LOCATION AND ORIENTATION



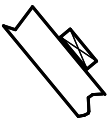
\* Plate location details available in MITek software or upon request.

## PLATE SIZE

**4 X 4**

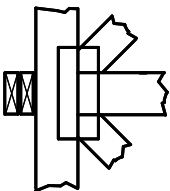
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## 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.

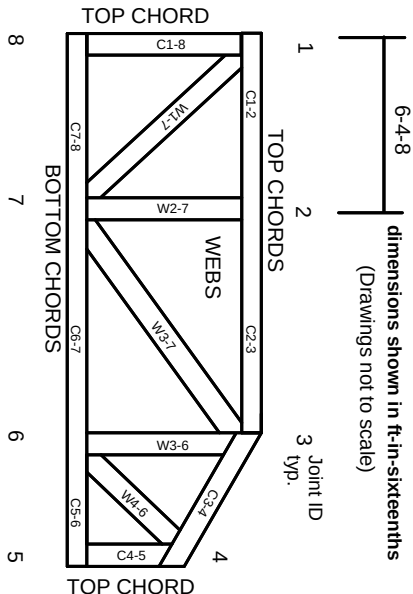
## BEARING



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/TP1.1: 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 1 section 6.3. These truss designs rely on lumber values established by others.

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# General Safety Notes

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

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

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