

**Trenco**

818 Soundside Rd  
Edenton, NC 27932

Re: P02608-25469  
A669 Kipling A

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by 84 Lumber 2383 (Dunn, NC).

Pages or sheets covered by this seal: I73370332 thru I73370374

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

North Carolina COA: C-0844



May 12, 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.

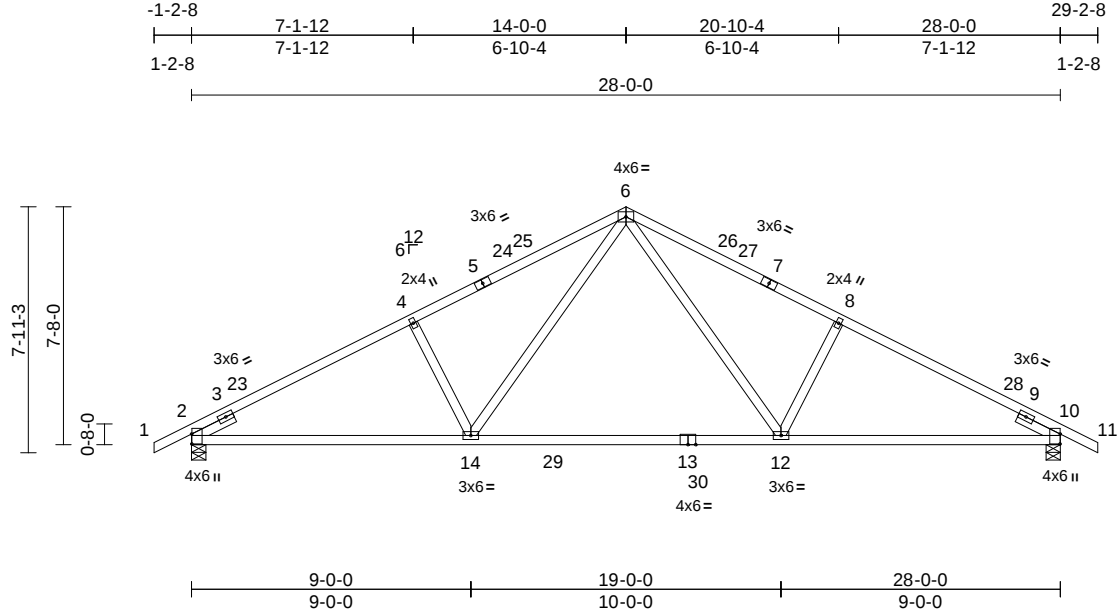
|              |       |            |     |     |                          |           |
|--------------|-------|------------|-----|-----|--------------------------|-----------|
| Job          | Truss | Truss Type | Qty | Ply | A669 Kipling A           | 173370332 |
| P02608-25469 | A1    | Common     | 5   | 1   | Job Reference (optional) |           |

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Fri May 09 08:46:04

Page: 1

ID:sXat?sTsb8kAJp?abcF3bxzIIWL-RfC?PsB70Hq3NSgPqnL8w3uITxbGKwRCDoi7J4zJC?f



Scale = 1:74.3

Plate Offsets (X, Y): [2:0-3-13,0-0-1], [10:0-3-13,0-0-1]

| Loading                 | (psf)    | Spacing         | 2-0-0           | CSI       | DEFL | in       | (loc) | l/defl | L/d  | PLATES | GRIP    |
|-------------------------|----------|-----------------|-----------------|-----------|------|----------|-------|--------|------|--------|---------|
| TCLL (roof)             | 20.0     | Plate Grip DOL  | 1.25            | TC        | 0.59 | Vert(LL) | -0.38 | 12-14  | >891 | 240    | 244/190 |
| Snow (Pf/Pg)            | 7.7/10.0 | Lumber DOL      | 1.25            | BC        | 0.75 | Vert(CT) | -0.59 | 12-14  | >568 | 180    |         |
| TCDL                    | 7.0      | Rep Stress Incr | YES             | WB        | 0.19 | Horz(CT) | 0.06  | 10     | n/a  | n/a    |         |
| BCLL                    | 0.0*     | Code            | IRC2018/TPI2014 | Matrix-MS |      |          |       |        |      |        |         |
| BCDL                    | 10.0     |                 |                 |           |      |          |       |        |      |        |         |
| Weight: 135 lb FT = 20% |          |                 |                 |           |      |          |       |        |      |        |         |

#### LUMBER

TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.1  
 WEBS 2x4 SP No.2 \*Except\* 12-8,14-4:2x4 SP No.3  
 SLIDER Left 2x4 SP No.3 -- 1-6-0, Right 2x4 SP No.3 -- 1-6-0

#### BRACING

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

#### REACTIONS

(size) 2=0-5-8, 10=0-5-8  
 Max Horiz 2=94 (LC 16)  
 Max Uplift 2=-165 (LC 16), 10=-165 (LC 17)  
 Max Grav 2=1194 (LC 3), 10=1194 (LC 3)

#### FORCES

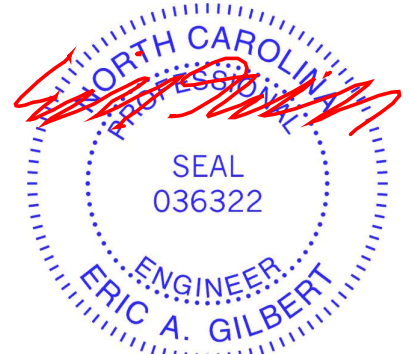
(lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=0/29, 2-4=-1858/256, 4-6=-1743/283, 6-8=-1743/283, 8-10=-1858/256, 10-11=0/29  
 BOT CHORD 2-14=-233/1609, 12-14=-78/1088, 10-12=-161/1609  
 WEBS 6-12=-132/747, 8-12=-344/182, 6-14=-132/747, 4-14=-344/182

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 1-2-8 to 1-9-8, Interior (1) 1-9-8 to 14-0-0, Exterior(2R) 14-0-0 to 17-0-0, Interior (1) 17-0-0 to 29-2-8 zone;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=1.25 Plate DOL=1.25); Pg=10.0 psf; Pf=7.7 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 7.7 psf on overhangs non-concurrent with other live loads.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 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 3-06-00 tall by 2-00-00 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 165 lb uplift at joint 2 and 165 lb uplift at joint 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.

LOAD CASE(S) Standard



May 12,2025

**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

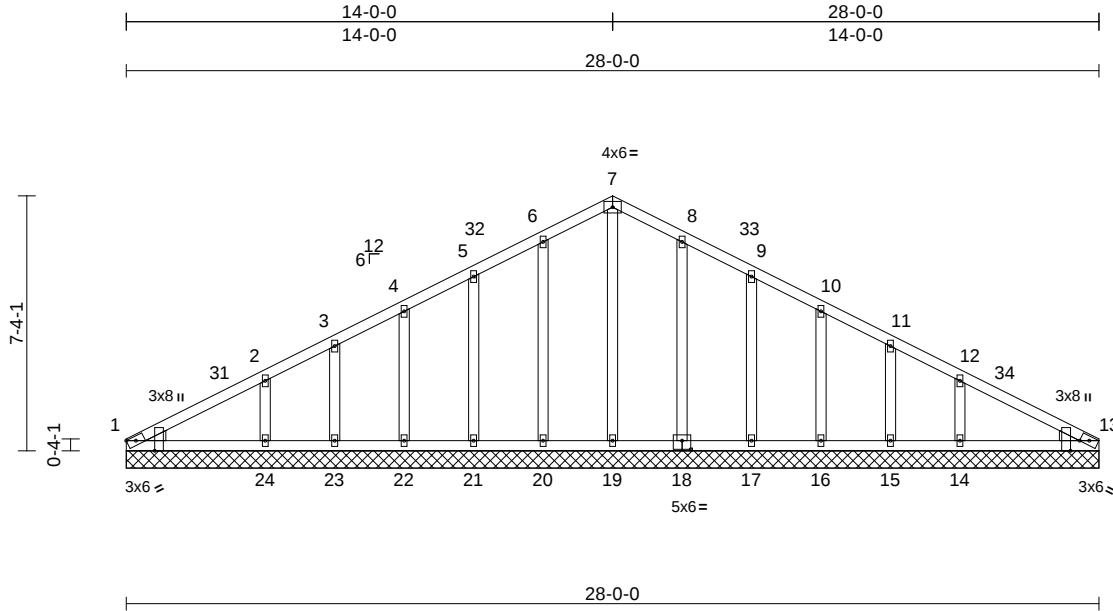
|              |       |                        |     |     |                          |           |
|--------------|-------|------------------------|-----|-----|--------------------------|-----------|
| Job          | Truss | Truss Type             | Qty | Ply | A669 Kipling A           | 173370333 |
| P02608-25469 | A1E   | Common Supported Gable | 1   | 1   | Job Reference (optional) |           |

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Fri May 09 08:46:05

Page: 1

ID:Oozefu2vqOK7c1qr2m7rgZzIIWu-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f



Scale = 1:66.3

Plate Offsets (X, Y): [1:0-0-0,Edge], [1:0-3-8,Edge], [13:0-0-0,Edge], [13:0-3-8,Edge], [18:0-3-0,0-3-0]

| Loading      | (psf)    | Spacing         | 2-0-0           | CSI       | DEFL | in        | (loc) | l/defl | L/d | PLATES         | GRIP     |
|--------------|----------|-----------------|-----------------|-----------|------|-----------|-------|--------|-----|----------------|----------|
| TCLL (roof)  | 20.0     | Plate Grip DOL  | 1.25            | TC        | 0.12 | Vert(LL)  | n/a   | -      | 999 | MT20           | 244/190  |
| Snow (Pf/Pg) | 7.7/10.0 | Lumber DOL      | 1.25            | BC        | 0.14 | Vert(TL)  | n/a   | -      | 999 |                |          |
| TCDL         | 7.0      | Rep Stress Incr | YES             | WB        | 0.09 | Horiz(TL) | 0.00  | 13     | n/a |                |          |
| BCLL         | 0.0*     | Code            | IRC2018/TPI2014 | Matrix-MS |      |           |       |        |     |                |          |
| BCDL         | 10.0     |                 |                 |           |      |           |       |        |     |                |          |
|              |          |                 |                 |           |      |           |       |        |     | Weight: 156 lb | FT = 20% |

#### LUMBER

TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2  
 OTHERS 2x4 SP No.3 \*Except\* 19-7:2x4 SP No.2  
 WEDGE Left: 2x4 SP No.3  
 Right: 2x4 SP No.3

#### BRACING

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

#### REACTIONS

(size) 1=28-0-0, 13=28-0-0, 14=28-0-0, 15=28-0-0, 16=28-0-0, 17=28-0-0, 18=28-0-0, 19=28-0-0, 20=28-0-0, 21=28-0-0, 22=28-0-0, 23=28-0-0, 24=28-0-0  
 Max Horiz 1=-88 (LC 17)  
 Max Uplift 1=-13 (LC 17), 14=-88 (LC 17), 15=-24 (LC 17), 16=-47 (LC 17), 17=-43 (LC 17), 18=-42 (LC 17), 20=-44 (LC 16), 21=-43 (LC 16), 22=-48 (LC 16), 23=-24 (LC 16), 24=-89 (LC 16)  
 Max Grav 1=127 (LC 2), 13=127 (LC 2), 14=299 (LC 36), 15=84 (LC 2), 16=164 (LC 36), 17=143 (LC 2), 18=157 (LC 36), 19=146 (LC 32), 20=156 (LC 35), 21=143 (LC 2), 22=164 (LC 35), 23=84 (LC 2), 24=300 (LC 35)

#### FORCES

(lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=-93/60, 2-3=-71/58, 3-4=-47/75, 4-5=-47/93, 5-6=-65/126, 6-7=-83/160, 7-8=-83/160, 8-9=-65/126, 9-10=-47/90, 10-11=-34/52, 11-12=-49/26, 12-13=-149/41

BOT CHORD 1-24=-36/88, 23-24=-36/88, 22-23=-36/88, 21-22=-36/88, 20-21=-36/88, 19-20=-36/88, 17-19=-36/88, 16-17=-36/88, 15-16=-36/88, 14-15=-36/88, 13-14=-36/122  
 WEBS 7-19=-106/23, 6-20=-116/60, 5-21=-105/64, 4-22=-116/67, 3-23=-76/49, 2-24=-189/120, 8-18=-116/60, 9-17=-106/64, 10-16=-116/67, 11-15=-76/49, 12-14=-188/119

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) 0-0-0 to 3-0-0, Exterior(2N) 3-0-0 to 14-0-0, Corner(3R) 14-0-0 to 17-0-0, Exterior(2N) 17-0-0 to 28-0-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); Pg=10.0 psf; Pf=7.7 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.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 44 lb uplift at joint 20, 43 lb uplift at joint 21, 48 lb uplift at joint 22, 24 lb uplift at joint 23, 89 lb uplift at joint 24, 42 lb uplift at joint 18, 43 lb uplift at joint 17, 47 lb uplift at joint 16, 24 lb uplift at joint 15, 88 lb uplift at joint 14, 13 lb uplift at joint 1 and 13 lb uplift at joint 1.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1.
- 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.

LOAD CASE(S) Standard



May 12,2025

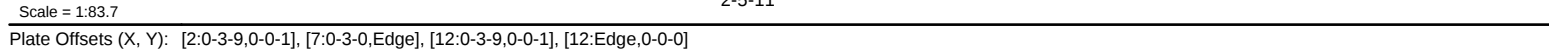
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.**

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  
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84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334, Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Fri May 09 08:46:05 Page: 1  
ID:Bn6VMRTMRSya03usQT0MP8zIIYw-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWRCDoi7J4zJC?f



**LUMBER**  
 TOP CHORD      2x4 SP No.2  
 BOT CHORD      2x4 SP No.2  
 WEBS            2x4 SP No.3 \*Except\* 14-8,22-6:2x4 SP No.2  
 SLIDER          Left 2x4 SP No.3 -- 1-6-0, Right 2x4 SP No.3  
                     -- 1-6-0

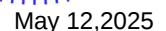
|                |                                                                  |
|----------------|------------------------------------------------------------------|
| <b>BRACING</b> |                                                                  |
| TOP CHORD      | Structural wood sheathing directly applied or 2-11-1 oc purlins. |
| BOT CHORD      | Rigid ceiling directly applied or 2-2-0 oc bracing.              |

**REACTIONS** (size) 2=0-5-8, 12=0-5-8  
 Max Horiz 2=94 (LC 16)  
 Max Uplift 2=-137 (LC 16), 12=-137 (LC 17)  
 Max Grav 2=1402 (LC 3), 12=1402 (LC 3)

|           |                                                                                                                                                                            |
|-----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| FORCES    | (lb) - Maximum Compression/Maximum Tension                                                                                                                                 |
| TOP CHORD | 1-2=0/29, 2-4=-2237/199, 4-6=-2118/216,<br>6-7=-88/35, 7-8=-88/35, 8-10=-2118/216,<br>10-12=-2237/199, 12-13=0/29                                                          |
| BOT CHORD | 2-22=-182/1941, 20-22=0/2430,<br>15-20=0/2430, 14-15=0/2430,<br>12-14=-109/1941, 19-21=-167/86,<br>17-19=-1102/0, 16-17=-166/86                                            |
| WEBS      | 8-16=-74/837, 14-16=-57/740,<br>10-14=-332/176, 21-22=-57/740,<br>6-21=-74/837, 4-22=-332/176,<br>6-8=-1468/201, 19-20=0/121, 19-22=-1088/0,<br>15-17=0/121, 14-17=-1088/0 |

1) Unbalanced roof live loads have been considered for this design.

- LOAD CASE(S) Standard



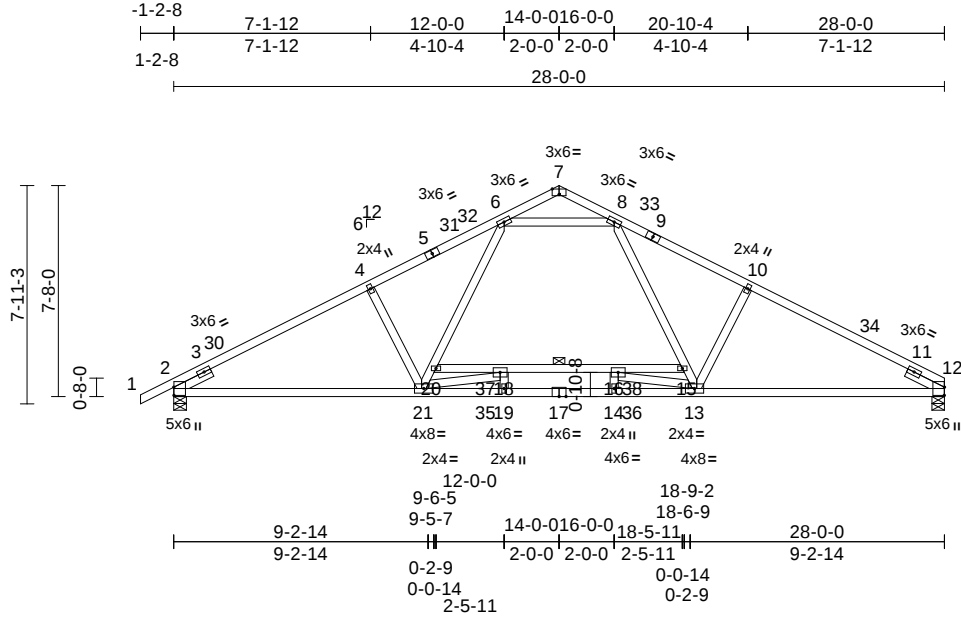
|              |       |            |     |     |                          |           |
|--------------|-------|------------|-----|-----|--------------------------|-----------|
| Job          | Truss | Truss Type | Qty | Ply | A669 Kipling A           | 173370335 |
| P02608-25469 | A1MA  | Common     | 1   | 1   | Job Reference (optional) |           |

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Fri May 09 08:46:06

Page: 1

ID:6kUQgpfe?2w?Prrr4FaynlzllbH-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWCDoi7J4zJC?f



Scale = 1:83.7

Plate Offsets (X, Y): [2:0-3-9,0-0-1], [7:0-3-0,Edge], [12:0-3-9,0-0-1], [12:Edge,0-0-0]

| Loading      | (psf)    | Spacing         | 2-0-0           | CSI       |      | DEFL     | in    | (loc) | l/defl | L/d | PLATES         | GRIP     |
|--------------|----------|-----------------|-----------------|-----------|------|----------|-------|-------|--------|-----|----------------|----------|
| TCLL (roof)  | 20.0     | Plate Grip DOL  | 1.25            | TC        | 0.64 | Vert(LL) | -0.21 | 13-28 | >999   | 240 | MT20           | 244/190  |
| Snow (Pf/Pg) | 7.7/10.0 | Lumber DOL      | 1.25            | BC        | 0.92 | Vert(CT) | -0.34 | 14-19 | >994   | 180 |                |          |
| TCDL         | 7.0      | Rep Stress Incr | YES             | WB        | 0.56 | Horz(CT) | 0.09  | 12    | n/a    | n/a |                |          |
| BCLL         | 0.0*     | Code            | IRC2018/TPI2014 | Matrix-MS |      |          |       |       |        |     |                |          |
| BCDL         | 10.0     |                 |                 |           |      |          |       |       |        |     |                |          |
|              |          |                 |                 |           |      |          |       |       |        |     | Weight: 157 lb | FT = 20% |

#### LUMBER

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3 \*Except\* 13-8,21-6:2x4 SP No.2  
SLIDER Left 2x4 SP No.3 -- 1-6-0, Right 2x4 SP No.3 -- 1-6-0

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 2-11-1 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.

#### REACTIONS

(size) 2=0-5-8, 12=0-5-8  
Max Horiz 2=102 (LC 16)  
Max Uplift 2=-137 (LC 16), 12=-117 (LC 17)  
Max Grav 2=1403 (LC 3), 12=1347 (LC 3)

#### FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/29, 2-4=-2239/199, 4-6=-2120/217, 6-7=-90/36, 7-8=-88/35, 8-10=-2125/225, 10-12=-2244/208

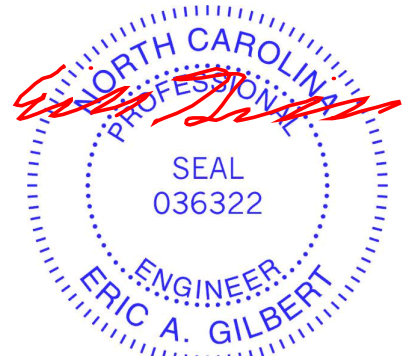
BOT CHORD 2-21=-188/1943, 19-21=0/2430, 14-19=0/2430, 13-14=0/2430, 12-13=-142/1949, 18-20=-166/87, 16-18=-1101/0, 15-16=-169/85  
WEBS 8-15=-76/843, 13-15=-59/746, 10-13=-337/178, 20-21=-57/739, 6-20=-74/836, 4-21=-332/176, 6-8=-1470/203, 18-19=0/121, 18-21=-1088/0, 14-16=0/121, 13-16=-1087/0

#### NOTES

1) Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-2-8 to 1-9-8, Interior (1) 1-9-8 to 14-0-0, Exterior(2R) 14-0-0 to 17-0-0, Interior (1) 17-0-0 to 28-0-0 zone;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=1.25 Plate DOL=1.25); Pg=10.0 psf; Pf=7.7 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 7.7 psf on overhangs non-concurrent with other live loads.
- 6) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 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 3-06-00 tall by 2-00-00 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 137 lb uplift at joint 2 and 117 lb uplift at joint 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.
- 11) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.

LOAD CASE(S) Standard



May 12,2025

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ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

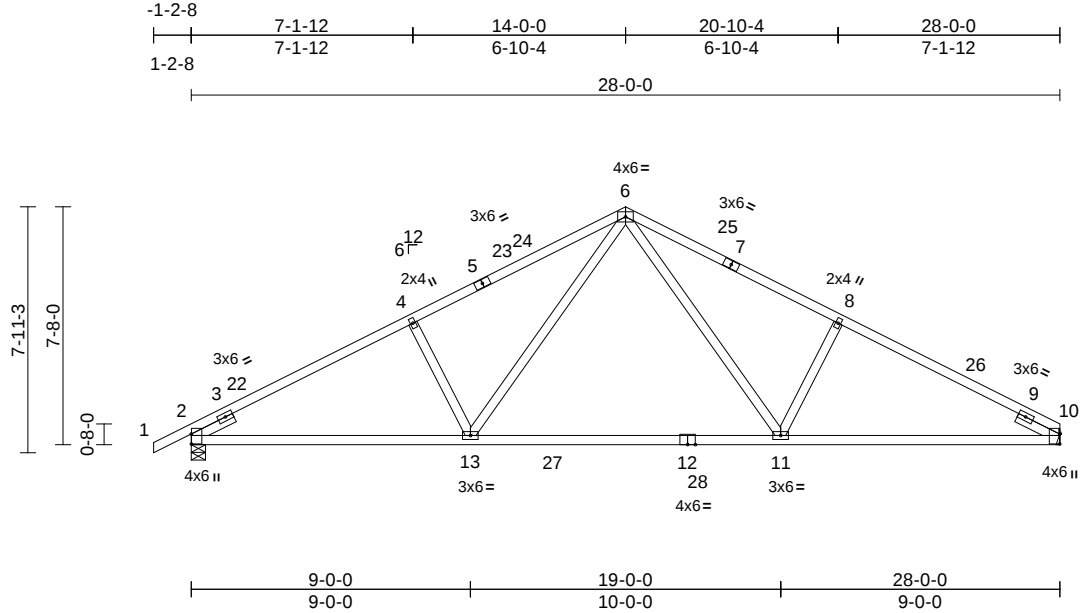
|              |       |            |     |     |                          |           |
|--------------|-------|------------|-----|-----|--------------------------|-----------|
| Job          | Truss | Truss Type | Qty | Ply | A669 Kipling A           | 173370336 |
| P02608-25469 | A2    | Common     | 1   | 1   | Job Reference (optional) |           |

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Fri May 09 08:46:06

Page: 1

ID:66KsGxQf1j4TAA2E6q1eozllct-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f



Scale = 1:74.3

Plate Offsets (X, Y): [2:0-3-13,0-0-1], [10:0-3-13,0-0-1]

| Loading      | (psf)    | Spacing         | 2-0-0           | CSI       |      | DEFL     | in    | (loc) | l/defl | L/d | PLATES         | GRIP     |
|--------------|----------|-----------------|-----------------|-----------|------|----------|-------|-------|--------|-----|----------------|----------|
| TCLL (roof)  | 20.0     | Plate Grip DOL  | 1.25            | TC        | 0.59 | Vert(LL) | -0.38 | 11-13 | >891   | 240 | MT20           | 244/190  |
| Snow (Pf/Pg) | 7.7/10.0 | Lumber DOL      | 1.25            | BC        | 0.75 | Vert(CT) | -0.59 | 11-13 | >570   | 180 |                |          |
| TCDL         | 7.0      | Rep Stress Incr | YES             | WB        | 0.19 | Horz(CT) | 0.05  | 10    | n/a    | n/a |                |          |
| BCLL         | 0.0*     | Code            | IRC2018/TPI2014 | Matrix-MS |      |          |       |       |        |     |                |          |
| BCDL         | 10.0     |                 |                 |           |      |          |       |       |        |     |                |          |
|              |          |                 |                 |           |      |          |       |       |        |     | Weight: 133 lb | FT = 20% |

#### LUMBER

TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.1  
 WEBS 2x4 SP No.2 \*Except\* 11-8,13-4:2x4 SP No.3  
 SLIDER Left 2x4 SP No.3 -- 1-6-0, Right 2x4 SP No.3 -- 1-6-0

#### BRACING

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

#### REACTIONS

(size) 2=0-5-8, 10= Mechanical  
 Max Horiz 2=102 (LC 20)  
 Max Uplift 2=-165 (LC 16), 10=-145 (LC 17)  
 Max Grav 2=1195 (LC 3), 10=1140 (LC 3)

#### FORCES

(lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=0/29, 2-4=-1860/257, 4-6=-1745/283, 6-8=-1749/291, 8-10=-1865/265  
 BOT CHORD 2-13=-240/1611, 11-13=-86/1090, 10-11=-177/1616  
 WEBS 6-11=-134/754, 8-11=-348/184, 6-13=-132/747, 4-13=-344/182

#### NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-2-8 to 1-9-8, Interior (1) 1-9-8 to 14-0-0, Exterior(2R) 14-0-0 to 17-0-0, Interior (1) 17-0-0 to 28-0-0 zone;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=1.25 Plate DOL=1.25); Pg=10.0 psf; Pf=7.7 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 7.7 psf on overhangs non-concurrent with other live loads.
- 6) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 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 3-06-00 tall by 2-00-00 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 165 lb uplift at joint 2 and 145 lb uplift at joint 10.
- 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.

LOAD CASE(S) Standard



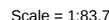
May 12,2025

**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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Page: 1

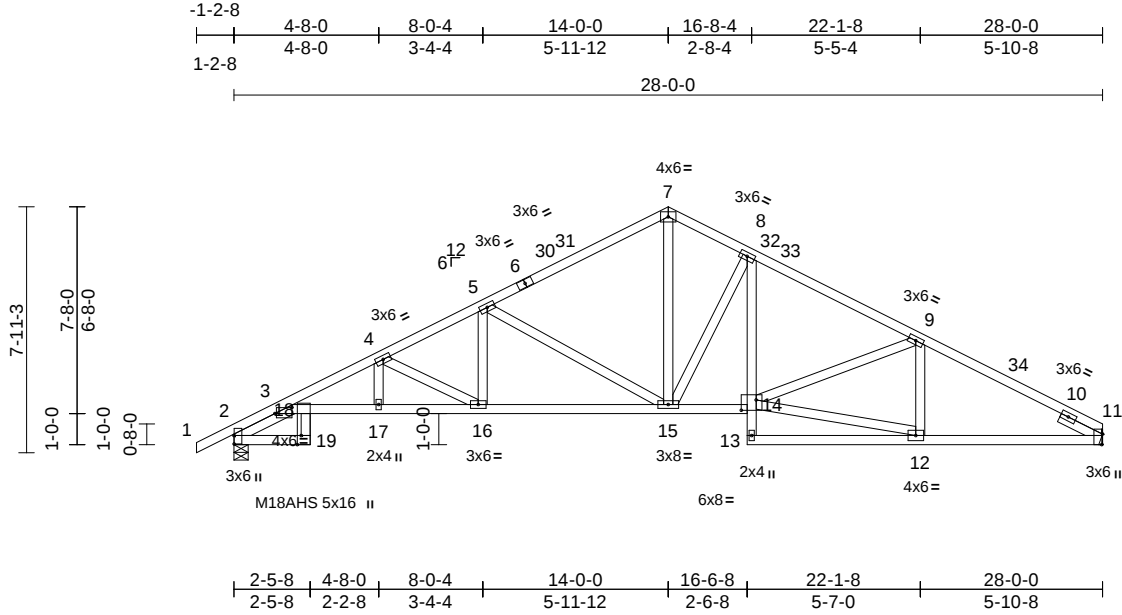
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|--------------|-------|--------------|-----|-----|--------------------------|-----------|
| Job          | Truss | Truss Type   | Qty | Ply | A669 Kipling A           | 173370338 |
| P02608-25469 | A3    | Roof Special | 2   | 1   | Job Reference (optional) |           |

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

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Scale = 1:74.3

Plate Offsets (X, Y): [2:0-3-4,0-0-1], [3:0-6-9,0-2-5], [11:0-4-1,Edge], [14:0-5-12,0-4-0], [19:0-3-8,Edge]

| Loading      | (psf)    | Spacing         | 2-0-0           | CSI       |      | DEFL     | in    | (loc) | l/defl | L/d | PLATES         | GRIP     |
|--------------|----------|-----------------|-----------------|-----------|------|----------|-------|-------|--------|-----|----------------|----------|
| TCLL (roof)  | 20.0     | Plate Grip DOL  | 1.25            | TC        | 0.83 | Vert(LL) | -0.16 | 17-18 | >999   | 240 | MT20           | 244/190  |
| Snow (Pf/Pg) | 7.7/10.0 | Lumber DOL      | 1.25            | BC        | 0.92 | Vert(CT) | -0.31 | 15-16 | >999   | 180 | M18AHS         | 186/179  |
| TCDL         | 7.0      | Rep Stress Incr | YES             | WB        | 0.58 | Horz(CT) | 0.21  | 11    | n/a    | n/a |                |          |
| BCLL         | 0.0*     | Code            | IRC2018/TPI2014 | Matrix-MS |      |          |       |       |        |     |                |          |
| BCDL         | 10.0     |                 |                 |           |      |          |       |       |        |     |                |          |
|              |          |                 |                 |           |      |          |       |       |        |     | Weight: 166 lb | FT = 20% |

#### LUMBER

TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2 \*Except\* 3-14:2x4 SP DSS,  
 8-13:2x4 SP No.3  
 WEBS 2x4 SP No.3 \*Except\* 15-7,15-5:2x4 SP No.2  
 SLIDER Left 2x4 SP No.3 -- 2-0-15, Right 2x4 SP  
 No.3 -- 1-6-0

#### BRACING

TOP CHORD Structural wood sheathing directly applied or  
 2-5-14 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc  
 bracing.

#### REACTIONS

(size) 2=0-5-8, 11= Mechanical  
 Max Horiz 2=102 (LC 16)  
 Max Uplift 2=-165 (LC 16), 11=-145 (LC 17)  
 Max Grav 2=1103 (LC 2), 11=1035 (LC 2)

#### FORCES

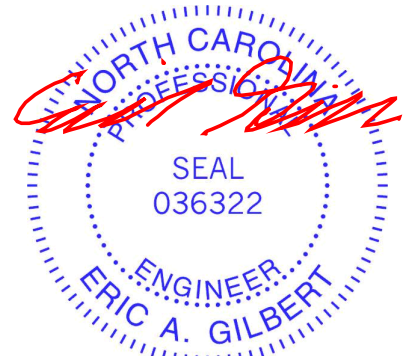
(lb) - Maximum Compression/Maximum  
 Tension  
 TOP CHORD 1-2=0/29, 2-3=-1028/149, 3-4=-2835/425,  
 4-5=-2034/303, 5-7=-1376/244,  
 7-8=-1331/261, 8-9=-1678/277,  
 9-11=-1724/260  
 BOT CHORD 2-19=-145/573, 18-19=-34/195,  
 3-18=-305/1926, 17-18=-425/2499,  
 16-17=-425/2499, 15-16=-265/1790,  
 14-15=-130/1441, 13-14=0/107,  
 8-14=-58/437, 12-13=-2/112,  
 11-12=-181/1485  
 WEBS 8-15=-588/155, 12-14=-184/1405,  
 9-14=-132/107, 9-12=-221/73, 4-17=-68/435,  
 4-16=-794/179, 5-16=-33/424,  
 7-15=-144/937, 5-15=-721/199

#### NOTES

1) Unbalanced roof live loads have been considered for  
 this design.

- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust)  
 Vasd=91mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; Cat.  
 II; Exp B; Enclosed; MWFRS (envelope) exterior zone  
 and C-C Exterior(2E) -1-2-8 to 1-10-13, Interior (1)  
 1-10-13 to 14-0-0, Exterior(2R) 14-0-0 to 17-0-0, Interior  
 (1) 17-0-0 to 28-0-0 zone;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=1.25  
 Plate DOL=1.25); Pg=10.0 psf; Pf=7.7 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 7.7 psf on  
 overhangs non-concurrent with other live loads.
- 6) Building Designer/Project engineer responsible for  
 verifying Rain Load = 5.0 (psf) covers rain loading  
 requirements specific to the use of this truss component.
- 7) All plates are MT20 plates unless otherwise indicated.
- 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  
 3-06-00 tall by 2-00-00 wide will fit between the bottom  
 chord and any other members.
- 10) Refer to girder(s) for truss to truss connections.
- 11) Provide mechanical connection (by others) of truss to  
 bearing plate capable of withstanding 145 lb uplift at joint  
 11 and 165 lb uplift at joint 2.
- 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.

LOAD CASE(S) Standard



May 12,2025

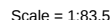
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.**

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)

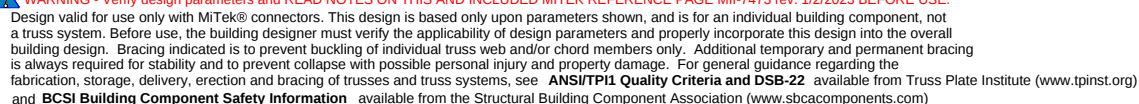
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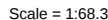
84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334, Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Fri May 09 08:46:07 Page: 1  
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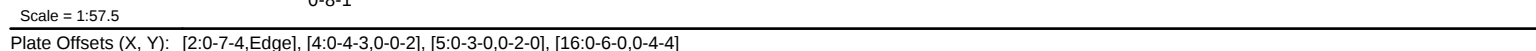
May 12, 2025



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84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334, Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Fri May 09 08:46:09 Page: 1  
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|                  |                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                          |                                                                                                                                                                                                          |
|------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>LUMBER</b>    |                                                                                                                                                                                                                                                                                                     | 3) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:                                                                                                                                                                           | 13) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3'-06-00 tall by 2'-00-00 wide will fit between the bottom chord and any other members. |
| TOP CHORD        | 2x4 SP No.2                                                                                                                                                                                                                                                                                         | Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc; 2x8 - 2 rows staggered at 0-9-0 oc.                                                                                                                                                            | 14) Refer to girder(s) for truss to truss connections.                                                                                                                                                   |
| BOT CHORD        | 2x6 SP No.2 *Except* 4-16:2x6 SP DSS, 7-15:2x4 SP No.3, 3-4:2x8 SP DSS                                                                                                                                                                                                                              | Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.                                                                                                                                                         | 15) Bearing at joint(s) 3 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.                                        |
| WEBS             | 2x4 SP No.3                                                                                                                                                                                                                                                                                         | Web connected as follows: 2x4 - 1 row at 0-9-0 oc.                                                                                                                                                                                                       | 16) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 597 lb uplift at joint 12 and 536 lb uplift at joint 3.                                                  |
| <b>BRACING</b>   |                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                          | 17) 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.                                               |
| TOP CHORD        | Structural wood sheathing directly applied or 5-3-4 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 2-3, 5-11.                                                                                                                                                                 | 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated. | 18) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.                                                                         |
| BOT CHORD        | Rigid ceiling directly applied or 10-0-0 oc bracing.                                                                                                                                                                                                                                                | 3) Unbalanced roof live loads have been considered for this design.                                                                                                                                                                                      | 19) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.                                                                                                           |
| <b>REACTIONS</b> | (size) 3=0-5-8, 12= Mechanical<br>Max Horiz 3=126 (LC 53)<br>Max Uplift 3=-536 (LC 12), 12=-597 (LC 9)<br>Max Grav 3=1655 (LC 2), 12=1428 (LC 2)                                                                                                                                                    | 4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=4.2psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; Lumber DOL=1.60 plate grip DOL=1.60                                                             | <b>LOAD CASE(S)</b> Standard                                                                                                                                                                             |
| <b>FORCES</b>    | (lb) - Maximum Compression/Maximum Tension                                                                                                                                                                                                                                                          | 5) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); Pg=10.0 psf; Pf=12.7 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                                             | 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15                                                                                                                                     |
| TOP CHORD        | 1-2=0/33, 2-3=-1090/279, 2-4=-573/166, 4-5=-3697/1389, 5-6=-3590/1483, 6-7=-3590/1483, 7-8=-3884/1634, 8-10=-1295/552, 10-11=-1295/552, 11-12=-1365/592                                                                                                                                             | 6) Unbalanced snow loads have been considered for this design.                                                                                                                                                                                           |                                                                                                                                                                                                          |
| BOT CHORD        | 2-19=-4/22, 4-18=-1216/3146, 17-18=-1193/3079, 16-17=-1665/3961, 15-16=-894, 7-16=-72/55, 14-15=-81/189, 13-14=-921/2175, 12-13=-916, 2-18=-4521/1259, 5-17=-373/203, 6-17=-327/180, 7-17=-443/213, 14-16=-894/2111, 8-16=-871/2089, 8-14=-609/310, 8-13=-1232/517, 10-13=-293/189, 11-13=-793/1792 | 7) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.                                                                                 |                                                                                                                                                                                                          |
| WEBS             |                                                                                                                                                                                                                                                                                                     | 8) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.                                                                                      |                                                                                                                                                                                                          |
| <b>NOTES</b>     |                                                                                                                                                                                                                                                                                                     | 9) Provide adequate drainage to prevent water ponding.                                                                                                                                                                                                   |                                                                                                                                                                                                          |
|                  |                                                                                                                                                                                                                                                                                                     | 10) All plates are MT20 plates unless otherwise indicated.                                                                                                                                                                                               |                                                                                                                                                                                                          |
|                  |                                                                                                                                                                                                                                                                                                     | 11) The Fabrication Tolerance at joint 4 = 4%                                                                                                                                                                                                            |                                                                                                                                                                                                          |
|                  |                                                                                                                                                                                                                                                                                                     | 12) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.                                                                                                                                          |                                                                                                                                                                                                          |

Continued on page 2

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|              |       |                 |     |     |                          |           |
|--------------|-------|-----------------|-----|-----|--------------------------|-----------|
| Job          | Truss | Truss Type      | Qty | Ply | A669 Kipling A           | I73370341 |
| P02608-25469 | A6G   | Half Hip Girder | 1   | 2   | Job Reference (optional) |           |

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

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Page: 2

Uniform Loads (lb/ft)

Vert: 1-5=-29, 2-3=-56, 5-11=-39, 2-19=-20,  
4-16=-20, 12-15=-20

Concentrated Loads (lb)

Vert: 14=-19 (B), 8=-12 (B), 10=-12 (B), 13=-19 (B),  
21=-14 (B), 22=-14 (B), 23=-14 (B), 24=-14 (B),  
25=-14 (B), 26=-12 (B), 27=-12 (B), 28=-12 (B),  
29=-86 (B), 30=-113 (B), 31=-121 (B), 32=-24 (B),  
33=-24 (B), 34=-24 (B), 35=-24 (B), 36=-24 (B),  
37=-19 (B), 38=-19 (B), 39=-19 (B)

*Eric Gilbert*



May 12, 2025

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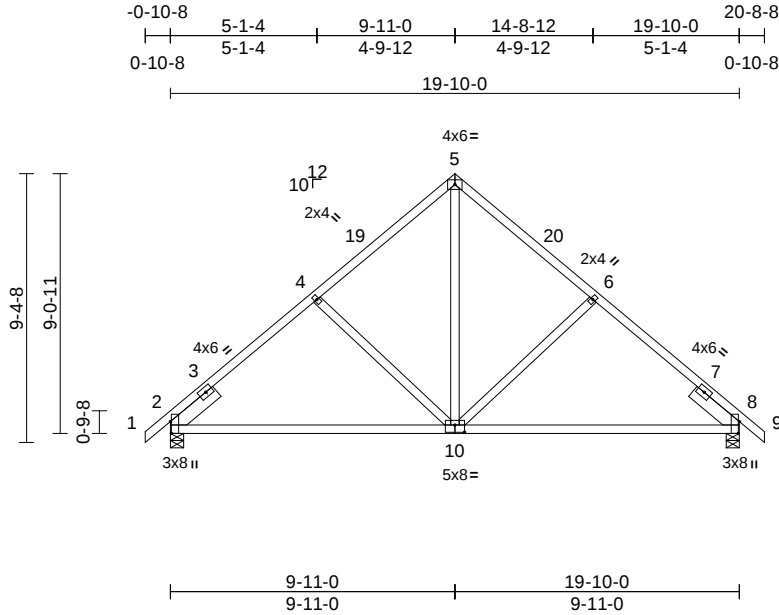
|              |       |            |     |     |                          |           |
|--------------|-------|------------|-----|-----|--------------------------|-----------|
| Job          | Truss | Truss Type | Qty | Ply | A669 Kipling A           |           |
| P02608-25469 | B1    | Common     | 4   | 1   | Job Reference (optional) | I73370342 |

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Fri May 09 08:46:10

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ID:HsQL4nTNFmdJ65tQikp1QNzIJ9f-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCdoi7J4zJC?f



Scale = 1:80.3

Plate Offsets (X, Y): [2:0-4-15,Edge], [8:0-4-15,Edge], [10:0-4-0,0-3-0]

| Loading      | (psf)    | Spacing         | 2-0-0           | CSI       |      | DEFL     | in    | (loc) | l/defl | L/d | PLATES         | GRIP     |
|--------------|----------|-----------------|-----------------|-----------|------|----------|-------|-------|--------|-----|----------------|----------|
| TCLL (roof)  | 20.0     | Plate Grip DOL  | 1.25            | TC        | 0.27 | Vert(LL) | -0.13 | 10-17 | >999   | 240 | MT20           | 244/190  |
| Snow (Pf/Pg) | 7.7/10.0 | Lumber DOL      | 1.25            | BC        | 0.77 | Vert(CT) | -0.25 | 10-17 | >934   | 180 |                |          |
| TCDL         | 7.0      | Rep Stress Incr | YES             | WB        | 0.19 | Horz(CT) | 0.02  | 2     | n/a    | n/a |                |          |
| BCLL         | 0.0*     | Code            | IRC2018/TPI2014 | Matrix-MS |      |          |       |       |        |     |                |          |
| BCDL         | 10.0     |                 |                 |           |      |          |       |       |        |     | Weight: 113 lb | FT = 20% |

#### LUMBER

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

#### BRACING

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

#### REACTIONS

|            |                                |
|------------|--------------------------------|
| (size)     | 2=0-5-8, 8=0-5-8               |
| Max Horiz  | 2=165 (LC 13)                  |
| Max Uplift | 2=-102 (LC 14), 8=-102 (LC 15) |
| Max Grav   | 2=781 (LC 2), 8=781 (LC 2)     |

#### FORCES

(lb) - Maximum Compression/Maximum Tension

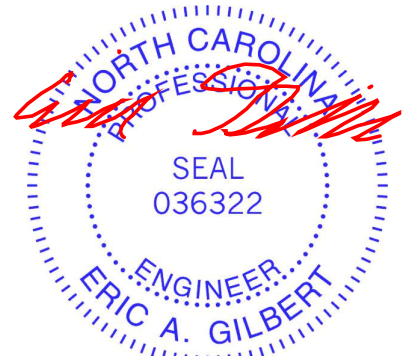
|           |                                                                            |
|-----------|----------------------------------------------------------------------------|
| TOP CHORD | 1-2=0/30, 2-4=-797/143, 4-5=-665/156, 5-6=-665/156, 6-8=-797/143, 8-9=0/30 |
| BOT CHORD | 2-8=-162/623                                                               |
| WEBS      | 5-10=-104/528, 6-10=-240/165, 4-10=-239/165                                |

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-10-8 to 2-1-8, Interior (1) 2-1-8 to 9-11-0, Exterior(2R) 9-11-0 to 12-11-0, Interior (1) 12-11-0 to 20-8-8 zone; 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=1.25 Plate DOL=1.25); Pg=10.0 psf; Pf=7.7 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
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 102 lb uplift at joint 2 and 102 lb uplift at joint 8.
- 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.

LOAD CASE(S) Standard



May 12,2025

**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)

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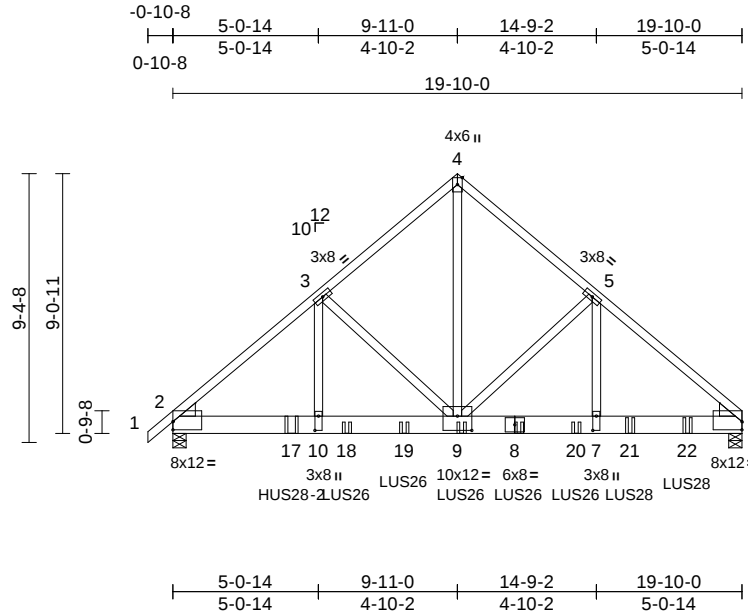
818 Soundside Road  
Edenton, NC 27932

|              |       |               |     |     |                          |           |
|--------------|-------|---------------|-----|-----|--------------------------|-----------|
| Job          | Truss | Truss Type    | Qty | Ply | A669 Kipling A           | 173370343 |
| P02608-25469 | B1G   | Common Girder | 1   | 2   | Job Reference (optional) |           |

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Fri May 09 08:46:10  
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Page: 1



Scale = 1:80.3

Plate Offsets (X, Y): [2:Edge,0-3-7], [6:Edge,0-3-7], [7:0-6-0,0-1-8], [9:0-6-0,0-6-0], [10:0-6-0,0-1-8]

| Loading      | (psf)    | Spacing         | 2-0-0           | CSI       |      | DEFL     | in    | (loc) | l/defl | L/d | PLATES         | GRIP     |
|--------------|----------|-----------------|-----------------|-----------|------|----------|-------|-------|--------|-----|----------------|----------|
| TCLL (roof)  | 20.0     | Plate Grip DOL  | 1.25            | TC        | 0.36 | Vert(LL) | -0.08 | 9-10  | >999   | 240 | MT20           | 244/190  |
| Snow (Pf/Pg) | 7.7/10.0 | Lumber DOL      | 1.25            | BC        | 0.29 | Vert(CT) | -0.15 | 9-10  | >999   | 180 |                |          |
| TCDL         | 7.0      | Rep Stress Incr | NO              | WB        | 0.63 | Horz(CT) | 0.02  | 6     | n/a    | n/a |                |          |
| BCLL         | 0.0*     | Code            | IRC2018/TPI2014 | Matrix-MS |      |          |       |       |        |     |                |          |
| BCDL         | 10.0     |                 |                 |           |      |          |       |       |        |     |                |          |
|              |          |                 |                 |           |      |          |       |       |        |     | Weight: 294 lb | FT = 20% |

#### LUMBER

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x8 SP DSS  
WEBS 2x4 SP No.2  
WEDGE Left: 2x6 SP No.2  
Right: 2x6 SP No.2

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 4-9-2 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS

(size) 2=0-5-8, 6=0-5-8  
Max Horiz 2=161 (LC 9)  
Max Uplift 2=-974 (LC 10), 6=-797 (LC 11)  
Max Grav 2=4734 (LC 2), 6=5534 (LC 3)

#### FORCES

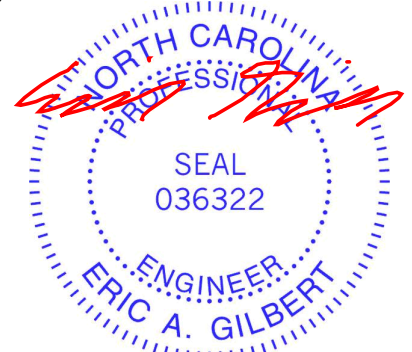
(lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=0/30, 2-3=-6326/1258, 3-4=-4635/843, 4-5=-4638/843, 5-6=-6562/1014  
BOT CHORD 2-10=-991/4779, 9-10=-991/4779, 7-9=-731/4968, 6-7=-731/4968  
WEBS 4-9=-982/5557, 5-9=-2276/369, 5-7=-270/2740, 3-9=-1764/622, 3-10=-600/2052

#### NOTES

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.  
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-7-0 oc.  
Web 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=115mph (3-second gust) Vasd=91mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); Pg=10.0 psf; Pf=7.7 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
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 797 lb uplift at joint 6 and 974 lb uplift at joint 2.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Use Simpson Strong-Tie HUS28-2 (6-10d Girder, 6-10d Truss) or equivalent at 4-1-10 from the left end to connect truss(es) to front face of bottom chord.
- Use Simpson Strong-Tie LUS26 (4-10d Girder, 3-10d Truss) or equivalent spaced at 4-0-0 oc max. starting at 6-0-12 from the left end to 12-0-12 to connect truss(es) to front face of bottom chord.

- Use Simpson Strong-Tie LUS26 (4-10d Girder, 4-10d Truss, Single Ply Girder) or equivalent at 8-0-12 from the left end to connect truss(es) to front face of bottom chord.
  - Use Simpson Strong-Tie LUS26 (4-10d Girder, 4-10d Truss) or equivalent at 14-0-12 from the left end to connect truss(es) to front face of bottom chord.
  - Use Simpson Strong-Tie LUS28 (6-10d Girder, 4-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 15-11-4 from the left end to 17-11-4 to connect truss(es) to front face of bottom chord.
  - Fill all nail holes where hanger is in contact with lumber.
- LOAD CASE(S)** Standard
- Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (lb/ft)  
Vert: 1-4=-29, 4-6=-29, 11-14=-20  
Concentrated Loads (lb)  
Vert: 8=-677 (F), 9=-677 (F), 17=-1246 (F), 18=-905 (F), 19=-946 (F), 20=-673 (F), 21=-769 (F), 22=-769 (F)



May 12, 2025

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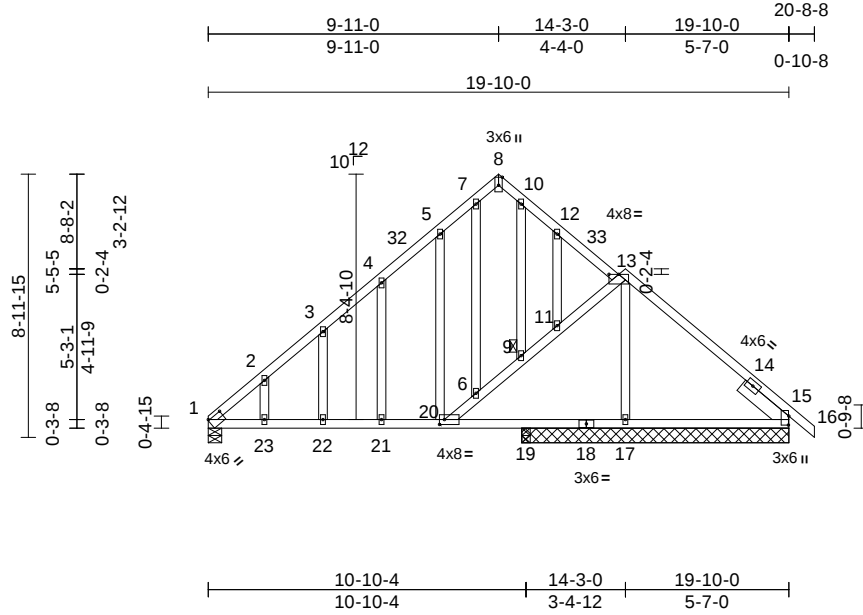
|              |       |                         |     |     |                          |           |
|--------------|-------|-------------------------|-----|-----|--------------------------|-----------|
| Job          | Truss | Truss Type              | Qty | Ply | A669 Kipling A           | 173370344 |
| P02608-25469 | B1SE  | Common Structural Gable | 1   | 1   | Job Reference (optional) |           |

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

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Scale = 1:78.7

Plate Offsets (X, Y): [1:0-5-12,0-0-5], [8:0-3-5,Edge], [13:0-4-0,Edge], [15:0-3-11,0-0-3], [20:0-2-0,0-2-0]

| Loading      | (psf)    | Spacing         | 2-0-0           | CSI       |      | DEFL     | in    | (loc) | l/defl | L/d | PLATES         | GRIP     |
|--------------|----------|-----------------|-----------------|-----------|------|----------|-------|-------|--------|-----|----------------|----------|
| TCLL (roof)  | 20.0     | Plate Grip DOL  | 1.25            | TC        | 0.49 | Vert(LL) | 0.25  | 21-22 | >527   | 240 | MT20           | 244/190  |
| Snow (Pf/Pg) | 7.7/10.0 | Lumber DOL      | 1.25            | BC        | 0.60 | Vert(CT) | -0.34 | 21-22 | >388   | 180 |                |          |
| TCDL         | 7.0      | Rep Stress Incr | YES             | WB        | 0.48 | Horz(CT) | -0.03 | 15    | n/a    | n/a |                |          |
| BCLL         | 0.0*     | Code            | IRC2018/TPI2014 | Matrix-MS |      |          |       |       |        |     |                |          |
| BCDL         | 10.0     |                 |                 |           |      |          |       |       |        |     |                |          |
|              |          |                 |                 |           |      |          |       |       |        |     | Weight: 140 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 *Except* 6-7,20-5:2x4 SP No.2 |
| SLIDER    | Right 2x6 SP No.2 -- 2-0-0                |

#### BRACING

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

JOINTS 1 Brace at Jt(s): 9

|                  |                                                                 |
|------------------|-----------------------------------------------------------------|
| REACTIONS (size) | 1=0-5-8, 15=9-1-8, 17=9-1-8, 19=0-3-8                           |
| Max Horiz        | 1=-156 (LC 12)                                                  |
| Max Uplift       | 1=-39 (LC 15), 15=-252 (LC 33), 17=-405 (LC 14), 19=-34 (LC 26) |
| Max Grav         | 1=428 (LC 2), 15=214 (LC 34), 17=1108 (LC 2), 19=66 (LC 14)     |

FORCES (lb) - Maximum Compression/Maximum Tension

|           |                                                                                                                                                                                                                     |
|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TOP CHORD | 13-15=-256/521, 15-16=0/30, 6-20=-297/701, 6-9=-271/659, 9-11=-246/620, 11-13=-267/661, 1-2=-358/49, 2-3=-322/53, 3-4=-277/70, 4-5=-252/103, 5-7=-288/135, 7-8=-181/95, 8-10=-172/94, 10-12=-263/119, 12-13=-281/84 |
| BOT CHORD | 1-23=-64/223, 22-23=-7/223, 21-22=-7/223, 20-21=-7/223, 19-20=-381/246, 17-19=-381/246, 15-17=-373/242                                                                                                              |
| WEBS      | 13-17=-953/401, 6-7=-68/99, 9-10=-44/72, 5-20=-195/113, 4-21=-82/68, 3-22=-39/47, 2-23=-47/48, 11-12=-93/60                                                                                                         |

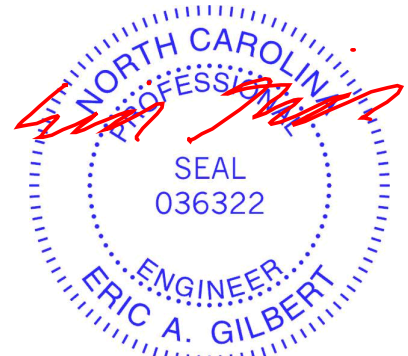
#### NOTES

- 1) Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-2-12 to 3-2-12, Interior (1) 3-2-12 to 9-11-0, Exterior(2R) 9-11-0 to 12-11-0, Interior (1) 12-11-0 to 20-8-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); Pg=10.0 psf; Pf=7.7 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) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
- 6) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 7) All plates are 2x4 (||) MT20 unless otherwise indicated.
- 8) Gable studs spaced at 2-0-0 oc.
- 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 39 lb uplift at joint 1, 252 lb uplift at joint 15, 405 lb uplift at joint 17, 34 lb uplift at joint 19 and 252 lb uplift at joint 15.
- 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.

LOAD CASE(S) Standard



May 12,2025

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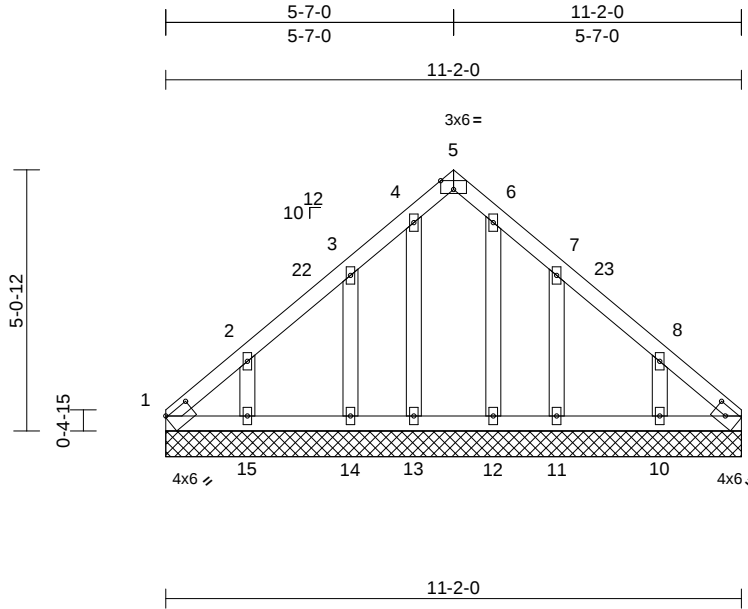
|              |       |                        |     |     |                          |           |
|--------------|-------|------------------------|-----|-----|--------------------------|-----------|
| Job          | Truss | Truss Type             | Qty | Ply | A669 Kipling A           |           |
| P02608-25469 | B2E   | Common Supported Gable | 1   | 1   | Job Reference (optional) | I73370345 |

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Fri May 09 08:46:11

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Scale = 1:44.7

Plate Offsets (X, Y): [1:0-5-12,0-0-5], [5:0-3-0,Edge], [9:0-2-14,0-2-1]

| Loading      | (psf)    | Spacing         | 2-0-0           | CSI       | DEFL | in        | (loc) | l/defl | L/d | PLATES        | GRIP     |
|--------------|----------|-----------------|-----------------|-----------|------|-----------|-------|--------|-----|---------------|----------|
| TCLL (roof)  | 20.0     | Plate Grip DOL  | 1.25            | TC        | 0.04 | Vert(LL)  | n/a   | -      | n/a | 999           | MT20     |
| Snow (Pf/Pg) | 7.7/10.0 | Lumber DOL      | 1.25            | BC        | 0.04 | Vert(TL)  | n/a   | -      | n/a | 999           | 244/190  |
| TCDL         | 7.0      | Rep Stress Incr | YES             | WB        | 0.04 | Horiz(TL) | 0.00  | 9      | n/a | n/a           |          |
| BCLL         | 0.0*     | Code            | IRC2018/TPI2014 | Matrix-MS |      |           |       |        |     |               |          |
| BCDL         | 10.0     |                 |                 |           |      |           |       |        |     |               |          |
|              |          |                 |                 |           |      |           |       |        |     | Weight: 62 lb | FT = 20% |

#### LUMBER

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

#### BRACING

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

**REACTIONS** (size) 1=11'-2-0, 9=11'-2-0, 10=11'-2-0, 11=11'-2-0, 12=11'-2-0, 13=11'-2-0, 14=11'-2-0, 15=11'-2-0  
Max Horiz 1=-87 (LC 10)  
Max Uplift 1=-14 (LC 10), 9=-3 (LC 11), 10=-76 (LC 15), 11=-66 (LC 15), 13=-6 (LC 11), 14=-64 (LC 14), 15=-77 (LC 14)  
Max Grav 1=82 (LC 27), 9=76 (LC 28), 10=160 (LC 26), 11=131 (LC 26), 12=80 (LC 2), 13=86 (LC 25), 14=128 (LC 25), 15=161 (LC 25)

#### FORCES

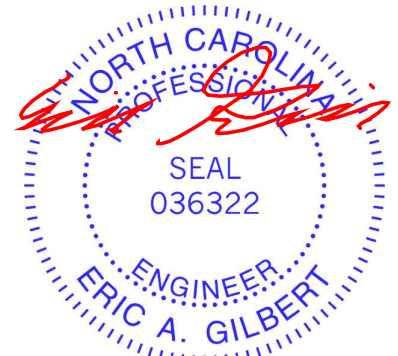
(lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=-133/64, 2-3=-74/41, 3-4=-56/58, 4-5=-40/60, 5-6=-39/60, 6-7=-47/60, 7-8=-65/26, 8-9=-129/56  
BOT CHORD 1-15=-50/128, 14-15=-49/128, 13-14=-49/128, 12-13=-49/128, 11-12=-49/128, 10-11=-49/128, 9-10=-49/128, 4-13=-59/13, 6-12=-54/0, 3-14=-97/120, 2-15=-112/138, 7-11=-100/121, 8-10=-111/137

#### NOTES

1) Unbalanced roof live loads have been considered for this design.

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) 0-0-0 to 3-0-0, Exterior(2N) 3-0-0 to 5-7-0, Corner(3R) 5-7-0 to 8-7-0, Exterior(2N) 8-7-0 to 11-2-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); Pg=10.0 psf; Pf=7.7 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
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 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'-0"-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 14 lb uplift at joint 1, 3 lb uplift at joint 9, 6 lb uplift at joint 13, 64 lb uplift at joint 14, 77 lb uplift at joint 15, 66 lb uplift at joint 11, 76 lb uplift at joint 10 and 14 lb uplift at joint 1.
- 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.

**LOAD CASE(S)** Standard



May 12, 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))

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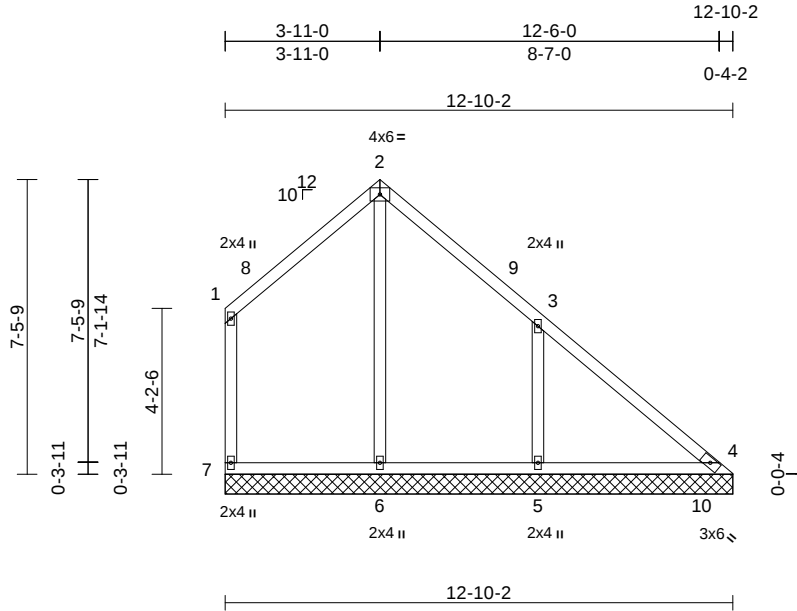
|              |       |            |     |     |                          |           |
|--------------|-------|------------|-----|-----|--------------------------|-----------|
| Job          | Truss | Truss Type | Qty | Ply | A669 Kipling A           | 173370346 |
| P02608-25469 | BV1   | Valley     | 1   | 1   | Job Reference (optional) |           |

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Fri May 09 08:46:11

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ID:SlamVldnE3e?2itOLh8XpJzIJHD-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCD0i7J4zJC?i



Scale = 1:58.3

| Loading      | (psf)    | Spacing         | 2-0-0           | CSI      | DEFL | in        | (loc) | l/defl | L/d | PLATES        | GRIP     |
|--------------|----------|-----------------|-----------------|----------|------|-----------|-------|--------|-----|---------------|----------|
| TCLL (roof)  | 20.0     | Plate Grip DOL  | 1.25            | TC       | 0.24 | n/a       | -     | n/a    | 999 | MT20          | 244/190  |
| Snow (Pf/Pg) | 7.7/10.0 | Lumber DOL      | 1.25            | BC       | 0.18 | n/a       | -     | n/a    | 999 |               |          |
| TCDL         | 7.0      | Rep Stress Incr | YES             | WB       | 0.16 | Horiz(TL) | 0.00  | 4      | n/a |               |          |
| BCLL         | 0.0*     | Code            | IRC2018/TPI2014 | Matrix-S |      |           |       |        |     |               |          |
| BCDL         | 10.0     |                 |                 |          |      |           |       |        |     | Weight: 65 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.2 *Except* 5-3:2x4 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)     | 4=12-10-2, 5=12-10-2, 6=12-10-2, 7=12-10-2                 |
|           | Max Horiz  | 7=-153 (LC 15)                                             |
|           | Max Uplift | 4=-25 (LC 11), 5=-180 (LC 15), 7=-69 (LC 14)               |
|           | Max Grav   | 4=184 (LC 25), 5=495 (LC 26), 6=379 (LC 26), 7=196 (LC 25) |

#### FORCES

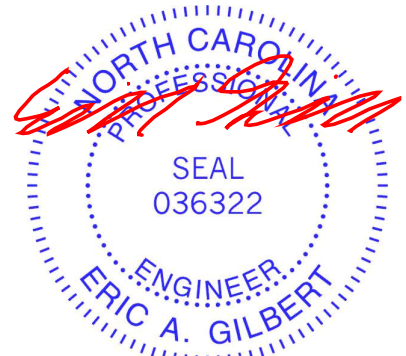
|           |                                                     |
|-----------|-----------------------------------------------------|
|           | (lb) - Maximum Compression/Maximum Tension          |
| TOP CHORD | 1-7=-116/85, 1-2=-83/79, 2-3=-122/100, 3-4=-146/144 |
| BOT CHORD | 6-7=-97/151, 5-6=-97/151, 4-5=-97/151               |
| WEBS      | 2-6=-180/21, 3-5=-290/205                           |

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior (1) 3-1-12 to 3-11-0, Exterior(2R) 3-11-0 to 6-11-0, Interior (1) 6-11-0 to 12-5-10 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); Pg=10.0 psf; Pf=7.7 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
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 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 3-06-00 tall by 2-00-00 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 69 lb uplift at joint 7, 25 lb uplift at joint 4 and 180 lb uplift at joint 5.
- 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.

LOAD CASE(S) Standard



May 12,2025

**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)

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Edenton, NC 27932

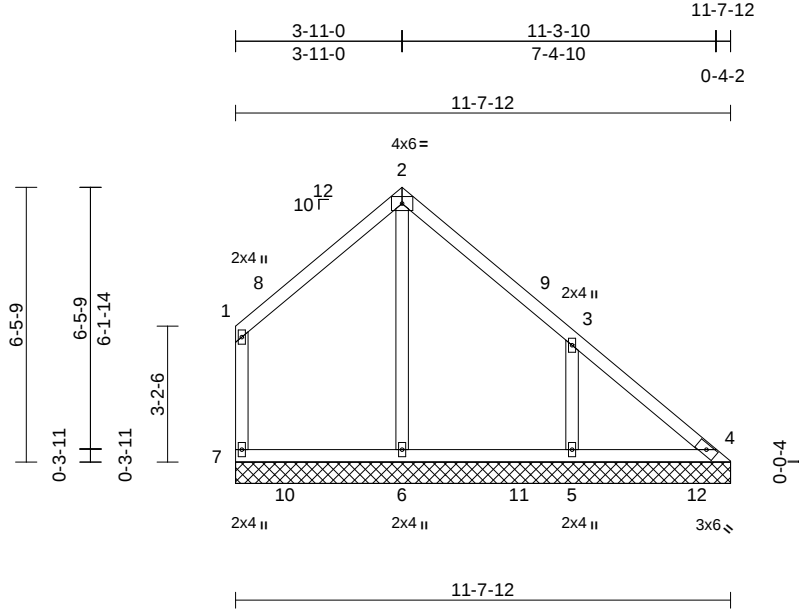
|              |       |            |     |     |                          |           |
|--------------|-------|------------|-----|-----|--------------------------|-----------|
| Job          | Truss | Truss Type | Qty | Ply | A669 Kipling A           | 173370347 |
| P02608-25469 | BV2   | Valley     | 1   | 1   | Job Reference (optional) |           |

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Fri May 09 08:46:11

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Scale = 1:54.2

| Loading      | (psf)    | Spacing         | 2-0-0           | CSI      | DEFL | in        | (loc) | l/defl | L/d | PLATES        | GRIP     |
|--------------|----------|-----------------|-----------------|----------|------|-----------|-------|--------|-----|---------------|----------|
| TCLL (roof)  | 20.0     | Plate Grip DOL  | 1.25            | TC       | 0.17 | Vert(LL)  | n/a   | -      | 999 | MT20          | 244/190  |
| Snow (Pf/Pg) | 7.7/10.0 | Lumber DOL      | 1.25            | BC       | 0.18 | Vert(TL)  | n/a   | -      | 999 |               |          |
| TCDL         | 7.0      | Rep Stress Incr | YES             | WB       | 0.13 | Horiz(TL) | 0.00  | 4      | n/a |               |          |
| BCLL         | 0.0*     | Code            | IRC2018/TPI2014 | Matrix-S |      |           |       |        |     |               |          |
| BCDL         | 10.0     |                 |                 |          |      |           |       |        |     |               |          |
|              |          |                 |                 |          |      |           |       |        |     | Weight: 56 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.                                  |

|                  |            |                                                            |
|------------------|------------|------------------------------------------------------------|
| <b>REACTIONS</b> | (size)     | 4=11-7-12, 5=11-7-12, 6=11-7-12, 7=11-7-12                 |
|                  | Max Horiz  | 7=-125 (LC 15)                                             |
|                  | Max Uplift | 4=-34 (LC 11), 5=-153 (LC 15), 7=-71 (LC 14)               |
|                  | Max Grav   | 4=144 (LC 25), 5=404 (LC 26), 6=387 (LC 26), 7=186 (LC 25) |

#### FORCES

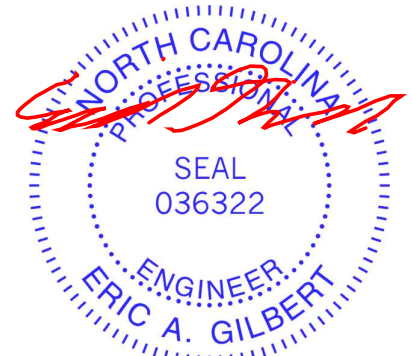
|           |                                                     |
|-----------|-----------------------------------------------------|
|           | (lb) - Maximum Compression/Maximum Tension          |
| TOP CHORD | 1-7=-119/93, 1-2=-89/86, 2-3=-124/101, 3-4=-126/119 |
| BOT CHORD | 6-7=-85/122, 5-6=-85/122, 4-5=-85/122               |
| WEBS      | 2-6=-182/26, 3-5=-247/191                           |

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior (1) 3-1-12 to 3-11-0, Exterior(2R) 3-11-0 to 6-11-0, Interior (1) 6-11-0 to 11-3-3 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); Pg=10.0 psf; Pf=7.7 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
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 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 3-06-00 tall by 2-00-00 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 71 lb uplift at joint 7, 34 lb uplift at joint 4 and 153 lb uplift at joint 5.
- 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.

**LOAD CASE(S)** Standard



May 12, 2025

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

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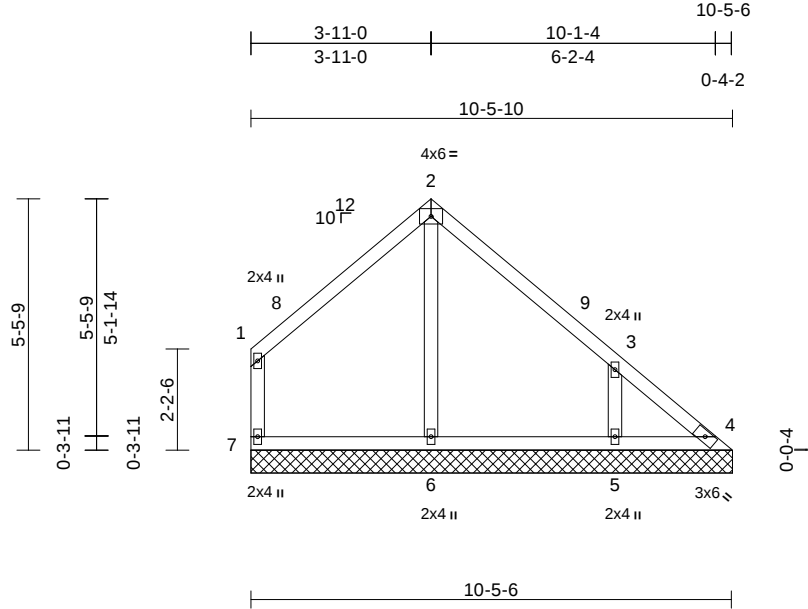
|              |       |            |     |     |                          |           |
|--------------|-------|------------|-----|-----|--------------------------|-----------|
| Job          | Truss | Truss Type | Qty | Ply | A669 Kipling A           | 173370348 |
| P02608-25469 | BV3   | Valley     | 1   | 1   | Job Reference (optional) |           |

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Fri May 09 08:46:11

Page: 1

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Scale = 1:50.1

| Loading      | (psf)    | Spacing         | 2-0-0           | CSI      |      | DEFL      | in   | (loc) | l/defl | L/d | PLATES        | GRIP     |
|--------------|----------|-----------------|-----------------|----------|------|-----------|------|-------|--------|-----|---------------|----------|
| TCLL (roof)  | 20.0     | Plate Grip DOL  | 1.25            | TC       | 0.15 | Vert(LL)  | n/a  | -     | n/a    | 999 | MT20          | 244/190  |
| Snow (Pf/Pg) | 7.7/10.0 | Lumber DOL      | 1.25            | BC       | 0.13 | Vert(TL)  | n/a  | -     | n/a    | 999 |               |          |
| TCDL         | 7.0      | Rep Stress Incr | YES             | WB       | 0.09 | Horiz(TL) | 0.00 | 4     | n/a    | n/a |               |          |
| BCLL         | 0.0*     | Code            | IRC2018/TPI2014 | Matrix-S |      |           |      |       |        |     |               |          |
| BCDL         | 10.0     |                 |                 |          |      |           |      |       |        |     | Weight: 48 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.                                  |

|                  |            |                                                            |
|------------------|------------|------------------------------------------------------------|
| <b>REACTIONS</b> | (size)     | 4=10-5-10, 5=10-5-10, 6=10-5-10, 7=10-5-10                 |
|                  | Max Horiz  | 7=-96 (LC 15)                                              |
|                  | Max Uplift | 4=-47 (LC 11), 5=-135 (LC 15), 6=-3 (LC 10), 7=-73 (LC 14) |
|                  | Max Grav   | 4=95 (LC 25), 5=288 (LC 26), 6=262 (LC 26), 7=157 (LC 25)  |

#### FORCES

|           |                                                      |
|-----------|------------------------------------------------------|
|           | (lb) - Maximum Compression/Maximum Tension           |
| TOP CHORD | 1-7=-124/105, 1-2=-96/98, 2-3=-129/108, 3-4=-116/106 |
| BOT CHORD | 6-7=-73/94, 5-6=-73/94, 4-5=-73/94                   |
| WEBS      | 2-6=-177/29, 3-5=-220/188                            |

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior (1) 3-1-12 to 3-11-0, Exterior(2R) 3-11-0 to 6-11-0, Interior (1) 6-11-0 to 10-0-13 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); Pg=10.0 psf; Pf=7.7 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
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 73 lb uplift at joint 7, 47 lb uplift at joint 4, 3 lb uplift at joint 6 and 135 lb uplift at joint 5.
- 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.

**LOAD CASE(S)** Standard



May 12, 2025

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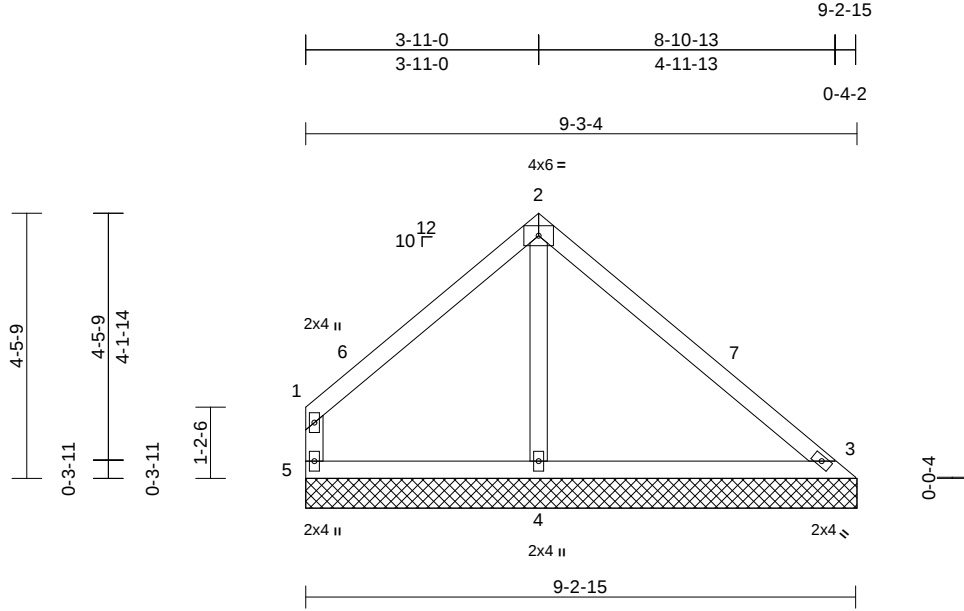
|              |       |            |     |     |                          |           |
|--------------|-------|------------|-----|-----|--------------------------|-----------|
| Job          | Truss | Truss Type | Qty | Ply | A669 Kipling A           |           |
| P02608-25469 | BV4   | Valley     | 1   | 1   | Job Reference (optional) | I73370349 |

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Fri May 09 08:46:11

Page: 1

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Scale = 1:38.7

| Loading      | (psf)    | Spacing         | 2-0-0           | CSI      | DEFL | in        | (loc) | l/defl | L/d | PLATES        | GRIP     |
|--------------|----------|-----------------|-----------------|----------|------|-----------|-------|--------|-----|---------------|----------|
| TCLL (roof)  | 20.0     | Plate Grip DOL  | 1.25            | TC       | 0.30 | Vert(LL)  | n/a   | -      | 999 | MT20          | 244/190  |
| Snow (Pf/Pg) | 7.7/10.0 | Lumber DOL      | 1.25            | BC       | 0.20 | Vert(TL)  | n/a   | -      | 999 |               |          |
| TCDL         | 7.0      | Rep Stress Incr | YES             | WB       | 0.07 | Horiz(TL) | 0.00  | 3      | n/a |               |          |
| BCLL         | 0.0*     | Code            | IRC2018/TPI2014 | Matrix-S |      |           |       |        |     |               |          |
| BCDL         | 10.0     |                 |                 |          |      |           |       |        |     | Weight: 38 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

|            |                                             |
|------------|---------------------------------------------|
| (size)     | 3=9-3-4, 4=9-3-4, 5=9-3-4                   |
| Max Horiz  | 5=-74 (LC 10)                               |
| Max Uplift | 3=-60 (LC 14), 4=-30 (LC 15), 5=-75 (LC 14) |
| Max Grav   | 3=188 (LC 2), 4=330 (LC 26), 5=164 (LC 31)  |

#### FORCES

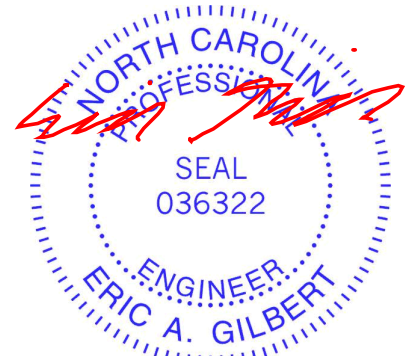
|                                            |                                          |
|--------------------------------------------|------------------------------------------|
| (lb) - Maximum Compression/Maximum Tension |                                          |
| TOP CHORD                                  | 1-5=-138/114, 1-2=-120/111, 2-3=-146/105 |
| BOT CHORD                                  | 4-5=-65/86, 3-4=-65/86                   |
| WEBS                                       | 2-4=-209/52                              |

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior (1) 3-1-12 to 3-11-0, Exterior(2R) 3-11-0 to 6-11-0, Interior (1) 6-11-0 to 8-10-7 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); Pg=10.0 psf; Pf=7.7 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
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 75 lb uplift at joint 5, 60 lb uplift at joint 3 and 30 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.

LOAD CASE(S) Standard



May 12, 2025

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

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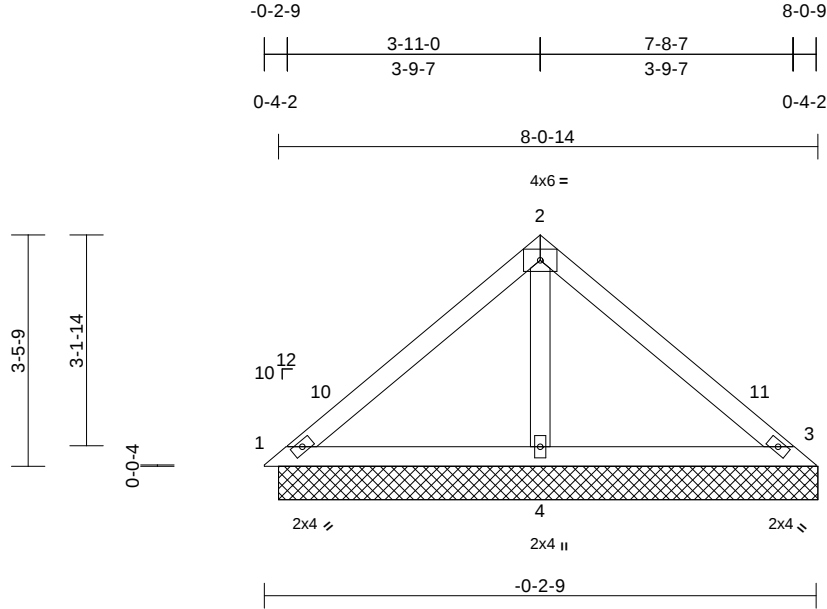
|              |       |            |     |     |                          |           |
|--------------|-------|------------|-----|-----|--------------------------|-----------|
| Job          | Truss | Truss Type | Qty | Ply | A669 Kipling A           | 173370350 |
| P02608-25469 | BV5   | Valley     | 1   | 1   | Job Reference (optional) |           |

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Fri May 09 08:46:12

Page: 1

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Scale = 1:34.5

| Loading      | (psf)    | Spacing         | 2-0-0           | CSI       | DEFL | in        | (loc) | l/defl | L/d | PLATES        | GRIP     |
|--------------|----------|-----------------|-----------------|-----------|------|-----------|-------|--------|-----|---------------|----------|
| TCLL (roof)  | 20.0     | Plate Grip DOL  | 1.25            | TC        | 0.19 | n/a       | -     | n/a    | 999 | MT20          | 244/190  |
| Snow (Pf/Pg) | 7.7/10.0 | Lumber DOL      | 1.25            | BC        | 0.17 | n/a       | -     | n/a    | 999 |               |          |
| TCDL         | 7.0      | Rep Stress Incr | YES             | WB        | 0.10 | Horiz(TL) | 0.00  | 4      | n/a |               |          |
| BCLL         | 0.0*     | Code            | IRC2018/TPI2014 | Matrix-MP |      |           |       |        |     |               |          |
| BCDL         | 10.0     |                 |                 |           |      |           |       |        |     | Weight: 31 lb | FT = 20% |

#### LUMBER

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

#### BRACING

|           |                                                                  |
|-----------|------------------------------------------------------------------|
| TOP CHORD | Structural wood sheathing directly applied or 8-0-14 oc purlins. |
| BOT CHORD | Rigid ceiling directly applied or 6-0-0 oc bracing.              |

#### REACTIONS

|            |                                            |
|------------|--------------------------------------------|
| (size)     | 1=8-0-14, 3=8-0-14, 4=8-0-14               |
| Max Horiz  | 1=60 (LC 11)                               |
| Max Uplift | 1=-69 (LC 32), 3=-1 (LC 15), 4=-66 (LC 15) |
| Max Grav   | 1=83 (LC 31), 3=3 (LC 26), 4=555 (LC 2)    |

#### FORCES

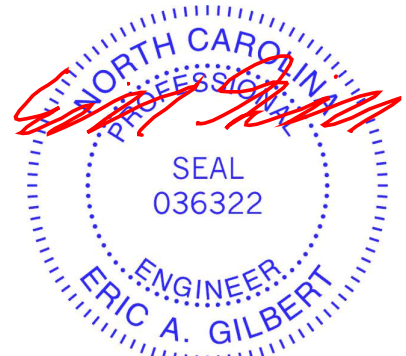
|                                            |                            |
|--------------------------------------------|----------------------------|
| (lb) - Maximum Compression/Maximum Tension |                            |
| TOP CHORD                                  | 1-2=-58/233, 2-3=-212/256  |
| BOT CHORD                                  | 1-4=-157/115, 3-4=-157/115 |
| WEBS                                       | 2-4=-409/150               |

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior (1) 3-0-0 to 3-11-0, Exterior(2R) 3-11-0 to 6-11-0, Interior (1) 6-11-0 to 7-8-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); Pg=10.0 psf; Pf=7.7 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
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 69 lb uplift at joint 1, 1 lb uplift at joint 3, 66 lb uplift at joint 4 and 1 lb uplift at joint 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.

LOAD CASE(S) Standard



May 12, 2025

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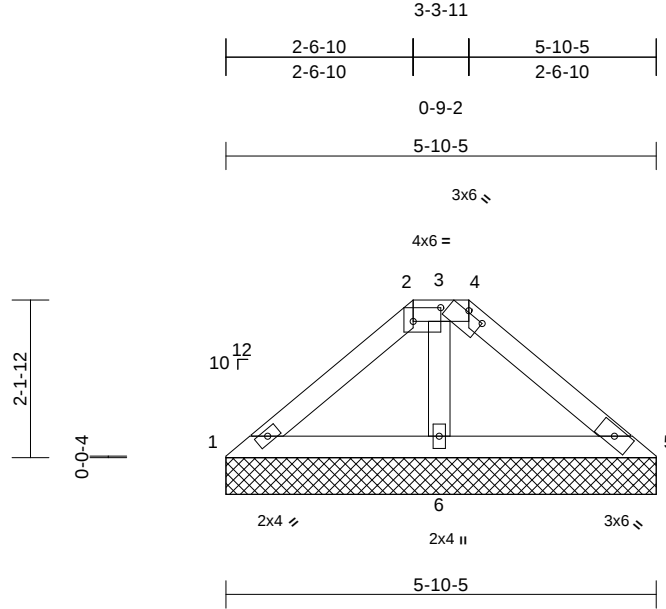
818 Soundside Road  
Edenton, NC 27932

|              |       |            |     |     |                          |           |
|--------------|-------|------------|-----|-----|--------------------------|-----------|
| Job          | Truss | Truss Type | Qty | Ply | A669 Kipling A           | 173370351 |
| P02608-25469 | BV6   | Valley     | 1   | 1   | Job Reference (optional) |           |

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Fri May 09 08:46:12  
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Page: 1



Scale = 1:31.4

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

| Loading      | (psf)     | Spacing         | 2-0-0           | CSI       | DEFL | in        | (loc) | l/defl | L/d | PLATES        | GRIP     |
|--------------|-----------|-----------------|-----------------|-----------|------|-----------|-------|--------|-----|---------------|----------|
| TCLL (roof)  | 20.0      | Plate Grip DOL  | 1.25            | TC        | 0.09 | Vert(LL)  | n/a   | -      | n/a | 999           | MT20     |
| Snow (Pf/Pg) | 12.7/10.0 | Lumber DOL      | 1.25            | BC        | 0.19 | Vert(TL)  | n/a   | -      | n/a | 999           | 244/190  |
| TCDL         | 7.0       | Rep Stress Incr | YES             | WB        | 0.04 | Horiz(TL) | 0.00  | 5      | n/a | n/a           |          |
| BCLL         | 0.0*      | Code            | IRC2018/TPI2014 | Matrix-MP |      |           |       |        |     |               |          |
| BCDL         | 10.0      |                 |                 |           |      |           |       |        |     |               |          |
|              |           |                 |                 |           |      |           |       |        |     | Weight: 21 lb | FT = 20% |

#### LUMBER

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

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 5-10-5 oc purlins, except 2-0-0 oc purlins: 2-4.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

**REACTIONS** (size) 1=5-10-5, 5=5-10-5, 6=5-10-5  
Max Horiz 1=-37 (LC 12)  
Max Uplift 1=-19 (LC 15), 5=-30 (LC 10), 6=-72 (LC 14)  
Max Grav 1=74 (LC 26), 5=112 (LC 32), 6=295 (LC 2)

**FORCES** (lb) - Maximum Compression/Maximum Tension

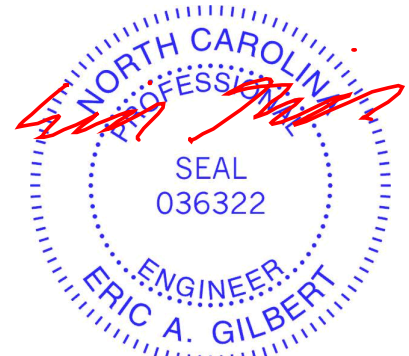
TOP CHORD 1-2=-89/101, 2-3=-28/62, 3-4=-28/62, 4-5=-126/97  
BOT CHORD 1-6=-62/88, 5-6=-62/98  
WEBS 3-6=-212/144

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); Pg=10.0 psf; Pf=12.7 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
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 19 lb uplift at joint 1, 30 lb uplift at joint 5 and 72 lb uplift at joint 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard



May 12, 2025

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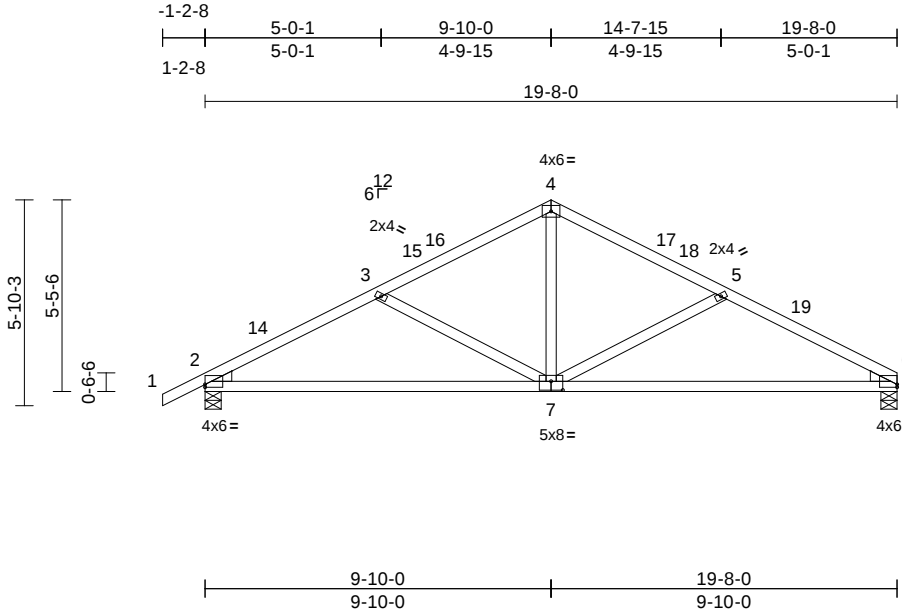
|              |       |            |     |     |                          |           |
|--------------|-------|------------|-----|-----|--------------------------|-----------|
| Job          | Truss | Truss Type | Qty | Ply | A669 Kipling A           | 173370352 |
| P02608-25469 | C1    | Common     | 5   | 1   | Job Reference (optional) |           |

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Fri May 09 08:46:12

Page: 1

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Scale = 1:65.5

Plate Offsets (X, Y): [2:Edge,0-1-0], [6:Edge,0-1-0], [7:0-4-0,0-3-0]

| Loading      | (psf)    | Spacing         | 2-0-0           | CSI       | DEFL | in       | (loc) | l/defl | L/d  | PLATES        | GRIP     |
|--------------|----------|-----------------|-----------------|-----------|------|----------|-------|--------|------|---------------|----------|
| TCLL (roof)  | 20.0     | Plate Grip DOL  | 1.25            | TC        | 0.26 | Vert(LL) | -0.14 | 7-10   | >999 | 240           | 244/190  |
| Snow (Pf/Pg) | 7.7/10.0 | Lumber DOL      | 1.25            | BC        | 0.86 | Vert(CT) | -0.29 | 7-10   | >803 | 180           |          |
| TCDL         | 7.0      | Rep Stress Incr | YES             | WB        | 0.20 | Horz(CT) | 0.03  | 6      | n/a  | n/a           |          |
| BCLL         | 0.0*     | Code            | IRC2018/TPI2014 | Matrix-MS |      |          |       |        |      |               |          |
| BCDL         | 10.0     |                 |                 |           |      |          |       |        |      |               |          |
|              |          |                 |                 |           |      |          |       |        |      | Weight: 89 lb | FT = 20% |

#### LUMBER

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

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 5-3-4 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS

(size) 2=0-5-8, 6=0-5-8  
Max Horiz 2=76 (LC 20)  
Max Uplift 2=-122 (LC 16), 6=-102 (LC 17)  
Max Grav 2=795 (LC 2), 6=726 (LC 2)

#### FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/29, 2-3=-1175/263, 3-4=-887/201,  
4-5=-887/205, 5-6=-1181/268  
BOT CHORD 2-6=-195/1011  
WEBS 4-7=-69/528, 5-7=-330/153, 3-7=-321/150

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust)  
Vasd=91mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-2-8 to 1-9-8, Interior (1) 1-9-8 to 9-10-0, Exterior(2R) 9-10-0 to 12-10-0, Interior (1) 12-10-0 to 19-8-0 zone;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=1.25 Plate DOL=1.25); Pg=10.0 psf; Pf=7.7 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 7.7 psf on overhangs non-concurrent with other live loads.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 102 lb uplift at joint 6 and 122 lb uplift at joint 2.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



May 12,2025

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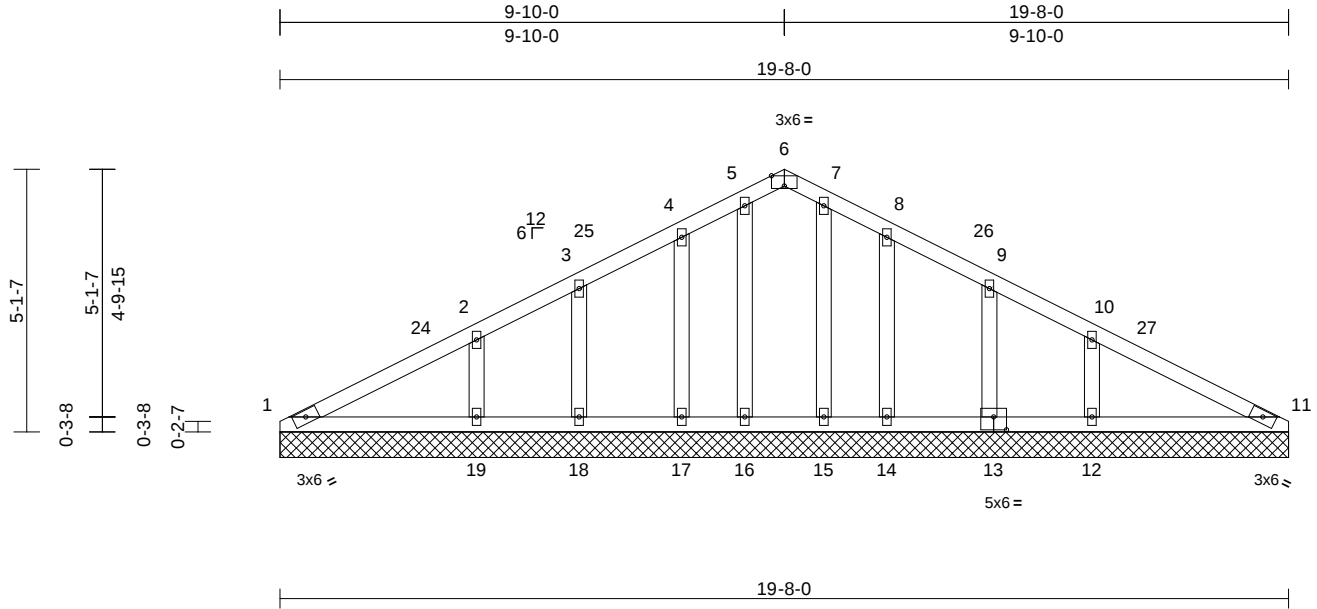
818 Soundside Road  
Edenton, NC 27932

|              |       |                        |     |     |                          |           |
|--------------|-------|------------------------|-----|-----|--------------------------|-----------|
| Job          | Truss | Truss Type             | Qty | Ply | A669 Kipling A           | 173370353 |
| P02608-25469 | C1E   | Common Supported Gable | 1   | 1   | Job Reference (optional) |           |

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Fri May 09 08:46:12  
ID:yFOULvBwdrXSrW5kzti4hFzIHoe-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:44.9

Plate Offsets (X, Y): [6:0-3-0,Edge], [13:0-3-0,0-3-0]

| Loading      | (psf)    | Spacing         | 2-0-0           | CSI       | DEFL | in        | (loc) | l/defl | L/d | PLATES        | GRIP     |
|--------------|----------|-----------------|-----------------|-----------|------|-----------|-------|--------|-----|---------------|----------|
| TCLL (roof)  | 20.0     | Plate Grip DOL  | 1.25            | TC        | 0.12 | Vert(LL)  | n/a   | -      | 999 | MT20          | 244/190  |
| Snow (Pf/Pg) | 7.7/10.0 | Lumber DOL      | 1.25            | BC        | 0.12 | Vert(TL)  | n/a   | -      | 999 |               |          |
| TCDL         | 7.0      | Rep Stress Incr | YES             | WB        | 0.04 | Horiz(TL) | 0.00  | 11     | n/a |               |          |
| BCLL         | 0.0*     | Code            | IRC2018/TPI2014 | Matrix-MS |      |           |       |        |     |               |          |
| BCDL         | 10.0     |                 |                 |           |      |           |       |        |     |               |          |
|              |          |                 |                 |           |      |           |       |        |     | Weight: 97 lb | FT = 20% |

#### LUMBER

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

#### BRACING

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

**REACTIONS** (size) 1=19-8-0, 11=19-8-0, 12=19-8-0, 13=19-8-0, 14=19-8-0, 15=19-8-0, 16=19-8-0, 17=19-8-0, 18=19-8-0, 19=19-8-0  
Max Horiz 1=-61 (LC 17)  
Max Uplift 1=-7 (LC 17), 12=-80 (LC 17), 13=-30 (LC 17), 14=-49 (LC 17), 17=-47 (LC 16), 18=-28 (LC 16), 19=-82 (LC 16)  
Max Grav 1=109 (LC 35), 11=108 (LC 36), 12=287 (LC 36), 13=95 (LC 2), 14=138 (LC 36), 15=105 (LC 2), 16=106 (LC 2), 17=137 (LC 35), 18=95 (LC 2), 19=287 (LC 35)

#### FORCES

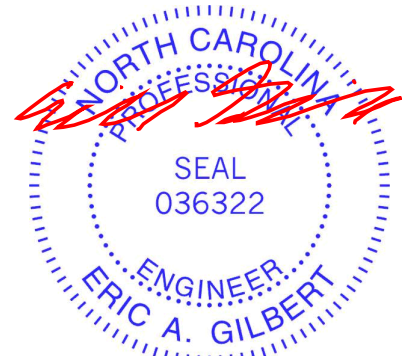
(lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=-127/74, 2-3=-28/53, 3-4=-16/68, 4-5=-33/83, 5-6=-35/81, 6-7=-35/81, 7-8=-33/83, 8-9=-16/52, 9-10=-15/38, 10-11=-126/72  
BOT CHORD 1-19=-44/114, 18-19=-44/92, 17-18=-44/92, 16-17=-44/92, 15-16=-44/92, 14-15=-44/92, 12-14=-45/93, 11-12=-45/101  
WEBS 5-16=-82/1, 7-15=-82/0, 4-17=-95/70, 3-18=-82/56, 2-19=-184/122, 8-14=-95/71, 9-13=-83/56, 10-12=-183/121

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) 0-0-0 to 3-0-0, Exterior(2N) 3-0-0 to 9-10-0, Corner(3R) 9-10-0 to 12-10-0, Exterior(2N) 12-10-0 to 19-8-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); Pg=10.0 psf; Pf=7.7 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.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 7 lb uplift at joint 1, 47 lb uplift at joint 17, 28 lb uplift at joint 18, 82 lb uplift at joint 19, 49 lb uplift at joint 14, 30 lb uplift at joint 13 and 80 lb uplift at joint 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.

**LOAD CASE(S)** Standard



May 12,2025

**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)

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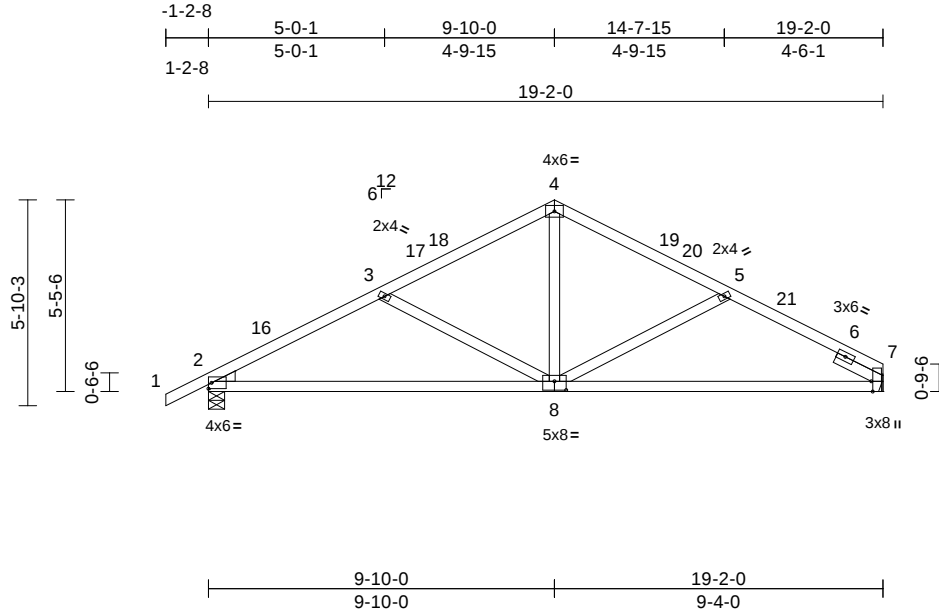
|              |       |            |     |     |                          |           |
|--------------|-------|------------|-----|-----|--------------------------|-----------|
| Job          | Truss | Truss Type | Qty | Ply | A669 Kipling A           | 173370354 |
| P02608-25469 | C2    | Common     | 2   | 1   | Job Reference (optional) |           |

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Fri May 09 08:46:13

Page: 1

ID:QdNarpaYOTEYrEH71NoMfizHp0-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:65.5

Plate Offsets (X, Y): [7:0-3-8,Edge], [8:0-4-0,0-3-0]

| Loading      | (psf)    | Spacing         | 2-0-0           | CSI       | DEFL | in       | (loc) | l/defl | L/d  | PLATES        | GRIP     |
|--------------|----------|-----------------|-----------------|-----------|------|----------|-------|--------|------|---------------|----------|
| TCLL (roof)  | 20.0     | Plate Grip DOL  | 1.25            | TC        | 0.28 | Vert(LL) | -0.16 | 8-15   | >999 | 240           | 244/190  |
| Snow (Pf/Pg) | 7.7/10.0 | Lumber DOL      | 1.25            | BC        | 0.81 | Vert(CT) | -0.32 | 8-15   | >720 | 180           |          |
| TCDL         | 7.0      | Rep Stress Incr | YES             | WB        | 0.20 | Horz(CT) | 0.03  | 7      | n/a  | n/a           |          |
| BCLL         | 0.0*     | Code            | IRC2018/TPI2014 | Matrix-MS |      |          |       |        |      |               |          |
| BCDL         | 10.0     |                 |                 |           |      |          |       |        |      |               |          |
|              |          |                 |                 |           |      |          |       |        |      | Weight: 89 lb | FT = 20% |

#### LUMBER

TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2  
 WEBS 2x4 SP No.3  
 WEDGE Left: 2x4 SP No.3  
 SLIDER Right 2x4 SP No.3 -- 1-6-0

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 5-4-2 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 2=0-5-8, 7= Mechanical  
 Max Horiz 2=80 (LC 16)  
 Max Uplift 2=-121 (LC 16), 7=-97 (LC 17)  
 Max Grav 2=776 (LC 2), 7=707 (LC 2)

**FORCES** (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/29, 2-3=-1133/261, 3-4=-843/198,  
 4-5=-839/201, 5-7=-1051/252

BOT CHORD 2-7=-200/967

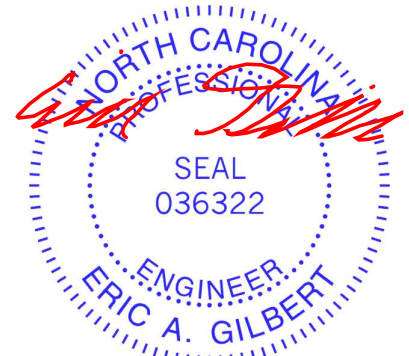
WEBS 4-8=-61/489, 5-8=-261/136, 3-8=-324/149

#### NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-2-8 to 1-9-8, Interior (1) 1-9-8 to 9-10-0, Exterior(2R) 9-10-0 to 12-10-0, Interior (1) 12-10-0 to 19-2-0 zone; 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=1.25 Plate DOL=1.25); Pg=10.0 psf; Pf=7.7 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 7.7 psf on overhangs non-concurrent with other live loads.
- 6) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 9) Refer to girder(s) for truss to truss connections.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 97 lb uplift at joint 7 and 121 lb uplift at joint 2.
- 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.

**LOAD CASE(S)** Standard



May 12, 2025

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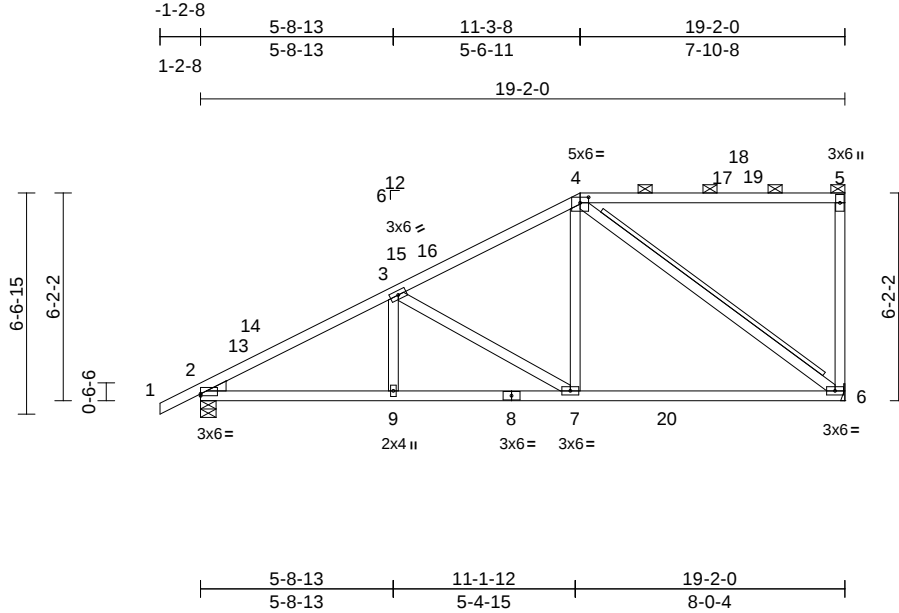
818 Soundside Road  
 Edenton, NC 27932

|              |       |            |     |     |                          |           |
|--------------|-------|------------|-----|-----|--------------------------|-----------|
| Job          | Truss | Truss Type | Qty | Ply | A669 Kipling A           | 173370355 |
| P02608-25469 | C3    | Half Hip   | 1   | 1   | Job Reference (optional) |           |

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Fri May 09 08:46:13  
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Page: 1



Scale = 1:68.5

Plate Offsets (X, Y): [2:Edge,0-0-12], [4:0-3-0,0-2-0]

| Loading      | (psf)     | Spacing         | 2-0-0           | CSI       |      | DEFL     | in    | (loc) | l/defl | L/d | PLATES         | GRIP     |
|--------------|-----------|-----------------|-----------------|-----------|------|----------|-------|-------|--------|-----|----------------|----------|
| TCLL (roof)  | 20.0      | Plate Grip DOL  | 1.25            | TC        | 0.90 | Vert(LL) | -0.15 | 6-7   | >999   | 240 | MT20           | 244/190  |
| Snow (Pf/Pg) | 12.7/10.0 | Lumber DOL      | 1.25            | BC        | 0.66 | Vert(CT) | -0.26 | 6-7   | >868   | 180 |                |          |
| TCDL         | 7.0       | Rep Stress Incr | YES             | WB        | 0.44 | Horz(CT) | 0.03  | 6     | n/a    | n/a |                |          |
| BCLL         | 0.0*      | Code            | IRC2018/TPI2014 | Matrix-MS |      |          |       |       |        |     |                |          |
| BCDL         | 10.0      |                 |                 |           |      |          |       |       |        |     |                |          |
|              |           |                 |                 |           |      |          |       |       |        |     | Weight: 106 lb | FT = 20% |

#### LUMBER

|           |                                      |
|-----------|--------------------------------------|
| TOP CHORD | 2x4 SP No.2                          |
| BOT CHORD | 2x4 SP No.2                          |
| WEBS      | 2x4 SP No.3 *Except* 6-4:2x4 SP No.2 |
| OTHERS    | 2x4 SP No.3(flat)                    |
| WEDGE     | Left: 2x4 SP No.3                    |

#### BRACING

|           |                                                                                                                                                                                            |
|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TOP CHORD | Structural wood sheathing directly applied or 5-2-12 oc purlins, except end verticals, and 2-0-0 oc purlins (4-6-8 max.): 4-5.                                                             |
| BOT CHORD | Rigid ceiling directly applied or 10-0-0 oc bracing.                                                                                                                                       |
| WEBS      | T-Brace: 2x4 SP No.3 - 4-6<br>Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance.<br>Brace must cover 90% of web length. |

|           |                                           |
|-----------|-------------------------------------------|
| REACTIONS | (size) 2=0-5-8, 6= Mechanical             |
|           | Max Horiz 2=177 (LC 16)                   |
|           | Max Uplift 2=-111 (LC 16), 6=-114 (LC 13) |
|           | Max Grav 2=820 (LC 3), 6=777 (LC 3)       |

#### FORCES

|           |                                                               |
|-----------|---------------------------------------------------------------|
|           | (lb) - Maximum Compression/Maximum Tension                    |
| TOP CHORD | 1-2=0/29, 2-3=-1217/139, 3-4=-807/102, 4-5=-31/6, 5-6=-222/78 |
| BOT CHORD | 2-9=-237/1039, 7-9=-237/1039, 6-7=-123/660                    |
| WEBS      | 3-9=0/185, 3-7=-469/154, 4-7=-29/546, 4-6=-793/149            |

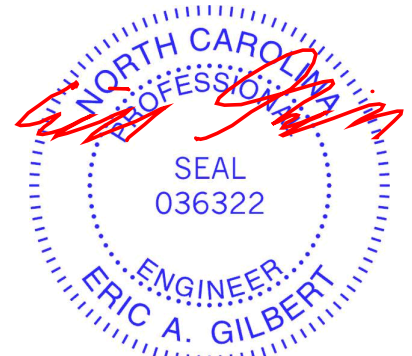
#### NOTES

- Unbalanced roof live loads have been considered for this design.

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-2-8 to 1-9-8, Interior (1) 1-9-8 to 11-3-8, Exterior(2R) 11-3-8 to 15-6-7, Interior (1) 15-6-7 to 19-0-4 zone;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=1.25 Plate DOL=1.25); Pg=10.0 psf; Pf=12.7 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
- 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 7.7 psf on overhangs non-concurrent with other live loads.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 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 3-06-00 tall by 2-00-00 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 111 lb uplift at joint 2 and 114 lb uplift at joint 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

- Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

LOAD CASE(S) Standard



May 12, 2025

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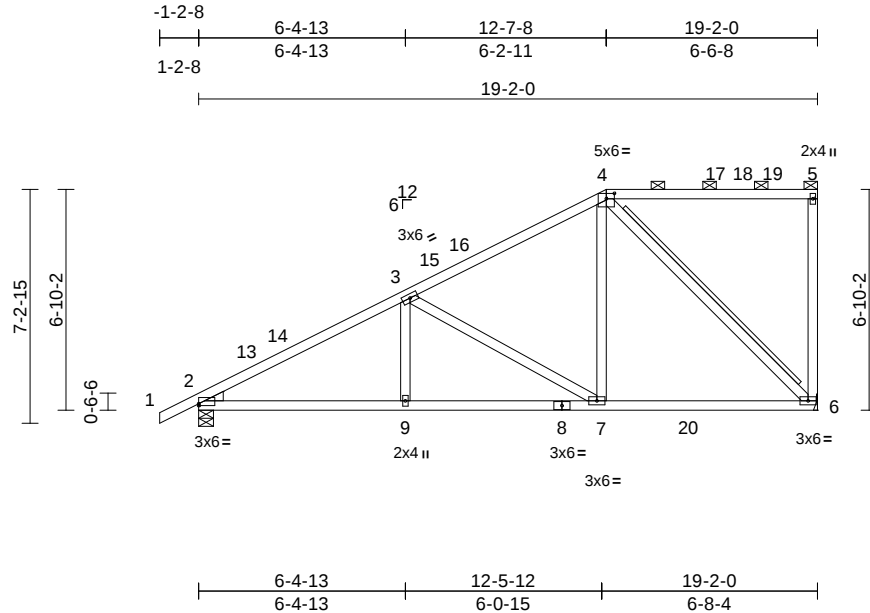
|              |       |            |     |     |                          |           |
|--------------|-------|------------|-----|-----|--------------------------|-----------|
| Job          | Truss | Truss Type | Qty | Ply | A669 Kipling A           | 173370356 |
| P02608-25469 | C4    | Half Hip   | 1   | 1   | Job Reference (optional) |           |

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Fri May 09 08:46:13

Page: 1

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Scale = 1:71.4

Plate Offsets (X, Y): [2:Edge,0-0-12], [4:0-3-0,0-2-0]

| Loading      | (psf)     | Spacing         | 2-0-0           | CSI       |      | DEFL     | in    | (loc) | l/defl | L/d | PLATES         | GRIP     |
|--------------|-----------|-----------------|-----------------|-----------|------|----------|-------|-------|--------|-----|----------------|----------|
| TCLL (roof)  | 20.0      | Plate Grip DOL  | 1.25            | TC        | 0.61 | Vert(LL) | -0.08 | 6-7   | >999   | 240 | MT20           | 244/190  |
| Snow (Pf/Pg) | 12.7/10.0 | Lumber DOL      | 1.25            | BC        | 0.56 | Vert(CT) | -0.13 | 6-7   | >999   | 180 |                |          |
| TCDL         | 7.0       | Rep Stress Incr | YES             | WB        | 0.46 | Horz(CT) | 0.03  | 6     | n/a    | n/a |                |          |
| BCLL         | 0.0*      | Code            | IRC2018/TPI2014 | Matrix-MS |      |          |       |       |        |     |                |          |
| BCDL         | 10.0      |                 |                 |           |      |          |       |       |        |     |                |          |
|              |           |                 |                 |           |      |          |       |       |        |     | Weight: 109 lb | FT = 20% |

#### LUMBER

|           |                                      |
|-----------|--------------------------------------|
| TOP CHORD | 2x4 SP No.2                          |
| BOT CHORD | 2x4 SP No.2                          |
| WEBS      | 2x4 SP No.2 *Except* 3-9:2x4 SP No.3 |
| OTHERS    | 2x4 SP No.3(flat)                    |
| WEDGE     | Left: 2x4 SP No.3                    |

#### BRACING

|           |                                                                                                                                                                                            |
|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TOP CHORD | Structural wood sheathing directly applied or 5-3-4 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-5.                                                              |
| BOT CHORD | Rigid ceiling directly applied or 10-0-0 oc bracing.                                                                                                                                       |
| WEBS      | T-Brace: 2x4 SP No.3 - 4-6<br>Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance.<br>Brace must cover 90% of web length. |

|           |                                           |
|-----------|-------------------------------------------|
| REACTIONS | (size) 2=0-5-8, 6= Mechanical             |
|           | Max Horiz 2=197 (LC 16)                   |
|           | Max Uplift 2=-111 (LC 16), 6=-109 (LC 13) |
|           | Max Grav 2=817 (LC 3), 6=779 (LC 3)       |

#### FORCES

|           |                                                              |
|-----------|--------------------------------------------------------------|
|           | (lb) - Maximum Compression/Maximum Tension                   |
| TOP CHORD | 1-2=0/29, 2-3=-1196/135, 3-4=-684/82, 4-5=-18/4, 5-6=-182/64 |
| BOT CHORD | 2-9=-248/1017, 7-9=-248/1017, 6-7=-106/541                   |
| WEBS      | 3-9=0/239, 3-7=-555/174, 4-7=-42/554, 4-6=-750/148           |

#### NOTES

- 1) Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-2-8 to 1-9-8, Interior (1) 1-9-8 to 12-7-8, Exterior(2R) 12-7-8 to 16-10-7, Interior (1) 16-10-7 to 19-0-4 zone;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=1.25 Plate DOL=1.25); Pg=10.0 psf; Pf=12.7 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
- 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 7.7 psf on overhangs non-concurrent with other live loads.
- 6) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 7) Provide adequate drainage to prevent water ponding.
- 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 10) Refer to girder(s) for truss to truss connections.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 109 lb uplift at joint 6 and 111 lb uplift at joint 2.
- 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.

- 14) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

LOAD CASE(S) Standard



May 12,2025

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818 Soundside Road  
Edenton, NC 27932

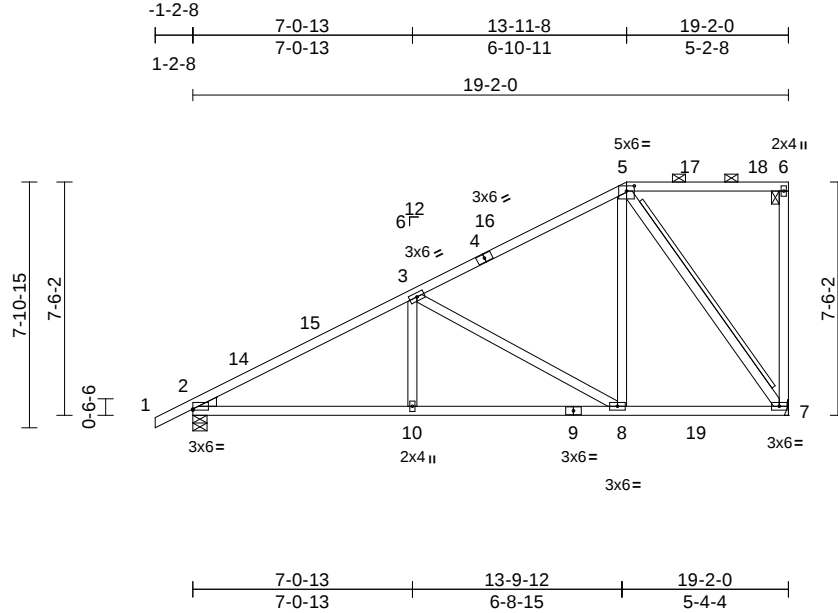
|              |       |            |     |     |                          |           |
|--------------|-------|------------|-----|-----|--------------------------|-----------|
| Job          | Truss | Truss Type | Qty | Ply | A669 Kipling A           |           |
| P02608-25469 | C5    | Half Hip   | 1   | 1   | Job Reference (optional) | I73370357 |

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Fri May 09 08:46:13

Page: 1

ID:Pkhtb78vQvER4yhFZuASLczlHqt-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWRCDoi7J4zJC?f



Scale = 1:74.2

Plate Offsets (X, Y): [2:Edge,0-0-8], [5:0-3-0,0-2-0]

| Loading      | (psf)     | Spacing         | 2-0-0           | CSI       |      | DEFL     | in    | (loc) | l/defl | L/d | PLATES         | GRIP     |
|--------------|-----------|-----------------|-----------------|-----------|------|----------|-------|-------|--------|-----|----------------|----------|
| TCLL (roof)  | 20.0      | Plate Grip DOL  | 1.25            | TC        | 0.55 | Vert(LL) | -0.06 | 10-13 | >999   | 240 | MT20           | 244/190  |
| Snow (Pf/Pg) | 12.7/10.0 | Lumber DOL      | 1.25            | BC        | 0.50 | Vert(CT) | -0.11 | 10-13 | >999   | 180 |                |          |
| TCDL         | 7.0       | Rep Stress Incr | YES             | WB        | 0.65 | Horz(CT) | 0.03  | 7     | n/a    | n/a |                |          |
| BCLL         | 0.0*      | Code            | IRC2018/TPI2014 | Matrix-MS |      |          |       |       |        |     |                |          |
| BCDL         | 10.0      |                 |                 |           |      |          |       |       |        |     |                |          |
|              |           |                 |                 |           |      |          |       |       |        |     | Weight: 112 lb | FT = 20% |

#### LUMBER

|           |                                       |
|-----------|---------------------------------------|
| TOP CHORD | 2x4 SP No.2                           |
| BOT CHORD | 2x4 SP No.2                           |
| WEBS      | 2x4 SP No.2 *Except* 3-10:2x4 SP No.3 |
| OTHERS    | 2x4 SP No.3(flat)                     |
| WEDGE     | Left: 2x4 SP No.3                     |

#### BRACING

|           |                                                                                                                                                                                            |
|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TOP CHORD | Structural wood sheathing directly applied or 5-2-13 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-6.                                                             |
| BOT CHORD | Rigid ceiling directly applied or 10-0-0 oc bracing.                                                                                                                                       |
| WEBS      | T-Brace: 2x4 SP No.3 - 5-7<br>Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance.<br>Brace must cover 90% of web length. |

|           |                                           |
|-----------|-------------------------------------------|
| REACTIONS | (size) 2=0-5-8, 7= Mechanical             |
|           | Max Horiz 2=216 (LC 16)                   |
|           | Max Uplift 2=-109 (LC 16), 7=-120 (LC 16) |
|           | Max Grav 2=814 (LC 3), 7=778 (LC 3)       |

#### FORCES

|           |                                                             |
|-----------|-------------------------------------------------------------|
|           | (lb) - Maximum Compression/Maximum Tension                  |
| TOP CHORD | 1-2=0/29, 2-3=-1168/126, 3-5=-566/59, 5-6=-8/2, 6-7=-142/51 |
| BOT CHORD | 2-10=-254/989, 8-10=-254/989, 7-8=-88/426                   |
| WEBS      | 3-10=0/284, 3-8=-633/194, 5-8=-53/563, 5-7=-730/152         |

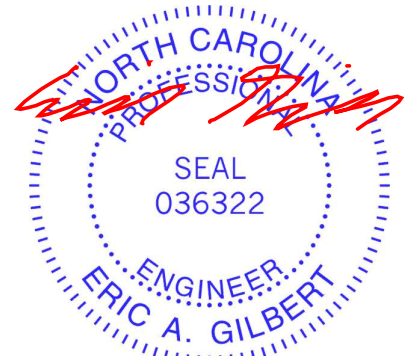
#### NOTES

- 1) Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-2-8 to 1-9-8, Interior (1) 1-9-8 to 13-11-8, Exterior(2R) 13-11-8 to 18-2-7, Interior (1) 18-2-7 to 19-0-4 zone;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=1.25 Plate DOL=1.25); Pg=10.0 psf; Pf=12.7 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
- 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 7.7 psf on overhangs non-concurrent with other live loads.
- 6) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 7) Provide adequate drainage to prevent water ponding.
- 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 10) Refer to girder(s) for truss to truss connections.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 120 lb uplift at joint 7 and 109 lb uplift at joint 2.
- 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.

- 14) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

**LOAD CASE(S)** Standard



May 12,2025

**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)

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Edenton, NC 27932

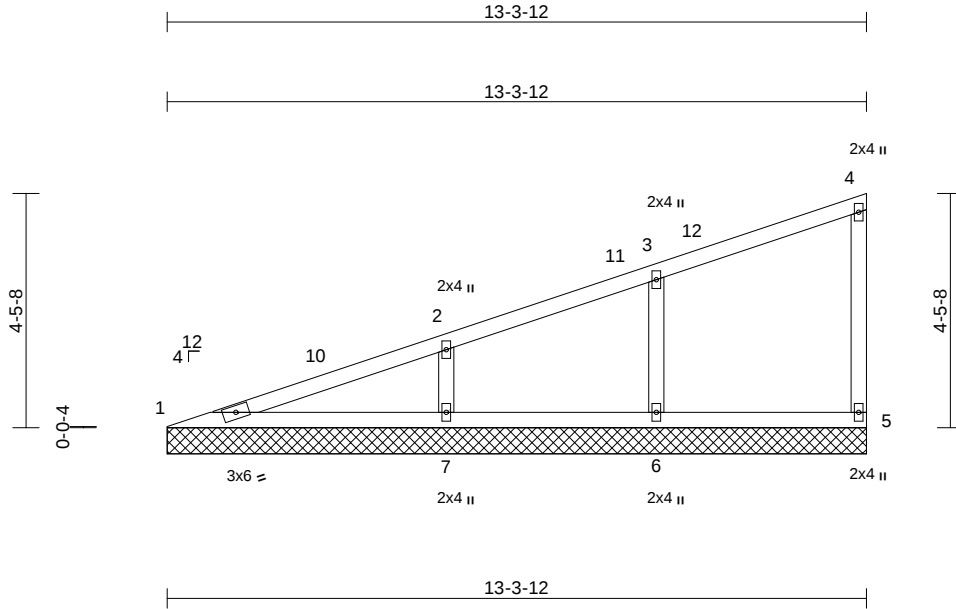
|              |       |            |     |     |                          |           |
|--------------|-------|------------|-----|-----|--------------------------|-----------|
| Job          | Truss | Truss Type | Qty | Ply | A669 Kipling A           | 173370358 |
| P02608-25469 | CV1   | Valley     | 1   | 1   | Job Reference (optional) |           |

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Fri May 09 08:46:14

Page: 1

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Scale = 1:43.9

| Loading      | (psf)    | Spacing         | 2-0-0           | CSI       | DEFL | in        | (loc) | l/defl | L/d | PLATES        | GRIP     |
|--------------|----------|-----------------|-----------------|-----------|------|-----------|-------|--------|-----|---------------|----------|
| TCLL (roof)  | 20.0     | Plate Grip DOL  | 1.25            | TC        | 0.22 | n/a       | -     | n/a    | 999 | MT20          | 244/190  |
| Snow (Pf/Pg) | 7.7/10.0 | Lumber DOL      | 1.25            | BC        | 0.25 | n/a       | -     | n/a    | 999 |               |          |
| TCDL         | 7.0      | Rep Stress Incr | YES             | WB        | 0.05 | Horiz(TL) | 0.00  | 5      | n/a |               |          |
| BCLL         | 0.0*     | Code            | IRC2018/TPI2014 | Matrix-MS |      |           |       |        |     |               |          |
| BCDL         | 10.0     |                 |                 |           |      |           |       |        |     | Weight: 51 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.                                  |

|                  |            |                                                           |
|------------------|------------|-----------------------------------------------------------|
| <b>REACTIONS</b> | (size)     | 1=13-3-12, 5=13-3-12, 6=13-3-12, 7=13-3-12                |
|                  | Max Horiz  | 1=122 (LC 12)                                             |
|                  | Max Uplift | 1=-1 (LC 12), 5=-29 (LC 12), 6=-68 (LC 12), 7=-91 (LC 12) |
|                  | Max Grav   | 1=163 (LC 2), 5=124 (LC 2), 6=282 (LC 2), 7=405 (LC 2)    |

#### FORCES

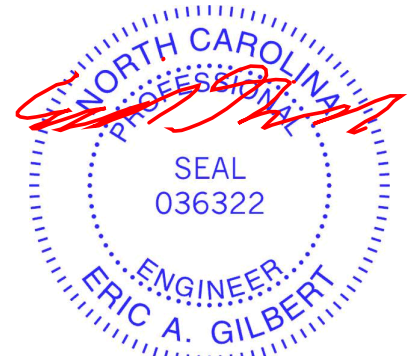
|           |                                                 |
|-----------|-------------------------------------------------|
|           | (lb) - Maximum Compression/Maximum Tension      |
| TOP CHORD | 1-2=-346/64, 2-3=-73/35, 3-4=-44/22, 4-5=-88/55 |
| BOT CHORD | 1-7=-129/322, 6-7=-3/6, 5-6=-3/6                |
| WEBS      | 3-6=-216/118, 2-7=-265/113                      |

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-12 to 3-0-12, Interior (1) 3-0-12 to 13-2-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); Pg=10.0 psf; Pf=7.7 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.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 29 lb uplift at joint 5, 1 lb uplift at joint 1, 68 lb uplift at joint 6 and 91 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.

**LOAD CASE(S)** Standard



May 12, 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))

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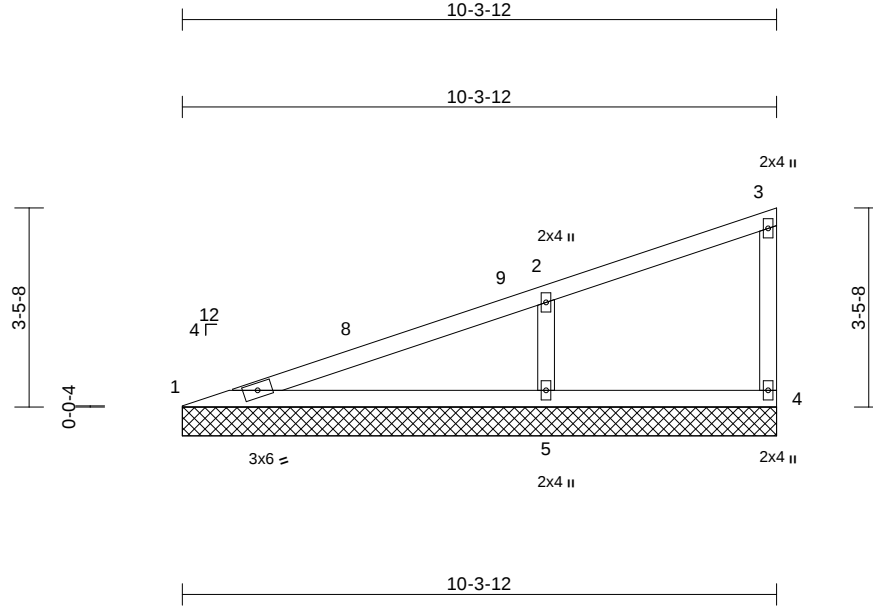
|              |       |            |     |     |                          |           |
|--------------|-------|------------|-----|-----|--------------------------|-----------|
| Job          | Truss | Truss Type | Qty | Ply | A669 Kipling A           | 173370359 |
| P02608-25469 | CV2   | Valley     | 1   | 1   | Job Reference (optional) |           |

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Fri May 09 08:46:14

Page: 1

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Scale = 1:40

| Loading      | (psf)    | Spacing         | 2-0-0           | CSI       | DEFL | in        | (loc) | l/defl | L/d | PLATES        | GRIP     |
|--------------|----------|-----------------|-----------------|-----------|------|-----------|-------|--------|-----|---------------|----------|
| TCLL (roof)  | 20.0     | Plate Grip DOL  | 1.25            | TC        | 0.33 | Vert(LL)  | n/a   | -      | n/a | 999           | MT20     |
| Snow (Pf/Pg) | 7.7/10.0 | Lumber DOL      | 1.25            | BC        | 0.35 | Vert(TL)  | n/a   | -      | n/a | 999           | 244/190  |
| TCDL         | 7.0      | Rep Stress Incr | YES             | WB        | 0.06 | Horiz(TL) | 0.01  | 5      | n/a | n/a           |          |
| BCLL         | 0.0*     | Code            | IRC2018/TPI2014 | Matrix-MS |      |           |       |        |     |               |          |
| BCDL         | 10.0     |                 |                 |           |      |           |       |        |     |               |          |
|              |          |                 |                 |           |      |           |       |        |     | Weight: 37 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

|            |                                              |
|------------|----------------------------------------------|
| (size)     | 1=10-3-12, 4=10-3-12, 5=10-3-12              |
| Max Horiz  | 1=93 (LC 12)                                 |
| Max Uplift | 1=-15 (LC 12), 4=-18 (LC 12), 5=-113 (LC 12) |
| Max Grav   | 1=189 (LC 2), 4=77 (LC 22), 5=494 (LC 2)     |

#### FORCES

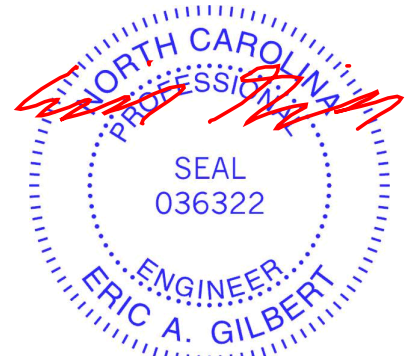
|                                            |                                     |
|--------------------------------------------|-------------------------------------|
| (lb) - Maximum Compression/Maximum Tension |                                     |
| TOP CHORD                                  | 1-2=-421/62, 2-3=-43/16, 3-4=-62/69 |
| BOT CHORD                                  | 1-5=-164/394, 4-5=-3/1              |
| WEBS                                       | 2-5=-324/198                        |

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-12 to 3-0-12, Interior (1) 3-0-12 to 10-2-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); Pg=10.0 psf; Pf=7.7 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.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 18 lb uplift at joint 4, 15 lb uplift at joint 1 and 113 lb uplift at joint 5.
- 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.

LOAD CASE(S) Standard



May 12,2025

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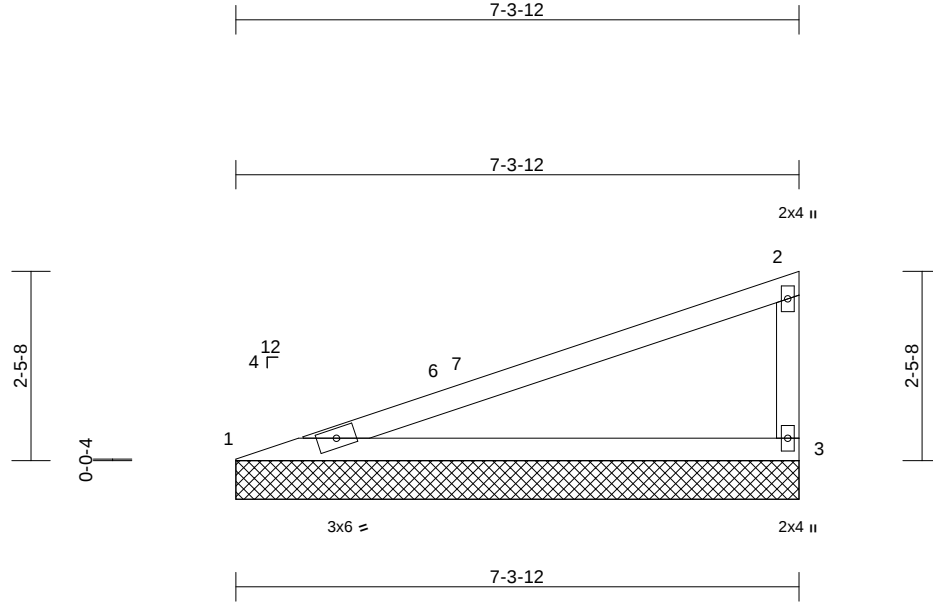
818 Soundside Road  
Edenton, NC 27932

|              |       |            |     |     |                          |           |
|--------------|-------|------------|-----|-----|--------------------------|-----------|
| Job          | Truss | Truss Type | Qty | Ply | A669 Kipling A           | I73370360 |
| P02608-25469 | CV3   | Valley     | 1   | 1   | Job Reference (optional) |           |

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

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Page: 1



Scale = 1:29.9

| Loading      | (psf)    | Spacing         | 2-0-0           | CSI       |      | DEFL      | in   | (loc) | l/defl | L/d | PLATES        | GRIP     |
|--------------|----------|-----------------|-----------------|-----------|------|-----------|------|-------|--------|-----|---------------|----------|
| TCLL (roof)  | 20.0     | Plate Grip DOL  | 1.25            | TC        | 0.62 | Vert(LL)  | n/a  | -     | n/a    | 999 | MT20          | 244/190  |
| Snow (Pf/Pg) | 7.7/10.0 | Lumber DOL      | 1.25            | BC        | 0.62 | Vert(TL)  | n/a  | -     | n/a    | 999 |               |          |
| TCDL         | 7.0      | Rep Stress Incr | YES             | WB        | 0.00 | Horiz(TL) | 0.02 | 3     | n/a    | n/a |               |          |
| BCLL         | 0.0*     | Code            | IRC2018/TPI2014 | Matrix-MP |      |           |      |       |        |     |               |          |
| BCDL         | 10.0     |                 |                 |           |      |           |      |       |        |     | 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 6-0-0 oc purlins, except end verticals. |
| BOT CHORD | Rigid ceiling directly applied or 10-0-0 oc bracing.                                  |

#### REACTIONS (size)

|                                         |
|-----------------------------------------|
| 1=7-3-12, 3=7-3-12                      |
| Max Horiz 1=65 (LC 12)                  |
| Max Uplift 1=-41 (LC 12), 3=-61 (LC 12) |
| Max Grav 1=265 (LC 2), 3=265 (LC 2)     |

#### FORCES

|                                            |
|--------------------------------------------|
| (lb) - Maximum Compression/Maximum Tension |
|--------------------------------------------|

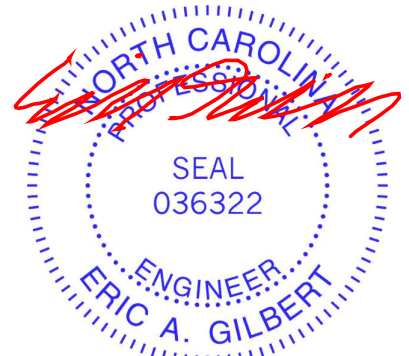
|           |                            |
|-----------|----------------------------|
| TOP CHORD | 1-2=-646/196, 2-3=-166/134 |
| BOT CHORD | 1-3=-285/606               |

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-12 to 3-0-12, Interior (1) 3-0-12 to 7-2-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); Pg=10.0 psf; Pf=7.7 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.

- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 61 lb uplift at joint 3 and 41 lb uplift at joint 1.
- 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.

LOAD CASE(S) Standard



May 12,2025

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

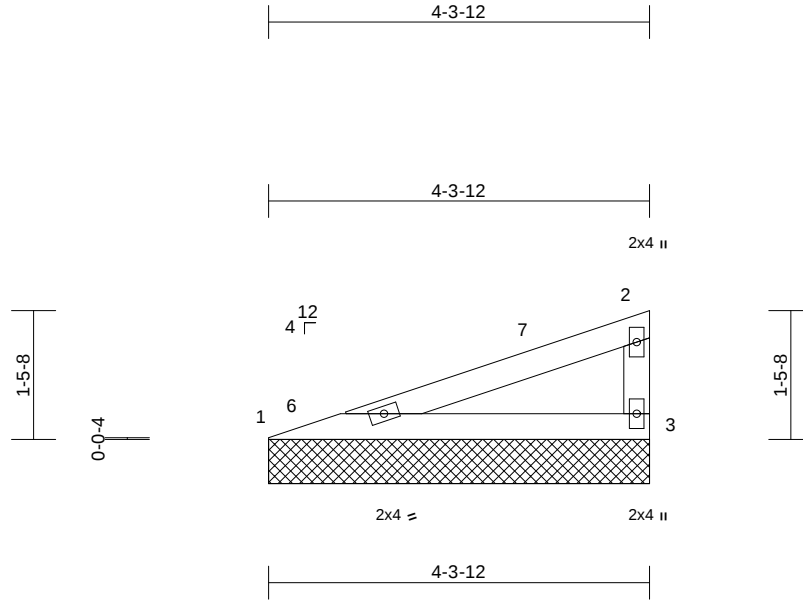
818 Soundside Road  
Edenton, NC 27932

|              |       |            |     |     |                          |           |
|--------------|-------|------------|-----|-----|--------------------------|-----------|
| Job          | Truss | Truss Type | Qty | Ply | A669 Kipling A           | 173370361 |
| P02608-25469 | CV4   | Valley     | 1   | 1   | Job Reference (optional) |           |

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Fri May 09 08:46:14  
ID:h?VX4GPenAY5FaWXUaZ8NkzHrq-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:26.1

| Loading      | (psf)    | Spacing         | 2-0-0           | CSI       | DEFL | in        | (loc) | l/defl | L/d | PLATES        | GRIP     |
|--------------|----------|-----------------|-----------------|-----------|------|-----------|-------|--------|-----|---------------|----------|
| TCLL (roof)  | 20.0     | Plate Grip DOL  | 1.25            | TC        | 0.17 | n/a       | -     | n/a    | 999 | MT20          | 244/190  |
| Snow (Pf/Pg) | 7.7/10.0 | Lumber DOL      | 1.25            | BC        | 0.20 | n/a       | -     | n/a    | 999 |               |          |
| TCDL         | 7.0      | Rep Stress Incr | YES             | WB        | 0.00 | Horiz(TL) | 0.00  | 3      | n/a |               |          |
| BCLL         | 0.0*     | Code            | IRC2018/TPI2014 | Matrix-MP |      |           |       |        |     |               |          |
| BCDL         | 10.0     |                 |                 |           |      |           |       |        |     | Weight: 13 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 4-3-12 oc purlins, except end verticals. |
| BOT CHORD | Rigid ceiling directly applied or 10-0-0 oc bracing.                                   |

#### REACTIONS (size)

|                                         |
|-----------------------------------------|
| 1=4-3-12, 3=4-3-12                      |
| Max Horiz 1=36 (LC 12)                  |
| Max Uplift 1=-24 (LC 12), 3=-35 (LC 12) |
| Max Grav 1=154 (LC 2), 3=154 (LC 2)     |

#### FORCES (lb) - Maximum Compression/Maximum Tension

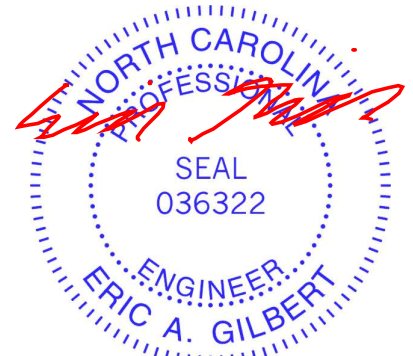
|           |                          |
|-----------|--------------------------|
| TOP CHORD | 1-2=-320/157, 2-3=-92/81 |
| BOT CHORD | 1-3=-210/298             |

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-12 to 3-0-12, Interior (1) 3-0-12 to 4-2-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); Pg=10.0 psf; Pf=7.7 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.

- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 35 lb uplift at joint 3 and 24 lb uplift at joint 1.
- 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.

LOAD CASE(S) Standard



May 12,2025

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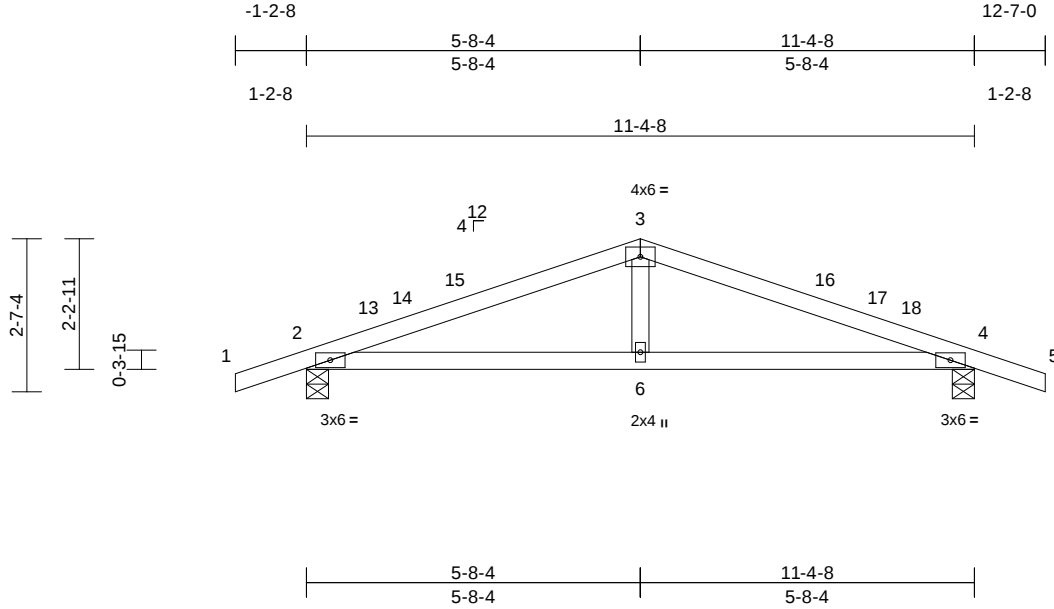
818 Soundside Road  
Edenton, NC 27932

|              |       |            |     |     |                          |           |
|--------------|-------|------------|-----|-----|--------------------------|-----------|
| Job          | Truss | Truss Type | Qty | Ply | A669 Kipling A           | 173370362 |
| P02608-25469 | D1    | Common     | 1   | 1   | Job Reference (optional) |           |

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Fri May 09 08:46:14  
ID:PfatctJFR0g4wVUBacxVaGzIHrx-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?

Page: 1



Scale = 1:39.2

| Loading      | (psf)    | Spacing         | 2-0-0           | CSI       | DEFL | in       | (loc) | l/defl | L/d  | PLATES        | GRIP     |
|--------------|----------|-----------------|-----------------|-----------|------|----------|-------|--------|------|---------------|----------|
| TCLL (roof)  | 20.0     | Plate Grip DOL  | 1.25            | TC        | 0.31 | Vert(LL) | 0.04  | 6-9    | >999 | 240           | 244/190  |
| Snow (Pf/Pg) | 7.7/10.0 | Lumber DOL      | 1.25            | BC        | 0.37 | Vert(CT) | -0.07 | 6-9    | >999 | 180           |          |
| TCDL         | 7.0      | Rep Stress Incr | YES             | WB        | 0.10 | Horz(CT) | 0.01  | 4      | n/a  | n/a           |          |
| BCLL         | 0.0*     | Code            | IRC2018/TPI2014 | Matrix-MS |      |          |       |        |      |               |          |
| BCDL         | 10.0     |                 |                 |           |      |          |       |        |      |               |          |
|              |          |                 |                 |           |      |          |       |        |      | Weight: 41 lb | FT = 20% |

#### LUMBER

|           |             |
|-----------|-------------|
| TOP CHORD | 2x4 SP No.2 |
| BOT CHORD | 2x4 SP No.2 |
| WEBS      | 2x4 SP No.3 |

#### BRACING

|           |                                                                 |
|-----------|-----------------------------------------------------------------|
| TOP CHORD | Structural wood sheathing directly applied or 6-0-0 oc purlins. |
| BOT CHORD | Rigid ceiling directly applied or 8-11-9 oc bracing.            |

#### REACTIONS (size)

|            |                                |
|------------|--------------------------------|
| Max Horiz  | 2=29 (LC 16)                   |
| Max Uplift | 2=-182 (LC 12), 4=-182 (LC 13) |
| Max Grav   | 2=486 (LC 2), 4=486 (LC 2)     |

#### FORCES (lb) - Maximum Compression/Maximum Tension

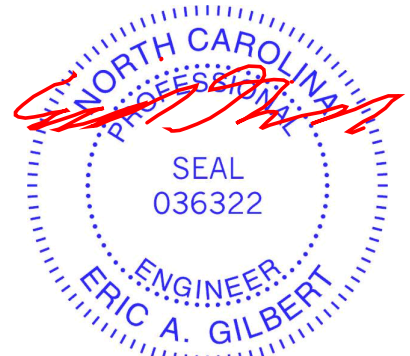
|           |                                                |
|-----------|------------------------------------------------|
| TOP CHORD | 1-2=0/21, 2-3=-767/490, 3-4=-767/490, 4-5=0/21 |
| BOT CHORD | 2-6=-400/699, 4-6=-400/699                     |
| WEBS      | 3-6=-122/253                                   |

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-2-8 to 1-9-8, Interior (1) 1-9-8 to 5-8-4, Exterior(2R) 5-8-4 to 8-8-4, Interior (1) 8-8-4 to 12-7-0 zone; porch 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=1.25 Plate DOL=1.25); Pg=10.0 psf; Pf=7.7 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 7.7 psf on overhangs non-concurrent with other live loads.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 182 lb uplift at joint 2 and 182 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.

LOAD CASE(S) Standard



May 12, 2025

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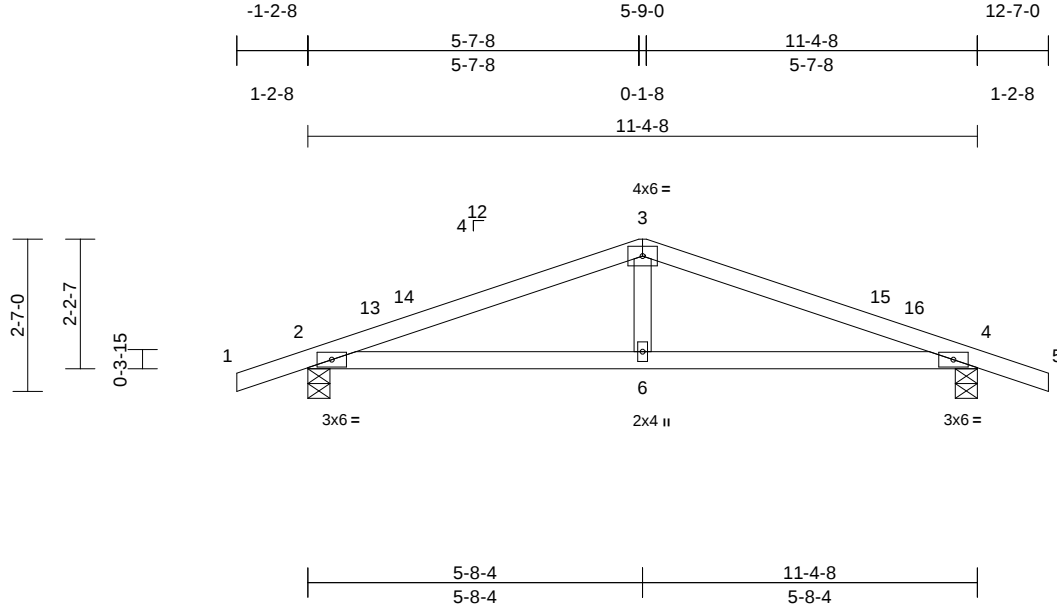
818 Soundside Road  
Edenton, NC 27932

|              |       |            |     |     |                          |           |
|--------------|-------|------------|-----|-----|--------------------------|-----------|
| Job          | Truss | Truss Type | Qty | Ply | A669 Kipling A           | 173370363 |
| P02608-25469 | D2    | Hip        | 1   | 1   | Job Reference (optional) |           |

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Fri May 09 08:46:15  
ID:DYPJl6BM1eHe5p83RoFwexzIHs6-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:39.1

| Loading       | (psf)    | Spacing         | 2-0-0           | CSI       |      | DEFL     | in    | (loc) | l/defl | L/d | PLATES   | GRIP    |
|---------------|----------|-----------------|-----------------|-----------|------|----------|-------|-------|--------|-----|----------|---------|
| TCLL (roof)   | 20.0     | Plate Grip DOL  | 1.25            | TC        | 0.31 | Vert(LL) | 0.05  | 6-9   | >999   | 240 | MT20     | 244/190 |
| Snow (Pf/Pg)  | 7.7/10.0 | Lumber DOL      | 1.25            | BC        | 0.37 | Vert(CT) | -0.07 | 6-12  | >999   | 180 |          |         |
| TCDL          | 7.0      | Rep Stress Incr | YES             | WB        | 0.10 | Horz(CT) | 0.01  | 4     | n/a    | n/a |          |         |
| BCLL          | 0.0*     | Code            | IRC2018/TPI2014 | Matrix-MS |      |          |       |       |        |     |          |         |
| BCDL          | 10.0     |                 |                 |           |      |          |       |       |        |     |          |         |
| Weight: 41 lb |          |                 |                 |           |      |          |       |       |        |     | FT = 20% |         |

#### LUMBER

|           |             |
|-----------|-------------|
| TOP CHORD | 2x4 SP No.2 |
| BOT CHORD | 2x4 SP No.2 |
| WEBS      | 2x4 SP No.3 |

#### BRACING

|           |                                                                 |
|-----------|-----------------------------------------------------------------|
| TOP CHORD | Structural wood sheathing directly applied or 6-0-0 oc purlins. |
| BOT CHORD | Rigid ceiling directly applied or 9-0-8 oc bracing.             |

#### REACTIONS (size)

|            |                                |
|------------|--------------------------------|
| Max Horiz  | 2=-28 (LC 17)                  |
| Max Uplift | 2=-182 (LC 12), 4=-182 (LC 13) |
| Max Grav   | 2=486 (LC 2), 4=486 (LC 2)     |

#### FORCES (lb) - Maximum Compression/Maximum Tension

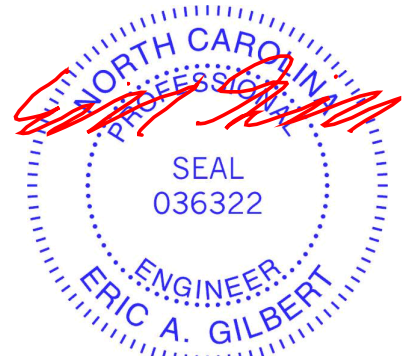
|           |                                                |
|-----------|------------------------------------------------|
| TOP CHORD | 1-2=0/21, 2-3=-770/477, 3-4=-770/477, 4-5=0/21 |
| BOT CHORD | 2-6=-389/702, 4-6=-389/702                     |
| WEBS      | 3-6=-124/253                                   |

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-2-8 to 1-9-8, Interior (1) 1-9-8 to 5-8-4, Exterior(2R) 5-8-4 to 9-11-3, Interior (1) 9-11-3 to 12-7-0 zone; porch 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=1.25 Plate DOL=1.25); Pg=10.0 psf; Pf=7.7 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 7.7 psf on overhangs non-concurrent with other live loads.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 182 lb uplift at joint 2 and 182 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.

LOAD CASE(S) Standard



May 12, 2025

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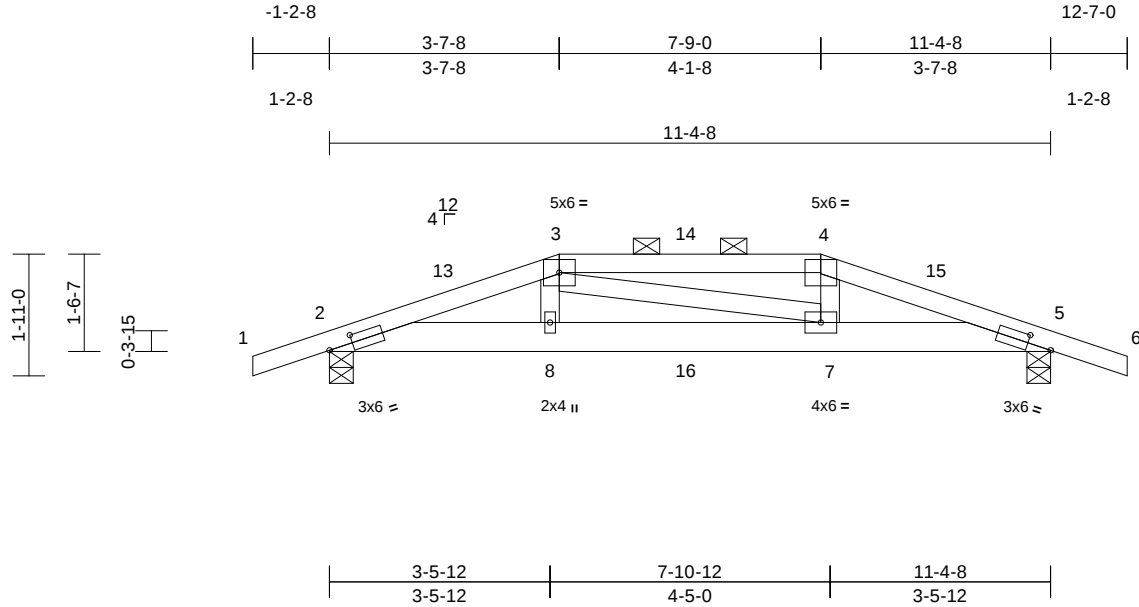
818 Soundside Road  
Edenton, NC 27932

|              |       |            |     |     |                          |           |
|--------------|-------|------------|-----|-----|--------------------------|-----------|
| Job          | Truss | Truss Type | Qty | Ply | A669 Kipling A           | 173370364 |
| P02608-25469 | D3G   | Hip Girder | 1   | 1   | Job Reference (optional) |           |

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Fri May 09 08:46:15  
ID:5mbN?sqX5QVvVCrlgViuQdzIHsa-RfC?PsB70Hq3NSgPqnL8w3uITxbGKWrCdoi7J4zJC?f

Page: 1



Scale = 1:36.3

Plate Offsets (X, Y): [2:0-4-9,0-1-8], [5:0-4-9,0-1-8]

| Loading      | (psf)     | Spacing         | 2-0-0           | CSI       |      | DEFL     | in    | (loc) | l/defl | L/d | PLATES        | GRIP     |
|--------------|-----------|-----------------|-----------------|-----------|------|----------|-------|-------|--------|-----|---------------|----------|
| TCLL (roof)  | 20.0      | Plate Grip DOL  | 1.25            | TC        | 0.60 | Vert(LL) | 0.11  | 7-8   | >999   | 240 | MT20          | 244/190  |
| Snow (Pf/Pg) | 12.7/10.0 | Lumber DOL      | 1.25            | BC        | 0.76 | Vert(CT) | -0.18 | 7-8   | >746   | 180 |               |          |
| TCDL         | 7.0       | Rep Stress Incr | NO              | WB        | 0.12 | Horz(CT) | 0.04  | 5     | n/a    | n/a |               |          |
| BCLL         | 0.0*      | Code            | IRC2018/TPI2014 | Matrix-MS |      |          |       |       |        |     |               |          |
| BCDL         | 10.0      |                 |                 |           |      |          |       |       |        |     |               |          |
|              |           |                 |                 |           |      |          |       |       |        |     | Weight: 57 lb | FT = 20% |

#### LUMBER

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

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 3-1-14 oc purlins, except 2-0-0 oc purlins (2-11-13 max.); 3-4.  
BOT CHORD Rigid ceiling directly applied or 6-10-3 oc bracing.

**REACTIONS** (size) 2=0-4-8, 5=0-4-8  
Max Horiz 2=20 (LC 56)  
Max Uplift 2=-476 (LC 8), 5=-476 (LC 9)  
Max Grav 2=1211 (LC 2), 5=1210 (LC 2)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=0/21, 2-3=-3217/1231, 3-4=-2954/1146, 4-5=-3169/1210, 5-6=0/21  
BOT CHORD 2-8=-1147/3035, 7-8=-1134/2998, 5-7=-1123/2988  
WEBS 3-8=-111/327, 3-7=-81/33, 4-7=-100/310

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; porch 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=1.25 Plate DOL=1.25); Pg=10.0 psf; Pf=12.7 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
- 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 7.7 psf on overhangs non-concurrent with other live loads.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 476 lb uplift at joint 2 and 476 lb uplift at joint 5.
- 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.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 571 lb down and 236 lb up at 3-7-8, and 49 lb down and 36 lb up at 5-7-8, and 571 lb down and 236 lb up at 7-9-0 on top chord, and 175 lb down and 98 lb up at 3-7-8, and 28 lb down and 22 lb up at 5-7-8, and 175 lb down and 98 lb up at 7-7-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

#### LOAD CASE(S) Standard

- Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (lb/ft)  
Vert: 1-3=-29, 3-4=-39, 4-6=-29, 2-5=-20

Concentrated Loads (lb)  
Vert: 4=-398 (F), 8=-134 (F), 7=-134 (F), 3=-398 (F), 14=-28 (F), 16=-22 (F)



May 12, 2025

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ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

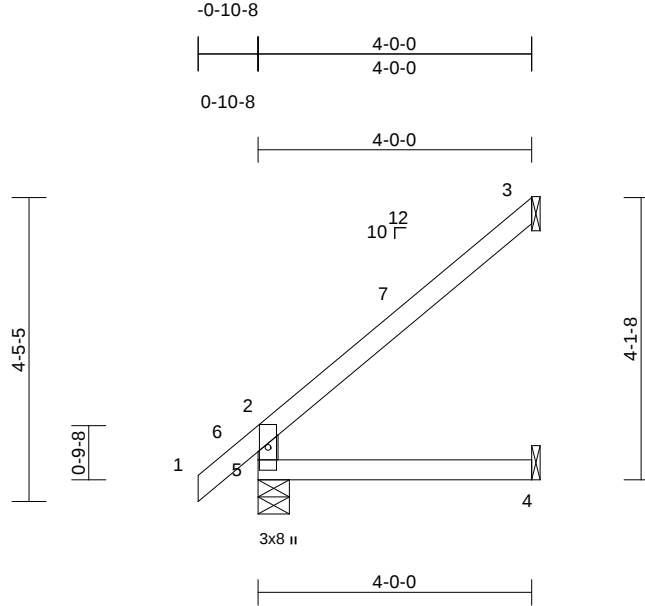
|              |       |            |     |     |                          |           |
|--------------|-------|------------|-----|-----|--------------------------|-----------|
| Job          | Truss | Truss Type | Qty | Ply | A669 Kipling A           | 173370365 |
| P02608-25469 | J1    | Jack-Open  | 5   | 1   | Job Reference (optional) |           |

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Fri May 09 08:46:15

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Scale = 1:33.7

| Loading      | (psf)    | Spacing         | 2-0-0           | CSI       |      | DEFL     | in    | (loc) | l/defl | L/d | PLATES        | GRIP     |
|--------------|----------|-----------------|-----------------|-----------|------|----------|-------|-------|--------|-----|---------------|----------|
| TCLL (roof)  | 20.0     | Plate Grip DOL  | 1.25            | TC        | 0.34 | Vert(LL) | 0.02  | 4-5   | >999   | 240 | MT20          | 244/190  |
| Snow (Pf/Pg) | 7.7/10.0 | Lumber DOL      | 1.25            | BC        | 0.23 | Vert(CT) | -0.02 | 4-5   | >999   | 180 |               |          |
| TCDL         | 7.0      | Rep Stress Incr | YES             | WB        | 0.00 | Horz(CT) | -0.02 | 3     | n/a    | n/a |               |          |
| BCLL         | 0.0*     | Code            | IRC2018/TPI2014 | Matrix-MR |      |          |       |       |        |     |               |          |
| BCDL         | 10.0     |                 |                 |           |      |          |       |       |        |     |               |          |
|              |          |                 |                 |           |      |          |       |       |        |     | Weight: 16 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.                                  |

|                  |            |                                         |
|------------------|------------|-----------------------------------------|
| <b>REACTIONS</b> | (size)     | 3= Mechanical, 4= Mechanical,           |
|                  |            | 5=0-5-8                                 |
|                  | Max Horiz  | 5=106 (LC 14)                           |
|                  | Max Uplift | 3=-71 (LC 14), 4=-6 (LC 14)             |
|                  | Max Grav   | 3=98 (LC 26), 4=71 (LC 5), 5=203 (LC 2) |

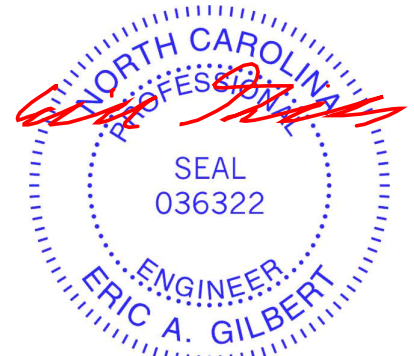
|               |                                            |
|---------------|--------------------------------------------|
| <b>FORCES</b> | (lb) - Maximum Compression/Maximum Tension |
| TOP CHORD     | 2-5=-170/79, 1-2=0/35, 2-3=-111/53         |
| BOT CHORD     | 4-5=0/0                                    |

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-10-8 to 2-1-8, Interior (1) 2-1-8 to 3-11-4 zone; 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=1.25 Plate DOL=1.25); Pg=10.0 psf; Pf=7.7 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
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.

- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 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 3-06-00 tall by 2-00-00 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 71 lb uplift at joint 3 and 6 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.

**LOAD CASE(S)** Standard



May 12, 2025

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Edenton, NC 27932

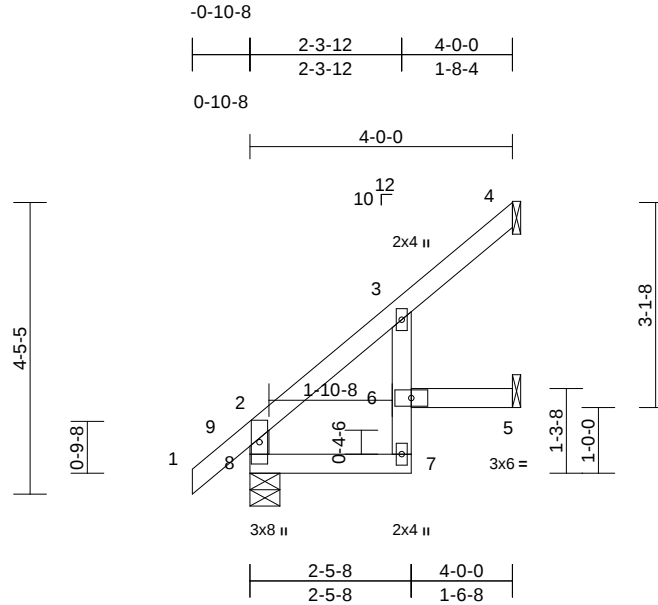
|              |       |            |     |     |                          |           |
|--------------|-------|------------|-----|-----|--------------------------|-----------|
| Job          | Truss | Truss Type | Qty | Ply | A669 Kipling A           | 173370366 |
| P02608-25469 | J2    | Jack-Open  | 5   | 1   | Job Reference (optional) |           |

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

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Scale = 1:35.1

| Loading      | (psf)    | Spacing         | 2-0-0           | CSI       | DEFL | in    | (loc) | l/defl | L/d | PLATES        | GRIP     |
|--------------|----------|-----------------|-----------------|-----------|------|-------|-------|--------|-----|---------------|----------|
| TCLL (roof)  | 20.0     | Plate Grip DOL  | 1.25            | TC        | 0.12 | 0.02  | 7     | >999   | 240 | MT20          | 244/190  |
| Snow (Pf/Pg) | 7.7/10.0 | Lumber DOL      | 1.25            | BC        | 0.18 | -0.02 | 7     | >999   | 180 |               |          |
| TCDL         | 7.0      | Rep Stress Incr | YES             | WB        | 0.00 | -0.01 | 5     | n/a    | n/a |               |          |
| BCLL         | 0.0*     | Code            | IRC2018/TPI2014 | Matrix-MR |      |       |       |        |     |               |          |
| BCDL         | 10.0     |                 |                 |           |      |       |       |        |     | Weight: 20 lb | FT = 20% |

#### LUMBER

|           |                                      |
|-----------|--------------------------------------|
| TOP CHORD | 2x4 SP No.2                          |
| BOT CHORD | 2x4 SP No.2 *Except* 7-3:2x4 SP No.3 |
| 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.                                  |

|                  |            |                                          |
|------------------|------------|------------------------------------------|
| <b>REACTIONS</b> | (size)     | 4= Mechanical, 5= Mechanical, 8=0-5-8    |
|                  | Max Horiz  | 8=106 (LC 14)                            |
|                  | Max Uplift | 4=-49 (LC 14), 5=-28 (LC 14)             |
|                  | Max Grav   | 4=80 (LC 26), 5=64 (LC 26), 8=203 (LC 2) |

|               |                                            |
|---------------|--------------------------------------------|
| <b>FORCES</b> | (lb) - Maximum Compression/Maximum Tension |
|---------------|--------------------------------------------|

|           |                                               |
|-----------|-----------------------------------------------|
| TOP CHORD | 2-8=-179/71, 1-2=0/35, 2-3=-114/0, 3-4=-72/47 |
|-----------|-----------------------------------------------|

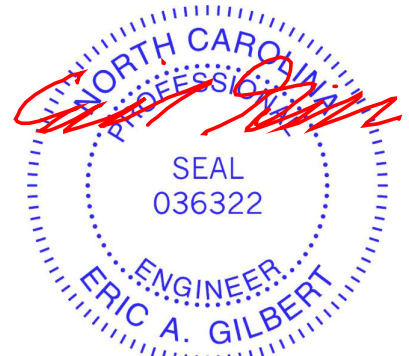
|           |                                             |
|-----------|---------------------------------------------|
| BOT CHORD | 7-8=-86/62, 6-7=-21/43, 3-6=-17/57, 5-6=0/0 |
|-----------|---------------------------------------------|

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-2-10, Interior (1) 2-2-10 to 3-11-4 zone; 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=1.25 Plate DOL=1.25); Pg=10.0 psf; Pf=7.7 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
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.

- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 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 3-06-00 tall by 2-00-00 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 49 lb uplift at joint 4 and 28 lb uplift at joint 5.
- 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.

**LOAD CASE(S)** Standard



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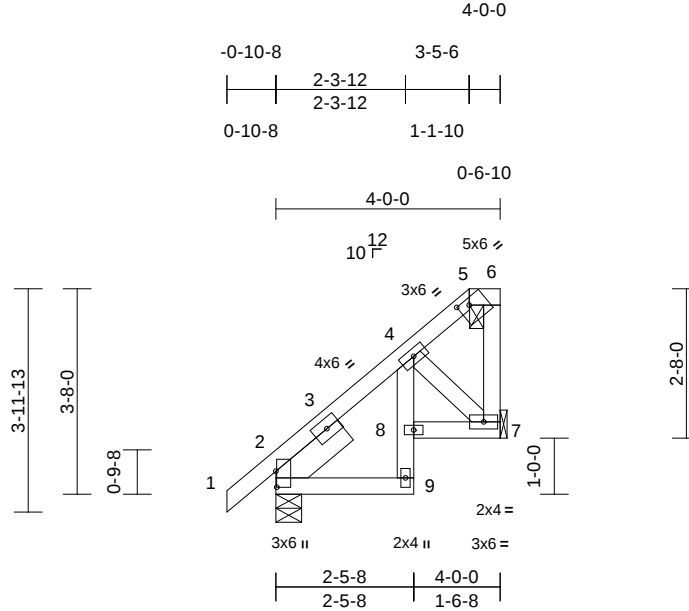
|              |       |            |     |     |                          |           |
|--------------|-------|------------|-----|-----|--------------------------|-----------|
| Job          | Truss | Truss Type | Qty | Ply | A669 Kipling A           | 173370367 |
| P02608-25469 | J2A   | Half Hip   | 1   | 1   | Job Reference (optional) |           |

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

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Scale = 1:41.1

Plate Offsets (X, Y): [2:0-3-7,0-0-3], [5:0-2-6,0-1-6]

| Loading      | (psf)     | Spacing         | 2-0-0           | CSI       | DEFL | in       | (loc) | l/defl | L/d  | PLATES        | GRIP     |
|--------------|-----------|-----------------|-----------------|-----------|------|----------|-------|--------|------|---------------|----------|
| TCLL (roof)  | 20.0      | Plate Grip DOL  | 1.25            | TC        | 0.10 | Vert(LL) | 0.01  | 9      | >999 | 240           | MT20     |
| Snow (Pf/Pg) | 12.7/10.0 | Lumber DOL      | 1.25            | BC        | 0.33 | Vert(CT) | -0.01 | 9      | >999 | 180           | 244/190  |
| TCDL         | 7.0       | Rep Stress Incr | YES             | WB        | 0.06 | Horz(CT) | 0.01  | 7      | n/a  | n/a           |          |
| BCLL         | 0.0*      | Code            | IRC2018/TPI2014 | Matrix-MP |      |          |       |        |      |               |          |
| BCDL         | 10.0      |                 |                 |           |      |          |       |        |      |               |          |
|              |           |                 |                 |           |      |          |       |        |      | Weight: 28 lb | FT = 20% |

#### LUMBER

TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2 \*Except\* 9-4:2x4 SP No.3  
 WEBS 2x4 SP No.3  
 SLIDER Left 2x6 SP No.2 -- 1-6-0

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 4-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 5-6.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 2=0-5-8, 7= Mechanical  
 Max Horiz 2=102 (LC 16)  
 Max Uplift 2=-1 (LC 16), 7=-63 (LC 16)  
 Max Grav 2=229 (LC 38), 7=141 (LC 38)

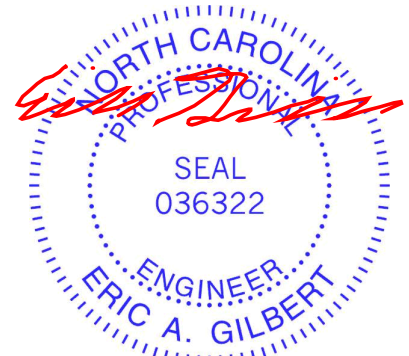
**FORCES** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=0/37, 2-4=-102/31, 4-5=-52/4, 5-6=0/0, 6-7=-13/8  
 BOT CHORD 2-9=-113/79, 8-9=-4/32, 4-8=0/63, 7-8=-154/137  
 WEBS 4-7=-184/207

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-3-12, Interior (1) 2-3-12 to 3-5-6, Exterior(2E) 3-5-6 to 3-10-4 zone; 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=1.25 Plate DOL=1.25); Pg=10.0 psf; Pf=12.7 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

- 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 7.7 psf on overhangs non-concurrent with other live loads.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 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 3-06-00 tall by 2-00-00 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 63 lb uplift at joint 7 and 1 lb uplift at joint 2.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard



May 12, 2025

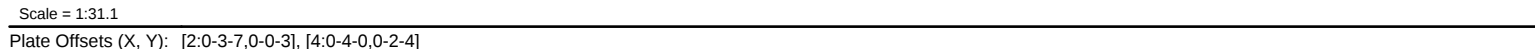
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84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334, Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Fri May 09 08:46:16 Page: 1  
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|                  |                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|------------------|------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>LUMBER</b>    |                                                                                                                  | <p>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 7.7 psf on overhangs non-concurrent with other live loads.</p> <p>6) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.</p> <p>7) Provide adequate drainage to prevent water ponding.</p> <p>8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.</p> <p>9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.</p> <p>10) Refer to girder(s) for truss to truss connections.</p> <p>11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 31 lb uplift at joint 6 and 19 lb uplift at joint 2.</p> <p>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.</p> <p>13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.</p> |
| TOP CHORD        | 2x4 SP No.2                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| BOT CHORD        | 2x4 SP No.2 *Except* 8-4:2x4 SP No.3                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| WEBS             | 2x4 SP No.3                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| SLIDER           | Left 2x6 SP No.2 -- 1-6-0                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>BRACING</b>   |                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| TOP CHORD        | Structural wood sheathing directly applied or 4-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 4-5. |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| BOT CHORD        | Rigid ceiling directly applied or 10-0-0 oc bracing.                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>REACTIONS</b> |                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|                  | (size) 2=0-5-8, 6= Mechanical                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|                  | Max Horiz 2=73 (LC 16)                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|                  | Max Uplift 2=-19 (LC 16), 6=-31 (LC 16)                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|                  | Max Grav 2=214 (LC 38), 6=137 (LC 2)                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>FORCES</b>    |                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|                  | (lb) - Maximum Compression/Maximum Tension                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| TOP CHORD        | 1-2=0/37, 2-4=-71/32, 4-5=0/0, 5-6=-53/31                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| BOT CHORD        | 2-8=-101/67, 7-8=-16/36, 4-7=-13/68, 6-7=-85/92                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| WEBS             | 4-6=-121/112                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>NOTES</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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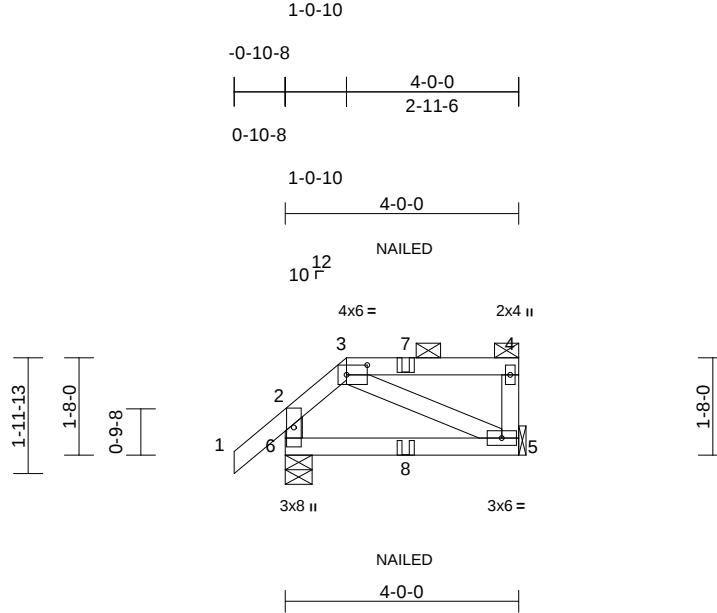
818 Soundside Road  
Edenton, NC 27922

|              |       |            |     |     |                          |           |
|--------------|-------|------------|-----|-----|--------------------------|-----------|
| Job          | Truss | Truss Type | Qty | Ply | A669 Kipling A           | 173370369 |
| P02608-25469 | J2C   | Half Hip   | 1   | 1   | Job Reference (optional) |           |

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Fri May 09 08:46:16  
ID:pwjzm3YObWBp6wcd6PbVfEzIJMU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:39.5

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

| Loading      | (psf)     | Spacing         | 2-0-0           | CSI       |      | DEFL     | in    | (loc) | l/defl | L/d | PLATES        | GRIP     |
|--------------|-----------|-----------------|-----------------|-----------|------|----------|-------|-------|--------|-----|---------------|----------|
| TCLL (roof)  | 20.0      | Plate Grip DOL  | 1.25            | TC        | 0.09 | Vert(LL) | -0.01 | 5-6   | >999   | 240 | MT20          | 244/190  |
| Snow (Pf/Pg) | 12.7/10.0 | Lumber DOL      | 1.25            | BC        | 0.11 | Vert(CT) | -0.01 | 5-6   | >999   | 180 |               |          |
| TCDL         | 7.0       | Rep Stress Incr | YES             | WB        | 0.01 | Horz(CT) | 0.00  | 5     | n/a    | n/a |               |          |
| BCLL         | 0.0*      | Code            | IRC2018/TPI2014 | Matrix-MS |      |          |       |       |        |     |               |          |
| BCDL         | 10.0      |                 |                 |           |      |          |       |       |        |     |               |          |
|              |           |                 |                 |           |      |          |       |       |        |     | Weight: 21 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, and 2-0-0 oc purlins: 3-4.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 5= Mechanical, 6=0-5-8  
Max Horiz 6=38 (LC 14)  
Max Uplift 5=-32 (LC 11), 6=-33 (LC 14)  
Max Grav 5=132 (LC 34), 6=201 (LC 2)

**FORCES** (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/35, 2-3=-111/60, 3-4=-22/8,  
4-5=-79/55, 2-6=-161/121

BOT CHORD 5-6=-53/58  
WEBS 3-5=-40/50

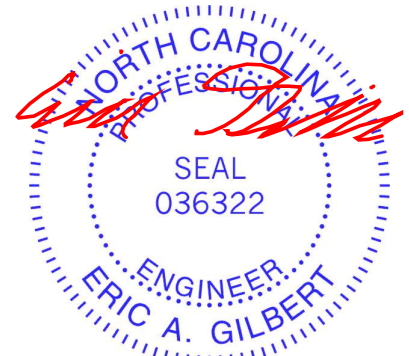
#### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 3-10-4 zone; 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=1.25 Plate DOL=1.25); Pg=10.0 psf; Pf=12.7 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
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.

- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 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 3-06-00 tall by 2-00-00 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 33 lb uplift at joint 6 and 32 lb uplift at joint 5.
- 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.
- "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

#### LOAD CASE(S) Standard

- Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (lb/ft)  
Vert: 1-2=-29, 2-3=-29, 3-4=-39, 5-6=-20  
Concentrated Loads (lb)  
Vert: 8=-3 (F)



May 12, 2025

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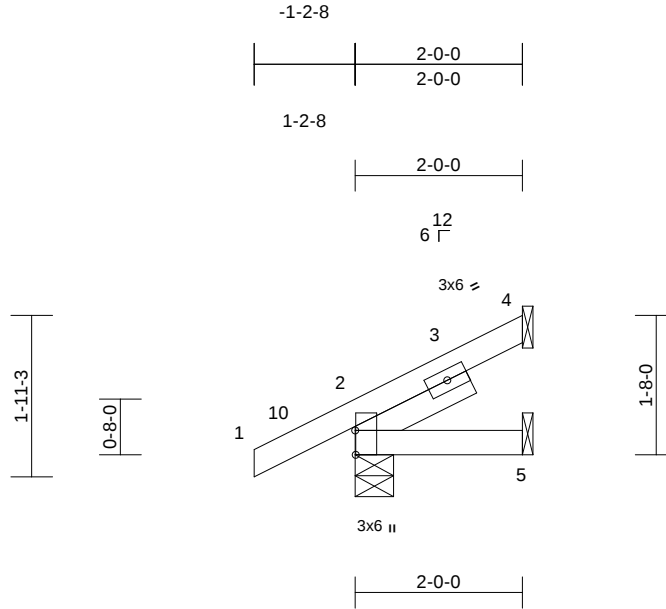
818 Soundside Road  
Edenton, NC 27932

|              |       |            |     |     |                          |           |
|--------------|-------|------------|-----|-----|--------------------------|-----------|
| Job          | Truss | Truss Type | Qty | Ply | A669 Kipling A           | 173370370 |
| P02608-25469 | J3    | Jack-Open  | 1   | 1   | Job Reference (optional) |           |

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Fri May 09 08:46:16  
ID:Imns279J8h9LH?AUeh0?MUzIJN\_-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:27.5

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

| Loading      | (psf)    | Spacing         | 2-0-0           | CSI       |      | DEFL     | in   | (loc) | l/defl | L/d | PLATES        | GRIP     |
|--------------|----------|-----------------|-----------------|-----------|------|----------|------|-------|--------|-----|---------------|----------|
| TCLL (roof)  | 20.0     | Plate Grip DOL  | 1.25            | TC        | 0.08 | Vert(LL) | 0.00 | 5-8   | >999   | 240 | MT20          | 244/190  |
| Snow (Pf/Pg) | 7.7/10.0 | Lumber DOL      | 1.25            | BC        | 0.02 | Vert(CT) | 0.00 | 5-8   | >999   | 180 |               |          |
| TCDL         | 7.0      | Rep Stress Incr | YES             | WB        | 0.00 | Horz(CT) | 0.00 | 2     | n/a    | n/a |               |          |
| BCLL         | 0.0*     | Code            | IRC2018/TPI2014 | Matrix-MP |      |          |      |       |        |     |               |          |
| BCDL         | 10.0     |                 |                 |           |      |          |      |       |        |     |               |          |
|              |          |                 |                 |           |      |          |      |       |        |     | Weight: 11 lb | FT = 20% |

#### LUMBER

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
SLIDER Left 2x4 SP No.2 -- 1-6-0

#### BRACING

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

#### REACTIONS

(size) 2=0-5-8, 4= Mechanical, 5= Mechanical  
Max Horiz 2=43 (LC 16)  
Max Uplift 2=-27 (LC 16), 4=-20 (LC 16)  
Max Grav 2=159 (LC 2), 4=36 (LC 2), 5=31 (LC 7)

#### FORCES

(lb) - Maximum Compression/Maximum Tension

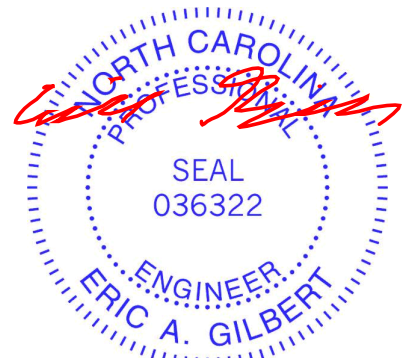
TOP CHORD 1-2=0/29, 2-4=-47/16  
BOT CHORD 2-5=-22/28

#### NOTES

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); Pg=10.0 psf; Pf=7.7 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 7.7 psf on overhangs non-concurrent with other live loads.

- 5) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 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 3-06-00 tall by 2-00-00 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 27 lb uplift at joint 2 and 20 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.

LOAD CASE(S) Standard



May 12, 2025

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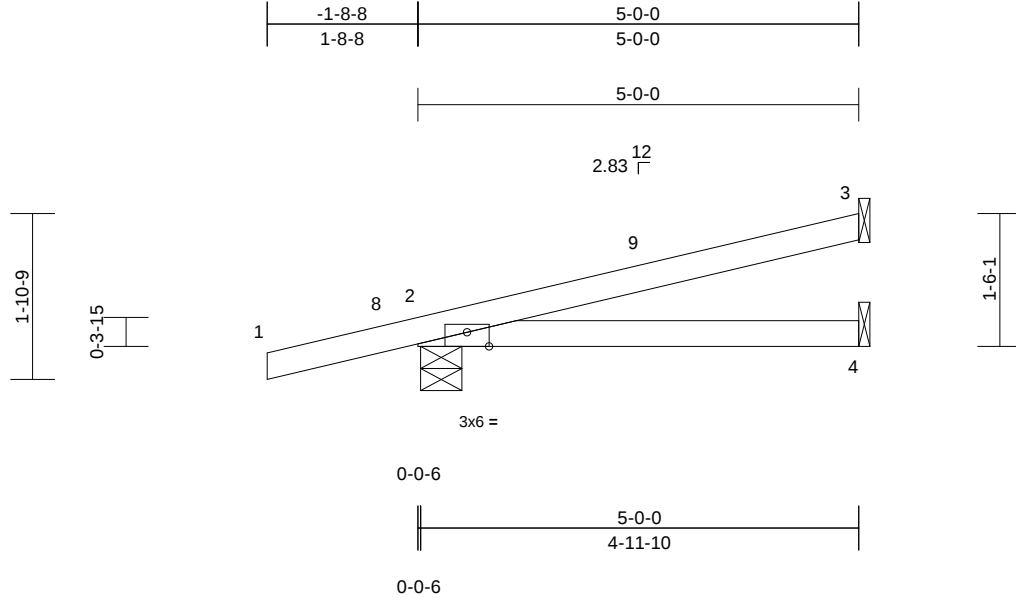
|              |       |              |     |     |                          |           |
|--------------|-------|--------------|-----|-----|--------------------------|-----------|
| Job          | Truss | Truss Type   | Qty | Ply | A669 Kipling A           | 173370371 |
| P02608-25469 | J4    | Jack-Partial | 2   | 1   | Job Reference (optional) |           |

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Fri May 09 08:46:16

Page: 1

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|                                      |          |                 |                 |            |      |             |               |             |        |
|--------------------------------------|----------|-----------------|-----------------|------------|------|-------------|---------------|-------------|--------|
| Scale = 1:26.1                       |          |                 |                 |            |      |             |               |             |        |
| Plate Offsets (X, Y): [2:0-3-0,Edge] |          |                 |                 |            |      |             |               |             |        |
| <b>Loading</b>                       | (psf)    | <b>Spacing</b>  | 2-0-0           | <b>CSI</b> |      | <b>DEFL</b> | in            | (loc)       | l/defl |
| TCLL (roof)                          | 20.0     | Plate Grip DOL  | 1.25            | TC         | 0.61 | Vert(LL)    | 0.18          | 4-7         | >331   |
| Snow (Pf/Pg)                         | 7.7/10.0 | Lumber DOL      | 1.25            | BC         | 0.58 | Vert(CT)    | -0.17         | 4-7         | >348   |
| TCDL                                 | 7.0      | Rep Stress Incr | NO              | WB         | 0.00 | Horz(CT)    | 0.00          | 2           | n/a    |
| BCLL                                 | 0.0*     | Code            | IRC2018/TPI2014 | Matrix-MP  |      |             |               |             |        |
| BCDL                                 | 10.0     |                 |                 |            |      |             |               |             |        |
|                                      |          |                 |                 |            |      |             | <b>PLATES</b> | <b>GRIP</b> |        |
|                                      |          |                 |                 |            |      |             | MT20          | 244/190     |        |
|                                      |          |                 |                 |            |      |             | Weight: 18 lb | FT = 20%    |        |

**LUMBER**  
TOP CHORD 2x4 SP DSS  
BOT CHORD 2x4 SP DSS

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

**REACTIONS** (size) 2=0-5-10, 3= Mechanical, 4= Mechanical  
Max Horiz 2=49 (LC 12)  
Max Uplift 2=-349 (LC 12), 3=-220 (LC 12), 4=-68 (LC 12)  
Max Grav 2=883 (LC 2), 3=578 (LC 2), 4=181 (LC 2)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=0/21, 2-3=-598/521  
BOT CHORD 2-4=-514/542

- NOTES**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner (3) -1-8-8 to 2-6-6, Exterior(2R) 2-6-6 to 4-11-4 zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); Pg=10.0 psf; Pf=7.7 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 7.7 psf on overhangs non-concurrent with other live loads.

- 5) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
  - 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 3-06-00 tall by 2-00-00 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 220 lb uplift at joint 3, 349 lb uplift at joint 2 and 68 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.
  - 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 (lb/ft)  
Vert: 1-2=-29, 2-3=-189 (F=-80, B=-80), 4-5=-20



May 12, 2025

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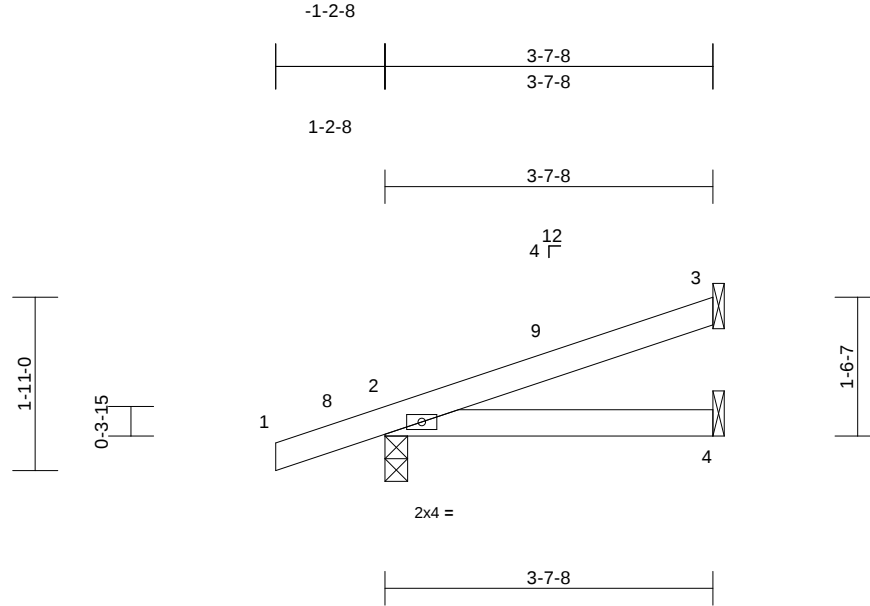
|              |       |            |     |     |                          |           |
|--------------|-------|------------|-----|-----|--------------------------|-----------|
| Job          | Truss | Truss Type | Qty | Ply | A669 Kipling A           | 173370372 |
| P02608-25469 | J5    | Jack-Open  | 3   | 1   | Job Reference (optional) |           |

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Fri May 09 08:46:17

Page: 1

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Scale = 1:25.5

| Loading      | (psf)    | Spacing         | 2-0-0           | CSI       |      | DEFL     | in    | (loc) | l/defl | L/d | PLATES        | GRIP     |
|--------------|----------|-----------------|-----------------|-----------|------|----------|-------|-------|--------|-----|---------------|----------|
| TCLL (roof)  | 20.0     | Plate Grip DOL  | 1.25            | TC        | 0.12 | Vert(LL) | 0.01  | 4-7   | >999   | 240 | MT20          | 244/190  |
| Snow (Pf/Pg) | 7.7/10.0 | Lumber DOL      | 1.25            | BC        | 0.11 | Vert(CT) | -0.01 | 4-7   | >999   | 180 |               |          |
| TCDL         | 7.0      | Rep Stress Incr | YES             | WB        | 0.00 | Horz(CT) | 0.00  | 3     | n/a    | n/a |               |          |
| BCLL         | 0.0*     | Code            | IRC2018/TPI2014 | Matrix-MP |      |          |       |       |        |     |               |          |
| BCDL         | 10.0     |                 |                 |           |      |          |       |       |        |     |               |          |
|              |          |                 |                 |           |      |          |       |       |        |     | Weight: 13 lb | FT = 20% |

#### LUMBER

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

#### BRACING

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

**REACTIONS** (size) 2=0-3-0, 3= Mechanical, 4= Mechanical  
Max Horiz 2=49 (LC 12)  
Max Uplift 2=-87 (LC 12), 3=-33 (LC 12), 4=-16 (LC 12)  
Max Grav 2=208 (LC 2), 3=78 (LC 2), 4=61 (LC 7)

**FORCES** (lb) - Maximum Compression/Maximum Tension

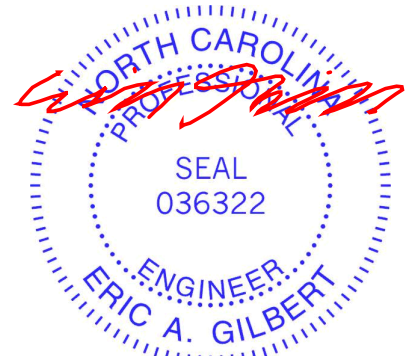
TOP CHORD 1-2=0/21, 2-3=-47/24  
BOT CHORD 2-4=-51/44

#### NOTES

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-2-8 to 1-9-8, Interior (1) 1-9-8 to 3-6-12 zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); Pg=10.0 psf; Pf=7.7 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 7.7 psf on overhangs non-concurrent with other live loads.

- 5) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 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 3-06-00 tall by 2-00-00 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 33 lb uplift at joint 3, 87 lb uplift at joint 2 and 16 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.

**LOAD CASE(S)** Standard



May 12, 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))

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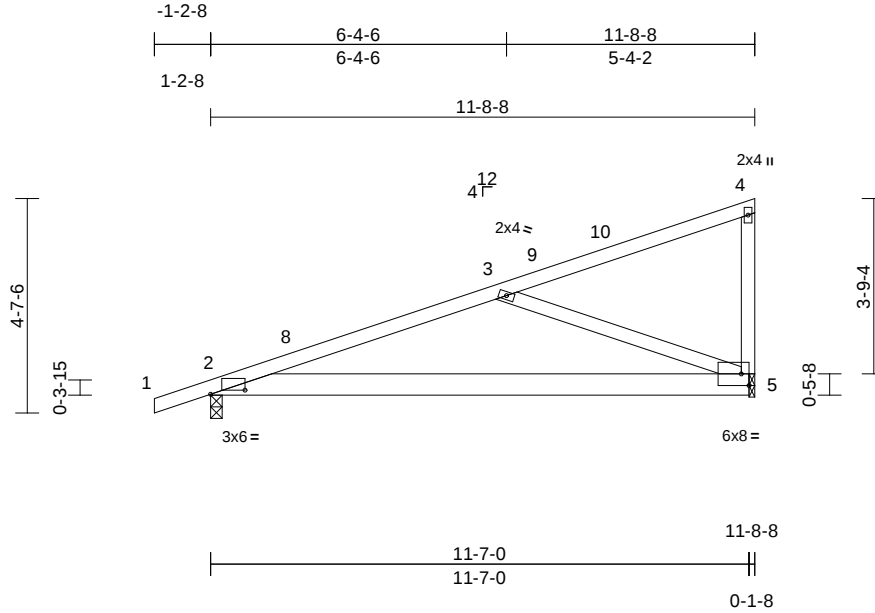
|              |       |            |     |     |                          |           |
|--------------|-------|------------|-----|-----|--------------------------|-----------|
| Job          | Truss | Truss Type | Qty | Ply | A669 Kipling A           | 173370373 |
| P02608-25469 | M1    | Monopitch  | 4   | 1   | Job Reference (optional) |           |

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Fri May 09 08:46:17

Page: 1

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Scale = 1:49.6

Plate Offsets (X, Y): [2:0-8-14,0-1-1]

| Loading      | (psf)    | Spacing         | 2-0-0           | CSI       |      | DEFL     | in    | (loc) | l/defl | L/d | PLATES        | GRIP     |
|--------------|----------|-----------------|-----------------|-----------|------|----------|-------|-------|--------|-----|---------------|----------|
| TCLL (roof)  | 20.0     | Plate Grip DOL  | 1.25            | TC        | 0.58 | Vert(LL) | -0.16 | 5-7   | >865   | 240 | MT20          | 244/190  |
| Snow (Pf/Pg) | 7.7/10.0 | Lumber DOL      | 1.25            | BC        | 0.56 | Vert(CT) | -0.33 | 5-7   | >414   | 180 |               |          |
| TCDL         | 7.0      | Rep Stress Incr | YES             | WB        | 0.35 | Horz(CT) | 0.01  | 5     | n/a    | n/a |               |          |
| BCLL         | 0.0*     | Code            | IRC2018/TPI2014 | Matrix-MS |      |          |       |       |        |     |               |          |
| BCDL         | 10.0     |                 |                 |           |      |          |       |       |        |     |               |          |
|              |          |                 |                 |           |      |          |       |       |        |     | Weight: 61 lb | FT = 20% |

#### LUMBER

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

#### BRACING

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

#### REACTIONS

(size) 2=0-3-0, 5=0-1-8  
Max Horiz 2=127 (LC 12)  
Max Uplift 2=-184 (LC 12), 5=-176 (LC 12)  
Max Grav 2=499 (LC 2), 5=419 (LC 2)

#### FORCES

(lb) - Maximum Compression/Maximum Tension

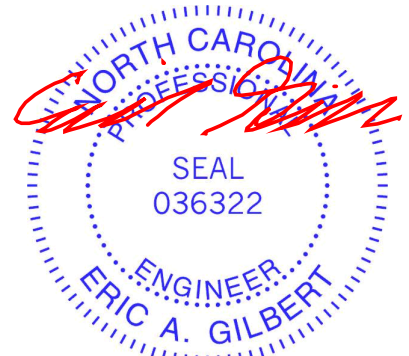
TOP CHORD 1-2=0/23, 2-3=-600/261, 3-4=-90/20, 4-5=-108/69  
BOT CHORD 2-5=-355/557  
WEBS 3-5=-558/312

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-2-8 to 1-9-8, Interior (1) 1-9-8 to 11-6-12 zone; porch 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=1.25 Plate DOL=1.25); Pg=10.0 psf; Pf=7.7 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 7.7 psf on overhangs non-concurrent with other live loads.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate at joint(s) 5.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 184 lb uplift at joint 2 and 176 lb uplift at joint 5.
- 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.

LOAD CASE(S) Standard



May 12, 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)

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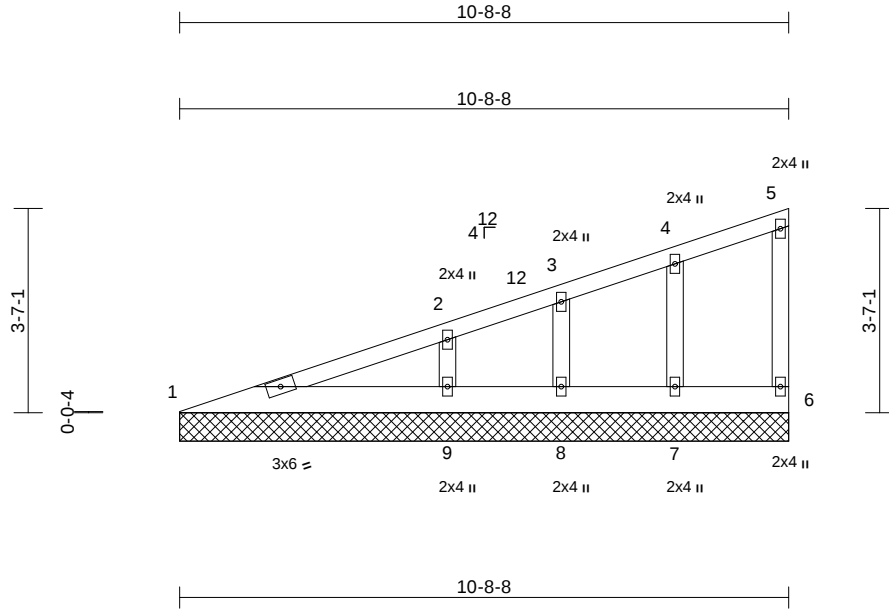
|              |       |            |     |     |                          |           |
|--------------|-------|------------|-----|-----|--------------------------|-----------|
| Job          | Truss | Truss Type | Qty | Ply | A669 Kipling A           | 173370374 |
| P02608-25469 | M1E   | Monopitch  | 1   | 1   | Job Reference (optional) |           |

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Apr 24 2025 Print: 8.830 S Apr 24 2025 MiTek Industries, Inc. Fri May 09 08:46:17

Page: 1

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Scale = 1:40.5

| Loading      | (psf)    | Spacing         | 2-0-0           | CSI       | DEFL | in        | (loc) | l/defl | L/d | PLATES        | GRIP     |
|--------------|----------|-----------------|-----------------|-----------|------|-----------|-------|--------|-----|---------------|----------|
| TCLL (roof)  | 20.0     | Plate Grip DOL  | 1.25            | TC        | 0.09 | Vert(LL)  | n/a   | -      | 999 | MT20          | 244/190  |
| Snow (Pf/Pg) | 7.7/10.0 | Lumber DOL      | 1.25            | BC        | 0.12 | Vert(TL)  | n/a   | -      | 999 |               |          |
| TCDL         | 7.0      | Rep Stress Incr | YES             | WB        | 0.04 | Horiz(TL) | 0.00  | 6      | n/a |               |          |
| BCLL         | 0.0*     | Code            | IRC2018/TPI2014 | Matrix-MS |      |           |       |        |     |               |          |
| BCDL         | 10.0     |                 |                 |           |      |           |       |        |     |               |          |
|              |          |                 |                 |           |      |           |       |        |     | Weight: 51 lb | FT = 20% |

#### LUMBER

|           |             |
|-----------|-------------|
| TOP CHORD | 2x4 SP No.2 |
| BOT CHORD | 2x6 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.                                   |

|                  |            |                                                                          |
|------------------|------------|--------------------------------------------------------------------------|
| <b>REACTIONS</b> | (size)     | 1=10-8-8, 6=10-8-8, 7=10-8-8, 8=10-8-8, 9=10-8-8                         |
|                  | Max Horiz  | 1=97 (LC 12)                                                             |
|                  | Max Uplift | 1=-4 (LC 12), 6=-13 (LC 12), 7=-40 (LC 12), 8=-16 (LC 12), 9=-77 (LC 12) |
|                  | Max Grav   | 1=143 (LC 2), 6=50 (LC 2), 7=183 (LC 2), 8=60 (LC 22), 9=355 (LC 2)      |

#### FORCES

|           |                                                            |
|-----------|------------------------------------------------------------|
|           | (lb) - Maximum Compression/Maximum Tension                 |
| TOP CHORD | 5-6=-39/39, 1-2=-207/47, 2-3=-90/28, 3-4=-57/20, 4-5=-19/9 |
| BOT CHORD | 1-9=-154/185, 8-9=-1/0, 7-8=-1/0, 6-7=-1/0                 |
| WEBS      | 4-7=-120/111, 3-8=-85/89, 2-9=-161/138                     |

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=4.2psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) 0-0-0 to 3-0-0, Exterior(2N) 3-0-0 to 10-6-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); Pg=10.0 psf; Pf=7.7 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.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 4 lb uplift at joint 1, 13 lb uplift at joint 6, 40 lb uplift at joint 7, 16 lb uplift at joint 8 and 77 lb uplift at joint 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.

**LOAD CASE(S)** Standard



May 12, 2025

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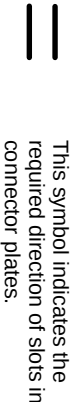
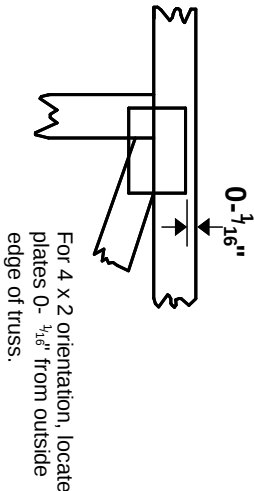
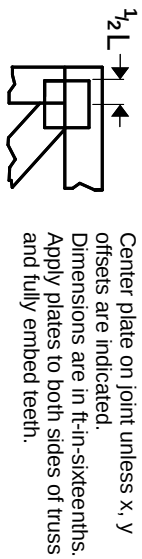
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria 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)

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# Symbols

## PLATE LOCATION AND ORIENTATION



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

## PLATE SIZE

**4 X 4**

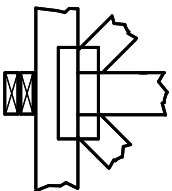
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## 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.

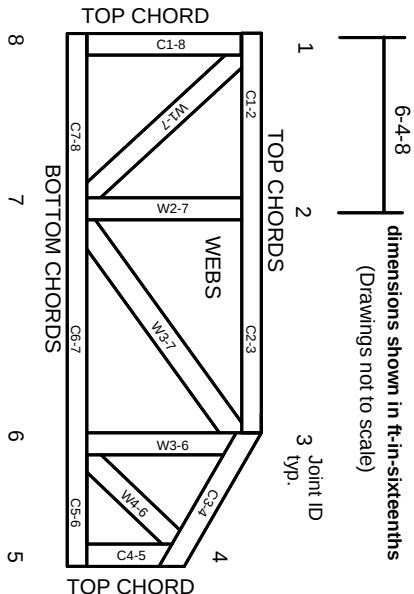
## BEARING



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