

**Trenco**

818 Soundside Rd  
Edenton, NC 27932

Re: 250112-A  
106 Ducks Landing

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

Pages or sheets covered by this seal: I75317399 thru I75317412

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

North Carolina COA: C-0844



August 1, 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 | 106 Ducks Landing |
| 250112-A | A02GE | GABLE      | 1   | 1   | 175317399         |

Comtech, Inc., Fayetteville, NC - 28314,

25.2.0 s Jul 24 2025 MiTek Industries, Inc. Thu Jul 31 11:33:31 2025 Page 1

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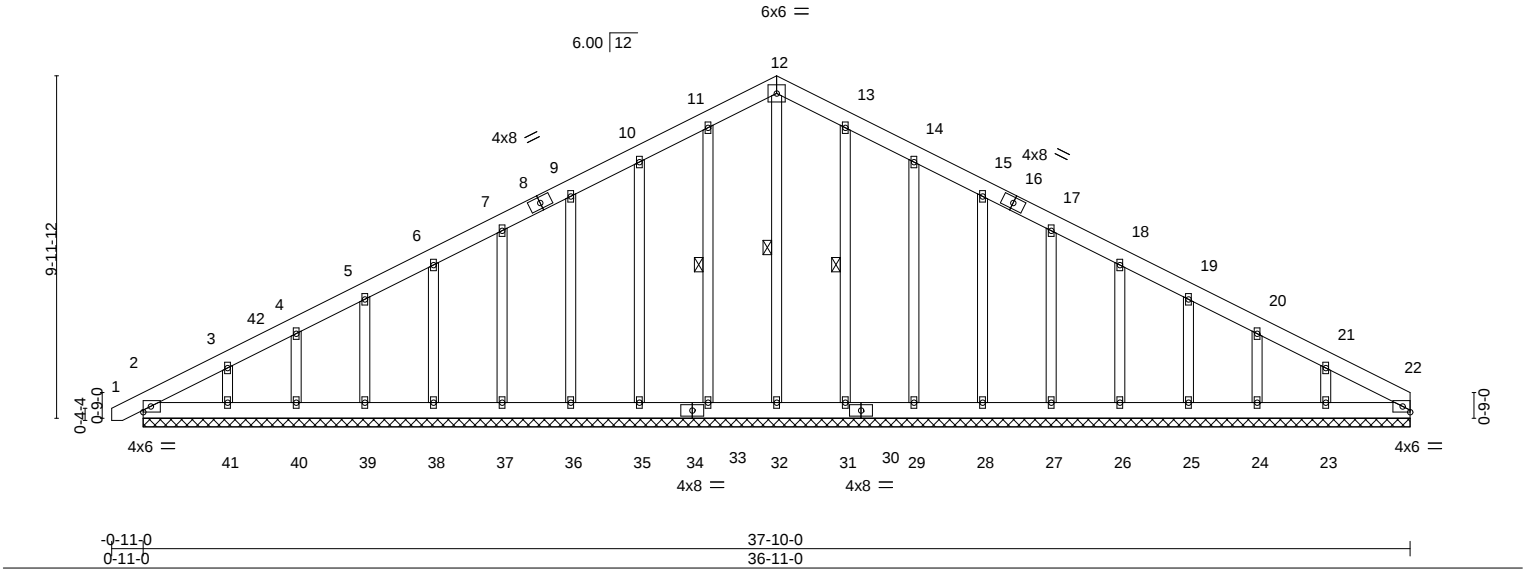
Job Reference (optional)

-Q-11-0  
0-11-0

19-4-8  
18-5-8

37-10-0  
18-5-8

Scale = 1:67.1



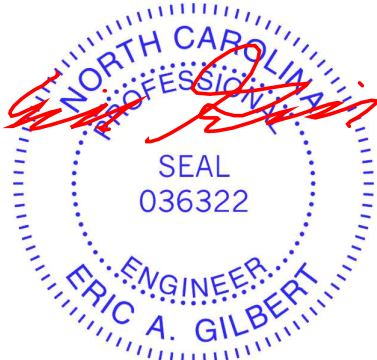
| LOADING (psf) | SPACING-             | CSI.     | DEFL.    | VERT (LL) | VERT (CT) | HORZ (CT) | PLATES         | GRIP     |
|---------------|----------------------|----------|----------|-----------|-----------|-----------|----------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.07  | in (loc) | -0.00     | 0.00      | 0.01      | MT20           | 244/190  |
| TCDL 10.0     | Plate Grip DOL 1.15  | BC 0.03  | l/defl   | 1 n/r     | 1 n/r     | 22 n/a    |                |          |
| BCLL 0.0 *    | Lumber DOL 1.15      | WB 0.11  | L/d      | 120       | 120       | n/a       |                |          |
| BCDL 10.0     | Rep Stress Incr YES  | Matrix-S |          |           |           |           | Weight: 308 lb | FT = 25% |
|               | Code IRC2021/TPI2014 |          |          |           |           |           |                |          |

| LUMBER-               | BRACING-                                                                  |
|-----------------------|---------------------------------------------------------------------------|
| TOP CHORD 2x6 SP No.1 | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins. |
| BOT CHORD 2x6 SP No.1 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.            |
| OTHERS 2x4 SP No.2    | WEBS 1 Row at midpt                                                       |

**REACTIONS.** All bearings 36-11-0.  
(lb) - Max Horz 2=262(LC 12)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 33, 31, 24 except 35=-119(LC 12), 36=-108(LC 12), 37=-107(LC 12), 38=-108(LC 12), 39=-109(LC 12), 40=-101(LC 12), 41=-168(LC 12), 29=-123(LC 13), 28=-108(LC 13), 27=-107(LC 13), 26=-108(LC 13), 25=-109(LC 13), 23=-167(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 2, 22, 32, 33, 35, 36, 37, 38, 39, 40, 41, 31, 29, 28, 27, 26, 25, 24, 23

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-350/115, 7-9=-88/252, 9-10=-115/318, 10-11=-145/402, 11-12=-164/456, 12-13=-164/456, 13-14=-145/402, 14-15=-115/318, 21-22=-252/81  
BOT CHORD 2-41=-72/276, 40-41=-72/276, 39-40=-72/276, 38-39=-72/276, 37-38=-72/276, 36-37=-72/276, 35-36=-72/276, 33-35=-72/276, 32-33=-72/276, 31-32=-72/276, 29-31=-72/276, 28-29=-72/276, 27-28=-72/276, 26-27=-72/276, 25-26=-72/276, 24-25=-72/276, 23-24=-72/276, 22-23=-72/276  
WEBS 3-41=-140/283, 21-23=-149/307

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-9-2 to 3-7-11, Exterior(2N) 3-7-11 to 18-5-8, Corner(3R) 18-5-8 to 22-10-5, Exterior(2N) 22-10-5 to 36-11-0 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.
  - 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 33, 31, 24 except (jt=lb) 35=119, 36=108, 37=107, 38=108, 39=109, 40=101, 41=168, 29=123, 28=108, 27=107, 26=108, 25=109, 23=167.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



August 1,2025

**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 | 106 Ducks Landing |
| 250112-A | A02   | COMMON     | 4   | 1   |                   |

I75317400

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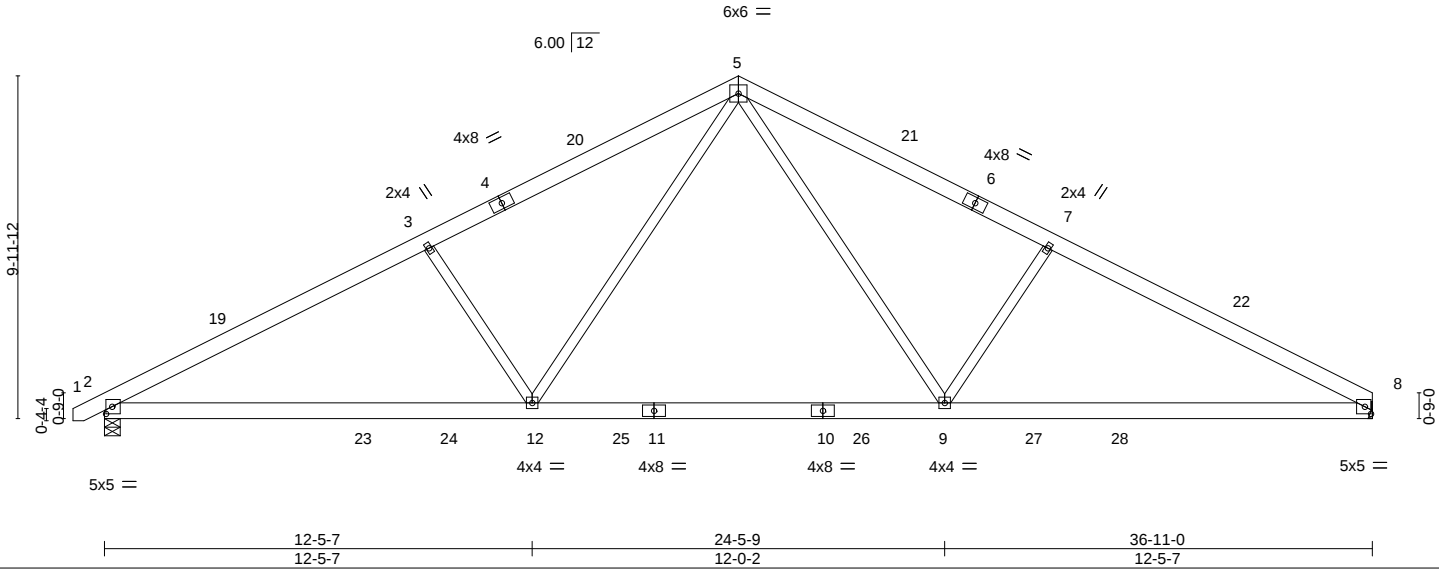
25.2.0 s Jul 24 2025 MiTek Industries, Inc. Thu Jul 31 11:33:29 2025 Page 1

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Job Reference (optional)

0-11-0 9-5-6 18-5-8 27-5-10 36-11-0  
0-11-0 9-5-6 9-0-2 9-0-2 9-5-6

Scale = 1:67.1



|                       |                      |                                  |           |                  |            |                  |     |                   |          |
|-----------------------|----------------------|----------------------------------|-----------|------------------|------------|------------------|-----|-------------------|----------|
| Plate Offsets (X,Y)-- |                      | [2:0-2-2,0-2-8], [8:0-2-2,0-2-8] |           | 12-5-7<br>12-5-7 |            | 24-5-9<br>12-0-2 |     | 36-11-0<br>12-5-7 |          |
| LOADING (psf)         | SPACING-             | 2-0-0                            | CSI.      | DEFL.            | in (loc)   | l/defl           | L/d | PLATES            | GRIP     |
| TCLL 20.0             | Plate Grip DOL       | 1.15                             | TC 0.28   | Vert(LL)         | -0.30 9-12 | >999             | 360 | MT20              | 244/190  |
| TCDL 10.0             | Lumber DOL           | 1.15                             | BC 0.72   | Vert(CT)         | -0.43 9-12 | >999             | 240 |                   |          |
| BCLL 0.0 *            | Rep Stress Incr      | YES                              | WB 0.60   | Horz(CT)         | 0.07 8     | n/a              | n/a |                   |          |
| BCDL 10.0             | Code IRC2021/TPI2014 |                                  | Matrix-AS | Wind(LL)         | 0.08 12    | >999             | 240 | Weight: 234 lb    | FT = 25% |

|                       |                                                       |
|-----------------------|-------------------------------------------------------|
| LUMBER-               | BRACING-                                              |
| TOP CHORD 2x6 SP No.1 | TOP CHORD Structural wood sheathing directly applied. |
| BOT CHORD 2x6 SP No.1 | BOT CHORD Rigid ceiling directly applied.             |
| WEBS 2x4 SP No.2      |                                                       |

|            |                                         |
|------------|-----------------------------------------|
| REACTIONS. | (size) 2=0-5-8, 8=Mechanical            |
|            | Max Horz 2=168(LC 9)                    |
|            | Max Uplift 2=-282(LC 12), 8=-265(LC 13) |
|            | Max Grav 2=1787(LC 2), 8=1749(LC 2)     |

|           |                                                                              |
|-----------|------------------------------------------------------------------------------|
| FORCES.   | (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. |
| TOP CHORD | 2-3=-2996/953, 3-5=-2754/960, 5-7=-2756/969, 7-8=-2998/963                   |
| BOT CHORD | 2-12=-725/2655, 9-12=-343/1770, 8-9=-706/2600                                |
| WEBS      | 5-9=-271/1187, 7-9=-540/444, 5-12=-269/1185, 3-12=-538/444                   |

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-9-2 to 3-7-11, Interior(1) 3-7-11 to 18-5-8, Exterior(2R) 18-5-8 to 22-10-5, Interior(1) 22-10-5 to 36-11-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=282, 8=265.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



August 1,2025

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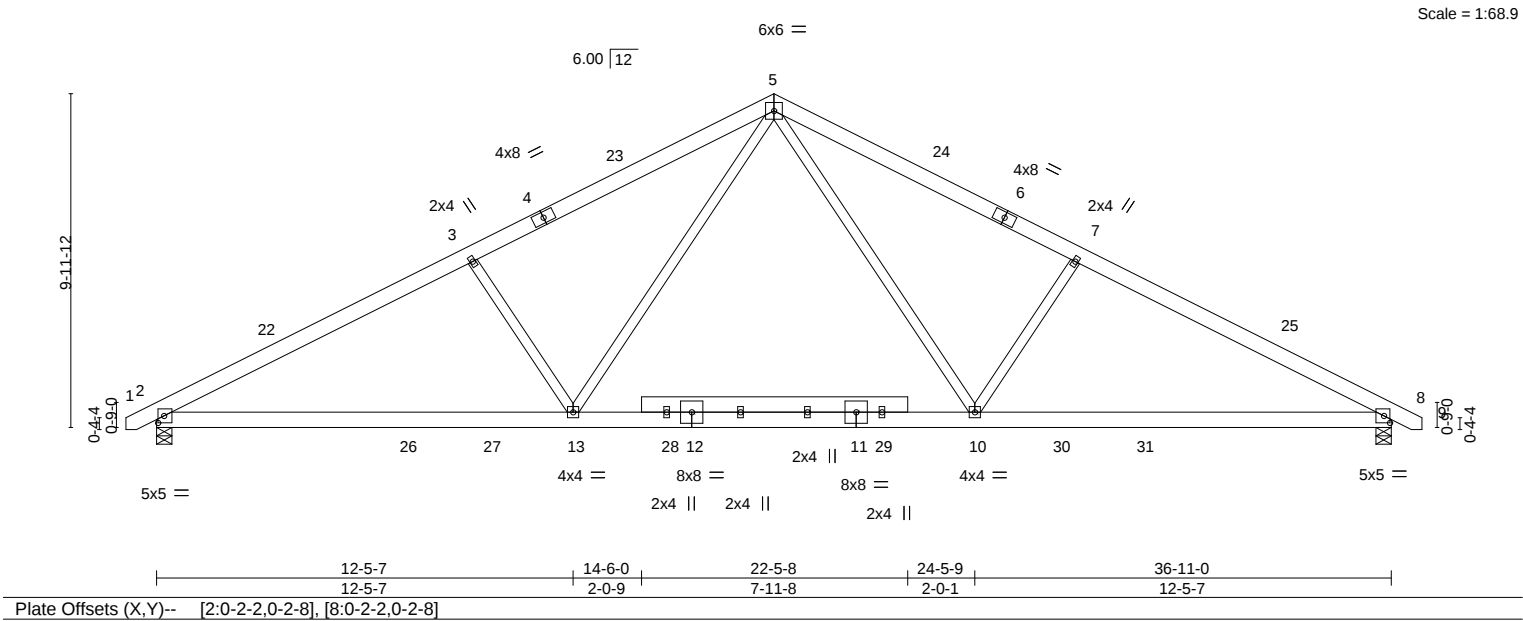


|          |       |            |     |     |                          |           |
|----------|-------|------------|-----|-----|--------------------------|-----------|
| Job      | Truss | Truss Type | Qty | Ply | 106 Ducks Landing        | I75317402 |
| 250112-A | A01A  | COMMON     | 3   | 1   | Job Reference (optional) |           |

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| LOADING (psf) | SPACING-             | 2-0-0 | CSI.      | DEFL.    | in (loc)    | l/defl | L/d | PLATES         | GRIP     |
|---------------|----------------------|-------|-----------|----------|-------------|--------|-----|----------------|----------|
| TCLL 20.0     | Plate Grip DOL       | 1.15  | TC 0.28   | Vert(LL) | -0.28 10-13 | >999   | 360 | MT20           | 244/190  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.71   | Vert(CT) | -0.41 10-13 | >999   | 240 |                |          |
| BCLL 0.0 *    | Rep Stress Incr      | YES   | WB 0.59   | Horz(CT) | 0.07 8      | n/a    | n/a |                |          |
| BCDL 10.0     | Code IRC2021/TP12014 |       | Matrix-AS | Wind(LL) | 0.08 13     | >999   | 240 | Weight: 255 lb | FT = 25% |

|                           |                                                       |
|---------------------------|-------------------------------------------------------|
| <b>LUMBER-</b>            | <b>BRACING-</b>                                       |
| TOP CHORD 2x6 SP No.1     | TOP CHORD Structural wood sheathing directly applied. |
| BOT CHORD 2x6 SP No.1     | BOT CHORD Rigid ceiling directly applied.             |
| WEBS 2x4 SP No.2 *Except* |                                                       |
| 14-15: 2x6 SP No.1        |                                                       |

**REACTIONS.** (size) 2=0-5-8 (min. 0-2-2), 8=0-5-8 (min. 0-2-2)  
Max Horz 2=167(LC 10)  
Max Uplift 2=282(LC 12), 8=282(LC 13)  
Max Grav 2=1778(LC 2), 8=1778(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-22=-2975/923, 3-22=-2883/953, 3-4=-2732/915, 4-23=-2626/936, 5-23=-2626/960, 5-24=-2626/960, 6-24=-2626/936, 6-7=-2732/915, 7-25=-2883/953, 8-25=-2975/923  
BOT CHORD 2-26=-688/2643, 26-27=-688/2643, 13-27=-688/2643, 13-28=-306/1763, 12-28=-306/1763, 11-12=-306/1763, 11-29=-306/1763, 10-29=-306/1763, 10-30=-685/2579, 30-31=-685/2579, 8-31=-685/2579  
WEBS 5-10=-270/1175, 7-10=-538/444, 5-13=-270/1174, 3-13=-538/444

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-9-2 to 3-7-11, Interior(1) 3-7-11 to 18-5-8, Exterior(2R) 18-5-8 to 22-10-5, Interior(1) 22-10-5 to 37-8-2 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 282 lb uplift at joint 2 and 282 lb uplift at joint 8.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



August 1,2025

|          |       |            |     |     |                          |
|----------|-------|------------|-----|-----|--------------------------|
| Job      | Truss | Truss Type | Qty | Ply | 106 Ducks Landing        |
| 250112-A | A01   | COMMON     | 3   | 1   |                          |
|          |       |            |     |     | Job Reference (optional) |

I75317403

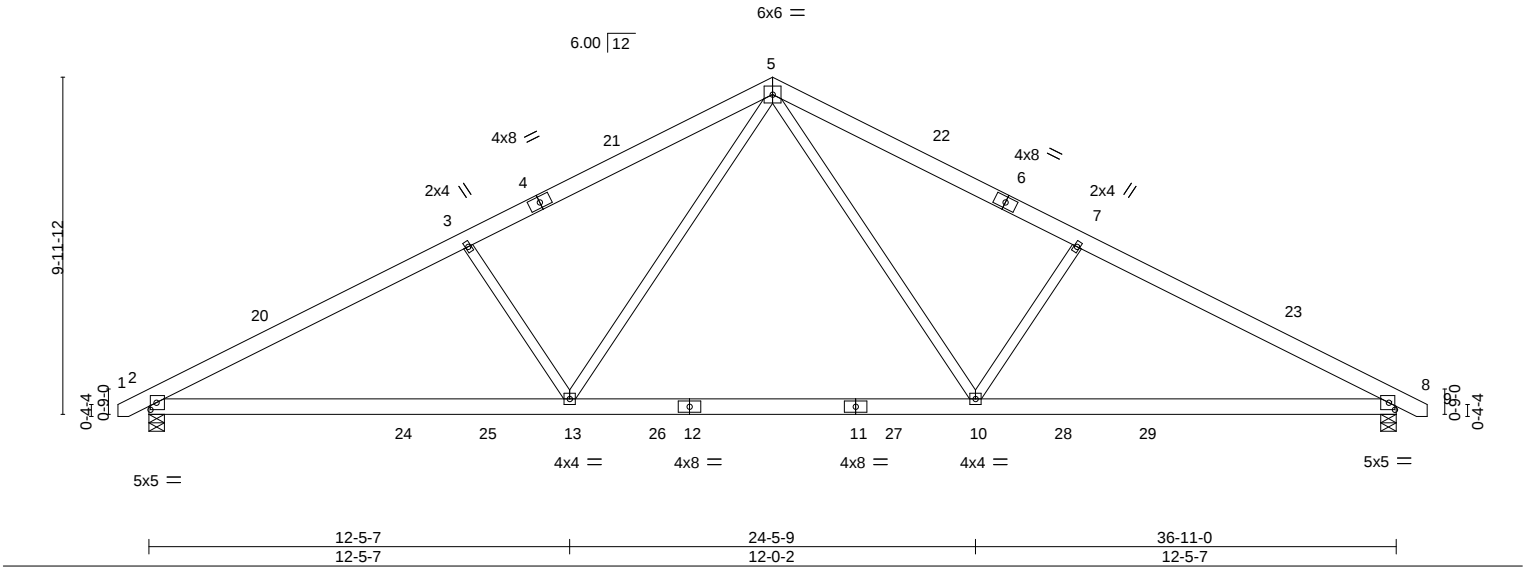
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-0-11-0 9-5-6 18-5-8 27-5-10 36-11-0 37-10-0  
0-11-0 9-5-6 9-0-2 9-0-2 9-5-6 0-11-0

Scale = 1:68.2



| Plate Offsets (X,Y)-- [2:0-2-2,0-2-8], [8:0-2-2,0-2-8] |                      |      |           |          |       |       |        |     |                |
|--------------------------------------------------------|----------------------|------|-----------|----------|-------|-------|--------|-----|----------------|
| LOADING (psf)                                          | SPACING-             |      | CSI.      | DEFL.    | in    | (loc) | l/defl | L/d | PLATES         |
| TCLL 20.0                                              | Plate Grip DOL       | 1.15 | TC 0.28   | Vert(LL) | -0.30 | 10-13 | >999   | 360 | MT20           |
| TCDL 10.0                                              | Lumber DOL           | 1.15 | BC 0.72   | Vert(CT) | -0.43 | 10-13 | >999   | 240 |                |
| BCLL 0.0 *                                             | Rep Stress Incr      | YES  | WB 0.59   | Horz(CT) | 0.07  | 8     | n/a    | n/a |                |
| BCDL 10.0                                              | Code IRC2021/TPI2014 |      | Matrix-AS | Wind(LL) | 0.08  | 13    | >999   | 240 |                |
|                                                        |                      |      |           |          |       |       |        |     | Weight: 237 lb |
|                                                        |                      |      |           |          |       |       |        |     | FT = 25%       |

| LUMBER-   |             | BRACING-  |                                             |
|-----------|-------------|-----------|---------------------------------------------|
| TOP CHORD | 2x6 SP No.1 | TOP CHORD | Structural wood sheathing directly applied. |
| BOT CHORD | 2x6 SP No.1 | BOT CHORD | Rigid ceiling directly applied.             |
| WEBS      | 2x4 SP No.2 |           |                                             |

**REACTIONS.** (size) 2=0-5-8, 8=0-5-8  
Max Horz 2=-167(LC 10)  
Max Uplift 2=-282(LC 12), 8=-282(LC 13)  
Max Grav 2=1787(LC 2), 8=1787(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-2996/953, 3-5=-2753/960, 5-7=-2753/960, 7-8=-2996/953  
BOT CHORD 2-13=-688/2661, 10-13=-306/1776, 8-10=-685/2597  
WEBS 5-10=-270/1185, 7-10=-538/444, 5-13=-270/1185, 3-13=-538/444

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=150mph (3-second gust) Vasd=119mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-9-2 to 3-7-11, Interior(1) 3-7-11 to 18-5-8, Exterior(2R) 18-5-8 to 22-10-5, Interior(1) 22-10-5 to 37-8-2 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 2=282, 8=282.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



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ENGINEERING BY  
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A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

|          |       |            |     |     |                   |
|----------|-------|------------|-----|-----|-------------------|
| Job      | Truss | Truss Type | Qty | Ply | 106 Ducks Landing |
| 250112-A | A01GE | GABLE      | 1   | 1   | 175317404         |

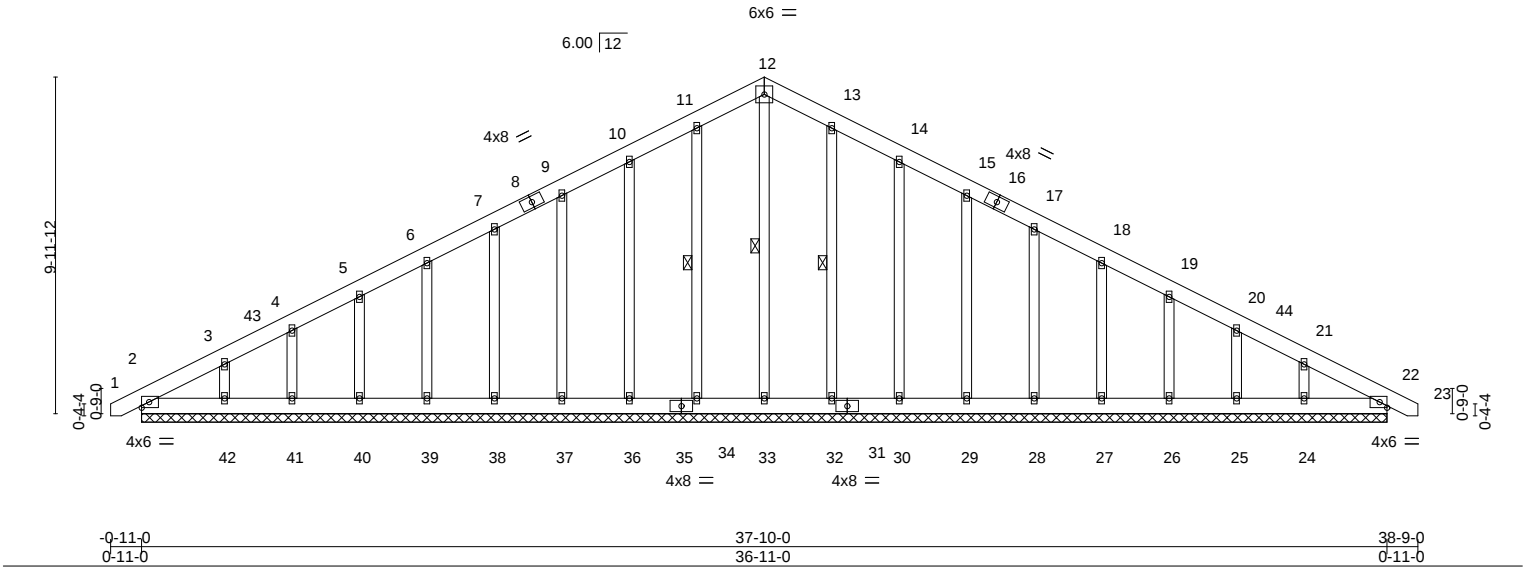
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-Q-11-0 19-4-8 37-10-0 38-9-0  
0-11-0 18-5-8 18-5-8 0-11-0

Scale = 1:68.3



| LOADING (psf) | SPACING-             | CSI.     | DEFL.                    | PLATES         | GRIP     |
|---------------|----------------------|----------|--------------------------|----------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.07  | in (loc) l/defl L/d      | MT20           | 244/190  |
| TCDL 10.0     | Plate Grip DOL 1.15  | BC 0.03  | Vert(LL) 0.00 22 n/r 120 |                |          |
| BCLL 0.0 *    | Lumber DOL 1.15      | WB 0.11  | Vert(CT) 0.00 22 n/r 120 |                |          |
| BCDL 10.0     | Rep Stress Incr YES  | Matrix-S | Horz(CT) 0.01 22 n/a n/a |                |          |
|               | Code IRC2021/TPI2014 |          |                          | Weight: 311 lb | FT = 25% |

| LUMBER-               | BRACING-                                                                  |
|-----------------------|---------------------------------------------------------------------------|
| TOP CHORD 2x6 SP No.1 | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins. |
| BOT CHORD 2x6 SP No.1 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.            |
| OTHERS 2x4 SP No.2    | WEBS 1 Row at midpt 12-33, 11-34, 13-32                                   |

**REACTIONS.** All bearings 36-11-0.  
(lb) - Max Horz 2=259(LC 12)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 22, 34, 32 except 36=-120(LC 12), 37=-108(LC 12), 38=-107(LC 12), 39=-108(LC 12), 40=-109(LC 12), 41=-101(LC 12), 42=-168(LC 12), 30=-123(LC 13), 29=-108(LC 13), 28=-107(LC 13), 27=-108(LC 13), 26=-109(LC 13), 25=-101(LC 13), 24=-159(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 2, 22, 33, 34, 36, 37, 38, 39, 40, 41, 42, 32, 30, 29, 28, 27, 26, 25, 24

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-348/117, 7-9=-89/254, 9-10=-116/318, 10-11=-145/402, 11-12=-164/455, 12-13=-164/455, 13-14=-145/402, 14-15=-116/318  
BOT CHORD 2-42=-74/278, 41-42=-74/278, 40-41=-74/278, 39-40=-74/278, 38-39=-74/278, 37-38=-74/278, 36-37=-74/278, 34-36=-74/278, 33-34=-74/278, 32-33=-74/278, 30-32=-74/278, 29-30=-74/278, 28-29=-74/278, 27-28=-74/278, 26-27=-74/278, 25-26=-74/278, 24-25=-74/278, 22-24=-74/278  
WEBS 3-42=-140/283, 21-24=-140/280

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-9-2 to 3-7-11, Exterior(2N) 3-7-11 to 18-5-8, Corner(3R) 18-5-8 to 22-10-5, Exterior(2N) 22-10-5 to 37-8-2 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.
  - 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 22, 34, 32 except (jt=lb) 36=120, 37=108, 38=107, 39=108, 40=109, 41=101, 42=168, 30=123, 29=108, 28=107, 27=108, 26=109, 25=101, 24=159.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



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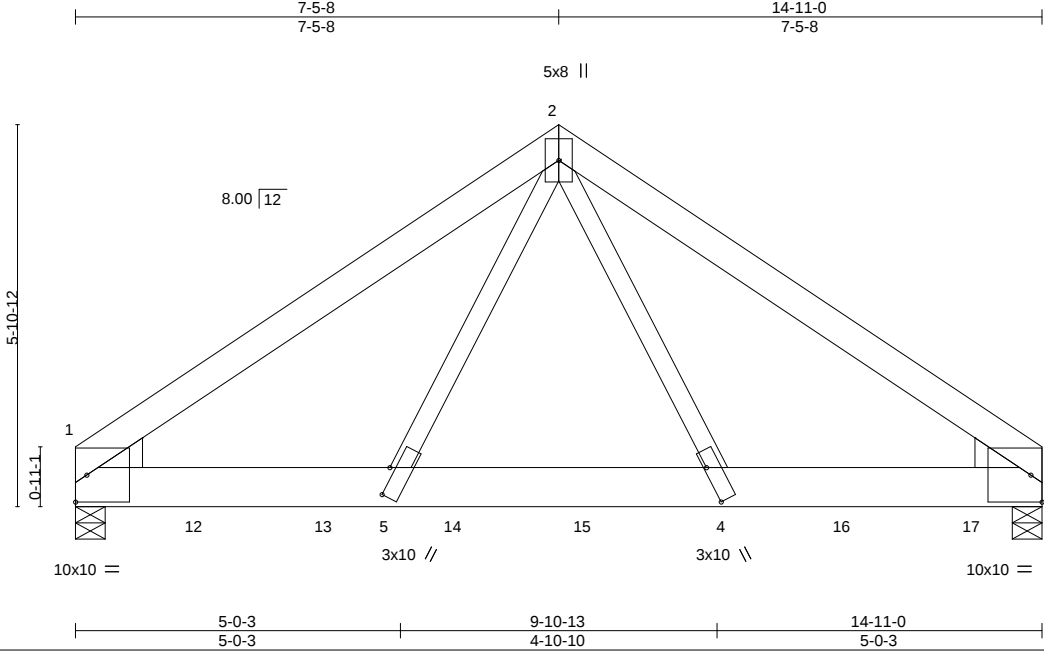
|          |        |               |     |     |                          |
|----------|--------|---------------|-----|-----|--------------------------|
| Job      | Truss  | Truss Type    | Qty | Ply | 106 Ducks Landing        |
| 250112-A | B02GRD | COMMON GIRDER | 1   | 2   | Job Reference (optional) |

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Scale = 1:35.6

| Plate Offsets (X,Y)-- [4:0-6-14,0-0-8], [5:0-5-2,0-1-0] |       |                      |      |           |      |          |       |                |          |
|---------------------------------------------------------|-------|----------------------|------|-----------|------|----------|-------|----------------|----------|
| LOADING (psf)                                           |       | SPACING-             |      | CSI.      |      | DEFL.    |       | PLATES         |          |
| TCLL                                                    | 20.0  | Plate Grip DOL       | 1.15 | TC        | 0.27 | Vert(LL) | -0.08 | MT20           | 244/190  |
| TCDL                                                    | 10.0  | Lumber DOL           | 1.15 | BC        | 0.70 | Vert(CT) | -0.14 |                |          |
| BCLL                                                    | 0.0 * | Rep Stress Incr      | NO   | WB        | 0.60 | Horz(CT) | 0.03  |                |          |
| BCDL                                                    | 10.0  | Code IRC2021/TP12014 |      | Matrix-MS |      | Wind(LL) | 0.06  | Weight: 217 lb | FT = 25% |

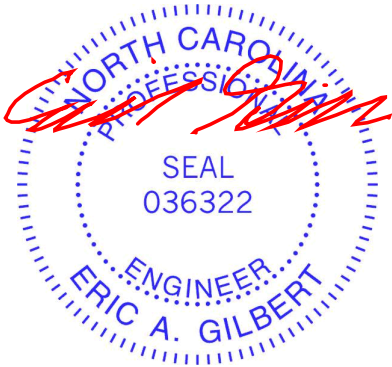
| LUMBER-                                |             | BRACING-  |                                                                 |
|----------------------------------------|-------------|-----------|-----------------------------------------------------------------|
| TOP CHORD                              | 2x6 SP No.1 | TOP CHORD | Structural wood sheathing directly applied or 5-9-0 oc purlins. |
| BOT CHORD                              | 2x8 SP No.1 | BOT CHORD | Rigid ceiling directly applied or 10-0-0 oc bracing.            |
| WEBS                                   | 2x4 SP No.2 |           |                                                                 |
| WEDGE                                  |             |           |                                                                 |
| Left: 2x6 SP No.2 , Right: 2x6 SP No.2 |             |           |                                                                 |

| REACTIONS. |                            |
|------------|----------------------------|
| (size)     | 1=0-5-8, 3=0-5-8           |
| Max Horz   | 1=159(LC 28)               |
| Max Uplift | 1=1013(LC 8), 3=1124(LC 9) |
| Max Grav   | 1=6222(LC 2), 3=6895(LC 2) |

| FORCES.                                                                      |                                               |
|------------------------------------------------------------------------------|-----------------------------------------------|
| (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. |                                               |
| TOP CHORD                                                                    | 1-2=-8079/1326, 2-3=-8159/1340                |
| BOT CHORD                                                                    | 1-5=-1041/6629, 4-5=-717/4569, 3-4=-1025/6699 |
| WEBS                                                                         | 2-4=-771/4875, 2-5=-741/4716                  |

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-5-0 oc.  
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=1013, 3=1124.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1729 lb down and 285 lb up at 1-10-4, 1729 lb down and 285 lb up at 3-10-4, 1729 lb down and 285 lb up at 5-10-4, 1729 lb down and 285 lb up at 7-10-4, 1719 lb down and 285 lb up at 9-10-4, and 1719 lb down and 285 lb up at 11-10-4, and 1719 lb down and 285 lb up at 13-10-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

| LOAD CASE(S) Standard                                                     |  |
|---------------------------------------------------------------------------|--|
| 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15 |  |



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|          |        |               |     |     |                          |
|----------|--------|---------------|-----|-----|--------------------------|
| Job      | Truss  | Truss Type    | Qty | Ply | 106 Ducks Landing        |
| 250112-A | B02GRD | COMMON GIRDER | 1   | 2   | Job Reference (optional) |

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ID:vWFTz60CRi\_Y9uBpUWIOFxz0O6Y-OV35GlfQRzBLOc6dGYxKTOvSUPHrsFzlfGfXDysZAX

**LOAD CASE(S)** Standard  
Uniform Loads (plf)  
Vert: 1-2=-60, 2-3=-60, 6-9=-20  
Concentrated Loads (lb)  
Vert: 4=-1456(B) 12=-1456(B) 13=-1456(B) 14=-1456(B) 15=-1456(B) 16=-1456(B) 17=-1456(B)

*Eric A. Gilbert*



August 1, 2025

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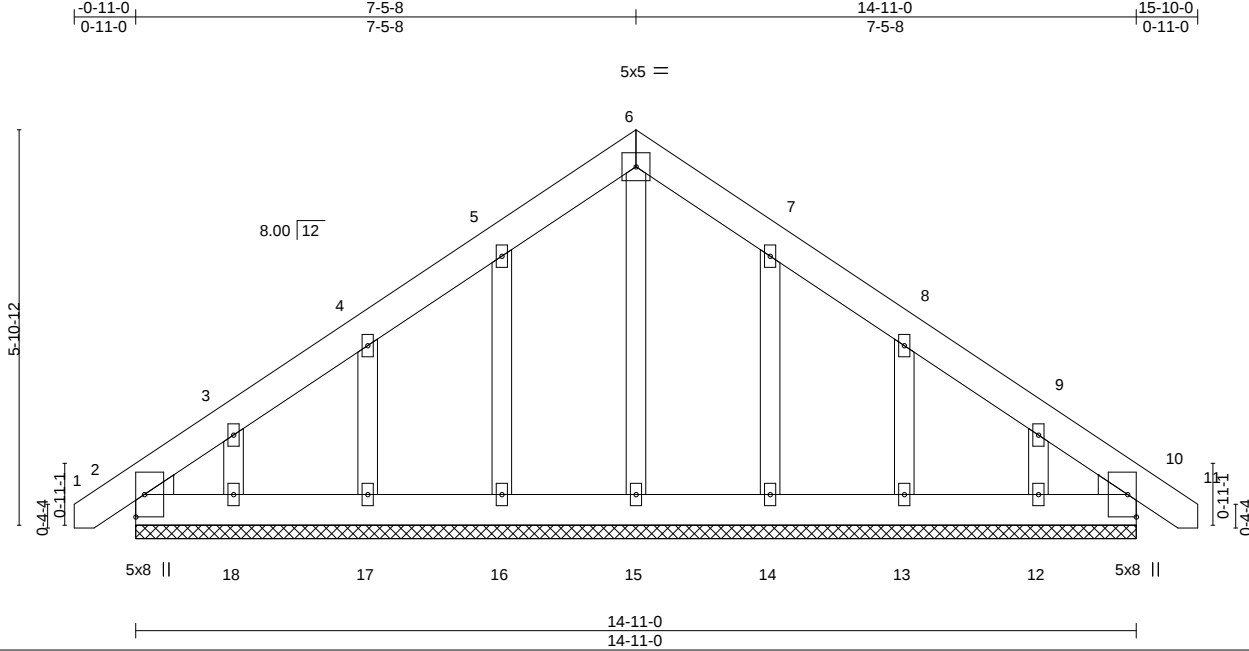
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A MiTek Affiliate  
818 Soundside Road  
Edenton, NC 27932

|          |       |            |     |     |                   |
|----------|-------|------------|-----|-----|-------------------|
| Job      | Truss | Truss Type | Qty | Ply | 106 Ducks Landing |
| 250112-A | B01GE | GABLE      | 1   | 1   | 175317406         |

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Scale = 1:34.4

| LOADING (psf) | SPACING-             | 2-0-0 | CSI.     | DEFL.    | in    | (loc) | l/defl | L/d | PLATES         | GRIP     |
|---------------|----------------------|-------|----------|----------|-------|-------|--------|-----|----------------|----------|
| TCLL 20.0     | Plate Grip DOL       | 1.15  | TC 0.03  | Vert(LL) | -0.00 | 10    | n/r    | 120 | MT20           | 244/190  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.02  | Vert(CT) | -0.00 | 10    | n/r    | 120 |                |          |
| BCLL 0.0 *    | Rep Stress Incr      | YES   | WB 0.05  | Horz(CT) | 0.00  | 10    | n/a    | n/a |                |          |
| BCDL 10.0     | Code IRC2021/TPI2014 |       | Matrix-S |          |       |       |        |     | Weight: 112 lb | FT = 25% |

| LUMBER-                                | BRACING-                                                                  |
|----------------------------------------|---------------------------------------------------------------------------|
| TOP CHORD 2x6 SP No.1                  | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins. |
| BOT CHORD 2x6 SP No.1                  | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.            |
| OTHERS 2x4 SP No.2                     |                                                                           |
| WEDGE                                  |                                                                           |
| Left: 2x4 SP No.2 , Right: 2x4 SP No.2 |                                                                           |

**REACTIONS.** All bearings 14-11-0.  
(lb) - Max Horz 2=219(LC 11)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 10 except 16=122(LC 12), 17=142(LC 12), 18=165(LC 12),  
14=117(LC 13), 13=144(LC 13), 12=155(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 2, 10, 15, 16, 17, 18, 14, 13, 12

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-9-4 to 3-5-8, Interior(1) 3-5-8 to 7-5-8, Exterior(2R) 7-5-8 to 11-10-5, Interior(1) 11-10-5 to 15-8-4 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.
  - 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 10 except (jt=lb) 16=122, 17=142, 18=165, 14=117, 13=144, 12=155.



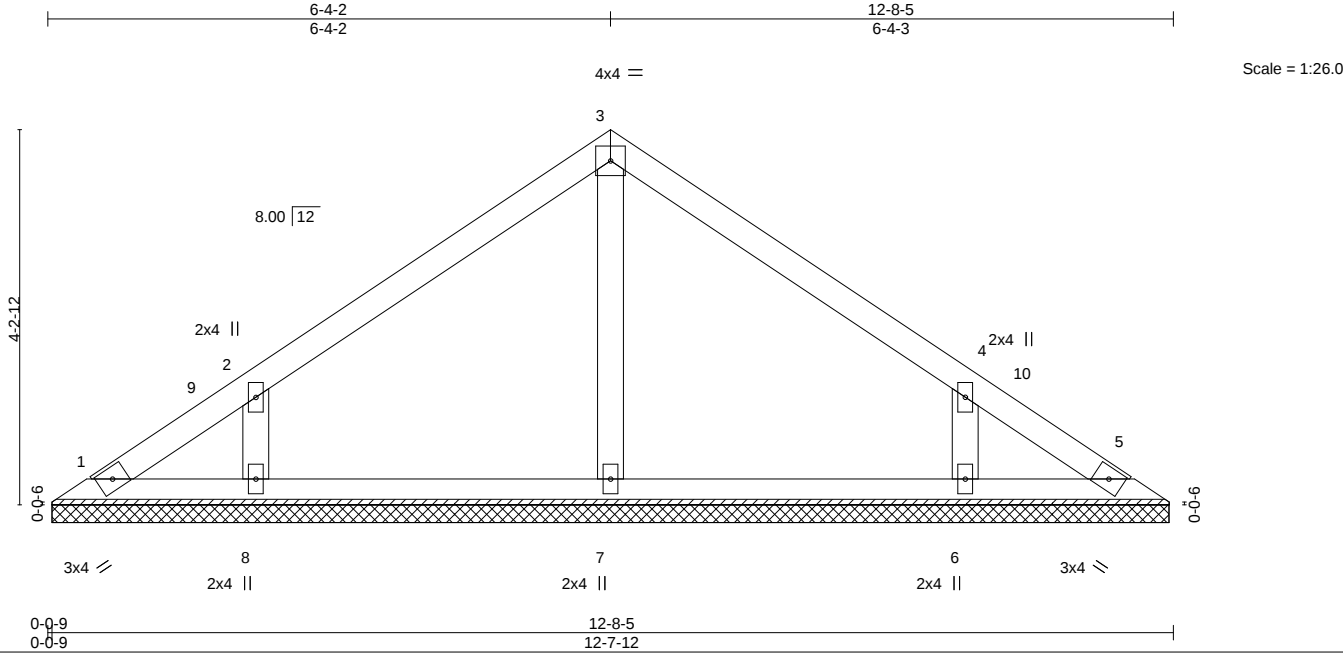
August 1,2025

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|          |       |            |     |     |                          |           |
|----------|-------|------------|-----|-----|--------------------------|-----------|
| Job      | Truss | Truss Type | Qty | Ply | 106 Ducks Landing        | 175317407 |
| 250112-A | VB01  | VALLEY     | 1   | 1   | Job Reference (optional) |           |

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|                       |                 |                 |          |          |          |        |     |               |          |
|-----------------------|-----------------|-----------------|----------|----------|----------|--------|-----|---------------|----------|
| Plate Offsets (X,Y)-- |                 | [4:0-0-0,0-0-0] |          |          |          |        |     |               |          |
| LOADING (psf)         | SPACING-        | 2-0-0           | CSI.     | DEFL.    | in (loc) | l/defl | L/d | PLATES        | GRIP     |
| TCLL 20.0             | Plate Grip DOL  | 1.15            | TC 0.13  | Vert(LL) | n/a      | -      | n/a | 999           | MT20     |
| TCDL 10.0             | Lumber DOL      | 1.15            | BC 0.09  | Vert(CT) | n/a      | -      | n/a | 999           | 244/190  |
| BCLL 0.0 *            | Rep Stress Incr | YES             | WB 0.06  | Horz(CT) | 0.00     | 5      | n/a | n/a           |          |
| BCDL 10.0             | Code            | IRC2021/TPI2014 | Matrix-S |          |          |        |     |               |          |
|                       |                 |                 |          |          |          |        |     | Weight: 48 lb | FT = 25% |

|                |             |                 |                                                                 |
|----------------|-------------|-----------------|-----------------------------------------------------------------|
| <b>LUMBER-</b> |             | <b>BRACING-</b> |                                                                 |
| TOP CHORD      | 2x4 SP No.1 | TOP CHORD       | Structural wood sheathing directly applied or 6-0-0 oc purlins. |
| BOT CHORD      | 2x4 SP No.1 | BOT CHORD       | Rigid ceiling directly applied or 10-0-0 oc bracing.            |
| OTHERS         | 2x4 SP No.2 |                 |                                                                 |

**REACTIONS.** All bearings 12-7-3.  
(lb) - Max Horz 1=-125(LC 8)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-152(LC 12), 6=-152(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=264(LC 1), 8=337(LC 19), 6=336(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
WEBS 2-8=-287/314, 4-6=-286/314

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-5-15 to 4-10-12, Interior(1) 4-10-12 to 6-4-2, Exterior(2R) 6-4-2 to 10-8-15, Interior(1) 10-8-15 to 12-2-6 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=152, 6=152.



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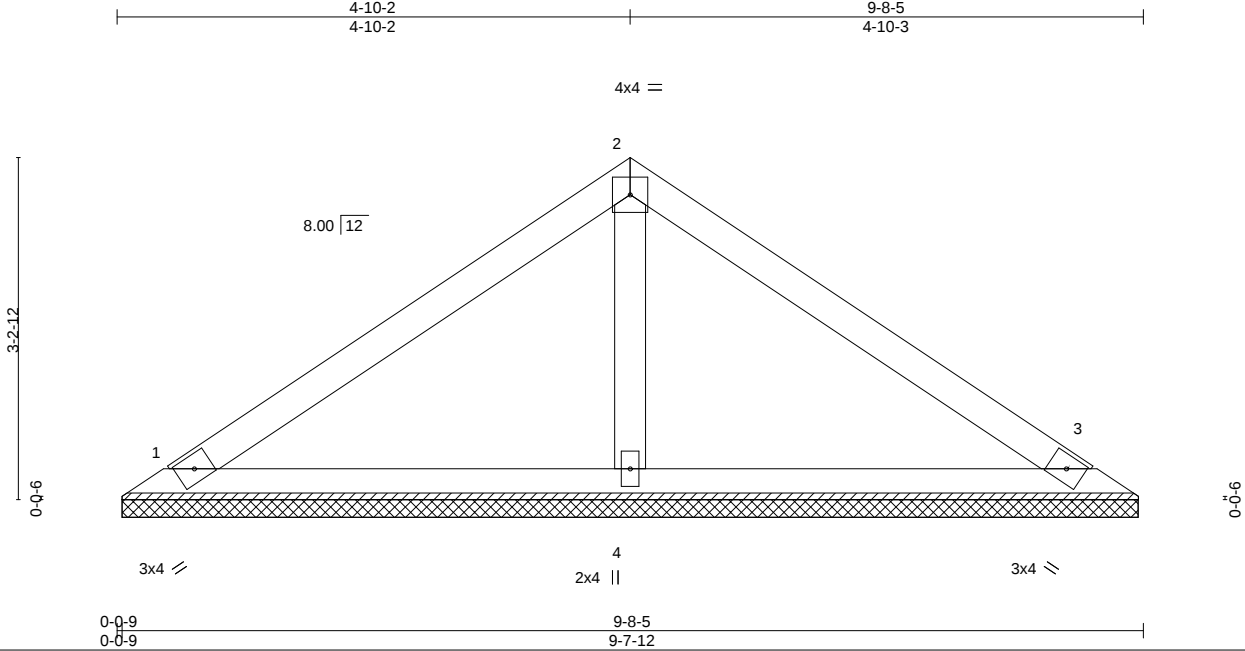
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|          |       |            |     |     |                   |
|----------|-------|------------|-----|-----|-------------------|
| Job      | Truss | Truss Type | Qty | Ply | 106 Ducks Landing |
| 250112-A | VB02  | VALLEY     | 1   | 1   | 175317408         |

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| LOADING (psf) | SPACING-             | 2-0-0 | CSI.     | DEFL.    | in   | (loc) | l/defl | L/d | PLATES        | GRIP     |
|---------------|----------------------|-------|----------|----------|------|-------|--------|-----|---------------|----------|
| TCLL 20.0     | Plate Grip DOL       | 1.15  | TC 0.20  | Vert(LL) | n/a  | -     | n/a    | 999 | MT20          | 244/190  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.14  | Vert(CT) | n/a  | -     | n/a    | 999 |               |          |
| BCLL 0.0 *    | Rep Stress Incr      | YES   | WB 0.04  | Horz(CT) | 0.00 | 3     | n/a    | n/a |               |          |
| BCDL 10.0     | Code IRC2021/TPI2014 |       | Matrix-S |          |      |       |        |     | Weight: 34 lb | FT = 25% |

| LUMBER-               | BRACING-                                                                  |
|-----------------------|---------------------------------------------------------------------------|
| TOP CHORD 2x4 SP No.1 | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins. |
| BOT CHORD 2x4 SP No.1 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.            |
| OTHERS 2x4 SP No.2    |                                                                           |

**REACTIONS.** (size) 1=9-7-3, 3=9-7-3, 4=9-7-3  
Max Horz 1=93(LC 9)  
Max Uplift 1=-45(LC 12), 3=-54(LC 13), 4=-29(LC 12)  
Max Grav 1=173(LC 1), 3=177(LC 20), 4=351(LC 1)

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) 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
  - 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.



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818 Soundside Road  
Edenton, NC 27932

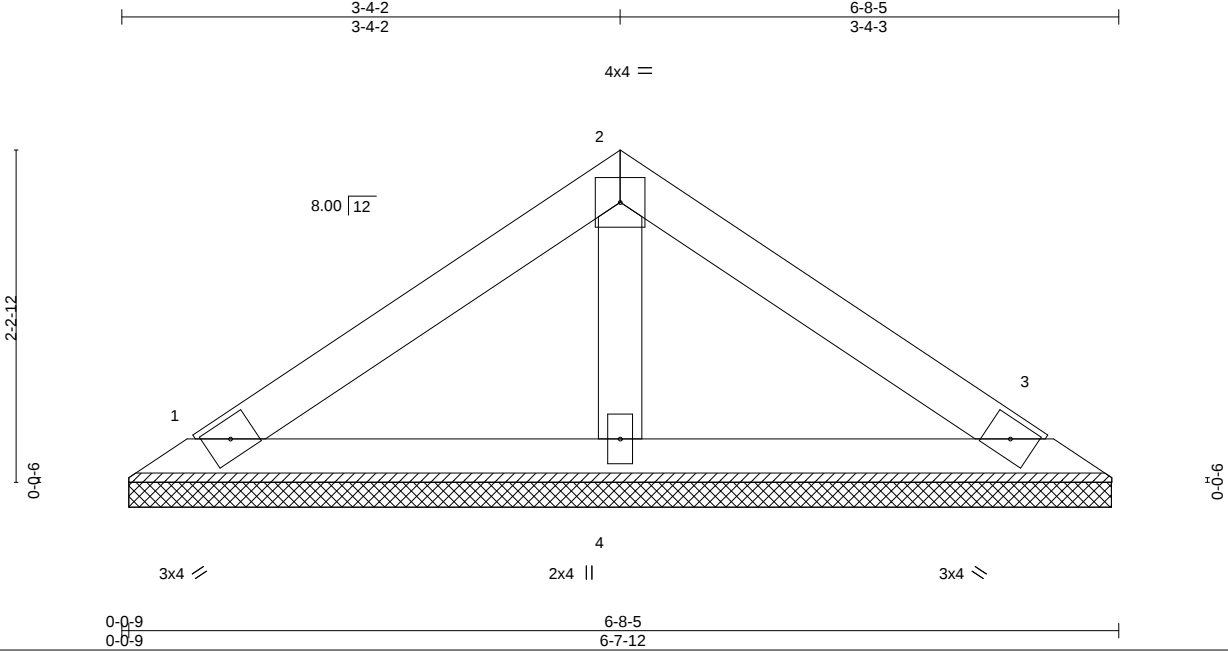
|          |       |            |     |     |                   |
|----------|-------|------------|-----|-----|-------------------|
| Job      | Truss | Truss Type | Qty | Ply | 106 Ducks Landing |
| 250112-A | VB03  | VALLEY     | 1   | 1   | 175317409         |

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ID:vWFTz60CRi\_Y9uBpUWIOFz006Y-KuBshQh?y2DvahmVkhaPPuTHdHGpJvhFCzImb6ysZAV

Job Reference (optional)



Scale = 1:15.5

| LOADING (psf) | SPACING-             | CSI.     | DEFL.    | in   | (loc) | l/defl | L/d | PLATES        | GRIP     |
|---------------|----------------------|----------|----------|------|-------|--------|-----|---------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.16  | Vert(LL) | n/a  | -     | n/a    | 999 | MT20          | 244/190  |
| TCDL 10.0     | Plate Grip DOL 1.15  | BC 0.06  | Vert(CT) | n/a  | -     | n/a    | 999 |               |          |
| BCLL 0.0 *    | Lumber DOL 1.15      | WB 0.03  | Horz(CT) | 0.00 | 3     | n/a    | n/a |               |          |
| BCDL 10.0     | Rep Stress Incr YES  | Matrix-P |          |      |       |        |     | Weight: 22 lb | FT = 25% |
|               | Code IRC2021/TPI2014 |          |          |      |       |        |     |               |          |

| LUMBER-               | BRACING-                                                                  |
|-----------------------|---------------------------------------------------------------------------|
| TOP CHORD 2x4 SP No.1 | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins. |
| BOT CHORD 2x4 SP No.1 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.            |
| OTHERS 2x4 SP No.2    |                                                                           |

**REACTIONS.** (size) 1=6-7-3, 3=6-7-3, 4=6-7-3  
Max Horz 1=-61(LC 10)  
Max Uplift 1=-37(LC 12), 3=-43(LC 13), 4=-3(LC 12)  
Max Grav 1=124(LC 1), 3=126(LC 20), 4=208(LC 1)

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) 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
  - 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.



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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)

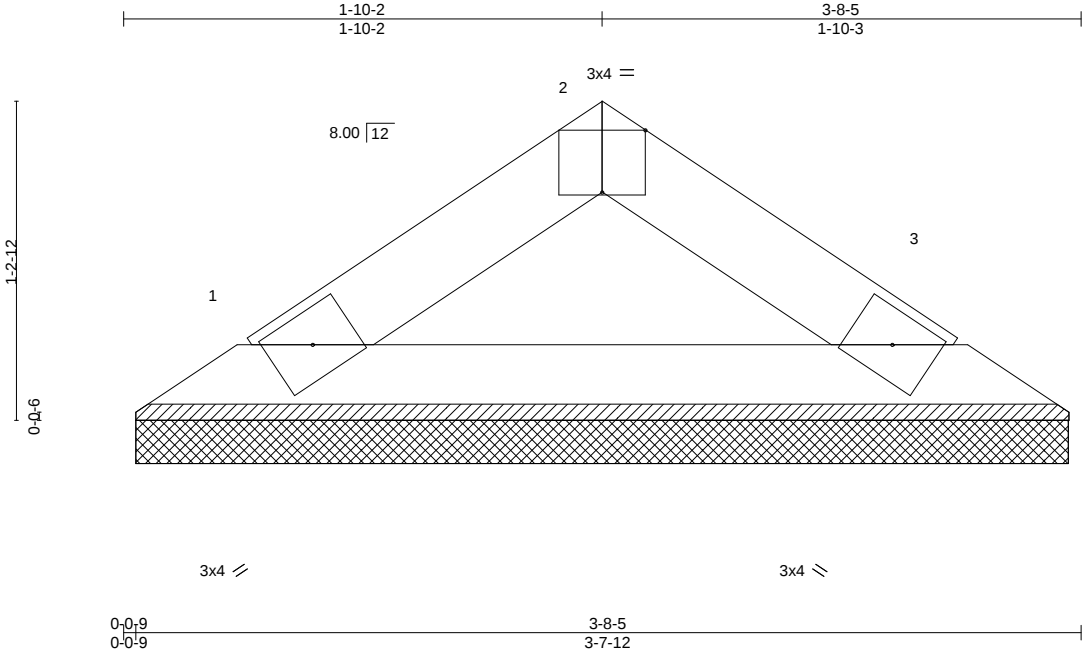
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A MiTek Affiliate  
818 Soundside Road  
Edenton, NC 27932

|          |       |            |     |     |                   |
|----------|-------|------------|-----|-----|-------------------|
| Job      | Truss | Truss Type | Qty | Ply | 106 Ducks Landing |
| 250112-A | VB04  | VALLEY     | 1   | 1   | 175317410         |

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Scale = 1:8.9

| Plate Offsets (X,Y)-- [2:0-2:0,Edge] |  | 3-8-5                   |  |
|--------------------------------------|--|-------------------------|--|
| 0-0-9                                |  | 3-7-12                  |  |
| 0-0-9                                |  | 3-7-12                  |  |
| <b>LOADING</b> (psf)                 |  | <b>SPACING-</b>         |  |
| TCLL 20.0                            |  | 2-0-0                   |  |
| TCDL 10.0                            |  | Plate Grip DOL 1.15     |  |
| BCLL 0.0 *                           |  | Lumber DOL 1.15         |  |
| BCDL 10.0                            |  | Rep Stress Incr YES     |  |
|                                      |  | Code IRC2021/TPI2014    |  |
|                                      |  | <b>CSI.</b>             |  |
|                                      |  | TC 0.05                 |  |
|                                      |  | BC 0.06                 |  |
|                                      |  | WB 0.00                 |  |
|                                      |  | Matrix-P                |  |
|                                      |  | <b>DEFL.</b>            |  |
|                                      |  | in (loc) l/defl L/d     |  |
|                                      |  | Vert(LL) n/a - n/a 999  |  |
|                                      |  | Vert(CT) n/a - n/a 999  |  |
|                                      |  | Horz(CT) 0.00 3 n/a n/a |  |
|                                      |  | <b>PLATES</b>           |  |
|                                      |  | MT20                    |  |
|                                      |  | <b>GRIP</b>             |  |
|                                      |  | 244/190                 |  |
|                                      |  | Weight: 10 lb FT = 25%  |  |

|                       |  |                                                                           |  |
|-----------------------|--|---------------------------------------------------------------------------|--|
| <b>LUMBER-</b>        |  | <b>BRACING-</b>                                                           |  |
| TOP CHORD 2x4 SP No.1 |  | TOP CHORD Structural wood sheathing directly applied or 3-8-5 oc purlins. |  |
| BOT CHORD 2x4 SP No.1 |  | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.            |  |

**REACTIONS.** (size) 1=3-7-3, 3=3-7-3  
Max Horz 1=-29(LC 8)  
Max Uplift 1=-18(LC 12), 3=-18(LC 13)  
Max Grav 1=108(LC 1), 3=108(LC 1)

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) 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
  - 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



August 1,2025

**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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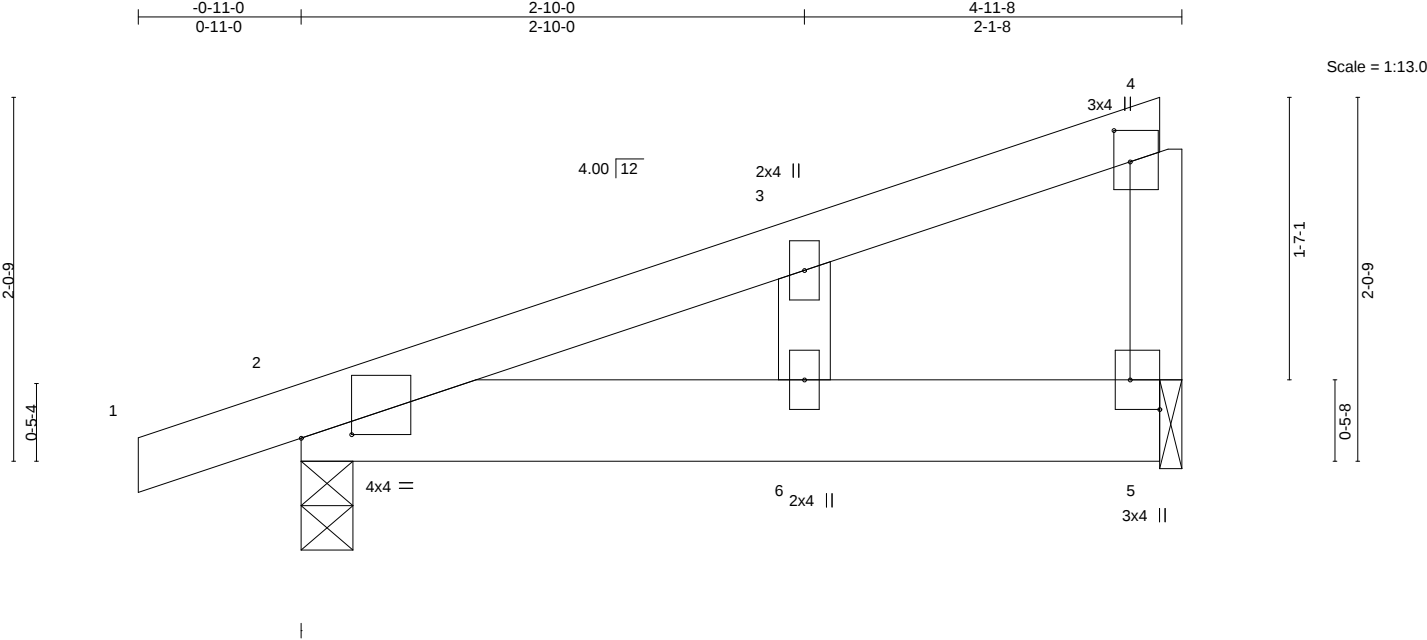
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A MiTek Affiliate  
818 Soundside Road  
Edenton, NC 27932

|          |       |            |     |     |                   |
|----------|-------|------------|-----|-----|-------------------|
| Job      | Truss | Truss Type | Qty | Ply | 106 Ducks Landing |
| 250112-A | C01GE | MONOPITCH  | 2   | 1   | 175317411         |

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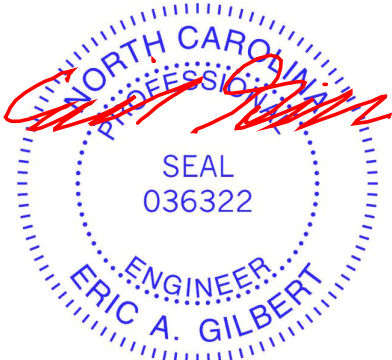
| Plate Offsets (X,Y)-- [2:0-3-7,0-0-4], [4:0-2-2,0-1-2], [5:Edge,0-2-0] |       |                 |                 |           |      |          |       |               |          |
|------------------------------------------------------------------------|-------|-----------------|-----------------|-----------|------|----------|-------|---------------|----------|
| LOADING (psf)                                                          |       | SPACING-        |                 | CSI.      |      | DEFL.    |       | PLATES        |          |
| TCLL                                                                   | 20.0  | Plate Grip DOL  | 1.15            | TC        | 0.15 | Vert(LL) | 0.04  | MT20          | 244/190  |
| TCDL                                                                   | 10.0  | Lumber DOL      | 1.15            | BC        | 0.27 | Vert(CT) | -0.02 |               |          |
| BCLL                                                                   | 0.0 * | Rep Stress Incr | YES             | WB        | 0.05 | Horz(CT) | -0.00 | Weight: 23 lb | FT = 25% |
| BCDL                                                                   | 10.0  | Code            | IRC2021/TPI2014 | Matrix-AS |      |          |       |               |          |

| LUMBER-   |             | BRACING-  |                                                                   |
|-----------|-------------|-----------|-------------------------------------------------------------------|
| TOP CHORD | 2x4 SP No.1 | TOP CHORD | Structural wood sheathing directly applied, except end verticals. |
| BOT CHORD | 2x6 SP No.1 | BOT CHORD | Rigid ceiling directly applied.                                   |
| WEBS      | 2x4 SP No.2 |           |                                                                   |

**REACTIONS.** (size) 2=0-3-8, 5=0-1-8  
Max Horz 2=125(LC 8)  
Max Uplift 2=-218(LC 8), 5=-175(LC 8)  
Max Grav 2=253(LC 1), 5=187(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
WEBS 3-6=-111/282

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-11-0 to 3-5-13, Exterior(2N) 3-5-13 to 4-9-12 zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Bearing at joint(s) 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 100 lb uplift at joint(s) except (jt=lb) 2=218, 5=175.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



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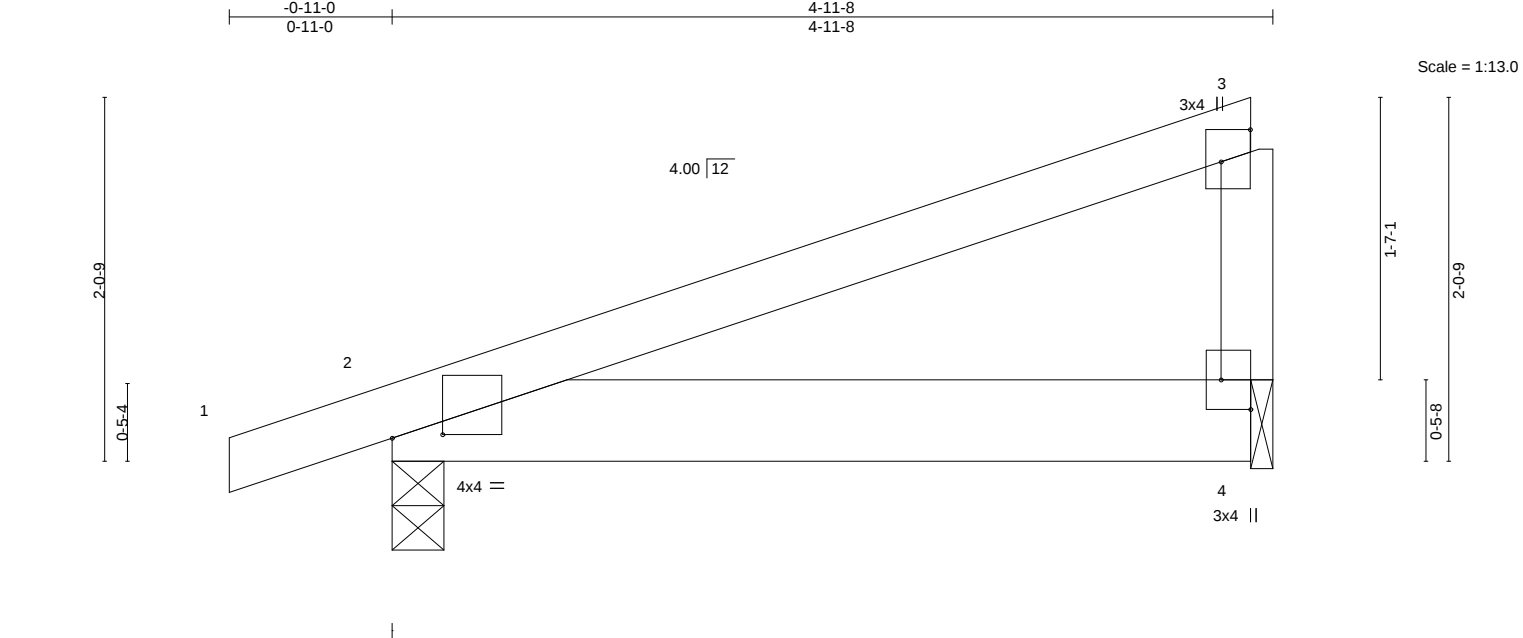
|          |       |            |     |     |                   |
|----------|-------|------------|-----|-----|-------------------|
| Job      | Truss | Truss Type | Qty | Ply | 106 Ducks Landing |
| 250112-A | C01   | MONOPITCH  | 7   | 1   | 175317412         |

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ID:vWFTz60CRi\_Y9uBpUWIOFz0O6Y-shdUU4gNBk52yYBIBz3Asgw5HtudaSq6zJ0D3gysZAW

Job Reference (optional)



| Plate Offsets (X,Y)-- |                 | [2:0-3-7,0-0-4], [3:Edge,0-2-0], [4:Edge,0-2-0] |                             |
|-----------------------|-----------------|-------------------------------------------------|-----------------------------|
| LOADING (psf)         | SPACING-        | 2-0-0                                           | CSI.                        |
| TCLL 20.0             | Plate Grip DOL  | 1.15                                            | TC 0.20                     |
| TCDL 10.0             | Lumber DOL      | 1.15                                            | BC 0.19                     |
| BCLL 0.0 *            | Rep Stress Incr | YES                                             | WB 0.00                     |
| BCDL 10.0             | Code            | IRC2021/TPI2014                                 | Matrix-AS                   |
|                       |                 |                                                 | DEFL.                       |
|                       |                 |                                                 | in (loc) l/defl L/d         |
|                       |                 |                                                 | Vert(LL) 0.03 4-7 >999 240  |
|                       |                 |                                                 | Vert(CT) -0.02 4-7 >999 240 |
|                       |                 |                                                 | Horz(CT) -0.00 2 n/a n/a    |
|                       |                 |                                                 | PLATES GRIP                 |
|                       |                 |                                                 | MT20 244/190                |
|                       |                 |                                                 | Weight: 22 lb FT = 25%      |

|                       |                                                                             |
|-----------------------|-----------------------------------------------------------------------------|
| LUMBER-               | BRACING-                                                                    |
| TOP CHORD 2x4 SP No.1 | TOP CHORD Structural wood sheathing directly applied, except end verticals. |
| BOT CHORD 2x6 SP No.1 | BOT CHORD Rigid ceiling directly applied.                                   |
| WEBS 2x4 SP No.2      |                                                                             |

REACTIONS. (size) 2=0-3-8, 4=0-1-8  
Max Horz 2=89(LC 8)  
Max Uplift 2=-158(LC 8), 4=-126(LC 8)  
Max Grav 2=253(LC 1), 4=187(LC 1)

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

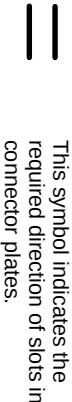
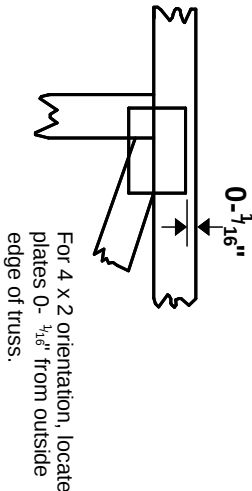
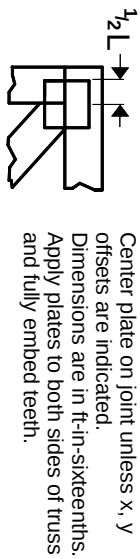
- NOTES-
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-11-0 to 3-5-13, Interior(1) 3-5-13 to 4-9-12 zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=158, 4=126.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



August 1,2025

# Symbols

## PLATE LOCATION AND ORIENTATION



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

## PLATE SIZE

**4 X 4**

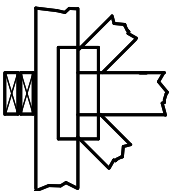
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## 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.

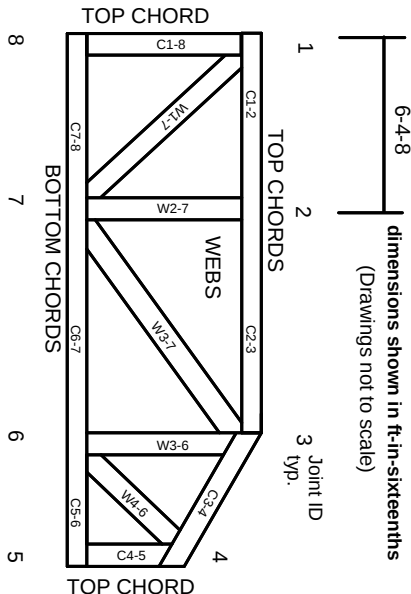
## BEARING



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/TPI 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/TPI 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/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 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/TPI 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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