

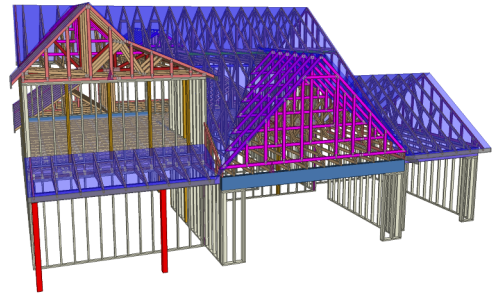


Carter Sanford Component Plant  
298 Harvey Faulk Rd  
Sanford, NC 27332

Phone #:919-775-1450

**Builder:** HH Hunt Homes Raleigh  
Durham

**Model:** Maxwekk FA 3CG SP BR4 FE  
GRH



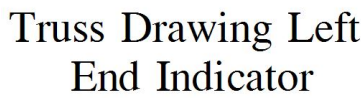
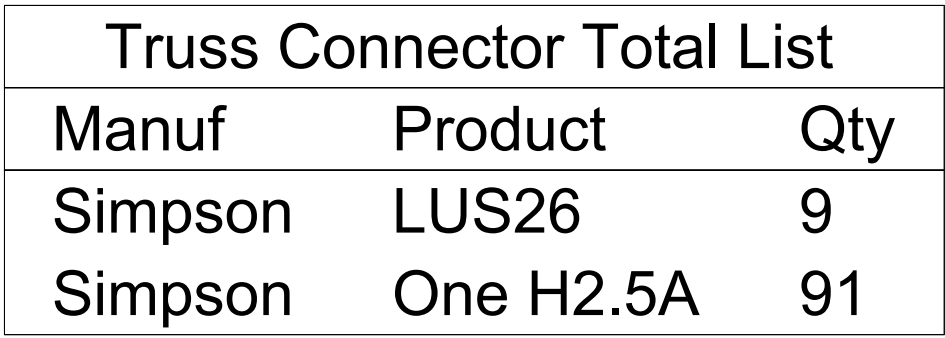
THE PLACEMENT PLAN NOTES:

1. The Placement Plan is a diagram for truss installation. It is not an engineered drawing and has not been reviewed by an engineer. The Owner/Building Designer is responsible for obtaining an engineer's review if one is required by the local jurisdiction.
2. The responsibilities of the Owner, Contractor, Building Designer, Component Designer and Component Manufacturer shall be as set forth in ANSI/TPI 1. Capitalized terms shall be as defined in ANSI/TP 1 unless otherwise indicated.
3. Each Component is designed as an individual component utilizing information provided by others. The Owner/Building Designer is responsible for reviewing all Component Submittal Packages and individual Component Design Drawings for compliance with the Construction Documents and compatibility with the overall Building design.
4. Contractor will not proceed with component installation until the Owner/Building Designer has reviewed the Component Submittal Package. Questions on the suitability of any Component will be resolved by the Building Designer.
5. The Building Designer and Contractor are responsible for all temporary and permanent bracing.
6. The Placement Plan assumes the building is dimensionally correct, structurally sound, and in a suitable condition to support each Component during installation and thereafter, including but not limited to installation of all bearing points. Proper design and construction of all structural components, including foundations, headers, beams, walls and columns are the responsibility of the Owner, Building Designer and Contractor.
7. Do not cut, drill, or modify any Component without first consulting the Component Manufacturer or Building Designer. Damaged Components shall not be installed unless directed by the Building Designer or approved by the Component Manufacturer.
8. Components must be handled and installed following all applicable safety standards and best practices, including but not limited to BCSI, OSHA, TPI and local codes. Failure to properly handle, brace or otherwise install Component can result in serious injury or death.
9. All uplift connectors shown within these documents are recommendations only. Per ANSI/TPI 1, all uplift connectors are the responsibility of the building designer and or contractor.

**Approved By:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**\*\* TRUSS TO TRUSS CONNECTIONS ARE TOE-NAILED, UNLESS NOTED OTHERWISE.**



1, all uplift connectors are the responsibility of the bldg designer and or contractor.

| Revisions |      |
|-----------|------|
| 00/00/00  | Name |
| 00/00/00  | Name |
| 00/00/00  | Name |
| 00/00/00  | Name |
| 00/00/00  | Name |

Trenco  
818 Soundside Rd  
Edenton, NC 27932

Re: 25040237-A

Install 2 Oak Meadow-Roof-Maxwell FA 3CG SP BR4 FE GRH

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

Pages or sheets covered by this seal: I73125309 thru I73125343

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

North Carolina COA: C-0844



May 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.

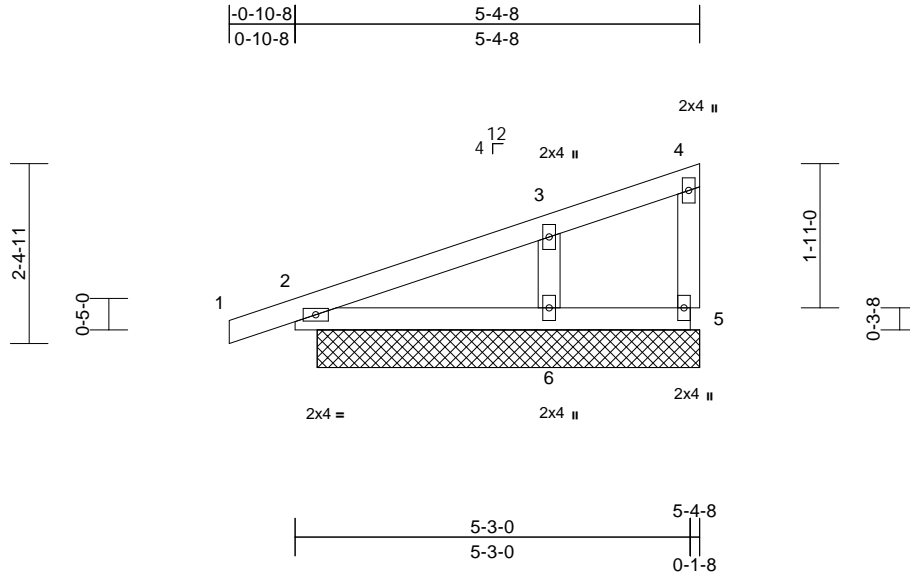
|            |       |                           |     |     |   |
|------------|-------|---------------------------|-----|-----|---|
| Job        | Truss | Truss Type                | Qty | Ply | Install 2 Oak Meadow-Roof-Maxwell FA 3CG SP BR4 FE<br>I73125309 |
| 25040237-A | J02   | Monopitch Supported Gable | 1   | 1   | Job Reference (optional)  |

Carter Components (Chesapeake), Chesapeake, VA - 23323,

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Wed Apr 30 06:59:54

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|                |       |                 |                 |            |      |             |      |       |        |     |               |             |
|----------------|-------|-----------------|-----------------|------------|------|-------------|------|-------|--------|-----|---------------|-------------|
| <b>Loading</b> | (psf) | <b>Spacing</b>  | 1-11-4          | <b>CSI</b> |      | <b>DEFL</b> | in   | (loc) | l/defl | L/d | <b>PLATES</b> | <b>GRIP</b> |
| TCLL (roof)    | 20.0  | Plate Grip DOL  | 1.15            | TC         | 0.15 | Vert(LL)    | n/a  | -     | n/a    | 999 | MT20          | 244/190     |
| Snow (Pf)      | 20.0  | Lumber DOL      | 1.15            | BC         | 0.11 | Vert(CT)    | n/a  | -     | n/a    | 999 |               |             |
| TCDL           | 10.0  | Rep Stress Incr | YES             | WB         | 0.08 | Horz(CT)    | 0.00 | 2     | n/a    | n/a |               |             |
| BCLL           | 0.0*  | Code            | IRC2018/TPI2014 | Matrix-MP  |      |             |      |       |        |     | Weight: 22 lb | FT = 20%    |
| BCDL           | 10.0  |                 |                 |            |      |             |      |       |        |     |               |             |

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

**BRACING**  
TOP CHORD Structural wood sheathing directly applied or 5-4-8 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 2=5-1-0, 5=5-1-0, 6=5-1-0  
Max Horiz 2=76 (LC 13)  
Max Uplift 2=42 (LC 10), 5=5 (LC 11), 6=55 (LC 14)  
Max Grav 2=233 (LC 21), 5=43 (LC 21), 6=351 (LC 21)

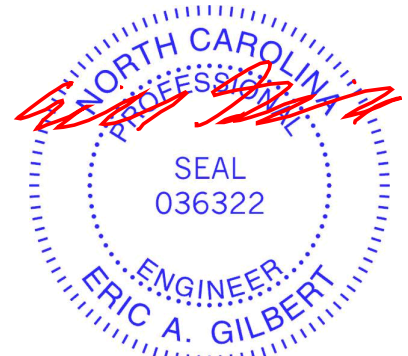
**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=0/24, 2-3=-69/77, 3-4=-41/39, 4-5=-43/34  
BOT CHORD 2-6=-23/73, 5-6=-23/42  
WEBS 3-6=-261/254

#### NOTES

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; 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 20.0 psf on overhangs non-concurrent with other live loads.
- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 9) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 5, 2, and 6. This connection is for uplift only and does not consider lateral forces.
- 10) Non Standard bearing condition. Review required.
- 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 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](http://www.tpinst.org)) and **BCSI Building Component Safety Information** available from the Structural Building Component Association ([www.sbcacompnents.com](http://www.sbcacompnents.com))

ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932



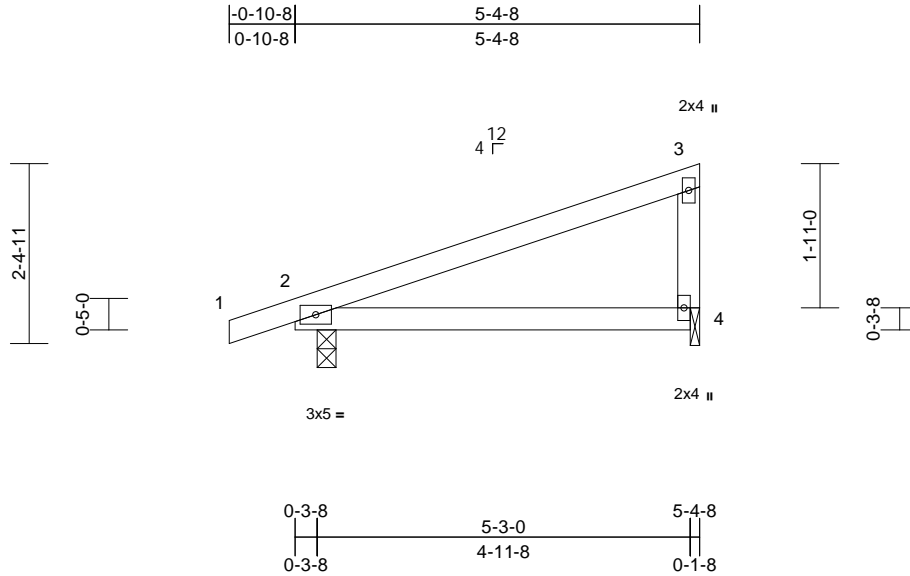
|            |       |            |     |     |   |
|------------|-------|------------|-----|-----|---|
| Job        | Truss | Truss Type | Qty | Ply | Install 2 Oak Meadow-Roof-Maxwell FA 3CG SP BR4 FE<br>I73125310 |
| 25040237-A | J01   | Monopitch  | 8   | 1   | Job Reference (optional)  |

Carter Components (Chesapeake), Chesapeake, VA - 23323,

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Wed Apr 30 06:59:54

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Scale = 1:30.6

| Loading     | (psf) | Spacing         | 2-0-0           | CSI       |      | DEFL     | in    | (loc) | l/defl | L/d | PLATES        | GRIP     |
|-------------|-------|-----------------|-----------------|-----------|------|----------|-------|-------|--------|-----|---------------|----------|
| TCLL (roof) | 20.0  | Plate Grip DOL  | 1.15            | TC        | 0.58 | Vert(LL) | 0.08  | 4-7   | >784   | 240 | MT20          | 244/190  |
| Snow (Pf)   | 20.0  | Lumber DOL      | 1.15            | BC        | 0.42 | Vert(CT) | -0.10 | 4-7   | >636   | 180 |               |          |
| TCDL        | 10.0  | Rep Stress Incr | YES             | WB        | 0.00 | Horz(CT) | 0.01  | 2     | n/a    | n/a |               |          |
| BCLL        | 0.0*  | Code            | IRC2018/TPI2014 | Matrix-MP |      |          |       |       |        |     |               |          |
| BCDL        | 10.0  |                 |                 |           |      |          |       |       |        |     |               |          |
|             |       |                 |                 |           |      |          |       |       |        |     | Weight: 20 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 5-4-8 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS

(size) 2=0-3-0, 4=0-1-8  
Max Horiz 2=78 (LC 13)  
Max Uplift 2=-108 (LC 10), 4=-82 (LC 20)  
Max Grav 2=369 (LC 21), 4=278 (LC 21)

#### FORCES

(lb) - Maximum Compression/Maximum Tension

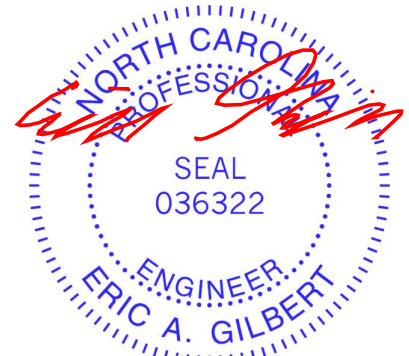
TOP CHORD 1-2=0/25, 2-3=-73/62, 3-4=-199/163  
BOT CHORD 2-4=-74/95

#### NOTES

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust)  
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; 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 20.0 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3'-06"-00 tall by 2'-00"-00 wide will fit between the bottom chord and any other members.
- 7) Bearings are assumed to be: , Joint 4 SP No.3 .
- 8) 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.
- 9) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- 10) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 4. This connection is for uplift only and does not consider lateral forces.
- 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 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](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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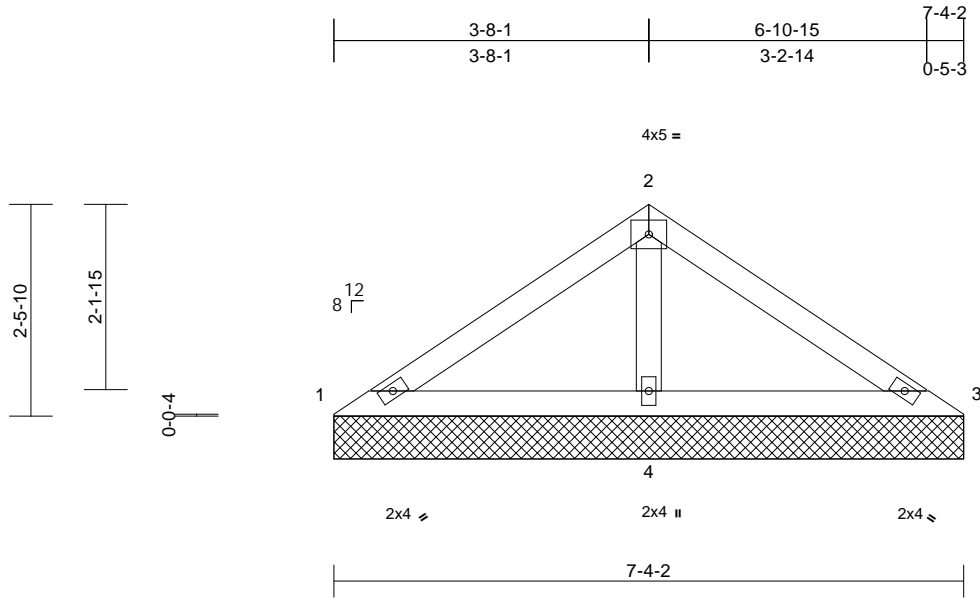
818 Soundside Road  
Edenton, NC 27932

|            |       |            |     |     |   |
|------------|-------|------------|-----|-----|---|
| Job        | Truss | Truss Type | Qty | Ply | Install 2 Oak Meadow-Roof-Maxwell FA 3CG SP BR4 FE<br>I73125311 |
| 25040237-A | V3A   | Valley     | 1   | 1   | Job Reference (optional)  |

Carter Components (Chesapeake), Chesapeake, VA - 23323,

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Scale = 1:26.9

| Loading     | (psf) | Spacing         | 2-0-0           | CSI       | DEFL | in        | (loc) | l/defl | L/d | PLATES        | GRIP     |
|-------------|-------|-----------------|-----------------|-----------|------|-----------|-------|--------|-----|---------------|----------|
| TCLL (roof) | 20.0  | Plate Grip DOL  | 1.15            | TC        | 0.28 | n/a       | -     | n/a    | 999 | MT20          | 244/190  |
| Snow (Pf)   | 20.0  | Lumber DOL      | 1.15            | BC        | 0.26 | Vert(TL)  | n/a   | -      | 999 |               |          |
| TCDL        | 10.0  | Rep Stress Incr | YES             | WB        | 0.13 | Horiz(TL) | 0.00  | 9      | n/a |               |          |
| BCLL        | 0.0*  | Code            | IRC2018/TPI2014 | Matrix-MP |      |           |       |        |     |               |          |
| BCDL        | 10.0  |                 |                 |           |      |           |       |        |     | Weight: 25 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 7-4-2 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

#### REACTIONS

(size) 1=7-4-2, 3=7-4-2, 4=7-4-2  
Max Horiz 1=54 (LC 13)  
Max Uplift 1=-118 (LC 21), 3=-1 (LC 15), 4=-53 (LC 15)  
Max Grav 1=116 (LC 20), 3=2 (LC 21), 4=731 (LC 21)

#### FORCES

(lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=-118/420, 2-3=-153/461  
BOT CHORD 1-4=-339/137, 3-4=-357/148  
WEBS 2-4=-608/178

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-6 to 3-0-6, Exterior(2R) 3-0-6 to 4-4-8, Exterior(2E) 4-4-8 to 7-4-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- 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 118 lb uplift at joint 1, 1 lb uplift at joint 3, 53 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 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.sbcacompnents.com)

ENGINEERING BY  
**TRENCO**  
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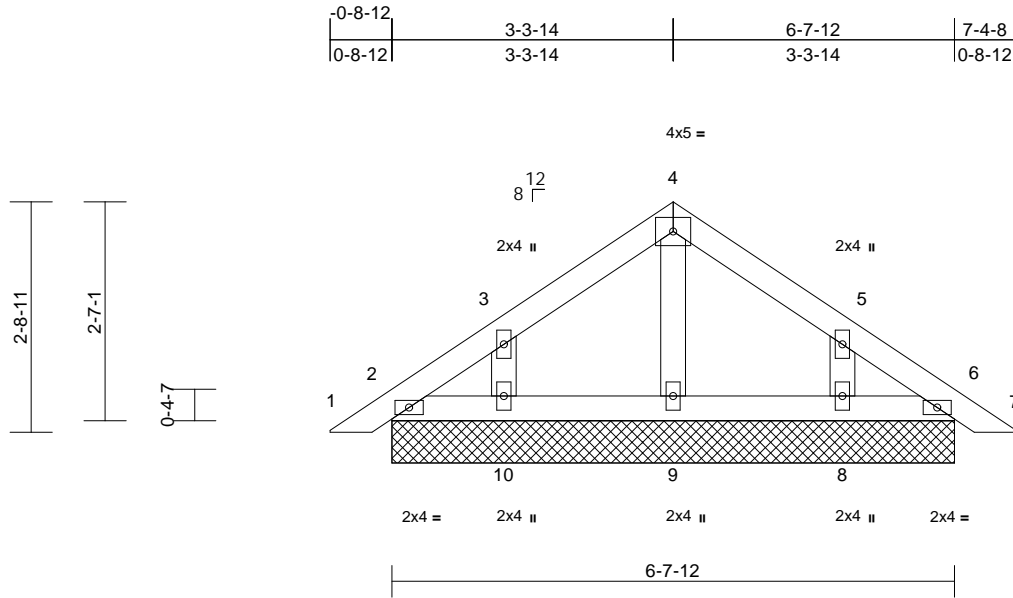
818 Soundside Road  
Edenton, NC 27932

|            |       |            |     |     |   |
|------------|-------|------------|-----|-----|---|
| Job        | Truss | Truss Type | Qty | Ply | Install 2 Oak Meadow-Roof-Maxwell FA 3CG SP BR4 FE<br>I73125312 |
| 25040237-A | PB2   | Piggyback  | 1   | 1   | Job Reference (optional)  |

Carter Components (Chesapeake), Chesapeake, VA - 23323,

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Scale = 1:27.2

| Loading     | (psf) | Spacing         | 1-11-4          | CSI       |      | DEFL     | in   | (loc) | l/defl | L/d | PLATES        | GRIP     |
|-------------|-------|-----------------|-----------------|-----------|------|----------|------|-------|--------|-----|---------------|----------|
| TCLL (roof) | 20.0  | Plate Grip DOL  | 1.15            | TC        | 0.08 | Vert(LL) | n/a  | -     | n/a    | 999 | MT20          | 244/190  |
| Snow (Pf)   | 20.0  | Lumber DOL      | 1.15            | BC        | 0.03 | Vert(CT) | n/a  | -     | n/a    | 999 |               |          |
| TCDL        | 10.0  | Rep Stress Incr | YES             | WB        | 0.04 | Horz(CT) | 0.00 | 15    | n/a    | n/a |               |          |
| BCLL        | 0.0*  | Code            | IRC2018/TPI2014 | Matrix-MP |      |          |      |       |        |     |               |          |
| BCDL        | 10.0  |                 |                 |           |      |          |      |       |        |     | Weight: 29 lb | FT = 20% |

#### LUMBER

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

#### BRACING

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

|                  |            |  |
|------------------|------------|--|
| <b>REACTIONS</b> | (size)     | 2=6-7-12, 6=6-7-12, 8=6-7-12, 9=6-7-12, 10=6-7-12                          |
|                  | Max Horiz  | 2=-58 (LC 12)  |
|                  | Max Uplift | 2=-6 (LC 15), 8=-61 (LC 15), 10=-62 (LC 14)                                |
|                  | Max Grav   | 2=109 (LC 21), 6=109 (LC 22), 8=223 (LC 22), 9=122 (LC 21), 10=223 (LC 21) |

#### FORCES

|           |  |
|-----------|--|
|           | (lb) - Maximum Compression/Maximum Tension                         |
| TOP CHORD | 1-2=0/25, 2-3=-42/42, 3-4=-79/68, 4-5=-79/68, 5-6=-28/27, 6-7=0/25 |
| BOT CHORD | 2-10=-16/54, 9-10=-16/54, 8-9=-16/54, 6-8=-16/54                   |
| WEBS      | 4-9=-81/0, 3-10=-192/127, 5-8=-192/127                             |

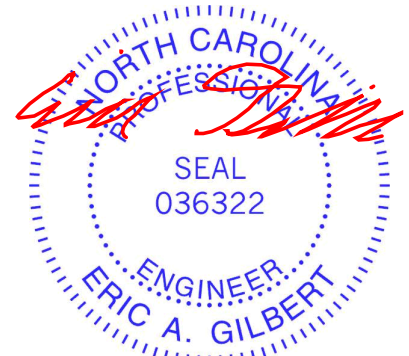
#### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-3-5 to 3-3-5, Exterior(2R) 3-3-5 to 4-10-11, Exterior(2E) 4-10-11 to 7-10-11 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; 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 20.0 psf on overhangs non-concurrent with other live loads.
- 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.
- N/A

- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

**LOAD CASE(S)** Standard



May 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)

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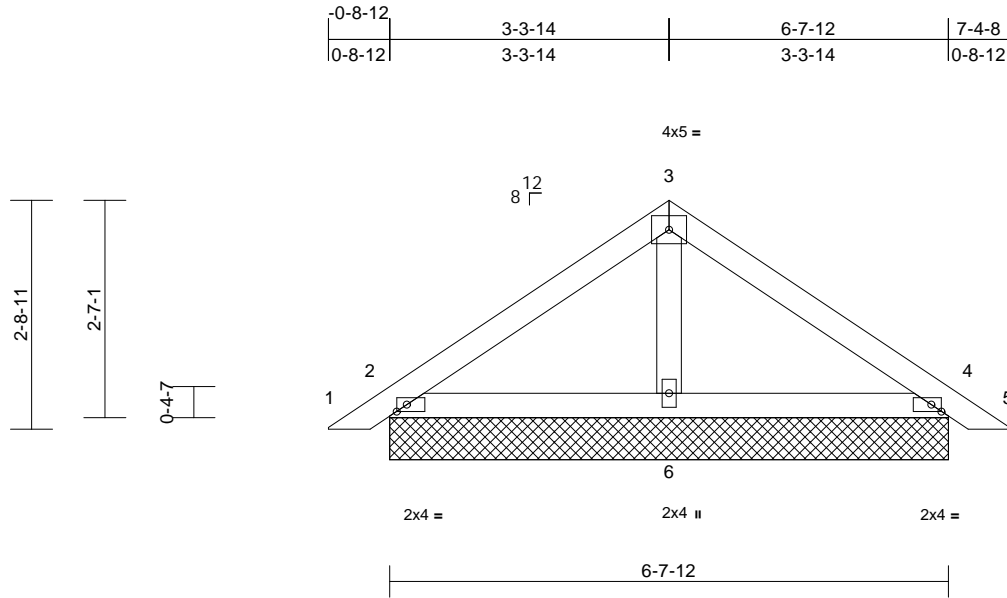
818 Soundside Road  
Edenton, NC 27932

|            |       |            |     |     |   |
|------------|-------|------------|-----|-----|---|
| Job        | Truss | Truss Type | Qty | Ply | Install 2 Oak Meadow-Roof-Maxwell FA 3CG SP BR4 FE<br>I73125313 |
| 25040237-A | PB1   | Piggyback  | 8   | 1   | Job Reference (optional)  |

Carter Components (Chesapeake), Chesapeake, VA - 23323,

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Wed Apr 30 06:59:54  
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Page: 1



Scale = 1:27.4

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

| Loading                | (psf) | Spacing         | 2-0-0           | CSI       | DEFL | in       | (loc) | l/defl | L/d | PLATES | GRIP    |
|------------------------|-------|-----------------|-----------------|-----------|------|----------|-------|--------|-----|--------|---------|
| TCLL (roof)            | 20.0  | Plate Grip DOL  | 1.15            | TC        | 0.21 | Vert(LL) | n/a   | -      | n/a | 999    | MT20    |
| Snow (Pf)              | 20.0  | Lumber DOL      | 1.15            | BC        | 0.22 | Vert(CT) | n/a   | -      | n/a | 999    | 244/190 |
| TCDL                   | 10.0  | Rep Stress Incr | YES             | WB        | 0.02 | Horz(CT) | 0.00  | 2      | n/a | n/a    |         |
| BCLL                   | 0.0*  | Code            | IRC2018/TPI2014 | Matrix-MP |      |          |       |        |     |        |         |
| BCDL                   | 10.0  |                 |                 |           |      |          |       |        |     |        |         |
| Weight: 27 lb FT = 20% |       |                 |                 |           |      |          |       |        |     |        |         |

#### LUMBER

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

#### BRACING

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

**REACTIONS** (size) 2=6-7-12, 4=6-7-12, 6=6-7-12  
Max Horiz 2=-60 (LC 12)  
Max Uplift 2=-35 (LC 14), 4=-43 (LC 15)  
Max Grav 2=262 (LC 21), 4=262 (LC 22), 6=236 (LC 21)

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

TOP CHORD 1-2=0/26, 2-3=-148/86, 3-4=-148/86, 4-5=0/26

BOT CHORD 2-6=-18/61, 4-6=-7/61  
WEBS 3-6=-100/16

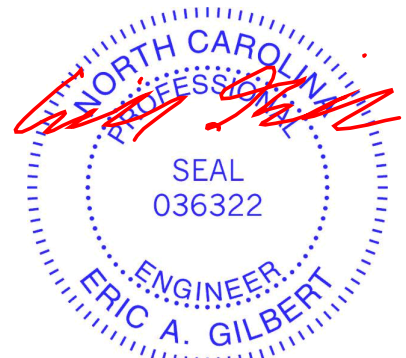
#### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-3-5 to 3-3-5, Exterior(2R) 3-3-5 to 4-10-11, Exterior(2E) 4-10-11 to 7-10-11 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; 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 20.0 psf on overhangs non-concurrent with other live loads.
- 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.
- N/A

- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

**LOAD CASE(S)** Standard



May 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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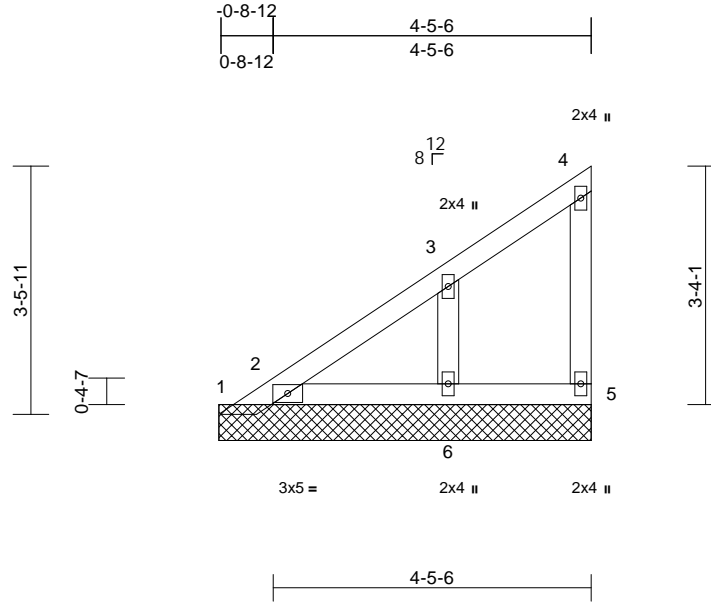


|            |       |            |     |     |   |
|------------|-------|------------|-----|-----|---|
| Job        | Truss | Truss Type | Qty | Ply | Install 2 Oak Meadow-Roof-Maxwell FA 3CG SP BR4 FE<br>I73125314 |
| 25040237-A | PB4   | Piggyback  | 1   | 1   | Job Reference (optional)  |

Carter Components (Chesapeake), Chesapeake, VA - 23323,

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Wed Apr 30 06:59:55  
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Page: 1



|                |       |                 |                 |            |      |             |      |       |        |     |               |             |
|----------------|-------|-----------------|-----------------|------------|------|-------------|------|-------|--------|-----|---------------|-------------|
| <b>Loading</b> | (psf) | <b>Spacing</b>  | 1-11-4          | <b>CSI</b> |      | <b>DEFL</b> | in   | (loc) | l/defl | L/d | <b>PLATES</b> | <b>GRIP</b> |
| TCLL (roof)    | 20.0  | Plate Grip DOL  | 1.15            | TC         | 0.20 | Vert(LL)    | n/a  | -     | n/a    | 999 | MT20          | 244/190     |
| Snow (Pf)      | 20.0  | Lumber DOL      | 1.15            | BC         | 0.33 | Vert(TL)    | n/a  | -     | n/a    | 999 |               |             |
| TCDL           | 10.0  | Rep Stress Incr | YES             | WB         | 0.07 | Horiz(TL)   | 0.00 | 5     | n/a    | n/a |               |             |
| BCLL           | 0.0*  | Code            | IRC2018/TPI2014 | Matrix-MP  |      |             |      |       |        |     |               |             |
| BCDL           | 10.0  |                 |                 |            |      |             |      |       |        |     | Weight: 22 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 5-2-8 oc purlins, except end verticals. |
| BOT CHORD | Rigid ceiling directly applied or 10-0-0 oc bracing.                                  |

|                  |            |  |
|------------------|------------|--|
| <b>REACTIONS</b> | (size)     | 1=5-2-8, 2=5-2-8, 5=5-2-8, 6=5-2-8                       |
|                  | Max Horiz  | 1=107 (LC 11)  |
|                  | Max Uplift | 1=163 (LC 7), 2=2 (LC 14), 6=52 (LC 14)                  |
|                  | Max Grav   | 1=36 (LC 11), 2=366 (LC 21), 5=126 (LC 7), 6=298 (LC 21) |

#### FORCES

|           |  |
|-----------|--|
|           | (lb) - Maximum Compression/Maximum Tension         |
| TOP CHORD | 1-2=-156/312, 2-3=-112/153, 3-4=-69/82, 4-5=-79/28 |
| BOT CHORD | 2-6=-95/66, 5-6=-36/66                             |
| WEBS      | 3-6=-240/228                                       |

#### NOTES

- Wind: ASCE 7-16; Vult=130mph (3-second gust)  
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

- Unbalanced snow loads have been considered for this design.
- 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.
- Bearing at joint(s) 2, 1, 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 2 lb uplift at joint 2, 163 lb uplift at joint 1, 52 lb uplift at joint 6 and 2 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.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

**LOAD CASE(S)** Standard



May 1, 2025

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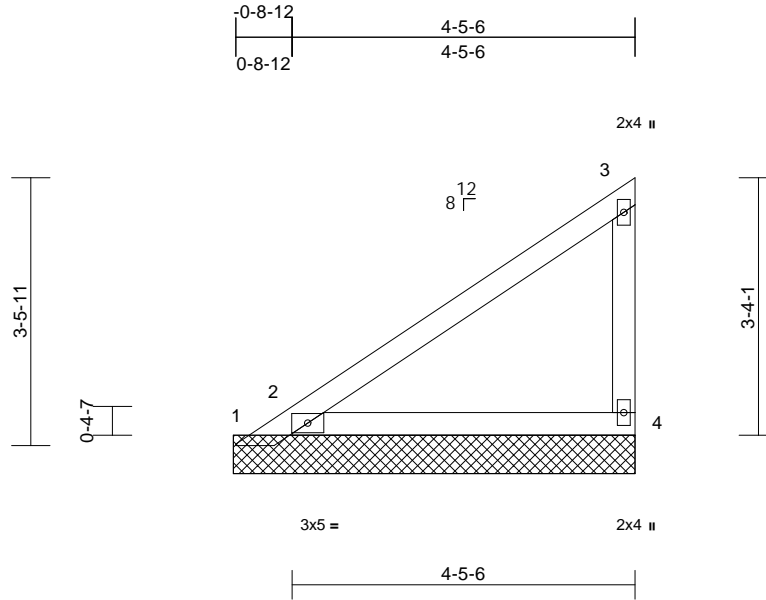
|                          |       |            |     |     |  |
|--------------------------|-------|------------|-----|-----|--|
| Job                      | Truss | Truss Type | Qty | Ply | Install 2 Oak Meadow-Roof-Maxwell FA 3CG SP BR4 FE |
| 25040237-A               | PB3   | Piggyback  | 10  | 1   | 173125315  |
| Job Reference (optional) |       |            |     |     |  |

Carter Components (Chesapeake), Chesapeake, VA - 23323,

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Wed Apr 30 06:59:55

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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  | 1.15            | TC        | 0.57 | Vert(LL)  | n/a   | -      | n/a | 999    | MT20    |
| Snow (Pf)              | 20.0  | Lumber DOL      | 1.15            | BC        | 0.13 | Vert(TL)  | n/a   | -      | n/a | 999    | 244/190 |
| TCDL                   | 10.0  | Rep Stress Incr | YES             | WB        | 0.00 | Horiz(TL) | 0.00  | 4      | n/a | n/a    |         |
| BCLL                   | 0.0*  | Code            | IRC2018/TPI2014 | Matrix-MP |      |           |       |        |     |        |         |
| BCDL                   | 10.0  |                 |                 |           |      |           |       |        |     |        |         |
| Weight: 20 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 5-2-8 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS

(size) 1=5-2-8, 2=5-2-8, 4=5-2-8  
Max Horiz 1=110 (LC 11)  
Max Uplift 1=-479 (LC 21), 2=-179 (LC 14), 4=-30 (LC 14)  
Max Grav 1=157 (LC 14), 2=864 (LC 21), 4=206 (LC 21)

#### FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-179/375, 2-3=-165/248, 3-4=-160/62  
BOT CHORD 2-4=-221/100

#### NOTES

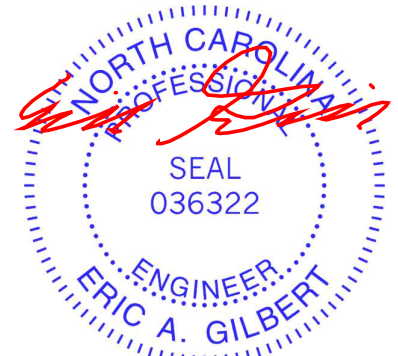
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- 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.
- Bearing at joint(s) 2, 1, 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 479 lb uplift at joint 1.
- N/A

- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard



May 1, 2025

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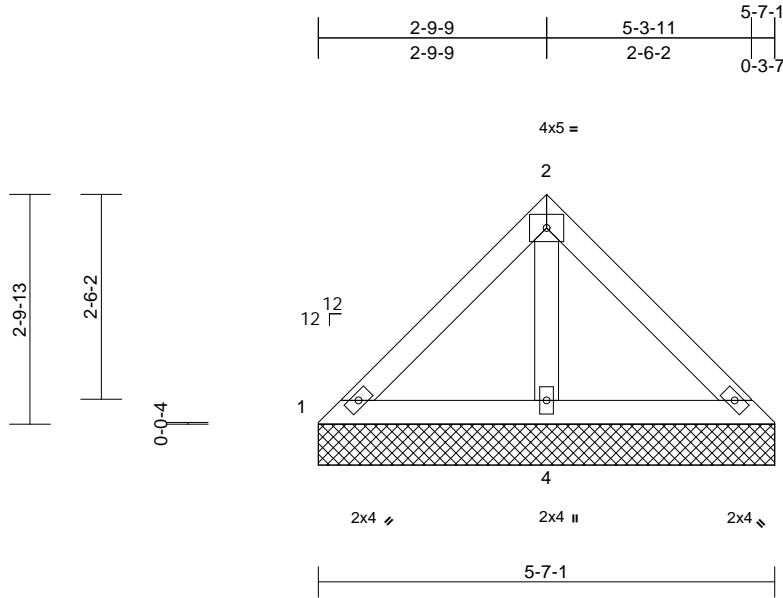
|            |       |            |     |     |   |
|------------|-------|------------|-----|-----|---|
| Job        | Truss | Truss Type | Qty | Ply | Install 2 Oak Meadow-Roof-Maxwell FA 3CG SP BR4 FE<br>I73125316 |
| 25040237-A | V2C   | Valley     | 1   | 1   | Job Reference (optional)  |

Carter Components (Chesapeake), Chesapeake, VA - 23323,

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Wed Apr 30 06:59:56

Page: 1

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Scale = 1:28.2

| Loading                | (psf) | Spacing         | 2-0-0           | CSI       | DEFL | in        | (loc) | l/defl | L/d | PLATES | GRIP    |
|------------------------|-------|-----------------|-----------------|-----------|------|-----------|-------|--------|-----|--------|---------|
| TCLL (roof)            | 20.0  | Plate Grip DOL  | 1.15            | TC        | 0.14 | Vert(LL)  | n/a   | -      | n/a | 999    | MT20    |
| Snow (Pf)              | 20.0  | Lumber DOL      | 1.15            | BC        | 0.16 | Vert(TL)  | n/a   | -      | n/a | 999    | 244/190 |
| TCDL                   | 10.0  | Rep Stress Incr | YES             | WB        | 0.05 | Horiz(TL) | 0.00  | 3      | n/a | n/a    |         |
| BCLL                   | 0.0*  | Code            | IRC2018/TPI2014 | Matrix-MP |      |           |       |        |     |        |         |
| BCDL                   | 10.0  |                 |                 |           |      |           |       |        |     |        |         |
| Weight: 22 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 5-7-1 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

#### REACTIONS

(size) 1=5-7-1, 3=5-7-1, 4=5-7-1  
Max Horiz 1=-61 (LC 10)  
Max Uplift 4=-58 (LC 14)  
Max Grav 1=101 (LC 20), 3=101 (LC 21), 4=365 (LC 21)

#### FORCES

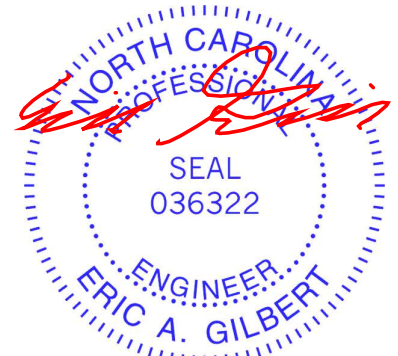
(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-84/132, 2-3=-84/132  
BOT CHORD 1-4=-103/127, 3-4=-103/127  
WEBS 2-4=-272/145

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

- Unbalanced snow loads have been considered for this design.
  - 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 58 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 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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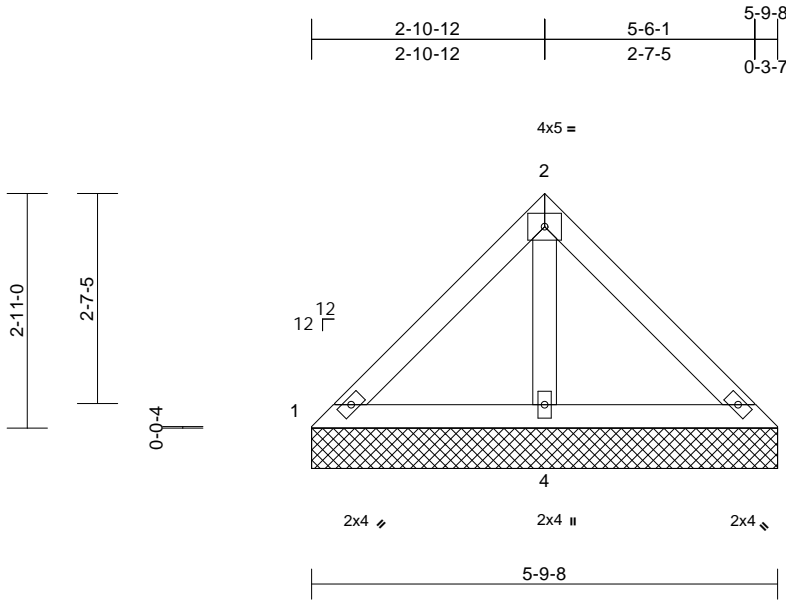
818 Soundside Road  
Edenton, NC 27932

|            |       |            |     |     |   |
|------------|-------|------------|-----|-----|---|
| Job        | Truss | Truss Type | Qty | Ply | Install 2 Oak Meadow-Roof-Maxwell FA 3CG SP BR4 FE<br>I73125317 |
| 25040237-A | V1G   | Valley     | 1   | 1   | Job Reference (optional)  |

Carter Components (Chesapeake), Chesapeake, VA - 23323,

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Wed Apr 30 06:59:55  
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Page: 1



Scale = 1:28.6

| Loading     | (psf) | Spacing         | 2-0-0           | CSI       | DEFL | in        | (loc) | l/defl | L/d | PLATES        | GRIP     |
|-------------|-------|-----------------|-----------------|-----------|------|-----------|-------|--------|-----|---------------|----------|
| TCLL (roof) | 20.0  | Plate Grip DOL  | 1.15            | TC        | 0.15 | n/a       | -     | n/a    | 999 | MT20          | 244/190  |
| Snow (Pf)   | 20.0  | Lumber DOL      | 1.15            | BC        | 0.18 | n/a       | -     | n/a    | 999 |               |          |
| TCDL        | 10.0  | Rep Stress Incr | YES             | WB        | 0.06 | Horiz(TL) | 0.00  | 3      | n/a |               |          |
| BCLL        | 0.0*  | Code            | IRC2018/TPI2014 | Matrix-MP |      |           |       |        |     |               |          |
| BCDL        | 10.0  |                 |                 |           |      |           |       |        |     | Weight: 23 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 5-9-8 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

#### REACTIONS

(size) 1=5-9-8, 3=5-9-8, 4=5-9-8  
Max Horiz 1=-64 (LC 12)  
Max Uplift 4=-63 (LC 14)  
Max Grav 1=103 (LC 20), 3=103 (LC 21), 4=384 (LC 20)

#### FORCES

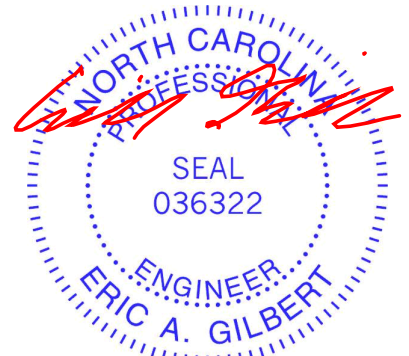
(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-84/142, 2-3=-84/142  
BOT CHORD 1-4=-119/82, 3-4=-119/82  
WEBS 2-4=-300/82

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust)  
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

- Unbalanced snow loads have been considered for this design.
  - 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 63 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 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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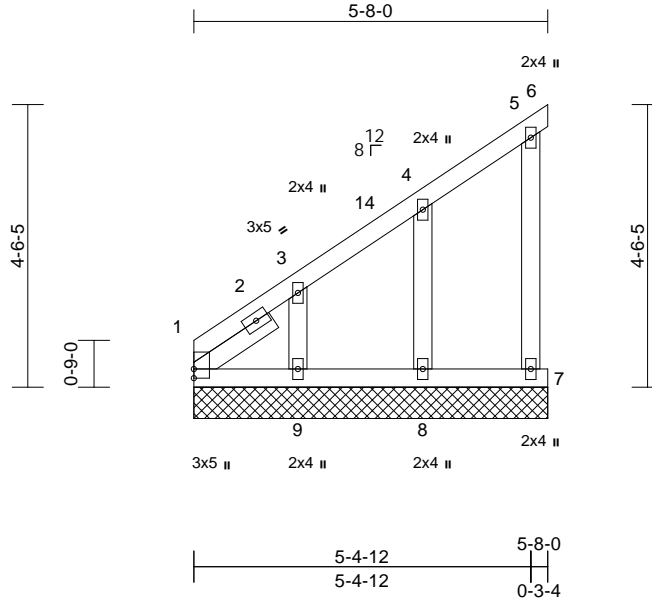
|            |       |                           |     |     |   |
|------------|-------|---------------------------|-----|-----|---|
| Job        | Truss | Truss Type                | Qty | Ply | Install 2 Oak Meadow-Roof-Maxwell FA 3CG SP BR4 FE<br>I73125318 |
| 25040237-A | H01   | Monopitch Supported Gable | 1   | 1   | Job Reference (optional)  |

Carter Components (Chesapeake), Chesapeake, VA - 23323,

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Wed Apr 30 06:59:54

Page: 1

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Scale = 1:36.9

| Loading                | (psf) | Spacing         | 1-11-4          | CSI       | DEFL | in        | (loc) | l/defl | L/d | PLATES | GRIP    |
|------------------------|-------|-----------------|-----------------|-----------|------|-----------|-------|--------|-----|--------|---------|
| TCLL (roof)            | 20.0  | Plate Grip DOL  | 1.15            | TC        | 0.33 | Vert(LL)  | n/a   | -      | n/a | 999    | MT20    |
| Snow (Pf)              | 20.0  | Lumber DOL      | 1.15            | BC        | 0.05 | Vert(TL)  | n/a   | -      | n/a | 999    | 244/190 |
| TCDL                   | 10.0  | Rep Stress Incr | YES             | WB        | 0.07 | Horiz(TL) | 0.00  | 6      | n/a | n/a    |         |
| BCLL                   | 0.0*  | Code            | IRC2018/TPI2014 | Matrix-MP |      |           |       |        |     |        |         |
| BCDL                   | 10.0  |                 |                 |           |      |           |       |        |     |        |         |
| Weight: 33 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  
SLIDER Left 2x4 SP No.3 -- 1-6-0

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

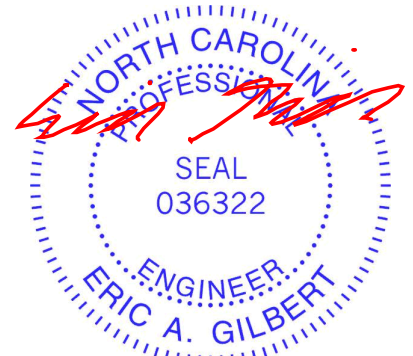
**REACTIONS** (size)  
1=5-8-0, 6=5-8-0, 7=5-8-0, 8=5-8-0, 9=5-8-0  
Max Horiz 1=137 (LC 13)  
Max Uplift 1=-29 (LC 10), 6=-13 (LC 13), 7=-22 (LC 11), 8=-48 (LC 14), 9=-92 (LC 14)  
Max Grav 1=100 (LC 13), 6=11 (LC 14), 7=111 (LC 20), 8=241 (LC 20), 9=222 (LC 20)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-3=-174/236, 3-4=-92/166, 4-5=-78/112, 5-6=-17/14, 5-7=-102/44  
BOT CHORD 1-9=-50/90, 8-9=-50/90, 7-8=-50/90  
WEBS 4-8=-202/154, 3-9=-189/223

**NOTES**  
1) Wind: ASCE 7-16; Vult=130mph (3-second gust)  
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; 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 5-8-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- 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 29 lb uplift at joint 1, 13 lb uplift at joint 6, 22 lb uplift at joint 7, 48 lb uplift at joint 8, 92 lb uplift at joint 9 and 29 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 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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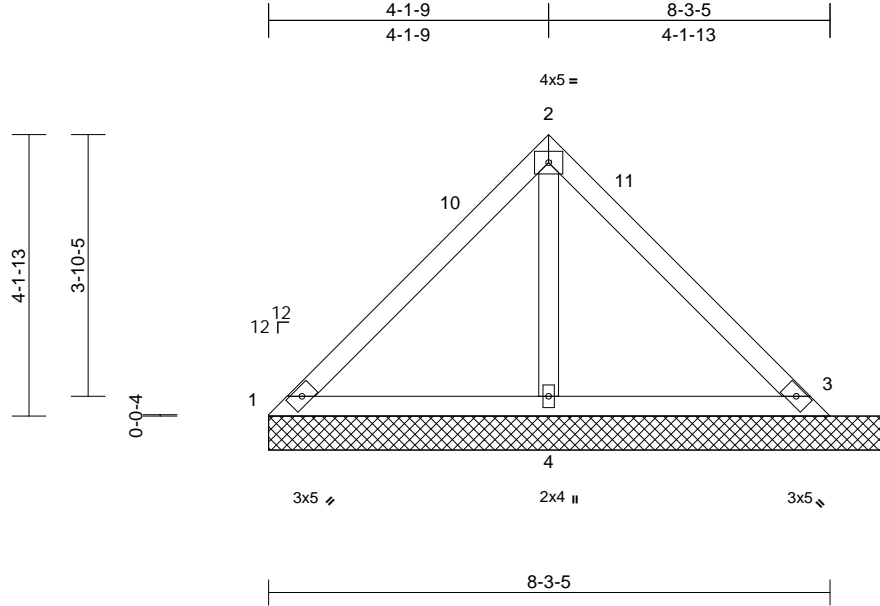


|            |       |            |     |     |   |
|------------|-------|------------|-----|-----|---|
| Job        | Truss | Truss Type | Qty | Ply | Install 2 Oak Meadow-Roof-Maxwell FA 3CG SP BR4 FE<br>I73125319 |
| 25040237-A | V2B   | Valley     | 1   | 1   | Job Reference (optional)  |

Carter Components (Chesapeake), Chesapeake, VA - 23323,

Run: 8.73 E Nov 16 2023 Print: 8.730 E Nov 16 2023 MiTek Industries, Inc. Thu May 01 12:04:16  
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Page: 1



Scale = 1:34

| Loading     | (psf) | Spacing         | 2-0-0           | CSI       | DEFL | in        | (loc) | l/defl | L/d | PLATES | GRIP          |          |
|-------------|-------|-----------------|-----------------|-----------|------|-----------|-------|--------|-----|--------|---------------|----------|
| TCLL (roof) | 20.0  | Plate Grip DOL  | 1.15            | TC        | 0.38 | Vert(LL)  | n/a   | -      | n/a | 999    | MT20          | 244/190  |
| Snow (Pf)   | 20.0  | Lumber DOL      | 1.15            | BC        | 0.38 | Vert(TL)  | n/a   | -      | n/a | 999    |               |          |
| TCDL        | 10.0  | Rep Stress Incr | YES             | WB        | 0.20 | Horiz(TL) | 0.00  | 4      | n/a | n/a    |               |          |
| BCLL        | 0.0*  | Code            | IRC2018/TPI2014 | Matrix-MP |      |           |       |        |     |        |               |          |
| BCDL        | 10.0  |                 |                 |           |      |           |       |        |     |        |               |          |
|             |       |                 |                 |           |      |           |       |        |     |        | Weight: 34 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 8-3-5 oc purlins. |
| BOT CHORD | Rigid ceiling directly applied or 6-0-0 oc bracing.             |

#### REACTIONS

|            |   |
|------------|---|
| (lb/size)  | 1=23/9-1-9, 3=3/9-1-9, 4=609/9-1-9, 7=3/9-1-9             |
| Max Horiz  | 1=92 (LC 11)  |
| Max Uplift | 1=-103 (LC 21), 3=-2 (LC 15), 4=-39 (LC 14), 7=-2 (LC 15) |
| Max Grav   | 1=136 (LC 20), 3=5 (LC 21), 4=775 (LC 21), 7=5 (LC 21)    |

#### FORCES

|  |   |
|--|---|
| (lb) - Maximum Compression/Maximum Tension |   |
| TOP CHORD                                  | 1-10=-113/295, 2-10=-27/319, 2-11=-19/384, 3-11=-42/295 |
| BOT CHORD                                  | 1-4=-209/129, 3-4=-209/129                              |
| WEBS                                       | 2-4=-624/163  |

#### NOTES

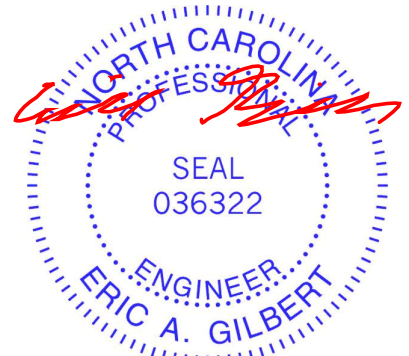
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-4 to 3-0-4, Exterior(2R) 3-0-4 to 4-11-6, Exterior(2E) 4-11-6 to 7-11-6 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- 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 103 lb uplift at joint 1.
- n/a

- 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 1, 2025

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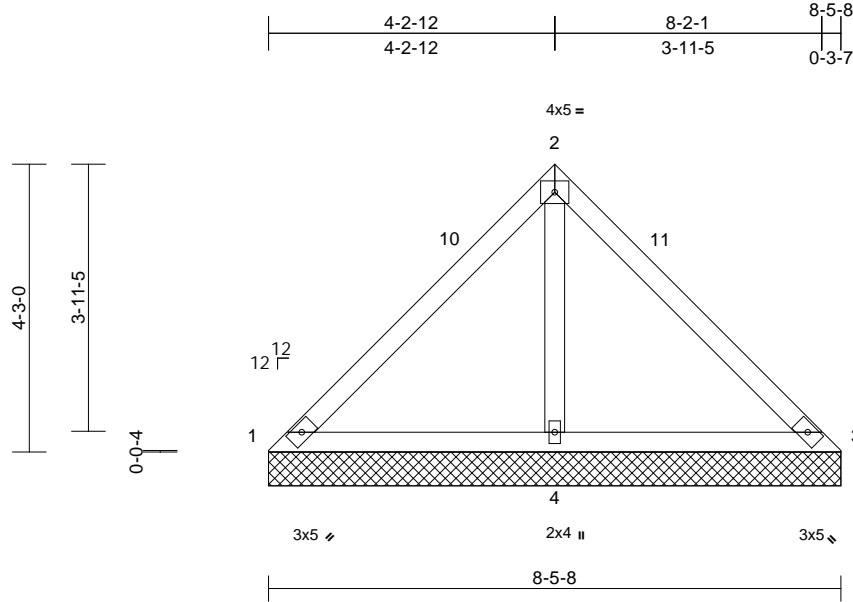
|            |       |            |     |     |   |
|------------|-------|------------|-----|-----|---|
| Job        | Truss | Truss Type | Qty | Ply | Install 2 Oak Meadow-Roof-Maxwell FA 3CG SP BR4 FE<br>I73125320 |
| 25040237-A | V1F   | Valley     | 1   | 1   | Job Reference (optional)  |

Carter Components (Chesapeake), Chesapeake, VA - 23323,

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Wed Apr 30 06:59:55

Page: 1

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Scale = 1:34

| Loading     | (psf) | Spacing         | 2-0-0           | CSI       | DEFL | in        | (loc) | l/defl | L/d | PLATES        | GRIP     |
|-------------|-------|-----------------|-----------------|-----------|------|-----------|-------|--------|-----|---------------|----------|
| TCLL (roof) | 20.0  | Plate Grip DOL  | 1.15            | TC        | 0.42 | n/a       | -     | n/a    | 999 | MT20          | 244/190  |
| Snow (Pf)   | 20.0  | Lumber DOL      | 1.15            | BC        | 0.40 | n/a       | -     | n/a    | 999 |               |          |
| TCDL        | 10.0  | Rep Stress Incr | YES             | WB        | 0.23 | Horiz(TL) | 0.01  | 3      | n/a |               |          |
| BCLL        | 0.0*  | Code            | IRC2018/TPI2014 | Matrix-MP |      |           |       |        |     |               |          |
| BCDL        | 10.0  |                 |                 |           |      |           |       |        |     | Weight: 34 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 8-5-8 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

#### REACTIONS

(size) 1=8-5-8, 3=8-5-8, 4=8-5-8  
Max Horiz 1=-95 (LC 10)  
Max Uplift 1=-133 (LC 21), 3=-2 (LC 15), 4=-43 (LC 15)  
Max Grav 1=127 (LC 20), 3=5 (LC 21), 4=852 (LC 21)

#### FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-96/368, 2-3=-233/437  
BOT CHORD 1-4=-243/148, 3-4=-292/187  
WEBS 2-4=-700/184

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-4 to 3-0-4, Exterior(2R) 3-0-4 to 5-5-12, Exterior(2E) 5-5-12 to 8-5-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- 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 133 lb uplift at joint 1, 2 lb uplift at joint 3, 43 lb uplift at joint 4 and 2 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 1, 2025

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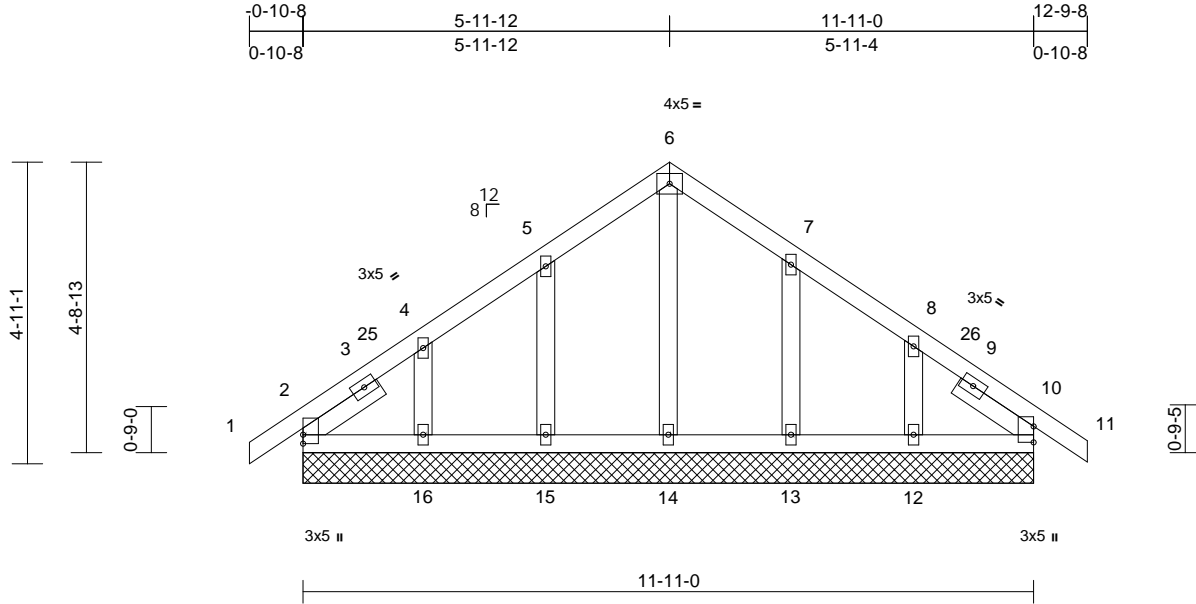
|            |       |                        |     |     |   |
|------------|-------|------------------------|-----|-----|---|
| Job        | Truss | Truss Type             | Qty | Ply | Install 2 Oak Meadow-Roof-Maxwell FA 3CG SP BR4 FE<br>I73125321 |
| 25040237-A | G02   | Common Supported Gable | 1   | 1   | Job Reference (optional)  |

Carter Components (Chesapeake), Chesapeake, VA - 23323,

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Wed Apr 30 06:59:54

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Scale = 1:37.6

| Loading     | (psf) | Spacing         | 1-11-4          | CSI        | DEFL | in       | (loc) | l/defl | L/d | PLATES        | GRIP     |
|-------------|-------|-----------------|-----------------|------------|------|----------|-------|--------|-----|---------------|----------|
| TCLL (roof) | 20.0  | Plate Grip DOL  | 1.15            | TC         | 0.08 | n/a      | -     | n/a    | 999 | MT20          | 244/190  |
| Snow (Pf)   | 20.0  | Lumber DOL      | 1.15            | BC         | 0.04 | n/a      | -     | n/a    | 999 |               |          |
| TCDL        | 10.0  | Rep Stress Incr | YES             | WB         | 0.05 | Horz(CT) | 0.00  | 10     | n/a |               |          |
| BCLL        | 0.0*  | Code            | IRC2018/TPI2014 | Matrix-MSH |      |          |       |        |     |               |          |
| BCDL        | 10.0  |                 |                 |            |      |          |       |        |     |               |          |
|             |       |                 |                 |            |      |          |       |        |     | Weight: 66 lb | FT = 20% |

**LUMBER**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
OTHERS 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 6-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 2=11-11-0, 10=11-11-0, 12=11-11-0, 13=11-11-0, 14=11-11-0, 15=11-11-0, 16=11-11-0

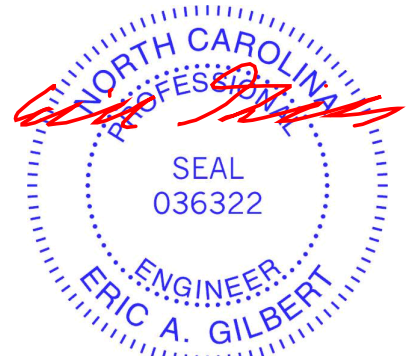
Max Horiz 2=-104 (LC 12)  
Max Uplift 2=-18 (LC 10), 10=-1 (LC 14), 12=-77 (LC 15), 13=-54 (LC 15), 15=-55 (LC 14), 16=-81 (LC 14)  
Max Grav 2=144 (LC 1), 10=145 (LC 22), 12=209 (LC 22), 13=252 (LC 22), 14=131 (LC 28), 15=255 (LC 21), 16=208 (LC 21)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=0/28, 2-4=-77/68, 4-5=-81/78, 5-6=-102/155, 6-7=-101/154, 7-8=-77/80, 8-10=-44/32, 10-11=0/28  
BOT CHORD 2-16=-28/88, 15-16=-28/88, 14-15=-28/88, 13-14=-28/89, 12-13=-28/89, 10-12=-28/89  
WEBS 6-14=-95/7, 5-15=-217/114, 4-16=-166/128, 7-13=-214/112, 8-12=-168/130

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

- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 1-11-8, Exterior(2N) 1-11-8 to 2-11-12, Corner(3R) 2-11-12 to 8-11-12, Exterior(2N) 8-11-12 to 9-9-8, Corner(3E) 9-9-8 to 12-9-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; 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 20.0 psf on overhangs non-concurrent with other live loads.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 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 2, 1 lb uplift at joint 10, 55 lb uplift at joint 15, 81 lb uplift at joint 16, 54 lb uplift at joint 13, 77 lb uplift at joint 12, 18 lb uplift at joint 2 and 1 lb uplift at joint 10.

13) 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 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.sbcacompnents.com)

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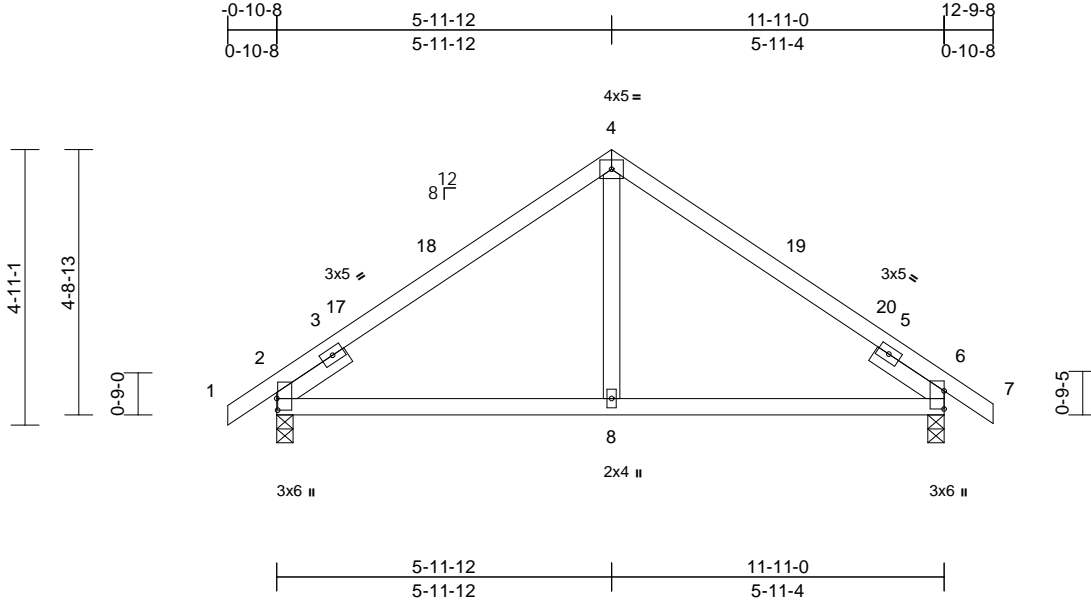
818 Soundside Road  
Edenton, NC 27932

|            |       |            |     |     |   |
|------------|-------|------------|-----|-----|---|
| Job        | Truss | Truss Type | Qty | Ply | Install 2 Oak Meadow-Roof-Maxwell FA 3CG SP BR4 FE<br>I73125322 |
| 25040237-A | G01   | Common     | 4   | 1   | Job Reference (optional)  |

Carter Components (Chesapeake), Chesapeake, VA - 23323,

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Wed Apr 30 06:59:54  
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Page: 1



Scale = 1:41.1

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

| Loading     | (psf) | Spacing         | 2-0-0           | CSI        |      | DEFL     | in    | (loc) | l/defl | L/d | PLATES        | GRIP     |
|-------------|-------|-----------------|-----------------|------------|------|----------|-------|-------|--------|-----|---------------|----------|
| TCLL (roof) | 20.0  | Plate Grip DOL  | 1.15            | TC         | 0.67 | Vert(LL) | -0.06 | 8-11  | >999   | 240 | MT20          | 244/190  |
| Snow (Pf)   | 20.0  | Lumber DOL      | 1.15            | BC         | 0.46 | Vert(CT) | -0.09 | 8-11  | >999   | 180 |               |          |
| TCDL        | 10.0  | Rep Stress Incr | YES             | WB         | 0.10 | Horz(CT) | 0.03  | 2     | n/a    | n/a |               |          |
| BCLL        | 0.0*  | Code            | IRC2018/TPI2014 | Matrix-MSH |      |          |       |       |        |     |               |          |
| BCDL        | 10.0  |                 |                 |            |      |          |       |       |        |     |               |          |
|             |       |                 |                 |            |      |          |       |       |        |     | Weight: 53 lb | FT = 20% |

#### LUMBER

|           |   |
|-----------|---|
| TOP CHORD | 2x4 SP No.2   |
| BOT CHORD | 2x4 SP No.2   |
| WEBS      | 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 5-9-13 oc purlins. |
| BOT CHORD | Rigid ceiling directly applied or 10-0-0 oc bracing.             |

#### REACTIONS

|            |                              |
|------------|------------------------------|
| (size)     | 2=0-3-8, 6=0-3-8             |
| Max Horiz  | 2=-107 (LC 12)               |
| Max Uplift | 2=-57 (LC 14), 6=-56 (LC 15) |
| Max Grav   | 2=620 (LC 21), 6=620 (LC 22) |

#### FORCES

(lb) - Maximum Compression/Maximum Tension

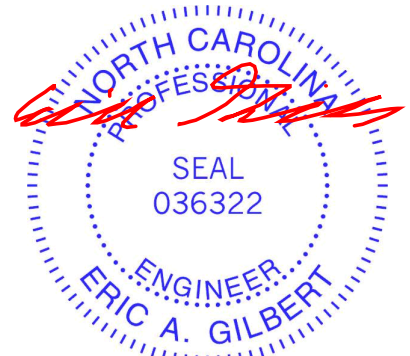
|           |  |
|-----------|--|
| TOP CHORD | 1-2=0/29, 2-4=-593/279, 4-6=-592/279, 6-7=0/29 |
| BOT CHORD | 2-8=-164/388, 6-8=-113/388                     |
| WEBS      | 4-8=-133/257                                   |

#### NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; 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 2-11-12, Exterior(2R) 2-11-12 to 8-11-12, Interior (1) 8-11-12 to 9-9-8, Exterior(2E) 9-9-8 to 12-9-8 zone; cantilever left and right exposed ; end vertical left and right exposed; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; 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 20.0 psf on overhangs non-concurrent with other live loads.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 8) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 6. This connection is for uplift only and does not consider lateral forces.
- 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 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.sbcacompnents.com)

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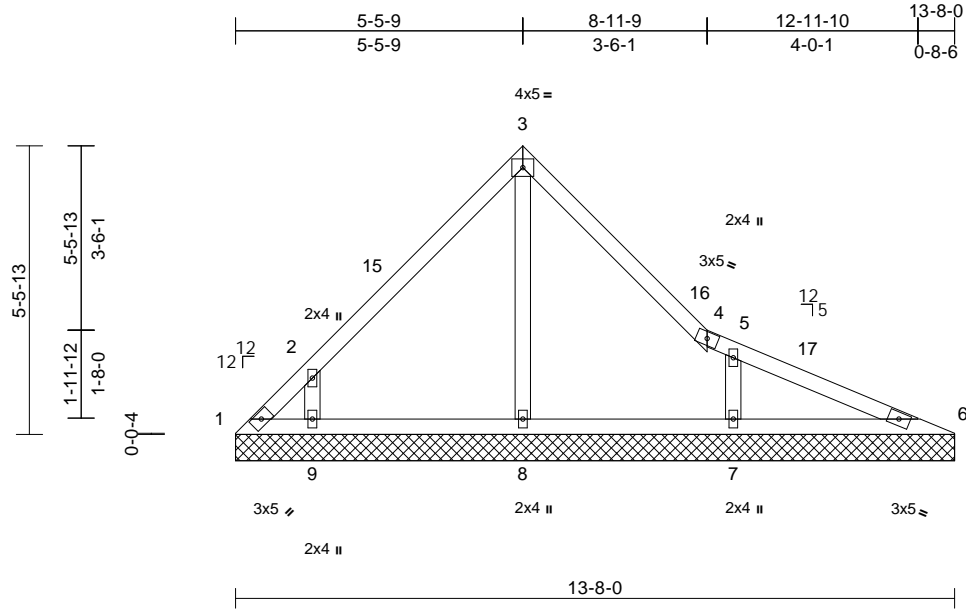
|                          |       |            |     |     |  |
|--------------------------|-------|------------|-----|-----|--|
| Job                      | Truss | Truss Type | Qty | Ply | Install 2 Oak Meadow-Roof-Maxwell FA 3CG SP BR4 FE |
| 25040237-A               | V2A   | Valley     | 1   | 1   | I73125323  |
| Job Reference (optional) |       |            |     |     |  |

Carter Components (Chesapeake), Chesapeake, VA - 23323,

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|                |       |                 |                 |            |      |             |       |       |        |     |               |
|----------------|-------|-----------------|-----------------|------------|------|-------------|-------|-------|--------|-----|---------------|
| Scale = 1:43.8 |       |                 |                 |            |      |             |       |       |        |     |               |
| <b>Loading</b> | (psf) | <b>Spacing</b>  | 2-0-0           | <b>CSI</b> |      | <b>DEFL</b> | in    | (loc) | l/defl | L/d | <b>PLATES</b> |
| TCLL (roof)    | 20.0  | Plate Grip DOL  | 1.15            | TC         | 0.43 | Vert(LL)    | n/a   | -     | n/a    | 999 | <b>GRIP</b>   |
| Snow (Pf)      | 20.0  | Lumber DOL      | 1.15            | BC         | 0.38 | Vert(TL)    | n/a   | -     | n/a    | 999 | MT20          |
| TCDL           | 10.0  | Rep Stress Incr | YES             | WB         | 0.55 | Horiz(TL)   | -0.02 | 6     | n/a    | n/a | 244/190       |
| BCLL           | 0.0*  | Code            | IRC2018/TPI2014 | Matrix-MSH |      |             |       |       |        |     |               |
| BCDL           | 10.0  |                 |                 |            |      |             |       |       |        |     | Weight: 56 lb |
|                |       |                 |                 |            |      |             |       |       |        |     | FT = 20%      |

|                  |  |   |
|------------------|--|---|
| <b>LUMBER</b>    |  |   |
| TOP CHORD        | 2x4 SP No.2  |   |
| BOT CHORD        | 2x4 SP No.2  |   |
| OTHERS           | 2x4 SP No.3  |   |
| <b>BRACING</b>   |  |   |
| TOP CHORD        | Structural wood sheathing directly applied or 10-0-0 oc purlins. |   |
| BOT CHORD        | Rigid ceiling directly applied or 6-0-0 oc bracing.              |   |
| <b>REACTIONS</b> |  | (size)  |
|                  |  | 1=13-8-0, 6=13-8-0, 7=13-8-0, 8=13-8-0, 9=13-8-0                                  |
|                  |  | Max Horiz 1=-130 (LC 10)  |
|                  |  | Max Uplift 1=-394 (LC 42), 6=-3 (LC 42), 7=-126 (LC 15), 9=-178 (LC 14)           |
|                  |  | Max Grav 1=106 (LC 11), 6=0 (LC 11), 7=313 (LC 21), 8=1099 (LC 42), 9=411 (LC 20) |
| <b>FORCES</b>    |  | (lb) - Maximum Compression/Maximum Tension  |
| TOP CHORD        |  | 1-2=-219/719, 2-3=-73/733, 3-4=-10/707, 4-5=-7/615, 5-6=-115/590                  |
| BOT CHORD        |  | 1-9=-499/126, 8-9=-499/119, 7-8=-499/119, 6-7=-508/120                            |
| WEBS             |  | 3-8=-1063/74, 2-9=-452/355, 5-7=-193/218  |

- NOTES**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-4 to 3-0-4, Exterior(2R) 3-0-4 to 8-5-13, Interior (1) 8-5-13 to 10-8-4, Exterior(2E) 10-8-4 to 13-8-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- 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 394 lb uplift at joint 1, 3 lb uplift at joint 6, 178 lb uplift at joint 9, 126 lb uplift at joint 7 and 3 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.

**LOAD CASE(S)** Standard



May 1, 2025

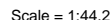
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.**

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.sbcacompnents.com)

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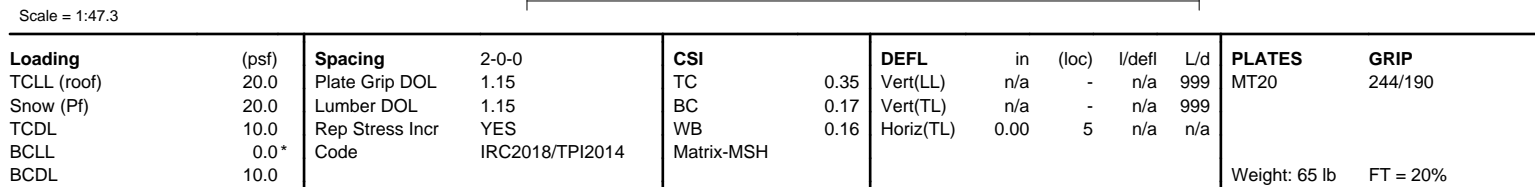
818 Soundside Road  
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May 1, 2025

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- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 5) Unbalanced snow loads have been considered for this design.
- 6) Gable requires continuous bottom chord bearing.
- 7) Gable studs spaced at 4-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 41 lb uplift at joint 1, 4 lb uplift at joint 5, 193 lb uplift at joint 8 and 188 lb uplift at joint 6.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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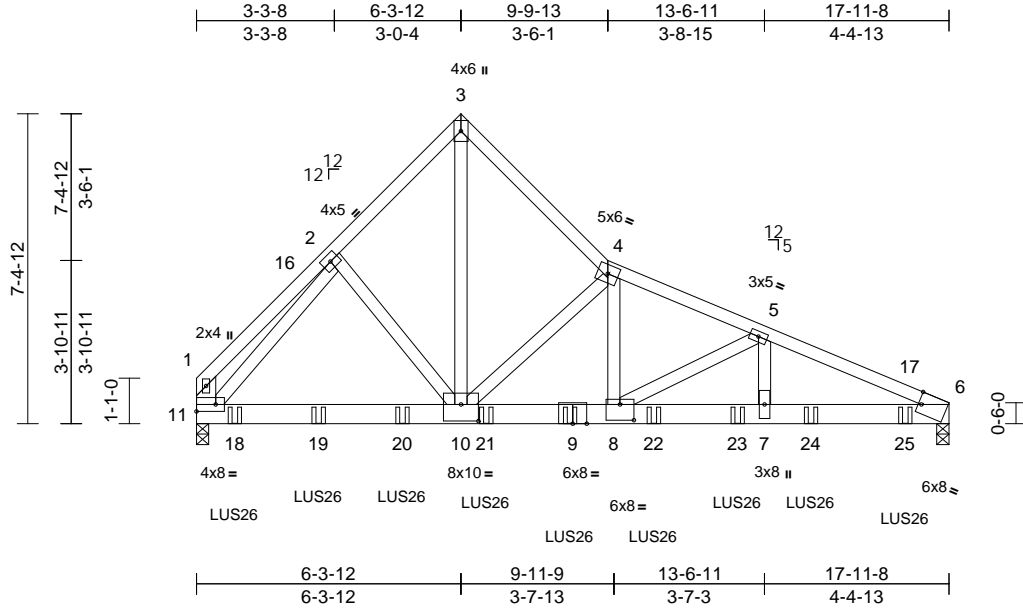
|            |       |                     |     |     |   |
|------------|-------|---------------------|-----|-----|---|
| Job        | Truss | Truss Type          | Qty | Ply | Install 2 Oak Meadow-Roof-Maxwell FA 3CG SP BR4 FE<br>I73125326 |
| 25040237-A | E02   | Roof Special Girder | 1   | 2   | Job Reference (optional)  |

Carter Components (Chesapeake), Chesapeake, VA - 23323,

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Wed Apr 30 06:59:54

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Scale = 1:55

Plate Offsets (X, Y): [6:0-0-14,Edge], [8:0-4-0,0-4-8], [10:0-5-0,0-4-12], [11:Edge,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  | 1.15            | TC         | 0.57 | Vert(LL) | -0.13 | 7-8   | >999   | 240 | MT20           | 244/190  |
| Snow (Pf)   | 20.0  | Lumber DOL      | 1.15            | BC         | 0.52 | Vert(CT) | -0.23 | 7-8   | >906   | 180 |                |          |
| TCDL        | 10.0  | Rep Stress Incr | NO              | WB         | 0.79 | Horz(CT) | 0.04  | 6     | n/a    | n/a |                |          |
| BCLL        | 0.0*  | Code            | IRC2018/TPI2014 | Matrix-MSH |      |          |       |       |        |     |                |          |
| BCDL        | 10.0  |                 |                 |            |      |          |       |       |        |     |                |          |
|             |       |                 |                 |            |      |          |       |       |        |     | Weight: 241 lb | FT = 20% |

#### LUMBER

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x6 SP 2400F 2.0E  
WEBS 2x4 SP No.3 \*Except\* 10-3:2x4 SP No.2,  
11-1:2x6 SP No.2

#### BRACING

TOP CHORD Structural wood sheathing directly applied or  
3-6-5 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc  
bracing.

#### REACTIONS

(size) 6=0-3-8, 11=0-3-8  
Max Horiz 11=-184 (LC 10)  
Max Uplift 6=-208 (LC 13), 11=-193 (LC 13)  
Max Grav 6=-5634 (LC 21), 11=-5809 (LC 21)

#### FORCES

(lb) - Maximum Compression/Maximum  
Tension  
TOP CHORD 1-2=-2023/112, 2-3=-4894/262,  
3-4=-4910/243, 4-5=-7843/299,  
5-6=-10196/382, 1-11=-1502/100  
BOT CHORD 10-11=-148/3330, 8-10=-191/7120,  
7-8=-309/9373, 6-7=-309/9373  
WEBS 2-10=-55/442, 3-10=-262/6646,  
4-10=-5102/296, 4-8=-87/3055,  
5-8=-2518/153, 5-7=-21/1970,  
2-11=-3080/127

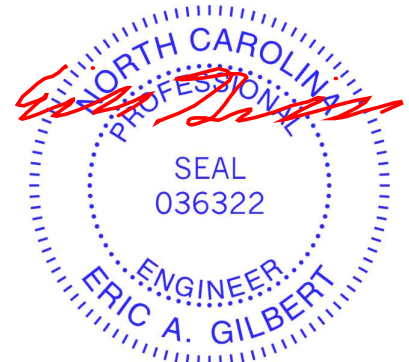
#### NOTES

- 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, 2x6 - 2 rows staggered at 0-9-0 oc.  
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-8-0 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=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 6 and 11. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Use Simpson Strong-Tie LUS26 (4-SD9112 Girder, 4-SD9212 Truss, Single Ply Girder) or equivalent spaced at 2-3-0 oc max. starting at 0-11-0 from the left end to 16-11-0 to connect truss(es) to back 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: 1-3=-60, 3-4=-60, 4-14=-60, 6-11=-20  
Concentrated Loads (lb)  
Vert: 9=-927 (B), 18=-930 (B), 19=-927 (B), 20=-927 (B), 21=-927 (B), 22=-927 (B), 23=-927 (B), 24=-928 (B), 25=-928 (B)



May 1, 2025

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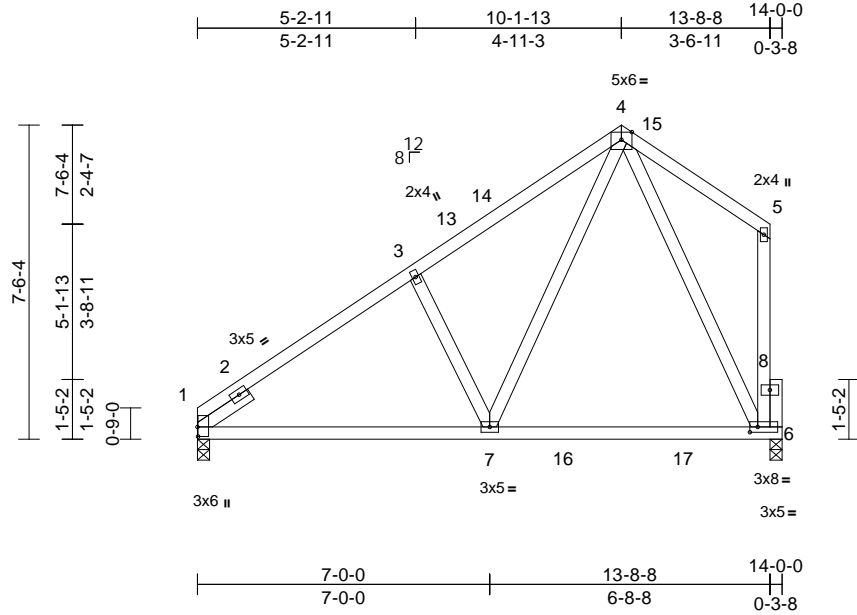
|            |       |            |     |     |   |
|------------|-------|------------|-----|-----|---|
| Job        | Truss | Truss Type | Qty | Ply | Install 2 Oak Meadow-Roof-Maxwell FA 3CG SP BR4 FE<br>I73125327 |
| 25040237-A | D05   | Common     | 4   | 1   | Job Reference (optional)  |

Carter Components (Chesapeake), Chesapeake, VA - 23323,

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Wed Apr 30 06:59:53

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Scale = 1:55.2

Plate Offsets (X, Y): [1:0-2-12,0-0-3], [6:0-2-4,0-1-8]

| Loading     | (psf) | Spacing         | 2-0-0           | CSI        |      | DEFL     | in    | (loc) | l/defl | L/d | PLATES        | GRIP     |
|-------------|-------|-----------------|-----------------|------------|------|----------|-------|-------|--------|-----|---------------|----------|
| TCLL (roof) | 20.0  | Plate Grip DOL  | 1.15            | TC         | 0.43 | Vert(LL) | -0.09 | 6-7   | >999   | 240 | MT20          | 244/190  |
| Snow (Pf)   | 20.0  | Lumber DOL      | 1.15            | BC         | 0.50 | Vert(CT) | -0.14 | 6-7   | >999   | 180 |               |          |
| TCDL        | 10.0  | Rep Stress Incr | YES             | WB         | 0.69 | Horz(CT) | 0.01  | 6     | n/a    | n/a |               |          |
| BCLL        | 0.0*  | Code            | IRC2018/TPI2014 | Matrix-MSH |      |          |       |       |        |     |               |          |
| BCDL        | 10.0  |                 |                 |            |      |          |       |       |        |     |               |          |
|             |       |                 |                 |            |      |          |       |       |        |     | Weight: 85 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  
SLIDER Left 2x4 SP No.3 -- 1-6-0

#### 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=0-3-8, 6=0-3-8  
Max Horiz 1=225 (LC 13)  
Max Uplift 1=-47 (LC 14), 6=-72 (LC 14)  
Max Grav 1=623 (LC 5), 6=653 (LC 24)

#### FORCES

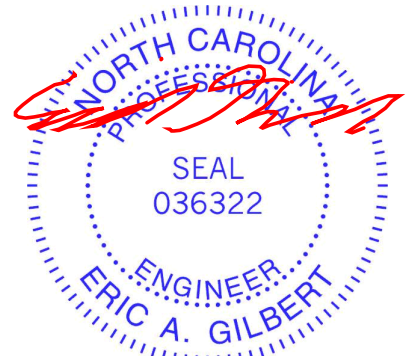
(lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-3=-656/133, 3-4=-691/192, 4-5=-149/171, 5-6=-183/127  
BOT CHORD 1-7=-187/743, 6-7=-60/337  
WEBS 3-7=-338/192, 4-7=-104/648, 4-6=-595/69

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust)  
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; 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 7-1-13, Exterior(2R) 7-1-13 to 10-6-12, Exterior(2E) 10-6-12 to 13-6-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

- Unbalanced snow loads have been considered for this design.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 6. This connection is for uplift only and does not consider lateral forces.
- 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 1, 2025

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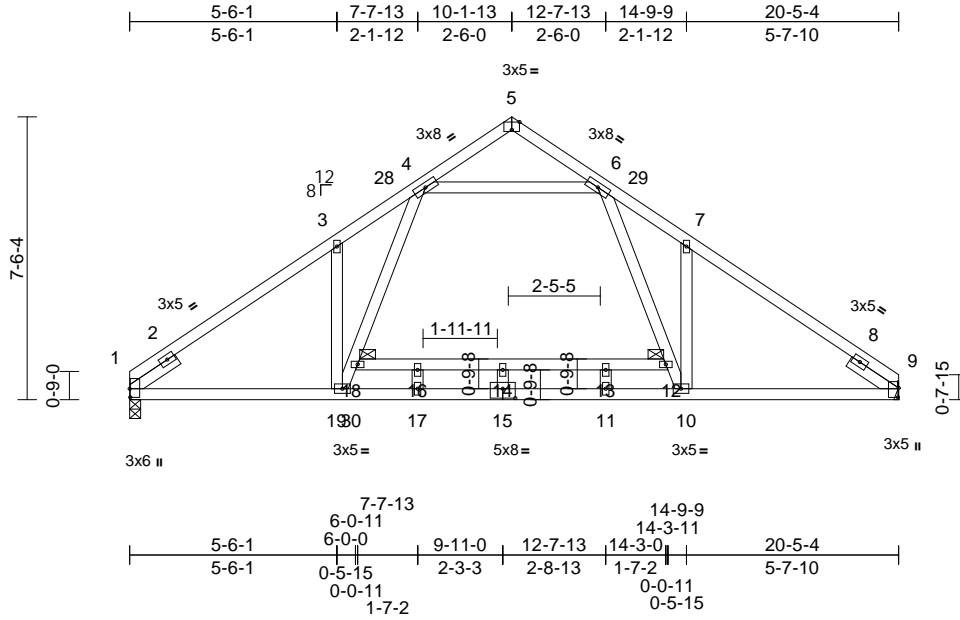
|            |       |            |     |     |   |
|------------|-------|------------|-----|-----|---|
| Job        | Truss | Truss Type | Qty | Ply | Install 2 Oak Meadow-Roof-Maxwell FA 3CG SP BR4 FE<br>I73125328 |
| 25040237-A | D02   | Common     | 2   | 1   | Job Reference (optional)  |

Carter Components (Chesapeake), Chesapeake, VA - 23323,

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Scale = 1:61.2

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

| Loading     | (psf) | Spacing         | 2-0-0           | CSI        |      | DEFL     | in    | (loc) | l/defl | L/d | PLATES         | GRIP     |
|-------------|-------|-----------------|-----------------|------------|------|----------|-------|-------|--------|-----|----------------|----------|
| TCLL (roof) | 20.0  | Plate Grip DOL  | 1.15            | TC         | 0.73 | Vert(LL) | -0.42 | 13-14 | >581   | 240 | MT20           | 244/190  |
| Snow (Pf)   | 20.0  | Lumber DOL      | 1.15            | BC         | 1.00 | Vert(CT) | -0.66 | 13-14 | >369   | 180 |                |          |
| TCDL        | 10.0  | Rep Stress Incr | YES             | WB         | 0.50 | Horz(CT) | 0.05  | 9     | n/a    | n/a |                |          |
| BCLL        | 0.0*  | Code            | IRC2018/TPI2014 | Matrix-MSH |      |          |       |       |        |     |                |          |
| BCDL        | 10.0  |                 |                 |            |      |          |       |       |        |     |                |          |
|             |       |                 |                 |            |      |          |       |       |        |     | Weight: 122 lb | FT = 20% |

#### LUMBER

TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.1 \*Except\* 18-12:2x4 SP No.2  
 WEBS 2x4 SP No.3  
 SLIDER Left 2x4 SP No.2 -- 1-6-0, Right 2x4 SP No.3 -- 1-6-0

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 3-1-4 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 8-9-4 oc bracing: 13-14.

#### REACTIONS

(size) 1=0-3-8, 9= Mechanical  
 Max Horiz 1=-161 (LC 10)  
 Max Uplift 1=-17 (LC 14), 9=-19 (LC 15)  
 Max Grav 1=1128 (LC 5), 9=1126 (LC 25)

#### FORCES

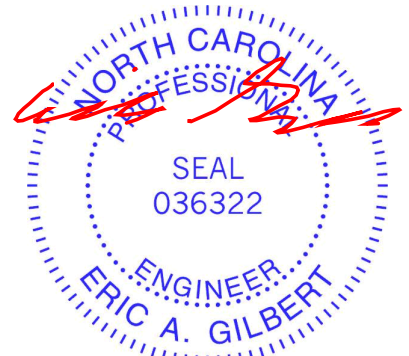
(lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-3=-1766/22, 3-4=-1726/155, 4-5=-209/78, 5-6=-202/79, 6-7=-1786/157, 7-9=-1792/22  
 BOT CHORD 1-19=-129/1360, 17-19=0/1058, 11-17=0/1058, 10-11=0/1058, 9-10=-46/1389, 16-18=-18/42, 14-16=-18/42, 13-14=-18/42, 12-13=-18/42  
 WEBS 18-19=-162/662, 4-18=-124/770, 6-12=-125/839, 10-12=-162/734, 3-19=-338/267, 7-10=-379/268, 4-6=-1083/81, 14-15=-43/0, 16-17=-48/4, 11-13=-58/0

#### NOTES

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

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; 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 7-1-13, Exterior(2R) 7-1-13 to 13-1-13, Interior (1) 13-1-13 to 17-5-4, Exterior(2E) 17-5-4 to 20-5-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) All plates are 2x4 MT20 unless otherwise indicated.
- 6) 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, with BCDL = 10.0psf.
- 8) Refer to girder(s) for truss to truss connections.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 19 lb uplift at joint 9.
- 10) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1. This connection is for uplift only and does not consider lateral forces.
- 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 1, 2025

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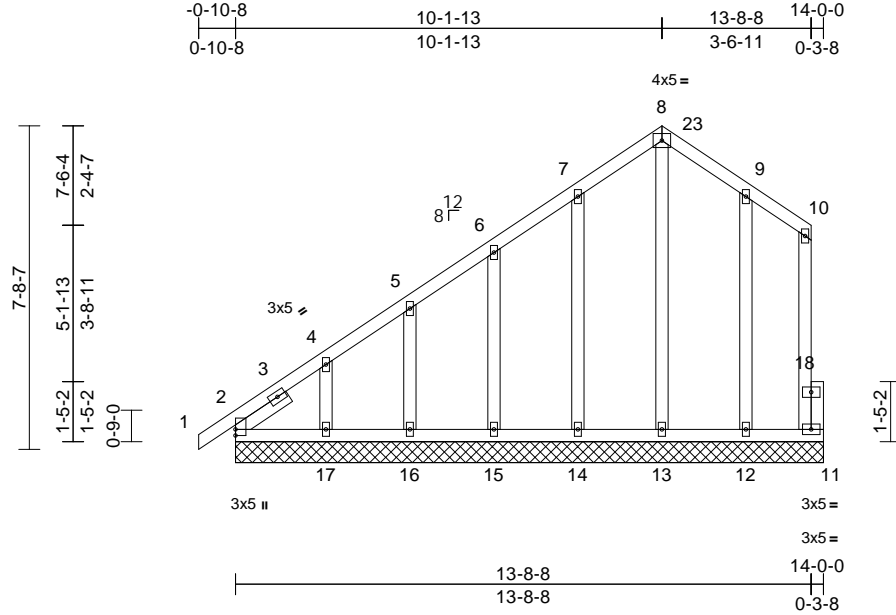
|            |       |                        |     |     |   |
|------------|-------|------------------------|-----|-----|---|
| Job        | Truss | Truss Type             | Qty | Ply | Install 2 Oak Meadow-Roof-Maxwell FA 3CG SP BR4 FE<br>I73125329 |
| 25040237-A | D06   | Common Supported Gable | 1   | 1   | Job Reference (optional)  |

Carter Components (Chesapeake), Chesapeake, VA - 23323,

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Scale = 1:54.9

| Loading                | (psf) | Spacing         | 1-11-4          | CSI        | DEFL | in       | (loc) | l/defl | L/d | PLATES | GRIP    |
|------------------------|-------|-----------------|-----------------|------------|------|----------|-------|--------|-----|--------|---------|
| TCLL (roof)            | 20.0  | Plate Grip DOL  | 1.15            | TC         | 0.32 | Vert(LL) | n/a   | -      | n/a | 999    | MT20    |
| Snow (Pf)              | 20.0  | Lumber DOL      | 1.15            | BC         | 0.16 | Vert(CT) | n/a   | -      | n/a | 999    | 244/190 |
| TCDL                   | 10.0  | Rep Stress Incr | YES             | WB         | 0.18 | Horz(CT) | 0.00  | 11     | n/a | n/a    |         |
| BCLL                   | 0.0*  | Code            | IRC2018/TPI2014 | Matrix-MSH |      |          |       |        |     |        |         |
| BCDL                   | 10.0  |                 |                 |            |      |          |       |        |     |        |         |
| Weight: 99 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  
SLIDER Left 2x4 SP No.3 -- 1-6-0

**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=14-0-0, 11=14-0-0, 12=14-0-0, 13=14-0-0, 14=14-0-0, 15=14-0-0, 16=14-0-0, 17=14-0-0  
Max Horiz 2=227 (LC 13)  
Max Uplift 2=70 (LC 10), 11=20 (LC 14), 12=39 (LC 15), 13=41 (LC 13), 14=58 (LC 14), 15=60 (LC 14), 16=42 (LC 14), 17=110 (LC 14)  
Max Grav 2=197 (LC 31), 11=64 (LC 22), 12=232 (LC 22), 13=172 (LC 25), 14=237 (LC 21), 15=187 (LC 21), 16=152 (LC 25), 17=208 (LC 30)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=0/28, 2-4=-209/221, 4-5=-168/162, 5-6=-155/134, 6-7=-140/170, 7-8=-119/237, 8-9=-106/233, 9-10=-89/172, 10-11=-73/135  
BOT CHORD 2-17=-64/116, 16-17=-64/116, 15-16=-64/116, 14-15=-64/116, 13-14=-64/116, 12-13=-64/116, 11-12=-64/116  
WEBS 8-13=-179/71, 7-14=-199/98, 6-15=-148/109, 5-16=-136/98, 4-17=-177/133, 9-12=-194/88

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

- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 2-1-13, Exterior(2N) 2-1-13 to 7-1-13, Corner(3R) 7-1-13 to 10-6-12, Corner (3E) 10-6-12 to 13-6-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; 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 20.0 psf on overhangs non-concurrent with other live loads.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 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 70 lb uplift at joint 2, 20 lb uplift at joint 11, 41 lb uplift at joint 13, 58 lb uplift at joint 14, 60 lb uplift at joint 15, 42 lb uplift at joint 16, 110 lb uplift at joint 17, 39 lb uplift at joint 12 and 70 lb uplift at joint 2.

13) 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 1, 2025

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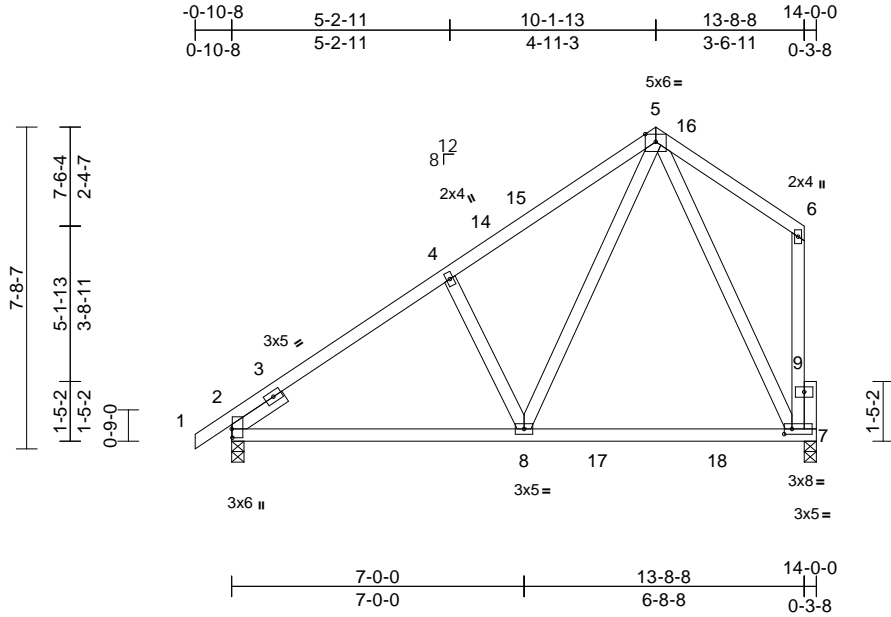
|            |       |            |     |     |   |
|------------|-------|------------|-----|-----|---|
| Job        | Truss | Truss Type | Qty | Ply | Install 2 Oak Meadow-Roof-Maxwell FA 3CG SP BR4 FE<br>I73125330 |
| 25040237-A | D04   | Common     | 6   | 1   | Job Reference (optional)  |

Carter Components (Chesapeake), Chesapeake, VA - 23323,

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Scale = 1:55.2

Plate Offsets (X, Y): [2:0-2-8,0-0-3], [7:0-2-4,0-1-8]

| Loading     | (psf) | Spacing         | 2-0-0           | CSI        | DEFL | in       | (loc) | l/defl | L/d  | PLATES        | GRIP     |
|-------------|-------|-----------------|-----------------|------------|------|----------|-------|--------|------|---------------|----------|
| TCLL (roof) | 20.0  | Plate Grip DOL  | 1.15            | TC         | 0.43 | Vert(LL) | -0.09 | 7-8    | >999 | 240           | 244/190  |
| Snow (Pf)   | 20.0  | Lumber DOL      | 1.15            | BC         | 0.50 | Vert(CT) | -0.14 | 7-8    | >999 | 180           |          |
| TCDL        | 10.0  | Rep Stress Incr | YES             | WB         | 0.69 | Horz(CT) | 0.01  | 7      | n/a  | n/a           |          |
| BCLL        | 0.0*  | Code            | IRC2018/TPI2014 | Matrix-MSH |      |          |       |        |      |               |          |
| BCDL        | 10.0  |                 |                 |            |      |          |       |        |      |               |          |
|             |       |                 |                 |            |      |          |       |        |      | Weight: 87 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               |
| SLIDER    | Left 2x4 SP No.3 -- 1-6-0 |

#### 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=0-3-8, 7=0-3-8             |
| Max Horiz  | 2=234 (LC 13)                |
| Max Uplift | 2=-65 (LC 14), 7=-71 (LC 14) |
| Max Grav   | 2=672 (LC 25), 7=652 (LC 25) |

#### FORCES

|  |  |
|--|--|
| (lb) - Maximum Compression/Maximum Tension |  |
| TOP CHORD                                  | 1-2=0/29, 2-4=-654/132, 4-5=-689/190, 5-6=-149/171, 6-7=-183/127 |
| BOT CHORD                                  | 2-8=-188/740, 7-8=-60/337  |
| WEBS                                       | 4-8=-336/191, 5-8=-103/644, 5-7=-593/69                          |

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; 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 7-1-13, Exterior(2R) 7-1-13 to 10-6-12, Exterior(2E) 10-6-12 to 13-6-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; 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 20.0 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 7. This connection is for uplift only and does not consider lateral forces.
- 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 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.sbcacompnents.com)

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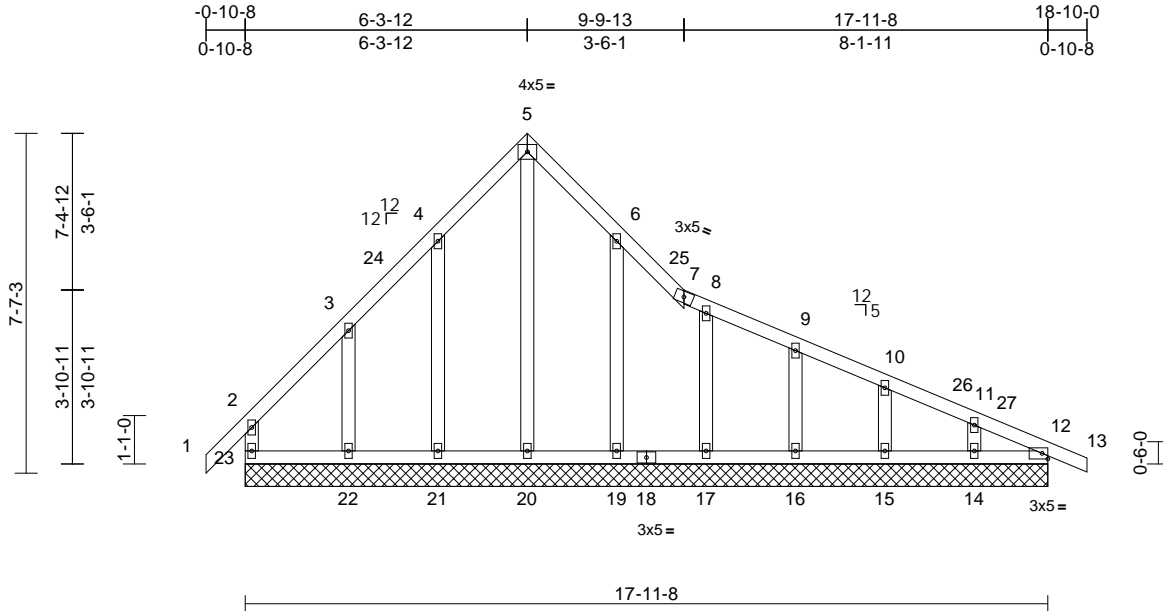
818 Soundside Road  
Edenton, NC 27932

|            |       |                              |     |     |   |
|------------|-------|------------------------------|-----|-----|---|
| Job        | Truss | Truss Type                   | Qty | Ply | Install 2 Oak Meadow-Roof-Maxwell FA 3CG SP BR4 FE<br>I73125331 |
| 25040237-A | E03   | Roof Special Supported Gable | 1   | 1   | Job Reference (optional)  |

Carter Components (Chesapeake), Chesapeake, VA - 23323,

Run: 8.73 E Nov 16 2023 Print: 8.730 E Nov 16 2023 MiTek Industries, Inc. Thu May 01 12:08:25  
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Page: 1



Scale = 1:51.5

| Loading                 | (psf) | Spacing         | 1-11-4          | CSI       | DEFL | in       | (loc) | l/defl | L/d | PLATES | GRIP    |
|-------------------------|-------|-----------------|-----------------|-----------|------|----------|-------|--------|-----|--------|---------|
| TCLL (roof)             | 20.0  | Plate Grip DOL  | 1.15            | TC        | 0.16 | n/a      | -     | n/a    | 999 | MT20   | 244/190 |
| Snow (Pf)               | 20.0  | Lumber DOL      | 1.15            | BC        | 0.07 | n/a      | -     | n/a    | 999 |        |         |
| TCDL                    | 10.0  | Rep Stress Incr | YES             | WB        | 0.24 | Horz(CT) | 0.00  | 12     | n/a |        |         |
| BCLL                    | 0.0*  | Code            | IRC2018/TPI2014 | Matrix-SH |      |          |       |        |     |        |         |
| 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  
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** (lb/size)  
12=119/17-11-8, 14=136/17-11-8,  
15=159/17-11-8, 16=153/17-11-8,  
17=159/17-11-8, 19=162/17-11-8,  
20=133/17-11-8, 21=161/17-11-8,  
22=157/17-11-8, 23=153/17-11-8  
Max Horiz 23=194 (LC 12)  
Max Uplift 12=39 (LC 11), 14=45 (LC 15),  
15=39 (LC 15), 16=32 (LC 15),  
17=60 (LC 14), 19=95 (LC 15),  
21=78 (LC 14), 22=156 (LC 14),  
23=21 (LC 10)  
Max Grav 12=125 (LC 25), 14=175 (LC 43),  
15=213 (LC 43), 16=211 (LC 43),  
17=186 (LC 22), 19=271 (LC 42),  
20=241 (LC 14), 21=274 (LC 21),  
22=209 (LC 25), 23=153 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 2-23=-134/62, 1-2=0/42, 2-3=-81/65,  
3-24=-81/106, 4-24=-54/120, 4-5=-109/234,  
5-6=-109/235, 6-25=-93/138, 7-25=-100/129,  
7-8=-98/120, 8-9=-95/91, 9-10=-110/69,  
10-26=-117/55, 11-26=-122/42,  
11-27=-141/49, 12-27=-150/39, 12-13=0/10  
BOT CHORD 22-23=-29/142, 21-22=-29/142,  
20-21=-29/142, 19-20=-29/142,  
18-19=-29/142, 17-18=-29/142,  
16-17=-29/142, 15-16=-29/142,  
14-15=-29/142, 12-14=-29/142

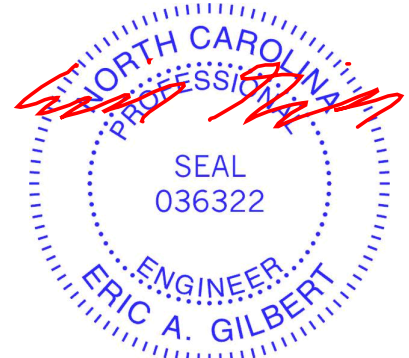
**WEBS** 5-20=-254/80, 4-21=-236/137,  
3-22=-160/156, 6-19=-232/152,  
8-17=-147/115, 9-16=-173/55,  
10-15=-173/64, 11-14=-143/67

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; 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 3-3-12, Exterior(2R) 3-3-12 to 9-3-12, Interior (1) 9-3-12 to 15-10-0, Exterior(2E) 15-10-0 to 18-10-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; 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 20.0 psf on overhangs non-concurrent with other live loads.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

13) 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 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.sbcacompnents.com)

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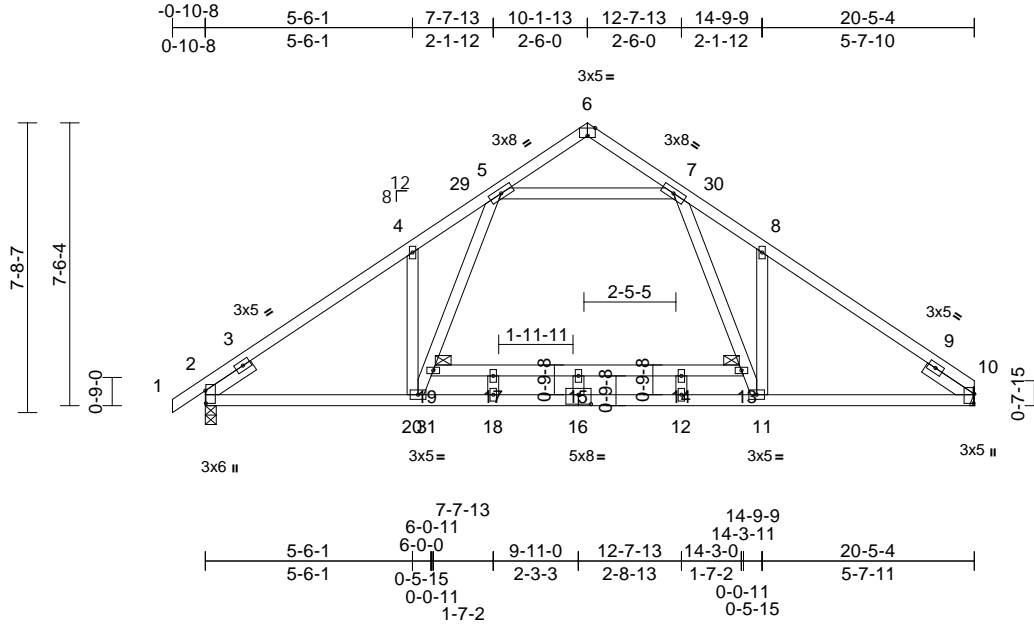


|            |       |            |     |     |   |
|------------|-------|------------|-----|-----|---|
| Job        | Truss | Truss Type | Qty | Ply | Install 2 Oak Meadow-Roof-Maxwell FA 3CG SP BR4 FE<br>I73125333 |
| 25040237-A | D01   | Common     | 7   | 1   | Job Reference (optional)  |

Carter Components (Chesapeake), Chesapeake, VA - 23323,

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Page: 1

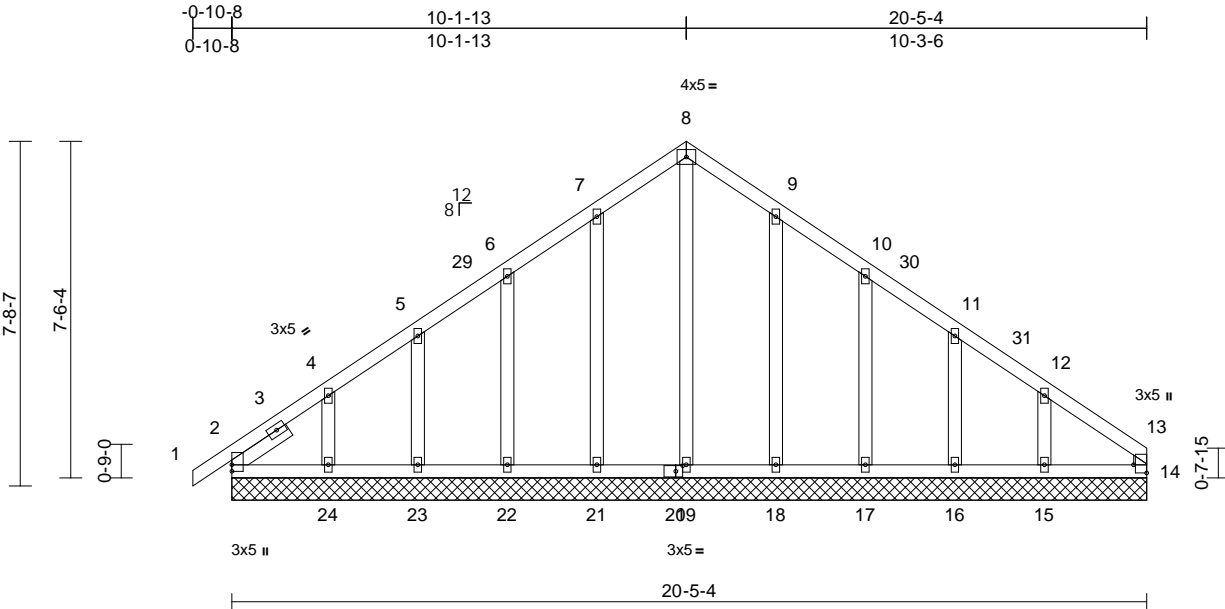




|            |       |                        |     |     |   |
|------------|-------|------------------------|-----|-----|---|
| Job        | Truss | Truss Type             | Qty | Ply | Install 2 Oak Meadow-Roof-Maxwell FA 3CG SP BR4 FE<br>I73125334 |
| 25040237-A | D03   | Common Supported Gable | 1   | 1   | Job Reference (optional)  |

Carter Components (Chesapeake), Chesapeake, VA - 23323,
Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Wed Apr 30 06:59:53
Page: 1

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Scale = 1:51.5

|  |       |                 |                 |            |      |             |      |       |        |                         |               |             |
|--|-------|-----------------|-----------------|------------|------|-------------|------|-------|--------|-------------------------|---------------|-------------|
| Plate Offsets (X, Y): [13:Edge,0-3-8], [20:0-1-14,0-1-8] |       |                 |                 |            |      |             |      |       |        |                         |               |             |
| <b>Loading</b>   | (psf) | <b>Spacing</b>  | 2-0-0           | <b>CSI</b> |      | <b>DEFL</b> | in   | (loc) | l/defl | L/d                     | <b>PLATES</b> | <b>GRIP</b> |
| TCLL (roof)  | 20.0  | Plate Grip DOL  | 1.15            | TC         | 0.08 | Vert(LL)    | n/a  | -     | n/a    | 999                     | MT20          | 244/190     |
| Snow (Pf)  | 20.0  | Lumber DOL      | 1.15            | BC         | 0.05 | Vert(CT)    | n/a  | -     | n/a    | 999                     |               |             |
| TCDL   | 10.0  | Rep Stress Incr | YES             | WB         | 0.17 | Horz(CT)    | 0.00 | 14    | n/a    | n/a                     |               |             |
| BCLL   | 0.0*  | Code            | IRC2018/TPI2014 | Matrix-MSH |      |             |      |       |        |                         |               |             |
| BCDL   | 10.0  |                 |                 |            |      |             |      |       |        |                         |               |             |
|  |       |                 |                 |            |      |             |      |       |        | Weight: 125 lb FT = 20% |               |             |

|  |  |  |
|--|--|--|
| <b>LUMBER</b>  |  |  |
| TOP CHORD  | 2x4 SP No.2  |  |
| BOT CHORD  | 2x4 SP No.2  |  |
| WEBS   | 2x4 SP No.3  |  |
| OTHERS   | 2x4 SP No.3  |  |
| SLIDER   | Left 2x4 SP No.3 -- 1-6-0  |  |
| <b>BRACING</b>   |  |  |
| 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)                                  |  |  |
|  | 2=20-5-4, 14=20-5-4, 15=20-5-4, 16=20-5-4, 17=20-5-4, 18=20-5-4, 19=20-5-4, 21=20-5-4, 22=20-5-4, 23=20-5-4, 24=20-5-4   |  |
| Max Horiz  | 2=179 (LC 13)  |  |
| Max Uplift   | 2=-57 (LC 10), 15=-97 (LC 15), 16=-47 (LC 15), 17=-63 (LC 15), 18=-55 (LC 15), 21=-57 (LC 14), 22=-63 (LC 14), 23=-46 (LC 14), 24=-104 (LC 14)                               |  |
| Max Grav   | 2=188 (LC 26), 14=99 (LC 28), 15=206 (LC 26), 16=159 (LC 26), 17=223 (LC 22), 18=259 (LC 22), 19=175 (LC 28), 21=259 (LC 21), 22=223 (LC 21), 23=159 (LC 25), 24=205 (LC 25) |  |
| <b>FORCES</b> (lb) - Maximum Compression/Maximum Tension |  |  |
| TOP CHORD  | 1-2=0/29, 2-4=-156/138, 4-5=-132/109, 5-6=-122/115, 6-7=-109/158, 7-8=-128/216, 8-9=-128/216, 9-10=-102/158, 10-11=-77/94, 11-12=-71/37, 12-13=-98/51, 13-14=-75/5           |  |
| BOT CHORD  | 2-24=-47/90, 23-24=-47/90, 22-23=-47/90, 21-22=-47/90, 19-21=-47/90, 18-19=-47/90, 17-18=-47/90, 16-17=-47/90, 15-16=-47/90, 14-15=-47/90                                    |  |

- WEBS**
8-19=-176/45, 7-21=-219/81, 6-22=-182/91, 5-23=-141/82, 4-24=-153/108, 9-18=-219/80, 10-17=-183/91, 11-16=-137/79, 12-15=-166/129
- NOTES**
  - Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 2-1-13, Exterior(2N) 2-1-13 to 7-1-13, Corner(3R) 7-1-13 to 13-1-13, Exterior (2N) 13-1-13 to 17-3-8, Corner(3E) 17-3-8 to 20-3-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; 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 20.0 psf on overhangs non-concurrent with other live loads.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 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 57 lb uplift at joint 2, 57 lb uplift at joint 21, 63 lb uplift at joint 22, 46 lb uplift at joint 23, 104 lb uplift at joint 24, 55 lb uplift at joint 18, 63 lb uplift at joint 17, 47 lb uplift at joint 16, 97 lb uplift at joint 15 and 57 lb uplift at joint 2.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2, 25.
- 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 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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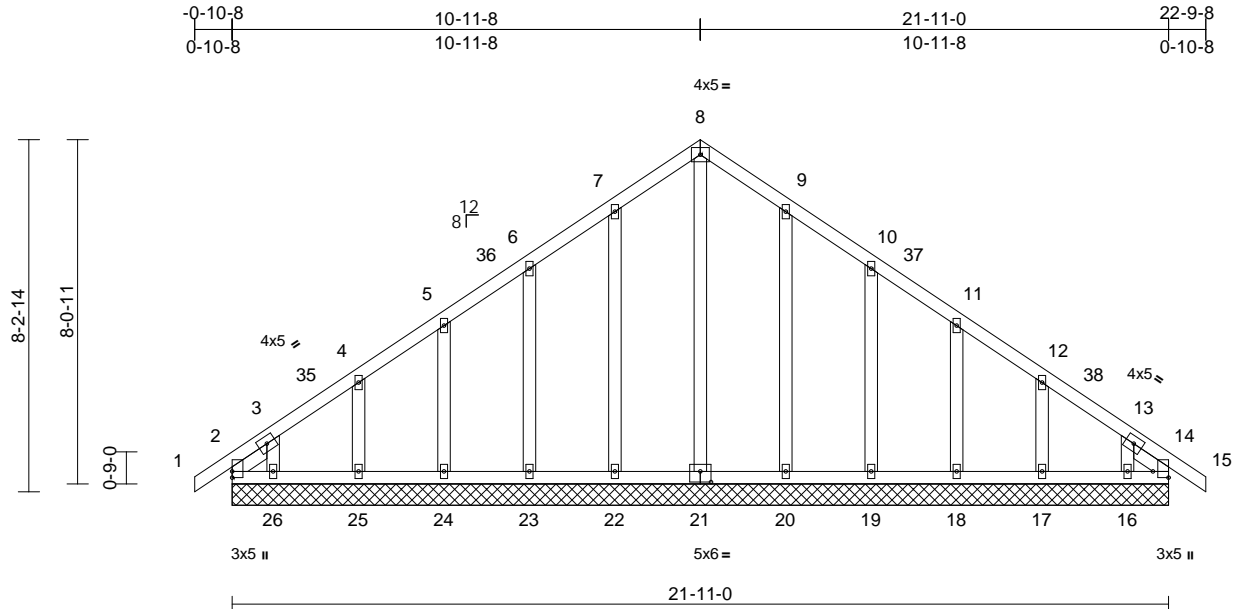
818 Soundside Road  
Edenton, NC 27932

|            |       |                        |     |     |   |
|------------|-------|------------------------|-----|-----|---|
| Job        | Truss | Truss Type             | Qty | Ply | Install 2 Oak Meadow-Roof-Maxwell FA 3CG SP BR4 FE<br>I73125335 |
| 25040237-A | B02   | Common Supported Gable | 1   | 1   | Job Reference (optional)  |

Carter Components (Chesapeake), Chesapeake, VA - 23323,

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Wed Apr 30 06:59:52  
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Page: 1



Scale = 1:53.9

Plate Offsets (X, Y): [14:Edge,0-4-6], [21:0-3-0,0-3-0]

| Loading        | (psf) | Spacing         | 1-11-4          | CSI        | DEFL | in       | (loc) | l/defl | L/d | PLATES | GRIP     |         |
|----------------|-------|-----------------|-----------------|------------|------|----------|-------|--------|-----|--------|----------|---------|
| TCLL (roof)    | 20.0  | Plate Grip DOL  | 1.15            | TC         | 0.08 | Vert(LL) | n/a   | -      | n/a | 999    | MT20     | 244/190 |
| Snow (Pf)      | 20.0  | Lumber DOL      | 1.15            | BC         | 0.03 | Vert(CT) | n/a   | -      | n/a | 999    |          |         |
| TCDL           | 10.0  | Rep Stress Incr | YES             | WB         | 0.17 | Horz(CT) | 0.01  | 14     | n/a | n/a    |          |         |
| BCLL           | 0.0*  | Code            | IRC2018/TPI2014 | Matrix-MSH |      |          |       |        |     |        |          |         |
| BCDL           | 10.0  |                 |                 |            |      |          |       |        |     |        |          |         |
| Weight: 142 lb |       |                 |                 |            |      |          |       |        |     |        | FT = 20% |         |

#### LUMBER

|           |   |
|-----------|---|
| TOP CHORD | 2x4 SP No.2   |
| BOT CHORD | 2x4 SP No.2   |
| OTHERS    | 2x4 SP No.3   |
| SLIDER    | Left 2x4 SP No.3 -- 1-0-7, Right 2x4 SP No.3 -- 1-0-7 |

#### 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=21-11-0, 14=21-11-0, 16=21-11-0, 17=21-11-0, 18=21-11-0, 19=21-11-0, 20=21-11-0, 21=21-11-0, 22=21-11-0, 23=21-11-0, 24=21-11-0, 25=21-11-0, 26=21-11-0   |
| Max Horiz        | 2=179 (LC 12)   |
| Max Uplift       | 2=83 (LC 10), 14=27 (LC 11), 16=97 (LC 15), 17=57 (LC 15), 18=56 (LC 15), 19=59 (LC 15), 20=54 (LC 15), 22=56 (LC 14), 23=58 (LC 14), 24=56 (LC 14), 25=56 (LC 14), 26=114 (LC 14)                            |
| Max Grav         | 2=164 (LC 26), 14=129 (LC 28), 16=132 (LC 31), 17=169 (LC 31), 18=162 (LC 31), 19=215 (LC 22), 20=251 (LC 22), 21=172 (LC 28), 22=251 (LC 21), 23=215 (LC 21), 24=162 (LC 25), 25=168 (LC 25), 26=150 (LC 25) |

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

|           |  |
|-----------|--|
| TOP CHORD | 1-2=0/28, 2-3=-90/86, 3-4=-135/122, 4-5=-113/101, 5-6=-100/98, 6-7=-89/133, 7-8=-109/181, 8-9=-109/181, 9-10=-84/127, 10-11=-60/68, 11-12=-66/38, 12-13=-91/60, 13-14=-70/64, 14-15=0/28 |
| BOT CHORD | 2-26=61/133, 25-26=61/133, 24-25=61/133, 23-24=61/133, 22-23=61/133, 20-22=61/133, 19-20=61/133, 18-19=61/133, 17-18=61/133, 16-17=61/133, 14-16=61/133                                  |
| WEBS      | 8-21=-142/28, 7-22=-212/79, 6-23=-176/83, 5-24=-138/78, 4-25=-143/85, 3-26=-112/118, 9-20=-212/77, 10-19=-176/83, 11-18=-138/78, 12-17=-143/85, 13-16=-112/105                           |

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 7-11-8, Corner(3R) 7-11-8 to 13-11-8, Exterior(2N) 13-11-8 to 19-9-8, Corner(3E) 19-9-8 to 22-9-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; 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 20.0 psf on overhangs non-concurrent with other live loads.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 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 83 lb uplift at joint 2, 27 lb uplift at joint 14, 56 lb uplift at joint 22, 58 lb uplift at joint 23, 56 lb uplift at joint 24, 56 lb uplift at joint 25, 114 lb uplift at joint 26, 54 lb uplift at joint 20, 59 lb uplift at joint 19, 56 lb uplift at joint 18, 57 lb uplift at joint 17, 97 lb uplift at joint 16, 83 lb uplift at joint 2 and 27 lb uplift at joint 14.



May 1, 2025

Continued on page 2

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

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.sbcacompnents.com](http://www.sbcacompnents.com))

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A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

|            |       |                        |     |     |   |
|------------|-------|------------------------|-----|-----|---|
| Job        | Truss | Truss Type             | Qty | Ply | Install 2 Oak Meadow-Roof-Maxwell FA 3CG SP BR4 FE<br>I73125335 |
| 25040237-A | B02   | Common Supported Gable | 1   | 1   | Job Reference (optional)  |

13) 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

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

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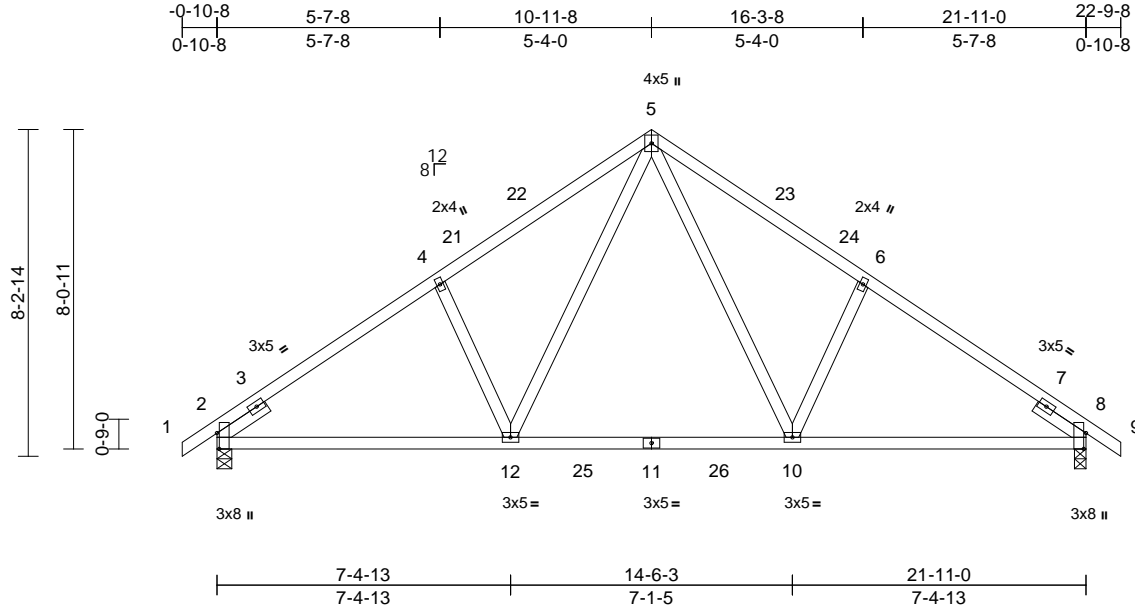
818 Soundside Road  
Edenton, NC 27932

|            |       |            |     |     |   |
|------------|-------|------------|-----|-----|---|
| Job        | Truss | Truss Type | Qty | Ply | Install 2 Oak Meadow-Roof-Maxwell FA 3CG SP BR4 FE<br>I73125336 |
| 25040237-A | B01   | Common     | 5   | 1   | Job Reference (optional)  |

Carter Components (Chesapeake), Chesapeake, VA - 23323,

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Wed Apr 30 06:59:52  
ID:Xu6TXzD8ZlmcI?29OnmY\_WzsNpi-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrcDoi7J4zJC?f

Page: 1



Scale = 1:58.1

Plate Offsets (X, Y): [2:0-4-13,Edge], [8:0-4-13,Edge]

| Loading     | (psf) | Spacing         | 2-0-0           | CSI        |      | DEFL     | in    | (loc) | l/defl | L/d | PLATES         | GRIP     |
|-------------|-------|-----------------|-----------------|------------|------|----------|-------|-------|--------|-----|----------------|----------|
| TCLL (roof) | 20.0  | Plate Grip DOL  | 1.15            | TC         | 0.70 | Vert(LL) | -0.13 | 10-12 | >999   | 240 | MT20           | 244/190  |
| Snow (Pf)   | 20.0  | Lumber DOL      | 1.15            | BC         | 0.62 | Vert(CT) | -0.19 | 10-12 | >999   | 180 |                |          |
| TCDL        | 10.0  | Rep Stress Incr | YES             | WB         | 0.24 | Horz(CT) | 0.04  | 8     | n/a    | n/a |                |          |
| BCLL        | 0.0*  | Code            | IRC2018/TPI2014 | Matrix-MSH |      |          |       |       |        |     |                |          |
| BCDL        | 10.0  |                 |                 |            |      |          |       |       |        |     |                |          |
|             |       |                 |                 |            |      |          |       |       |        |     | Weight: 117 lb | FT = 20% |

#### LUMBER

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

#### BRACING

|           |  |
|-----------|--|
| TOP CHORD | Structural wood sheathing directly applied or 3-10-9 oc purlins. |
| BOT CHORD | Rigid ceiling directly applied or 10-0-0 oc bracing.             |

#### REACTIONS

|            |                                |
|------------|--------------------------------|
| (size)     | 2=0-4-8, 8=0-3-8               |
| Max Horiz  | 2=-185 (LC 12)                 |
| Max Uplift | 2=-91 (LC 14), 8=-91 (LC 15)   |
| Max Grav   | 2=1043 (LC 25), 8=1043 (LC 26) |

#### FORCES

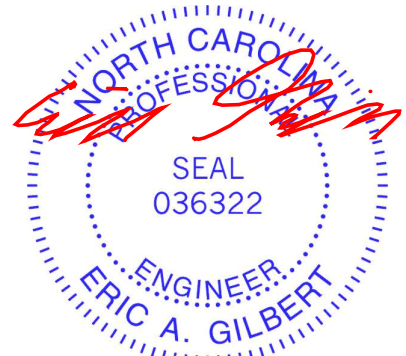
|  |  |
|--|--|
| (lb) - Maximum Compression/Maximum Tension |  |
| TOP CHORD                                  | 1-2=0/29, 2-4=-1468/141, 4-5=-1395/201, 5-6=-1395/201, 6-8=-1468/141, 8-9=0/29 |
| BOT CHORD                                  | 2-12=-184/1146, 10-12=0/761, 8-10=-81/1146                                     |
| WEBS                                       | 5-10=-118/620, 6-10=-347/205, 5-12=-118/620, 4-12=-347/205                     |

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; 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 7-11-8, Exterior(2R) 7-11-8 to 13-11-8, Interior (1) 13-11-8 to 19-9-8, Exterior(2E) 19-9-8 to 22-9-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; 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 20.0 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 8. This connection is for uplift only and does not consider lateral forces.
- 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 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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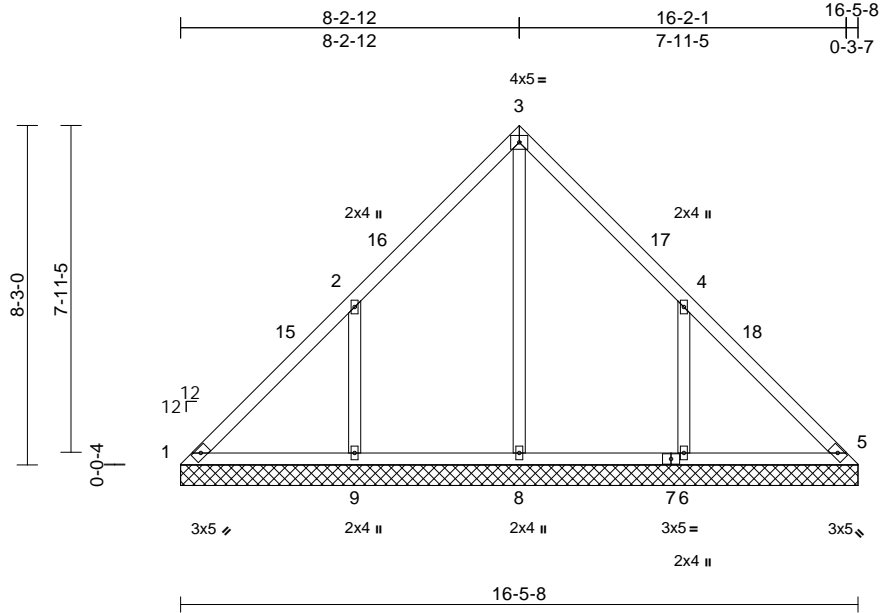
818 Soundside Road  
Edenton, NC 27932

|            |       |            |     |     |   |
|------------|-------|------------|-----|-----|---|
| Job        | Truss | Truss Type | Qty | Ply | Install 2 Oak Meadow-Roof-Maxwell FA 3CG SP BR4 FE<br>I73125337 |
| 25040237-A | V1C   | Valley     | 1   | 1   | Job Reference (optional)  |

Carter Components (Chesapeake), Chesapeake, VA - 23323,

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Wed Apr 30 06:59:55  
ID:mY2VV1YPxwVWWH8UVqFVh4yzsOgo-RC?PsB70Hq3NSgPqnL8w3uITXbGKWRCDoi7J4zJC?f

Page: 1



Scale = 1:56

| Loading     | (psf) | Spacing         | 2-0-0           | CSI        | DEFL | in        | (loc) | l/defl | L/d | PLATES        | GRIP     |
|-------------|-------|-----------------|-----------------|------------|------|-----------|-------|--------|-----|---------------|----------|
| TCLL (roof) | 20.0  | Plate Grip DOL  | 1.15            | TC         | 0.38 | n/a       | -     | n/a    | 999 | MT20          | 244/190  |
| Snow (Pf)   | 20.0  | Lumber DOL      | 1.15            | BC         | 0.17 | n/a       | -     | n/a    | 999 |               |          |
| TCDL        | 10.0  | Rep Stress Incr | YES             | WB         | 0.59 | Horiz(TL) | 0.00  | 5      | n/a |               |          |
| BCLL        | 0.0*  | Code            | IRC2018/TPI2014 | Matrix-MSH |      |           |       |        |     |               |          |
| BCDL        | 10.0  |                 |                 |            |      |           |       |        |     | Weight: 80 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=16-5-8, 5=16-5-8, 6=16-5-8, 8=16-5-8, 9=16-5-8                        |
| Max Horiz  | 1=188 (LC 11)   |
| Max Uplift | 1=-102 (LC 10), 5=-1 (LC 15), 6=-228 (LC 15), 9=-235 (LC 14)            |
| Max Grav   | 1=122 (LC 13), 5=1 (LC 25), 6=521 (LC 25), 8=692 (LC 27), 9=521 (LC 24) |

#### FORCES

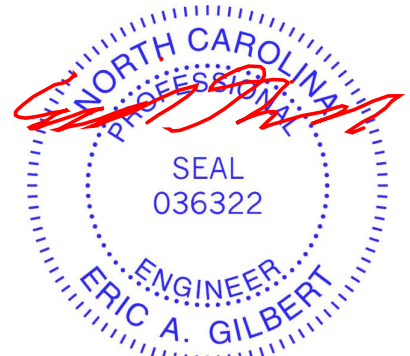
|  |  |
|--|--|
| (lb) - Maximum Compression/Maximum Tension |  |
| TOP CHORD                                  | 1-2=-158/386, 2-3=-64/340, 3-4=-39/312, 4-5=-171/276 |
| BOT CHORD                                  | 1-9=-166/78, 8-9=-166/78, 6-8=-166/78, 5-6=-166/78   |
| WEBS                                       | 3-8=-497/0, 2-9=-398/265, 4-6=-399/263               |

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-4 to 3-0-4, Interior (1) 3-0-4 to 5-3-0, Exterior(2R) 5-3-0 to 11-3-0, Interior (1) 11-3-0 to 13-5-12, Exterior(2E) 13-5-12 to 16-5-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- 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 102 lb uplift at joint 1, 1 lb uplift at joint 5, 235 lb uplift at joint 9, 228 lb uplift at joint 6 and 1 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 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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818 Soundside Road  
Edenton, NC 27932

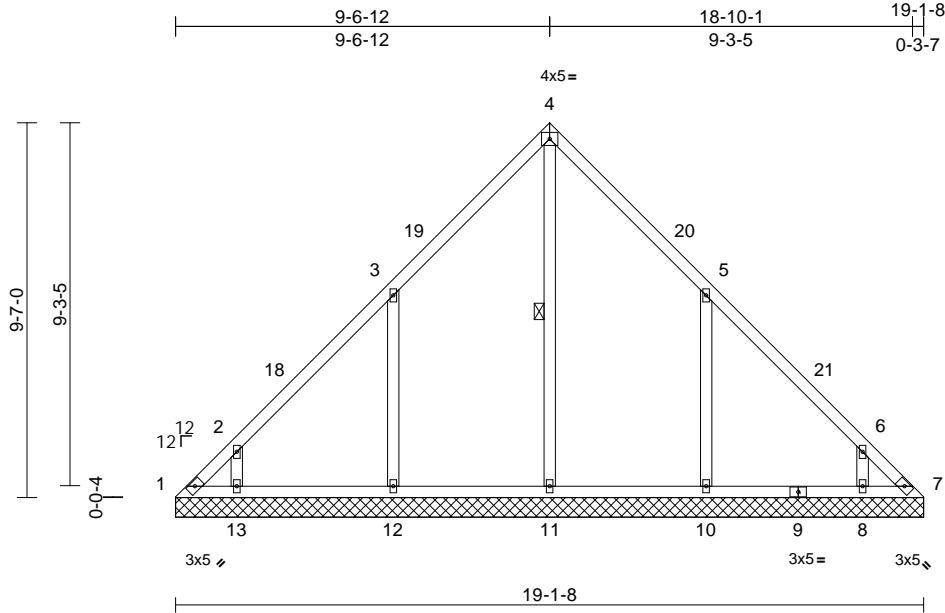


|            |       |            |     |     |   |
|------------|-------|------------|-----|-----|---|
| Job        | Truss | Truss Type | Qty | Ply | Install 2 Oak Meadow-Roof-Maxwell FA 3CG SP BR4 FE<br>I73125338 |
| 25040237-A | V1B   | Valley     | 1   | 1   | Job Reference (optional)  |

Carter Components (Chesapeake), Chesapeake, VA - 23323,

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Wed Apr 30 06:59:55  
ID:luY\_Qay5A3gq8CWqGhbRwvzsOgH-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:58.9

| Loading     | (psf) | Spacing         | 2-0-0           | CSI        |      | DEFL      | in   | (loc) | l/defl | L/d | PLATES        | GRIP     |
|-------------|-------|-----------------|-----------------|------------|------|-----------|------|-------|--------|-----|---------------|----------|
| TCLL (roof) | 20.0  | Plate Grip DOL  | 1.15            | TC         | 0.33 | Vert(LL)  | n/a  | -     | n/a    | 999 | MT20          | 244/190  |
| Snow (Pf)   | 20.0  | Lumber DOL      | 1.15            | BC         | 0.17 | Vert(TL)  | n/a  | -     | n/a    | 999 |               |          |
| TCDL        | 10.0  | Rep Stress Incr | YES             | WB         | 0.21 | Horiz(TL) | 0.01 | 7     | n/a    | n/a |               |          |
| BCLL        | 0.0*  | Code            | IRC2018/TPI2014 | Matrix-MSH |      |           |      |       |        |     |               |          |
| BCDL        | 10.0  |                 |                 |            |      |           |      |       |        |     | Weight: 99 lb | FT = 20% |

#### LUMBER

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

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.

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

WEBS 1 Row at midpt 4-11

| REACTIONS  | (size)  |  |
|------------|---|--|
|            | 1=19-1-8, 7=19-1-8, 8=19-1-8, 10=19-1-8, 11=19-1-8, 12=19-1-8, 13=19-1-8                                  |  |
| Max Horiz  | 1=220 (LC 11)   |  |
| Max Uplift | 1=-106 (LC 12), 7=-53 (LC 13), 8=-111 (LC 15), 10=-225 (LC 15), 12=-224 (LC 14), 13=-120 (LC 14)          |  |
| Max Grav   | 1=176 (LC 14), 7=140 (LC 15), 8=324 (LC 25), 10=487 (LC 6), 11=379 (LC 27), 12=487 (LC 5), 13=335 (LC 24) |  |

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

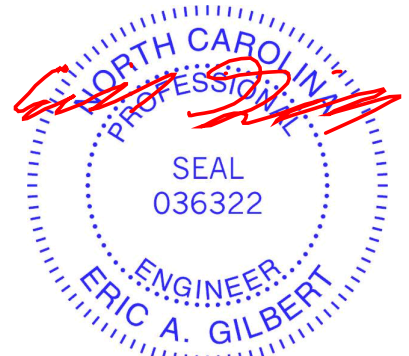
|           |  |
|-----------|--|
| TOP CHORD | 1-2=-301/193, 2-3=-213/142, 3-4=-242/181, 4-5=-242/157, 5-6=-171/87, 6-7=-261/134    |
| BOT CHORD | 1-13=-99/187, 12-13=-82/187, 11-12=-82/187, 10-11=-82/187, 8-10=-82/187, 7-8=-82/187 |
| WEBS      | 4-11=-173/30, 3-12=-389/271, 2-13=-272/203, 5-10=-389/271, 6-8=-272/199              |

#### NOTES

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

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-4 to 3-0-4, Interior (1) 3-0-4 to 6-7-0, Exterior(2R) 6-7-0 to 12-7-0, Interior (1) 12-7-0 to 16-1-12, Exterior(2E) 16-1-12 to 19-1-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 5) Unbalanced snow loads have been considered for this design.
- 6) All plates are 2x4 MT20 unless otherwise indicated.
- 7) Gable requires continuous bottom chord bearing.
- 8) Gable studs spaced at 4-0-0 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, with BCDL = 10.0psf.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 106 lb uplift at joint 1, 53 lb uplift at joint 7, 224 lb uplift at joint 12, 120 lb uplift at joint 13, 225 lb uplift at joint 10 and 111 lb uplift at joint 8.
- 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 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.sbcacompnents.com)

ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

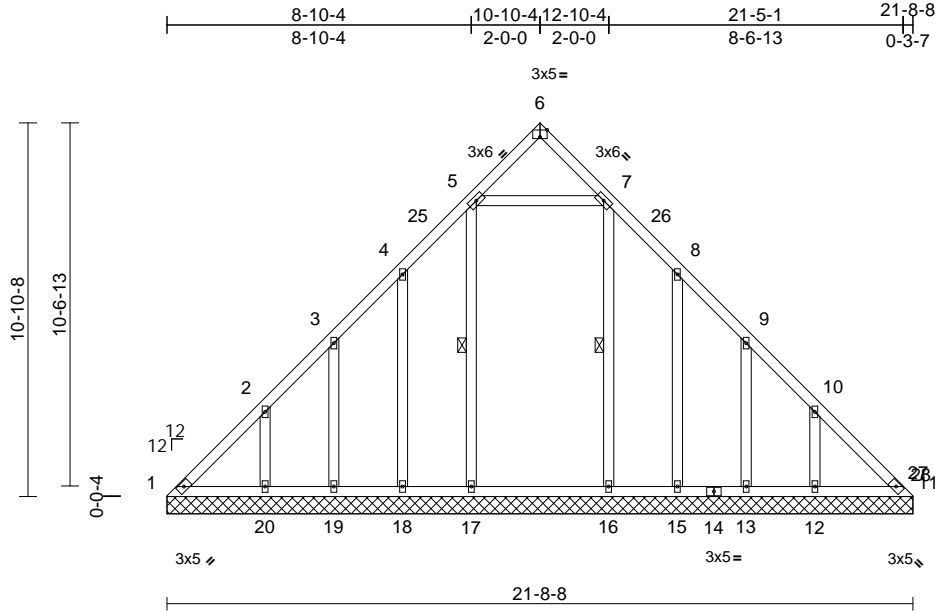
818 Soundside Road  
Edenton, NC 27932

|            |       |            |     |     |   |
|------------|-------|------------|-----|-----|---|
| Job        | Truss | Truss Type | Qty | Ply | Install 2 Oak Meadow-Roof-Maxwell FA 3CG SP BR4 FE<br>I73125339 |
| 25040237-A | V1A   | Valley     | 1   | 1   | Job Reference (optional)  |

Carter Components (Chesapeake), Chesapeake, VA - 23323,

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Wed Apr 30 06:59:55  
ID:FYB9P4B0hv47w7TUtARuBvzsOg\_-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:67

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

| Loading     | (psf) | Spacing         | 1-11-4          | CSI        | DEFL | in        | (loc) | l/defl | L/d | PLATES                  | GRIP    |
|-------------|-------|-----------------|-----------------|------------|------|-----------|-------|--------|-----|-------------------------|---------|
| TCLL (roof) | 20.0  | Plate Grip DOL  | 1.15            | TC         | 0.09 | Vert(LL)  | n/a   | -      | 999 | MT20                    | 244/190 |
| Snow (Pf)   | 20.0  | Lumber DOL      | 1.15            | BC         | 0.13 | Vert(TL)  | n/a   | -      | 999 |                         |         |
| TCDL        | 10.0  | Rep Stress Incr | YES             | WB         | 0.14 | Horiz(TL) | 0.01  | 11     | n/a |                         |         |
| BCLL        | 0.0*  | Code            | IRC2018/TPI2014 | Matrix-MSH |      |           |       |        |     |                         |         |
| BCDL        | 10.0  |                 |                 |            |      |           |       |        |     |                         |         |
|             |       |                 |                 |            |      |           |       |        |     | Weight: 145 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. |
| BOT CHORD | Rigid ceiling directly applied or 6-0-0 oc bracing.             |

WEBS 1 Row at midpt 5-17, 7-16

|           |            |   |
|-----------|------------|---|
| REACTIONS | (size)     | 1=21-8-8, 11=21-8-8, 12=21-8-8, 13=21-8-8, 15=21-8-8, 16=21-8-8, 17=21-8-8, 18=21-8-8, 19=21-8-8, 20=21-8-8   |
|           | Max Horiz  | 1=242 (LC 11)   |
|           | Max Uplift | 1=82 (LC 10), 11=20 (LC 11), 12=103 (LC 15), 13=95 (LC 15), 15=96 (LC 15), 18=98 (LC 14), 19=91 (LC 14), 20=111 (LC 14)                                     |
|           | Max Grav   | 1=181 (LC 30), 11=126 (LC 27), 12=279 (LC 25), 13=186 (LC 30), 15=197 (LC 21), 16=378 (LC 6), 17=378 (LC 5), 18=197 (LC 20), 19=182 (LC 24), 20=288 (LC 24) |

#### FORCES

|           |   |
|-----------|---|
|           | (lb) - Maximum Compression/Maximum Tension  |
| TOP CHORD | 1-2=231/216, 2-3=170/165, 3-4=140/160, 4-5=117/212, 5-6=173/36, 6-7=173/36, 7-8=117/156, 8-9=76/103, 9-10=100/82, 10-11=173/130 |
| BOT CHORD | 1-20=94/163, 19-20=94/163, 18-19=94/163, 17-18=94/163, 16-17=94/163, 15-16=94/163, 13-15=94/163, 12-13=94/163, 11-12=94/163     |

#### WEBS

5-17=-272/39, 4-18=-167/113, 3-19=-143/119, 2-20=-195/128, 7-16=-272/0, 8-15=-167/112, 9-13=-143/120, 10-12=-194/125, 5-7=-78/169

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-4 to 2-10-8, Interior (1) 2-10-8 to 7-10-8, Exterior(2R) 7-10-8 to 13-10-8, Interior (1) 13-10-8 to 18-4-12, Exterior(2E) 18-4-12 to 21-4-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 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 82 lb uplift at joint 1, 20 lb uplift at joint 11, 98 lb uplift at joint 18, 91 lb uplift at joint 19, 111 lb uplift at joint 20, 96 lb uplift at joint 15, 95 lb uplift at joint 13 and 103 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 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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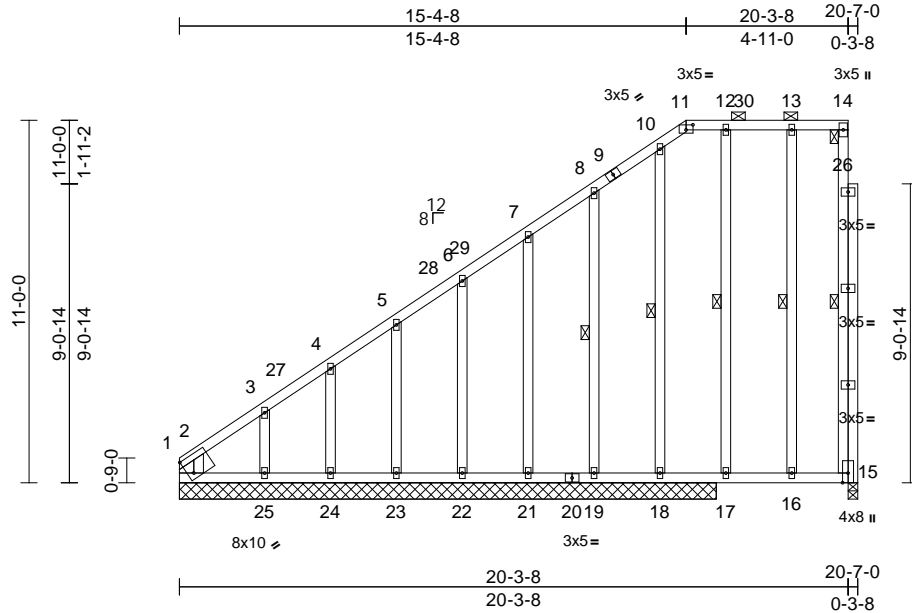
818 Soundside Road  
Edenton, NC 27932

|            |       |                                |     |     |   |
|------------|-------|--------------------------------|-----|-----|---|
| Job        | Truss | Truss Type                     | Qty | Ply | Install 2 Oak Meadow-Roof-Maxwell FA 3CG SP BR4 FE<br>I73125340 |
| 25040237-A | C02   | Piggyback Base Supported Gable | 1   | 1   | Job Reference (optional)  |

Carter Components (Chesapeake), Chesapeake, VA - 23323,

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Wed Apr 30 06:59:52  
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Page: 1



Scale = 1:69.9

Plate Offsets (X, Y): [1:0-2-2,0-6-1], [11:0-2-8,0-1-13]

| Loading        | (psf) | Spacing         | 1-11-4          | CSI        | DEFL | in       | (loc) | l/defl | L/d  | PLATES | GRIP     |         |
|----------------|-------|-----------------|-----------------|------------|------|----------|-------|--------|------|--------|----------|---------|
| TCLL (roof)    | 20.0  | Plate Grip DOL  | 1.15            | TC         | 0.50 | Vert(LL) | -0.05 | 16-17  | >999 | 240    | MT20     | 244/190 |
| Snow (Pf)      | 20.0  | Lumber DOL      | 1.15            | BC         | 0.33 | Vert(CT) | -0.07 | 16-17  | >960 | 180    |          |         |
| TCDL           | 10.0  | Rep Stress Incr | YES             | WB         | 0.21 | Horz(CT) | 0.00  | 15     | n/a  | n/a    |          |         |
| BCLL           | 0.0*  | Code            | IRC2018/TPI2014 | Matrix-MSH |      |          |       |        |      |        |          |         |
| BCDL           | 10.0  |                 |                 |            |      |          |       |        |      |        |          |         |
| Weight: 189 lb |       |                 |                 |            |      |          |       |        |      |        | FT = 20% |         |

#### LUMBER

|           |  |
|-----------|--|
| TOP CHORD | 2x4 SP No.2                                  |
| BOT CHORD | 2x4 SP No.2                                  |
| WEBS      | 2x4 SP No.2                                  |
| OTHERS    | 2x4 SP No.3 *Except* 16-13,17-12:2x4 SP No.2 |
| SLIDER    | Left 2x4 SP No.3 -- 0-7-0                    |

#### BRACING

|           |   |
|-----------|---|
| TOP CHORD | Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 11-14. |
| BOT CHORD | Rigid ceiling directly applied or 10-0-0 oc bracing.  |
| WEBS      | 1 Row at midpt 14-15, 13-16, 12-17, 10-18, 8-19   |

#### REACTIONS

|            |   |
|------------|---|
| (size)     | 1=16-3-8, 15=0-3-8, 18=16-3-8, 19=16-3-8, 21=16-3-8, 22=16-3-8, 23=16-3-8, 24=16-3-8, 25=16-3-8   |
| Max Horiz  | 1=371 (LC 11)   |
| Max Uplift | 1=130 (LC 12), 15=36 (LC 11), 18=105 (LC 11), 19=102 (LC 46), 21=53 (LC 14), 22=54 (LC 14), 23=66 (LC 14), 24=14 (LC 14), 25=207 (LC 14)      |
| Max Grav   | 1=288 (LC 11), 15=277 (LC 36), 18=471 (LC 36), 19=162 (LC 43), 21=240 (LC 37), 22=198 (LC 37), 23=171 (LC 24), 24=147 (LC 20), 25=262 (LC 43) |

#### FORCES

|  |   |
|--|---|
| (lb) - Maximum Compression/Maximum Tension |   |
| TOP CHORD                                  | 1-2=-289/333, 2-3=-352/441, 3-4=-277/353, 4-5=-255/337, 5-6=-230/303, 6-7=-214/273, 7-8=-198/235, 8-10=-186/235, 10-11=-156/201, 11-12=-131/207, 12-13=-131/207, 13-14=-131/207, 14-15=-153/123 |

|           |   |
|-----------|---|
| BOT CHORD | 1-25=-134/212, 24-25=-134/212, 23-24=-134/212, 22-23=-134/212, 21-22=-134/212, 19-21=-134/212, 18-19=-134/212, 17-18=-134/212, 16-17=-134/212, 15-16=-134/212 |
| WEBS      | 13-16=-123/90, 12-17=-95/46, 10-18=-318/97, 8-19=-155/98, 7-21=-197/82, 6-22=-173/83, 5-23=-144/87, 4-24=-116/68, 3-25=-224/159                               |

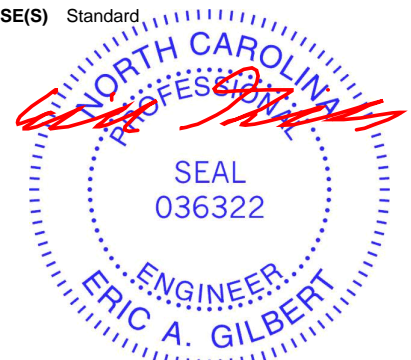
#### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) 0-4-6 to 3-4-6, Exterior(2N) 3-4-6 to 12-4-8, Corner(3R) 12-4-8 to 17-1-12, Corner(3E) 17-1-12 to 20-1-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Provide adequate drainage to prevent water ponding.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Bearing at joint(s) 15 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 130 lb uplift at joint 1.
- N/A

- 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 1, 2025

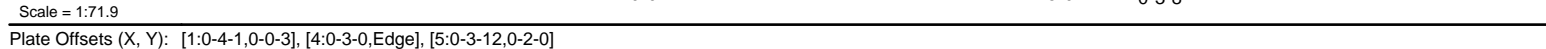
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.**

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ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

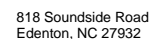
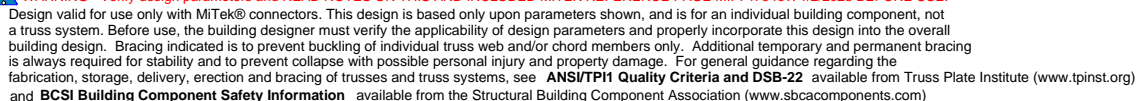
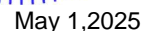
Carter Components (Chesapeake), Chesapeake, VA - 23323, Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Wed Apr 30 06:59:52 Page: 1  
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|                  |   |  |
|------------------|---|--|
| <b>LUMBER</b>    |   | 3) TCELL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10  |
| TOP CHORD        | 2x4 SP No.2 *Except* 1-4:2x4 SP No.1  |  |
| BOT CHORD        | 2x4 SP No.2   |  |
| WEBS             | 2x4 SP No.2 *Except* 3-10,8-3:2x4 SP No.3   |  |
| OTHERS           | 2x4 SP No.2   |  |
| SLIDER           | Left 2x4 SP No.2 -- 1-6-0   | 4) Unbalanced snow loads have been considered for this design.   |
| <b>BRACING</b>   |   | 5) Provide adequate drainage to prevent water ponding.   |
| TOP CHORD        | Structural wood sheathing directly applied or 3-11-15 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-6. | 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.   |
| BOT CHORD        | Rigid ceiling directly applied or 10-0-0 oc bracing.  | 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, with BCDL = 10.0psf. |
| WEBS             | 1 Row at midpt 6-7, 3-8, 5-7  | 8) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.   |
| <b>REACTIONS</b> | (size) 1=0-5-4, 7=0-3-8   | 9) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 7. This connection is for uplift only and does not consider lateral forces.                          |
|                  | Max Horiz 1=379 (LC 13)   | 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.   |
|                  | Max Uplift 1=-74 (LC 14), 7=-255 (LC 14)  | 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.   |
| <b>FORCES</b>    | Max Grav 1=1027 (LC 43), 7=1696 (LC 43)   |  |
|                  | (lb) - Maximum Compression/Maximum Tension  |  |
| TOP CHORD        | 1-3=-1291/115, 3-5=-705/177, 5-6=-142/185, 6-7=-1020/185  |  |
| BOT CHORD        | 1-10=-343/1276, 8-10=-184/1276, 7-8=-129/561  |  |
| WEBS             | 3-10=0/404, 3-8=-886/245, 5-8=-74/797, 5-7=-1072/163  |  |

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust)  
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; 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 11-1-9, Exterior(2R) 11-1-9 to 17-1-12, Exterior(2E) 17-1-12 to 20-1-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (lb/ft)  
Vert: 1-5=-60, 5-6=-60, 7-12=-20  
Concentrated Loads (lb)  
Vert: 6=-700





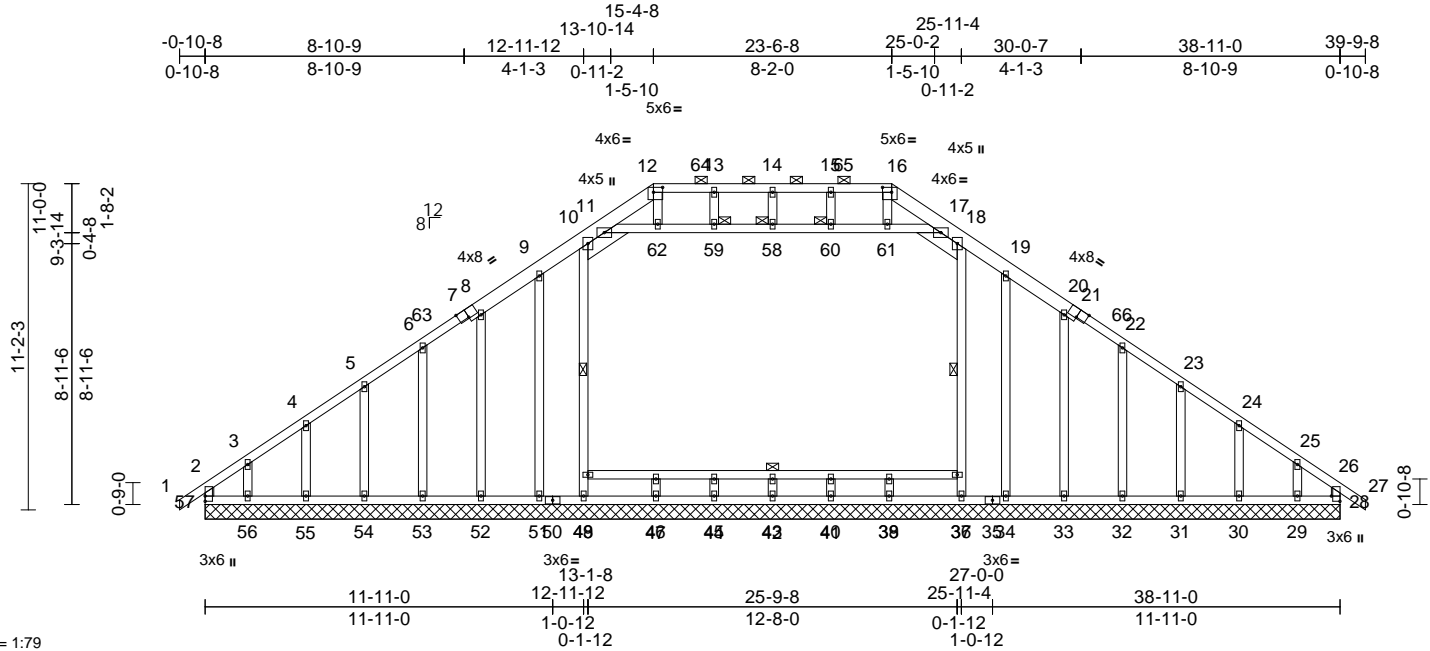
|            |       |                       |     |     |   |
|------------|-------|-----------------------|-----|-----|---|
| Job        | Truss | Truss Type            | Qty | Ply | Install 2 Oak Meadow-Roof-Maxwell FA 3CG SP BR4 FE<br>I73125342 |
| 25040237-A | A02   | Attic Supported Gable | 1   | 1   | Job Reference (optional)  |

Carter Components (Chesapeake), Chesapeake, VA - 23323,

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Wed Apr 30 06:59:51

Page: 1

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Scale = 1:79

Plate Offsets (X, Y): [7:0-4-0,Edge], [12:0-3-12,0-2-0], [16:0-3-12,0-2-0], [21:0-4-0,Edge], [28:Edge,0-3-8]

| Loading                 | (psf) | Spacing         | 1-11-4          | CSI        |      | DEFL     | in   | (loc) | l/defl | L/d | PLATES | GRIP    |
|-------------------------|-------|-----------------|-----------------|------------|------|----------|------|-------|--------|-----|--------|---------|
| TCLL (roof)             | 20.0  | Plate Grip DOL  | 1.15            | TC         | 0.41 | Vert(LL) | n/a  | -     | n/a    | 999 | MT20   | 244/190 |
| Snow (Pf)               | 20.0  | Lumber DOL      | 1.15            | BC         | 0.12 | Vert(CT) | n/a  | -     | n/a    | 999 |        |         |
| TCDL                    | 10.0  | Rep Stress Incr | YES             | WB         | 0.15 | Horz(CT) | 0.01 | 28    | n/a    | n/a |        |         |
| BCLL                    | 0.0*  | Code            | IRC2018/TPI2014 | Matrix-MSH |      |          |      |       |        |     |        |         |
| BCDL                    | 10.0  |                 |                 |            |      |          |      |       |        |     |        |         |
| Weight: 304 lb FT = 20% |       |                 |                 |            |      |          |      |       |        |     |        |         |

#### LUMBER

TOP CHORD 2x6 SP No.2 \*Except\* 12-16,7-1,21-27:2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3 \*Except\* 57-2,28-26,11-17:2x4 SP No.2  
OTHERS 2x4 SP No.3

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (5-6-9 max.): 12-16.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
WEBS 1 Row at midpt 10-49, 18-36  
JOINTS 1 Brace at Jt(s): 58, 59, 60

#### REACTIONS

(size) 28=38-11-0, 29=38-11-0, 30=38-11-0, 31=38-11-0, 32=38-11-0, 33=38-11-0, 34=38-11-0, 36=38-11-0, 39=38-11-0, 41=38-11-0, 43=38-11-0, 45=38-11-0, 47=38-11-0, 49=38-11-0, 51=38-11-0, 52=38-11-0, 53=38-11-0, 54=38-11-0, 55=38-11-0, 56=38-11-0, 57=38-11-0  
Max Horiz 57=-256 (LC 12)  
Max Uplift 28=90 (LC 11), 29=-104 (LC 15), 30=-49 (LC 15), 31=-59 (LC 15), 32=-50 (LC 15), 33=-62 (LC 15), 34=-42 (LC 15), 36=-39 (LC 10), 49=-88 (LC 11), 51=-39 (LC 14), 52=-61 (LC 14), 53=-51 (LC 14), 54=-60 (LC 14), 55=-46 (LC 14), 56=-126 (LC 14), 57=-166 (LC 10)

Max Grav 28=286 (LC 23), 29=158 (LC 54), 30=200 (LC 32), 31=191 (LC 32), 32=201 (LC 54), 33=249 (LC 54), 34=166 (LC 54), 36=483 (LC 6), 39=291 (LC 21), 41=213 (LC 21), 43=242 (LC 21), 45=213 (LC 21), 47=291 (LC 21), 49=504 (LC 57), 51=162 (LC 52), 52=247 (LC 52), 53=203 (LC 52), 54=192 (LC 26), 55=196 (LC 26), 56=186 (LC 52), 57=289 (LC 27)

#### FORCES

(lb) - Maximum Compression/Maximum Tension  
TOP CHORD 2-57=-240/137, 1-2=0/33, 2-3=-289/217, 3-4=-237/188, 4-5=-234/187, 5-6=-221/183, 6-8=-238/183, 8-9=-254/234, 9-10=-246/278, 10-11=-431/276, 11-12=-978/248, 12-13=-863/228, 13-14=-863/228, 14-15=-863/228, 15-16=-863/228, 16-17=-978/248, 17-18=-431/276, 18-19=-246/278, 19-20=-254/234, 20-22=-238/181, 22-23=-218/131, 23-24=-206/108, 24-25=-199/110, 25-26=-250/128, 26-27=0/33, 26-28=-240/75  
BOT CHORD 56-57=-98/192, 55-56=-98/192, 54-55=-98/192, 53-54=-98/192, 52-53=-98/192, 51-52=-98/192, 49-51=-98/192, 47-49=-96/187, 45-47=-96/187, 43-45=-96/187, 41-43=-96/187, 39-41=-96/187, 36-39=-96/187, 34-36=-98/192, 33-34=-98/192, 32-33=-98/192, 31-32=-98/192, 30-31=-98/192, 29-30=-98/192, 28-29=-98/192, 46-48=-2/6, 44-46=-2/6, 42-44=-2/6, 40-42=-2/6, 38-40=-2/6, 37-38=-2/6

#### WEBS

14-58=-67/17, 42-43=-122/0, 13-59=-131/36, 44-45=-104/0, 46-47=-153/0, 15-60=-131/36, 40-41=-104/0, 38-39=-153/0, 11-62=-145/682, 59-62=-152/711, 58-59=-152/711, 58-60=-152/711, 60-61=-152/711, 17-61=-143/682, 9-51=-127/60, 8-52=-188/85, 6-53=-145/75, 5-54=-138/81, 4-55=-147/76, 3-56=-112/108, 19-34=-127/60, 20-33=-188/86, 22-32=-145/73, 23-31=-138/81, 24-30=-147/77, 25-29=-97/97, 48-49=-438/113, 10-48=-418/124, 36-37=-438/63, 18-37=-418/75, 16-61=-75/256, 12-62=-78/256

#### NOTES

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



May 1, 2025

Continued on page 2

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

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ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932



| Job        | Truss | Truss Type            | Qty | Ply | Install 2 Oak Meadow-Roof-Maxwell FA 3CG SP BR4 FE<br>I73125342 |
|------------|-------|-----------------------|-----|-----|---|
| 25040237-A | A02   | Attic Supported Gable | 1   | 1   | Job Reference (optional)  |

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust)  
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 3-0-3, Exterior(2N) 3-0-3 to 11-5-8, Corner(3R) 11-5-8 to 27-5-8, Exterior(2N) 27-5-8 to 35-10-13, Corner(3E) 35-10-13 to 39-9-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) TCELL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 5) Unbalanced snow loads have been considered for this design.
- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 7) Provide adequate drainage to prevent water ponding.
- 8) All plates are 2x4 MT20 unless otherwise indicated.
- 9) Gable requires continuous bottom chord bearing.
- 10) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 11) Gable studs spaced at 2-0-0 oc.
- 12) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 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, with BCDL = 10.0psf.
- 14) Ceiling dead load (5.0 psf) on member(s). 10-11, 17-18, 11-62, 59-62, 58-59, 58-60, 60-61, 17-61; Wall dead load (5.0psf) on member(s).48-49, 10-48, 36-37, 18-37
- 15) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 90 lb uplift at joint 28, 166 lb uplift at joint 57, 39 lb uplift at joint 51, 61 lb uplift at joint 52, 51 lb uplift at joint 53, 60 lb uplift at joint 54, 46 lb uplift at joint 55, 126 lb uplift at joint 56, 42 lb uplift at joint 34, 62 lb uplift at joint 33, 50 lb uplift at joint 32, 59 lb uplift at joint 31, 49 lb uplift at joint 30, 104 lb uplift at joint 29, 88 lb uplift at joint 49 and 39 lb uplift at joint 36.
- 16) 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.
- 17) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 18) Attic room checked for L/360 deflection.

LOAD CASE(S)
Standard

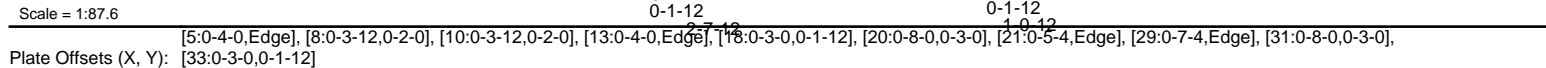

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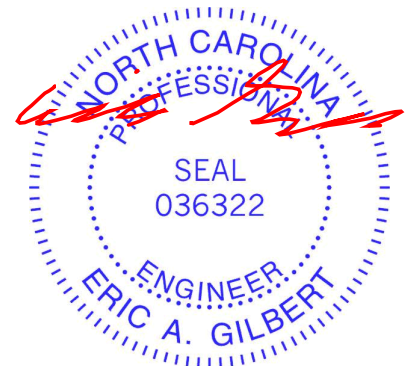


818 Soundside Road  
Edenton, NC 27932

Carter Components (Chesapeake), Chesapeake, VA - 23323, Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Wed Apr 30 06:59:50 Page: 1  
ID:KDzT94CRdtJDprRoRBEzOzsNls-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?fi  
45.4.8



|                  |  |   |   |
|------------------|--|---|---|
| <b>LUMBER</b>    |  | <b>WEBS</b>   | 4-33=-275/67, 4-30=-364/305, 30-31=0/246, 6-30=0/1173, 20-22=0/246, 12-22=0/1173, 14-22=-364/314, 14-18=-276/81, 7-34=-2993/0, 34-35=-2654/0, 11-35=-2993/0, 8-34=-11/341, 10-35=-11/341, 9-35=-661/207, 9-34=-661/207, 30-33=-34/2153, 18-22=-108/2153, 21-22=0/2015, 29-30=0/2015, 21-23=-369/0, 28-29=-369/0, 21-24=-1137/330, 26-29=-1138/330, 26-27=-60/131, 24-25=-60/131 |
| <b>TOP CHORD</b> | 2x6 SP No.2 *Except* 8-10:2x4 SP No.2, 5-1,13-17:2x4 SP 2400F 2.0E   |   |   |
| <b>BOT CHORD</b> | 2x4 SP 2400F 2.0E *Except* 30-22,32-19:2x4 SP No.2   |   |   |
| <b>WEBS</b>      | 2x4 SP No.3 *Except* 7-11:2x4 SP No.2  |   |   |
| <b>SLIDER</b>    | Left 2x4 SP No.3 -- 1-6-0, Right 2x4 SP No.2 -- 1-6-0  |   |   |
| <b>BRACING</b>   |  |   |   |
| <b>TOP CHORD</b> | Structural wood sheathing directly applied or 3-0-7 oc purlins, except 2-0-0 oc purlins (6-0-0 max.); 8-10.  |   |   |
| <b>BOT CHORD</b> | Rigid ceiling directly applied or 2-2-0 oc bracing.  |   |   |
| <b>WEBS</b>      | 3 Rows at 1/4 pts 7-11   |   |   |
| <b>REACTIONS</b> | (size) 2=0-3-8, 16=0-3-8<br>Max Horiz 2=-255 (LC 12)<br>Max Grav 2=2219 (LC 48), 16=2219 (LC 48)   |   |   |
| <b>FORCES</b>    | (lb) - Maximum Compression/Maximum Tension   |   |   |
| <b>TOP CHORD</b> | 1-2=0/29, 2-4=-3589/0, 4-6=-3523/0, 6-7=-2644/0, 7-8=-670/189, 8-9=-465/247, 9-10=-465/248, 10-11=-670/190, 11-12=-2644/0, 12-14=-3523/0, 14-16=-3589/0, 16-17=0/29  |   |   |
| <b>BOT CHORD</b> | 2-33=-182/2868, 31-33=-518/1812, 29-31=-560/1805, 27-29=0/3238, 25-27=0/3238, 21-25=0/3238, 20-21=-420/1805, 18-20=-377/1812, 16-18=-33/2868, 28-30=-358/904, 26-28=-358/904, 24-26=-925/181, 23-24=-440/904, 22-23=-440/904 |   |   |
|                  |  | <b>NOTES</b>  |   |
|                  |  | 1) Unbalanced roof live loads have been considered for this design.   |   |
|                  |  | 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 3-0-3, Interior (1) 3-0-3 to 9-10-7, Exterior(2R) 9-10-7 to 29-0-9, Interior (1) 29-0-9 to 35-10-13, Exterior(2E) 35-10-13 to 39-9-8 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60 |   |
|                  |  | 3) TCLK: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Cts=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 20.0 psf on overhangs non-concurrent with other live loads.   |   |
|                  |  | 6) Provide adequate drainage to prevent water ponding.  |   |
|                  |  | 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.  |   |
|                  |  |   | 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.   |
|                  |  |   | 9) Ceiling dead load (5.0 psf) on member(s). 6-7, 11-12, 7-34, 34-35, 11-35; Wall dead load (5.0psf) on member (s).6-30, 12-22  |
|                  |  |   | 10) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 28-30, 26-28, 24-26, 23-24, 22-23   |
|                  |  |   | 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.  |
|                  |  |   | 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.  |
|                  |  |   | 13) Attic room checked for L/360 deflection.  |
|                  |  | <b>LOAD CASE(S)</b>   | Standard  |



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818 Soundside Road  
Edenton, NC 27932

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

# Numbering System



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

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

# Product Code Approvals

ICC-ES Reports:  
ESR-1988, ESR-2362, ESR-2685, ESR-3282  
ESR-4722, ESL-1388

# Design General Notes

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

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

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# General Safety Notes

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

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

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