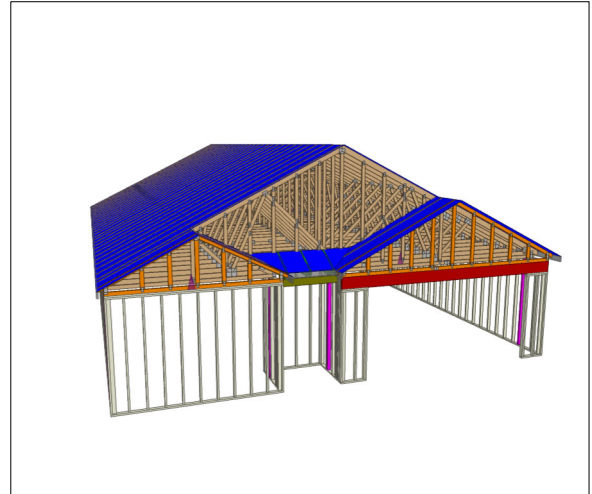




Carter Sanford Component Plant
298 Harvey Faulk Rd
Sanford, NC 27332

Phone #:919-775-1450



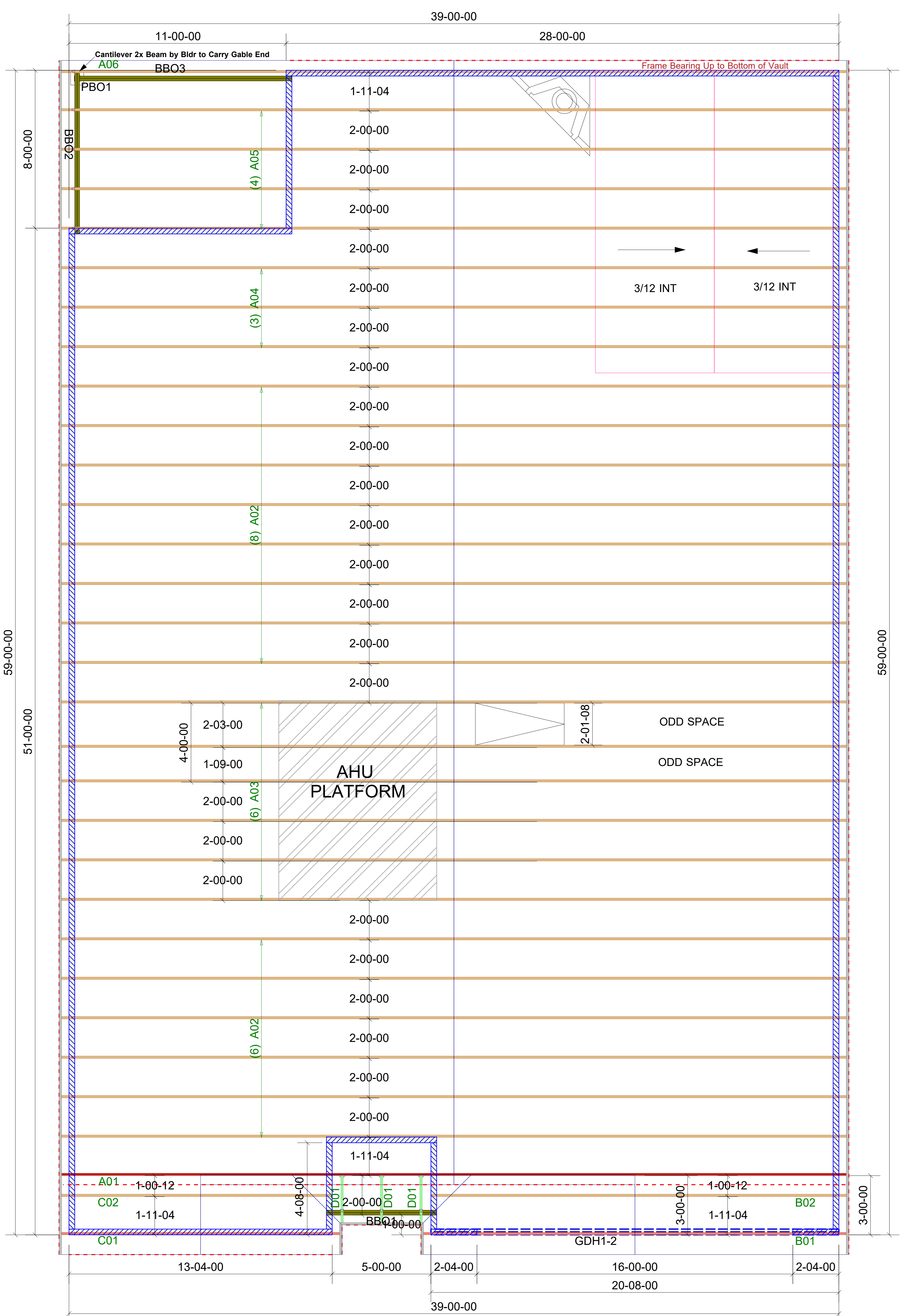
Builder: DR Horton Inc
Model: 16 Mason Ridge
Cali N

THE PLACEMENT PLAN NOTES:

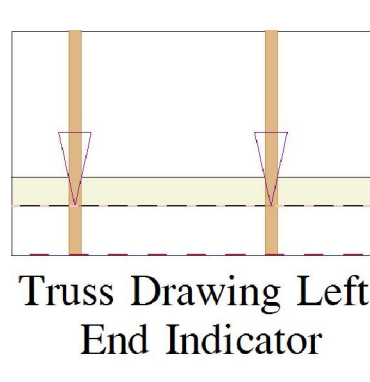
1. The Placement Plan is a diagram for truss installation. It is not an engineered drawing and has not been reviewed by an engineer. The Owner/Building Designer is responsible for obtaining an engineer's review if one is required by the local jurisdiction.
2. The responsibilities of the Owner, Contractor, 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 Connector Total List | | | Products | | | | | |
|----------------------------|------------|-----|----------|----------|------------------------------------|-------|---------|----------|
| Manuf | Product | Qty | PlotID | Length | Product | Plies | Net Qty | Fab Type |
| Simpson | One H2.5A* | 58 | GDH1-2 | 22-00-00 | 2.0 RigidLam DF LVL 1-3/4 x 11-7/8 | 2 | 2 | FF |



** GIRDERS MUST BE FULLY CONNECTED TOGETHER PRIOR TO ADDING ANY LOADS. ** DIMENSIONS ARE READ AS: FOOT-INCH-SIXTEENTH. ** All uplift connectors shown within these documents are recommendations only. Per ANSI/TPI 1, all uplift connectors are the responsibility of the bldg designer and or contractor.

Scale: NTS
 Date: 11/18/2024
 Designer: Nate Donaldson
 Project Number: 24110088-A
 Sheet Number: 1/1

DR Horton Inc
 16 Mason Ridge
 Cali N
ROOF PLACEMENT PLAN



THIS IS A TRUSS PLACEMENT DIAGRAM ONLY. These trusses are designed as individual components to be incorporated into the building design at the specification of the building designer. See individual design sheets for each truss design identified on the placement drawing. The building designer is responsible for temporary and permanent bracing of the roof and floor systems and for the overall structure. The design of the truss support structure including headers, beams, walls, and columns is the responsibility of the building designer. For general guidance regarding the bracing, consult "Bracing of Wood Trusses" available from the Truss Plate Institute, 583 D'Onifrio Drive, Madison, WI 53179

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

RE: 24110088
Cali-N-Roof-All Levels

Trenco
818 Soundside Rd
Edenton, NC 27932

Site Information:

Customer: DR Horton Inc Project Name: 24110088
Lot/Block: 16 Model: Cali N
Address: Subdivision: Mason Ridge
City: State:

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

Design Code: IRC2018/TPI2014 Design Program: MiTek 20/20 8.7
Wind Code: ASCE 7-16 Wind Speed: 130 mph
Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 11 individual, dated Truss Design Drawings and 0 Additional Drawings.

| No. | Seal# | Truss Name | Date |
|-----|-----------|------------|------------|
| 1 | I68889173 | A01 | 10/16/2024 |
| 2 | I68889174 | A02 | 10/16/2024 |
| 3 | I68889175 | A03 | 10/16/2024 |
| 4 | I68889176 | A04 | 10/16/2024 |
| 5 | I68889177 | A05 | 10/16/2024 |
| 6 | I68889178 | A06 | 10/16/2024 |
| 7 | I68889179 | B01 | 10/16/2024 |
| 8 | I68889180 | B02 | 10/16/2024 |
| 9 | I68889181 | C01 | 10/16/2024 |
| 10 | I68889182 | C02 | 10/16/2024 |
| 11 | I68889183 | D01 | 10/16/2024 |

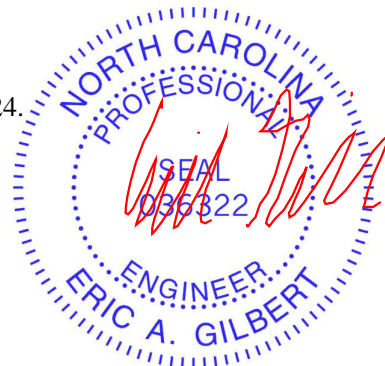
The truss drawing(s) referenced above have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Carter Components (Sanford, NC)).

Truss Design Engineer's Name: Gilbert, Eric

My license renewal date for the state of North Carolina is December 31, 2024.

North Carolina COA: C-0844

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



October 16, 2024

| | | | | | | |
|-----------------|--------------|----------------------|-----------|----------|--|-----------|
| Job 24110088 | Truss A02 | Truss Type Common | Qty 14 | Ply 1 | Cali-N-Roof-All Levels Job Reference (optional) | 168889174 |
|-----------------|--------------|----------------------|-----------|----------|--|-----------|

Carter Components (Sanford, NC), Sanford, NC - 27332,

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Page: 1

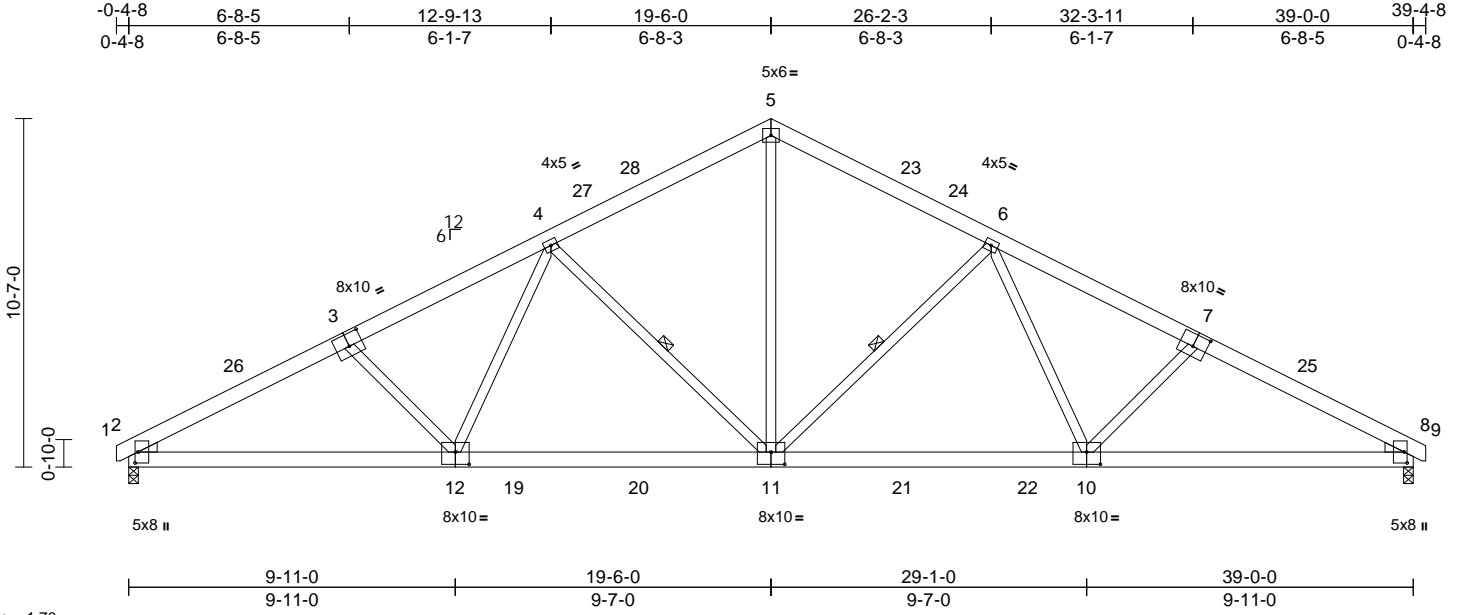


Plate Offsets (X, Y): [2:0-4-0,0-1-1], [3:0-5-0,0-4-8], [7:0-5-0,0-4-8], [8:0-4-0,0-1-1], [10:0-5-0,0-4-8], [11:0-5-0,0-4-8], [12:0-5-0,0-4-8]

| 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 | 0.34 | Vert(LL) | -0.17 | 11-12 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.71 | Vert(CT) | -0.31 | 11-12 | >999 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.58 | Horz(CT) | 0.09 | 8 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2018/TPI2014 | Matrix-MSH | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | | |
| | | | | | | | | | | | Weight: 273 lb | FT = 20% |

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3
WEDGE Left: 2x4 SP No.3
Right: 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-0-12 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 6-11, 4-11

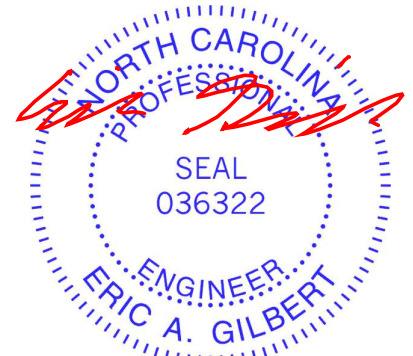
REACTIONS (size) 2=0-3-8, 8=0-3-8
Max Horiz 2=157 (LC 18)
Max Uplift 2=-156 (LC 14), 8=-156 (LC 15)
Max Grav 2=1730 (LC 3), 8=1730 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 5-6=-2008/327, 6-8=-2964/318, 8-9=0/9,
1-2=0/9, 2-4=-2964/318, 4-5=-2008/327
BOT CHORD 2-8=-323/2577
WEBS 5-11=-108/1411, 6-11=-771/240,
6-10=-21/557, 7-10=-287/181,
4-11=-771/239, 4-12=-20/557, 3-12=-287/181

- 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

- 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) -0-3-14 to 3-6-14, Interior (1) 3-6-14 to 15-7-5, Exterior(2R) 15-7-5 to 23-4-11, Interior (1) 23-4-11 to 35-5-2, Exterior(2E) 35-5-2 to 39-3-13 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



October 16, 2024

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

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



818 Soundside Road
Edenton, NC 27932

| | | | | | | |
|-----------------|--------------|----------------------|----------|----------|--|-----------|
| Job 24110088 | Truss A03 | Truss Type Common | Qty 6 | Ply 1 | Cali-N-Roof-All Levels Job Reference (optional) | 168889175 |
|-----------------|--------------|----------------------|----------|----------|--|-----------|

Carter Components (Sanford, NC), Sanford, NC - 27332,

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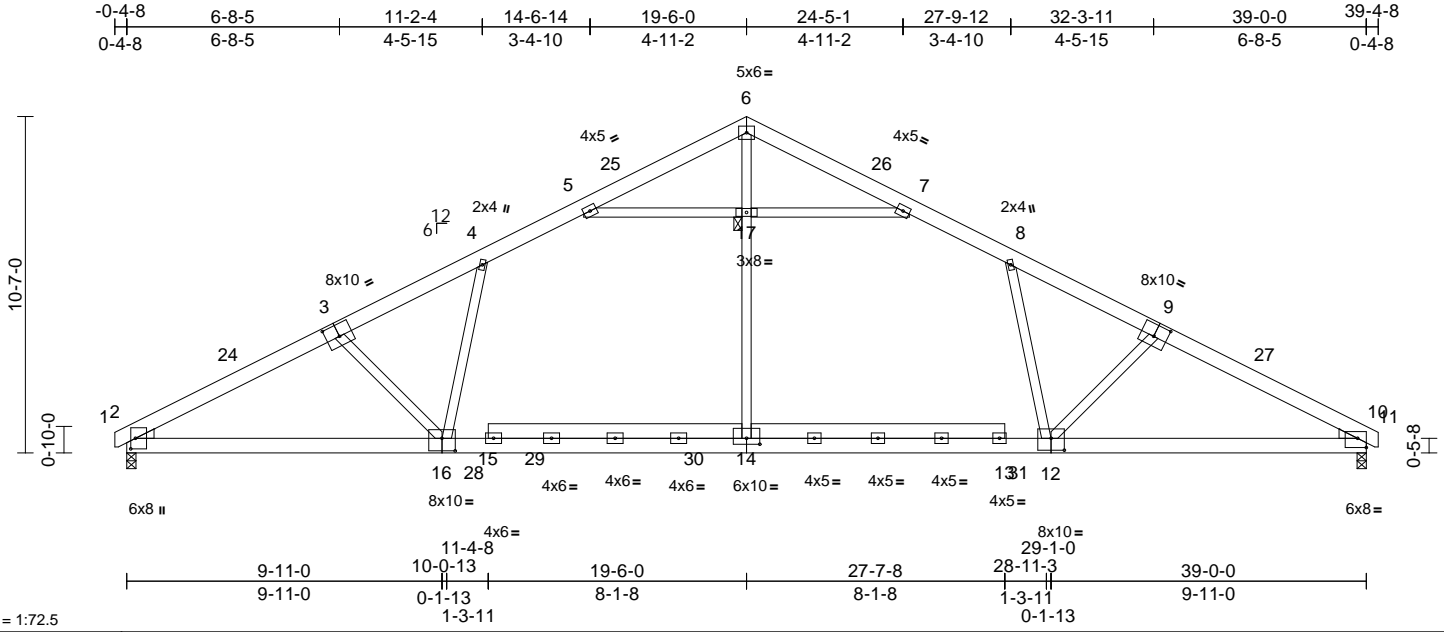


Plate Offsets (X, Y): [2:0-4-0,0-1-13], [3:0-5-0,0-4-8], [9:0-5-0,0-4-8], [10:Edge,0-3-8], [12:0-5-0,0-4-8], [14:0-5-0,0-2-4], [16:0-5-0,0-4-12]

| Loading | (psf) | Spacing | 2-0-0 | CSI | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP | |
|-------------|-------|-----------------|-----------------|------------|------|----------|-------|--------|------|--------|----------------|----------|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.47 | Vert(LL) | -0.50 | 12-23 | >943 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.53 | Vert(CT) | -0.72 | 16-20 | >649 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.83 | Horz(CT) | 0.06 | 10 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2018/TPI2014 | Matrix-MSH | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | | |
| | | | | | | | | | | | Weight: 295 lb | FT = 20% |

LUMBER
TOP CHORD 2x6 SP No.2 *Except* 9-6,3-6:2x6 SP 2400F 2.0E
BOT CHORD 2x6 SP 2400F 2.0E *Except* 14-15,13-14:2x6 SP No.2
WEBS 2x4 SP No.3 *Except* 14-6:2x4 SP No.2
WEDGE Left: 2x4 SP No.3
Right: 2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-11-1 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
JOINTS 1 Brace at Jt(s): 17

REACTIONS (size) 2=0-3-8, 10=0-3-8
Max Horiz 2=157 (LC 18)
Max Uplift 2=-34 (LC 14), 10=-77 (LC 15)
Max Grav 2=1923 (LC 3), 10=1881 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/9, 2-4=-3321/78, 4-5=-2644/151, 5-6=-1305/0, 6-7=-1327/0, 7-8=-2653/142, 8-10=-3247/151, 10-11=0/9
BOT CHORD 2-10=-129/2911
WEBS 14-17=0/1007, 6-17=0/1066, 8-12=-54/452, 9-12=-534/318, 4-16=0/554, 3-16=-601/250, 5-17=-1473/288, 7-17=-1458/302

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 Exterior(2E) -0-3-14 to 3-6-14, Interior (1) 3-6-14 to 15-7-5, Exterior(2R) 15-7-5 to 23-4-11, Interior (1) 23-4-11 to 35-5-2, Exterior(2E) 35-5-2 to 39-3-13 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 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.
- 200.0lb AC unit load placed on the bottom chord, 15-4-4 from left end, supported at two points, 5-0-0 apart.
- 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 10. 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



October 16, 2024

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

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



818 Soundside Road
Edenton, NC 27932

| | | | | | | |
|-----------------|--------------|----------------------------|----------|----------|--|-----------|
| Job 24110088 | Truss A04 | Truss Type Roof Special | Qty 3 | Ply 1 | Cali-N-Roof-All Levels Job Reference (optional) | 168889176 |
|-----------------|--------------|----------------------------|----------|----------|--|-----------|

Carter Components (Sanford, NC), Sanford, NC - 27332,

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Page: 1

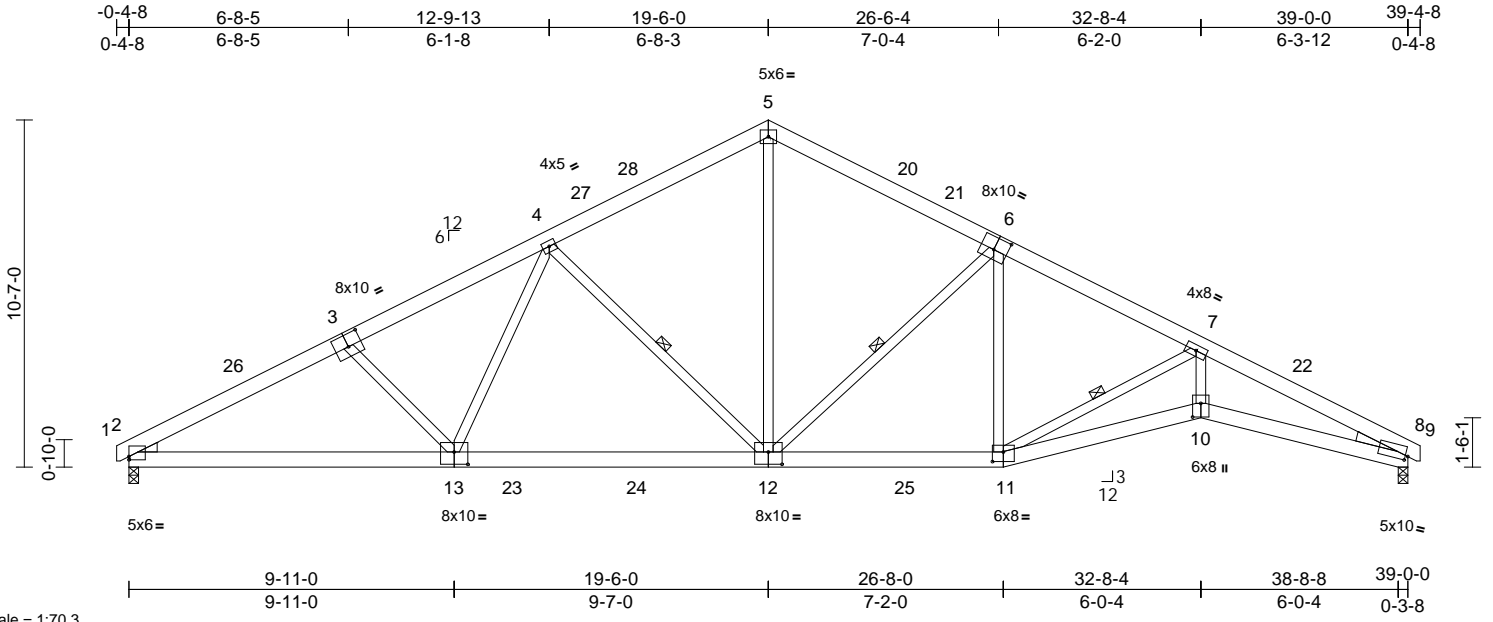


Plate Offsets (X, Y): [2:Edge,0-1-3], [3:0-5-0,0-4-8], [6:0-5-0,0-4-8], [8:0-1-0,0-1-9], [10:0-5-0,0-3-0], [11:0-4-0,0-3-8], [12:0-5-0,0-4-8], [13:0-5-0,0-4-8]

| 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 | 0.75 | Vert(LL) | -0.25 | 10-11 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.78 | Vert(CT) | -0.46 | 10-11 | >999 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.85 | Horz(CT) | 0.21 | 8 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2018/TPI2014 | Matrix-MSH | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | | |
| | | | | | | | | | | | Weight: 280 lb | FT = 20% |

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2 *Except* 11-10,10-8:2x6 SP 2400F 2.0E
WEBS 2x4 SP No.3
WEDGE Left: 2x4 SP No.3
Right: 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-5-1 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 6-12, 7-11, 4-12

REACTIONS
(size) 2=0-3-8, 8=0-3-8
Max Horiz 2=-157 (LC 15)
Max Uplift 2=-156 (LC 14), 8=-156 (LC 15)
Max Grav 2=1727 (LC 3), 8=1722 (LC 3)

FORCES
(lb) - Maximum Compression/Maximum Tension
TOP CHORD 5-7=-2576/327, 7-8=-4875/436, 8-9=0/9,
1-2=0/9, 2-4=-2970/318, 4-5=-1991/328
BOT CHORD 2-11=-326/2569, 10-11=-323/4370,
8-10=-320/4343
WEBS 5-12=-105/1405, 6-12=-851/233, 6-11=0/402,
7-11=-2252/257, 3-13=-286/186,
4-13=-18/566, 4-12=-782/237, 7-10=-69/2050

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 Exterior(2E) -0-3-14 to 3-6-14, Interior (1) 3-6-14 to 15-7-5, Exterior(2R) 15-7-5 to 23-4-11, Interior (1) 23-4-11 to 35-5-2, Exterior(2E) 35-5-2 to 39-3-13 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.
- Bearing at joint(s) 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 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



October 16, 2024

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)



818 Soundside Road
Edenton, NC 27932

| | | | | | | |
|-----------------|--------------|----------------------------|----------|----------|--|-----------|
| Job 24110088 | Truss A05 | Truss Type Roof Special | Qty 4 | Ply 1 | Cali-N-Roof-All Levels Job Reference (optional) | 168889177 |
|-----------------|--------------|----------------------------|----------|----------|--|-----------|

Carter Components (Sanford, NC), Sanford, NC - 27332,

Run: 8.73 S Sep 25 2024 Print: 8.730 S Sep 25 2024 MiTek Industries, Inc. Mon Oct 14 12:52:35
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Page: 1

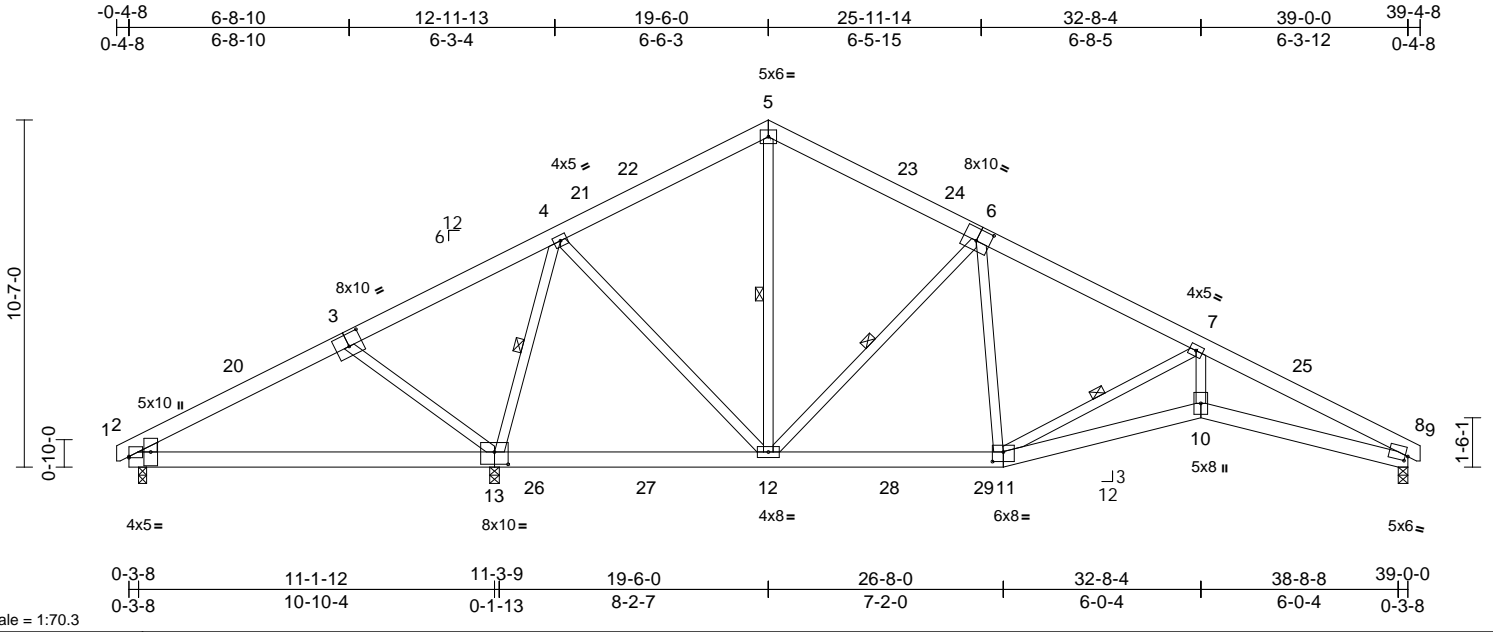


Plate Offsets (X, Y): [2:Edge,0-0-7], [3:0-5-0,0-4-8], [6:0-5-0,0-4-8], [8:0-1-0,0-1-13], [11:0-4-0,0-3-8], [13:0-5-0,0-4-8]

| 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 | 0.50 | Vert(LL) | -0.14 | 10-11 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.78 | Vert(CT) | -0.25 | 10-11 | >999 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.53 | Horz(CT) | 0.10 | 8 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2018/TPI2014 | Matrix-MSH | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | | |
| | | | | | | | | | | | Weight: 279 lb | FT = 20% |

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3
WEDGE Left: 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 5-12, 7-11, 4-13, 6-12

REACTIONS (size) 2=0-3-0, 8=0-3-8, 13=0-3-8
Max Horiz 2=157 (LC 18)
Max Uplift 2=-167 (LC 35), 8=-123 (LC 15), 13=-174 (LC 14)
Max Grav 2=240 (LC 34), 8=1071 (LC 6), 13=2358 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/9, 2-4=-116/930, 4-5=-557/196, 5-7=-1203/196, 7-8=-2762/285, 8-9=0/9
BOT CHORD 2-12=-560/234, 11-12=0/998, 10-11=-189/2459, 8-10=-190/2446
WEBS 5-12=-33/189, 7-11=-1536/241, 4-13=-1712/249, 6-12=-869/233, 3-13=-473/203, 6-11=-4/485, 4-12=-60/1125, 7-10=-15/1268

- 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) -0-3-14 to 3-6-14, Interior (1) 3-6-14 to 15-7-5, Exterior(2R) 15-7-5 to 23-4-11, Interior (1) 23-4-11 to 35-5-2, Exterior(2E) 35-5-2 to 39-3-13 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.
- Bearing at joint(s) 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 13, 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



October 16, 2024

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)



818 Soundside Road
Edenton, NC 27932

| | | | | | | |
|-----------------|--------------|----------------------------|----------|----------|--|-----------|
| Job 24110088 | Truss A06 | Truss Type Roof Special | Qty 1 | Ply 1 | Cali-N-Roof-All Levels Job Reference (optional) | 168889178 |
|-----------------|--------------|----------------------------|----------|----------|--|-----------|

Carter Components (Sanford, NC), Sanford, NC - 27332,

Run: 8.73 S Sep 25 2024 Print: 8.730 S Sep 25 2024 MiTek Industries, Inc. Mon Oct 14 12:52:35
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Page: 1

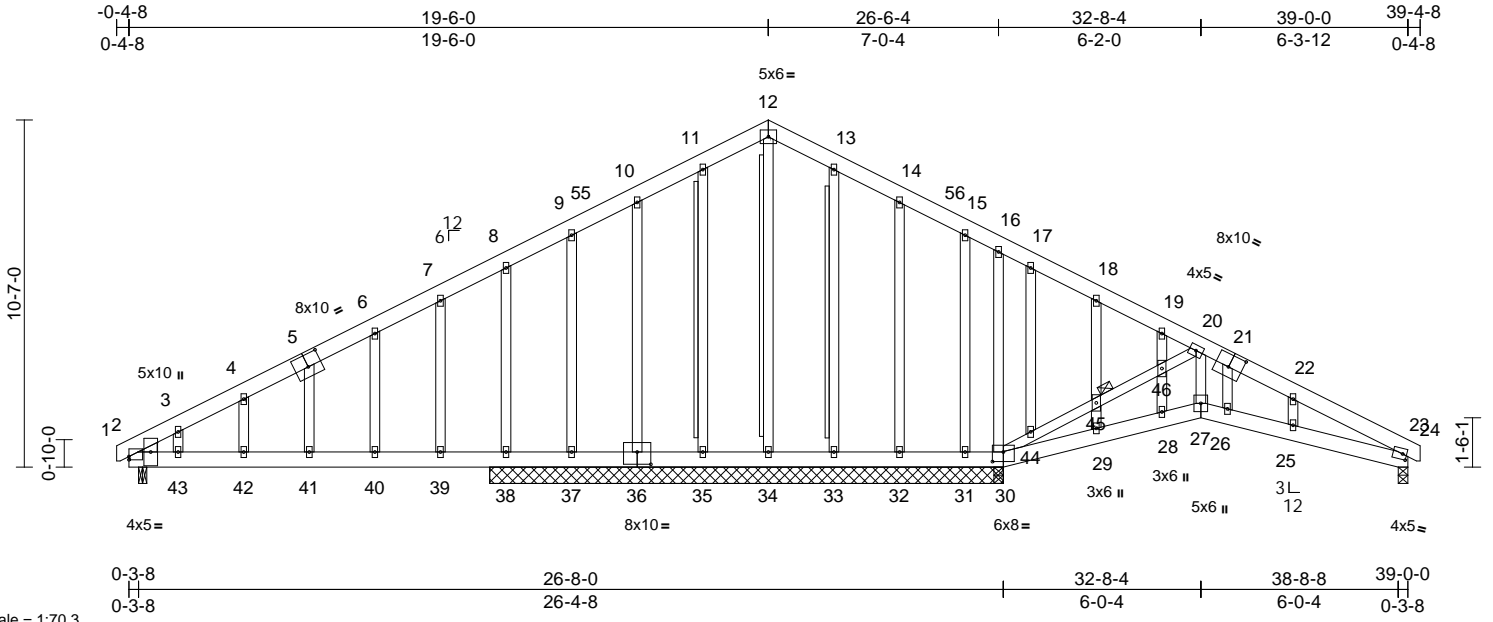


Plate Offsets (X, Y): [2:Edge,0-1-3], [5:0-5-0,0-4-8], [21:0-5-0,0-4-8], [23:0-1-7,0-2-0], [30:0-4-0,0-3-8], [36:0-5-0,0-4-8]

| 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 | Vert(LL) | 0.18 | 41 | >768 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | Vert(CT) | -0.23 | 41 | >605 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | Horz(CT) | -0.04 | 38 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2018/TPI2014 | Matrix-MSH | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | |
| Weight: 351 lb FT = 20% | | | | | | | | | | | |

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3
OTHERS 2x4 SP No.3 *Except* 0-0,0-0,0-0:2x4 SP No.2(flat)
WEDGE Left: 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, Except: 10-0-0 oc bracing:
29-30,28-29,27-28,26-27,25-26,23-25.
WEBS T-Brace: 2x4 SP No.2 - 12-34, 11-35, 13-33
Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance.
Brace must cover 90% of web length.

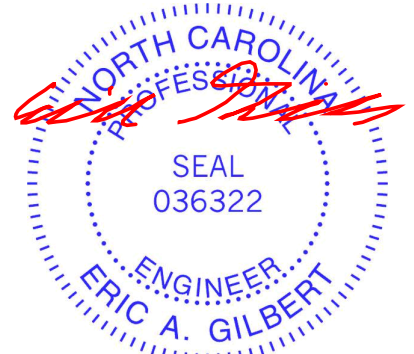
JOINTS
1 Brace at Jt(s): 45

REACTIONS (size)
2=0-3-0, 23=0-3-8, 30=15-8-0,
31=15-8-0, 32=15-8-0, 33=15-8-0,
34=15-8-0, 35=15-8-0, 36=15-8-0,
37=15-8-0, 38=15-8-0
Max Horiz 23=157 (LC 18)
Max Uplift 2=-125 (LC 11), 23=-80 (LC 14),
30=-188 (LC 15), 31=-97 (LC 1),
32=-50 (LC 15), 33=-28 (LC 15),
34=-1 (LC 34), 36=-95 (LC 14),
37=-528 (LC 1), 38=-332 (LC 14)
Max Grav 2=500 (LC 34), 23=526 (LC 1),
30=773 (LC 1), 31=5 (LC 14),
32=237 (LC 22), 33=238 (LC 22),
34=244 (LC 14), 35=195 (LC 21),
36=364 (LC 21), 37=179 (LC 11),
38=1180 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/9, 2-3=-243/217, 3-4=-250/236,
4-6=-189/250, 6-7=-126/229, 7-8=-119/260,
8-9=-294/434, 9-10=-186/380,
10-11=-199/429, 11-12=-194/453,
12-13=-172/452, 13-14=-181/430,
14-15=-182/386, 15-16=-204/370,
16-17=-173/336, 17-18=-154/313,
18-19=-172/283, 19-20=-204/268,
20-22=-953/422, 22-23=-1013/379,
23-24=0/9
BOT CHORD 2-43=-115/159, 42-43=-115/159,
41-42=-115/159, 40-41=-112/153,
39-40=-112/153, 38-39=-112/153,
37-38=-112/153, 35-37=-112/153,
34-35=-112/153, 33-34=-112/153,
32-33=-112/153, 31-32=-112/153,
30-31=-112/153, 29-30=-291/863,
28-29=-293/875, 27-28=-292/883,
26-27=-290/877, 25-26=-296/881,
23-25=-290/856
WEBS 16-30=-170/63, 30-44=-989/262,
44-45=-899/233, 45-46=-884/231,
20-46=-913/240, 20-27=-117/503,
12-34=-281/51, 11-35=-187/27,
10-36=-205/89, 9-37=-146/138,
8-38=-506/365, 7-39=-120/69, 6-40=-74/74,
5-41=-130/72, 4-42=-67/68, 3-43=-68/46,
13-33=-205/52, 14-32=-179/78,
15-31=-28/39, 17-44=-163/53, 18-45=-45/57,
29-45=-15/61, 19-46=0/77, 28-46=-12/31,
21-26=-4/67, 22-25=-69/63

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 Exterior(2E) -0-3-14 to 3-6-0, Interior (1) 3-6-0 to 15-6-0, Exterior(2R) 15-6-0 to 23-6-0, Interior (1) 23-6-0 to 35-5-2, Exterior(2E) 35-5-2 to 39-3-13 zone; end vertical left and right exposed; porch left 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.



October 16, 2024

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/TPI Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)



818 Soundside Road
Edenton, NC 27932

| | | | | | | |
|----------|-------|--------------|-----|-----|--------------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | Cali-N-Roof-All Levels | I68889178 |
| 24110088 | A06 | Roof Special | 1 | 1 | Job Reference (optional) | |

Carter Components (Sanford, NC), Sanford, NC - 27332,

Run: 8.73 S Sep 25 2024 Print: 8.730 S Sep 25 2024 MiTek Industries, Inc. Mon Oct 14 12:52:35
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Page: 2

- 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) All plates are 2x4 MT20 unless otherwise indicated.
- 8) Gable studs spaced at 2-0-0 oc.
- 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 11) Bearings are assumed to be: , Joint 2 SP No.2 , Joint 31 User Defined .
- 12) Bearing at joint(s) 23 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 13) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 30, 23, 2, 34, 36, 38, 33, 32, and 31. This connection is for uplift only and does not consider lateral forces.
- 14) One RT8A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 37. This connection is for uplift only and does not consider lateral forces.
- 15) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 16) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

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.

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)



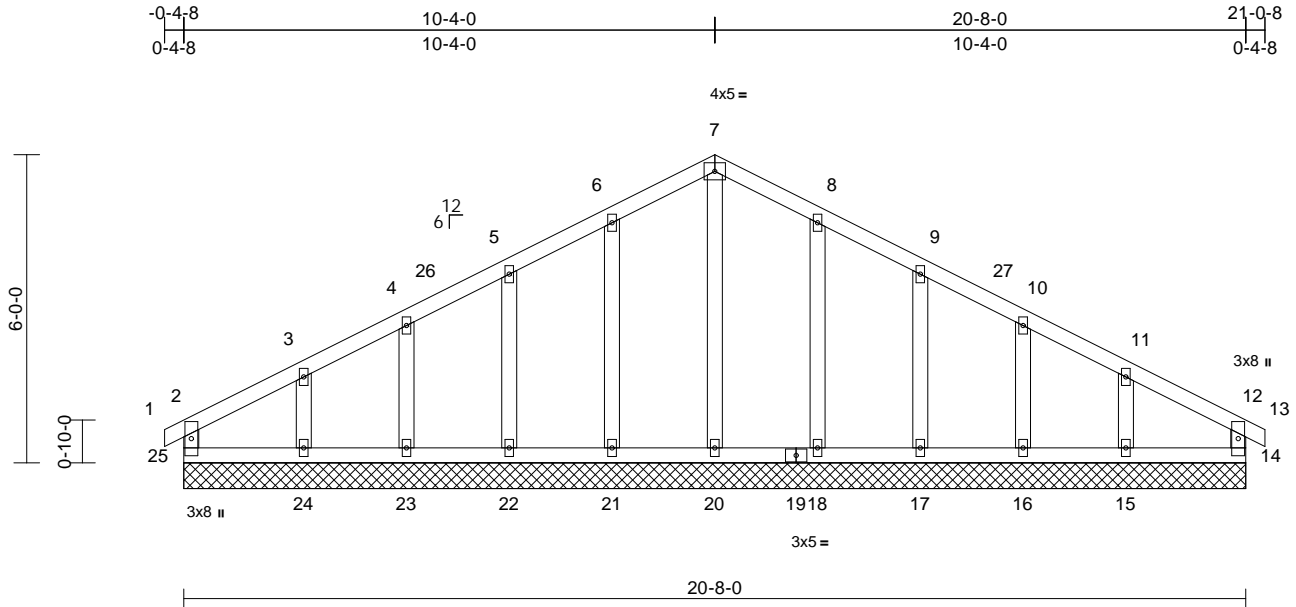
818 Soundside Road
Edenton, NC 27932

| | | | | | | |
|-----------------|--------------|--------------------------------------|----------|----------|--|-----------|
| Job 24110088 | Truss B01 | Truss Type Common Supported Gable | Qty 1 | Ply 1 | Cali-N-Roof-All Levels Job Reference (optional) | 168889179 |
|-----------------|--------------|--------------------------------------|----------|----------|--|-----------|

Carter Components (Sanford, NC), Sanford, NC - 27332,

Run: 8.73 S Sep 25 2024 Print: 8.730 S Sep 25 2024 MiTek Industries, Inc. Mon Oct 14 12:52:35
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Page: 1



| 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 | 0.07 | Vert(LL) | n/a | - | n/a | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.04 | Vert(CT) | n/a | - | n/a | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.09 | Horz(CT) | 0.00 | 14 | n/a | | |
| BCLL | 0.0* | Code | IRC2018/TPI2014 | Matrix-MR | | | | | | | |
| BCDL | 10.0 | | | | | | | | | Weight: 111 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" oc purlins, except end verticals. |
| BOT CHORD | Rigid ceiling directly applied or 10'-0" oc bracing. |

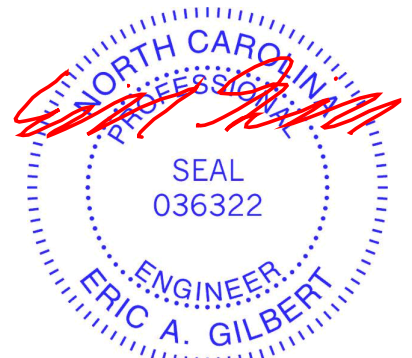
| REACTIONS | (size) |
|------------|--|
| Max Horiz | 14=20-8-0, 15=20-8-0, 16=20-8-0, 17=20-8-0, 18=20-8-0, 20=20-8-0, 21=20-8-0, 22=20-8-0, 23=20-8-0, 24=20-8-0, 25=20-8-0 |
| Max Uplift | 25=80 (LC 12) |
| Max Grav | 14=118 (LC 1), 15=174 (LC 35), 16=164 (LC 22), 17=222 (LC 22), 18=237 (LC 22), 20=144 (LC 27), 21=237 (LC 21), 22=222 (LC 21), 23=164 (LC 21), 24=174 (LC 34), 25=118 (LC 1) |

| FORCES | (lb) - Maximum Compression/Maximum Tension |
|-----------|--|
| TOP CHORD | 2-25=-100/79, 1-2=0/14, 2-3=-78/53, 3-4=-57/90, 4-5=-58/131, 5-6=-74/178, 6-7=-89/221, 7-8=-89/221, 8-9=-74/178, 9-10=-58/131, 10-11=-48/90, 11-12=-68/39, 12-13=0/14, 12-14=-100/79 |
| BOT CHORD | 24-25=-23/49, 23-24=-23/49, 22-23=-23/49, 21-22=-23/49, 20-21=-23/49, 18-20=-23/49, 17-18=-23/49, 16-17=-23/49, 15-16=-23/49, 14-15=-23/49 |

| WEBS | |
|------|---|
| 7-20 | =134/21, 6-21=-198/73, 5-22=-183/81, 4-23=-128/68, 3-24=-128/119, 8-18=-198/73, 9-17=-183/81, 10-16=-128/68, 11-15=-128/119 |

- 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) -0-4-8 to 2-4-0, Exterior(2N) 2-4-0 to 7-4-0, Corner(3R) 7-4-0 to 13-4-0, Exterior(2N) 13-4-0 to 18-0-8, Corner(3E) 18-0-8 to 21-0-8 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 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.
 - Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
 - Gable studs spaced at 2'-0" oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3'-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 26 lb uplift at joint 25, 16 lb uplift at joint 14, 42 lb uplift at joint 21, 46 lb uplift at joint 22, 33 lb uplift at joint 23, 77 lb uplift at joint 24, 42 lb uplift at joint 18, 45 lb uplift at joint 17, 34 lb uplift at joint 16 and 72 lb uplift at joint 15.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- LOAD CASE(S)** Standard



October 16, 2024

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/TPI Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)



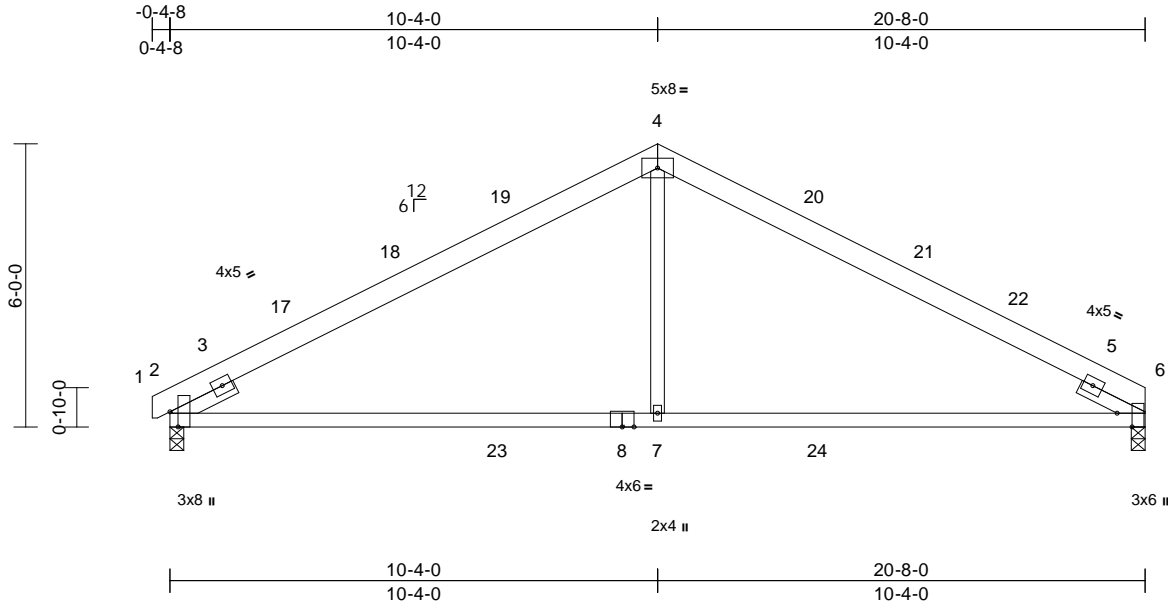
818 Soundside Road
Edenton, NC 27932

| | | | | | | |
|-----------------|--------------|----------------------|----------|----------|--|-----------|
| Job 24110088 | Truss B02 | Truss Type Common | Qty 1 | Ply 1 | Cali-N-Roof-All Levels Job Reference (optional) | 168889180 |
|-----------------|--------------|----------------------|----------|----------|--|-----------|

Carter Components (Sanford, NC), Sanford, NC - 27332,

Run: 8.73 S Sep 25 2024 Print: 8.730 S Sep 25 2024 MiTek Industries, Inc. Mon Oct 14 12:52:35
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Page: 1



Scale = 1:48.8

Plate Offsets (X, Y): [2:0-3-14,Edge], [6:0-3-8,Edge]

| Loading | (psf) | Spacing | 2-0-0 | CSI | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP | |
|-------------|-------|-----------------|-----------------|------------|------|----------|-------|--------|------|--------|---------------|----------|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.95 | Vert(LL) | -0.24 | 7-15 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.84 | Vert(CT) | -0.40 | 7-15 | >617 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.21 | Horz(CT) | 0.05 | 2 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2018/TPI2014 | Matrix-MSH | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | | |
| | | | | | | | | | | | Weight: 99 lb | FT = 20% |

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x4 SP No.2 *Except* 8-6:2x4 SP No.1
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 1-7-8 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=87 (LC 14), 6=78 (LC 15)
Max Uplift 2=-84 (LC 14), 6=-78 (LC 15)
Max Grav 2=980 (LC 5), 6=964 (LC 6)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/9, 2-4=-1229/216, 4-6=-1229/216
BOT CHORD 2-7=-271/1023, 6-7=-244/1023
WEBS 4-7=0/545

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) -0-3-14 to 2-8-2, Interior (1) 2-8-2 to 7-4-0, Exterior(2R) 7-4-0 to 13-4-0, Interior (1) 13-4-0 to 17-8-0, Exterior(2E) 17-8-0 to 20-8-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); 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) 6 and 2. 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



October 16, 2024

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

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



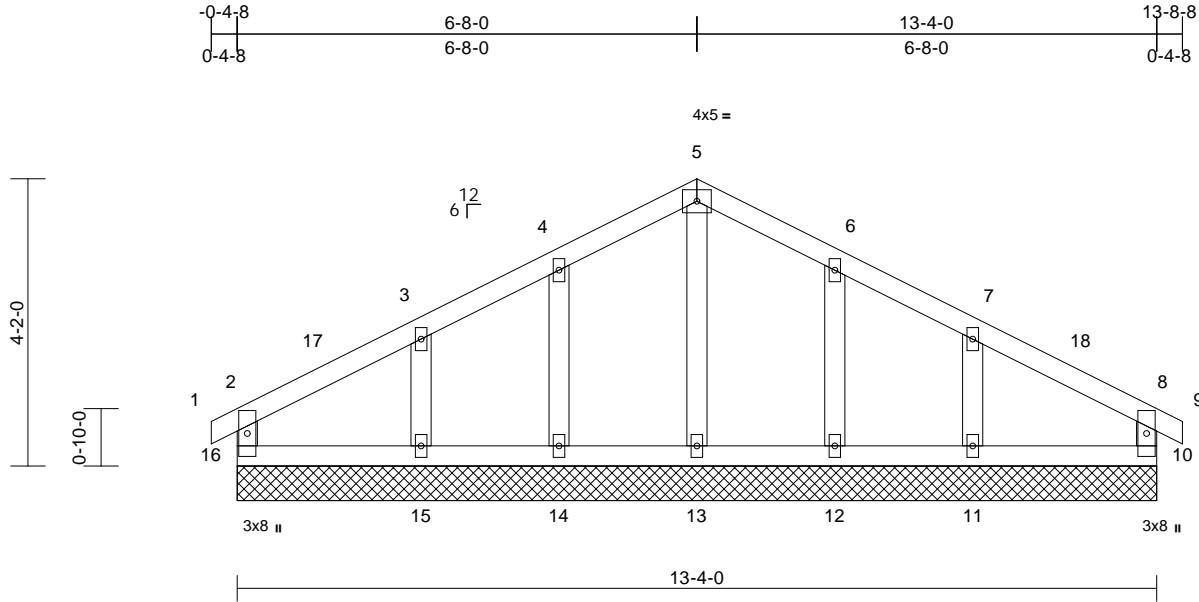
818 Soundside Road
Edenton, NC 27932

| | | | | | | |
|-----------------|--------------|--------------------------------------|----------|----------|--|-----------|
| Job 24110088 | Truss C01 | Truss Type Common Supported Gable | Qty 1 | Ply 1 | Cali-N-Roof-All Levels Job Reference (optional) | 168889181 |
|-----------------|--------------|--------------------------------------|----------|----------|--|-----------|

Carter Components (Sanford, NC), Sanford, NC - 27332,

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Page: 1



| 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 | - | 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 | 0.05 | Horz(CT) | 0.00 | 10 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2018/TPI2014 | Matrix-MR | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | | |
| | | | | | | | | | | | Weight: 63 lb | FT = 20% |

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

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

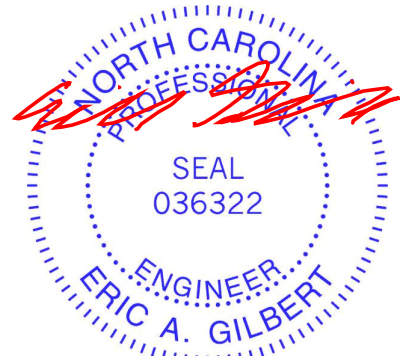
REACTIONS (size)
10=13-4-0, 11=13-4-0, 12=13-4-0, 13=13-4-0, 14=13-4-0, 15=13-4-0, 16=13-4-0
Max Horiz 16=59 (LC 13)
Max Uplift 10=20 (LC 14), 11=64 (LC 15), 12=38 (LC 15), 14=38 (LC 14), 15=66 (LC 14), 16=24 (LC 15)
Max Grav 10=143 (LC 22), 11=262 (LC 22), 12=225 (LC 22), 13=127 (LC 22), 14=225 (LC 21), 15=262 (LC 21), 16=143 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-16=-123/106, 1-2=0/14, 2-3=-70/67, 3-4=-75/140, 4-5=-87/195, 5-6=-87/195, 6-7=-75/140, 7-8=-67/67, 8-9=0/14, 8-10=-123/106
BOT CHORD 15-16=-15/44, 14-15=-15/44, 13-14=-15/44, 12-13=-15/44, 11-12=-15/44, 10-11=-15/44
WEBS 5-13=-89/6, 4-14=-190/99, 3-15=-211/141, 6-12=-190/99, 7-11=-211/141

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) -0-4-8 to 2-8-0, Exterior(2N) 2-8-0 to 3-8-0, Corner(3R) 3-8-0 to 9-8-0, Exterior(2N) 9-8-0 to 10-8-0, Corner(3E) 10-8-0 to 13-8-8 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 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 24 lb uplift at joint 16, 20 lb uplift at joint 10, 38 lb uplift at joint 14, 66 lb uplift at joint 15, 38 lb uplift at joint 12 and 64 lb uplift at joint 11.

14) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
LOAD CASE(S) Standard



October 16, 2024

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/TPI Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)

ENGINEERING BY
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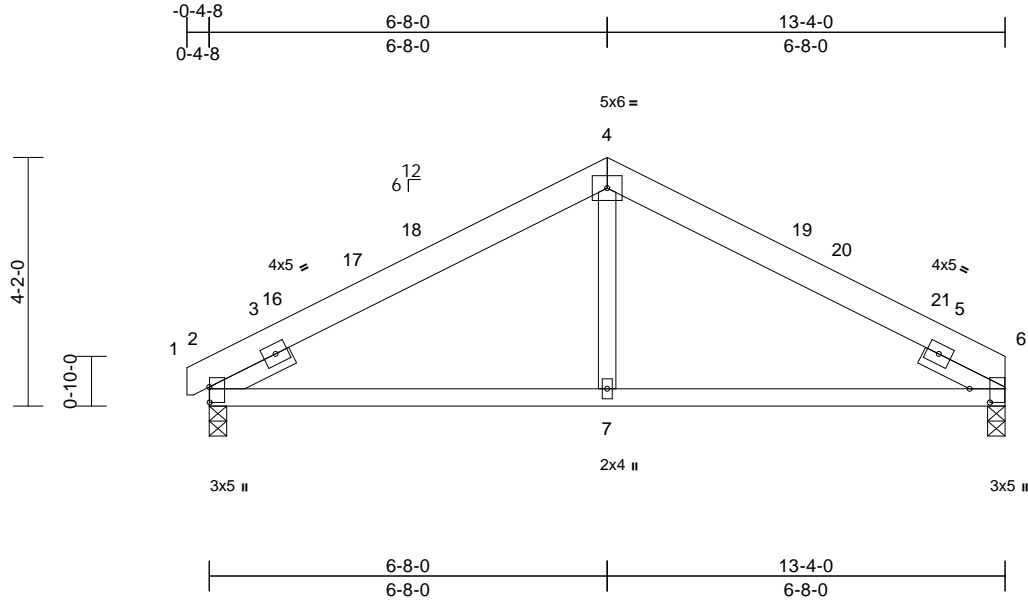
818 Soundside Road
Edenton, NC 27932

| | | | | | | |
|-----------------|--------------|----------------------|----------|----------|--|-----------|
| Job 24110088 | Truss C02 | Truss Type Common | Qty 1 | Ply 1 | Cali-N-Roof-All Levels Job Reference (optional) | 168889182 |
|-----------------|--------------|----------------------|----------|----------|--|-----------|

Carter Components (Sanford, NC), Sanford, NC - 27332,

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Page: 1



Scale = 1:38.6
Plate Offsets (X, Y): [2:0-3-2,0-0-1], [6:0-2-12,0-4-1]

| Loading | (psf) | Spacing | 2-0-0 | CSI | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP | |
|-------------|-------|-----------------|-----------------|------------|------|----------|-------|--------|------|--------|---------------|----------|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.38 | Vert(LL) | -0.04 | 7-10 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.36 | Vert(CT) | -0.07 | 7-10 | >999 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.10 | Horz(CT) | 0.02 | 2 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2018/TPI2014 | Matrix-MSH | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | | |
| | | | | | | | | | | | Weight: 66 lb | FT = 20% |

LUMBER
TOP CHORD 2x6 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 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

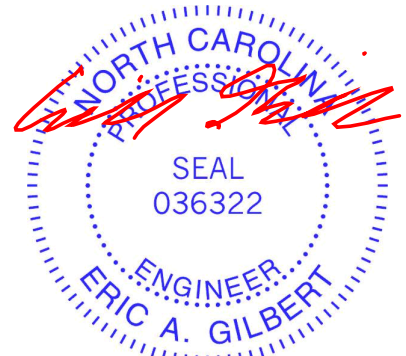
REACTIONS (size) 2=0-3-8, 6=0-3-8
Max Horiz 2=58 (LC 14)
Max Uplift 2=-56 (LC 14), 6=-50 (LC 15)
Max Grav 2=639 (LC 21), 6=619 (LC 22)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/9, 2-4=-715/239, 4-6=-715/238
BOT CHORD 2-7=-161/552, 6-7=-157/552
WEBS 4-7=0/261

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-3-14 to 2-8-2, Interior (1) 2-8-2 to 3-8-0, Exterior(2R) 3-8-0 to 9-8-0, Interior (1) 9-8-0 to 10-4-0, Exterior(2E) 10-4-0 to 13-4-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); 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.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 6 and 2. 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



October 16, 2024

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)



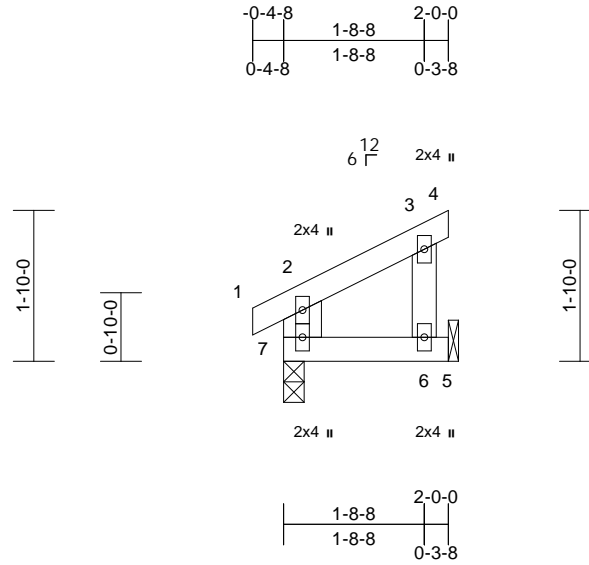
818 Soundside Road
Edenton, NC 27932

| | | | | | | |
|-----------------|--------------|---------------------------|----------|----------|--|-----------|
| Job 24110088 | Truss D01 | Truss Type Jack-Closed | Qty 3 | Ply 1 | Cali-N-Roof-All Levels Job Reference (optional) | 168889183 |
|-----------------|--------------|---------------------------|----------|----------|--|-----------|

Carter Components (Sanford, NC), Sanford, NC - 27332,

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Page: 1



Scale = 1:28

| Loading | (psf) | Spacing | 2-0-0 | CSI | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP | |
|-------------|-------|-----------------|-----------------|------------|------|----------|-------|--------|------|--------|---------------|----------|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.05 | Vert(LL) | 0.00 | 6-7 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.06 | Vert(CT) | 0.00 | 6-7 | >999 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.02 | Horz(CT) | n/a | - | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2018/TPI2014 | Matrix-MSH | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 10 lb | FT = 20% |

LUMBER

TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2
 WEBS 2x6 SP No.2 *Except* 3-6:2x4 SP No.3

BRACING

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

REACTIONS

(size) 5= Mechanical, 7=0-3-0
 Max Horiz 7=37 (LC 11)
 Max Uplift 5=-29 (LC 14), 7=-6 (LC 10)
 Max Grav 5=84 (LC 21), 7=152 (LC 21)

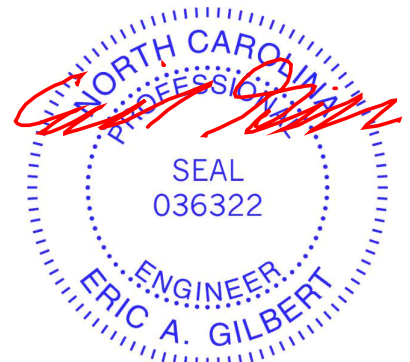
FORCES

(lb) - Maximum Compression/Maximum Tension
 TOP CHORD 2-7=-120/48, 1-2=0/23, 2-3=-37/20, 3-4=-11/0
 BOT CHORD 6-7=0/0, 5-6=0/0
 WEBS 3-6=-81/63

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 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 7 User Defined .
 - 8) Refer to girder(s) for truss to truss connections.
 - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 6 lb uplift at joint 7 and 29 lb uplift at joint 5.
 - 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- LOAD CASE(S)** Standard



October 16, 2024

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

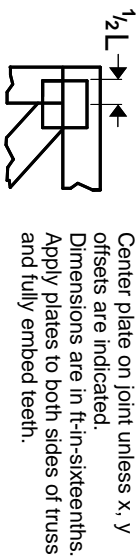
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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



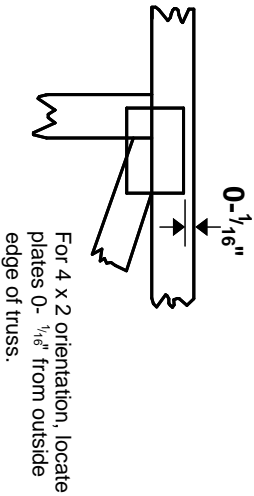
818 Soundside Road
 Edenton, NC 27932

Symbols

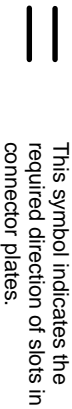
PLATE LOCATION AND ORIENTATION



Center plate on joint unless x, y offsets are indicated. Dimensions are in ft-in-sixteenths. Apply plates to both sides of truss and fully embed teeth.



For 4 x 2 orientation, locate plates 0- 1/16\" from outside edge of truss.



This symbol indicates the required direction of slots in connector plates.

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

PLATE SIZE

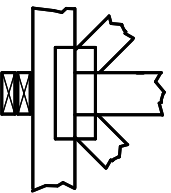
4 X 4
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



Indicated by symbol shown and/or by text in the bracing section of the output. Use T or I bracing if indicated.

BEARING

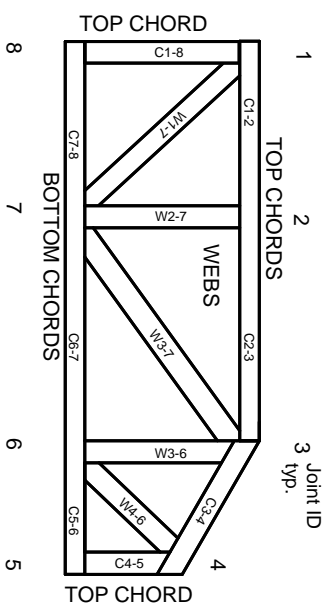


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

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

Numbering System



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

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

Product Code Approvals

ICC-ES Reports:

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

Design General Notes

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

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

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

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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