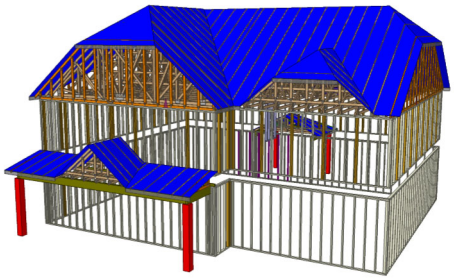
Carter Sanford Component Plant
298 Harvey Faulk Rd
Sanford, NC 27332

Phone #:919-775-1450



**Builder: DR Horton Inc**

**Model: 89 Eagle Creek - Norman - D**

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:** _____

## General Notes:

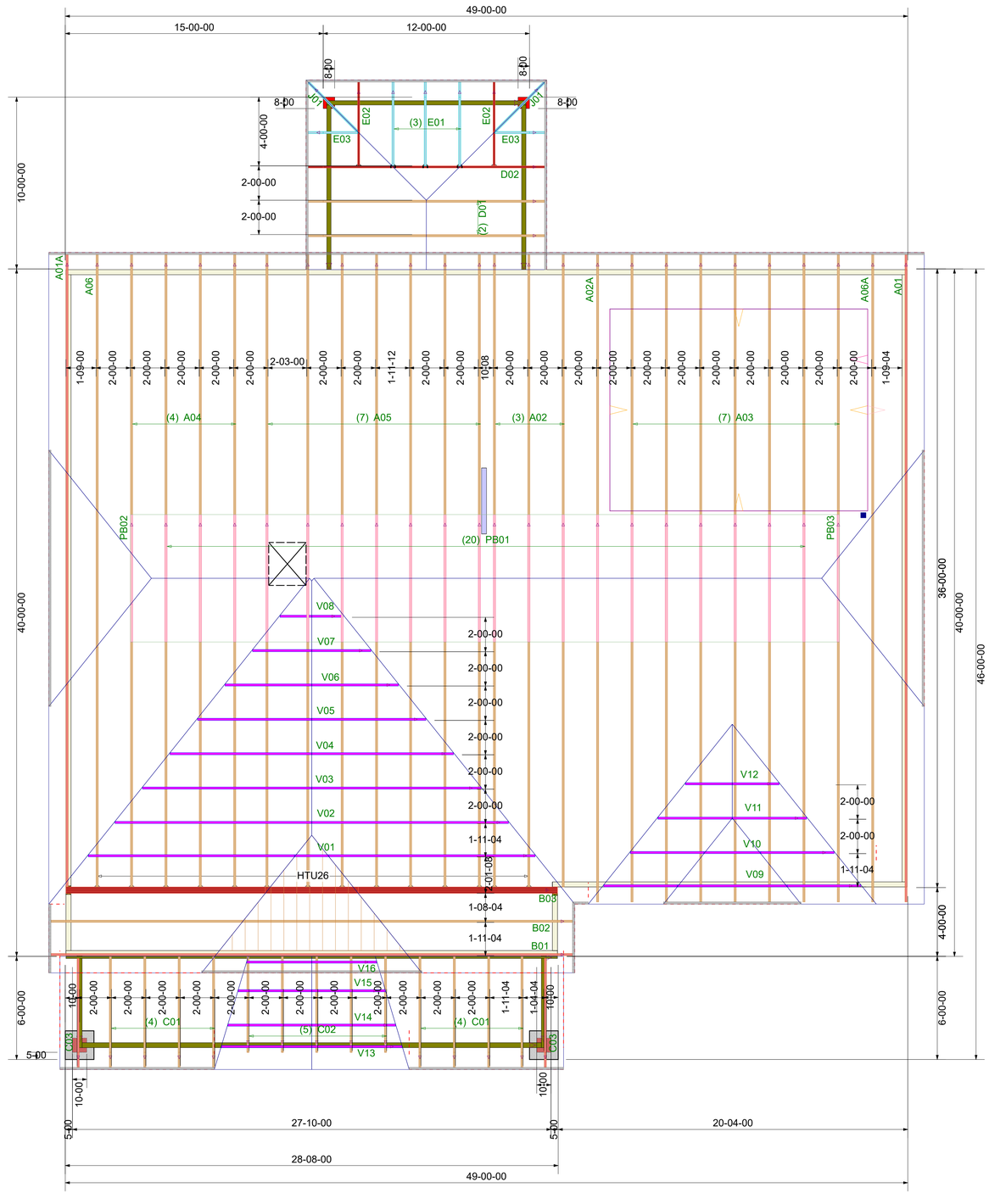
** CUTTING OR DRILLING OF COMPONENTS SHOULD NOT BE DONE WITHOUT CONTACTING COMPONENT SUPPLIER FIRST. CUSTOMER TAKES FULL RESPONSIBILITY FOR COMPONENTS IF CUT BEFORE AUTHORIZATION.

** ALL BEARING POINTS MUST BE INSTALLED PRIOR TO SETTING ANY COMPONENTS.

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

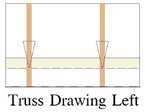
** DAMAGED COMPONENTS SHOULD NOT BE INSTALLED UNLESS TOLD TO BY THE COMPONENT PLANT.

** FRAMER MUST REFER TO PLANS WHILE SETTING COMPONENTS.




Truss Connector Total List

| Qty | Product | Manuf |
|---|---|---|
| 14 | HTU26 | Simpson |
| 80 | One H2.5A | Simpson |



Truss Drawing Left End Indicator

## ROOF PLACEMENT PLAN

** TRIANGULAR SYMBOL NEAR END OF TRUSS INDICATES LEFT END OF TRUSS AS SHOWN ON INDIVIDUAL TRUSS DRAWINGS.

** PLUMBING DROPS NOTED ARE IN THE APPROXIMATE LOCATIONS PER PLAN. BUILDER TO VERIFY LOCATIONS BEFORE SETTING TRUSSES.

** REFER TO FINAL TRUSS ENGINEERING SHEETS FOR PLY TO PLY CONNECTIONS.

** 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.

** DIMENSIONS ARE READ AS: FOOT-INCH-SIXTEENTH.

** GIRDERS MUST BE FULLY CONNECTED TOGETHER PRIOR TO ADDING ANY LOADS.

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

**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 supported structure including headers, beams, studs 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

CARTER Lumber

DR Horton Inc

89 Eagle Creek - Norman - D

Roof Truss Layout

Scale: NTS

Date: 4/30/2025

Designer: Nate Donaldson

Project Number: 25040191-B

Sheet Number: 1/1

ENGINEERING BY TRENCO
A MiTek Affiliate

RE: 25040191
89 Eagle Creek - Norman D - Roof

Trenco
818 Soundside Rd
Edenton, NC 27932

**Site Information:**

Customer: DR Horton Inc Project Name: 25040191
Lot/Block: 89 Model: Norman D
Address: Subdivision: Eagle Creek
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 40 individual, dated Truss Design Drawings and 0 Additional Drawings.

| No. | Seal# | Truss Name | Date | No. | Seal# | Truss Name | Date |
|---|---|---|---|---|---|---|---|
| 1 | I68925780 | A01 | 10/17/2024 | 21 | I68925800 | J01 | 10/17/2024 |
| 2 | I68925781 | A01A | 10/17/2024 | 22 | I68925801 | PB01 | 10/17/2024 |
| 3 | I68925782 | A02 | 10/17/2024 | 23 | I68925802 | PB02 | 10/17/2024 |
| 4 | I68925783 | A02A | 10/17/2024 | 24 | I68925803 | PB03 | 10/17/2024 |
| 5 | I68925784 | A03 | 10/17/2024 | 25 | I68925804 | V01 | 10/17/2024 |
| 6 | I68925785 | A04 | 10/17/2024 | 26 | I68925805 | V02 | 10/17/2024 |
| 7 | I68925786 | A05 | 10/17/2024 | 27 | I68925806 | V03 | 10/17/2024 |
| 8 | I68925787 | A06 | 10/17/2024 | 28 | I68925807 | V04 | 10/17/2024 |
| 9 | I68925788 | A06A | 10/17/2024 | 29 | I68925808 | V05 | 10/17/2024 |
| 10 | I68925789 | B01 | 10/17/2024 | 30 | I68925809 | V06 | 10/17/2024 |
| 11 | I68925790 | B02 | 10/17/2024 | 31 | I68925810 | V07 | 10/17/2024 |
| 12 | I68925791 | B03 | 10/17/2024 | 32 | I68925811 | V08 | 10/17/2024 |
| 13 | I68925792 | C01 | 10/17/2024 | 33 | I68925812 | V09 | 10/17/2024 |
| 14 | I68925793 | C02 | 10/17/2024 | 34 | I68925813 | V10 | 10/17/2024 |
| 15 | I68925794 | C03 | 10/17/2024 | 35 | I68925814 | V11 | 10/17/2024 |
| 16 | I68925795 | D01 | 10/17/2024 | 36 | I68925815 | V12 | 10/17/2024 |
| 17 | I68925796 | D02 | 10/17/2024 | 37 | I68925816 | V13 | 10/17/2024 |
| 18 | I68925797 | E01 | 10/17/2024 | 38 | I68925817 | V14 | 10/17/2024 |
| 19 | I68925798 | E02 | 10/17/2024 | 39 | I68925818 | V15 | 10/17/2024 |
| 20 | I68925799 | E03 | 10/17/2024 | 40 | I68925819 | V16 | 10/17/2024 |

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, 2025.

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 17, 2024



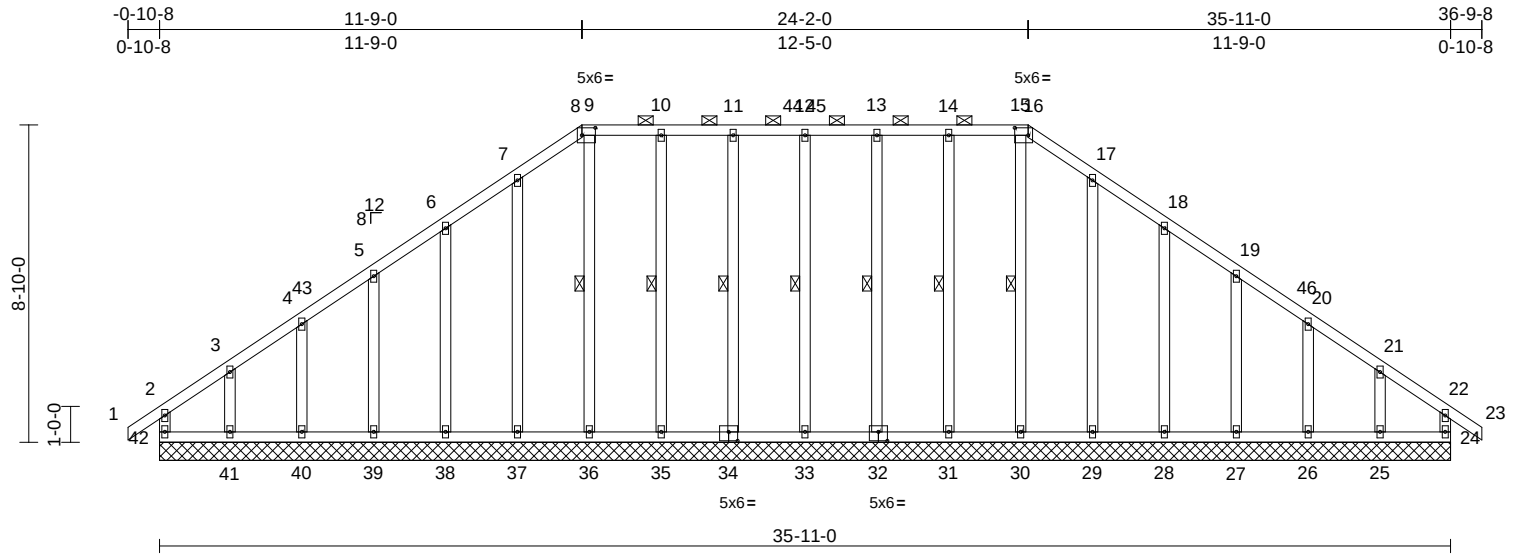
Gilbert, Eric

| Job | Truss | Truss Type | Qty | Ply | 89 Eagle Creek - Norman D - Roof |
|---|---|---|---|---|---|
| 25040191 | A01 | Hip Supported Gable | 1 | 1 | I68925780 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. Tue Oct 15 15:19:39 ID:jgeUCYH2wVfnTG7e_tlm6?zuo40-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f






Scale = 1:64.1

Plate Offsets (X, Y): [8:0-4-8,0-2-8], [16:0-4-8,0-2-8], [32:0-3-0,0-3-0], [34:0-3-0,0-3-0]

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.16 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.08 | Vert(CT) | n/a | - | n/a | 999 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.20 | Horz(CT) | 0.01 | 24 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2018/TPI2014 | Matrix-MR | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 271 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, and 2-0-0 oc purlins (6-0-0 max.): 8-16. |
| BOT CHORD | Rigid ceiling directly applied or 6-0-0 oc bracing. |
| WEBS | 1 Row at midpt 12-33, 11-34, 10-35, 9-36, 13-32, 14-31, 15-30 |

**REACTIONS** (size) 24=35-11-0, 25=35-11-0, 26=35-11-0, 27=35-11-0, 28=35-11-0, 29=35-11-0, 30=35-11-0, 31=35-11-0, 32=35-11-0, 33=35-11-0, 34=35-11-0, 35=35-11-0, 36=35-11-0, 37=35-11-0, 38=35-11-0, 39=35-11-0, 40=35-11-0, 41=35-11-0, 42=35-11-0

Max Horiz 42=-225 (LC 12)

Max Uplift 24=-53 (LC 11), 25=-115 (LC 15), 26=-45 (LC 15), 27=-60 (LC 15), 28=-62 (LC 15), 29=-47 (LC 15), 31=-31 (LC 11), 32=-26 (LC 10), 33=-24 (LC 11), 34=-26 (LC 10), 35=-33 (LC 10), 37=-49 (LC 14), 38=-61 (LC 14), 39=-61 (LC 14), 40=-42 (LC 14), 41=-128 (LC 14), 42=-99 (LC 10)

Max Grav 24=165 (LC 51), 25=196 (LC 26), 26=185 (LC 45), 27=228 (LC 45), 28=227 (LC 45), 29=233 (LC 45), 30=180 (LC 54), 31=234 (LC 40), 32=224 (LC 40), 33=228 (LC 40), 34=224 (LC 40), 35=232 (LC 40), 36=190 (LC 56), 37=233 (LC 43), 38=227 (LC 43), 39=229 (LC 43), 40=185 (LC 43), 41=216 (LC 25), 42=201 (LC 53)

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

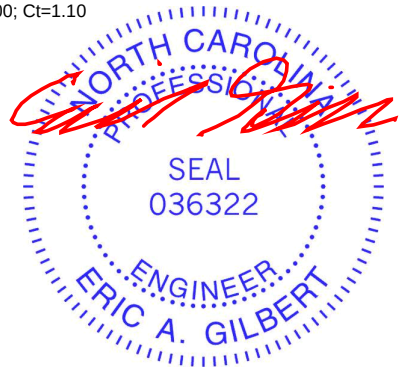
TOP CHORD 2-42=-162/83, 1-2=0/34, 2-3=-157/153, 3-4=-118/118, 4-5=-109/129, 5-6=-102/162, 6-7=-120/215, 7-8=-144/262, 8-9=-122/237, 9-10=-122/237, 10-11=-122/237, 11-12=-123/237, 12-13=-123/237, 13-14=-122/237, 14-15=-122/237, 15-16=-122/237, 16-17=-145/262, 17-18=-121/216, 18-19=-96/157, 19-20=-73/106, 20-21=-73/74, 21-22=-105/98, 22-23=0/34, 22-24=-133/46

BOT CHORD 41-42=-96/108, 40-41=-96/108, 39-40=-96/108, 38-39=-96/108, 37-38=-96/108, 36-37=-96/108, 35-36=-96/108, 33-35=-96/108, 31-33=-96/107, 30-31=-96/107, 29-30=-96/107, 28-29=-96/107, 27-28=-96/107, 26-27=-96/107, 25-26=-96/107, 24-25=-96/107

WEBS 12-33=-186/50, 11-34=-184/50, 10-35=-194/55, 9-36=-150/23, 7-37=-193/73, 6-38=-194/86, 5-39=-194/83, 4-40=-158/76, 3-41=-148/118, 13-32=-184/49, 14-31=-194/55, 15-30=-140/3, 17-29=-193/71, 18-28=-194/87, 19-27=-193/82, 20-26=-159/76, 21-25=-141/111

**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 Corner(3E) -0-10-8 to 2-8-9, Exterior(2N) 2-8-9 to 7-11-8, Corner(3R) 7-11-8 to 15-4-1, Exterior(2N) 15-4-1 to 20-6-15, Corner(3R) 20-6-15 to 27-11-8, Exterior(2N) 27-11-8 to 33-2-7, Corner(3E) 33-2-7 to 36-9-8 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) 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




October 17,2024

Continued on page 2



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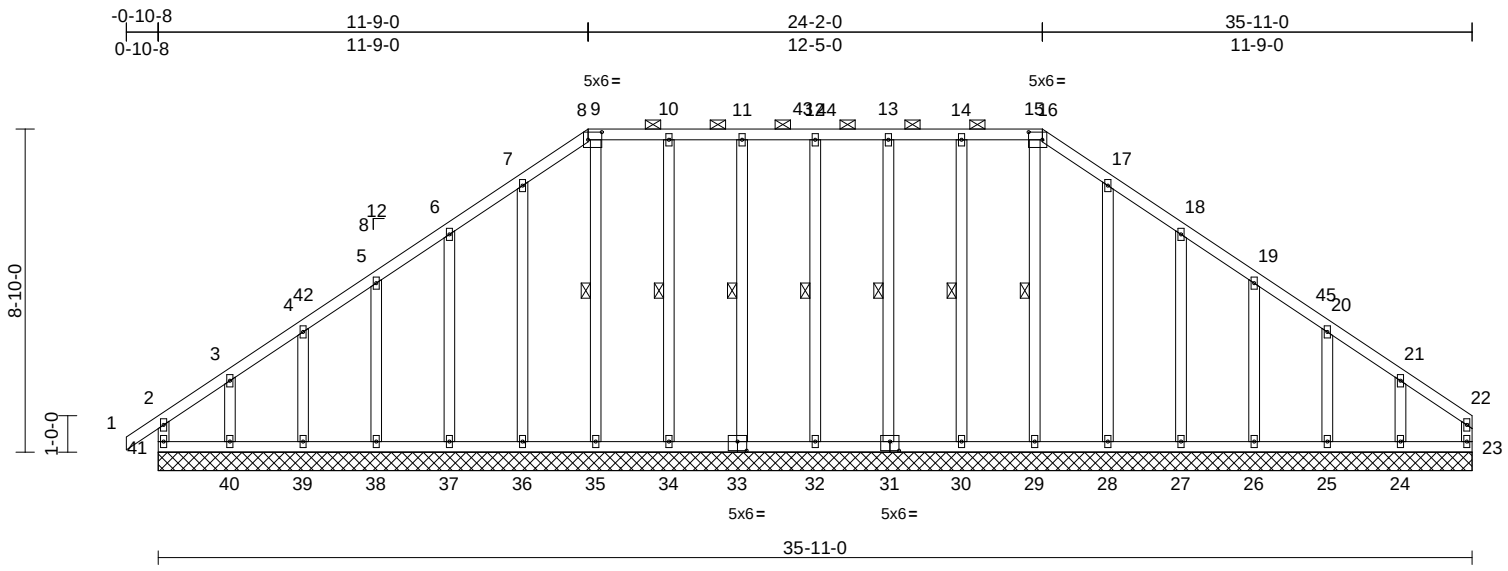
Edenton, NC 27932

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.
14) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 99 lb uplift at joint 42, 53 lb uplift at joint 24, 24 lb uplift at joint 33, 26 lb uplift at joint 34, 33 lb uplift at joint 35, 49 lb uplift at joint 37, 61 lb uplift at joint 38, 61 lb uplift at joint 39, 42 lb uplift at joint 40, 128 lb uplift at joint 41, 26 lb uplift at joint 32, 31 lb uplift at joint 31, 47 lb uplift at joint 29, 62 lb uplift at joint 28, 60 lb uplift at joint 27, 45 lb uplift at joint 26 and 115 lb uplift at joint 25.
15) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
16) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard

| Job | Truss | Truss Type | Qty | Ply | 89 Eagle Creek - Norman D - Roof |
|---|---|---|---|---|---|
| 25040191 | A01A | Hip Supported Gable | 1 | 1 | I68925781 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. Tue Oct 15 15:19:40 Page: 1
ID:jgeUCYH2wVfnTG7e_tlm6?zuo40-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f




Scale = 1:63

Plate Offsets (X, Y): [8:0-4-8,0-2-8], [16:0-4-8,0-2-8], [31:0-3-0,0-3-0], [33:0-3-0,0-3-0]

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.16 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.08 | Vert(CT) | n/a | - | n/a | 999 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.20 | Horz(CT) | 0.01 | 23 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2018/TPI2014 | Matrix-MR | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 269 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, and 2-0-0 oc purlins (6-0-0 max.): 8-16.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 12-32, 11-33, 10-34, 9-35, 13-31, 14-30, 15-29

**REACTIONS** (size) 23=35-11-0, 24=35-11-0, 25=35-11-0, 26=35-11-0, 27=35-11-0, 28=35-11-0, 29=35-11-0, 30=35-11-0, 31=35-11-0, 32=35-11-0, 33=35-11-0, 34=35-11-0, 35=35-11-0, 36=35-11-0, 37=35-11-0, 38=35-11-0, 39=35-11-0, 40=35-11-0, 41=35-11-0
Max Horiz 41=220 (LC 11)
Max Uplift 23=-51 (LC 11), 24=-116 (LC 15), 25=-45 (LC 15), 26=-60 (LC 15), 27=-62 (LC 15), 28=-47 (LC 15), 30=-31 (LC 11), 31=-26 (LC 10), 32=-24 (LC 11), 33=-26 (LC 10), 34=-33 (LC 10), 36=-49 (LC 14), 37=-61 (LC 14), 38=-61 (LC 14), 39=-42 (LC 14), 40=-131 (LC 14), 41=-101 (LC 10)
Max Grav 23=114 (LC 51), 24=214 (LC 26), 25=180 (LC 45), 26=230 (LC 45), 27=227 (LC 45), 28=232 (LC 45), 29=176 (LC 54), 30=234 (LC 40), 31=224 (LC 40), 32=228 (LC 40), 33=224 (LC 40), 34=232 (LC 40), 35=189 (LC 56), 36=231 (LC 43), 37=225 (LC 41), 38=227 (LC 43), 39=185 (LC 41), 40=214 (LC 25), 41=210 (LC 53)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-41=-169/84, 1-2=0/34, 2-3=-166/153, 3-4=-125/120, 4-5=-118/128, 5-6=-111/161, 6-7=-128/209, 7-8=-152/255, 8-9=-126/231, 9-10=-126/231, 10-11=-126/231, 11-12=-128/232, 12-13=-128/232, 13-14=-127/232, 14-15=-127/232, 15-16=-127/232, 16-17=-153/256, 17-18=-129/209, 18-19=-104/150, 19-20=-76/101, 20-21=-78/67, 21-22=-100/93, 22-23=-83/41
BOT CHORD 40-41=-85/95, 39-40=-85/95, 38-39=-85/95, 37-38=-85/95, 36-37=-85/95, 35-36=-85/95, 34-35=-85/95, 32-34=-85/95, 30-32=-85/95, 29-30=-85/95, 28-29=-85/95, 27-28=-85/95, 26-27=-85/95, 25-26=-85/95, 24-25=-85/95, 23-24=-85/95
WEBS 12-32=-186/50, 11-33=-184/50, 10-34=-195/55, 9-35=-148/27, 7-36=-191/73, 6-37=-194/86, 5-38=-193/83, 4-39=-158/75, 3-40=-147/119, 13-31=-184/49, 14-30=-195/55, 15-29=-136/6, 17-28=-192/71, 18-27=-194/87, 19-26=-194/82, 20-25=-157/76, 21-24=-152/110

**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 Corner(3E) -0-10-8 to 2-8-9, Exterior(2N) 2-8-9 to 7-11-8, Corner(3R) 7-11-8 to 15-4-1, Exterior(2N) 15-4-1 to 20-6-15, Corner(3R) 20-6-15 to 27-11-8, Exterior(2N) 27-11-8 to 31-11-8, Corner(3E) 31-11-8 to 35-9-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/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


October 17,2024

Continued on page 2



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818 Soundside Road
Edenton, NC 27932

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.
14) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 101 lb uplift at joint 41, 51 lb uplift at joint 23, 24 lb uplift at joint 32, 26 lb uplift at joint 33, 33 lb uplift at joint 34, 49 lb uplift at joint 36, 61 lb uplift at joint 37, 61 lb uplift at joint 38, 42 lb uplift at joint 39, 131 lb uplift at joint 40, 26 lb uplift at joint 31, 31 lb uplift at joint 30, 47 lb uplift at joint 28, 62 lb uplift at joint 27, 60 lb uplift at joint 26, 45 lb uplift at joint 25 and 116 lb uplift at joint 24.
15) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
16) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard

| Job | Truss | Truss Type | Qty | Ply | 89 Eagle Creek - Norman D - Roof |
|---|---|---|---|---|---|
| 25040191 | A02 | Piggyback Base | 3 | 1 | I68925782 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. Tue Oct 15 15:19:40 Page: 1
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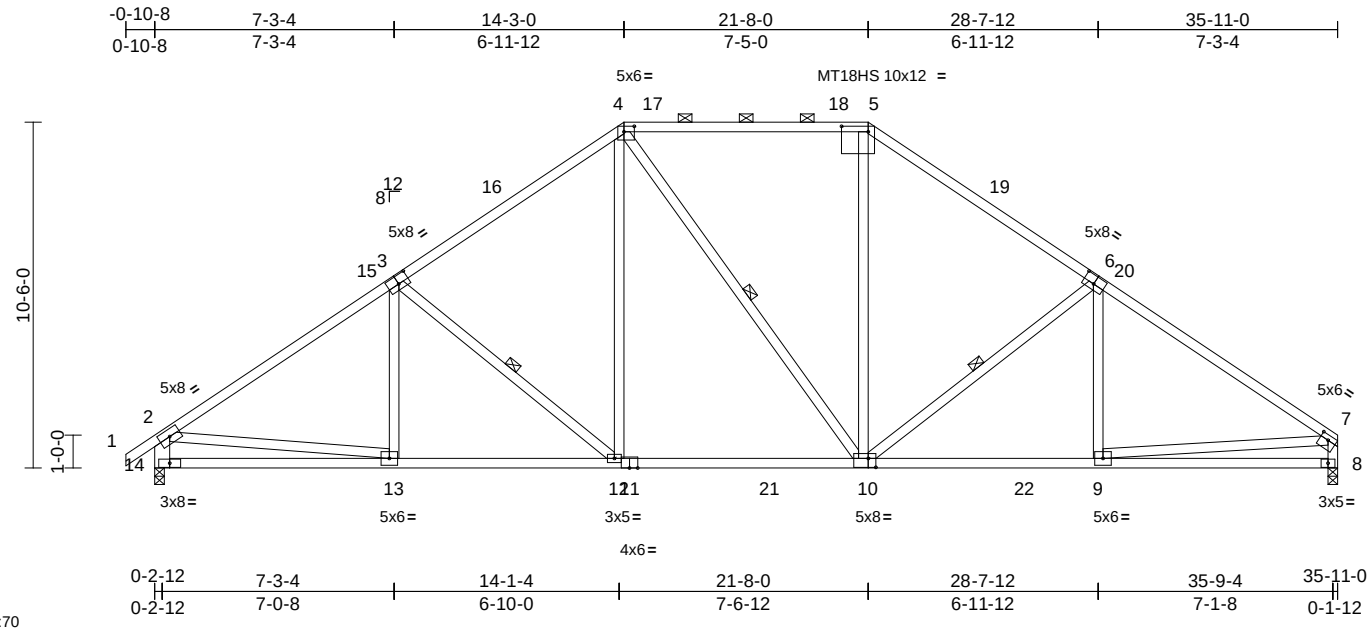


Scale = 1:70

Plate Offsets (X, Y): [3:0-4-0,0-3-0], [4:0-3-12,0-2-0], [5:0-9-12,0-2-0], [6:0-4-0,0-3-0], [7:Edge,0-1-12], [10:0-2-12,0-3-4]

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.91 | Vert(LL) | -0.18 | 10-12 | >999 | 240 | MT18HS | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.82 | Vert(CT) | -0.30 | 10-12 | >999 | 180 | MT20 | 244/190 |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.66 | Horz(CT) | 0.07 | 8 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2018/TPI2014 | Matrix-MSH | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 229 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x4 SP No.1 *Except* 4-5:2x4 SP 2400F 2.0E, 1-3,6-7:2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except* 10-4:2x4 SP No.2, 14-2:2x6 SP No.2

**BRACING**
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (5-3-13 max.): 4-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 3-12, 4-10, 6-10

**REACTIONS** (size) 8=0-3-8, 14=0-3-8
Max Horiz 14=259 (LC 11)
Max Uplift 8=-100 (LC 15), 14=-121 (LC 14)
Max Grav 8=1670 (LC 47), 14=1715 (LC 47)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/37, 2-4=-2608/281, 4-5=-1727/286, 5-7=-2649/282, 2-14=-1847/205, 7-8=-1816/165
BOT CHORD 13-14=-276/577, 12-13=-155/2074, 9-12=-74/2118, 8-9=-75/355
WEBS 3-13=-29/178, 3-12=-602/211, 4-12=-48/690, 4-10=-182/198, 5-10=-19/699, 6-10=-662/217, 6-9=-23/210, 2-13=-15/1630, 7-9=-45/1790

**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 2-8-9, Interior (1) 2-8-9 to 10-7-15, Exterior(2R) 10-7-15 to 25-3-1, Interior (1) 25-3-1 to 32-2-3, Exterior(2E) 32-2-3 to 35-9-4 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) 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) All plates are MT20 plates unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
10) Bearing at joint(s) 14, 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
11) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 14 and 8. This connection is for uplift only and does not consider lateral forces.
12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard


October 17,2024



ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | 89 Eagle Creek - Norman D - Roof |
|---|---|---|---|---|---|
| 25040191 | A02A | Piggyback Base | 1 | 1 | I68925783 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. Tue Oct 15 15:19:40 Page: 1
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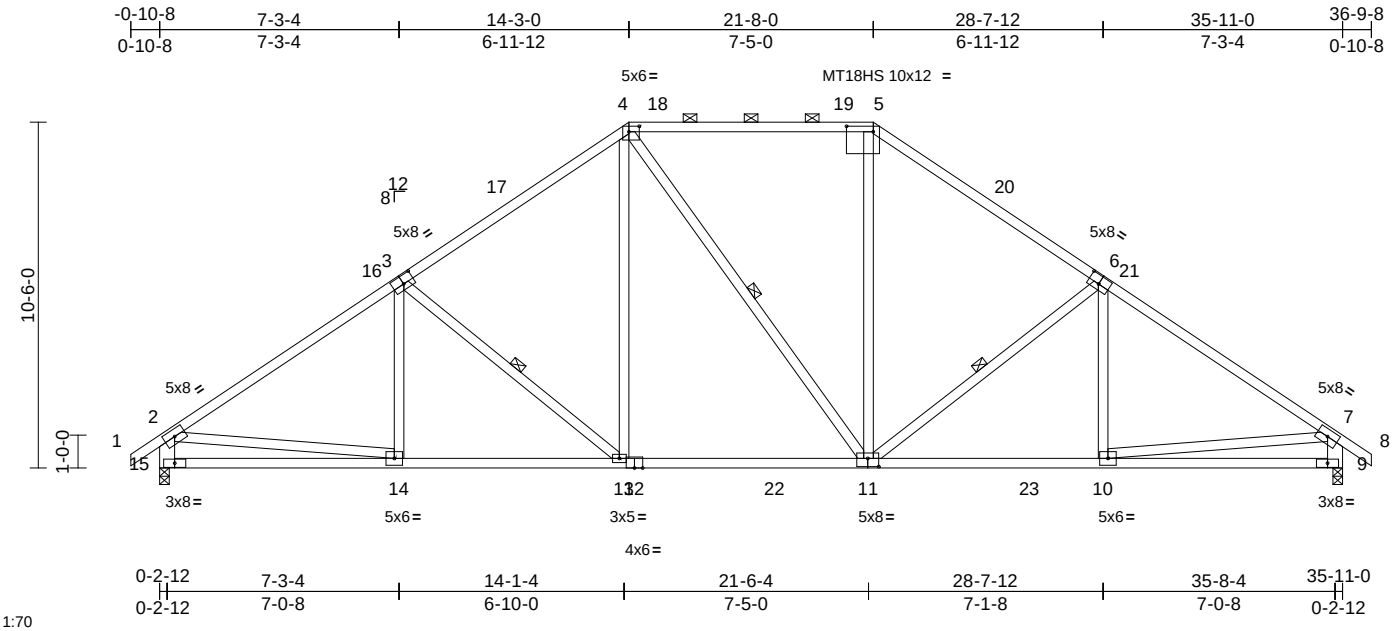


Scale = 1:70

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

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.87 | Vert(LL) | -0.17 | 11-13 | >999 | 240 | MT18HS | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.82 | Vert(CT) | -0.28 | 11-13 | >999 | 180 | MT20 | 244/190 |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.62 | Horz(CT) | 0.07 | 9 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2018/TPI2014 | Matrix-MSH | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 231 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x4 SP No.1 *Except* 4-5:2x4 SP 2400F 2.0E, 1-3,6-8:2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except* 11-4:2x4 SP No.2, 15-2,9-7:2x6 SP No.2

**BRACING**
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (5-4-1 max.): 4-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 3-13, 4-11, 6-11

**REACTIONS** (size) 9=0-3-8, 15=0-3-8
Max Horiz 15=-266 (LC 12)
Max Uplift 9=-121 (LC 15), 15=-121 (LC 14)
Max Grav 9=1722 (LC 47), 15=1710 (LC 47)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/37, 2-4=-2600/280, 4-5=-1719/285, 5-7=-2621/279, 7-8=0/37, 2-15=-1842/205, 7-9=-1859/203
BOT CHORD 14-15=-270/584, 13-14=-144/2077, 10-13=-36/2094, 9-10=-124/473
WEBS 3-14=-27/180, 3-13=-604/211, 4-13=-49/686, 4-11=-184/195, 5-11=-17/678, 6-11=-637/211, 6-10=-25/209, 2-14=-13/1625, 7-10=0/1665

**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 2-8-9, Interior (1) 2-8-9 to 10-7-15, Exterior(2R) 10-7-15 to 25-3-1, Interior (1) 25-3-1 to 33-2-7, Exterior(2E) 33-2-7 to 36-9-8 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) 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) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
10) Bearing at joint(s) 15, 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
11) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 15 and 9. This connection is for uplift only and does not consider lateral forces.
12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard


October 17,2024



ENGINEERING BY TRENCO A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | 89 Eagle Creek - Norman D - Roof |
|---|---|---|---|---|---|
| 25040191 | A03 | Piggyback Base | 7 | 1 | I68925784<br>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. Tue Oct 15 15:19:41 Page: 1

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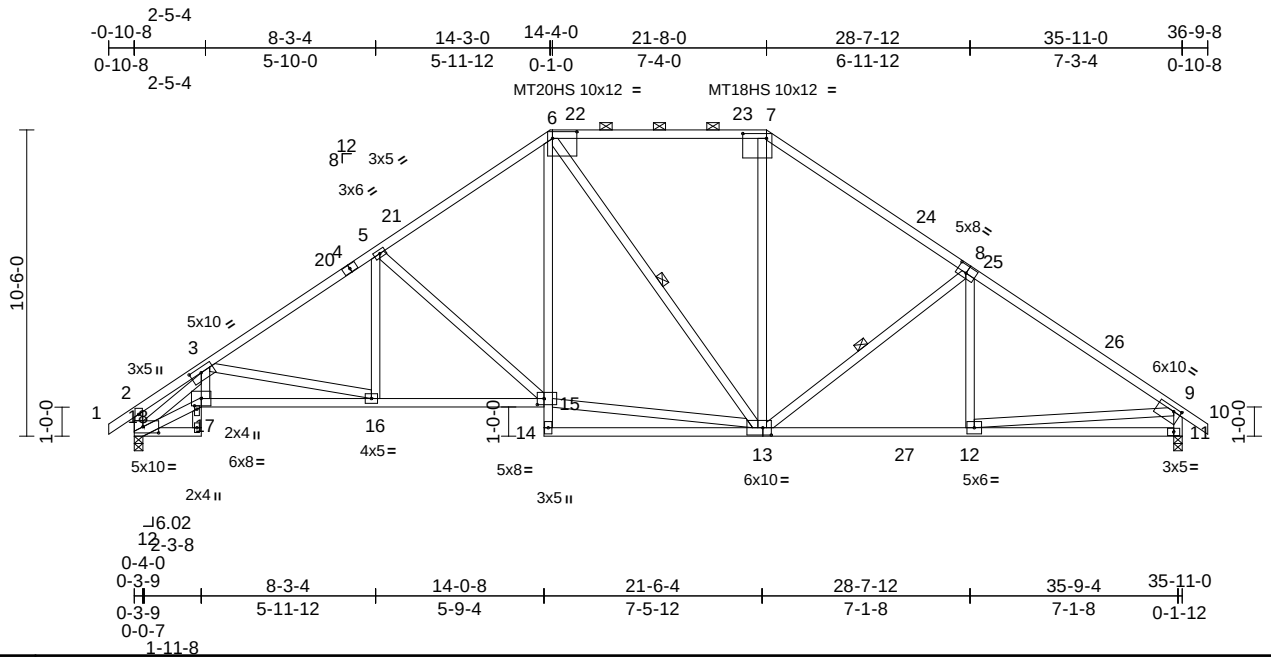


Scale = 1:79

Plate Offsets (X, Y): [3:0-4-10,0-2-0], [6:0-10-0,0-2-12], [7:0-9-12,0-2-0], [8:0-4-0,0-3-0], [9:0-3-0,0-1-8], [13:0-3-8,0-3-0], [15:0-2-12,0-2-8], [17:0-1-6,0-1-0], [18:0-6-8,0-2-8]

| 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 | 0.85 | Vert(LL) | -0.16 | 13-14 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.91 | Vert(CT) | -0.32 | 13-14 | >999 | 180 | MT20HS | 187/143 |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 1.00 | Horz(CT) | 0.19 | 11 | n/a | n/a | MT18HS | 244/190 |
| BCLL | 0.0* | Code | IRC2018/TPI2014 | Matrix-MSH | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 247 lb | FT = 20% |

**LUMBER**

TOP CHORD 2x4 SP No.1 *Except* 6-7:2x4 SP 2400F 2.0E

BOT CHORD 2x4 SP No.2 *Except* 18-17:2x4 SP No.1, 6-14,18-19:2x4 SP No.3

WEBS 2x4 SP No.3 *Except* 13-6:2x4 SP No.2

**BRACING**

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (5-6-9 max.): 6-7.

BOT CHORD Rigid ceiling directly applied or 9-6-9 oc bracing.

WEBS 1 Row at midpt 6-13, 8-13

**REACTIONS** (size) 11=0-3-8, 18=0-3-8
Max Horiz 18=-266 (LC 12)
Max Uplift 11=-120 (LC 15), 18=-121 (LC 14)
Max Grav 11=1695 (LC 47), 18=1677 (LC 47)

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

TOP CHORD 1-2=0/34, 2-3=-513/62, 3-5=-2826/187, 5-6=-2217/244, 6-7=-1603/256, 7-9=-2508/242, 9-10=0/34, 2-18=-440/72, 9-11=-1759/162

BOT CHORD 17-18=-435/3480, 16-17=-376/2953, 15-16=-144/2306, 14-15=0/134, 6-15=-69/963, 12-14=-10/2006, 11-12=-120/444

WEBS 3-17=-132/1589, 3-16=-728/238, 5-16=0/420, 5-15=-857/213, 6-13=-357/149, 7-13=-15/631, 8-13=-651/214, 8-12=-14/228, 3-18=-3969/344, 9-12=0/1603, 13-15=-58/1539

**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 2-5-4, Interior (1) 2-5-4 to 9-3-1, Exterior(2R) 9-3-1 to 26-8-15, Interior (1) 26-8-15 to 33-2-6, Exterior(2E) 33-2-6 to 36-9-8 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) 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) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
10) Bearing at joint(s) 18, 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
11) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 18 and 11. This connection is for uplift only and does not consider lateral forces.
12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard


October 17,2024



ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | 89 Eagle Creek - Norman D - Roof |
|---|---|---|---|---|---|
| 25040191 | A04 | Piggyback Base | 4 | 1 | I68925785<br>Job Reference (optional) |

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

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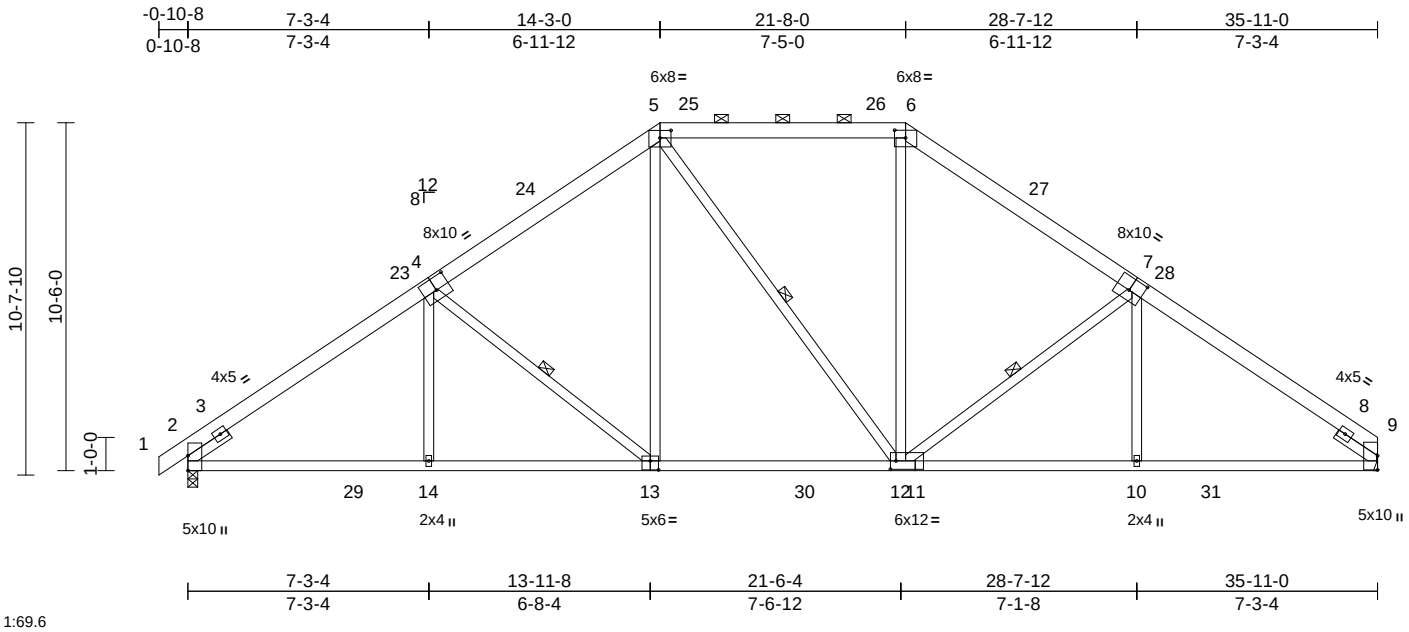



Scale = 1:69.6

Plate Offsets (X, Y): [4:0-5-0,0-4-8], [5:0-4-0,0-2-12], [6:0-4-0,0-2-13], [7:0-5-0,0-4-8], [12:0-2-0,0-3-0], [13:0-3-0,0-3-4]

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.67 | Vert(LL) | -0.19 | 12-13 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.85 | Vert(CT) | -0.31 | 12-13 | >999 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.26 | Horz(CT) | 0.12 | 9 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2018/TPI2014 | Matrix-MSH | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 246 lb | FT = 20% |

**LUMBER**

| | |
|---|---|
| TOP CHORD | 2x6 SP No.2 |
| BOT CHORD | 2x4 SP No.1 *Except* 13-11:2x4 SP No.2 |
| WEBS | 2x4 SP No.3 *Except* 12-5:2x4 SP No.2 |
| SLIDER | Left 2x4 SP No.3 -- 1-6-0, Right 2x4 SP No.3 -- 1-6-0 |

**BRACING**

| | |
|---|---|
| TOP CHORD | Structural wood sheathing directly applied or 3-4-0 oc purlins, except 2-0-0 oc purlins (5-0-12 max.): 5-6. |
| BOT CHORD | Rigid ceiling directly applied or 10-0-0 oc bracing. |
| WEBS | 1 Row at midpt 4-13, 5-12, 7-12 |

**REACTIONS** (size) 2=0-3-8, 9= Mechanical
Max Horiz 2=233 (LC 13)
Max Uplift 2=-119 (LC 14), 9=-102 (LC 15)
Max Grav 2=1746 (LC 47), 9=1695 (LC 47)

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

| | |
|---|---|
| TOP CHORD | 1-2=0/29, 2-5=-2763/285, 5-6=-1786/287, 6-9=-2758/283 |
| BOT CHORD | 2-14=-239/2153, 12-14=-178/2149, 10-12=-104/2145, 9-10=-109/2149 |
| WEBS | 4-14=0/269, 4-13=-632/226, 5-13=-56/723, 5-12=-181/200, 6-12=-17/698, 7-12=-651/226, 7-10=0/285 |

**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 2-8-9, Interior (1) 2-8-9 to 10-7-15, Exterior(2R) 10-7-15 to 25-3-1, Interior (1) 25-3-1 to 32-3-15, Exterior(2E) 32-3-15 to 35-11-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) 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, with BCDL = 10.0psf.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 102 lb uplift at joint 9.
11) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard


October 17,2024



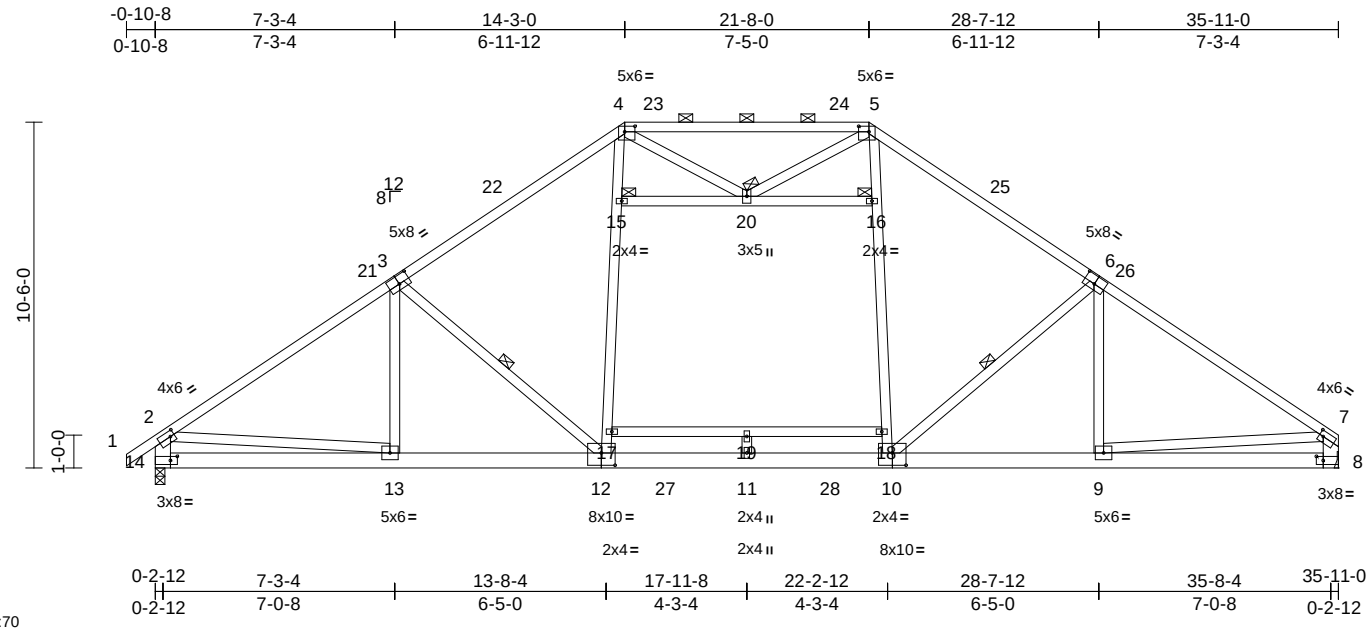
ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | 89 Eagle Creek - Norman D - Roof |
|---|---|---|---|---|---|
| 25040191 | A05 | Piggyback Base | 7 | 1 | I68925786<br>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. Tue Oct 15 15:19:41 ID:BtCsPuHghpnd4QiqYaG?fDzuo4?-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f






Scale = 1:70

Plate Offsets (X, Y): [2:0-1-8,0-2-0], [3:0-4-0,0-3-0], [4:0-3-12,0-2-0], [5:0-3-12,0-2-0], [6:0-4-0,0-3-0], [7:0-1-8,0-2-0], [8:0-2-8,0-1-8], [10:0-5-0,0-4-8], [12:0-5-0,0-4-8], [14:0-2-8,0-1-8]

| 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 | 0.72 | Vert(LL) | -0.25 | 9-10 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.38 | Vert(CT) | -0.31 | 9-10 | >999 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.83 | Horz(CT) | 0.03 | 8 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2018/TPI2014 | Matrix-MSH | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 275 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x4 SP 2400F 2.0E
BOT CHORD 2x6 SP 2400F 2.0E
WEBS 2x4 SP No.3 *Except* 14-2,8-7:2x6 SP No.2

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 4-10-7 oc purlins, except end verticals, and 2-0-0 oc purlins (5-1-5 max.): 4-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 3-12, 6-10
JOINTS 1 Brace at Jt(s): 15, 16, 20

**REACTIONS** (size) 8= Mechanical, 14=0-3-8
Max Horiz 14=257 (LC 11)
Max Uplift 14=-21 (LC 14)
Max Grav 8=1655 (LC 41), 14=1723 (LC 41)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/37, 2-4=-2358/104, 4-5=-1548/149, 5-7=-2354/105, 2-14=-1652/111, 7-8=-1606/70
BOT CHORD 13-14=-223/648, 11-13=-45/1867, 9-11=0/1874, 8-9=-38/470
WEBS 3-13=-119/117, 3-12=-544/292, 12-17=0/626, 15-17=0/620, 4-15=0/625, 5-16=0/633, 16-18=0/628, 10-18=0/634, 6-10=-559/295, 6-9=-125/112, 2-13=0/1339, 7-9=0/1425, 15-20=-99/28, 16-20=-97/29, 17-19=0/107, 18-19=0/107, 11-19=0/22, 4-20=-75/72, 5-20=-77/70

**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 2-8-9, Interior (1) 2-8-9 to 10-7-15, Exterior(2R) 10-7-15 to 25-3-1, Interior (1) 25-3-1 to 32-1-3, Exterior(2E) 32-1-3 to 35-8-4 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
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) 200.0lb AC unit load placed on the bottom chord, 18-0-0 from left end, supported at two points, 5-0-0 apart.
7) Provide adequate drainage to prevent water ponding.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) Refer to girder(s) for truss to truss connections.
11) Bearing at joint(s) 14 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
12) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 14. This connection is for uplift only and does not consider lateral forces.
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.
14) 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


October 17,2024



ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | 89 Eagle Creek - Norman D - Roof |
|---|---|---|---|---|---|
| 25040191 | A06 | Hip | 1 | 1 | I68925787 |
| | | | | | 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. Tue Oct 15 15:19:41 Page: 1
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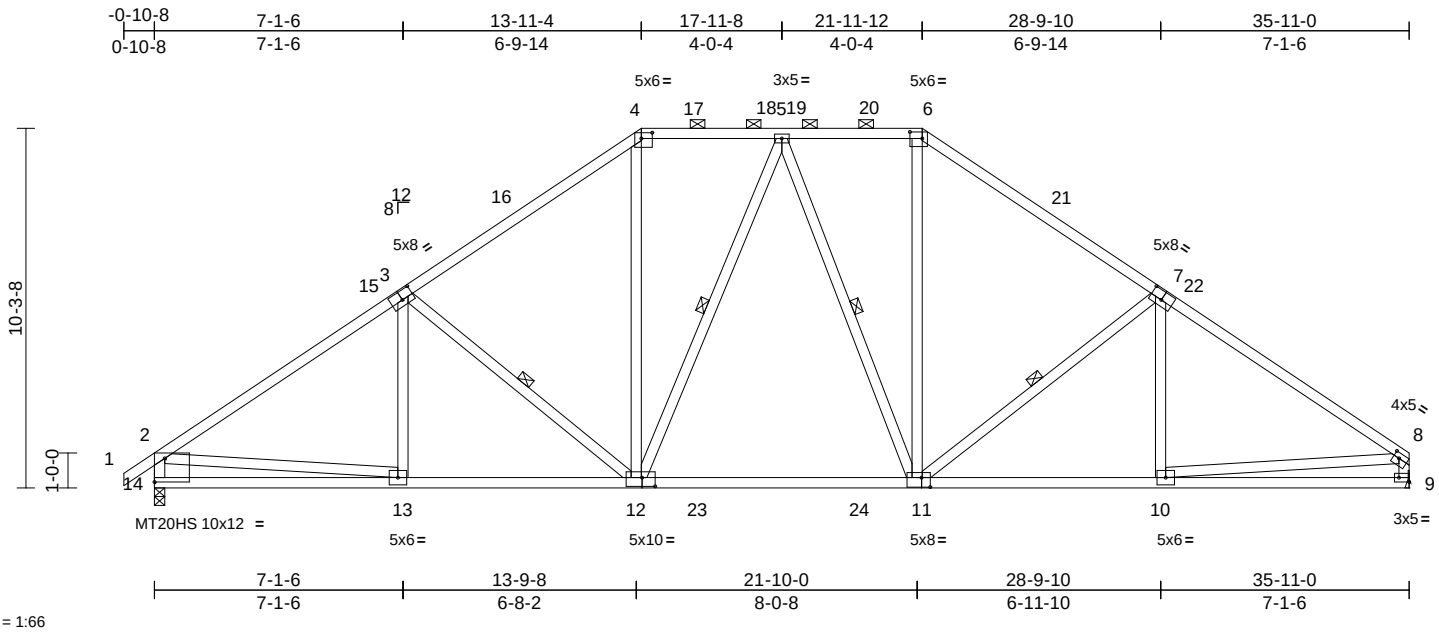


Scale = 1:66

Plate Offsets (X, Y): [3:0-4-0,0-3-0], [4:0-3-12,0-2-0], [6:0-4-4,0-2-4], [7:0-4-0,0-3-0], [8:Edge,0-1-12], [9:Edge,0-1-8], [11:0-3-0,0-3-4], [12:0-4-8,0-3-0], [14:Edge,0-8-2]

| 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 | 0.88 | Vert(LL) | -0.23 | 11-12 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.87 | Vert(CT) | -0.38 | 11-12 | >999 | 180 | MT20HS | 187/143 |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.65 | Horz(CT) | 0.07 | 9 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2018/TPI2014 | Matrix-MSH | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 239 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x4 SP No.2 *Except* 3-4,6-7:2x4 SP No.1
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except* 12-5,11-5:2x4 SP No.2

**BRACING**
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (4-3-4 max.): 4-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 3-12, 5-12, 5-11, 7-11

**REACTIONS** (size) 9= Mechanical, 14=0-3-8
Max Horiz 14=254 (LC 11)
Max Uplift 9=-98 (LC 15), 14=-118 (LC 14)
Max Grav 9=1645 (LC 47), 14=1697 (LC 47)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/34, 2-4=-2615/277, 4-5=-1727/281, 5-6=-1731/281, 6-8=-2613/277, 2-14=-1830/201, 8-9=-1790/164
BOT CHORD 13-14=-257/550, 10-13=-157/2095, 9-10=-64/334
WEBS 3-13=-30/171, 3-12=-603/210, 4-12=-21/750, 5-12=-269/173, 5-11=-263/174, 6-11=-23/751, 7-11=-616/213, 7-10=-35/171, 2-13=-34/1669, 8-10=-59/1786

**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 2-8-9, Interior (1) 2-8-9 to 10-4-3, Exterior(2R) 10-4-3 to 17-6-5, Interior (1) 17-6-5 to 18-4-11, Exterior(2R) 18-4-11 to 25-6-13, Interior (1) 25-6-13 to 32-2-3, Exterior(2E) 32-2-3 to 35-9-4 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) 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) All plates are MT20 plates unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
10) Refer to girder(s) for truss to truss connections.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 98 lb uplift at joint 9.
12) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 14. This connection is for uplift only and does not consider lateral forces.
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.
14) 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


October 17,2024



ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | 89 Eagle Creek - Norman D - Roof |
|---|---|---|---|---|---|
| 25040191 | A06A | Hip | 1 | 1 | I68925788 |
| | | | | | 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. Tue Oct 15 15:19:42 Page: 1
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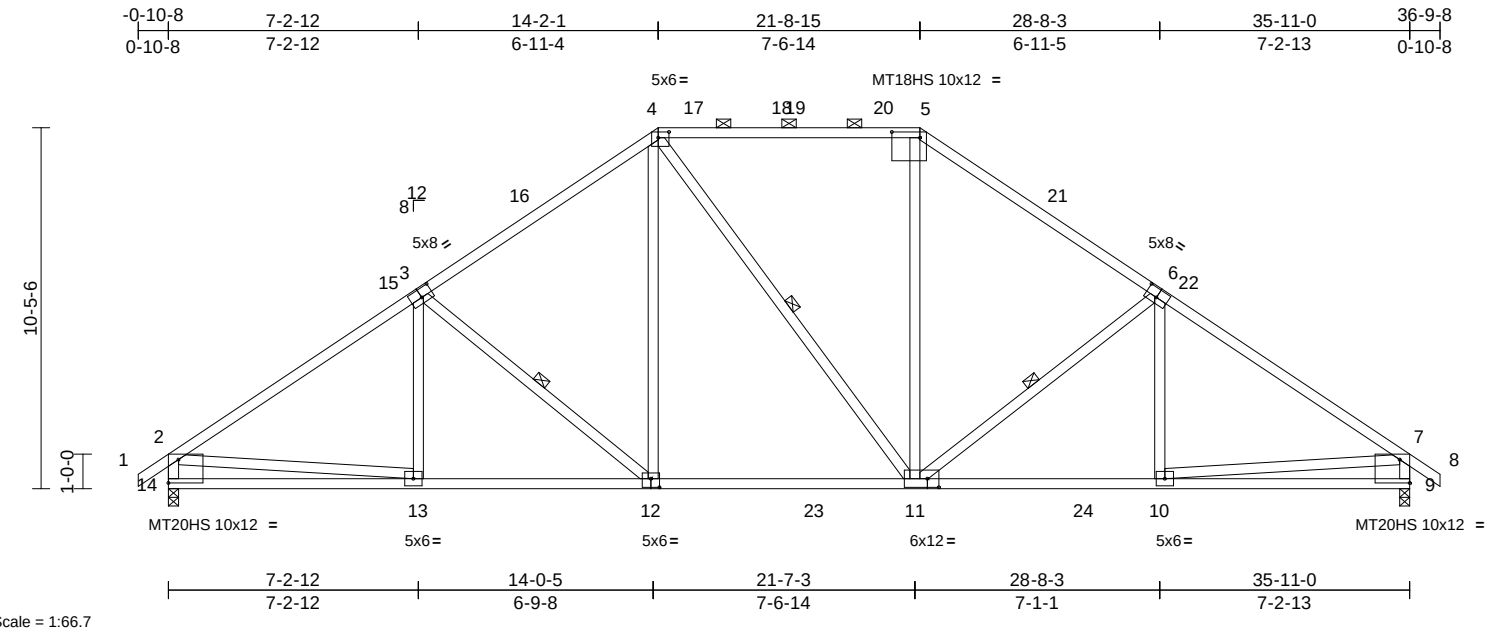


Scale = 1:66.7

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

| 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 | 0.86 | Vert(LL) | -0.18 | 11-12 | >999 | 240 | MT18HS | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.84 | Vert(CT) | -0.31 | 11-12 | >999 | 180 | MT20 | 244/190 |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.63 | Horz(CT) | 0.07 | 9 | n/a | n/a | MT20HS | 187/143 |
| BCLL | 0.0* | Code | IRC2018/TPI2014 | Matrix-MSH | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 229 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x4 SP No.1 *Except* 4-5:2x4 SP 2400F 2.0E, 1-3,6-8:2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except* 11-4:2x4 SP No.2

**BRACING**
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (4-11-11 max.): 4-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 3-12, 4-11, 6-11

**REACTIONS** (size) 9=0-3-8, 14=0-3-8
Max Horiz 14=-263 (LC 12)
Max Uplift 9=-120 (LC 15), 14=-120 (LC 14)
Max Grav 9=1724 (LC 47), 14=1713 (LC 47)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/34, 2-4=-2637/280, 4-5=-1739/284, 5-7=-2657/279, 7-8=0/34, 2-14=-1845/201, 7-9=-1861/200
BOT CHORD 13-14=-265/587, 10-13=-147/2124, 9-10=-120/475
WEBS 3-13=-19/184, 3-12=-615/212, 4-12=-49/699, 4-11=-184/197, 5-11=-15/689, 6-11=-650/212, 6-10=-16/213, 2-13=-16/1652, 7-10=0/1690

**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 2-8-9, Interior (1) 2-8-9 to 10-7-0, Exterior(2R) 10-7-0 to 17-9-2, Interior (1) 17-9-2 to 18-1-14, Exterior(2R) 18-1-14 to 25-4-0, Interior (1) 25-4-0 to 33-2-7, Exterior(2E) 33-2-7 to 36-9-8 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) 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) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
10) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 14 and 9. 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.
12) 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


October 17,2024



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A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | 89 Eagle Creek - Norman D - Roof |
|---|---|---|---|---|---|
| 25040191 | B01 | Hip Supported Gable | 1 | 1 | I68925789 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. Tue Oct 15 15:19:42 Page: 1
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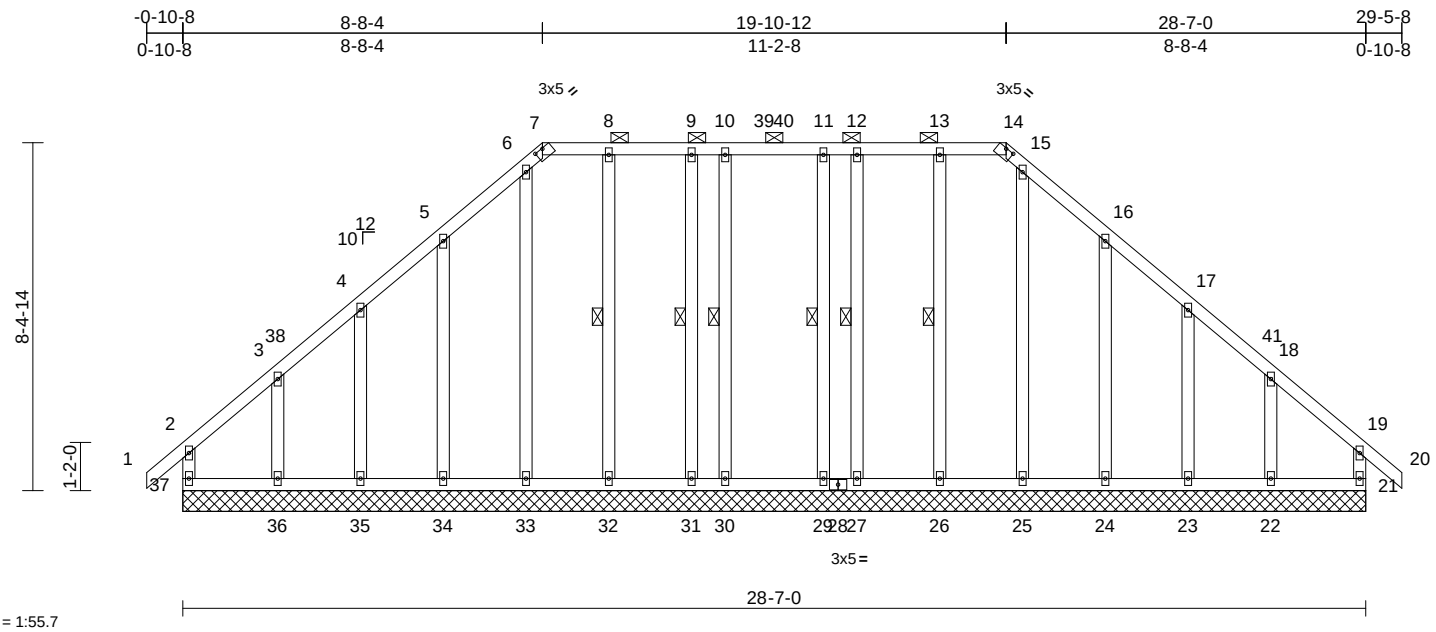


Scale = 1:55.7

Plate Offsets (X, Y): [7:0-2-8,0-0-3], [14:0-2-8,0-0-3]

| 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 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.09 | Vert(CT) | n/a | - | n/a | 999 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.18 | Horz(CT) | 0.00 | 21 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2018/TPI2014 | Matrix-MR | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 229 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, and 2-0-0 oc purlins (6-0-0 max.): 7-14.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 10-30, 11-29, 9-31, 8-32, 12-27, 13-26

**REACTIONS** (size) 21=28-7-0, 22=28-7-0, 23=28-7-0, 24=28-7-0, 25=28-7-0, 26=28-7-0, 27=28-7-0, 29=28-7-0, 30=28-7-0, 31=28-7-0, 32=28-7-0, 33=28-7-0, 34=28-7-0, 35=28-7-0, 36=28-7-0, 37=28-7-0
Max Horiz 37=-214 (LC 12)
Max Uplift 21=-69 (LC 11), 22=-139 (LC 15), 23=-53 (LC 15), 24=-98 (LC 15), 26=-15 (LC 11), 27=-22 (LC 10), 29=-19 (LC 11), 30=-19 (LC 11), 31=-22 (LC 10), 32=-14 (LC 11), 34=-97 (LC 14), 35=-52 (LC 14), 36=-146 (LC 14), 37=-97 (LC 10)
Max Grav 21=195 (LC 25), 22=283 (LC 53), 23=235 (LC 53), 24=265 (LC 53), 25=219 (LC 55), 26=232 (LC 40), 27=141 (LC 40), 29=214 (LC 46), 30=214 (LC 46), 31=141 (LC 40), 32=232 (LC 40), 33=224 (LC 57), 34=265 (LC 51), 35=232 (LC 51), 36=294 (LC 51), 37=217 (LC 26)

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

TOP CHORD 2-37=-164/83, 1-2=0/38, 2-3=-143/138, 3-4=-111/124, 4-5=-108/177, 5-6=-149/263, 6-7=-122/201, 7-8=-117/229, 8-9=-117/229, 9-10=-117/229, 10-11=-117/229, 11-12=-117/229, 12-13=-117/229, 13-14=-117/229, 14-15=-122/201, 15-16=-149/263, 16-17=-108/177, 17-18=-91/113, 18-19=-114/108, 19-20=0/38, 19-21=-146/68
BOT CHORD 36-37=-99/106, 35-36=-99/106, 34-35=-99/106, 33-34=-99/106, 32-33=-99/106, 31-32=-99/106, 30-31=-99/106, 29-30=-99/106, 27-29=-99/106, 26-27=-99/106, 25-26=-99/106, 24-25=-99/106, 23-24=-99/106, 22-23=-99/106, 21-22=-99/106
WEBS 10-30=-158/40, 11-29=-158/40, 9-31=-120/42, 8-32=-191/39, 6-33=-158/17, 5-34=-214/119, 4-35=-195/85, 3-36=-193/139, 12-27=-120/42, 13-26=-191/40, 15-25=-153/1, 16-24=-214/119, 17-23=-197/84, 18-22=-184/135

**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 Corner(3E) -0-10-8 to 2-3-8, Exterior(2N) 2-3-8 to 5-8-4, Corner(3R) 5-8-4 to 11-8-4, Exterior(2N) 11-8-4 to 16-10-12, Corner(3R) 16-10-12 to 22-10-12, Exterior (2N) 22-10-12 to 26-3-8, Corner(3E) 26-3-8 to 29-5-8 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) 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) 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.


October 17,2024

Continued on page 2



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818 Soundside Road
Edenton, NC 27932

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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 97 lb uplift at joint 37, 69 lb uplift at joint 21, 19 lb uplift at joint 30, 19 lb uplift at joint 29, 22 lb uplift at joint 31, 14 lb uplift at joint 32, 97 lb uplift at joint 34, 52 lb uplift at joint 35, 146 lb uplift at joint 36, 22 lb uplift at joint 27, 15 lb uplift at joint 26, 98 lb uplift at joint 24, 53 lb uplift at joint 23 and 139 lb uplift at joint 22.
15) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
16) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard

| Job | Truss | Truss Type | Qty | Ply | 89 Eagle Creek - Norman D - Roof | |
|---|---|---|---|---|---|---|
| 25040191 | B02 | Hip | 1 | 1 | Job Reference (optional) | I68925790 |

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

Run: 8.73 S Sep 25 2024 Print: 8.730 S Sep 25 2024 MiTek Industries, Inc. Tue Oct 15 15:19:42 Page: 1
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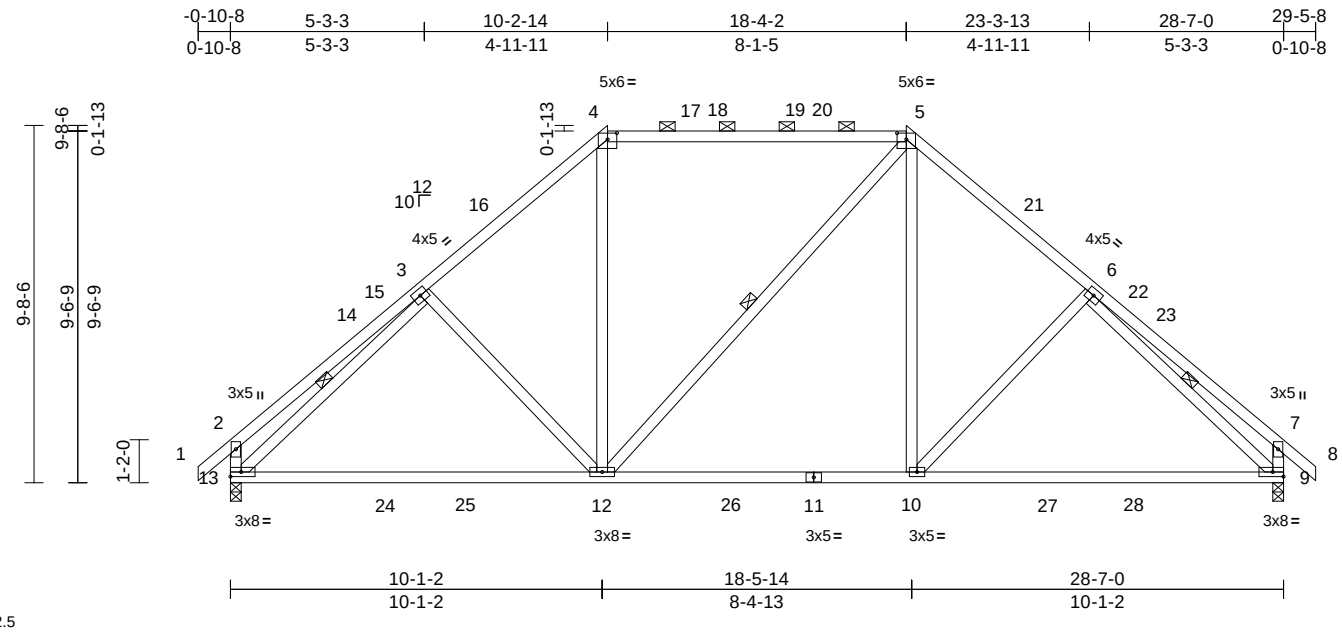


Scale = 1:62.5

Plate Offsets (X, Y): [4:0-3-0,0-2-1], [5:0-3-0,0-2-1]

| 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 | 0.83 | Vert(LL) | -0.22 | 12-13 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.45 | Vert(CT) | -0.40 | 12-13 | >853 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.36 | Horz(CT) | 0.03 | 9 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2018/TPI2014 | Matrix-MSH | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 186 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x4 SP 2400F 2.0E
BOT CHORD 2x4 SP 2400F 2.0E
WEBS 2x4 SP No.3 *Except* 5-12:2x4 SP No.2

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (4-11-7 max.): 4-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 3-13, 6-9, 5-12

**REACTIONS** (size) 9=0-3-8, 13=0-3-8
Max Horiz 13=-241 (LC 12)
Max Uplift 9=-80 (LC 15), 13=-80 (LC 14)
Max Grav 9=1381 (LC 47), 13=1370 (LC 47)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/38, 2-3=-568/120, 3-4=-1596/215, 4-5=-1158/218, 5-6=-1609/217, 6-7=-544/120, 7-8=0/38, 2-13=-513/136, 7-9=-498/136
BOT CHORD 12-13=-140/1237, 10-12=-6/1075, 9-10=-1/1244
WEBS 3-13=-1245/103, 6-9=-1282/71, 4-12=-8/538, 3-12=-247/210, 5-10=-40/570, 6-10=-246/210, 5-12=-132/133

**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 7-2-14, Exterior(2R) 7-2-14 to 13-2-14, Interior (1) 13-2-14 to 15-4-2, Exterior(2R) 15-4-2 to 21-4-2, Interior (1) 21-4-2 to 26-5-8, Exterior(2E) 26-5-8 to 29-5-8 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) 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) 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, with BCDL = 10.0psf.
9) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 13 and 9. This connection is for uplift only and does not consider lateral forces.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) 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


October 17,2024



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818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | 89 Eagle Creek - Norman D - Roof |
|---|---|---|---|---|---|
| 25040191 | B03 | Hip Girder | 1 | 3 | I68925791 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. Tue Oct 15 15:19:42 Page: 1
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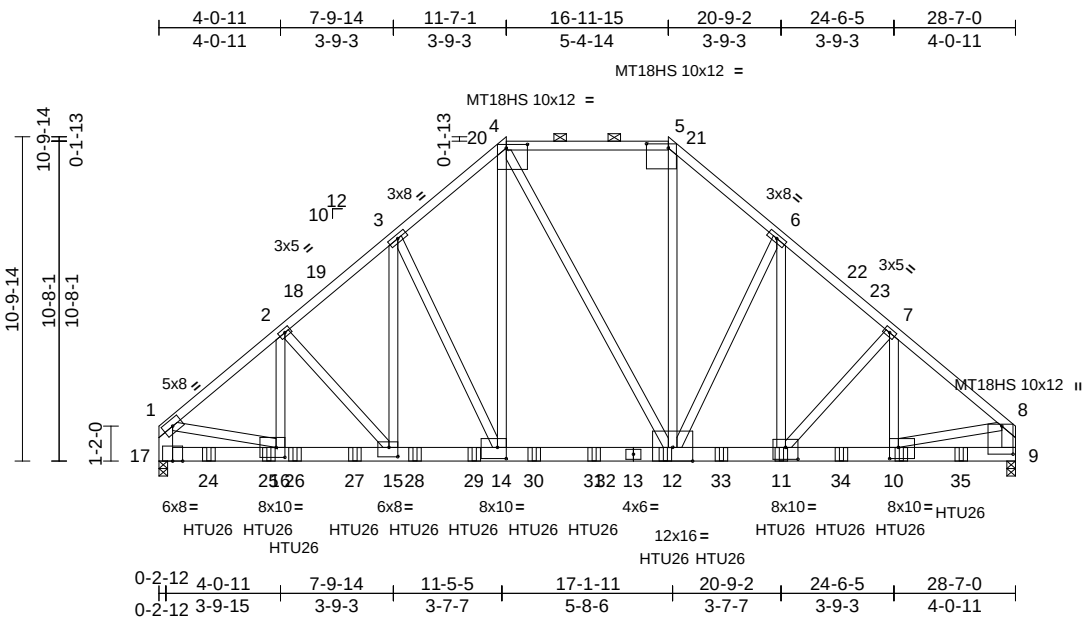


Scale = 1:76.9

Plate Offsets (X, Y): [4:0-8-8,0-1-8], [5:0-8-12,0-1-12], [8:0-11-4,0-4-8], [10:0-3-8,0-4-8], [11:0-5-0,0-4-12], [14:0-3-8,0-4-8], [15:0-3-8,0-3-12], [16:0-3-8,0-4-0]

| 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 | 0.59 | Vert(LL) | -0.14 | 12-14 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.43 | Vert(CT) | -0.27 | 12-14 | >999 | 180 | MT18HS | 244/190 |
| TCDL | 10.0 | Rep Stress Incr | NO | WB | 0.94 | Horz(CT) | 0.05 | 9 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2018/TPI2014 | Matrix-MSH | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 754 lb | FT = 20% |

**LUMBER**
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP 2400F 2.0E
WEBS 2x4 SP No.3 *Except* 12-4,16-1,10-8:2x4 SP No.2, 17-1,9-8:2x6 SP No.2

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 5-6-13 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 9=0-3-8, 17=0-3-8
Max Horiz 17=242 (LC 56)
Max Grav 9=11942 (LC 36), 17=12837 (LC 36)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-14201/0, 2-3=-13036/0, 3-4=-11160/0, 4-5=-8413/0, 5-6=-11071/0, 6-7=-12668/0, 7-8=-13306/0, 1-17=-11521/0, 8-9=-10806/0
BOT CHORD 16-17=-143/1460, 15-16=0/10834, 14-15=0/9966, 12-14=0/8473, 11-12=0/9680, 10-11=0/10149, 9-10=0/1188
WEBS 2-16=-13/1673, 2-15=-1399/146, 3-15=0/3769, 3-14=-3130/0, 4-14=0/6834, 4-12=-756/306, 5-12=0/6645, 6-12=-3009/685, 6-11=-645/3620, 7-11=-942/444, 7-10=-412/1070, 1-16=0/9822, 8-10=0/9236

**NOTES**
1) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 3 rows staggered at 0-5-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc, Except member 6-11 2x4 - 1 row at 0-7-0 oc, member 7-10 2x4 - 2 rows staggered at 0-7-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) 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) interior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) 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
6) Unbalanced snow loads have been considered for this design.
7) Provide adequate drainage to prevent water ponding.
8) All plates are MT20 plates unless otherwise indicated.
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) Bearing at joint(s) 17 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
14) Use Simpson Strong-Tie HTU26 (10-16d Girder, 14-10dx1 1/2 Truss) or equivalent spaced at 2-4-8 oc max. starting at 1-8-0 from the left end to 26-9-4 to connect truss(es) to back face of bottom chord.
15) Fill all nail holes where hanger is in contact with lumber.

**LOAD CASE(S)** Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-4=-58, 4-5=-58, 5-8=-58, 9-17=-19
Concentrated Loads (lb)


October 17,2024

Continued on page 2



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Vert: 12=-1636 (B), 11=-1554 (B), 10=-1554 (B), 24=-1539 (B), 25=-1539 (B), 26=-1636 (B), 27=-1636 (B), 28=-1636 (B), 29=-1636 (B), 30=-1636 (B), 31=-1636 (B), 33=-1554 (B), 34=-1554 (B), 35=-1534 (B)

| Job | Truss | Truss Type | Qty | Ply | 89 Eagle Creek - Norman D - Roof |
|---|---|---|---|---|---|
| 25040191 | C01 | Monopitch | 8 | 1 | I68925792 Job Reference (optional) |

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

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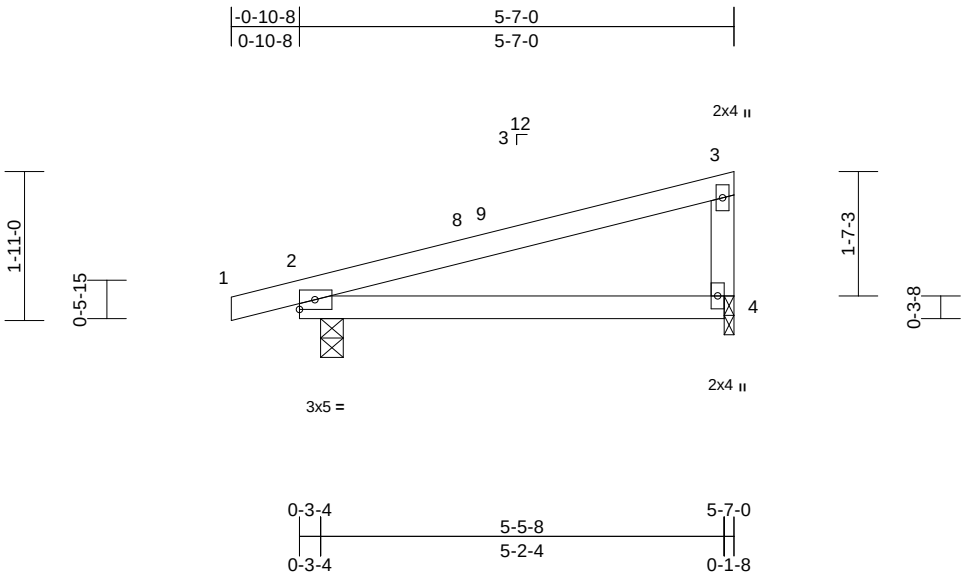


Scale = 1:29.6

| 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 | 0.62 | Vert(LL) | -0.06 | 4-7 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.42 | Vert(CT) | -0.11 | 4-7 | >606 | 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 5-7-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 2=0-3-8, 4=0-1-8
Max Horiz 2=62 (LC 13)
Max Uplift 2=-65 (LC 10), 4=-37 (LC 14)
Max Grav 2=366 (LC 21), 4=280 (LC 21)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/18, 2-3=-107/51, 3-4=-201/154
BOT CHORD 2-4=-77/114

**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) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 2-5-4, Exterior(2E) 2-5-4 to 5-5-4 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
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) 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.
8) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
9) H10A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
10) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 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


October 17,2024



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Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | 89 Eagle Creek - Norman D - Roof |
|---|---|---|---|---|---|
| 25040191 | C02 | Monopitch | 5 | 1 | I68925793 Job Reference (optional) |

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

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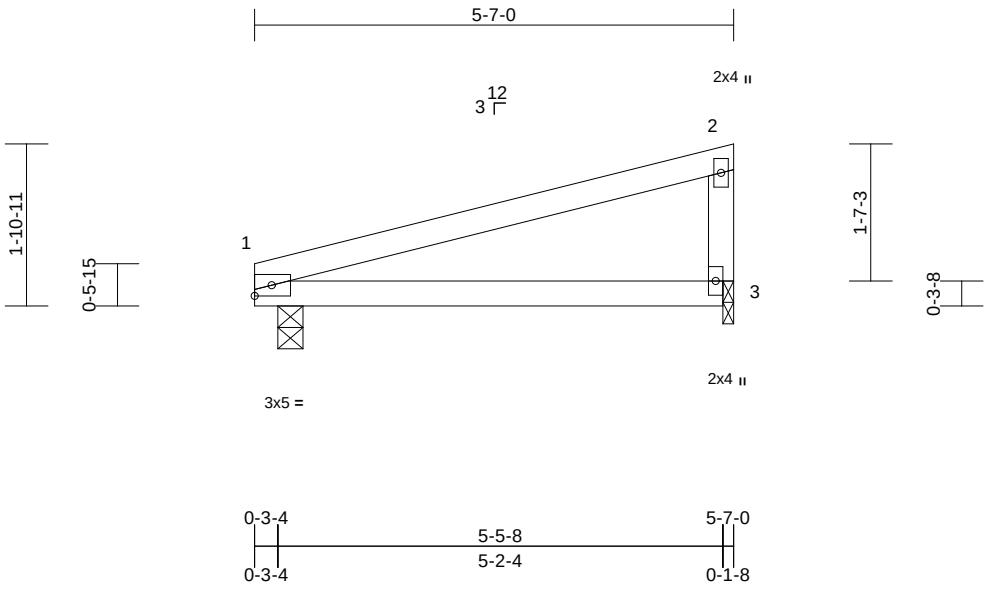


Scale = 1:26.9

| 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 | 0.62 | Vert(LL) | -0.06 | 3-6 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.44 | Vert(CT) | -0.11 | 3-6 | >587 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | 0.02 | 1 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2018/TPI2014 | Matrix-MP | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 19 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 5-7-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 1=0-3-8, 3=0-1-8
Max Horiz 1=56 (LC 13)
Max Uplift 1=-30 (LC 10), 3=-37 (LC 14)
Max Grav 1=277 (LC 21), 3=277 (LC 21)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-68/50, 2-3=-198/154
BOT CHORD 1-3=-124/135

**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;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 a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * 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.
6) Bearing at joint(s) 3 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 3.
8) H10A 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.
9) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 3. This connection is for uplift only and does not consider lateral forces.
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 17,2024



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818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | 89 Eagle Creek - Norman D - Roof | |
|---|---|---|---|---|---|---|
| 25040191 | C03 | Monopitch | 2 | 1 | Job Reference (optional) | I68925794 |

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

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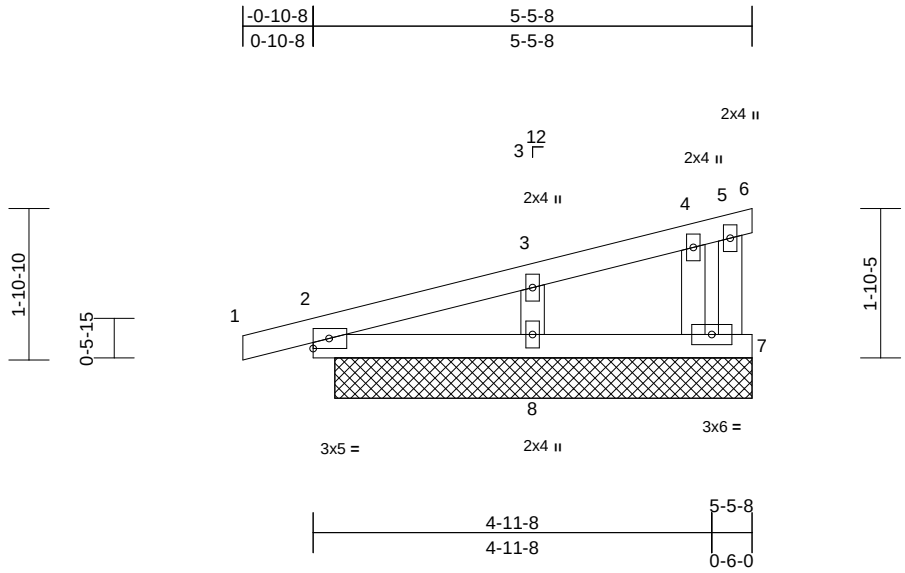


Scale = 1:28.7

| 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 | 0.06 | Vert(CT) | n/a | - | n/a | 999 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.06 | Horz(CT) | 0.00 | 6 | 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 5-5-8 oc purlins, except end verticals. |
| BOT CHORD | Rigid ceiling directly applied or 10-0-0 oc bracing. |

**REACTIONS** (size) 2=5-2-4, 6=5-2-4, 7=5-2-4, 8=5-2-4, 9=5-2-4
Max Horiz 2=58 (LC 13), 9=58 (LC 13)
Max Uplift 2=-46 (LC 10), 6=-3 (LC 11), 7=-24 (LC 10), 8=-35 (LC 14), 9=-46 (LC 10)
Max Grav 2=210 (LC 21), 6=6 (LC 7), 7=133 (LC 21), 8=278 (LC 21), 9=210 (LC 21)

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

| | |
|---|---|
| TOP CHORD | 1-2=0/17, 2-3=-69/40, 3-4=-59/38, 4-5=-22/31, 5-6=-5/3, 5-7=-14/4 |
| BOT CHORD | 2-8=-26/68, 7-8=-17/49 |
| WEBS | 3-8=-207/204, 4-7=-108/116 |

**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) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 5-5-8 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
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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 3 lb uplift at joint 6, 24 lb uplift at joint 7, 46 lb uplift at joint 2, 35 lb uplift at joint 8 and 46 lb uplift at joint 2.
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


October 17,2024



ENGINEERING BY TRENCO
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818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | 89 Eagle Creek - Norman D - Roof | |
|---|---|---|---|---|---|---|
| 25040191 | D01 | Common | 2 | 1 | Job Reference (optional) | I68925795 |

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

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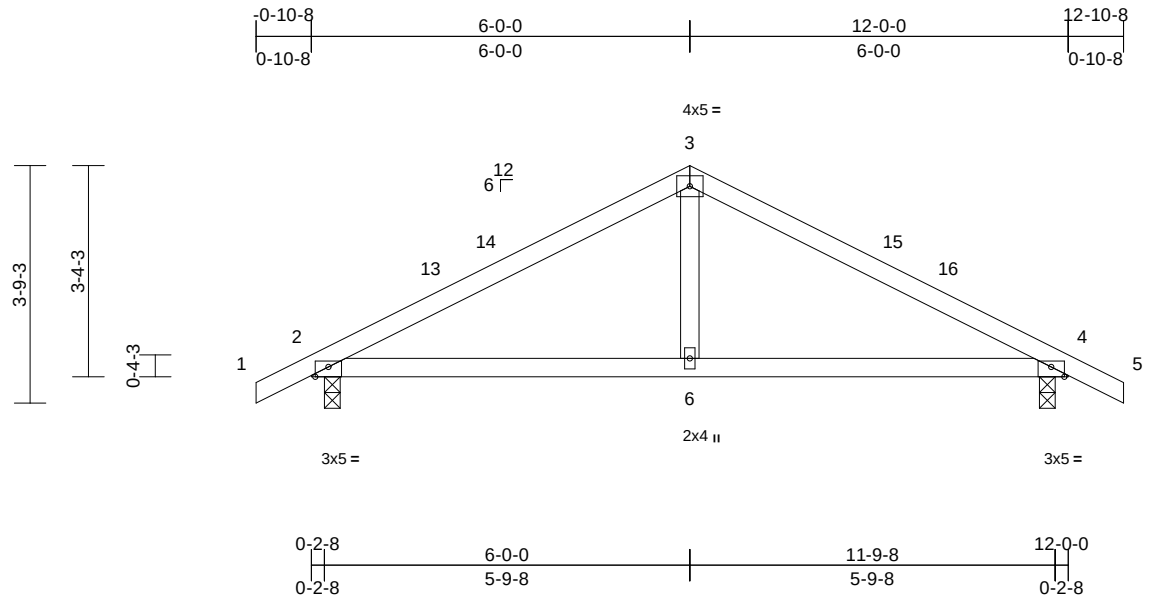


Scale = 1:36.5

Plate Offsets (X, Y): [2:0-2-8,Edge], [4:0-2-8,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 | 0.71 | Vert(LL) | -0.08 | 6-9 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.68 | Vert(CT) | -0.12 | 6-9 | >999 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.11 | Horz(CT) | 0.01 | 4 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2018/TPI2014 | Matrix-MSH | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 45 lb | FT = 20% |

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

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 4-8-2 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 2=0-3-0, 4=0-3-0
Max Horiz 2=54 (LC 14)
Max Uplift 2=-78 (LC 11), 4=-78 (LC 10)
Max Grav 2=632 (LC 21), 4=632 (LC 22)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/23, 2-3=-757/453, 3-4=-757/453, 4-5=0/23
BOT CHORD 2-6=-286/575, 4-6=-286/575
WEBS 3-6=-148/283

**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 3-0-0, Exterior(2R) 3-0-0 to 9-0-0, Interior (1) 9-0-0 to 9-10-8, Exterior(2E) 9-10-8 to 12-10-8 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 4. 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


October 17,2024



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818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | 89 Eagle Creek - Norman D - Roof | I68925796 |
|---|---|---|---|---|---|---|
| 25040191 | D02 | Hip Girder | 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. Tue Oct 15 15:19:43 Page: 1
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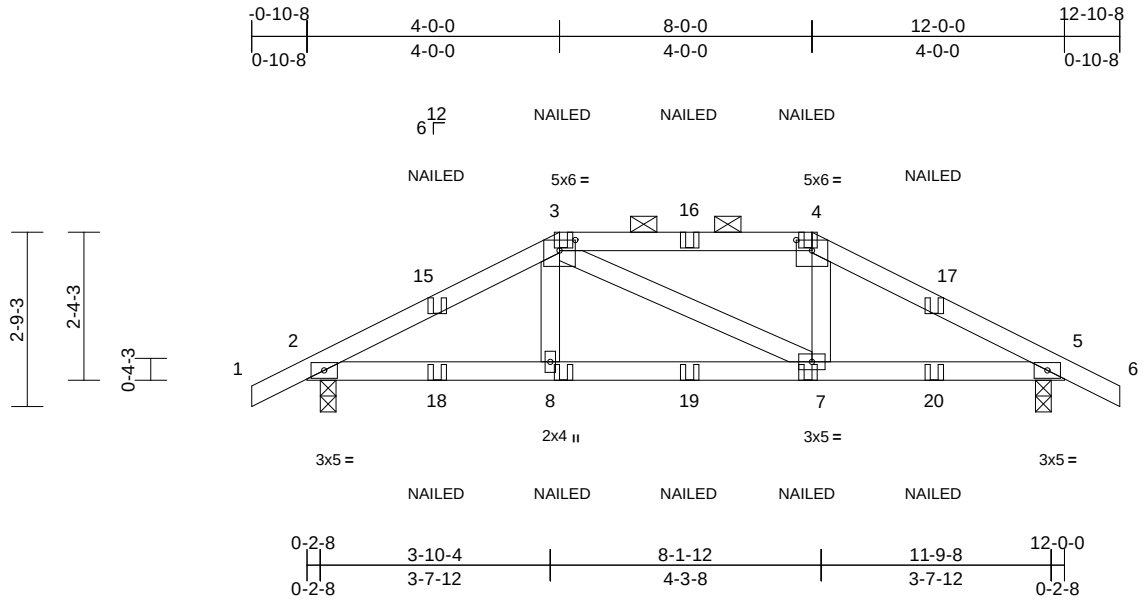


Scale = 1:36.5

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

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.57 | Vert(LL) | -0.03 | 8-11 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.59 | Vert(CT) | -0.06 | 7-8 | >999 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | NO | WB | 0.10 | Horz(CT) | 0.02 | 5 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2018/TPI2014 | Matrix-MSH | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 52 lb | FT = 20% |

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

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

**REACTIONS** (size) 2=0-3-0, 5=0-3-0
Max Horiz 2=39 (LC 12)
Max Uplift 2=-223 (LC 9), 5=-223 (LC 8)
Max Grav 2=930 (LC 37), 5=932 (LC 37)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-1467/391, 3-4=-1261/363, 4-5=-1471/392, 5-6=0/35
BOT CHORD 2-8=-334/1272, 7-8=-330/1257, 5-7=-318/1275
WEBS 3-8=-56/250, 3-7=-47/54, 4-7=-57/251

**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; cantilever left and right exposed ; end vertical left and right exposed; porch left and right exposed; 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) 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) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 5. This connection is for uplift only and does not consider lateral forces.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
12) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
13) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-60, 3-4=-60, 4-6=-60, 9-12=-20
Concentrated Loads (lb)
Vert: 4=-95 (B), 8=-42 (B), 7=-42 (B), 3=-95 (B), 15=-26 (B), 16=-95 (B), 17=-26 (B), 18=-95 (B), 19=-42 (B), 20=-95 (B)


October 17,2024



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818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | 89 Eagle Creek - Norman D - Roof |
|---|---|---|---|---|---|
| 25040191 | E01 | Jack-Open | 3 | 1 | I68925797 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. Tue Oct 15 15:19:44 Page: 1
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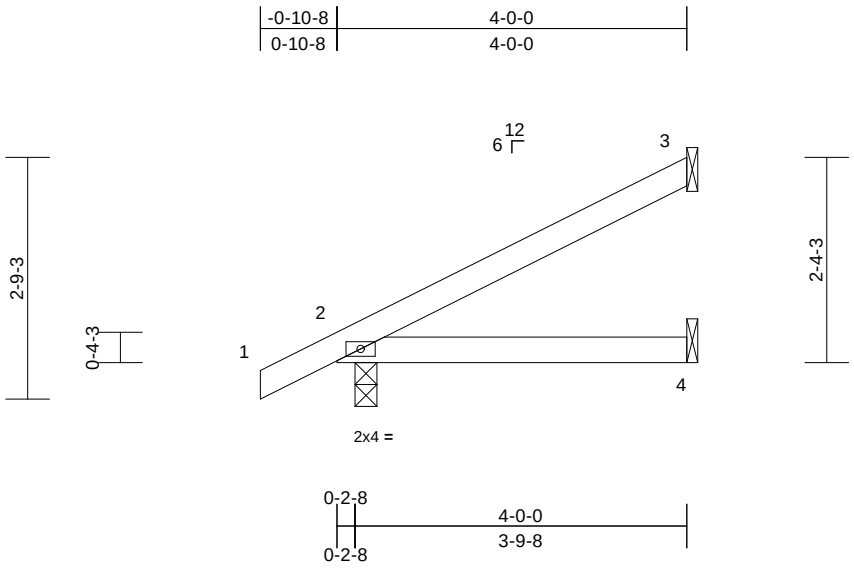


Scale = 1:26.3

| 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 | 0.31 | Vert(LL) | 0.02 | 4-7 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.24 | Vert(CT) | -0.03 | 4-7 | >999 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | 0.00 | 2 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2018/TPI2014 | Matrix-MP | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 14 lb | FT = 20% |

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

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

**REACTIONS** (size) 2=0-3-0, 3= Mechanical, 4= Mechanical
Max Horiz 2=86 (LC 14)
Max Uplift 2=-26 (LC 14), 3=-50 (LC 14), 4=-15 (LC 11)
Max Grav 2=319 (LC 21), 3=155 (LC 21), 4=72 (LC 7)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/37, 2-3=-67/55
BOT CHORD 2-4=-43/49

**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 2 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 50 lb uplift at joint 3, 15 lb uplift at joint 4 and 26 lb uplift at joint 2.
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 17,2024



ENGINEERING BY TRENCO A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | 89 Eagle Creek - Norman D - Roof | I68925798 |
|---|---|---|---|---|---|---|
| 25040191 | E02 | Jack-Open Girder | 2 | 1 | Job Reference (optional) | |

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

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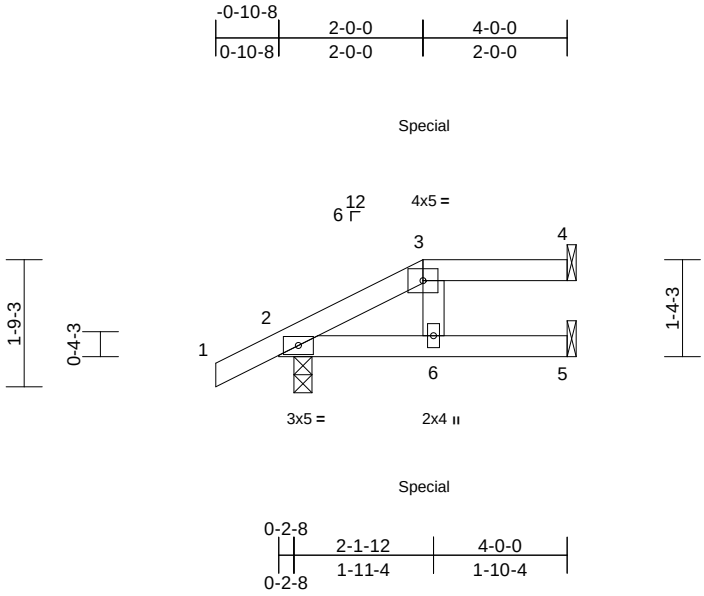


Scale = 1:32

| 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 | 0.16 | Vert(LL) | 0.03 | 6 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.44 | Vert(CT) | -0.05 | 6 | >990 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | NO | WB | 0.03 | Horz(CT) | 0.02 | 4 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2018/TPI2014 | Matrix-MP | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 15 lb | FT = 20% |

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

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 4-0-0 oc purlins, except 2-0-0 oc purlins: 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 2=0-3-0, 4= Mechanical, 5= Mechanical
Max Horiz 2=51 (LC 12)
Max Uplift 2=-54 (LC 12), 4=-24 (LC 8), 5=-35 (LC 9)
Max Grav 2=285 (LC 34), 4=86 (LC 33), 5=115 (LC 30)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-68/20, 3-4=0/0
BOT CHORD 2-6=-16/35, 5-6=0/0
WEBS 3-6=-162/56

**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; cantilever left and right exposed ; end vertical left and right exposed; porch left and right exposed; 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) 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) Bearings are assumed to be: , Joint 2 User Defined .
10) Refer to girder(s) for truss to truss connections.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 24 lb uplift at joint 4, 35 lb uplift at joint 5 and 54 lb uplift at joint 2.
12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
14) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 55 lb down and 68 lb up at 2-0-0 on top chord, and 18 lb down and 42 lb up at 2-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
15) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-60, 3-4=-60, 5-7=-20
Concentrated Loads (lb)
Vert: 3=-8 (B), 6=-18 (B)


October 17,2024



ENGINEERING BY TRENCO
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818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | 89 Eagle Creek - Norman D - Roof |
|---|---|---|---|---|---|
| 25040191 | E03 | Jack-Open | 2 | 1 | I68925799 Job Reference (optional) |

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

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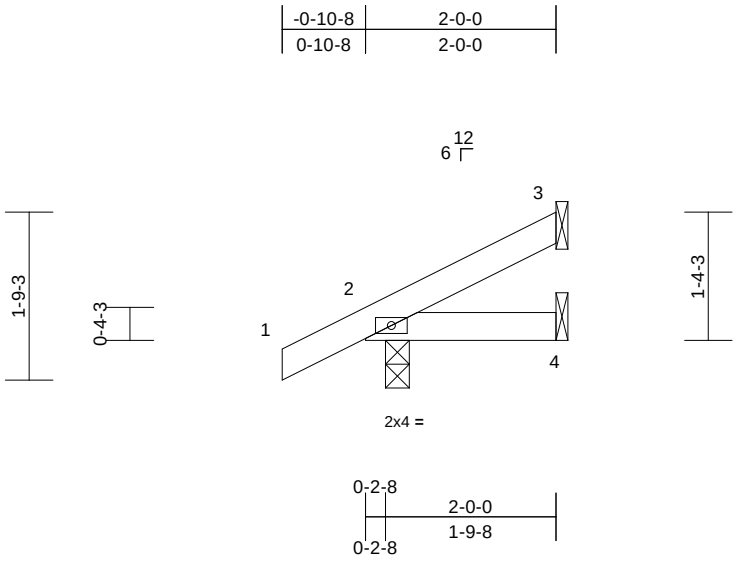



Scale = 1:24.2

| 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 | 0.08 | Vert(LL) | 0.00 | 4-7 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.04 | Vert(CT) | 0.00 | 4-7 | >999 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | 0.00 | 3 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2018/TPI2014 | Matrix-MP | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 8 lb | FT = 20% |

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

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

**REACTIONS** (size) 2=0-3-0, 3= Mechanical, 4= Mechanical
Max Horiz 2=50 (LC 14)
Max Uplift 2=-25 (LC 14), 3=-21 (LC 14), 4=-7 (LC 11)
Max Grav 2=199 (LC 21), 3=63 (LC 21), 4=34 (LC 7)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/34, 2-3=-29/23
BOT CHORD 2-4=-14/22

**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 2 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 7 lb uplift at joint 4, 21 lb uplift at joint 3 and 25 lb uplift at joint 2.
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 17,2024



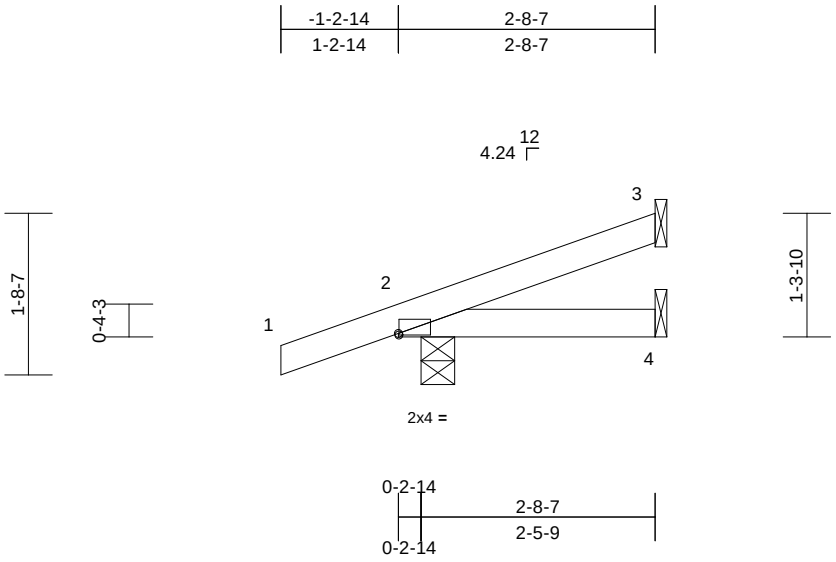
ENGINEERING BY TRENCO A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | 89 Eagle Creek - Norman D - Roof |
|---|---|---|---|---|---|
| 25040191 | J01 | Jack-Open | 2 | 1 | I68925800 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. Tue Oct 15 15:19:44 ID:quFFny4YH3CS_DEFdG1wO6zLb0v-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f






Scale = 1:24.3

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

| 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 | 0.15 | Vert(LL) | 0.00 | 4-7 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.06 | Vert(CT) | 0.00 | 4-7 | >999 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | 0.00 | 3 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2018/TPI2014 | Matrix-MP | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 10 lb | FT = 20% |

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

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 2-8-7 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 2=0-4-4, 3= Mechanical, 4= Mechanical
Max Horiz 2=56 (LC 10)
Max Uplift 2=-91 (LC 10), 3=-26 (LC 10), 4=-9 (LC 11)
Max Grav 2=273 (LC 21), 3=82 (LC 21), 4=45 (LC 7)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/36, 2-3=-60/30
BOT CHORD 2-4=-33/35

**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 (3) 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 2 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 26 lb uplift at joint 3, 9 lb uplift at joint 4 and 91 lb uplift at joint 2.
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 17,2024



ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | 89 Eagle Creek - Norman D - Roof |
|---|---|---|---|---|---|
| 25040191 | PB01 | Piggyback | 7 | 1 | I68925801 |
| | | | | | 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. Tue Oct 15 15:19:44 Page: 1
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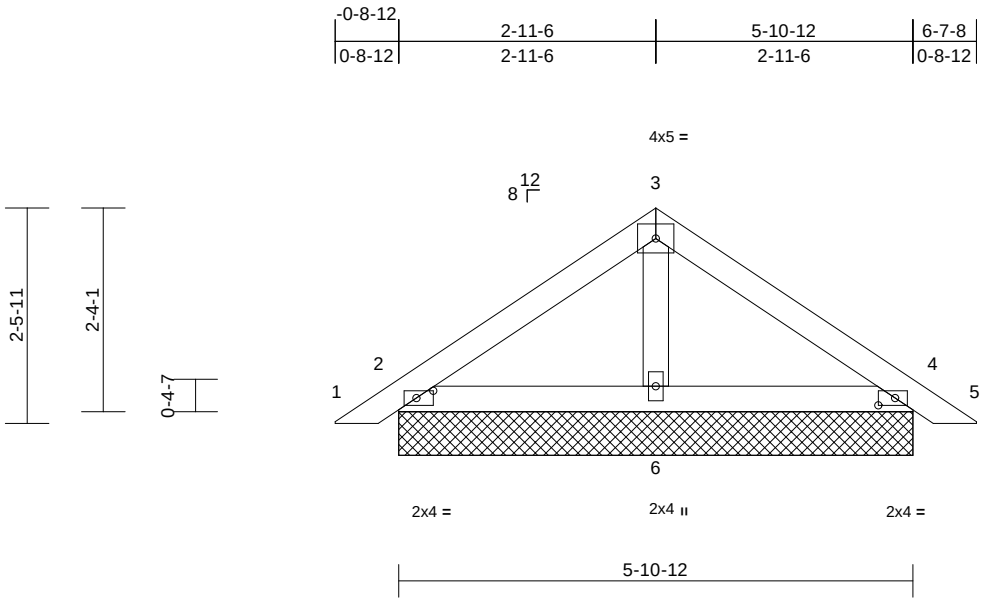


Scale = 1:26.4

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

| 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 | 0.16 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.17 | Vert(CT) | n/a | - | n/a | 999 | | |
| 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: 24 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=5-10-12, 4=5-10-12, 6=5-10-12, 7=5-10-12, 11=5-10-12
Max Horiz 2=54 (LC 13), 7=54 (LC 13)
Max Uplift 2=-31 (LC 14), 4=-38 (LC 15), 7=-31 (LC 14), 11=-38 (LC 15)
Max Grav 2=232 (LC 21), 4=232 (LC 22), 6=212 (LC 22), 7=232 (LC 21), 11=232 (LC 22)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/25, 2-3=-123/78, 3-4=-123/78, 4-5=0/25
BOT CHORD 2-6=-14/51, 4-6=-3/51
WEBS 3-6=-92/18

**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) 0-3-5 to 3-3-5, Exterior(2R) 3-3-5 to 4-1-11, Exterior(2E) 4-1-11 to 7-1-11 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
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) 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) 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.
11) N/A
12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
13) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

**LOAD CASE(S)** Standard


October 17,2024



ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | 89 Eagle Creek - Norman D - Roof | |
|---|---|---|---|---|---|---|
| 25040191 | PB02 | Piggyback | 1 | 1 | Job Reference (optional) | I68925802 |

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

Run: 8.73 S Sep 25 2024 Print: 8.730 S Sep 25 2024 MiTek Industries, Inc. Tue Oct 15 15:19:44 Page: 1
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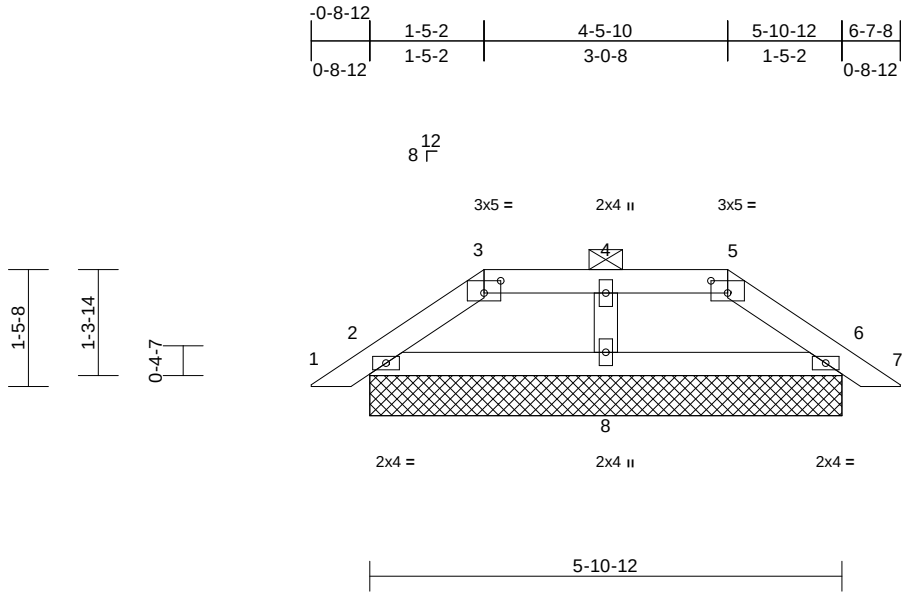


Scale = 1:28.8

Plate Offsets (X, Y): [3:0-2-8,0-1-13], [5:0-2-8,0-1-13]

| 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 | 0.07 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.08 | Vert(CT) | n/a | - | n/a | 999 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.04 | Horz(CT) | 0.00 | 6 | 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 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 2=5-10-12, 6=5-10-12, 8=5-10-12, 9=5-10-12, 13=5-10-12
Max Horiz 2=-31 (LC 12), 9=-31 (LC 12)
Max Uplift 2=-33 (LC 14), 6=-34 (LC 15), 8=-13 (LC 11), 9=-33 (LC 14), 13=-34 (LC 15)
Max Grav 2=212 (LC 41), 6=212 (LC 41), 8=252 (LC 40), 9=212 (LC 41), 13=212 (LC 41)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/25, 2-3=-156/66, 3-4=-121/67, 4-5=-121/67, 5-6=-156/66, 6-7=0/25
BOT CHORD 2-8=-11/108, 6-8=-11/108
WEBS 4-8=-185/76

**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) 0-3-5 to 2-2-4, Exterior(2R) 2-2-4 to 5-2-12, Exterior(2E) 5-2-12 to 7-1-11 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
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) 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) Gable requires continuous bottom chord bearing.
9) Gable studs spaced at 4-0-0 oc.
10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
11) * 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.
12) N/A
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.
14) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
15) 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


October 17,2024



ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | 89 Eagle Creek - Norman D - Roof | |
|---|---|---|---|---|---|---|
| 25040191 | PB03 | Piggyback | 1 | 1 | Job Reference (optional) | I68925803 |

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

Run: 8.73 S Sep 25 2024 Print: 8.730 S Sep 25 2024 MiTek Industries, Inc. Tue Oct 15 15:19:44 Page: 1
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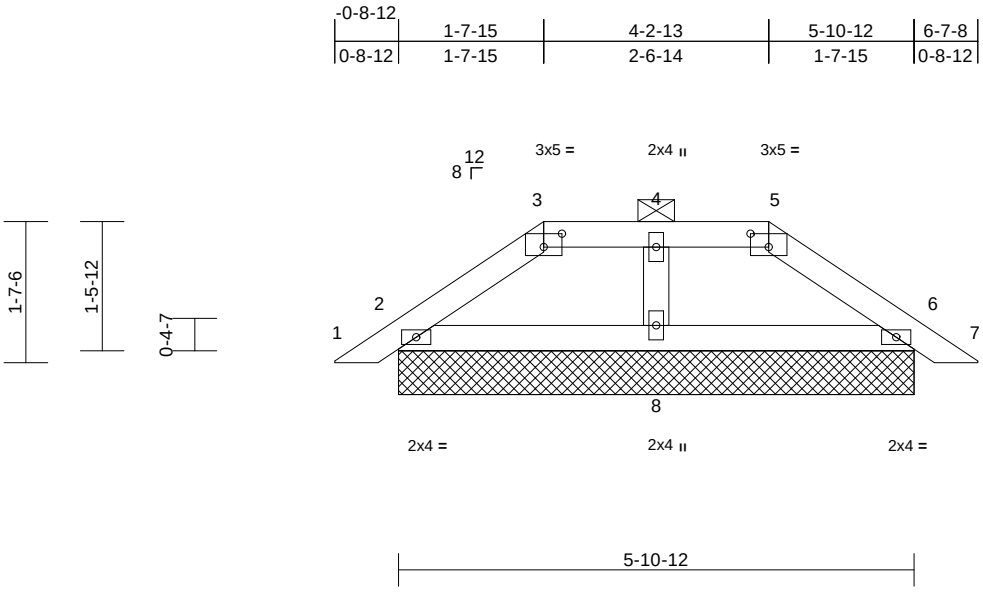


Scale = 1:26.4

Plate Offsets (X, Y): [3:0-2-8,0-1-13], [5:0-2-8,0-1-13]

| 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 | 0.06 | 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 | 0.03 | Horz(CT) | 0.00 | 6 | n/a | 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 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 2=5-10-12, 6=5-10-12, 8=5-10-12, 9=5-10-12, 13=5-10-12
Max Horiz 2=34 (LC 13), 9=34 (LC 13)
Max Uplift 2=-28 (LC 14), 6=-29 (LC 15), 8=-5 (LC 11), 9=-28 (LC 14), 13=-29 (LC 15)
Max Grav 2=224 (LC 41), 6=224 (LC 41), 8=231 (LC 40), 9=224 (LC 41), 13=224 (LC 41)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/25, 2-3=-166/79, 3-4=-133/84, 4-5=-133/84, 5-6=-166/79, 6-7=0/25
BOT CHORD 2-8=-13/113, 6-8=-11/113
WEBS 4-8=-172/76

**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) 0-3-5 to 2-5-1, Exterior(2R) 2-5-1 to 4-11-15, Exterior(2E) 4-11-15 to 7-1-11 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
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) 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) Gable requires continuous bottom chord bearing.
9) Gable studs spaced at 4-0-0 oc.
10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
11) * 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.
12) N/A
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.
14) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
15) 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


October 17,2024



ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | 89 Eagle Creek - Norman D - Roof |
|---|---|---|---|---|---|
| 25040191 | V01 | Valley | 1 | 1 | I68925804 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. Tue Oct 15 15:19:44 Page: 1

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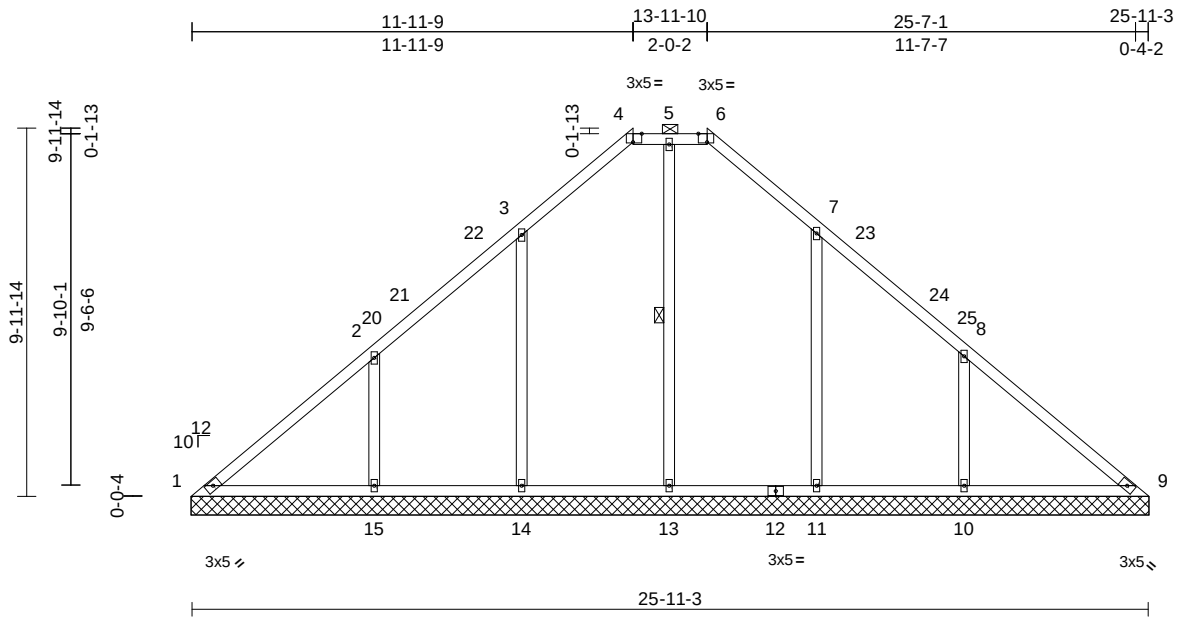


Scale = 1:62.5

Plate Offsets (X, Y): [4:0-2-13,Edge], [6:0-2-13,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 | 0.32 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.27 | Vert(TL) | n/a | - | n/a | 999 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.37 | Horiz(TL) | 0.01 | 9 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2018/TPI2014 | Matrix-MSH | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 132 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, except 2-0-0 oc purlins (6-0-0 max.): 4-6.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 5-13

**REACTIONS** (size) 1=25-11-13, 9=25-11-13, 10=25-11-13, 11=25-11-13, 13=25-11-13, 14=25-11-13, 15=25-11-13
Max Horiz 1=-228 (LC 10)
Max Uplift 1=-29 (LC 10), 10=-181 (LC 15), 11=-128 (LC 15), 14=-133 (LC 14), 15=-182 (LC 14)
Max Grav 1=202 (LC 54), 9=181 (LC 56), 10=600 (LC 52), 11=545 (LC 52), 13=484 (LC 27), 14=550 (LC 50), 15=598 (LC 50)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-284/243, 2-3=-149/183, 3-4=-141/155, 4-5=-64/142, 5-6=-64/142, 6-7=-141/146, 7-8=-132/135, 8-9=-258/196
BOT CHORD 1-15=-131/241, 14-15=-131/218, 13-14=-131/218, 11-13=-131/218, 10-11=-131/218, 9-10=-131/218
WEBS 5-13=-306/8, 3-14=-386/185, 2-15=-405/218, 7-11=-383/179, 8-10=-409/219

**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 8-11-10, Exterior(2R) 8-11-10 to 16-11-10, Interior (1) 16-11-10 to 22-11-13, Exterior(2E) 22-11-13 to 25-11-13 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
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) Provide adequate drainage to prevent water ponding.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) Gable requires continuous bottom chord bearing.
9) Gable studs spaced at 4-0-0 oc.
10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
11) * 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.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 29 lb uplift at joint 1, 133 lb uplift at joint 14, 182 lb uplift at joint 15, 128 lb uplift at joint 11 and 181 lb uplift at joint 10.
13) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 9.
14) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
15) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard


October 17,2024



ENGINEERING BY TRENCO A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | 89 Eagle Creek - Norman D - Roof | |
|---|---|---|---|---|---|---|
| 25040191 | V02 | Valley | 1 | 1 | Job Reference (optional) | I68925805 |

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

Run: 8.73 S Sep 25 2024 Print: 8.730 S Sep 25 2024 MiTek Industries, Inc. Tue Oct 15 15:19:44 Page: 1
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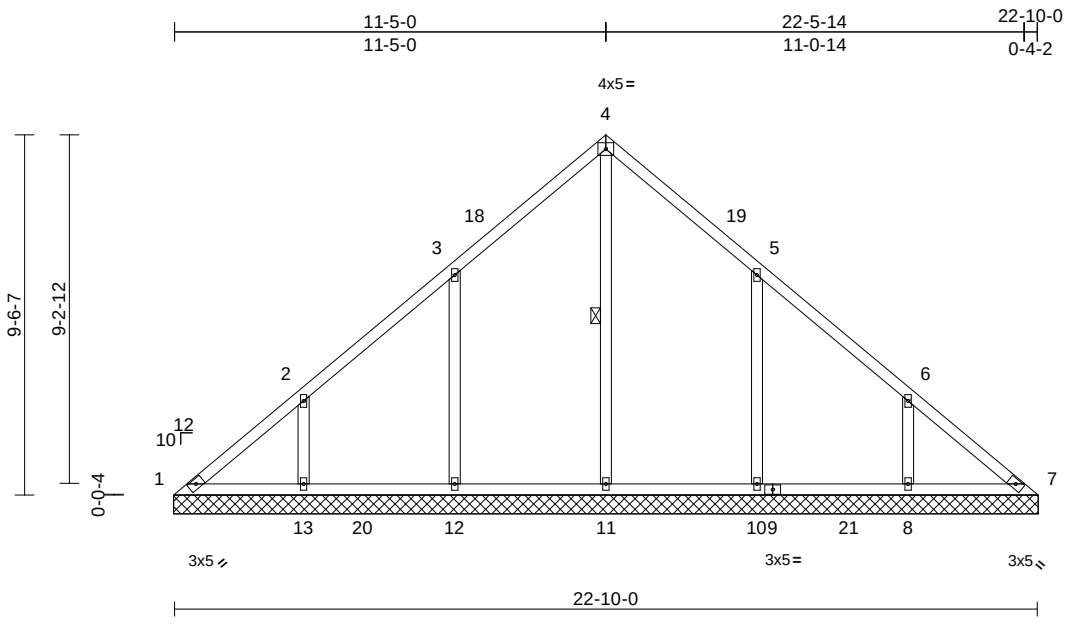



Scale = 1:61

| 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 | 0.31 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.16 | Vert(TL) | n/a | - | n/a | 999 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.25 | Horiz(TL) | 0.01 | 7 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2018/TPI2014 | Matrix-MSH | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 114 lb | FT = 20% |

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

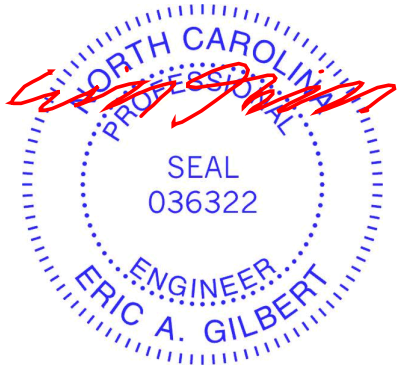
**BRACING**
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 4-11

**REACTIONS** (size) 1=22-10-10, 7=22-10-10, 8=22-10-10, 10=22-10-10, 11=22-10-10, 12=22-10-10, 13=22-10-10
Max Horiz 1=-219 (LC 12)
Max Uplift 1=-46 (LC 10), 8=-130 (LC 15), 10=-171 (LC 15), 12=-171 (LC 14), 13=-133 (LC 14)
Max Grav 1=161 (LC 25), 7=128 (LC 27), 8=413 (LC 25), 10=495 (LC 6), 11=443 (LC 27), 12=495 (LC 5), 13=418 (LC 24)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-217/196, 2-3=-144/155, 3-4=-165/191, 4-5=-165/165, 5-6=-91/102, 6-7=-177/134
BOT CHORD 1-13=-93/173, 12-13=-93/173, 11-12=-93/173, 10-11=-93/173, 8-10=-93/173, 7-8=-93/173
WEBS 4-11=-241/0, 3-12=-372/220, 2-13=-283/173, 5-10=-372/220, 6-8=-283/172

**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 8-5-5, Exterior(2R) 8-5-5 to 14-5-5, Interior (1) 14-5-5 to 19-10-10, Exterior(2E) 19-10-10 to 22-10-10 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 46 lb uplift at joint 1, 171 lb uplift at joint 12, 133 lb uplift at joint 13, 171 lb uplift at joint 10 and 130 lb uplift at joint 8.
12) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 7.
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




October 17,2024



ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | 89 Eagle Creek - Norman D - Roof | |
|---|---|---|---|---|---|---|
| 25040191 | V03 | Valley | 1 | 1 | Job Reference (optional) | I68925806 |

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

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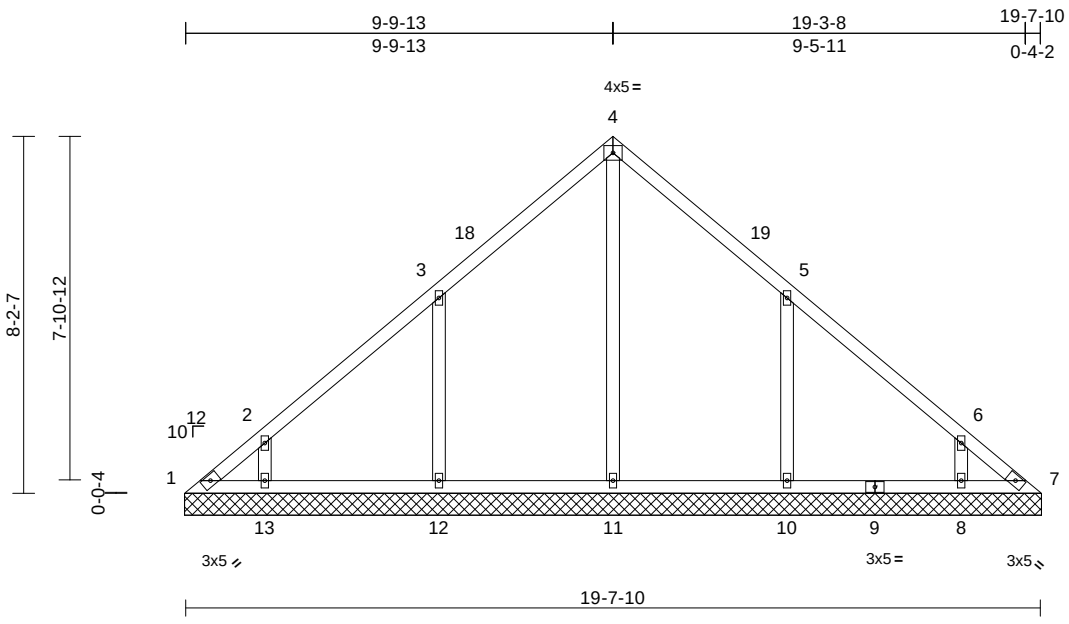


Scale = 1:52.9

| 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 | 0.31 | 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 | 0.22 | Horiz(TL) | 0.00 | 7 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2018/TPI2014 | Matrix-MSH | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 93 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) 1=19-8-3, 7=19-8-3, 8=19-8-3, 10=19-8-3, 11=19-8-3, 12=19-8-3, 13=19-8-3
Max Horiz 1=188 (LC 11)
Max Uplift 1=-61 (LC 12), 7=-17 (LC 13), 8=-92 (LC 15), 10=-175 (LC 15), 12=-175 (LC 14), 13=-97 (LC 14)
Max Grav 1=109 (LC 11), 7=83 (LC 27), 8=323 (LC 25), 10=479 (LC 6), 11=380 (LC 27), 12=479 (LC 5), 13=329 (LC 24)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-213/155, 2-3=-182/119, 3-4=-206/168, 4-5=-206/143, 5-6=-139/65, 6-7=-173/96
BOT CHORD 1-13=-72/143, 12-13=-63/143, 11-12=-63/143, 10-11=-63/143, 8-10=-63/143, 7-8=-63/143
WEBS 4-11=-184/7, 3-12=-378/222, 2-13=-253/162, 5-10=-378/222, 6-8=-253/160

**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 6-10-2, Exterior(2R) 6-10-2 to 12-10-2, Interior (1) 12-10-2 to 16-8-3, Exterior(2E) 16-8-3 to 19-8-3 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 61 lb uplift at joint 1, 17 lb uplift at joint 7, 175 lb uplift at joint 12, 97 lb uplift at joint 13, 175 lb uplift at joint 10 and 92 lb uplift at joint 8.
12) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 7.
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

NORTH CAROLINA PROFESSIONAL SEAL 036322 ENGINEER ERIC A. GILBERT

October 17,2024




ENGINEERING BY TRENCO A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | 89 Eagle Creek - Norman D - Roof |
|---|---|---|---|---|---|
| 25040191 | V04 | Valley | 1 | 1 | I68925807 |
| | | | | | Job Reference (optional) |

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

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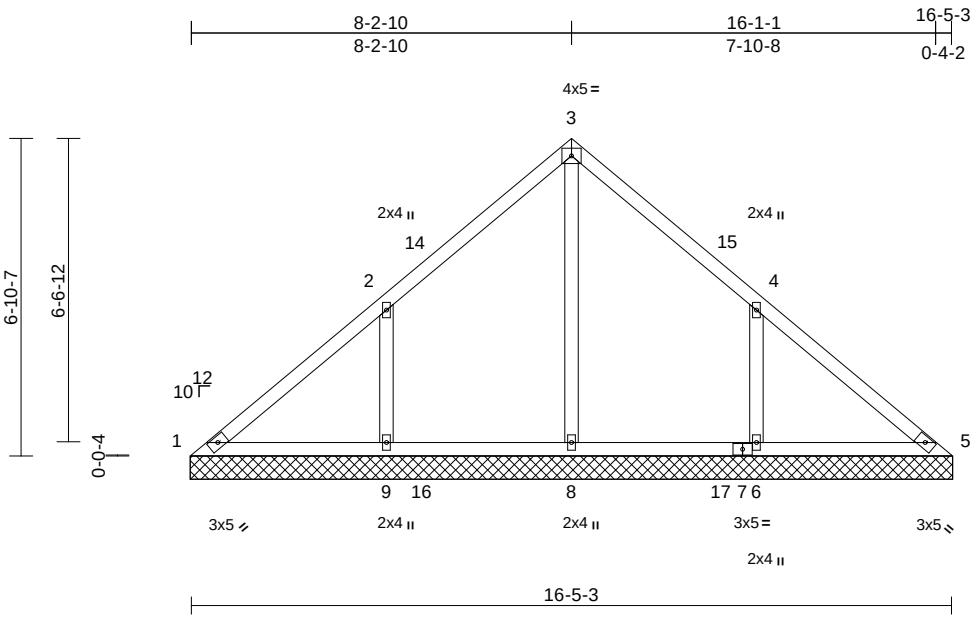


Scale = 1:49.8

| 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) | 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 | 0.25 | Horiz(TL) | 0.00 | 5 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2018/TPI2014 | Matrix-MSH | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 73 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=16-5-13, 5=16-5-13, 6=16-5-13, 8=16-5-13, 9=16-5-13
Max Horiz 1=-157 (LC 10)
Max Uplift 1=-22 (LC 10), 6=-177 (LC 15), 9=-179 (LC 14)
Max Grav 1=122 (LC 25), 5=104 (LC 21), 6=505 (LC 6), 8=486 (LC 24), 9=505 (LC 5)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-145/235, 2-3=-118/180, 3-4=-118/160, 4-5=-120/197
BOT CHORD 1-9=-118/132, 8-9=-118/130, 6-8=-118/130, 5-6=-118/130
WEBS 3-8=-298/0, 2-9=-390/214, 4-6=-390/213

**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 5-2-14, Exterior(2R) 5-2-14 to 11-2-14, Interior (1) 11-2-14 to 13-5-13, Exterior(2E) 13-5-13 to 16-5-13 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
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 22 lb uplift at joint 1, 179 lb uplift at joint 9 and 177 lb uplift at joint 6.
11) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 5.
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


October 17,2024



ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | 89 Eagle Creek - Norman D - Roof |
|---|---|---|---|---|---|
| 25040191 | V05 | Valley | 1 | 1 | I68925808 |
| | | | | | Job Reference (optional) |

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

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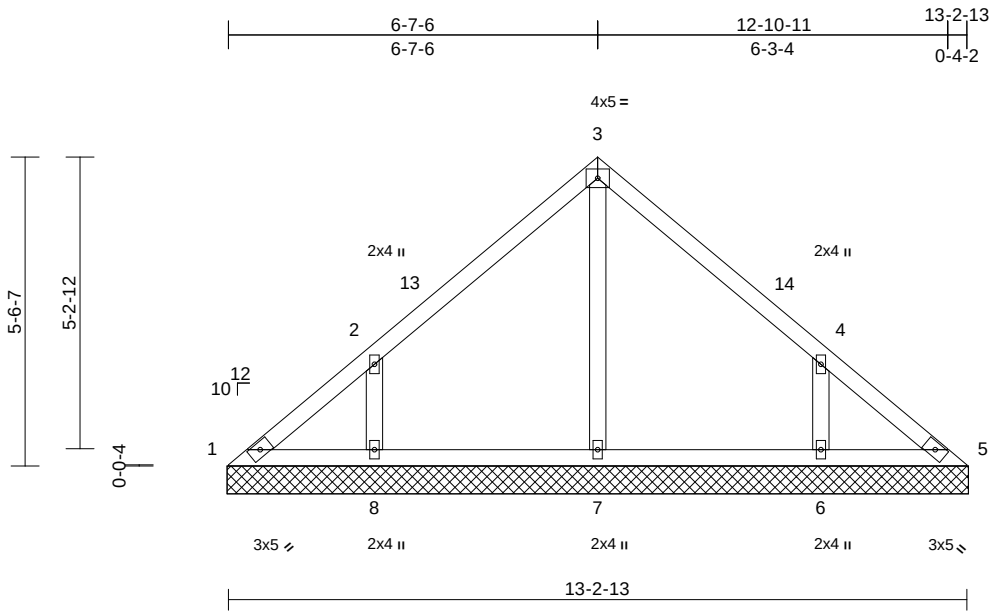


Scale = 1:41.3

| 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 | 0.32 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.12 | Vert(TL) | n/a | - | n/a | 999 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.10 | Horiz(TL) | 0.00 | 5 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2018/TPI2014 | Matrix-MSH | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 56 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) 1=13-3-6, 5=13-3-6, 6=13-3-6, 7=13-3-6, 8=13-3-6
Max Horiz 1=125 (LC 11)
Max Uplift 1=-27 (LC 10), 6=-143 (LC 15), 8=-146 (LC 14)
Max Grav 1=109 (LC 25), 5=87 (LC 24), 6=439 (LC 21), 7=280 (LC 21), 8=439 (LC 20)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-139/113, 2-3=-199/116, 3-4=-199/116, 4-5=-110/73
BOT CHORD 1-8=-44/105, 7-8=-44/85, 6-7=-44/85, 5-6=-44/85
WEBS 3-7=-196/0, 2-8=-378/196, 4-6=-378/196

**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 3-7-11, Exterior(2R) 3-7-11 to 9-7-11, Interior (1) 9-7-11 to 10-3-6, Exterior(2E) 10-3-6 to 13-3-6 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
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.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 27 lb uplift at joint 1, 146 lb uplift at joint 8 and 143 lb uplift at joint 6.
11) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 5.
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


October 17,2024



ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | 89 Eagle Creek - Norman D - Roof | I68925809 |
|---|---|---|---|---|---|---|
| 25040191 | V06 | Valley | 1 | 1 | Job Reference (optional) | |

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

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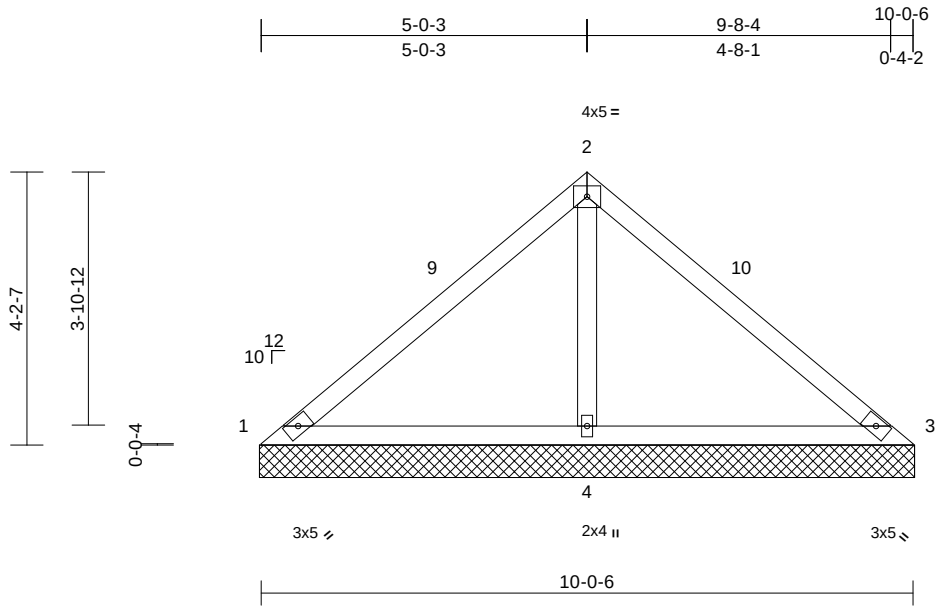


Scale = 1:35.5

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.50 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.46 | Vert(TL) | n/a | - | n/a | 999 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.21 | Horiz(TL) | 0.01 | 4 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2018/TPI2014 | Matrix-MSH | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 38 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 10-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

**REACTIONS** (size) 1=10-1-0, 3=10-1-0, 4=10-1-0
Max Horiz 1=94 (LC 11)
Max Uplift 1=-66 (LC 21), 3=-66 (LC 20), 4=-120 (LC 14)
Max Grav 1=86 (LC 20), 3=86 (LC 21), 4=840 (LC 20)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-130/417, 2-3=-130/417
BOT CHORD 1-4=-275/186, 3-4=-275/186
WEBS 2-4=-700/293

**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, Exterior(2R) 3-0-0 to 7-1-0, Exterior(2E) 7-1-0 to 10-1-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 66 lb uplift at joint 1, 66 lb uplift at joint 3 and 120 lb uplift at joint 4.
11) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 3.
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


October 17,2024



ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | 89 Eagle Creek - Norman D - Roof | I68925810 |
|---|---|---|---|---|---|---|
| 25040191 | V07 | Valley | 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. Tue Oct 15 15:19:45 Page: 1
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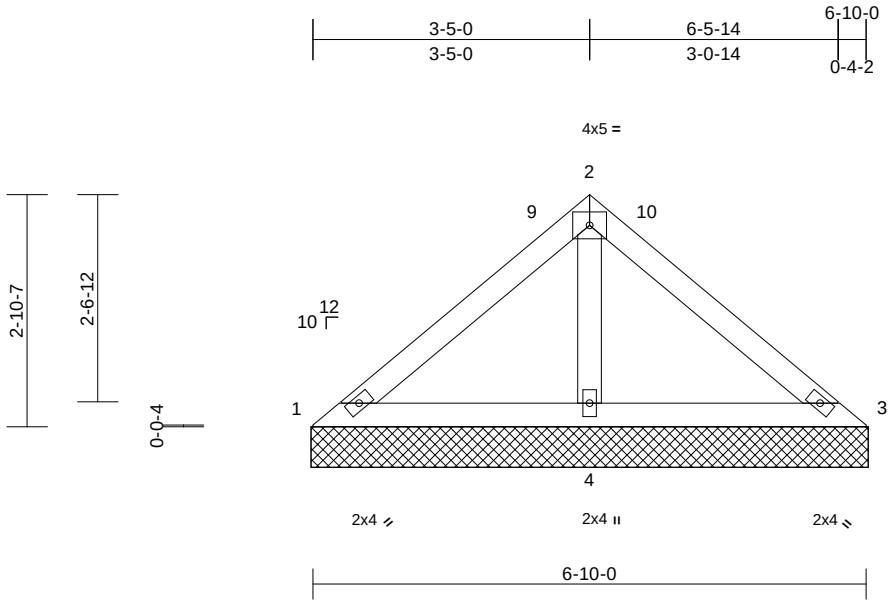



Scale = 1:28.5

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.22 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.24 | Vert(TL) | n/a | - | n/a | 999 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.08 | Horiz(TL) | 0.00 | 4 | n/a | 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 6-10-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

**REACTIONS** (size) 1=6-10-10, 3=6-10-10, 4=6-10-10
Max Horiz 1=-63 (LC 10)
Max Uplift 1=-13 (LC 21), 3=-13 (LC 20), 4=-67 (LC 14)
Max Grav 1=101 (LC 20), 3=101 (LC 21), 4=498 (LC 20)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-85/213, 2-3=-85/213
BOT CHORD 1-4=-168/145, 3-4=-168/145
WEBS 2-4=-394/188

**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, Exterior(2R) 3-0-0 to 3-10-10, Exterior(2E) 3-10-10 to 6-10-10 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) 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.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 13 lb uplift at joint 1, 13 lb uplift at joint 3 and 67 lb uplift at joint 4.
11) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 3.
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


October 17,2024



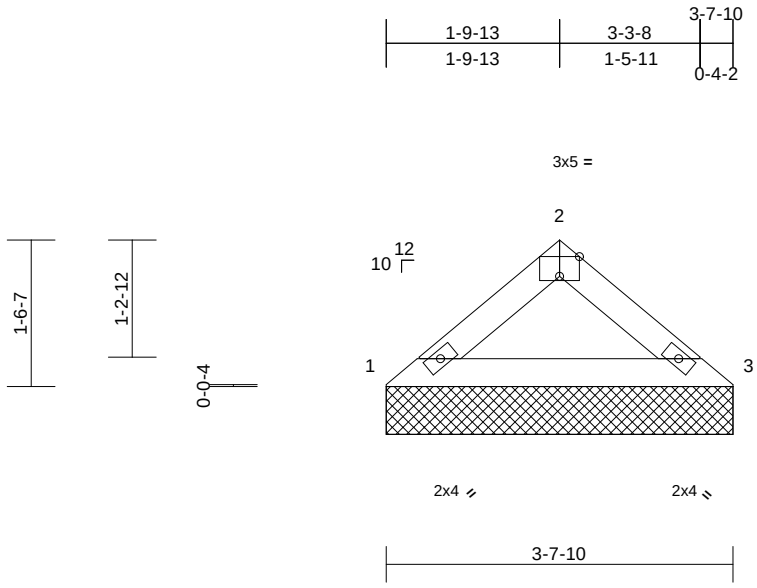
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | 89 Eagle Creek - Norman D - Roof |
|---|---|---|---|---|---|
| 25040191 | V08 | Valley | 1 | 1 | I68925811 |
| | | | | | 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. Tue Oct 15 15:19:45 ID:y89TWpA1p2evV2W6WCbunJzuo48-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f






Scale = 1:24.1

Plate Offsets (X, Y): [2:0-2-8,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 | 0.10 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.08 | Vert(TL) | n/a | - | n/a | 999 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.00 | Horiz(TL) | 0.00 | 3 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2018/TPI2014 | Matrix-MP | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 11 lb | FT = 20% |

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

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

**REACTIONS** (size) 1=3-7-10, 3=3-7-10
Max Horiz 1=32 (LC 11)
Max Uplift 1=-12 (LC 14), 3=-12 (LC 15)
Max Grav 1=171 (LC 20), 3=171 (LC 21)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-222/84, 2-3=-222/84
BOT CHORD 1-3=-51/161

**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) 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) 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.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 12 lb uplift at joint 1 and 12 lb uplift at joint 3.
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


October 17,2024



ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | 89 Eagle Creek - Norman D - Roof |
|---|---|---|---|---|---|
| 25040191 | V09 | Valley | 1 | 1 | I68925812 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. Tue Oct 15 15:19:45 Page: 1
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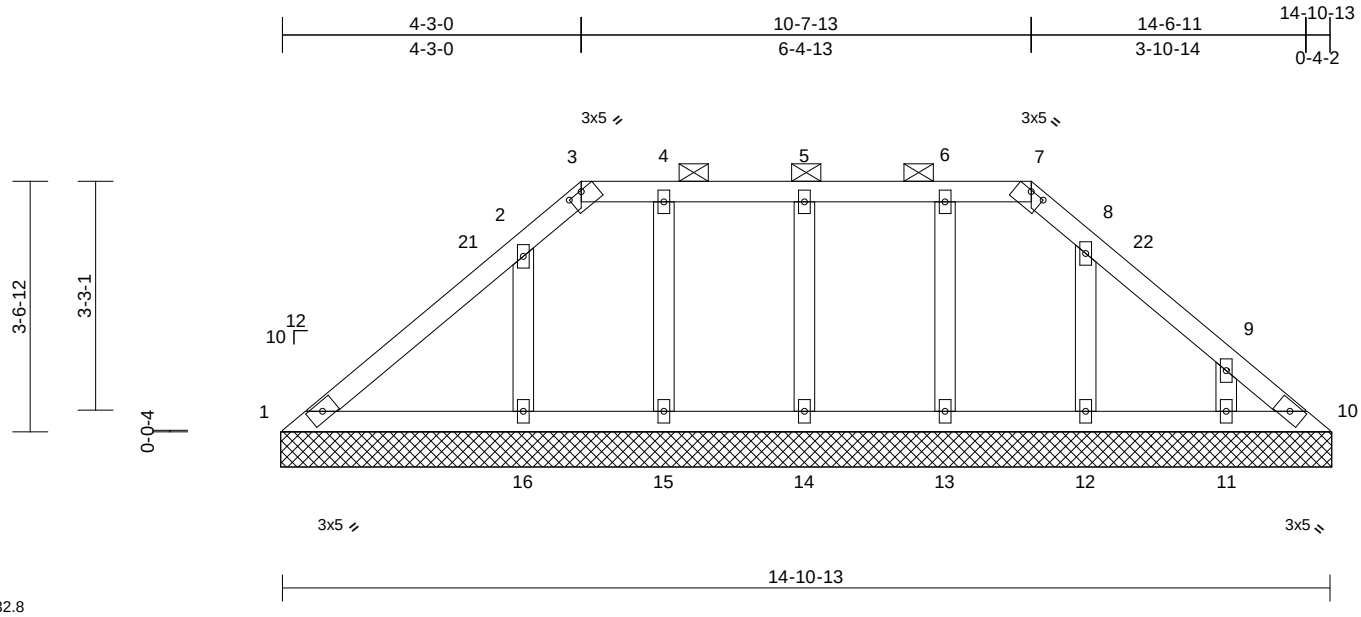


Scale = 1:32.8

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

| 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 | 0.19 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.19 | Vert(TL) | n/a | - | n/a | 999 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.06 | Horiz(TL) | 0.00 | 10 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2018/TPI2014 | Matrix-MSH | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 68 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, except 2-0-0 oc purlins (6-0-0 max.): 3-7.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

**REACTIONS** (size) 1=14-11-6, 10=14-11-6, 11=14-11-6, 12=14-11-6, 13=14-11-6, 14=14-11-6, 15=14-11-6, 16=14-11-6
Max Horiz 1=-80 (LC 10)
Max Uplift 11=-55 (LC 15), 12=-45 (LC 15), 13=-21 (LC 11), 14=-30 (LC 10), 15=-19 (LC 10), 16=-100 (LC 14)
Max Grav 1=133 (LC 40), 10=54 (LC 44), 11=215 (LC 44), 12=245 (LC 40), 13=227 (LC 39), 14=242 (LC 39), 15=198 (LC 39), 16=406 (LC 40)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-141/177, 2-3=-49/51, 3-4=-11/54, 4-5=-11/54, 5-6=-11/54, 6-7=-11/54, 7-8=-41/51, 8-9=-48/123, 9-10=-136/129
BOT CHORD 1-16=-79/131, 15-16=-79/131, 14-15=-79/131, 13-14=-79/131, 12-13=-79/131, 11-12=-79/131, 10-11=-79/131
WEBS 5-14=-198/78, 4-15=-174/44, 2-16=-298/156, 6-13=-188/46, 8-12=-212/107, 9-11=-176/129

**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 Corner(3E) 0-0-0 to 3-0-0, Corner(3R) 3-0-0 to 11-11-6, Corner(3E) 11-11-6 to 14-11-6 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
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) Provide adequate drainage to prevent water ponding.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) Gable requires continuous bottom chord bearing.
9) Gable studs spaced at 2-0-0 oc.
10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
11) * 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.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 30 lb uplift at joint 14, 19 lb uplift at joint 15, 100 lb uplift at joint 16, 21 lb uplift at joint 13, 45 lb uplift at joint 12 and 55 lb uplift at joint 11.
13) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 10.
14) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
15) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard


October 17,2024



ENGINEERING BY TRENCO A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | 89 Eagle Creek - Norman D - Roof |
|---|---|---|---|---|---|
| 25040191 | V10 | Valley | 1 | 1 | I68925813 |
| | | | | | Job Reference (optional) |

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

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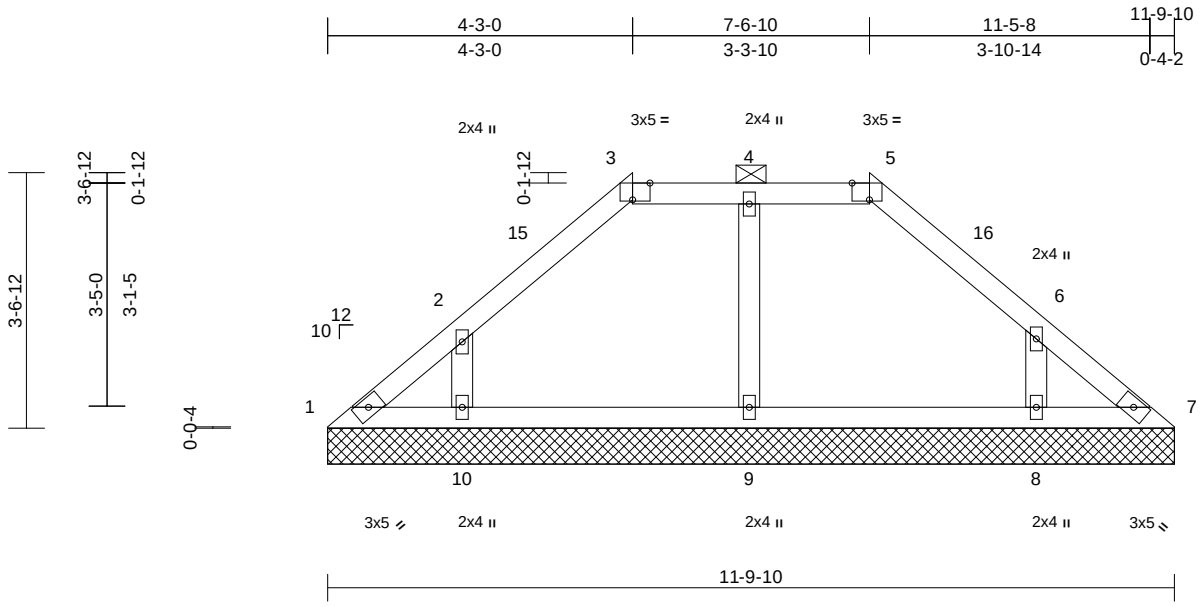


Scale = 1:32.1

Plate Offsets (X, Y): [3:0-2-14,Edge], [5:0-2-14,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 | 0.16 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.12 | Vert(TL) | n/a | - | n/a | 999 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.06 | Horiz(TL) | 0.00 | 7 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2018/TPI2014 | Matrix-MSH | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 45 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, except 2-0-0 oc purlins (6-0-0 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 1=11-9-10, 7=11-9-10, 8=11-9-10, 9=11-9-10, 10=11-9-10
Max Horiz 1=-77 (LC 10)
Max Uplift 1=-22 (LC 10), 7=-9 (LC 11), 8=-82 (LC 15), 9=-2 (LC 11), 10=-89 (LC 14)
Max Grav 1=150 (LC 40), 7=156 (LC 40), 8=354 (LC 44), 9=295 (LC 39), 10=356 (LC 42)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-191/63, 2-3=-258/101, 3-4=-160/109, 4-5=-160/108, 5-6=-257/101, 6-7=-198/51
BOT CHORD 1-10=-33/140, 9-10=-30/131, 8-9=-30/131, 7-8=-30/146
WEBS 4-9=-213/56, 2-10=-277/134, 6-8=-273/127

**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) 0-0-5 to 3-0-5, Exterior(2R) 3-0-5 to 8-9-14, Exterior(2E) 8-9-14 to 11-9-14 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) Provide adequate drainage to prevent water ponding.
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.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 22 lb uplift at joint 1, 9 lb uplift at joint 7, 2 lb uplift at joint 9, 89 lb uplift at joint 10 and 82 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.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard


October 17,2024



ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | 89 Eagle Creek - Norman D - Roof |
|---|---|---|---|---|---|
| 25040191 | V11 | Valley | 1 | 1 | I68925814 |
| | | | | | 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. Tue Oct 15 15:19:46 Page: 1
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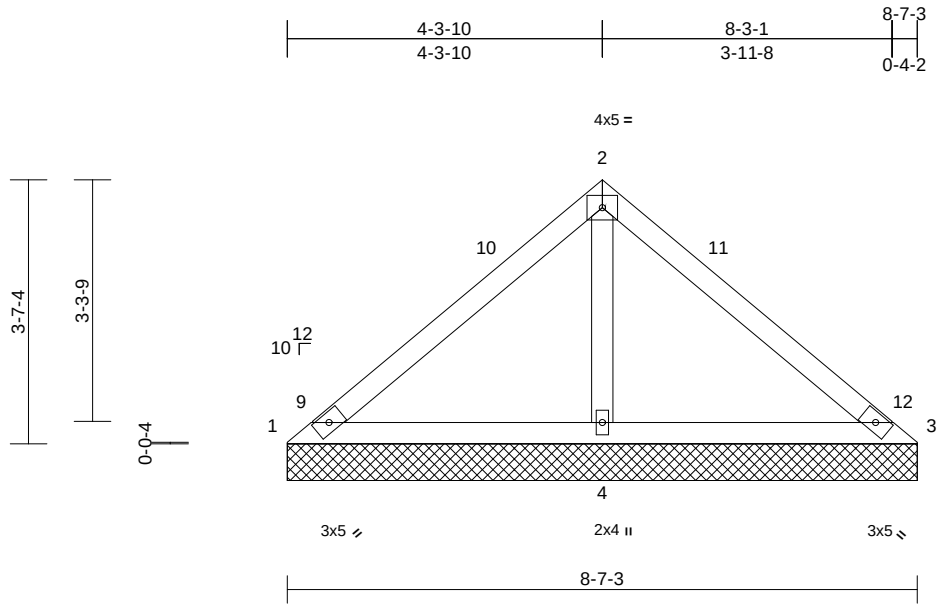


Scale = 1:31.5

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.40 | 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 | 0.14 | Horiz(TL) | 0.00 | 4 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2018/TPI2014 | Matrix-MP | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 32 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 8-7-3 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

**REACTIONS** (size) 1=8-7-3, 3=8-7-3, 4=8-7-3
Max Horiz 1=80 (LC 11)
Max Uplift 1=-48 (LC 21), 3=-48 (LC 20), 4=-105 (LC 14)
Max Grav 1=87 (LC 20), 3=87 (LC 21), 4=694 (LC 20)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-127/320, 2-3=-127/320
BOT CHORD 1-4=-247/188, 3-4=-247/188
WEBS 2-4=-563/258

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-5 to 3-0-5, Exterior(2R) 3-0-5 to 5-7-8, Exterior(2E) 5-7-8 to 8-7-8 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) 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.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 48 lb uplift at joint 1, 48 lb uplift at joint 3 and 105 lb uplift at joint 4.
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


October 17,2024



ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | 89 Eagle Creek - Norman D - Roof |
|---|---|---|---|---|---|
| 25040191 | V12 | Valley | 1 | 1 | I68925815 |
| | | | | | Job Reference (optional) |

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

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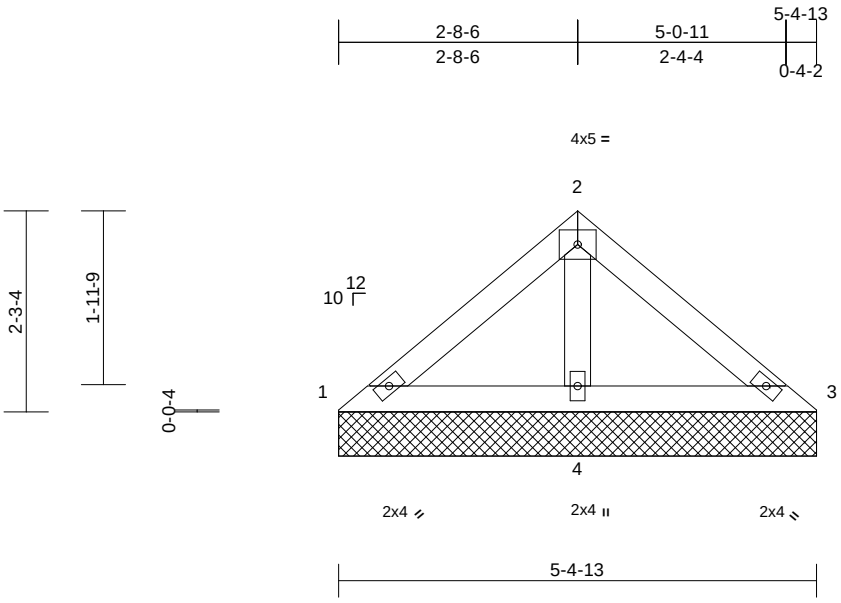


Scale = 1:26

| 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 | 0.12 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.14 | Vert(TL) | n/a | - | n/a | 999 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.05 | 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
OTHERS 2x4 SP No.3

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 5-4-13 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

**REACTIONS** (size) 1=5-4-13, 3=5-4-13, 4=5-4-13
Max Horiz 1=-49 (LC 12)
Max Uplift 3=-6 (LC 15), 4=-41 (LC 14)
Max Grav 1=94 (LC 20), 3=94 (LC 21), 4=344 (LC 20)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-85/128, 2-3=-85/128
BOT CHORD 1-4=-103/103, 3-4=-103/103
WEBS 2-4=-254/121

**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) 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) 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.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 6 lb uplift at joint 3 and 41 lb uplift at joint 4.
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


October 17,2024



ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | 89 Eagle Creek - Norman D - Roof |
|---|---|---|---|---|---|
| 25040191 | V13 | Valley | 1 | 1 | I68925816 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. Tue Oct 15 15:19:46 Page: 1
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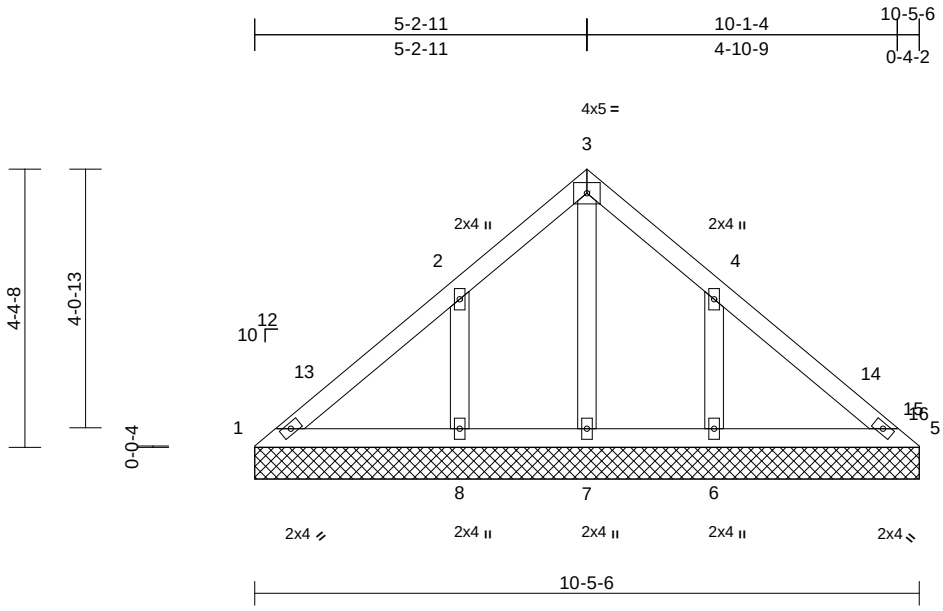


Scale = 1:36.2

| 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 | 0.18 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.14 | Vert(TL) | n/a | - | n/a | 999 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.06 | Horiz(TL) | 0.00 | 5 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2018/TPI2014 | Matrix-MSH | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 46 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 10-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

**REACTIONS** (size) 1=10-5-6, 5=10-5-6, 6=10-5-6, 7=10-5-6, 8=10-5-6
Max Horiz 1=95 (LC 11)
Max Uplift 1=-5 (LC 10), 6=-108 (LC 15), 8=-112 (LC 14)
Max Grav 1=89 (LC 20), 5=70 (LC 21), 6=390 (LC 21), 7=171 (LC 20), 8=391 (LC 20)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-101/156, 2-3=-28/92, 3-4=-28/90, 4-5=-101/156
BOT CHORD 1-8=-89/141, 7-8=-89/141, 6-7=-89/141, 5-6=-89/141
WEBS 3-7=-167/0, 2-8=-287/213, 4-6=-288/212

**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 Corner(3E) 0-0-5 to 3-3-0, Corner(3R) 3-3-0 to 7-3-0, Corner(3E) 7-3-0 to 10-1-2 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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 2-0-0 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.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 5 lb uplift at joint 1, 112 lb uplift at joint 8 and 108 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.

**LOAD CASE(S)** Standard


October 17,2024



ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | 89 Eagle Creek - Norman D - Roof |
|---|---|---|---|---|---|
| 25040191 | V14 | Valley | 1 | 1 | I68925817 |
| | | | | | Job Reference (optional) |

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

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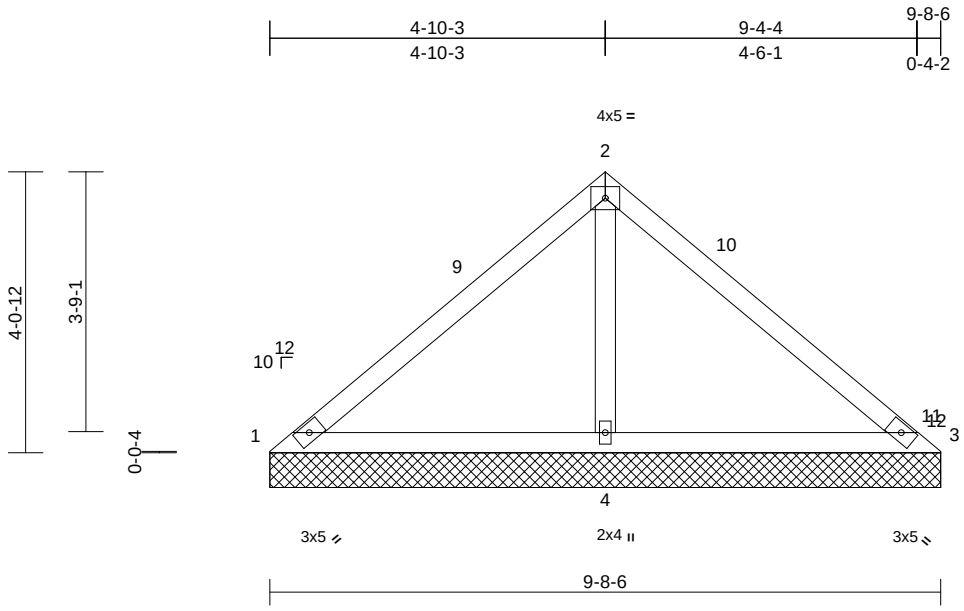


Scale = 1:33.3

| 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 | 0.45 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.43 | Vert(TL) | n/a | - | n/a | 999 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.19 | Horiz(TL) | 0.01 | 4 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2018/TPI2014 | Matrix-MSH | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 37 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 9-8-6 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

**REACTIONS** (size) 1=9-8-6, 3=9-8-6, 4=9-8-6
Max Horiz 1=90 (LC 11)
Max Uplift 1=-49 (LC 21), 3=-60 (LC 20), 4=-111 (LC 14)
Max Grav 1=94 (LC 20), 3=74 (LC 21), 4=777 (LC 21)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-118/372, 2-3=-117/376
BOT CHORD 1-4=-241/163, 3-4=-241/163
WEBS 2-4=-642/274

**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) 0-0-5 to 3-0-5, Exterior(2R) 3-0-5 to 6-4-2, Exterior(2E) 6-4-2 to 9-4-2 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 49 lb uplift at joint 1, 60 lb uplift at joint 3 and 111 lb uplift at joint 4.
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


October 17,2024



ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | 89 Eagle Creek - Norman D - Roof | |
|---|---|---|---|---|---|---|
| 25040191 | V15 | Valley | 1 | 1 | Job Reference (optional) | I68925818 |

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

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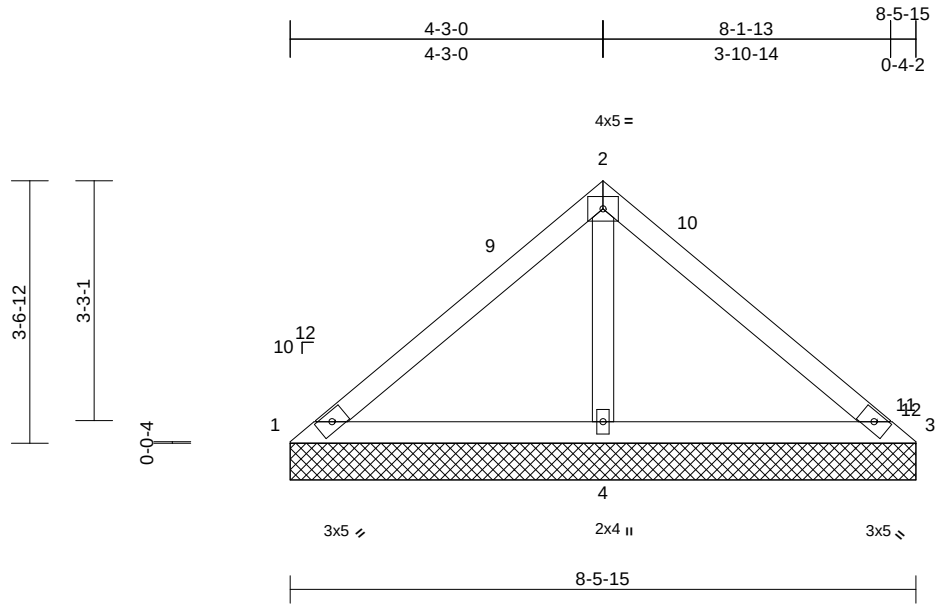


Scale = 1:31.3

| 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 | 0.39 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.37 | Vert(TL) | n/a | - | n/a | 999 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.13 | Horiz(TL) | 0.00 | 4 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2018/TPI2014 | Matrix-MP | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 32 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 8-5-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

**REACTIONS** (size) 1=8-5-15, 3=8-5-15, 4=8-5-15
Max Horiz 1=79 (LC 11)
Max Uplift 1=-44 (LC 21), 3=-51 (LC 20), 4=-103 (LC 14)
Max Grav 1=77 (LC 20), 3=69 (LC 21), 4=678 (LC 21)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-126/302, 2-3=-125/311
BOT CHORD 1-4=-236/174, 3-4=-236/174
WEBS 2-4=-550/254

**NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-5 to 3-0-5, Exterior(2R) 3-0-5 to 5-1-11, Exterior(2E) 5-1-11 to 8-1-11 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
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.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 44 lb uplift at joint 1, 51 lb uplift at joint 3 and 103 lb uplift at joint 4.
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


October 17,2024



ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | 89 Eagle Creek - Norman D - Roof |
|---|---|---|---|---|---|
| 25040191 | V16 | Valley | 1 | 1 | I68925819 |
| | | | | | Job Reference (optional) |

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

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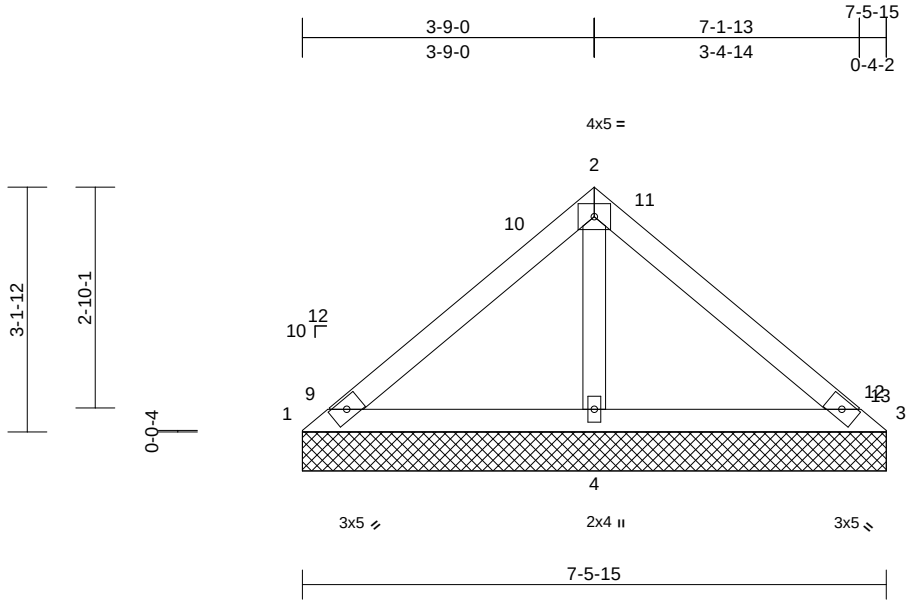



Scale = 1:29.6

| 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 | 0.28 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| Snow (Pf) | 20.0 | Lumber DOL | 1.15 | BC | 0.28 | Vert(TL) | n/a | - | n/a | 999 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.09 | Horiz(TL) | 0.00 | 4 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2018/TPI2014 | Matrix-MP | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 28 lb | FT = 20% |

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

**BRACING**
TOP CHORD Structural wood sheathing directly applied or 7-5-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

**REACTIONS** (size) 1=7-5-15, 3=7-5-15, 4=7-5-15
Max Horiz 1=69 (LC 11)
Max Uplift 1=-20 (LC 21), 3=-31 (LC 20), 4=-80 (LC 14)
Max Grav 1=92 (LC 20), 3=72 (LC 21), 4=555 (LC 21)

**FORCES** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-99/239, 2-3=-97/241
BOT CHORD 1-4=-185/147, 3-4=-185/147
WEBS 2-4=-445/212

**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) 0-0-5 to 3-0-5, Exterior(2R) 3-0-5 to 4-1-11, Exterior(2E) 4-1-11 to 7-1-11 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
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.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 20 lb uplift at joint 1, 31 lb uplift at joint 3 and 80 lb uplift at joint 4.
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

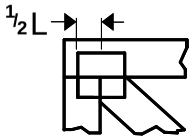

October 17,2024



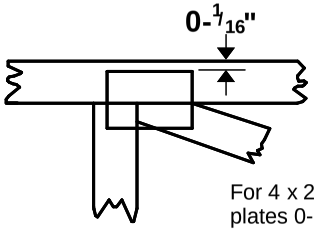
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

# 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.

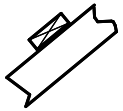
* Plate location details available in MiTek software or upon request.

## PLATE SIZE

4 x 4

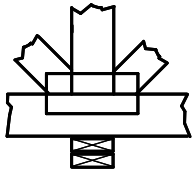
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## 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

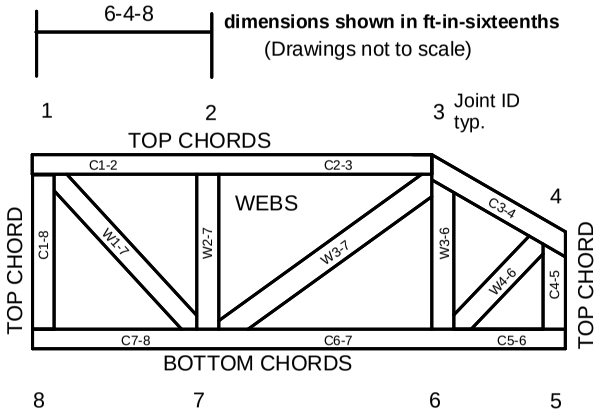


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

**Industry Standards:**

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-22: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses.

# Numbering System




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

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

# Product Code Approvals

ICC-ES Reports:

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

# Design General Notes

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

Lumber design values are in accordance with ANSI/TPI 1 section 6.3 These truss designs rely on lumber values established by others.



MiTek®

ENGINEERING BY TRENCO
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MiTek Engineering Reference Sheet: MII-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/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.