



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

Phone #:919-775-1450



**Builder: DRB HOMES**  
**Model: 67 FaNC**  
**CALLAWAY 1**

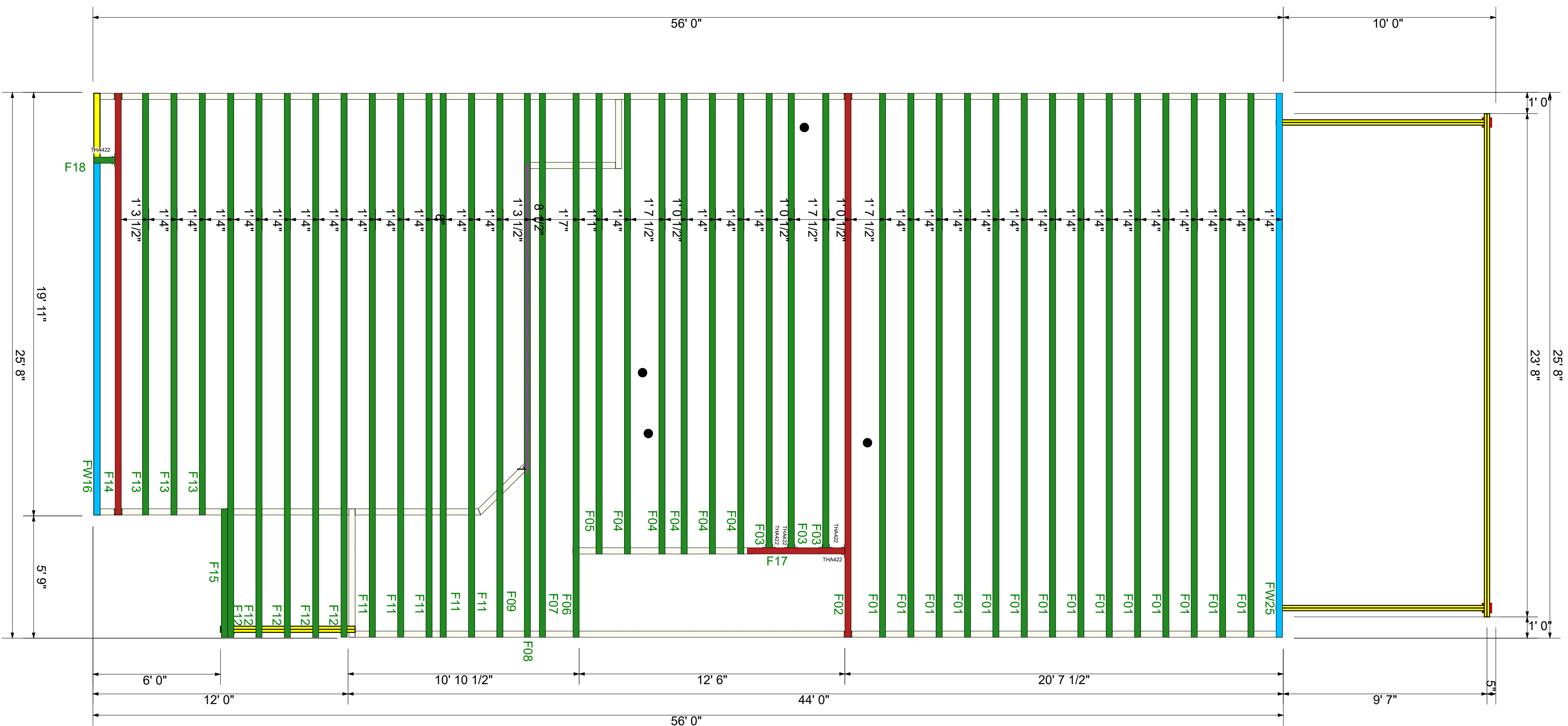
**THE PLACEMENT PLAN NOTES:**

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.

**Approved by:** \_\_\_\_\_

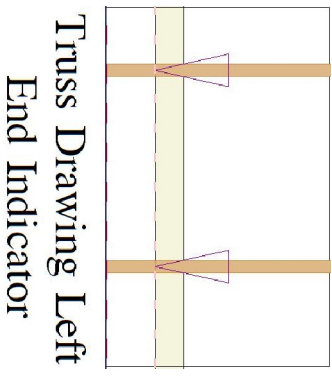
**Date:** \_\_\_\_\_

Truss Connector	Total List	
Qty	Product	Manuf
5	THA422	Simpson



\*\* FRAMER MUST REFER TO PLANS WHILE SETTING COMPONENTS.

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



\*\* 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.

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

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

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

Revisions	
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 support structure including headers, beams, walls, and columns is the responsibility of the building designer. For general guidance regarding the bracing, consult "Bracing of Wood Truss" available from the Truss Plate Institute, 583 D'Onifrio Drive: Madison, WI 53179



DRB HOMES  
67 FARM AT NEILLS CREEK  
CALLAWAY 1  
**COMPONENT  
PLACEMENT PLAN**

Scale:	NTS
Date:	3/29/2024
Designer:	ND
Project Number:	24030159
Sheet Number:	1/1

\*\* 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.

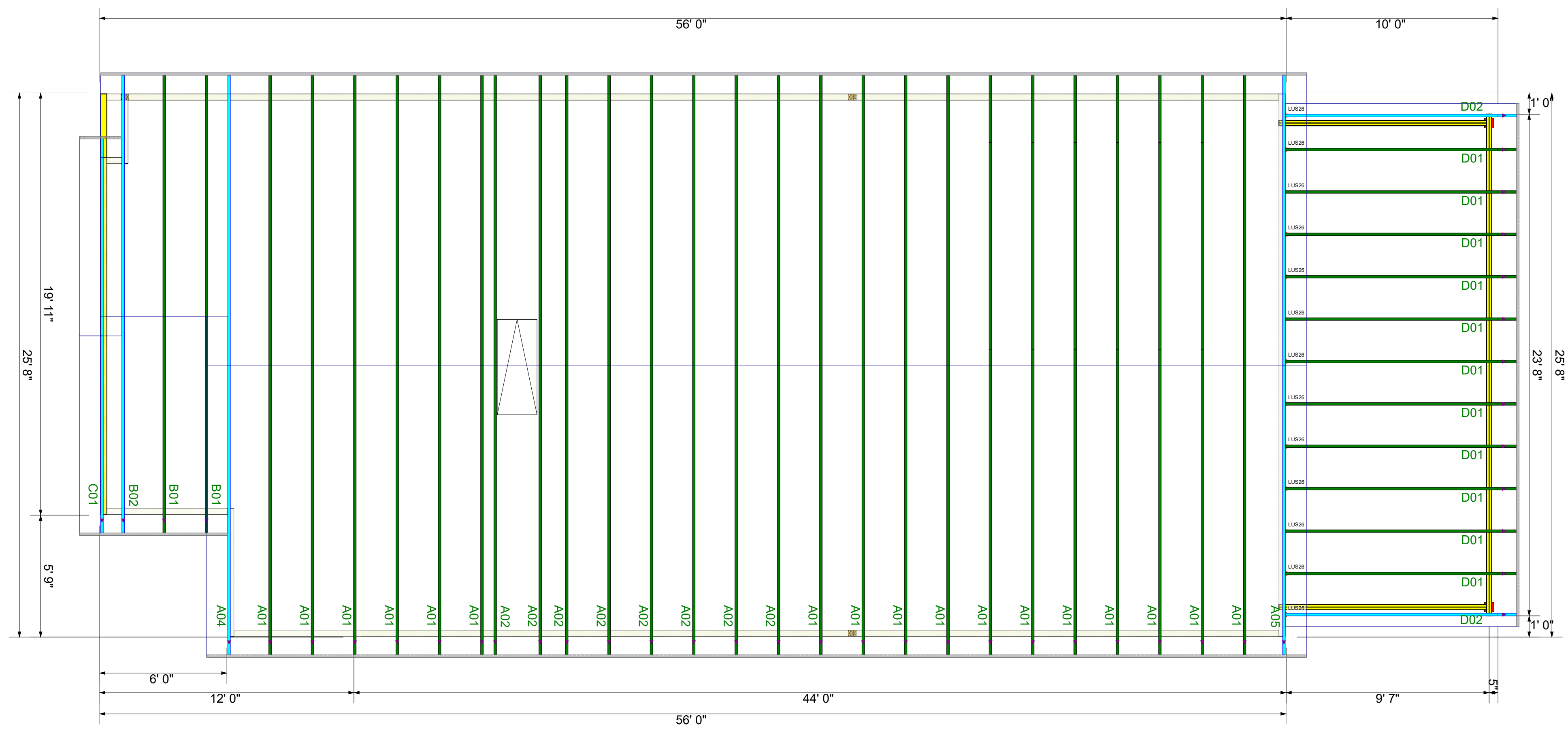
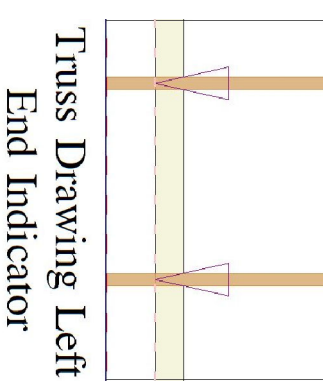
\*\* DAMAGED COMPONENTS SHOULD NOT BE INSTALLED UNLESS TOLD TO BY THE COMPONENT PLANT.

\*\* FRAMER MUST REFER TO PLANS WHILE SETTING COMPONENTS.

\*\* 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.



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

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

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

Revisions
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 support structure including headers, beams, walls, and columns is the responsibility of the building designer. For general guidance regarding the bracing, consult "Bracing of Wood Truss" available from the Truss Plate Institute, 583 D'Onifrio Drive: Madison, WI 53179



DRB HOMES  
67 FARM AT NEILLS CREEK  
CALLAWAY 1  
**COMPONENT  
PLACEMENT PLAN**

Scale:	NTS
Date:	3/29/2024
Designer:	ND
Project Number:	24030159
Sheet Number:	1/1

**Trenco**

818 Soundside Rd  
Edenton, NC 27932

Re: 24030159-B

67 Farm at Neills Creek-2nd Floor-Callaway 1 COP BR4 GLH

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

Pages or sheets covered by this seal: I64576599 thru I64576625

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

North Carolina COA: C-0844



April 1, 2024

Johnson, Andrew

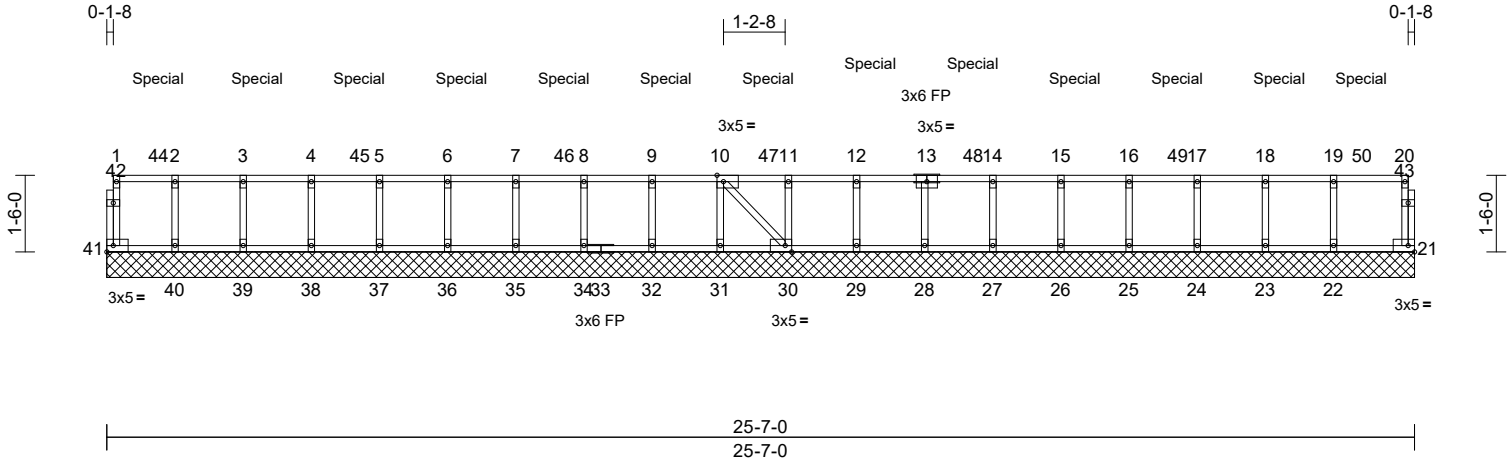
**IMPORTANT NOTE:** The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes),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

Job 24030159-B	Truss FW25	Truss Type Floor Supported Gable	Qty 1	Ply 1	67 Farm at Neills Creek-2nd Floor-Callaway 1 COP BR4 I64576599 Job Reference (optional)
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Carter Components (Sanford, NC), Sanford, NC - 27332,

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ID:vyw86Z18CIRtikWJH9GKgyyBw9-RfC?PsB70Hq3NSgPqnL8w3uITxbGKWrCdoi7J4zJc?F

Page: 1



Scale = 1:45.1

Plate Offsets (X, Y): [10:0-1-8, Edge], [30:0-1-8, Edge]

Loading	(psf)	Spacing	1-4-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.82	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.02	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.12	Horiz(TL)	0.00	21	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MSH							Weight: 119 lb	FT = 20%F, 11%E

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

**BRACING**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:  
6-0-0 oc bracing: 29-30,28-29.

**REACTIONS** (size)  
21=25-7-0, 22=25-7-0, 23=25-7-0,  
24=25-7-0, 25=25-7-0, 26=25-7-0,  
27=25-7-0, 28=25-7-0, 29=25-7-0,  
30=25-7-0, 31=25-7-0, 32=25-7-0,  
34=25-7-0, 35=25-7-0, 36=25-7-0,  
37=25-7-0, 38=25-7-0, 39=25-7-0,  
40=25-7-0, 41=25-7-0  
Max Uplift 21=-39 (LC 8), 22=-118 (LC 8),  
23=-96 (LC 8), 24=-123 (LC 8),  
25=-37 (LC 8), 26=-110 (LC 8),  
27=-118 (LC 8), 28=-39 (LC 8),  
29=-110 (LC 8), 30=-120 (LC 8),  
31=-37 (LC 8), 32=-109 (LC 8),  
34=-120 (LC 8), 35=-38 (LC 8),  
36=-109 (LC 8), 37=-120 (LC 8),  
38=-38 (LC 8), 39=-111 (LC 8),  
40=-128 (LC 8), 41=-24 (LC 8)  
Max Grav 21=160 (LC 3), 22=469 (LC 3),  
23=378 (LC 3), 24=472 (LC 3),  
25=222 (LC 6), 26=430 (LC 3),  
27=453 (LC 3), 28=228 (LC 6),  
29=430 (LC 3), 30=463 (LC 3),  
31=221 (LC 6), 32=427 (LC 3),  
34=460 (LC 3), 35=225 (LC 6),  
36=427 (LC 3), 37=460 (LC 3),  
38=224 (LC 6), 39=431 (LC 3),  
40=493 (LC 3), 41=105 (LC 6)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-41=-102/26, 20-21=-156/42, 1-2=-5/1,  
2-3=-5/1, 3-4=-5/1, 4-5=-5/1, 5-6=-5/1,  
6-7=-5/1, 7-8=-5/1, 8-9=-5/1, 9-10=-5/1,  
10-11=-1/1, 11-12=-1/1, 12-14=-7/2,  
14-15=-7/2, 15-16=-7/2, 16-17=-7/2,  
17-18=-7/2, 18-19=-7/2, 19-20=-7/2  
BOT CHORD 40-41=-1/5, 39-40=-1/5, 38-39=-1/5,  
37-38=-1/5, 36-37=-1/5, 35-36=-1/5,  
34-35=-1/5, 32-34=-1/5, 31-32=-1/5,  
30-31=-1/5, 29-30=-1/1, 28-29=-1/1,  
27-28=-2/7, 26-27=-2/7, 25-26=-2/7,  
24-25=-2/7, 23-24=-2/7, 22-23=-2/7,  
21-22=-2/7  
WEBS 2-40=484/134, 3-39=423/116,  
4-38=-215/43, 5-37=-451/125,  
6-36=-418/115, 7-35=-216/43,  
8-34=-451/125, 9-32=-418/115,  
10-31=-212/43, 11-30=-450/125,  
12-29=-421/115, 13-28=-219/44,  
14-27=-444/123, 15-26=-421/116,  
16-25=-213/42, 17-24=-463/129,  
18-23=-370/101, 19-22=-459/124, 10-30=-6/1

**NOTES**  
1) Unbalanced floor live loads have been considered for this design.  
2) All plates are 1.5x3 MT20 unless otherwise indicated.  
3) Gable requires continuous bottom chord bearing.  
4) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).  
5) Gable studs spaced at 1-4-0 oc.  
6) N/A

7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.  
8) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.  
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 504 lb down and 157 lb up at 1-0-4, 503 lb down and 158 lb up at 2-11-8, 503 lb down and 158 lb up at 4-11-8, 503 lb down and 158 lb up at 6-11-8, 503 lb down and 158 lb up at 8-11-8, 503 lb down and 158 lb up at 10-11-8, 503 lb down and 158 lb up at 12-11-8, 503 lb down and 158 lb up at 14-11-8, 503 lb down and 158 lb up at 16-11-8, 503 lb down and 158 lb up at 18-11-8, 503 lb down and 158 lb up at 20-11-8, and 503 lb down and 158 lb up at 22-11-8, and 504 lb down and 157 lb up at 24-6-12 on top chord. The design/selection of such connection device(s) is the responsibility of others.  
10) 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



April 1, 2024

Continued on page 2

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

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



818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	67 Farm at Neills Creek-2nd Floor-Callaway 1 COP BR4 I64576599
24030159-B	FW25	Floor Supported Gable	1	1	Job Reference (optional)

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

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Page: 2

- 1) Dead + Floor Live (balanced): Lumber Increase=1.00,  
Plate Increase=1.00  
Uniform Loads (lb/ft)  
Vert: 21-41=-7, 1-20=-67  
Concentrated Loads (lb)  
Vert: 3=-186 (B), 6=-186 (B), 9=-186 (B), 12=-186 (B), 15=-186 (B), 18=-186 (B), 44=-187 (B), 45=-186 (B), 46=-186 (B), 47=-186 (B), 48=-186 (B), 49=-186 (B), 50=-187 (B)

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

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



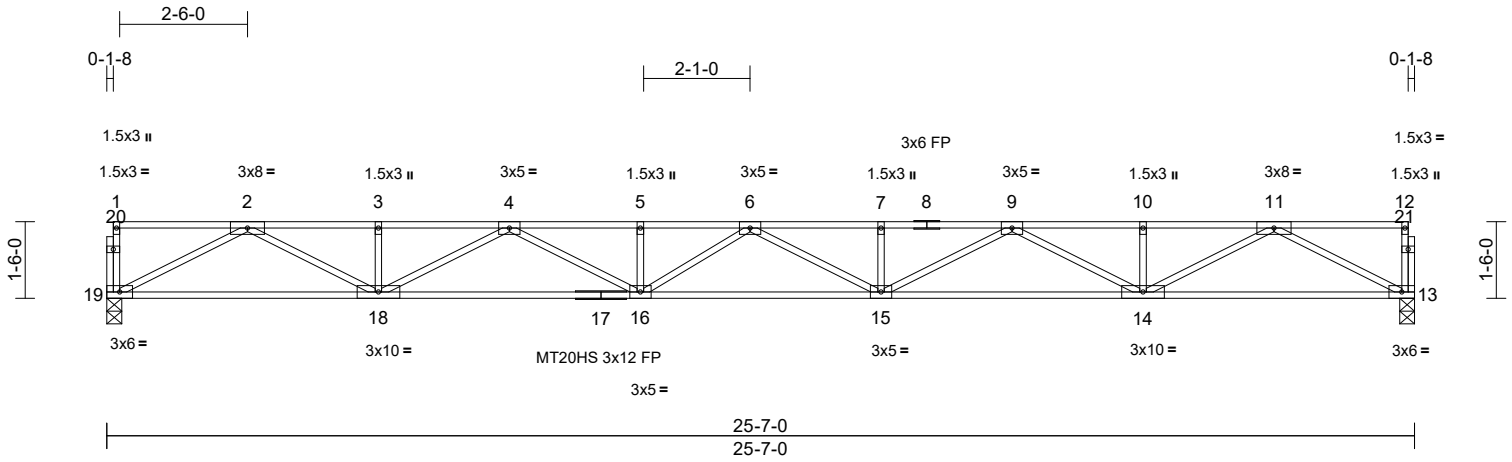
818 Soundside Road  
Edenton, NC 27932

Job 24030159-B	Truss F01	Truss Type Floor	Qty 14	Ply 1	67 Farm at Neills Creek-2nd Floor-Callaway 1 COP BR4 I64576600 Job Reference (optional)
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Carter Components (Sanford, NC), Sanford, NC - 27332,

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Page: 1



Scale = 1:45.1

Loading	(psf)	Spacing	1-4-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.64	Vert(LL)	-0.51	15-16	>598	480	MT20HS	187/143
TCDL	10.0	Lumber DOL	1.00	BC	0.83	Vert(CT)	-0.71	15-16	>429	360	MT20	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.65	Horz(CT)	0.11	13	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MSH								
											Weight: 131 lb	FT = 20%F, 11%E

**LUMBER**

TOP CHORD 2x4 SP No.2(flat)  
 BOT CHORD 2x4 SP No.1(flat)  
 WEBS 2x4 SP No.3(flat)  
 OTHERS 2x4 SP No.3(flat)

**BRACING**

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

**REACTIONS** (size) 13=0-3-8, 19=0-3-8  
 Max Grav 13=925 (LC 1), 19=925 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-19=-69/0, 12-13=-69/0, 1-2=-3/0,  
 2-3=-2815/0, 3-4=-2815/0, 4-5=-4147/0,  
 5-6=-4147/0, 6-7=-4153/0, 7-9=-4153/0,  
 9-10=-2815/0, 10-11=-2815/0, 11-12=-3/0  
 BOT CHORD 18-19=0/1609, 16-18=0/3648, 15-16=0/4284,  
 14-15=0/3646, 13-14=0/1609  
 WEBS 11-13=-1813/0, 2-19=-1813/0, 11-14=0/1369,  
 2-18=0/1369, 10-14=-163/0, 3-18=-162/0,  
 9-14=-943/0, 4-18=-945/0, 9-15=0/576,  
 4-16=0/567, 7-15=-171/0, 5-16=-150/0,  
 6-15=-148/0, 6-16=-162/0

**NOTES**

- 1) All plates are MT20 plates unless otherwise indicated.
- 2) All plates are 1.5x3 MT20 unless otherwise indicated.
- 3) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

**LOAD CASE(S)** Standard



April 1, 2024

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

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



818 Soundside Road  
 Edenton, NC 27932

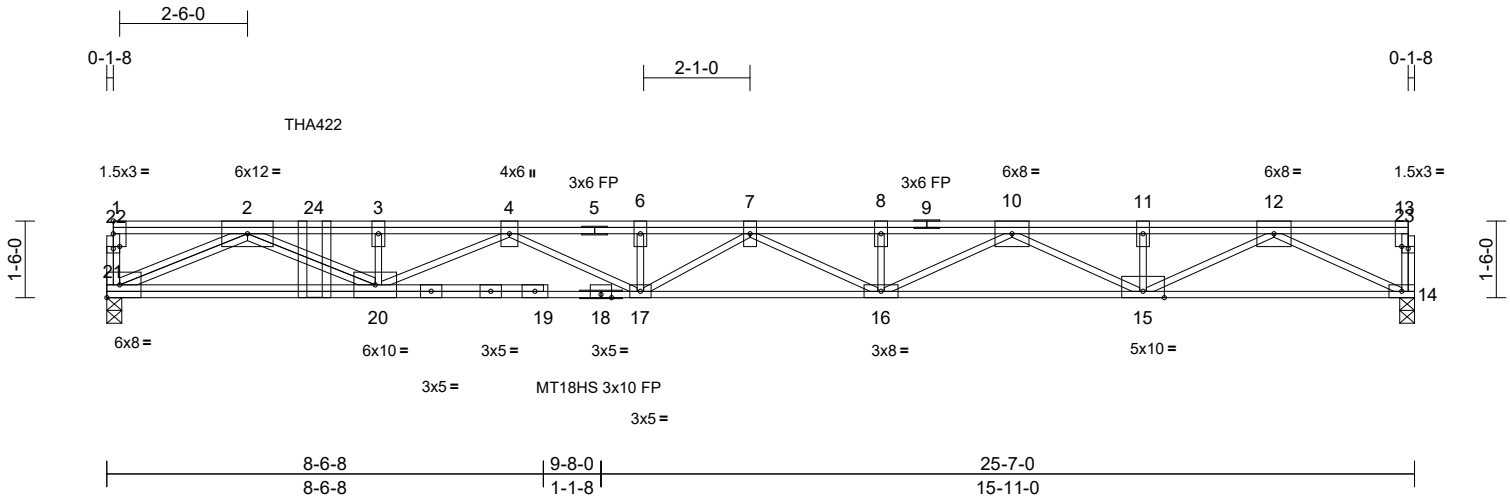
Job 24030159-B	Truss F02	Truss Type Floor Girder	Qty 1	Ply 1	67 Farm at Neills Creek-2nd Floor-Callaway 1 COP BR4 I64576601 Job Reference (optional)
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Carter Components (Sanford, NC), Sanford, NC - 27332,

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Fri Mar 29 10:49:48

Page: 1

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Scale = 1:45.1

Plate Offsets (X, Y): [22:0-1-8,0-0-8], [23:0-1-8,0-0-8]

Loading	(psf)	Spacing	1-4-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.78	Vert(LL)	-0.49	16-17	>616	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.93	Vert(CT)	-0.69	16-17	>442	360	MT18HS	244/190
BCLL	0.0	Rep Stress Incr	NO	WB	0.88	Horz(CT)	0.12	14	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MSH								Weight: 187 lb FT = 20%F, 11%E

**LUMBER**  
TOP CHORD 2x4 SP No.2(flat) \*Except\* 1-5,9-1:2x4 SP 2400F 2.0E(flat)  
BOT CHORD 2x4 SP 2400F 2.0E(flat) \*Except\* 21-19:2x4 SP No.2(flat)  
WEBS 2x4 SP No.3(flat)  
OTHERS 2x4 SP No.3(flat)

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

**REACTIONS** (size) 14=0-3-8, 21=0-3-8  
Max Grav 14=1116 (LC 1), 21=1964 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-21=0/7, 13-14=-76/0, 1-2=0/0, 2-3=-6279/0, 3-4=-6279/0, 4-6=-6509/0, 6-7=-6509/0, 7-8=-5853/0, 8-10=-5853/0, 10-11=-3696/0, 11-12=-3696/0, 12-13=-4/0  
BOT CHORD 20-21=0/4069, 17-20=0/6400, 16-17=0/6302, 15-16=0/4922, 14-15=0/2053  
WEBS 12-14=-2291/0, 12-15=0/1847, 11-15=-178/0, 10-15=-1377/0, 10-16=0/1045, 8-16=-203/0, 6-17=-229/0, 7-16=-505/0, 2-20=0/2459, 3-20=-932/0, 4-20=-134/0, 4-17=0/123, 7-17=0/243, 2-21=-4508/0

- Use Simpson Strong-Tie THA422 (6-16d Girder, 6-10d Truss) or equivalent at 4-0-12 from the left end to connect truss(es) to front face of top chord.
  - Fill all nail holes where hanger is in contact with lumber.
  - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
- LOAD CASE(S)** Standard
- Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
Uniform Loads (lb/ft)  
Vert: 14-21=-7, 1-13=-67  
Concentrated Loads (lb)  
Vert: 24=-1231 (F)

- NOTES**
- All plates are MT20 plates unless otherwise indicated.
  - All plates are 3x6 MT20 unless otherwise indicated.
  - The Fabrication Tolerance at joint 18 = 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.
  - Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.



April 1, 2024

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

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



818 Soundside Road  
Edenton, NC 27932

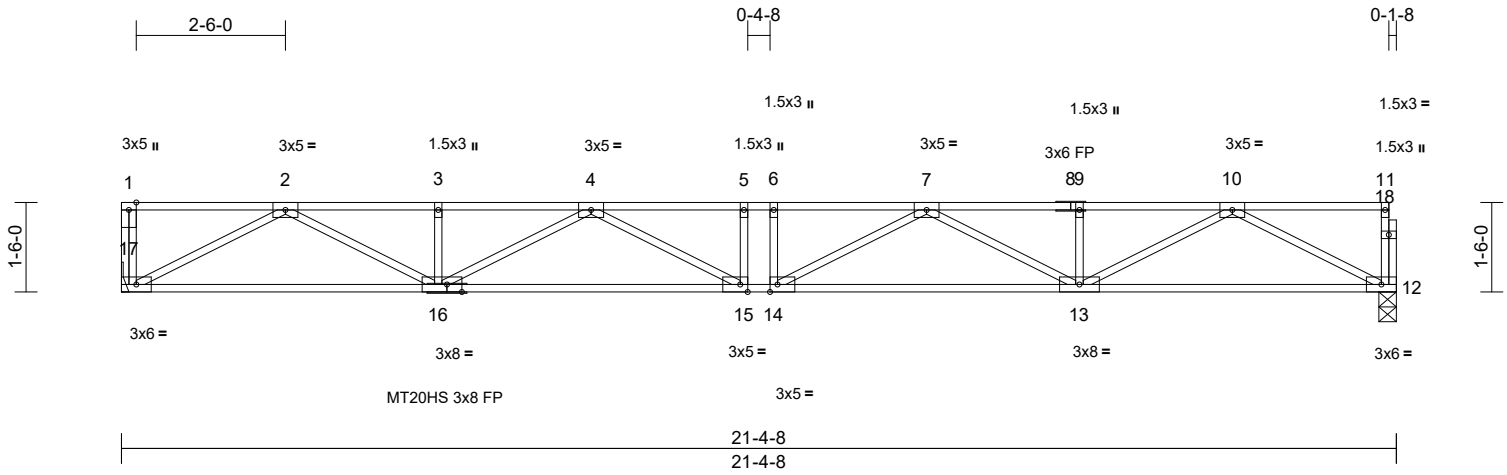


Job 24030159-B	Truss F03	Truss Type Floor	Qty 3	Ply 1	67 Farm at Neills Creek-2nd Floor-Callaway 1 COP BR4 I64576602 Job Reference (optional)
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Carter Components (Sanford, NC), Sanford, NC - 27332,

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Fri Mar 29 10:49:48  
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Page: 1



Scale = 1:38.6

Plate Offsets (X, Y): [14:0-1-8,Edge], [15:0-1-8,Edge], [16:0-3-0,Edge]

Loading	(psf)	Spacing	1-4-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.36	Vert(LL)	-0.27	14-15	>936	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.81	Vert(CT)	-0.37	13-14	>678	360	MT20HS	187/143
BCLL	0.0	Rep Stress Incr	YES	WB	0.50	Horz(CT)	0.07	12	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MSH								
											Weight: 111 lb	FT = 20%F, 11%E

**LUMBER**

TOP CHORD 2x4 SP No.2(flat)  
 BOT CHORD 2x4 SP No.2(flat)  
 WEBS 2x4 SP No.3(flat)  
 OTHERS 2x4 SP No.3(flat)

**BRACING**

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

**REACTIONS** (size) 12=0-3-8, 17= Mechanical  
 Max Grav 12=770 (LC 1), 17=775 (LC 1)

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

TOP CHORD 1-17=-70/0, 11-12=-69/0, 1-2=0/0,  
 2-3=-2235/0, 3-4=-2235/0, 4-5=-2992/0,  
 5-6=-2992/0, 6-7=-2992/0, 7-9=-2235/0,  
 9-10=-2235/0, 10-11=-3/0

BOT CHORD 15-17=0/2780, 14-15=0/2992, 13-14=0/2780,  
 12-13=0/1315

WEBS 10-12=-1481/0, 2-17=-1486/0, 10-13=0/1044,  
 2-16=0/1043, 9-13=-163/0, 3-16=-162/0,  
 7-13=-618/0, 4-16=-618/0, 7-14=-80/425,  
 4-15=-80/425, 5-15=-115/0, 6-14=-115/0

**NOTES**

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) Refer to girder(s) for truss to truss connections.
- 4) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 6) CAUTION, Do not erect truss backwards.

**LOAD CASE(S)** Standard



April 1, 2024

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

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



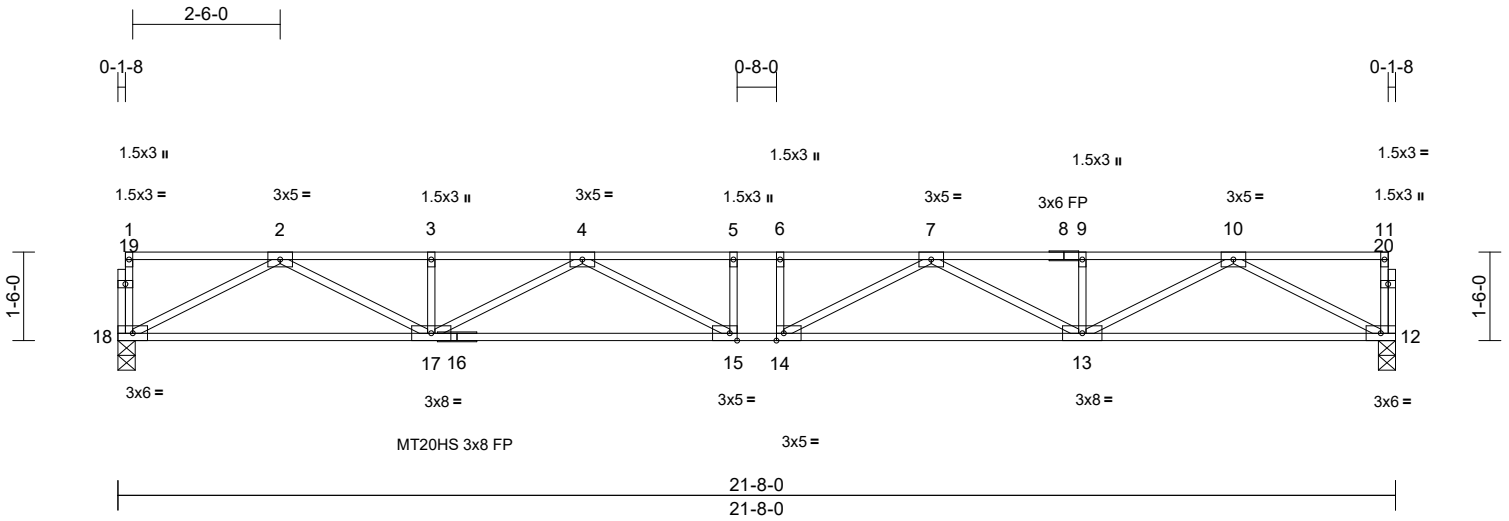
818 Soundside Road  
 Edenton, NC 27932

Job 24030159-B	Truss F04	Truss Type Floor	Qty 5	Ply 1	67 Farm at Neills Creek-2nd Floor-Callaway 1 COP BR4 I64576603 Job Reference (optional)
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Carter Components (Sanford, NC), Sanford, NC - 27332,

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Fri Mar 29 10:49:48  
ID:szMlchVXGNJxqGwRNcYdWxyyC0?-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:39.1

Plate Offsets (X, Y): [14:0-1-8,Edge], [15:0-1-8,Edge]

Loading	(psf)	Spacing	1-4-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.42	Vert(LL)	-0.29	14-15	>901	480	MT20HS	187/143
TCDL	10.0	Lumber DOL	1.00	BC	0.83	Vert(CT)	-0.39	15-17	>654	360	MT20	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.51	Horz(CT)	0.07	12	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MSH								Weight: 112 lb FT = 20%F, 11%E

**LUMBER**

- TOP CHORD 2x4 SP No.2(flat)
- BOT CHORD 2x4 SP No.2(flat)
- WEBS 2x4 SP No.3(flat)
- OTHERS 2x4 SP No.3(flat)

**BRACING**

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

**REACTIONS** (size) 12=0-3-8, 18=0-3-8

Max Grav 12=781 (LC 1), 18=781 (LC 1)

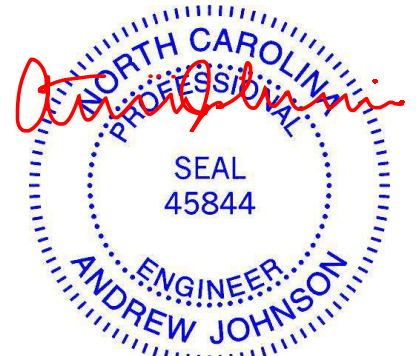
**FORCES** (lb) - Maximum Compression/Maximum Tension

- TOP CHORD 1-18=-69/0, 11-12=-69/0, 1-2=-3/0, 2-3=-2276/0, 3-4=-2276/0, 4-5=-3069/0, 5-6=-3069/0, 6-7=-3069/0, 7-9=-2276/0, 9-10=-2276/0, 10-11=-3/0
- BOT CHORD 17-18=0/1336, 15-17=0/2840, 14-15=0/3069, 13-14=0/2840, 12-13=0/1336
- WEBS 10-12=-1504/0, 2-18=-1504/0, 10-13=0/1067, 2-17=0/1067, 9-13=-162/0, 3-17=-162/0, 7-13=-640/0, 4-17=-640/0, 7-14=-71/459, 4-15=-71/459, 5-15=-136/0, 6-14=-136/0

**NOTES**

- Unbalanced floor live loads have been considered for this design.
- All plates are MT20 plates unless otherwise indicated.
- All plates are 1.5x3 MT20 unless otherwise indicated.
- 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.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

**LOAD CASE(S)** Standard



April 1, 2024

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

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



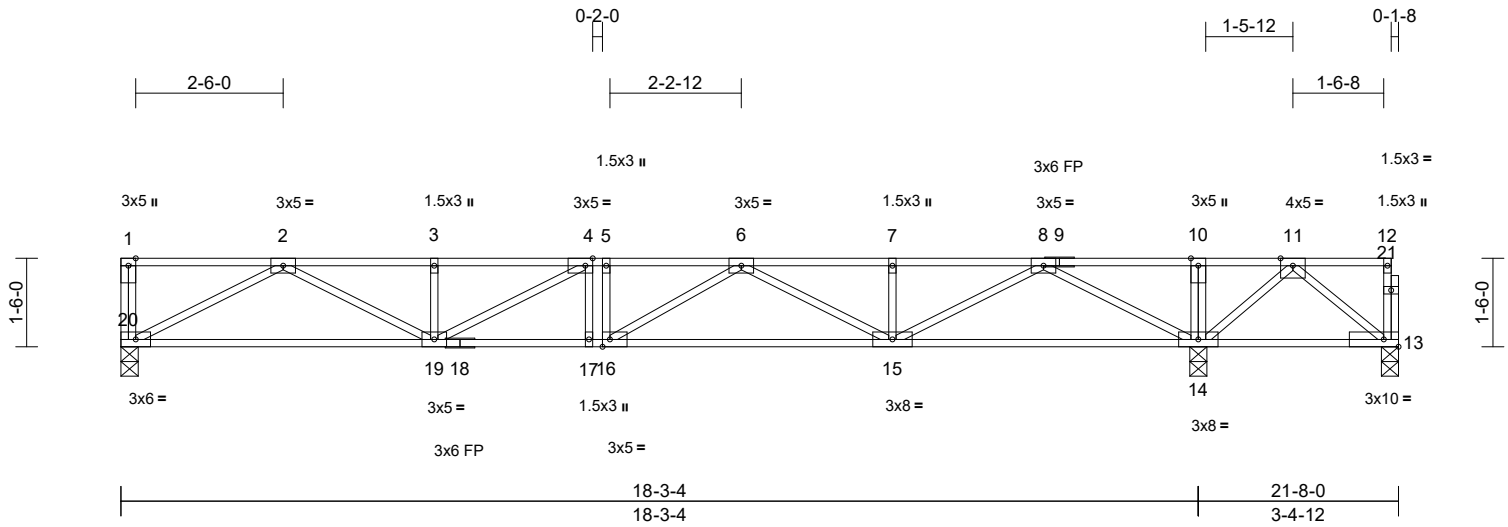
818 Soundside Road  
Edenton, NC 27932

Job 24030159-B	Truss F05	Truss Type Floor	Qty 1	Ply 1	67 Farm at Neills Creek-2nd Floor-Callaway 1 COP BR4 I64576604 Job Reference (optional)
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Carter Components (Sanford, NC), Sanford, NC - 27332,

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Fri Mar 29 10:49:48  
ID:LzVQXT791MsZ3FvQQXUpdvyyC?B-RfC?PsB70Hq3NSgPqnL8w3uITXbGkWrCDoi7J4zJC?f

Page: 1



Scale = 1:39.1

Plate Offsets (X, Y): [4:0-1-8,Edge], [16:0-1-8,Edge]

Loading	(psf)	Spacing	1-4-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.60	Vert(LL)	-0.10	17-19	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.46	Vert(CT)	-0.14	15-16	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.51	Horz(CT)	0.02	14	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MSH							Weight: 117 lb	FT = 20%F, 11%E

**LUMBER**

TOP CHORD 2x4 SP No.2(flat)  
BOT CHORD 2x4 SP No.2(flat)  
WEBS 2x4 SP No.3(flat)  
OTHERS 2x4 SP No.3(flat)

- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- CAUTION, Do not erect truss backwards.

**BRACING**

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

**LOAD CASE(S)** Standard

**REACTIONS**

(size) 13=0-3-8, 14=0-3-8, 20=0-3-8  
Max Uplift 13=620 (LC 3)  
Max Grav 13=67 (LC 4), 14=1558 (LC 1), 20=548 (LC 3)

**FORCES**

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-20=-71/0, 12-13=-45/0, 1-2=0/0,  
2-3=-1383/0, 3-4=-1383/0, 4-5=-1500/0,  
5-6=-1500/0, 6-7=-718/0, 7-8=-718/0,  
8-10=0/1515, 10-11=0/1515, 11-12=-2/0  
BOT CHORD 19-20=0/883, 17-19=0/1500, 16-17=0/1500,  
15-16=0/1276, 14-15=-227/0, 13-14=-772/0  
WEBS 10-14=-158/0, 8-14=-1461/0, 2-20=-997/0,  
8-15=0/1064, 2-19=0/567, 7-15=-171/0,  
3-19=-177/0, 6-15=-634/0, 4-19=-265/92,  
6-16=0/349, 4-17=-132/34, 5-16=-54/12,  
11-13=0/1001, 11-14=-1058/0

**NOTES**

- Unbalanced floor live loads have been considered for this design.
- All plates are 3x5 MT20 unless otherwise indicated.
- One RT8A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 13. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



April 1, 2024

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

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ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

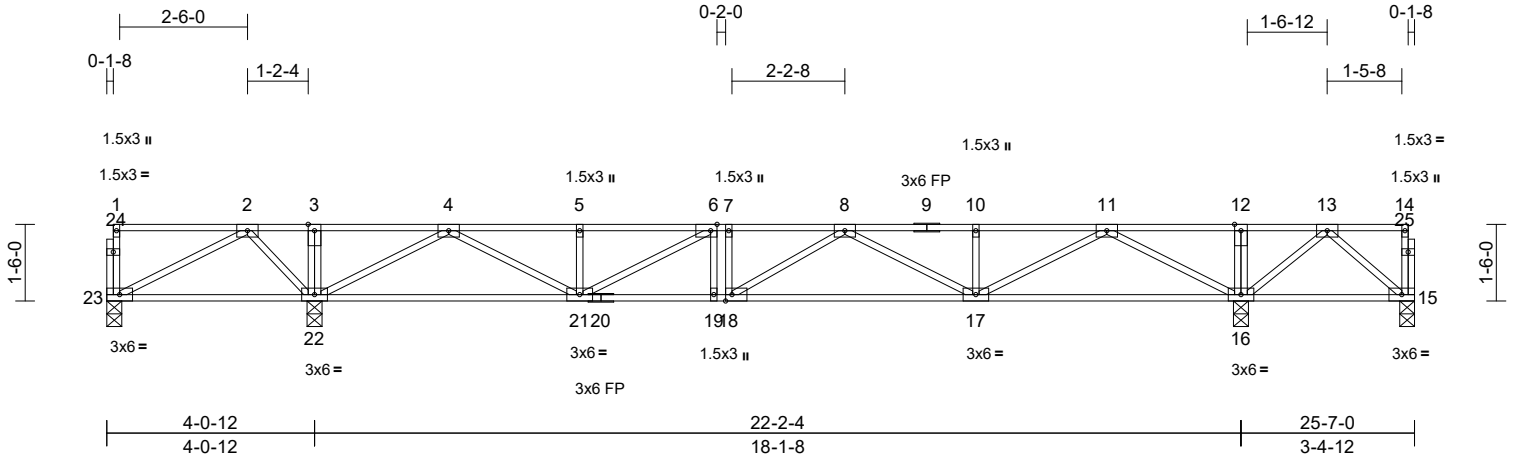
818 Soundside Road  
Edenton, NC 27932

Job 24030159-B	Truss F06	Truss Type Floor	Qty 1	Ply 1	67 Farm at Neills Creek-2nd Floor-Callaway 1 COP BR4 I64576605 Job Reference (optional)
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Carter Components (Sanford, NC), Sanford, NC - 27332,

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Fri Mar 29 10:49:48  
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Page: 1



Scale = 1:45.1

Plate Offsets (X, Y): [6:0-1-8,Edge], [18:0-1-8,Edge]

Loading	(psf)	Spacing	1-4-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.50	Vert(LL)	-0.07	17-18	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.34	Vert(CT)	-0.11	17-18	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.40	Horz(CT)	0.01	16	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MSH							Weight: 139 lb	FT = 20%F, 11%E

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

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

**REACTIONS** (size) 15=0-3-8, 16=0-3-8, 22=0-3-8, 23=0-3-8  
Max Uplift 15=-475 (LC 6), 23=-349 (LC 6)  
Max Grav 15=-25 (LC 5), 16=1303 (LC 4), 22=1198 (LC 3), 23=27 (LC 5)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-23=-71/0, 14-15=-42/0, 1-2=-3/0, 2-3=0/1092, 3-4=0/1092, 4-5=-683/0, 5-6=-683/0, 6-7=-1026/0, 7-8=-1026/0, 8-10=-645/0, 10-11=-645/0, 11-12=0/1174, 12-13=0/1174, 13-14=-2/0  
BOT CHORD 22-23=-709/0, 21-22=-143/79, 19-21=0/1026, 18-19=0/1026, 17-18=0/996, 16-17=-134/1, 15-16=-567/0  
WEBS 3-22=-123/0, 12-16=-159/0, 11-16=-1225/0, 4-22=-1196/0, 11-17=0/831, 4-21=0/798, 10-17=-170/0, 5-21=-179/0, 8-17=-400/0, 6-21=-428/0, 8-18=-132/191, 6-19=-88/73, 7-18=0/26, 2-23=0/801, 2-22=-666/0, 13-16=-859/0, 13-15=0/752

**NOTES**  
1) Unbalanced floor live loads have been considered for this design.  
2) All plates are 3x5 MT20 unless otherwise indicated.

- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 23. This connection is for uplift only and does not consider lateral forces.
  - One RT8A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 15. This connection is for uplift only and does not consider lateral forces.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - CAUTION, Do not erect truss backwards.
- LOAD CASE(S)** Standard



April 1, 2024

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

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818 Soundside Road  
Edenton, NC 27932

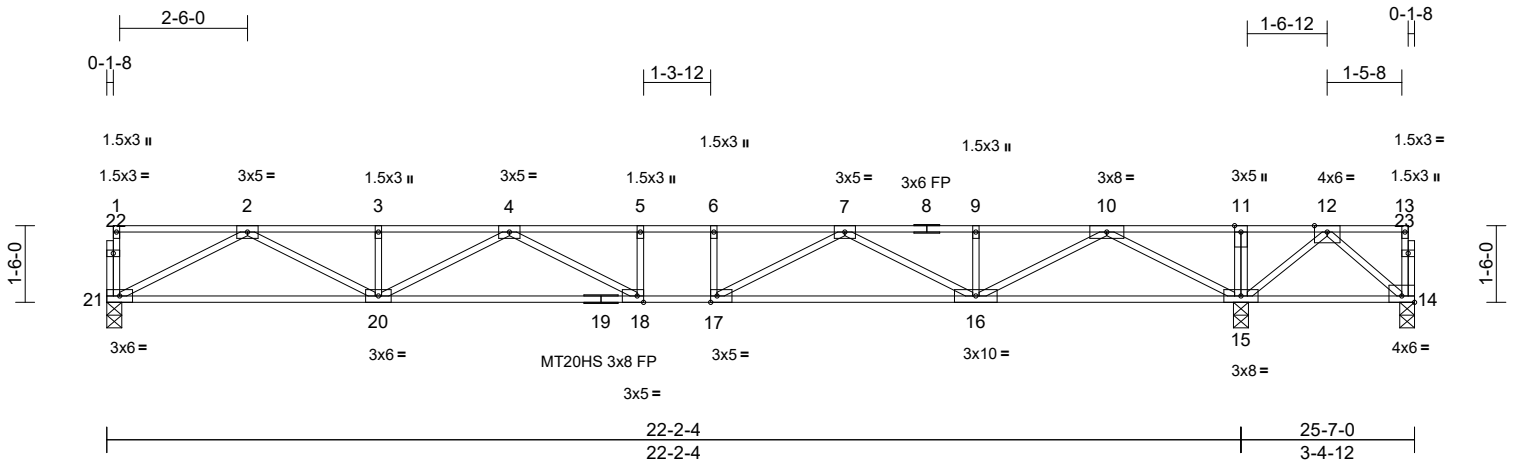
Job 24030159-B	Truss F07	Truss Type Floor	Qty 1	Ply 1	67 Farm at Neills Creek-2nd Floor-Callaway 1 COP BR4 I64576606 Job Reference (optional)
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Carter Components (Sanford, NC), Sanford, NC - 27332,

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Fri Mar 29 10:49:48

Page: 1

ID:IS6PI6aMkJWJ?xEX5ofUdiyC\_c-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWRcDoi7J4zJC?f



Scale = 1:45.1

Plate Offsets (X, Y): [14:Edge,0-1-8], [17:0-1-8,Edge], [18:0-1-8,Edge]

Loading	(psf)	Spacing	1-4-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.79	Vert(LL)	-0.27	18-20	>967	480	MT20HS	187/143
TCDL	10.0	Lumber DOL	1.00	BC	0.87	Vert(CT)	-0.39	18-20	>679	360	MT20	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.67	Horz(CT)	0.04	15	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MSH								
											Weight: 133 lb	FT = 20%F, 11%E

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

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

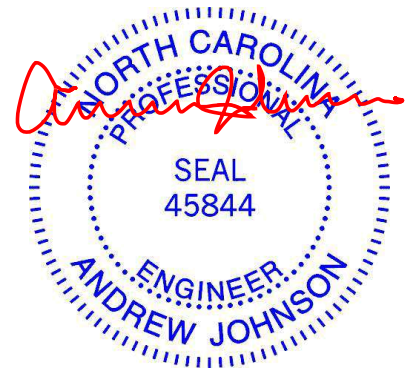
**REACTIONS** (size) 14=0-3-8, 15=0-3-8, 21=0-3-8  
Max Uplift 14=-898 (LC 3)  
Max Grav 14=-141 (LC 4), 15=1999 (LC 1), 21=667 (LC 3)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-21=-68/0, 13-14=-42/0, 1-2=-3/0, 2-3=-1850/0, 3-4=-1850/0, 4-5=-2143/0, 5-6=-2143/0, 6-7=-2143/0, 7-9=-673/0, 9-10=-673/0, 10-11=0/2167, 11-12=0/2167, 12-13=-2/0  
BOT CHORD 20-21=0/1122, 18-20=0/2201, 17-18=0/2143, 16-17=0/1539, 15-16=-572/0, 14-15=-1051/0  
WEBS 11-15=-165/0, 10-15=-1805/0, 2-21=-1264/0, 10-16=0/1408, 2-20=0/825, 9-16=-178/0, 3-20=-152/0, 7-16=-983/0, 4-20=-398/0, 7-17=0/738, 4-18=-246/230, 5-18=-77/42, 6-17=-244/0, 12-14=0/1393, 12-15=-1518/0

**NOTES**  
1) Unbalanced floor live loads have been considered for this design.  
2) All plates are MT20 plates unless otherwise indicated.  
3) All plates are 1.5x3 MT20 unless otherwise indicated.  
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 898 lb uplift at joint 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.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- CAUTION, Do not erect truss backwards.

**LOAD CASE(S)** Standard



April 1, 2024

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

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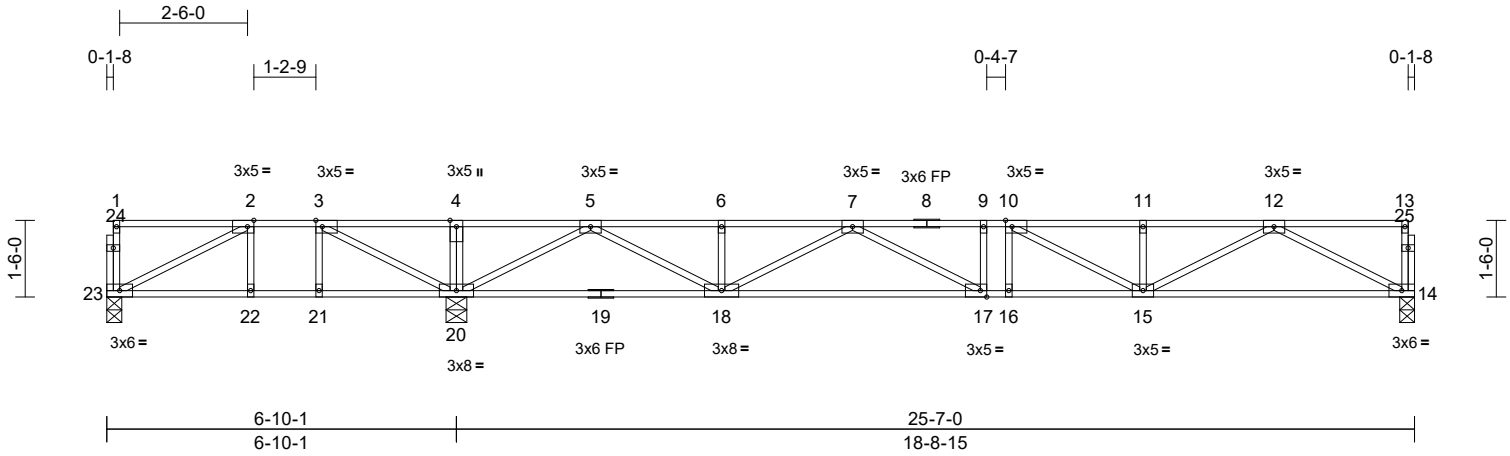
818 Soundside Road  
Edenton, NC 27932

Job 24030159-B	Truss F09	Truss Type Floor	Qty 1	Ply 1	67 Farm at Neills Creek-2nd Floor-Callaway 1 COP BR4 I64576607 Job Reference (optional)
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Carter Components (Sanford, NC), Sanford, NC - 27332,

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Fri Mar 29 10:49:48  
ID:LbgzxLM8?ij5Jxi1PyJkmPyyBzb-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:45.1

Plate Offsets (X, Y): [2:0-1-8,Edge], [3:0-1-8,Edge], [10:0-1-8,Edge], [17:0-1-8,Edge]

Loading	(psf)	Spacing	1-4-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.64	Vert(LL)	-0.15	17-18	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.58	Vert(CT)	-0.22	17-18	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.48	Horz(CT)	0.04	14	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MSH							Weight: 135 lb	FT = 20%F, 11%E

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

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

**REACTIONS** (size) 14=0-3-8, 20=0-4-14, 23=0-3-8  
Max Uplift 23=97 (LC 4)  
Max Grav 14=627 (LC 7), 20=1159 (LC 8), 23=193 (LC 3)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-23=-98/0, 13-14=-69/0, 1-2=-4/0, 2-3=-193/314, 3-4=0/898, 4-5=0/898, 5-6=-1389/0, 6-7=-1389/0, 7-9=-1985/0, 9-10=-1985/0, 10-11=-1695/0, 11-12=-1695/0, 12-13=-3/0  
BOT CHORD 22-23=-314/193, 21-22=-314/193, 20-21=-314/193, 18-20=0/543, 17-18=0/1858, 16-17=0/1985, 15-16=0/1985, 14-15=0/1041

**WEBS** 4-20=-162/0, 3-20=-780/0, 2-23=-212/355, 2-22=-110/0, 3-21=0/138, 5-20=-1401/0, 12-14=-1171/0, 5-18=0/1000, 12-15=0/742, 6-18=-166/0, 11-15=-181/0, 7-18=-568/0, 10-15=-415/5, 7-17=-73/323, 9-17=-59/6, 10-16=-87/73

**NOTES**  
1) Unbalanced floor live loads have been considered for this design.  
2) All plates are 1.5x3 MT20 unless otherwise indicated.

- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 23. This connection is for uplift only and does not consider lateral forces.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - CAUTION, Do not erect truss backwards.
- LOAD CASE(S)** Standard



April 1, 2024

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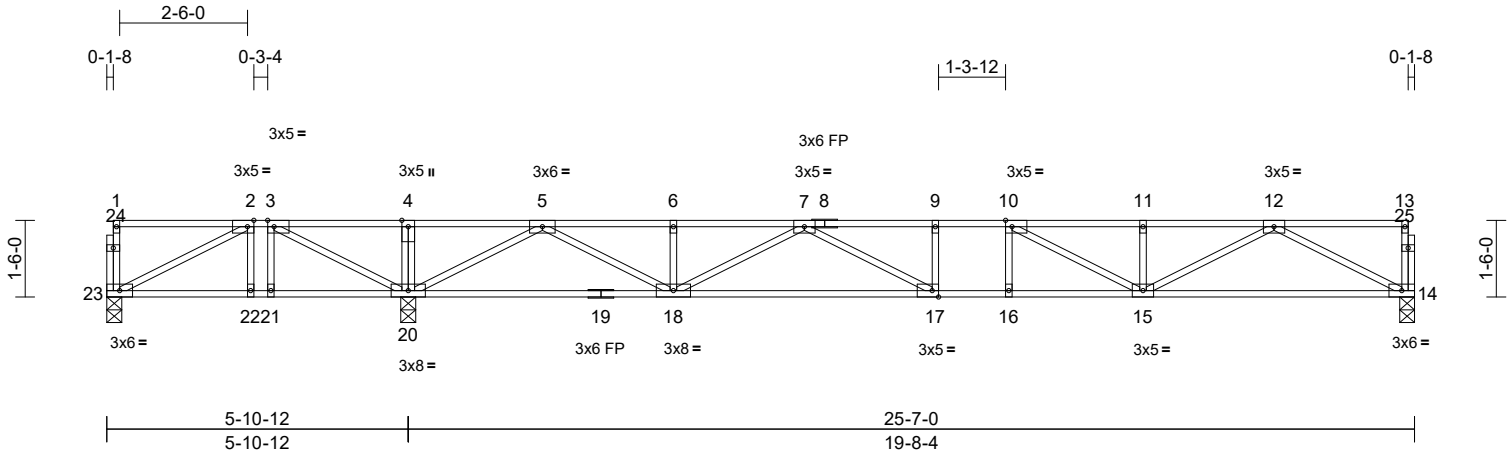


Job 24030159-B	Truss F11	Truss Type Floor	Qty 5	Ply 1	67 Farm at Neills Creek-2nd Floor-Callaway 1 COP BR4 I64576608 Job Reference (optional)
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Carter Components (Sanford, NC), Sanford, NC - 27332,

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Fri Mar 29 10:49:48  
ID:eybdPkSXMrb5e?kNJwxNYuyBzU-RFC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:45.1

Plate Offsets (X, Y): [2:0-1-8,Edge], [3:0-1-8,Edge], [10:0-1-8,Edge], [17:0-1-8,Edge]

Loading	(psf)	Spacing	1-4-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.77	Vert(LL)	-0.15	17-18	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.65	Vert(CT)	-0.22	17-18	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.55	Horz(CT)	0.03	14	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MSH								
											Weight: 135 lb	FT = 20%F, 11%E

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

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

**REACTIONS** (size) 14=0-3-8, 20=0-3-8, 23=0-3-8  
Max Uplift 23=-306 (LC 4)  
Max Grav 14=608 (LC 7), 20=1406 (LC 1), 23=99 (LC 3)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-23=-89/0, 13-14=-70/0, 1-2=-4/0, 2-3=-26/694, 3-4=0/1536, 4-5=0/1536, 5-6=-923/0, 6-7=-923/0, 7-9=-1858/0, 9-10=-1858/0, 10-11=-1627/0, 11-12=-1627/0, 12-13=-3/0  
BOT CHORD 22-23=-694/26, 21-22=-694/26, 20-21=-694/26, 18-20=-160/0, 17-18=0/1557, 16-17=0/1858, 15-16=0/1858, 14-15=0/1004  
WEBS 4-20=-171/0, 3-20=-1110/0, 2-23=-25/781, 2-22=-252/0, 3-21=0/272, 5-20=-1568/0, 12-14=-1130/0, 5-18=0/1161, 12-15=0/707, 6-18=-168/0, 11-15=-199/0, 7-18=-731/0, 10-15=-396/11, 7-17=0/461, 9-17=-133/0, 10-16=-70/56

**NOTES**  
1) Unbalanced floor live loads have been considered for this design.  
2) All plates are 1.5x3 MT20 unless otherwise indicated.  
3) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 23. This connection is for uplift only and does not consider lateral forces.

4) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.  
5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.  
6) CAUTION, Do not erect truss backwards.

**LOAD CASE(S)** Standard



April 1, 2024

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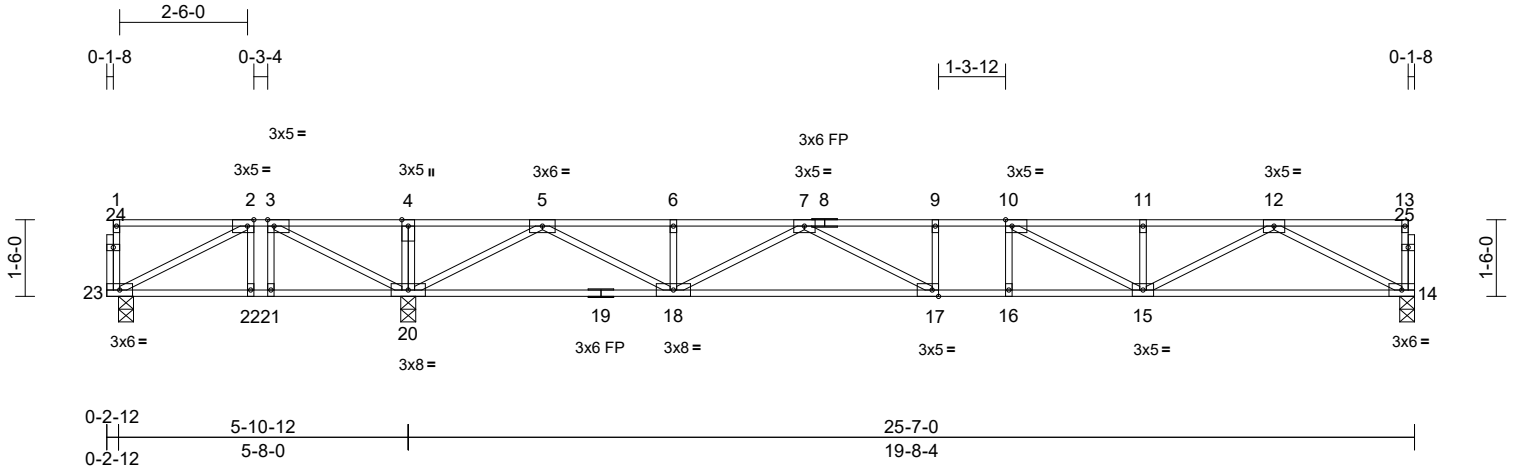
818 Soundside Road  
Edenton, NC 27932

Job 24030159-B	Truss F12	Truss Type Floor	Qty 5	Ply 1	67 Farm at Neills Creek-2nd Floor-Callaway 1 COP BR4 I64576609 Job Reference (optional)
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Carter Components (Sanford, NC), Sanford, NC - 27332,

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Fri Mar 29 10:49:49  
ID:T5yufnWlxhLFMwBxfB2nn9yyBzO-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:45.1

Plate Offsets (X, Y): [2:0-1-8,Edge], [3:0-1-8,Edge], [10:0-1-8,Edge], [17:0-1-8,Edge]

Loading	(psf)	Spacing	1-4-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.77	Vert(LL)	-0.15	17-18	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.65	Vert(CT)	-0.22	17-18	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.55	Horz(CT)	0.03	14	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MSH							Weight: 135 lb	FT = 20%F, 11%E

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

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

**REACTIONS** (size) 14=0-3-8, 20=0-3-8, 23=0-3-8  
Max Uplift 23=-306 (LC 4)  
Max Grav 14=608 (LC 7), 20=1406 (LC 1), 23=99 (LC 3)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-23=-89/0, 13-14=-70/0, 1-2=-4/0, 2-3=-26/694, 3-4=0/1536, 4-5=0/1536, 5-6=-923/0, 6-7=-923/0, 7-9=-1858/0, 9-10=-1858/0, 10-11=-1627/0, 11-12=-1627/0, 12-13=-3/0  
BOT CHORD 22-23=-694/26, 21-22=-694/26, 20-21=-694/26, 18-20=-160/0, 17-18=0/1557, 16-17=0/1858, 15-16=0/1858, 14-15=0/1004  
WEBS 4-20=-171/0, 3-20=-1110/0, 2-23=-25/781, 2-22=-252/0, 3-21=0/272, 5-20=-1568/0, 12-14=-1130/0, 5-18=0/1161, 12-15=0/707, 6-18=-168/0, 11-15=-199/0, 7-18=-731/0, 10-15=-396/11, 7-17=0/461, 9-17=-133/0, 10-16=-70/56

**NOTES**  
1) Unbalanced floor live loads have been considered for this design.  
2) All plates are 1.5x3 MT20 unless otherwise indicated.  
3) One RT8A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 23. This connection is for uplift only and does not consider lateral forces.

4) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.  
5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.  
6) CAUTION, Do not erect truss backwards.

**LOAD CASE(S)** Standard



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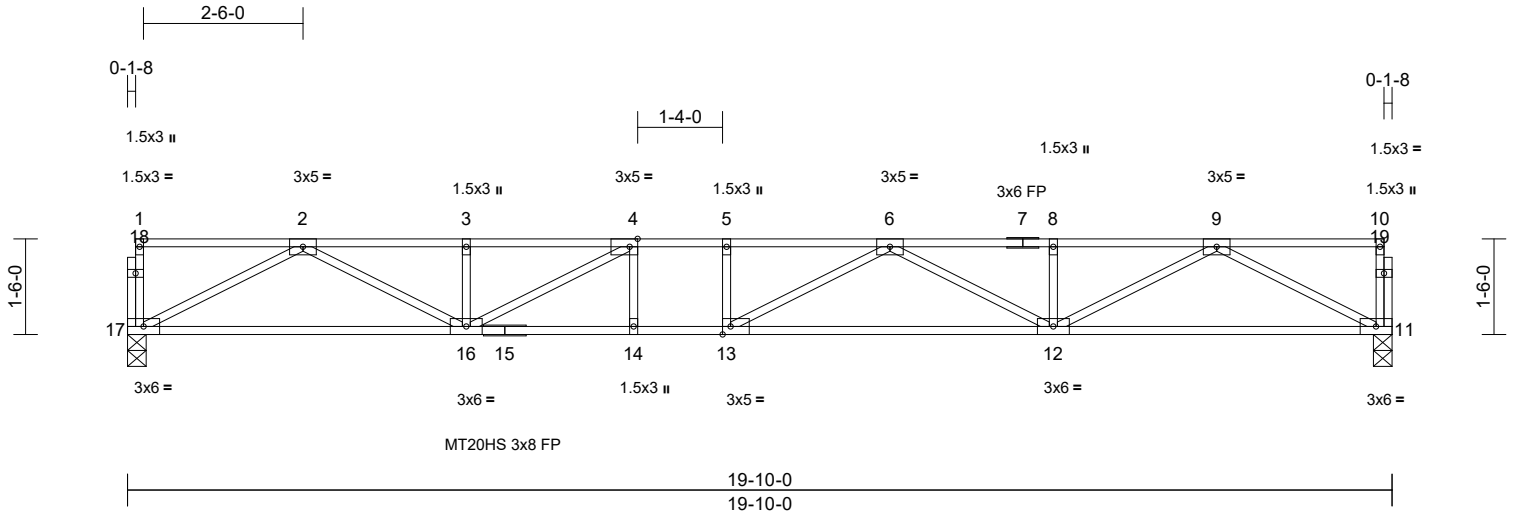


Job 24030159-B	Truss F13	Truss Type Floor	Qty 3	Ply 1	67 Farm at Neills Creek-2nd Floor-Callaway 1 COP BR4 I64576610 Job Reference (optional)
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Carter Components (Sanford, NC), Sanford, NC - 27332,

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Fri Mar 29 10:49:49  
ID:MTBPV9Zo?wshrYVlu07jy?yyBzK-RfC?PsB70Hq3NSgPqnL8w3ulTXbGkWRcDoi7J4zJC?f

Page: 1



Scale = 1:36.1

Plate Offsets (X, Y): [4:0-1-8,Edge], [13:0-1-8,Edge]

Loading	(psf)	Spacing	1-4-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.61	Vert(LL)	-0.26	12-13	>907	480	MT20HS	187/143
TCDL	10.0	Lumber DOL	1.00	BC	0.88	Vert(CT)	-0.37	12-13	>631	360	MT20	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.44	Horz(CT)	0.06	11	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MSH							Weight: 102 lb	FT = 20%F, 11%E

**LUMBER**

- TOP CHORD 2x4 SP No.2(flat)
- BOT CHORD 2x4 SP No.2(flat)
- WEBS 2x4 SP No.3(flat)
- OTHERS 2x4 SP No.3(flat)

**BRACING**

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

**REACTIONS** (size) 11=0-3-8, 17=0-3-8  
Max Grav 11=714 (LC 1), 17=714 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-17=-69/0, 10-11=-68/0, 1-2=-3/0, 2-3=-2013/0, 3-4=-2013/0, 4-5=-2518/0, 5-6=-2518/0, 6-8=-2025/0, 8-9=-2025/0, 9-10=-3/0  
BOT CHORD 16-17=0/1206, 14-16=0/2518, 13-14=0/2518, 12-13=0/2464, 11-12=0/1210  
WEBS 9-11=-1363/0, 2-17=-1357/0, 9-12=0/924, 2-16=0/916, 8-12=-155/0, 3-16=-187/16, 6-12=-498/0, 4-16=-684/0, 6-13=-166/325, 4-14=-39/113, 5-13=-95/11

**NOTES**

- Unbalanced floor live loads have been considered for this design.
- All plates are MT20 plates unless otherwise indicated.
- All plates are 1.5x3 MT20 unless otherwise indicated.
- 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.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

**LOAD CASE(S)** Standard



April 1, 2024

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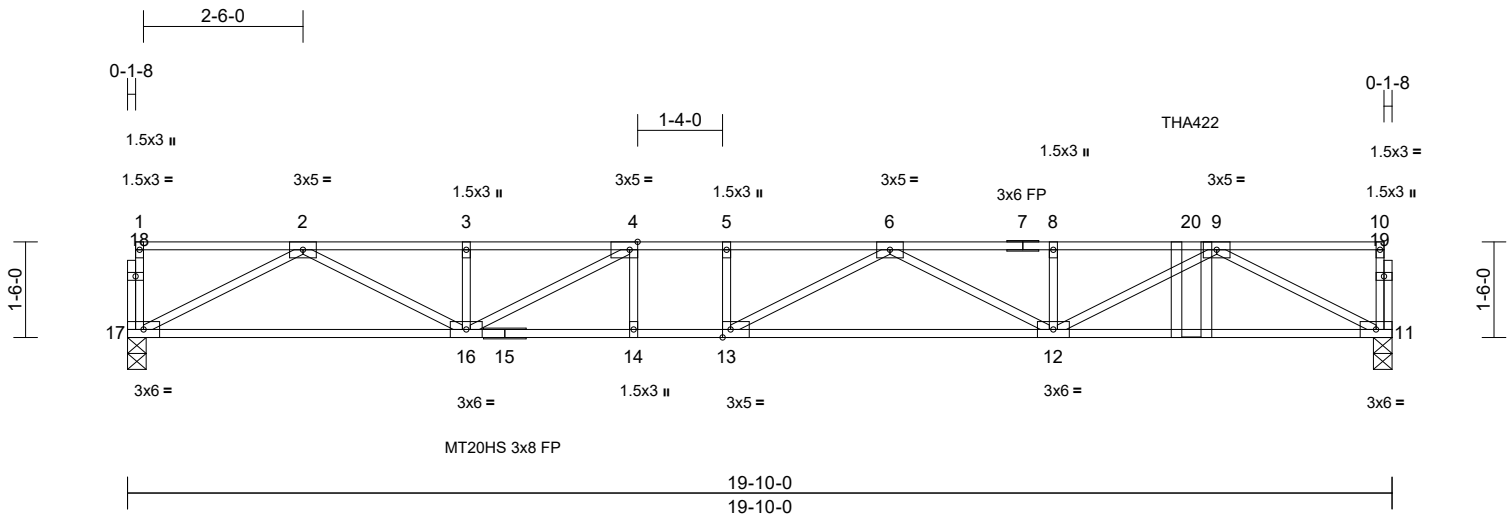
818 Soundside Road  
Edenton, NC 27932

Job 24030159-B	Truss F14	Truss Type Floor Girder	Qty 1	Ply 1	67 Farm at Neills Creek-2nd Floor-Callaway 1 COP BR4 I64576611 Job Reference (optional)
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Carter Components (Sanford, NC), Sanford, NC - 27332,

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Fri Mar 29 10:49:49  
ID:nQgEN7t\_Flojel1p1wXHf3yyBwM-RfC?PsB70Hq3NSgPqnL8w3uTXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:36.1

Plate Offsets (X, Y): [4:0-1-8,Edge], [13:0-1-8,Edge]

Loading	(psf)	Spacing	1-4-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.73	Vert(LL)	-0.26	12-13	>889	480	MT20HS	187/143
TCDL	10.0	Lumber DOL	1.00	BC	0.99	Vert(CT)	-0.38	12-13	>622	360	MT20	244/190
BCLL	0.0	Rep Stress Incr	NO	WB	0.44	Horz(CT)	0.06	11	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MSH							Weight: 102 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP No.2(flat)  
BOT CHORD 2x4 SP No.2(flat)  
WEBS 2x4 SP No.3(flat)  
OTHERS 2x4 SP No.3(flat)

#### BRACING

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

REACTIONS (size) 11=0-3-8, 17=0-3-8

Max Grav 11=716 (LC 1), 17=714 (LC 1)

#### FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-17=-69/0, 10-11=-68/0, 1-2=-3/0,  
2-3=-2014/0, 3-4=-2014/0, 4-5=-2520/0,  
5-6=-2520/0, 6-8=-2029/0, 8-9=-2029/0,  
9-10=-3/0

BOT CHORD 16-17=0/1206, 14-16=0/2520, 13-14=0/2520,  
12-13=0/2466, 11-12=0/1214

WEBS 9-11=-1367/0, 2-17=-1358/0, 9-12=0/924,  
2-16=0/917, 8-12=-156/0, 3-16=-186/16,  
6-12=-497/0, 4-16=-694/0, 6-13=-175/316,  
4-14=-37/116, 5-13=-92/13

#### NOTES

- Unbalanced floor live loads have been considered for this design.
- All plates are MT20 unless otherwise indicated.
- All plates are 1.5x3 MT20 unless otherwise indicated.
- 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.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

- Use Simpson Strong-Tie THA422 (Single Chord Girder) or equivalent at 16-8-4 from the left end to connect truss(es) to front face of top chord.
- Fill all nail holes where hanger is in contact with lumber.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

#### LOAD CASE(S) Standard

- Dead + Floor Live (balanced): Lumber Increase=1.00,  
Plate Increase=1.00  
Uniform Loads (lb/ft)  
Vert: 11-17=-7, 1-10=-67  
Concentrated Loads (lb)  
Vert: 20=-2 (F)



April 1, 2024

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ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

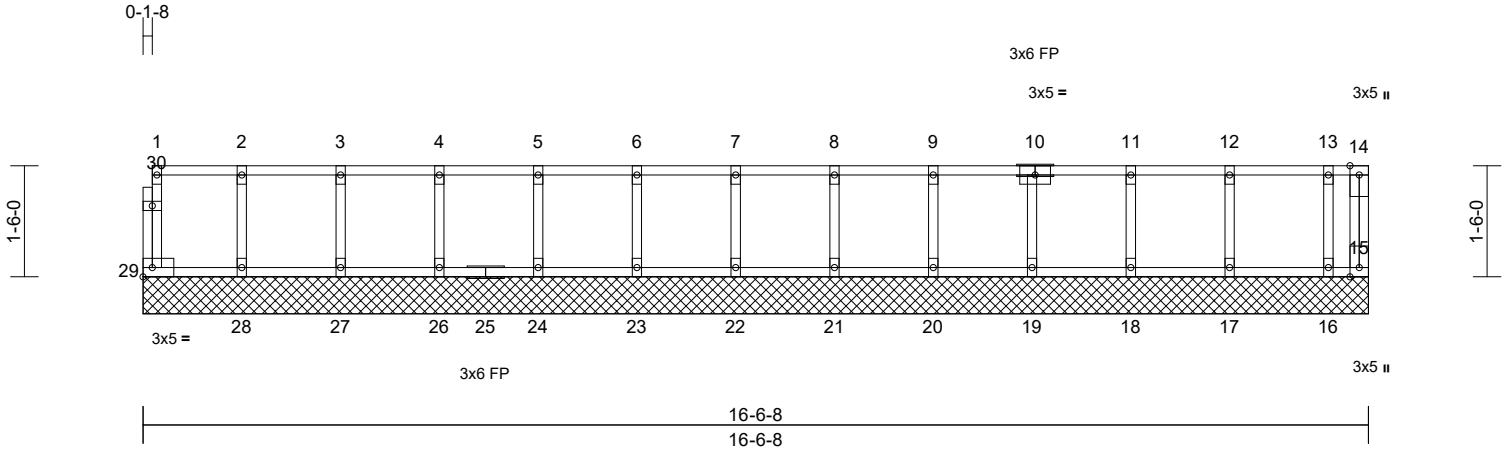
818 Soundside Road  
Edenton, NC 27932

Job 24030159-B	Truss FW16	Truss Type Floor Supported Gable	Qty 1	Ply 1	67 Farm at Neills Creek-2nd Floor-Callaway 1 COP BR4 I64576612 Job Reference (optional)
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Carter Components (Sanford, NC), Sanford, NC - 27332,

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Fri Mar 29 10:49:49  
ID:ca1VeAxlR8YtMgUzNBehuKyyBwG-RfC?PsB70Hq3NSgPqnL8w3ulTXbGkWrCDoi7J4zJC?F

Page: 1



Scale = 1:31.1

Loading	(psf)	Spacing	1-4-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.05	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.02	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.02	Horiz(TL)	0.00	15	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MR							Weight: 78 lb	FT = 20%F, 11%E

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

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

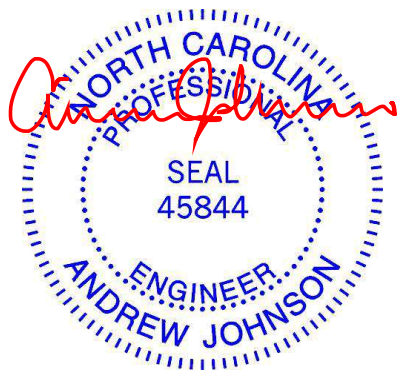
**REACTIONS** (size) 15=16-6-8, 16=16-6-8, 17=16-6-8, 18=16-6-8, 19=16-6-8, 20=16-6-8, 21=16-6-8, 22=16-6-8, 23=16-6-8, 24=16-6-8, 26=16-6-8, 27=16-6-8, 28=16-6-8, 29=16-6-8  
Max Grav 15=16 (LC 1), 16=60 (LC 1), 17=103 (LC 1), 18=95 (LC 1), 19=98 (LC 1), 20=100 (LC 1), 21=97 (LC 1), 22=98 (LC 1), 23=98 (LC 1), 24=98 (LC 1), 26=98 (LC 1), 27=98 (LC 1), 28=99 (LC 1), 29=34 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-29=-32/0, 14-15=-7/0, 1-2=-3/0, 2-3=-3/0, 3-4=-3/0, 4-5=-3/0, 5-6=-3/0, 6-7=-3/0, 7-8=-3/0, 8-9=-3/0, 9-11=-5/0, 11-12=-5/0, 12-13=-5/0, 13-14=-5/0  
BOT CHORD 28-29=0/3, 27-28=0/3, 26-27=0/3, 24-26=0/3, 23-24=0/3, 22-23=0/3, 21-22=0/3, 20-21=0/3, 19-20=0/3, 18-19=0/5, 17-18=0/5, 16-17=0/5, 15-16=0/5  
WEBS 2-28=-89/0, 3-27=-89/0, 4-26=-89/0, 5-24=-89/0, 6-23=-89/0, 7-22=-89/0, 8-21=-88/0, 9-20=-91/0, 10-19=-89/0, 11-18=-86/0, 12-17=-93/0, 13-16=-63/0

**NOTES**  
1) All plates are 1.5x3 MT20 unless otherwise indicated.  
2) Gable requires continuous bottom chord bearing.

- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 1-4-0 oc.
- 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.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- CAUTION, Do not erect truss backwards.

**LOAD CASE(S)** Standard



April 1, 2024

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.**  
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)

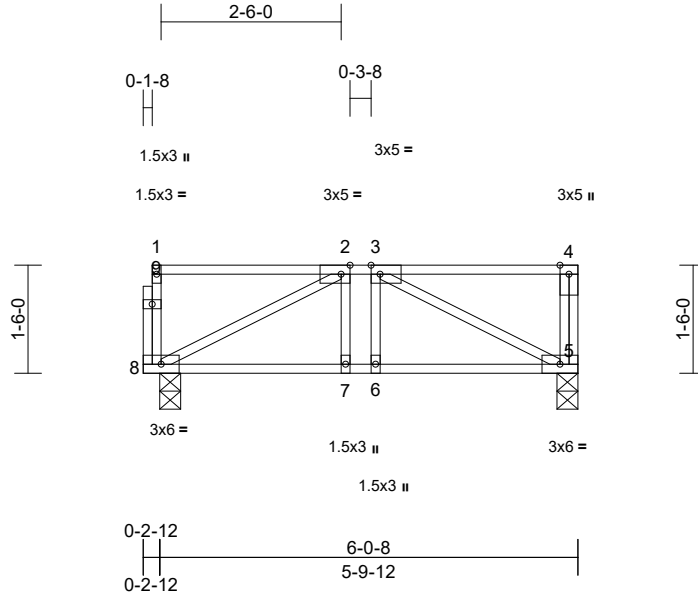
ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate  
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	67 Farm at Neills Creek-2nd Floor-Callaway 1 COP BR4 I64576613
24030159-B	F15	Floor	1	1	Job Reference (optional)

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

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Fri Mar 29 10:49:49  
ID:3ooBbah4e?6G24GDU7I3M6yyBzA-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWwRCoDI7J4zJC?F

Page: 1



Scale = 1:32

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

Loading	(psf)	Spacing	1-4-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.29	Vert(LL)	-0.01	5-6	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.14	Vert(CT)	-0.02	5-6	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00	5	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MSH							Weight: 37 lb	FT = 20%F, 11%E

**LUMBER**

TOP CHORD 2x4 SP No.2(flat)  
 BOT CHORD 2x4 SP No.2(flat)  
 WEBS 2x4 SP No.3(flat)  
 OTHERS 2x4 SP No.3(flat)

**BRACING**

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

**REACTIONS** (size) 5=0-3-8, 8=0-3-8  
 Max Grav 5=212 (LC 1), 8=208 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-8=-75/0, 4-5=-76/0, 1-2=-3/0, 2-3=-258/0, 3-4=0/0  
 BOT CHORD 7-8=0/258, 6-7=0/258, 5-6=0/258  
 WEBS 3-5=-290/0, 2-8=-287/0, 2-7=-58/86, 3-6=-62/82

**NOTES**

- 1) Unbalanced floor live loads have been considered for this design.
- 2) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 3) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 4) CAUTION, Do not erect truss backwards.

**LOAD CASE(S)** Standard



April 1, 2024

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

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 Edenton, NC 27932

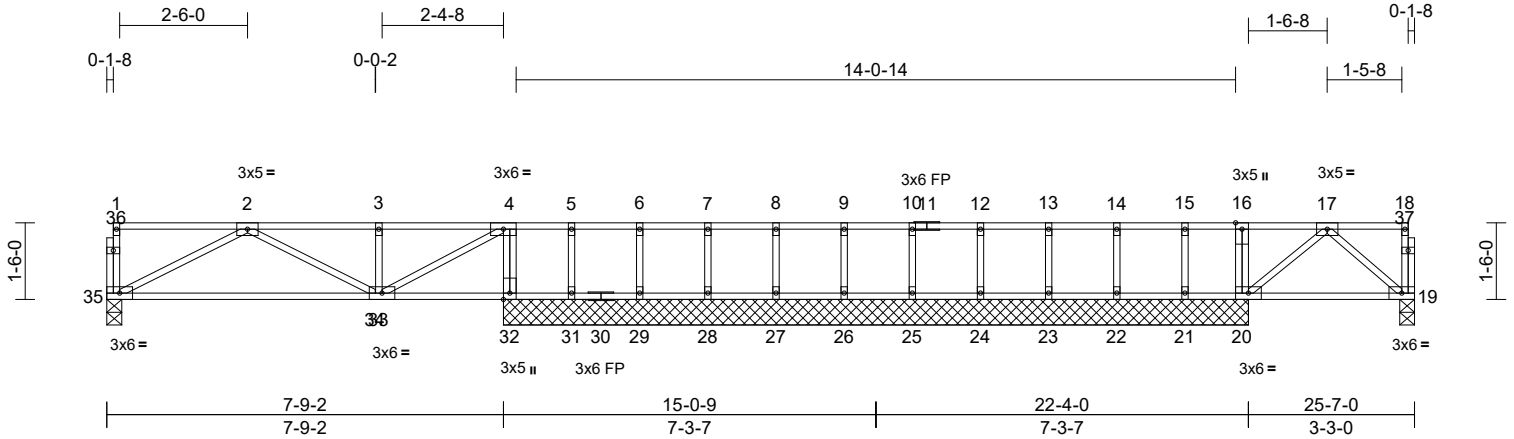
Job 24030159-B	Truss F08	Truss Type Floor	Qty 1	Ply 1	67 Farm at Neills Creek-2nd Floor-Callaway 1 COP BR4 I64576614 Job Reference (optional)
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Carter Components (Sanford, NC), Sanford, NC - 27332,

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Fri Mar 29 10:49:48

Page: 1

ID:Px0oyr7DU5JnX0INnSTHUPpyBzu-RfC?PsB70Hq3NSgPqnL8w3uITxbGKWrCdoi7J4zJC?F



Scale = 1:45.1

Loading	(psf)	Spacing	1-4-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.28	Vert(LL)	-0.01	34-35	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.23	Vert(CT)	-0.05	34-35	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.21	Horz(CT)	0.00	32	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MSH								

Weight: 129 lb FT = 20%F, 11%E

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

WEBS	
4-32	=-409/0, 16-20=-143/0, 5-31=-225/0,
6-29	=-229/0, 7-28=-222/0, 8-27=-223/0,
9-26	=-222/0, 10-25=-222/0, 12-24=-222/0,
13-23	=-222/0, 14-22=-226/0, 15-21=-216/0,
2-35	=-399/0, 2-34=-70/59, 3-33=-181/0,
4-33	=0/440, 17-19=-84/14, 17-20=-123/0

BRACING	
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing, Except: 10-0-0 oc bracing: 34-35,33-34.
REACTIONS (size)	19=0-3-8, 20=14-6-14, 21=14-6-14, 22=14-6-14, 23=14-6-14, 24=14-6-14, 25=14-6-14, 26=14-6-14, 27=14-6-14, 28=14-6-14, 29=14-6-14, 31=14-6-14, 32=14-6-14, 35=0-3-8
Max Grav	19=103 (LC 4), 20=244 (LC 1), 21=215 (LC 3), 22=237 (LC 7), 23=230 (LC 3), 24=232 (LC 7), 25=231 (LC 3), 26=231 (LC 7), 27=232 (LC 3), 28=231 (LC 7), 29=238 (LC 3), 31=234 (LC 7), 32=416 (LC 1), 35=268 (LC 3)

- NOTES**
- Unbalanced floor live loads have been considered for this design.
  - All plates are 1.5x3 MT20 unless otherwise indicated.
  - Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - Gable studs spaced at 1-4-0 oc.
  - 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) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
  - Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - CAUTION, Do not erect truss backwards.

FORCES	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-35=-68/0, 18-19=-40/0, 1-2=-3/0, 2-3=-342/0, 3-4=-342/0, 4-5=0/47, 5-6=0/47, 6-7=0/47, 7-8=0/47, 8-9=0/47, 9-10=0/47, 10-12=0/47, 12-13=0/47, 13-14=0/47, 14-15=0/47, 15-16=0/47, 16-17=0/47, 17-18=-2/0
BOT CHORD	34-35=0/357, 33-34=0/342, 32-33=-47/0, 31-32=-47/0, 29-31=-47/0, 28-29=-47/0, 27-28=-47/0, 26-27=-47/0, 25-26=-47/0, 24-25=-47/0, 23-24=-47/0, 22-23=-47/0, 21-22=-47/0, 20-21=-47/0, 19-20=-11/65

- LOAD CASE(S)** Standard
- Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
Uniform Loads (lb/ft)  
Vert: 19-35=-7, 1-4=-67, 4-16=-167, 16-18=-67



April 1, 2024

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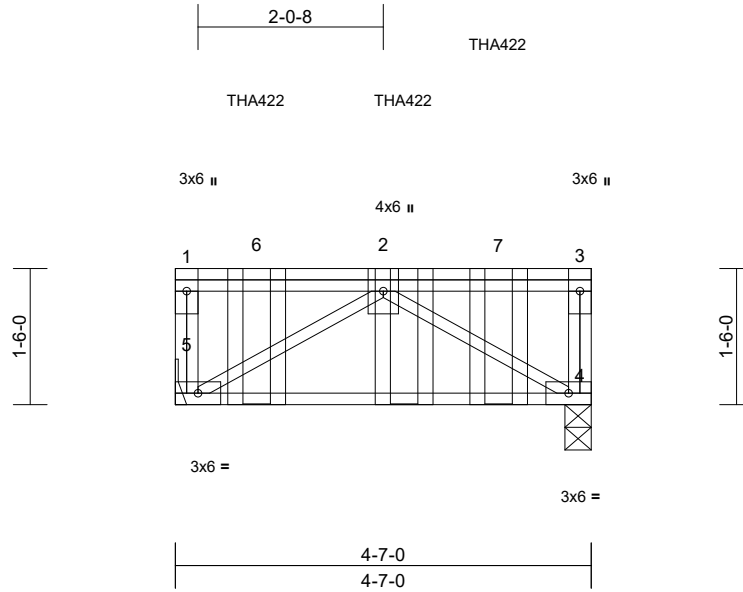
818 Soundside Road  
Edenton, NC 27932

Job 24030159-B	Truss F17	Truss Type Floor Girder	Qty 1	Ply 1	67 Farm at Neills Creek-2nd Floor-Callaway 1 COP BR4 I64576615 Job Reference (optional)
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Carter Components (Sanford, NC), Sanford, NC - 27332,

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Fri Mar 29 10:49:49  
ID:I3uRdHC2WCX9ih2UVfa8bAyyByV-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWRcDoi7J4zJC?F

Page: 1



Scale = 1:25.4

Loading	(psf)	Spacing	1-4-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.74	Vert(LL)	n/a	-	n/a	999	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.52	Vert(CT)	-0.04	4-5	>999	360	
BCLL	0.0	Rep Stress Incr	NO	WB	0.41	Horz(CT)	0.01	4	n/a	n/a	
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MP							
										Weight: 34 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP No.2(flat)  
BOT CHORD 2x4 SP No.2(flat)  
WEBS 2x4 SP No.3(flat)

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 4-7-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 4=0-3-8, 5= Mechanical  
Max Grav 4=1233 (LC 1), 5=1275 (LC 1)

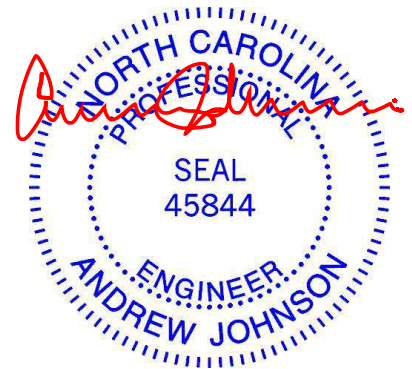
**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-5=-429/0, 3-4=-387/0, 1-2=0/0, 2-3=0/0  
BOT CHORD 4-5=0/1372  
WEBS 2-4=-1605/0, 2-5=-1605/0

#### NOTES

- 1) Refer to girder(s) for truss to truss connections.
- 2) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 3) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 4) Use Simpson Strong-Tie THA422 (6-16d Girder, 6-10d Truss) or equivalent spaced at 1-7-8 oc max. starting at 0-10-12 from the left end to 3-6-12 to connect truss(es) to back face of top chord.
- 5) Fill all nail holes where hanger is in contact with lumber.
- 6) 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 + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
Uniform Loads (lb/ft)  
Vert: 4-5=-7, 1-3=-67  
Concentrated Loads (lb)  
Vert: 2=-730 (B), 6=-730 (B), 7=-730 (B)



April 1, 2024

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

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



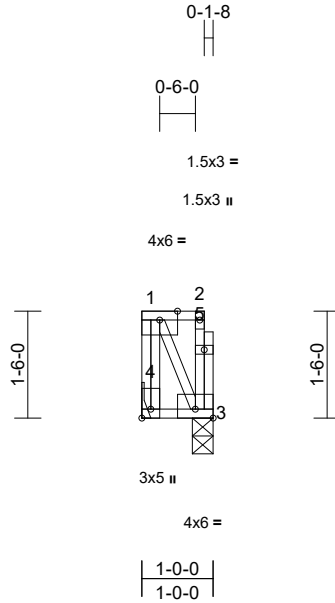
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	67 Farm at Neills Creek-2nd Floor-Callaway 1 COP BR4 I64576616
24030159-B	F18	Floor	1	1	Job Reference (optional)

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

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Fri Mar 29 10:49:49  
ID:RSTLKPprRm9RYz8sENx6y0yyBwR-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:32.3

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

Loading	(psf)	Spacing	1-4-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.02	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.00	Vert(CT)	0.00	4	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MP							Weight: 12 lb	FT = 20%F, 11%E

**LUMBER**

TOP CHORD 2x4 SP No.2(flat)  
 BOT CHORD 2x4 SP No.2(flat)  
 WEBS 2x4 SP No.3(flat)  
 OTHERS 2x4 SP No.3(flat)

**BRACING**

TOP CHORD Structural wood sheathing directly applied or 1-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 3=0-3-8, 4= Mechanical  
 Max Grav 3=24 (LC 1), 4=27 (LC 1)

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

TOP CHORD 1-4=-25/0, 2-3=-23/0, 1-2=-1/0  
 BOT CHORD 3-4=0/0  
 WEBS 1-3=0/2

**NOTES**

- 1) Refer to girder(s) for truss to truss connections.
- 2) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 3) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 4) CAUTION, Do not erect truss backwards.

**LOAD CASE(S)** Standard



April 1, 2024

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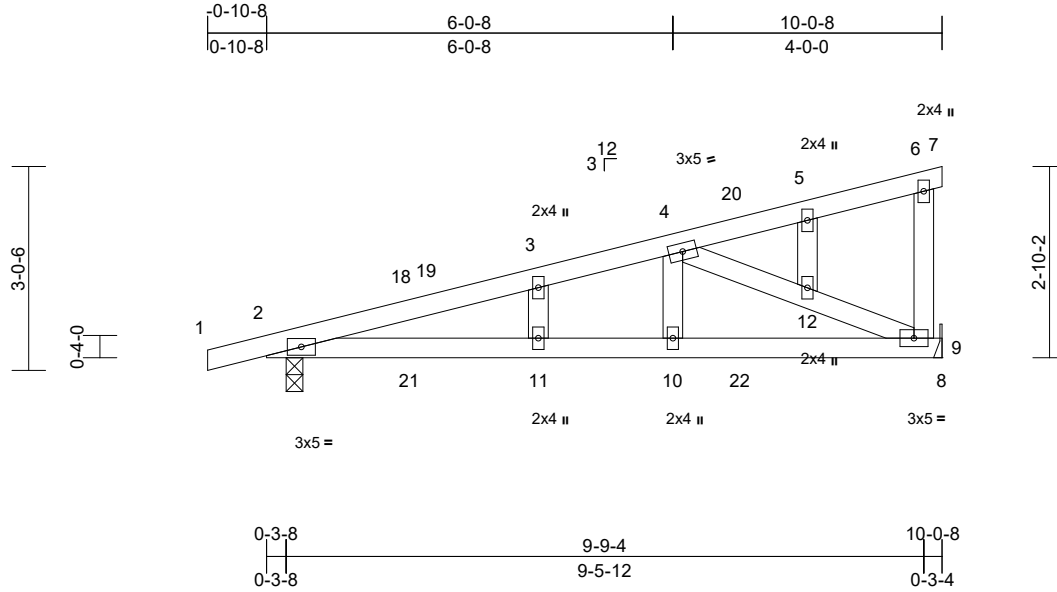
818 Soundside Road  
 Edenton, NC 27932

Job 24030159-B	Truss D02	Truss Type Monopitch	Qty 2	Ply 1	67 Farm at Neills Creek-2nd Floor-Callaway 1 COP BR4 I64576617 Job Reference (optional)
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Carter Components (Sanford, NC), Sanford, NC - 27332,

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Fri Mar 29 10:49:47  
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Page: 1



Scale = 1:34.3

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	0.33	Vert(LL)	0.08	11-17	>999	240	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.45	Vert(CT)	-0.09	11-17	>999	180	
TCDL	10.0	Rep Stress Incr	YES	WB	0.28	Horz(CT)	0.01	9	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  
OTHERS 2x4 SP No.3

**BRACING**  
TOP CHORD Structural wood sheathing directly applied or 5-8-12 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 6-1-9 oc bracing.

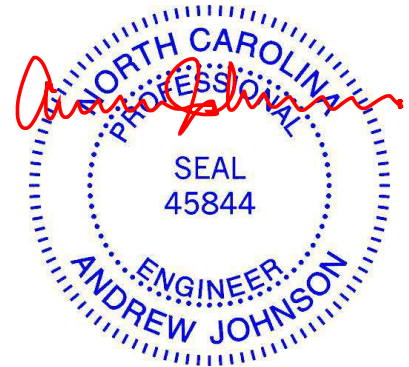
**REACTIONS** (size) 2=0-3-0, 9= Mechanical  
Max Horiz 2=101 (LC 13)  
Max Uplift 2=-180 (LC 10), 9=-148 (LC 10)  
Max Grav 2=529 (LC 21), 9=516 (LC 21)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=0/13, 2-3=-896/843, 3-4=-864/849, 4-5=-59/42, 5-6=-41/52, 6-7=-6/0, 6-9=-127/56  
BOT CHORD 2-11=-821/843, 10-11=-821/843, 9-10=-821/843, 8-9=0/0  
WEBS 4-12=-892/912, 9-12=-908/920, 5-12=-42/21, 4-10=-308/198, 3-11=-68/42

- 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 7-0-8, Exterior(2E) 7-0-8 to 10-0-8 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
  - 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) Refer to girder(s) for truss to truss connections.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 148 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.

**LOAD CASE(S)** Standard



April 1, 2024

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

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ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

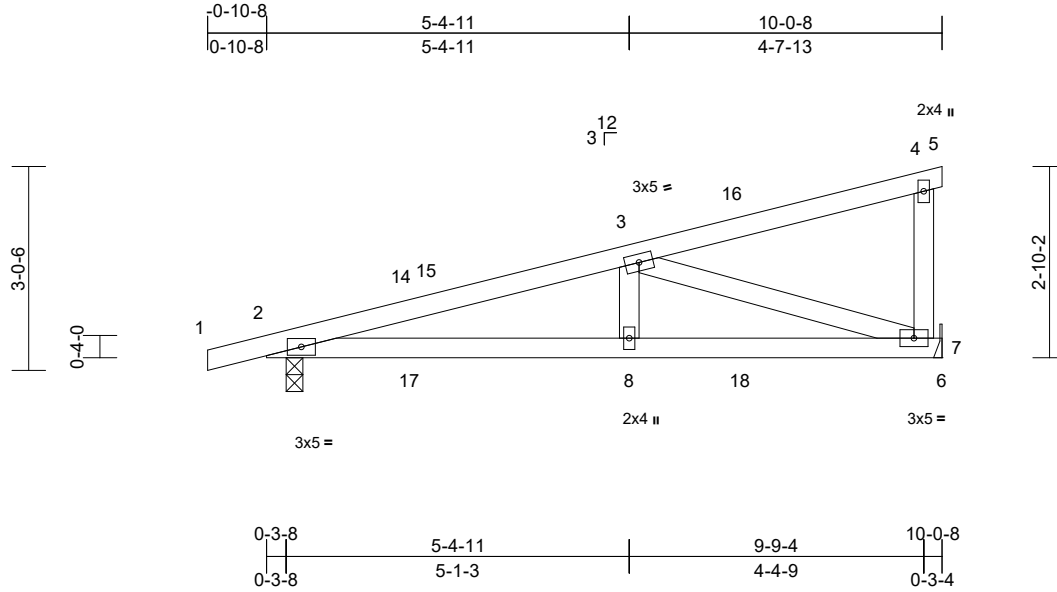


Job 24030159-B	Truss D01	Truss Type Monopitch	Qty 11	Ply 1	67 Farm at Neills Creek-2nd Floor-Callaway 1 COP BR4 I64576618 Job Reference (optional)
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Carter Components (Sanford, NC), Sanford, NC - 27332,

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Fri Mar 29 10:49:47  
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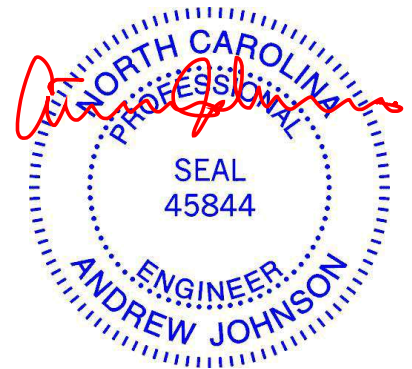


<b>Loading</b> (psf)		<b>Spacing</b> 2-0-0		<b>CSI</b>		<b>DEFL</b> in (loc) l/defl L/d		<b>PLATES</b>	<b>GRIP</b>
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.32	Vert(LL)	0.06 8-13 >999 240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.36	Vert(CT)	-0.06 8-13 >999 180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.40	Horz(CT)	0.01 7 n/a n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH					
BCDL	10.0							Weight: 43 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 5-7-12 oc purlins, except end verticals.
  - BOT CHORD Rigid ceiling directly applied or 5-11-11 oc bracing.
- REACTIONS** (size) 2=0-3-0, 7= Mechanical
- Max Horiz 2=101 (LC 13)
  - Max Uplift 2=-180 (LC 10), 7=-148 (LC 10)
  - Max Grav 2=529 (LC 21), 7=516 (LC 21)
- FORCES** (lb) - Maximum Compression/Maximum Tension
- TOP CHORD 1-2=0/13, 2-3=-995/938, 3-4=-92/69, 4-5=-6/0, 4-7=-182/93
  - BOT CHORD 2-8=-912/935, 7-8=-912/935, 6-7=0/0
  - WEBS 3-8=-287/198, 3-7=-937/954

- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 148 lb uplift at joint 7.
  - 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.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- LOAD CASE(S)** Standard

- NOTES**
- 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 7-0-8, Exterior(2E) 7-0-8 to 10-0-8 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
  - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
  - Unbalanced snow loads have been considered for this design.
  - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.



April 1, 2024

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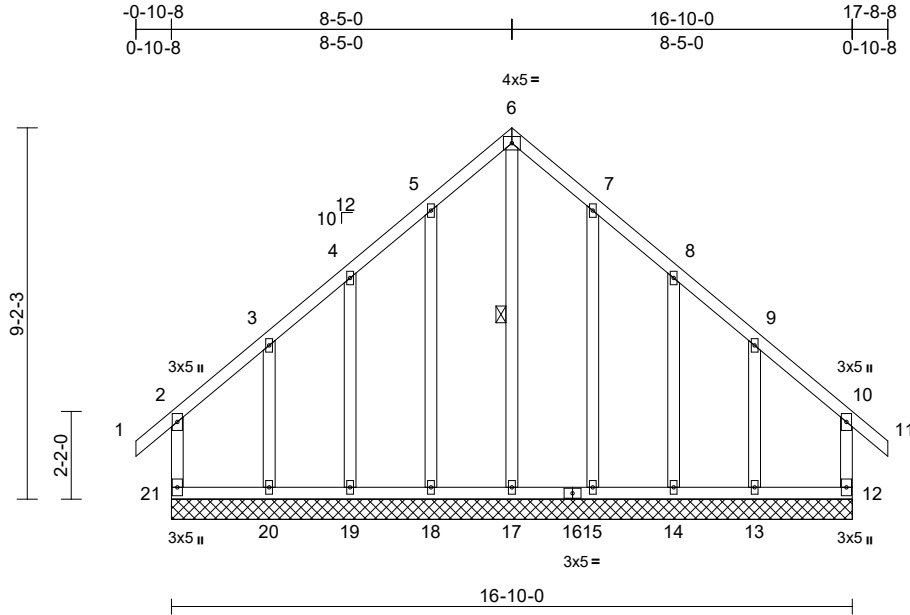
Job 24030159-B	Truss C01	Truss Type Common Supported Gable	Qty 1	Ply 1	67 Farm at Neills Creek-2nd Floor-Callaway 1 COP BR4 I64576619 Job Reference (optional)
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Carter Components (Sanford, NC), Sanford, NC - 27332,

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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	0.31	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.22	Horz(CT)	0.00	12	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MR								
BCDL	10.0											
											Weight: 127 lb	FT = 20%

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

BRACING	
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	1 Row at midpt 6-17

REACTIONS	(size)
Max Horiz	12=16-10-0, 13=16-10-0, 14=16-10-0, 15=16-10-0, 17=16-10-0, 18=16-10-0, 19=16-10-0, 20=16-10-0, 21=16-10-0
Max Uplift	21=241 (LC 12)
Max Grav	12=143 (LC 11), 13=163 (LC 10), 14=58 (LC 15), 15=70 (LC 15), 18=71 (LC 14), 19=57 (LC 14), 20=168 (LC 11), 21=150 (LC 10)
	12=236 (LC 24), 13=291 (LC 25), 14=195 (LC 22), 15=264 (LC 22), 17=283 (LC 15), 18=264 (LC 21), 19=195 (LC 21), 20=295 (LC 28), 21=241 (LC 29)

FORCES	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	2-21=-180/195, 1-2=0/38, 2-3=-153/157, 3-4=-80/230, 4-5=-113/326, 5-6=-154/402, 6-7=-154/402, 7-8=-114/324, 8-9=-75/236, 9-10=-147/151, 10-11=0/38, 10-12=-176/161
BOT CHORD	20-21=-125/118, 19-20=-125/118, 18-19=-125/118, 17-18=-125/118, 15-17=-125/118, 14-15=-125/118, 13-14=-125/118, 12-13=-125/118
WEBS	6-17=-434/103, 5-18=-225/96, 4-19=-158/126, 3-20=-194/143, 7-15=-225/98, 8-14=-158/114, 9-13=-192/156

**NOTES**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) 0-10-8 to 2-5-0, Exterior(2N) 2-5-0 to 5-5-0, Corner(3R) 5-5-0 to 11-5-0, Exterior(2N) 11-5-0 to 14-5-0, Corner(3E) 14-5-0 to 17-8-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 150 lb uplift at joint 21, 143 lb uplift at joint 12, 71 lb uplift at joint 18, 57 lb uplift at joint 19, 168 lb uplift at joint 20, 70 lb uplift at joint 15, 58 lb uplift at joint 14 and 163 lb uplift at joint 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



April 1, 2024

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

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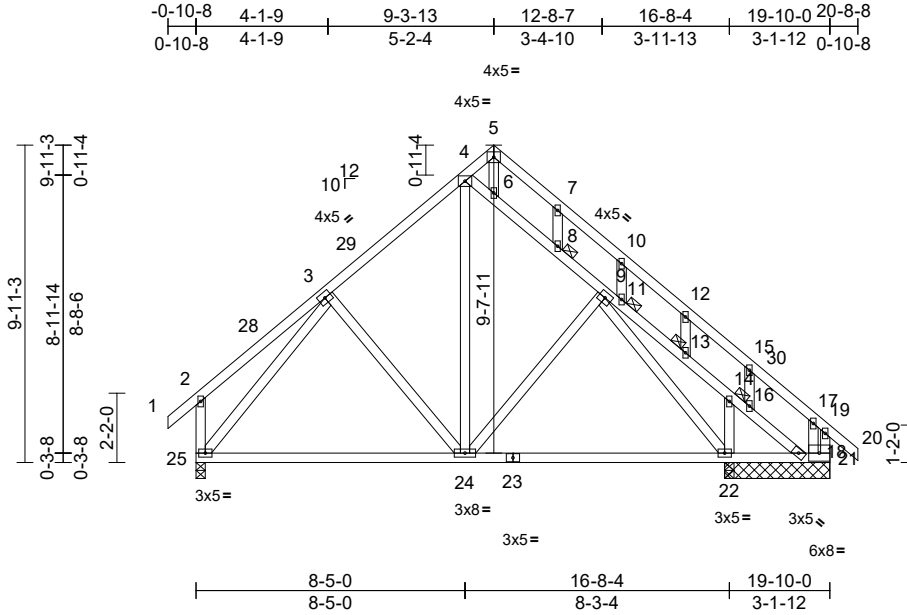
818 Soundside Road  
Edenton, NC 27932

Job 24030159-B	Truss B02	Truss Type Common	Qty 1	Ply 1	67 Farm at Neills Creek-2nd Floor-Callaway 1 COP BR4 I64576620 Job Reference (optional)
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Carter Components (Sanford, NC), Sanford, NC - 27332,

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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	0.39	Vert(LL)	-0.10	24-25	>999	24	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.59	Vert(CT)	-0.20	24-25	>982	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.50	Horz(CT)	0.01	21	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 160 lb	FT = 20%

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

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

5-3-9 oc bracing: 18-21.  
**JOINTS**  
1 Brace at Jt(s): 8, 11, 13, 16

REACTIONS	(size)	18=3-3-8, 21=3-3-8, 22=3-3-8, 25=0-3-8
Max Horiz	25=260 (LC 12)	
Max Uplift	18=-199 (LC 13), 21=-890 (LC 15), 22=-178 (LC 15), 25=-41 (LC 14)	
Max Grav	18=963 (LC 15), 21=270 (LC 29), 22=723 (LC 1), 25=760 (LC 21)	

FORCES	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=0/38, 2-3=-163/116, 3-4=-575/181, 4-5=-150/159, 5-7=-174/145, 7-10=-214/73, 10-12=-140/35, 12-15=-177/30, 15-17=-231/112, 17-19=-58/68, 19-20=0/38, 2-25=-229/168, 19-21=-99/171, 4-6=-459/142, 6-8=-462/91, 8-9=-496/118, 9-11=-46/95, 11-13=-84/63, 13-14=-112/109, 14-16=-69/40, 16-18=-94/87
BOT CHORD	24-25=-100/466, 22-24=0/424, 18-22=-37/235, 18-21=-1138/275
WEBS	5-6=-126/69, 7-8=-163/89, 10-11=-220/107, 12-13=-87/72, 15-16=-175/203, 17-21=-269/34, 14-22=-223/240, 4-24=-94/328, 3-24=-113/181, 9-24=-149/102, 3-25=-623/35, 9-22=-478/129

**NOTES**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; 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 6-3-13, Corner(3R) 6-3-13 to 12-3-13, Exterior(2N) 12-3-13 to 17-8-8, Corner(3E) 17-8-8 to 20-8-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- All plates are 2x4 MT20 unless otherwise indicated.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 890 lb uplift at joint 21.

- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at joint 25. This connection is for uplift only and does not consider lateral forces.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 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



April 1, 2024

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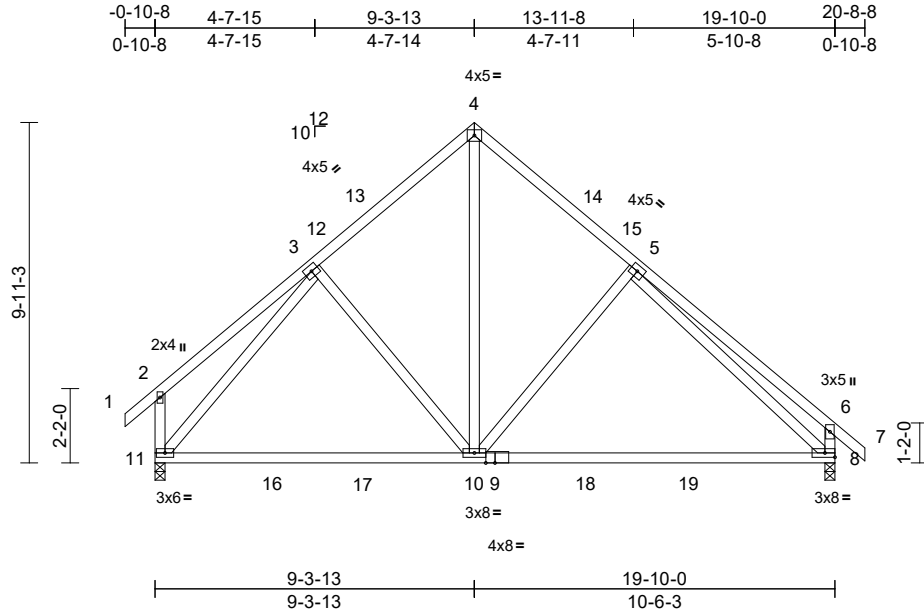
Job 24030159-B	Truss B01	Truss Type Common	Qty 2	Ply 1	67 Farm at Neills Creek-2nd Floor-Callaway 1 COP BR4 I64576621 Job Reference (optional)
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Carter Components (Sanford, NC), Sanford, NC - 27332,

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Scale = 1:67.2

Plate Offsets (X, Y): [9:0-3-3,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	0.69	Vert(LL)	-0.32	8-10	>725	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.85	Vert(CT)	-0.55	8-10	>430	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.75	Horz(CT)	0.02	8	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.1  
 WEBS 2x4 SP No.3

**BRACING**

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

**REACTIONS**

(size) 8=0-3-8, 11=0-3-8  
 Max Horiz 11=-268 (LC 12)  
 Max Uplift 8=-74 (LC 15), 11=-66 (LC 14)  
 Max Grav 8=960 (LC 6), 11=958 (LC 5)

**FORCES**

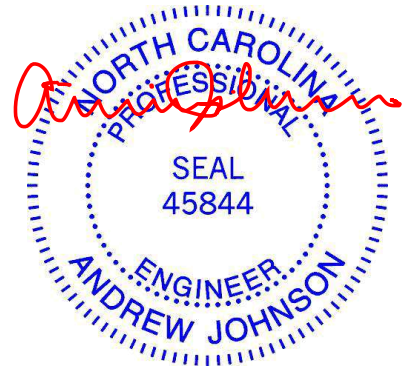
(lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=0/39, 2-3=-228/107, 3-4=-768/168,  
 4-5=-781/170, 5-6=-548/185, 6-7=0/39,  
 2-11=-284/122, 6-8=-516/189  
 BOT CHORD 10-11=-79/663, 8-10=0/650  
 WEBS 3-10=-148/204, 4-10=-102/613,  
 5-10=-278/230, 3-11=-773/53, 5-8=-589/28

**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 6-3-13, Exterior(2R) 6-3-13 to 12-3-13, Interior (1) 12-3-13 to 17-8-8, Exterior(2E) 17-8-8 to 20-8-8 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 8) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 11 and 8. 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



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

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



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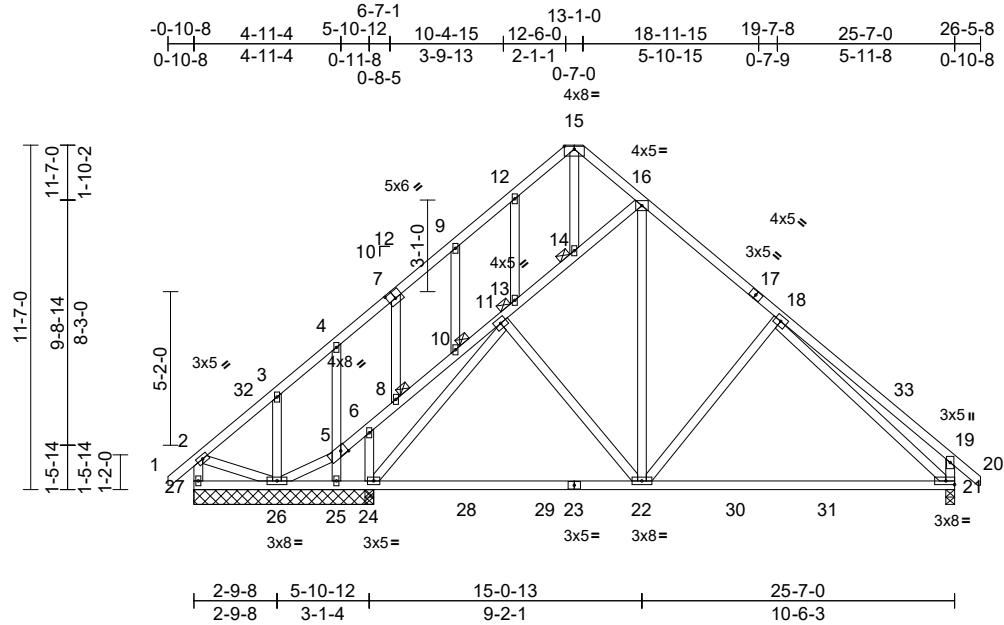
Job 24030159-B	Truss A04	Truss Type Common	Qty 1	Ply 1	67 Farm at Neills Creek-2nd Floor-Callaway 1 COP BR4 I64576622 Job Reference (optional)
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Carter Components (Sanford, NC), Sanford, NC - 27332,

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Fri Mar 29 10:49:46

Page: 1

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Scale = 1:77.5

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

Loading	(psf)	Spacing	1-11-4	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.70	Vert(LL)	-0.33	21-22	>702	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.80	Vert(CT)	-0.56	21-22	>417	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.59	Horz(CT)	0.02	21	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 211 lb	FT = 20%

LUMBER	WEBS	NOTES
TOP CHORD 2x4 SP No.2	14-15=-21/17, 12-13=-172/131, 9-10=-86/65,	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.
BOT CHORD 2x4 SP No.1	7-8=-136/98, 5-25=-60/80, 4-5=-138/103,	12) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at joint 21. This connection is for uplift only and does not consider lateral forces.
WEBS 2x4 SP No.3	3-26=-139/108, 6-24=-258/176,	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.
OTHERS 2x4 SP No.3	16-22=-107/569, 11-22=-87/114,	14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
	11-24=-613/134, 18-22=-236/221,	
	18-21=-462/0, 2-26=-174/352, 5-26=-102/127	

BRACING	REACTIONS	LOAD CASE(S)
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.	(size) 21=0-3-8, 24=6-0-8, 25=6-0-8, 26=6-0-8, 27=6-0-8	Standard
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 26-27.	Max Horiz 27=-290 (LC 12)	
JOINTS 1 Brace at Jt(s): 14, 13, 10, 8	Max Uplift 21=43 (LC 15), 24=-139 (LC 14), 25=-218 (LC 23), 26=-223 (LC 14), 27=-25 (LC 12)	
	Max Grav 21=944 (LC 25), 24=1139 (LC 24), 25=-39 (LC 34), 26=298 (LC 24), 27=350 (LC 26)	

FORCES	NOTES
(lb) - Maximum Compression/Maximum Tension	1) Unbalanced roof live loads have been considered for this design.
TOP CHORD 2-27=-312/98, 19-21=-520/239, 5-6=85/127, 6-8=-199/233, 8-10=-135/176, 10-11=-105/138, 11-13=-686/268, 13-14=-629/191, 14-16=-631/203, 1-2=0/36, 2-3=-372/163, 3-4=-283/113, 4-9=-206/71, 9-12=-111/27, 12-15=-118/51, 15-16=-129/50, 16-18=-734/134, 18-19=-561/225, 19-20=0/36	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) -0-9-14 to 2-2-2, Exterior(2N) 2-2-2 to 9-9-8, Corner(3R) 9-9-8 to 15-9-8, Exterior(2N) 15-9-8 to 23-4-14, Corner(3E) 23-4-14 to 26-4-14 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
BOT CHORD 26-27=-268/282, 25-26=-75/271, 24-25=-74/257, 22-24=0/577, 21-22=0/612	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) All plates are 2x4 MT20 unless otherwise indicated.
	8) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
	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.



**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.**  
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbccomponents.com)

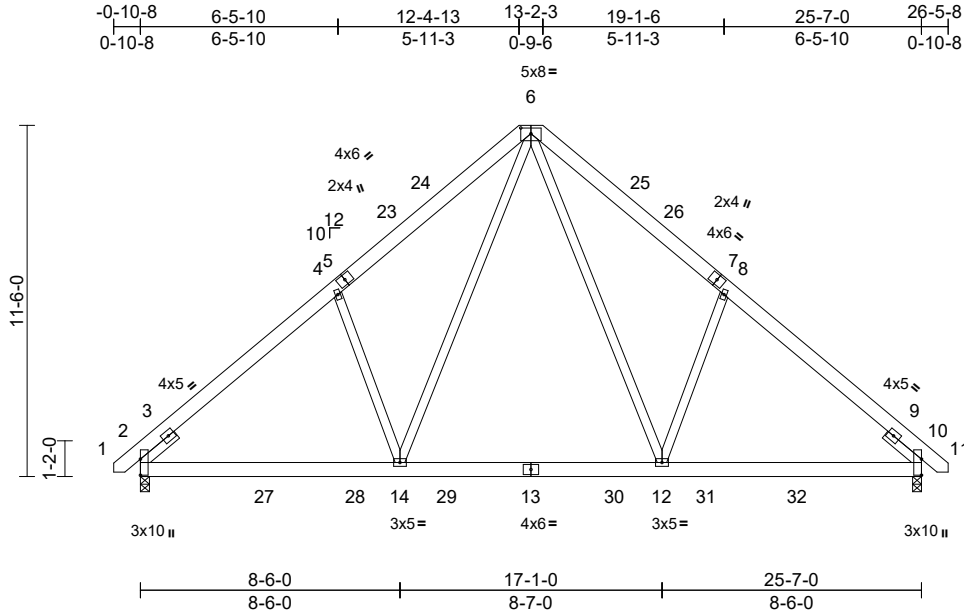
ENGINEERING BY  
**TRENCO**  
 A MiTek Affiliate  
 818 Soundside Road  
 Edenton, NC 27932

Job 24030159-B	Truss A01	Truss Type Common	Qty 17	Ply 1	67 Farm at Neills Creek-2nd Floor-Callaway 1 COP BR4 I64576623 Job Reference (optional)
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Carter Components (Sanford, NC), Sanford, NC - 27332,

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Page: 1



Scale = 1:75.5

Plate Offsets (X, Y): [6:0-4-0,0-2-4]

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	0.37	Vert(LL)	-0.08	12-14	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.43	Vert(CT)	-0.12	12-14	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.48	Horz(CT)	0.03	10	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 199 lb	FT = 20%

**LUMBER**

- TOP CHORD 2x6 SP No.2
- BOT CHORD 2x6 SP No.2
- WEBS 2x4 SP No.2 \*Except\* 12-8,14-4:2x4 SP No.3
- SLIDER Left 2x4 SP No.3 -- 1-6-0, Right 2x4 SP No.3 -- 1-6-0

**BRACING**

- TOP CHORD Structural wood sheathing directly applied or 5-8-2 oc purlins.
- BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS**

- (size) 2=0-3-8, 10=0-3-8
- Max Horiz 2=-260 (LC 12)
- Max Uplift 2=-87 (LC 14), 10=-87 (LC 15)
- Max Grav 2=1240 (LC 25), 10=1240 (LC 26)

**FORCES**

- (lb) - Maximum Compression/Maximum Tension
- TOP CHORD 1-2=0/27, 2-4=-1587/153, 4-6=-1528/270, 6-8=-1528/270, 8-10=-1587/153, 10-11=0/27
- BOT CHORD 2-14=-208/1148, 12-14=0/783, 10-12=-46/1111
- WEBS 6-12=-189/740, 8-12=-348/285, 6-14=-189/740, 4-14=-348/285

**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) -0-8-5 to 2-3-11, Interior (1) 2-3-11 to 9-9-8, Exterior(2R) 9-9-8 to 15-9-8, Interior (1) 15-9-8 to 23-3-5, Exterior(2E) 23-3-5 to 26-3-5 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 8) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 10. This connection is for uplift only and does not consider lateral forces.
  - 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



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

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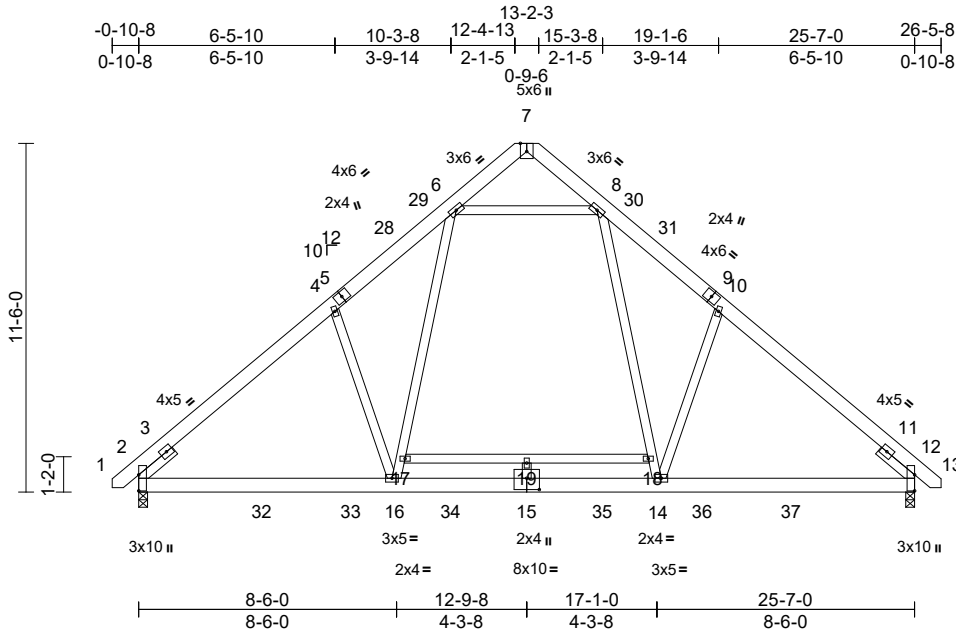
Job 24030159-B	Truss A02	Truss Type Common	Qty 8	Ply 1	67 Farm at Neills Creek-2nd Floor-Callaway 1 COP BR4 I64576624 Job Reference (optional)
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Carter Components (Sanford, NC), Sanford, NC - 27332,

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Fri Mar 29 10:49:46

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Scale = 1:76

Plate Offsets (X, Y): [7:0-3-4,Edge], [15:0-5-0,0-4-8]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.32	Vert(LL)	-0.09	16-22	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.49	Vert(CT)	-0.15	15-16	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.39	Horz(CT)	0.04	12	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 211 lb	FT = 20%

**LUMBER**

TOP CHORD 2x6 SP No.2  
 BOT CHORD 2x6 SP No.2  
 WEBS 2x4 SP No.3  
 SLIDER Left 2x4 SP No.3 -- 1-6-0, Right 2x4 SP No.3 -- 1-6-0

**BRACING**

TOP CHORD Structural wood sheathing directly applied or 5-8-12 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS**

(size) 2=0-3-8, 12=0-3-8  
 Max Horiz 2=260 (LC 13)  
 Max Grav 2=1298 (LC 24), 12=1298 (LC 25)

**FORCES**

(lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=0/27, 2-4=-1478/0, 4-6=-1371/91,  
 6-7=-196/87, 7-8=-196/87, 8-10=-1372/91,  
 10-12=-1478/0, 12-13=0/27  
 BOT CHORD 2-16=-142/1197, 14-16=0/951, 12-14=-1/1069  
 WEBS 8-18=-71/708, 14-18=-81/696,  
 10-14=-302/308, 16-17=-80/696,  
 6-17=-71/707, 4-16=-302/308, 6-8=-81/97,  
 17-19=-1/5, 18-19=-1/5, 15-19=0/28

**NOTES**

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

- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-8-5 to 2-3-11, Interior (1) 2-3-11 to 9-9-8, Exterior(2R) 9-9-8 to 15-9-8, Interior (1) 15-9-8 to 23-3-5, Exterior(2E) 23-3-5 to 26-3-5 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 200.0lb AC unit load placed on the bottom chord, 12-9-8 from left end, supported at two points, 5-0-0 apart.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 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



April 1,2024

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

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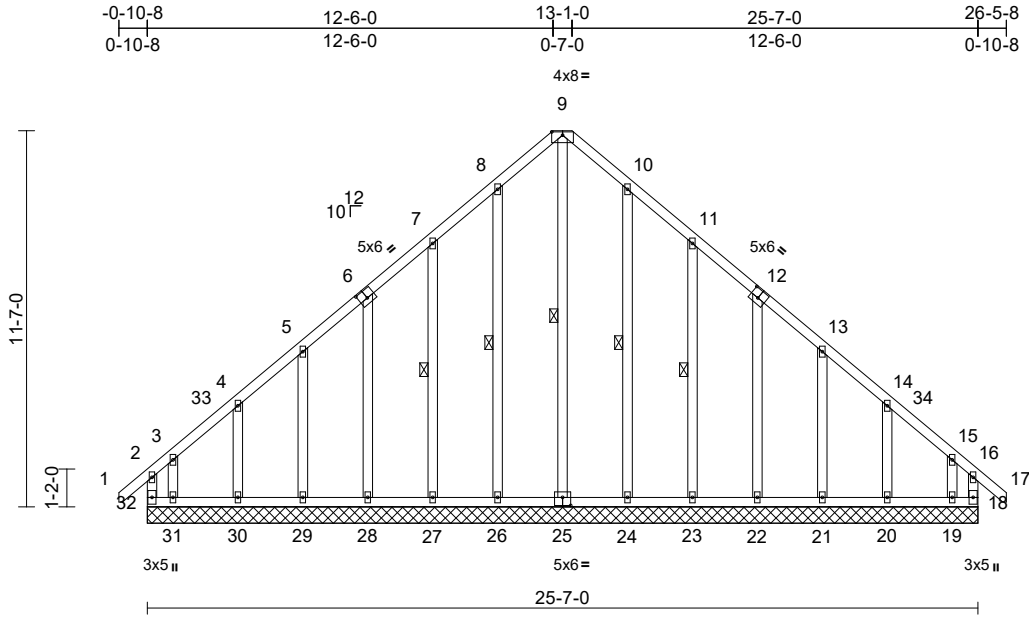
Job 24030159-B	Truss A05	Truss Type Common	Qty 1	Ply 1	67 Farm at Neills Creek-2nd Floor-Callaway 1 COP BR4 164576625 Job Reference (optional)
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Carter Components (Sanford, NC), Sanford, NC - 27332,

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Scale = 1:71

Plate Offsets (X, Y): [6:0-3-0,0-3-0], [12:0-3-0,0-3-0], [25:0-3-0,0-3-0]

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	0.26	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.23	Horz(CT)	0.01	18	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MR								
BCDL	10.0											
											Weight: 207 lb	FT = 20%

LUMBER	TOP CHORD	1-2=0/37, 2-3=-291/258, 3-4=-177/174, 4-5=-154/154, 5-7=-132/213, 7-8=-148/295, 8-9=-186/358, 9-10=-186/358, 10-11=-148/295, 11-13=-100/213, 13-14=-108/110, 14-15=-134/128, 15-16=-245/195, 16-17=0/37, 2-32=-260/194, 16-18=-206/140	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
TOP CHORD	2x4 SP No.2		5) Unbalanced snow loads have been considered for this design.
BOT CHORD	2x4 SP No.2		6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
WEBS	2x4 SP No.3		7) All plates are 2x4 MT20 unless otherwise indicated.
OTHERS	2x4 SP No.3 *Except* 25-9:2x4 SP No.2		8) Gable requires continuous bottom chord bearing.
BRACING			9) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.		10) Gable studs spaced at 2-0-0 oc.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.		11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
WEBS	1 Row at midpt 9-25, 8-26, 7-27, 10-24, 11-23		12) * 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.
REACTIONS (size)	18=25-7-0, 19=25-7-0, 20=25-7-0, 21=25-7-0, 22=25-7-0, 23=25-7-0, 24=25-7-0, 25=25-7-0, 26=25-7-0, 27=25-7-0, 28=25-7-0, 29=25-7-0, 30=25-7-0, 31=25-7-0, 32=25-7-0		
Max Horiz	32=-299 (LC 12)		
Max Uplift	18=-241 (LC 13), 19=-294 (LC 15), 20=-70 (LC 15), 21=-73 (LC 15), 22=-75 (LC 15), 23=-87 (LC 15), 24=-62 (LC 15), 26=-63 (LC 14), 27=-87 (LC 14), 28=-75 (LC 14), 29=-73 (LC 14), 30=-69 (LC 14), 31=-324 (LC 14), 32=-327 (LC 12)		
Max Grav	18=328 (LC 10), 19=285 (LC 13), 20=176 (LC 25), 21=167 (LC 25), 22=173 (LC 25), 23=209 (LC 22), 24=269 (LC 22), 25=339 (LC 15), 26=269 (LC 21), 27=209 (LC 21), 28=173 (LC 24), 29=167 (LC 24), 30=174 (LC 24), 31=344 (LC 12), 32=410 (LC 11)		
FORCES (lb) - Maximum Compression/Maximum Tension			

**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) -0-9-14 to 2-2-2, Exterior(2N) 2-2-2 to 9-9-8, Corner(3R) 9-9-8 to 15-9-8, Exterior(2N) 15-9-8 to 23-4-14, Corner(3E) 23-4-14 to 26-4-14 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.



April 1, 2024

Continued on page 2

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

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



818 Soundside Road  
Edenton, NC 27932



Job	Truss	Truss Type	Qty	Ply	67 Farm at Neills Creek-2nd Floor-Callaway 1 COP BR4 I64576625
24030159-B	A05	Common	1	1	Job Reference (optional)

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

Run: 8.73 S Mar 21 2024 Print: 8.730 S Mar 21 2024 MiTek Industries, Inc. Fri Mar 29 10:49:47

Page: 2

ID: \_qrWwZJexwYTmDiG3xJcR3zhJ9E-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

- 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 327 lb uplift at joint 32, 241 lb uplift at joint 18, 63 lb uplift at joint 26, 87 lb uplift at joint 27, 75 lb uplift at joint 28, 73 lb uplift at joint 29, 69 lb uplift at joint 30, 324 lb uplift at joint 31, 62 lb uplift at joint 24, 87 lb uplift at joint 23, 75 lb uplift at joint 22, 73 lb uplift at joint 21, 70 lb uplift at joint 20 and 294 lb uplift at joint 19.
- 14) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

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

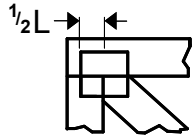
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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



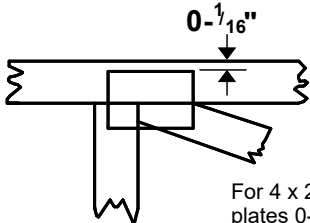
818 Soundside Road  
Edenton, NC 27932

# 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.

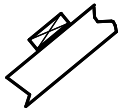
\* Plate location details available in MiTek software or upon request.

## PLATE SIZE

4 x 4

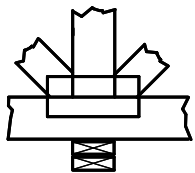
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## 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

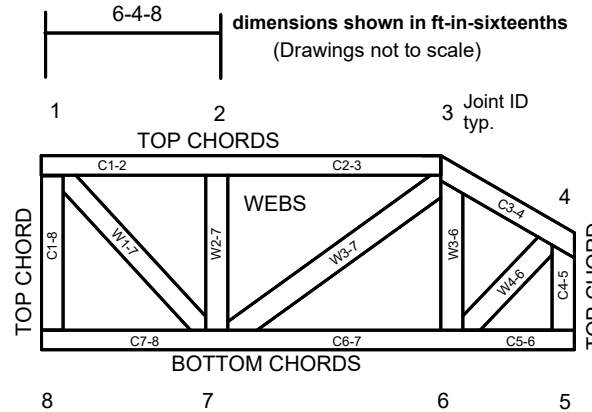


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

## 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.

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ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

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.