

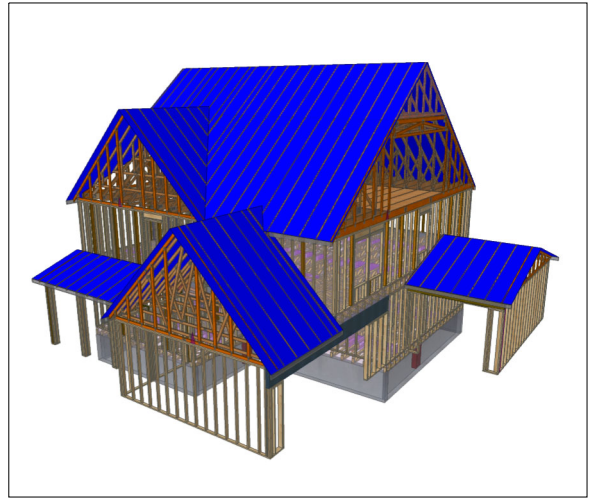


Carter Sanford Component Plant
298 Harvey Faulk Rd
Sanford, NC 27332

Phone #:919-775-1450

Builder: HH Hunt Homes Raleigh
Durham

Model: 17 Magnolia Acres
Greyson FA



THE PLACEMENT PLAN NOTES:

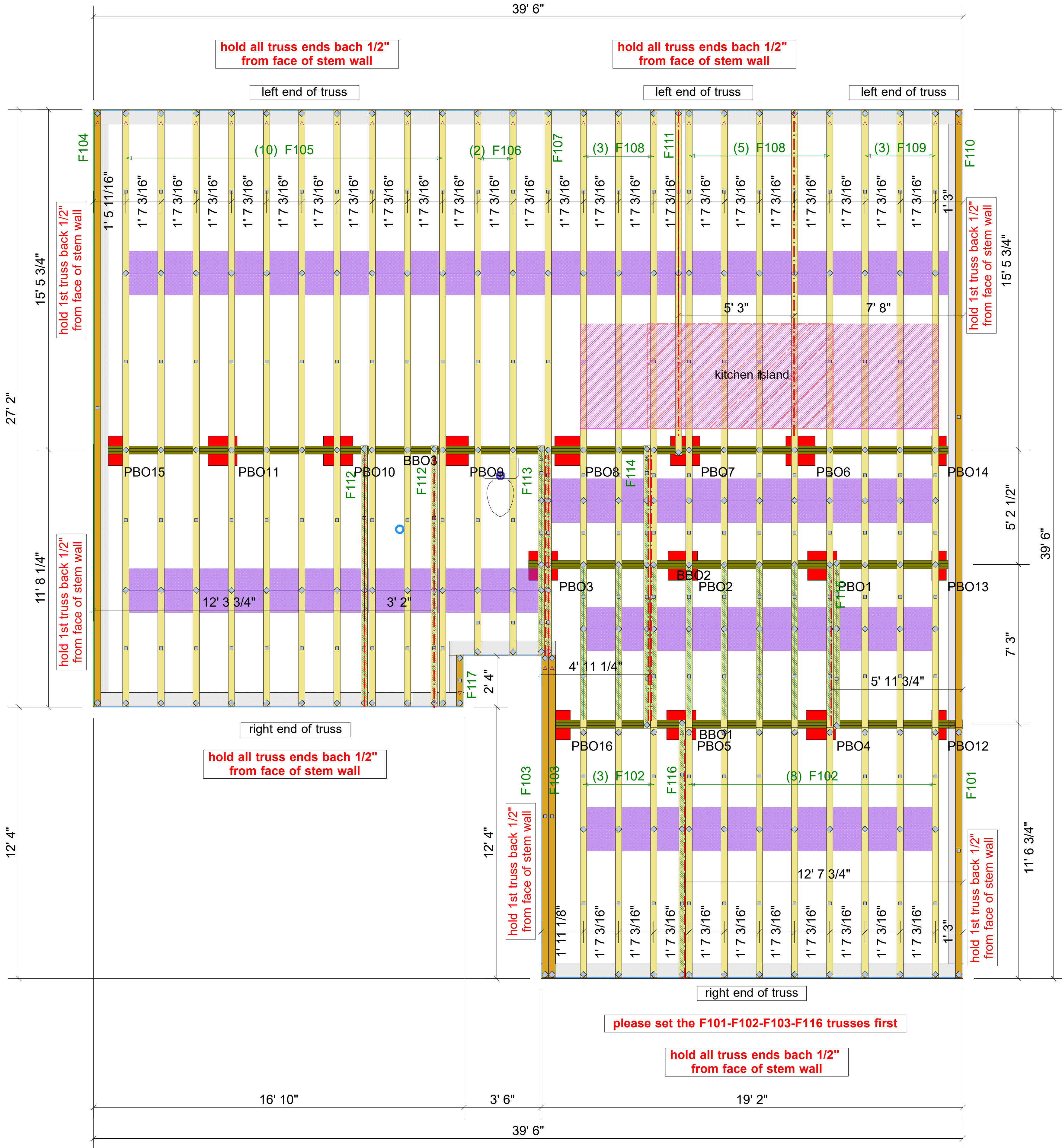
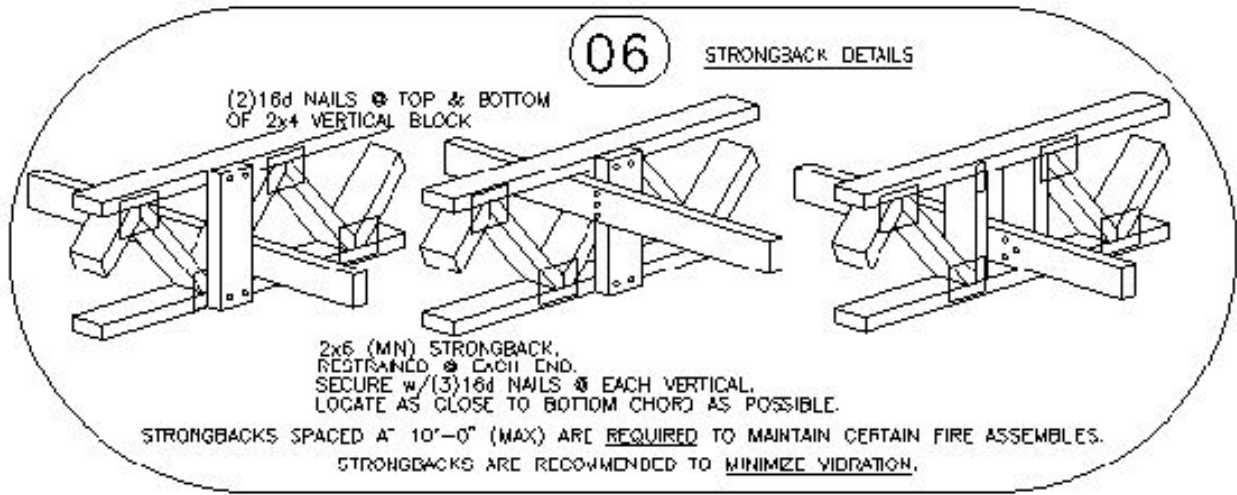
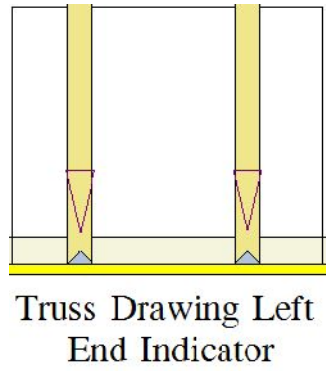
1. The Placement Plan is a diagram for truss installation. It is not an engineered drawing and has not been reviewed by an engineer. The Owner/Building Designer is responsible for obtaining an engineer's review if one is required by the local jurisdiction.
2. The responsibilities of the Owner, Contractor,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

Approved By: _____

Date: _____

General Notes: ** CUTTING OR DRILLING OF COMPONENTS SHOULD NOT BE DONE WITHOUT CONTACTING COMPONENT SUPPLIER FIRST. CUSTOMER TAKES FULL RESPONSIBILITY FOR COMPONENTS IF CUT BEFORE AUTHORIZATION. ** ALL POINT LOADS FROM ABOVE MUST BE TRANSFERRED TO BEARING FROM UNDER SIDE OF SHEATHING.

** FRAMER MUST REFER TO PLANS WHILE SETTING COMPONENTS ** DAMAGED COMPONENTS SHOULD NOT BE INSTALLED UNLESS TOLD TO BY THE COMPONENT PLANT. ** ALL BEARING POINTS MUST BE INSTALLED PRIOR TO SETTING ANY COMPONENTS.

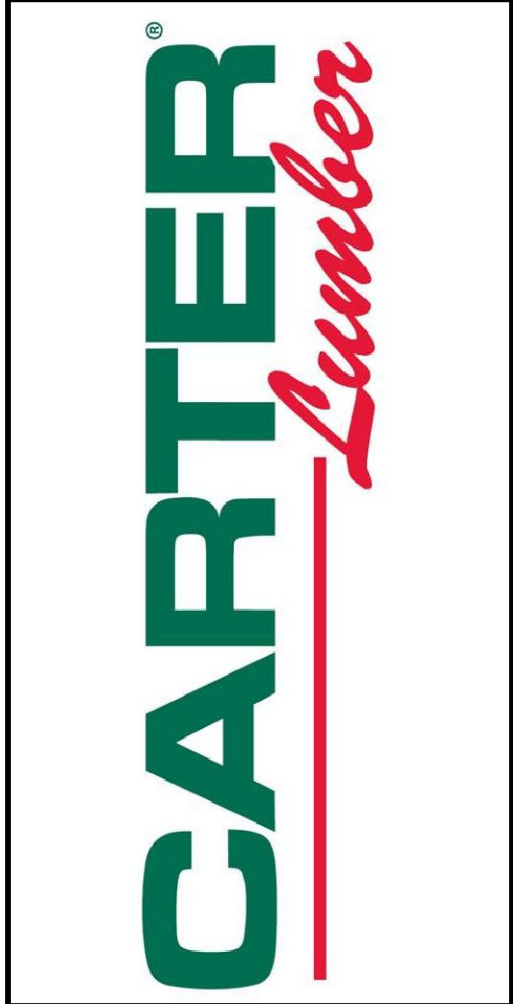


** TRIANGULAR SYMBOL NEAR END OF TRUSS INDICATES LEFT END OF TRUSS AS SHOWN ON INDIVIDUAL TRUSS DRAWINGS. ** PLUMBING DROPS NOTED ARE IN THE APPROXIMATE LOCATIONS PER PLAN. BUILDER TO VERIFY LOCATIONS BEFORE SETTING TRUSSES. ** REFER TO FINAL TRUSS ENGINEERING SHEETS FOR PLY TO PLY CONNECTIONS.

** 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
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 Trusses" available from the Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53179



HH Hunt Homes Raleigh Durham

17 Magnolia Acres
Greyson FA

FLOOR PLACEMENT PLAN

Scale: NTS

Date: 5/5/2025

Designer: Nate Donaldson

Project Number: 25040195-02

Sheet Number:

1/1

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: 25040195-02

Install 17 Magnolia Acres-Crawl-Greyson FA 3FL SP 3CG SL GRH

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

Pages or sheets covered by this seal: I73186494 thru I73186510

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

North Carolina COA: C-0844



May 5, 2025

Gilbert, Eric

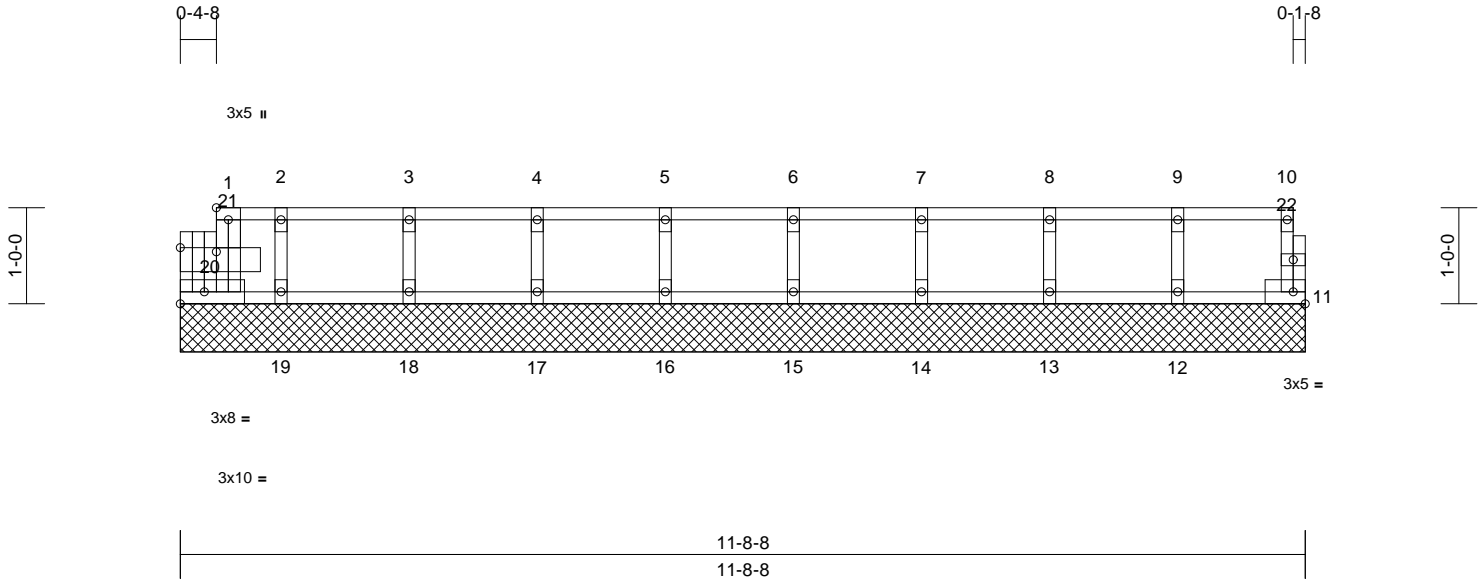
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which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

Job	Truss	Truss Type	Qty	Ply	Install 17 Magnolia Acres-Crawl-Greyson FA 3FL SP 3CG I73186494
25040195-02	F101	Floor Supported Gable	1	1	Job Reference (optional)

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu May 01 16:20:10
ID:?_TH1qR3t_61louVX7nNzTAT6-RfC?PsB70Hq3NSgPqnL8w3uTXbGKWrCDoi7J4zJC?i

Page: 1



Scale = 1:24

Plate Offsets (X, Y): [1:Edge,0-1-8], [21:0-4-8,0-0-8]

Loading	(psf)	Spacing	1-7-3	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(TL)	n/a	-	n/a	999	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	11	n/a	n/a	
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-MR							
										Weight: 50 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)

- 6) 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

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.

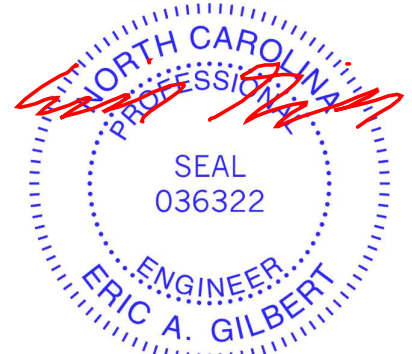
REACTIONS (size) 11=11-8-8, 12=11-8-8, 13=11-8-8, 14=11-8-8, 15=11-8-8, 16=11-8-8, 17=11-8-8, 18=11-8-8, 19=11-8-8, 20=11-8-8
Max Grav 11=42 (LC 1), 12=117 (LC 1), 13=118 (LC 1), 14=117 (LC 1), 15=117 (LC 1), 16=118 (LC 1), 17=116 (LC 1), 18=122 (LC 1), 19=89 (LC 1), 20=16 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-20=-13/0, 10-11=-39/0, 1-2=-7/0, 2-3=-7/0, 3-4=-7/0, 4-5=-7/0, 5-6=-7/0, 6-7=-7/0, 7-8=-7/0, 8-9=-7/0, 9-10=-7/0
BOT CHORD 19-20=0/7, 18-19=0/7, 17-18=0/7, 16-17=0/7, 15-16=0/7, 14-15=0/7, 13-14=0/7, 12-13=0/7, 11-12=0/7
WEBS 9-12=-105/0, 8-13=-107/0, 7-14=-106/0, 6-15=-107/0, 5-16=-107/0, 4-17=-105/0, 3-18=-111/0, 2-19=-83/0

NOTES

- All plates are 1.5x3 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 1-4-0 oc.
- All bearings are assumed to be SP No.2 .



May 5,2025

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

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

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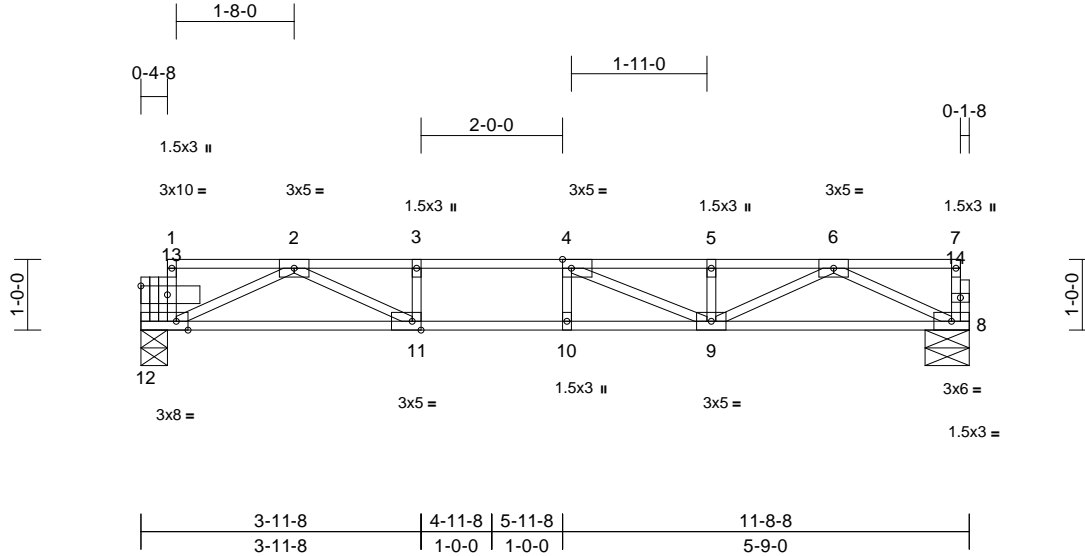
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Install 17 Magnolia Acres-Crawl-Greyson FA 3FL SP 3CG I73186495
25040195-02	F102	Floor	11	1	Job Reference (optional)

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu May 01 16:20:11
ID: ?_TH1qR3t_61louVX7nNzTAT6-RfC?PsB70Hq3NSgPqnL8w3uTXbGKWrCDoi7J4zJC?i

Page: 1



Scale = 1:32.6

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

Loading	(psf)	Spacing	1-7-3	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.58	Vert(LL)	-0.14	9-10	>989	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.77	Vert(CT)	-0.18	9-10	>762	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.34	Horz(CT)	0.02	8	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-MSH							Weight: 57 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)

Uniform Loads (lb/ft)
Vert: 8-12=-8, 1-7=-80
Concentrated Loads (lb)
Vert: 1=-223

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=0-7-8, 12=0-4-8
Max Grav 8=497 (LC 1), 12=703 (LC 1)

FORCES (lb) - Maximum Compression/Maximum
Tension

TOP CHORD 1-12=-317/0, 7-8=-60/0, 1-2=-67/0,
2-3=-1558/0, 3-4=-1558/0, 4-5=-1443/0,
5-6=-1443/0, 6-7=-4/0

BOT CHORD 11-12=0/959, 10-11=0/1558, 9-10=0/1558,
8-9=0/878

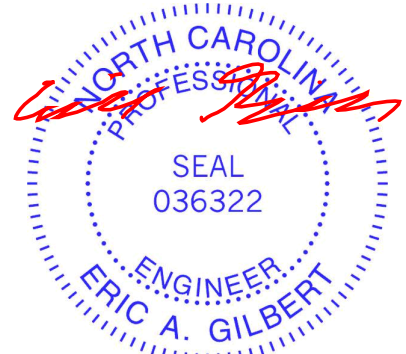
WEBS 3-11=-237/0, 4-10=-82/17, 2-12=-998/0,
2-11=0/712, 6-8=-973/0, 6-9=0/633,
5-9=-203/0, 4-9=-351/48

NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All bearings are assumed to be SP No.2 .
- 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) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 254 lb down and 50 lb up at 0-5-4 on top chord. The design/ selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

- 1) Dead + Floor Live (balanced): Lumber Increase=1.00,
Plate Increase=1.00



May 5,2025

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818 Soundside Road
Edenton, NC 27932

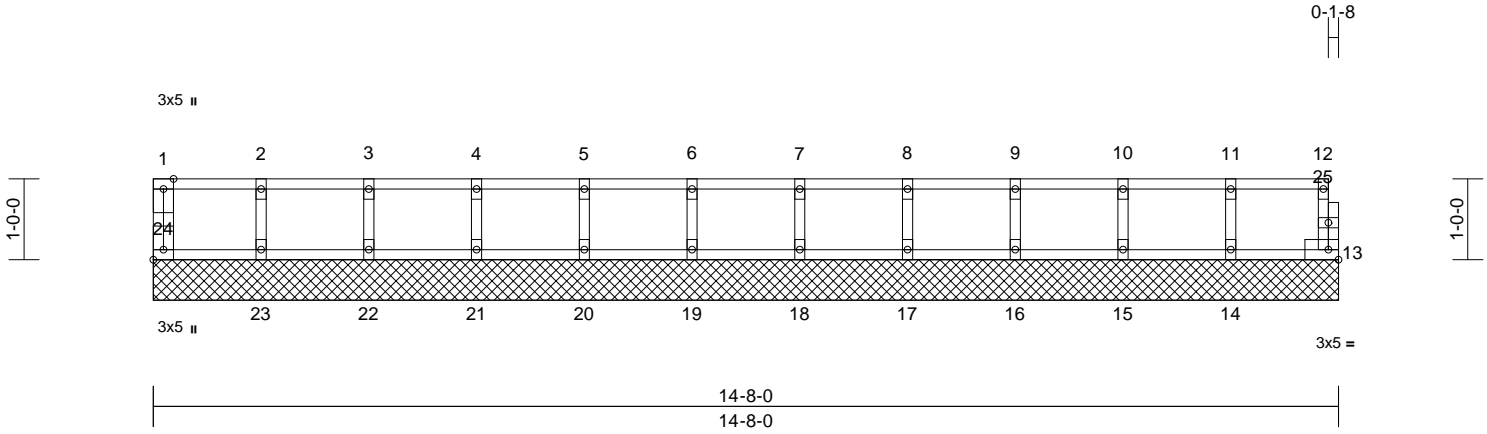
Job	Truss	Truss Type	Qty	Ply	Install 17 Magnolia Acres-Crawl-Greyson FA 3FL SP 3CG
25040195-02	F103	Floor Supported Gable	2	1	I73186496
Job Reference (optional)					

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu May 01 16:20:11

Page: 1

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Scale = 1:28.5

Plate Offsets (X, Y): [24:Edge,0-1-8]

Loading	(psf)	Spacing	1-7-3	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(TL)	n/a	-	n/a	999	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.02	Horiz(TL)	0.00	13	n/a	n/a	
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-MR							
Weight: 59 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" oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10'-0" oc bracing.

REACTIONS (size) 13=14'-8-0, 14=14'-8-0, 15=14'-8-0, 16=14'-8-0, 17=14'-8-0, 18=14'-8-0, 19=14'-8-0, 20=14'-8-0, 21=14'-8-0, 22=14'-8-0, 23=14'-8-0, 24=14'-8-0
Max Grav 13=45 (LC 1), 14=114 (LC 1), 15=118 (LC 1), 16=117 (LC 1), 17=117 (LC 1), 18=117 (LC 1), 19=117 (LC 1), 20=117 (LC 1), 21=117 (LC 1), 22=118 (LC 1), 23=114 (LC 1), 24=50 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

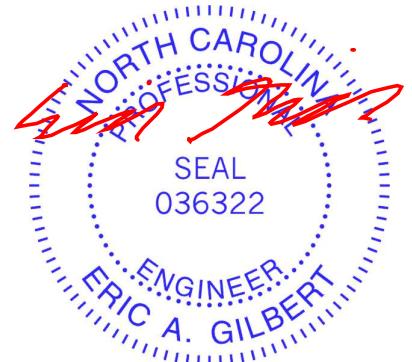
TOP CHORD 1-24=-45/0, 12-13=-41/0, 1-2=-9/0, 2-3=-9/0, 3-4=-9/0, 4-5=-9/0, 5-6=-9/0, 6-7=-9/0, 7-8=-9/0, 8-9=-9/0, 9-10=-9/0, 10-11=-9/0, 11-12=-9/0
BOT CHORD 23-24=0/9, 22-23=0/9, 21-22=0/9, 20-21=0/9, 19-20=0/9, 18-19=0/9, 17-18=0/9, 16-17=0/9, 15-16=0/9, 14-15=0/9, 13-14=0/9
WEBS 11-14=-104/0, 10-15=-107/0, 9-16=-106/0, 8-17=-107/0, 7-18=-107/0, 6-19=-107/0, 5-20=-107/0, 4-21=-106/0, 3-22=-107/0, 2-23=-104/0

NOTES

- 1) All plates are 1.5x3 MT20 unless otherwise indicated.
- 2) Gable requires continuous bottom chord bearing.
- 3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).

- 4) Gable studs spaced at 1'-4" oc.
- 5) All bearings are assumed to be SP No.2 .
- 6) Recommend 2x6 strongbacks, on edge, spaced at 10'-0" 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.
- 7) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



May 5, 2025

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ENGINEERING BY
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818 Soundside Road
Edenton, NC 27932

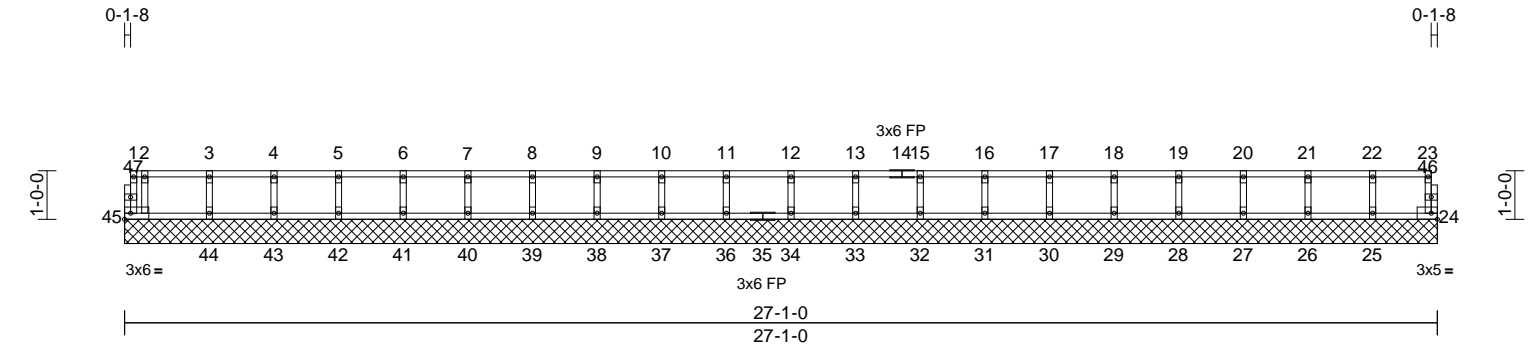
Job	Truss	Truss Type	Qty	Ply	Install 17 Magnolia Acres-Crawl-Greyson FA 3FL SP 3CG
25040195-02	F104	Floor Supported Gable	1	1	I73186497
Job Reference (optional)					

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu May 01 16:20:11

Page: 1

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Scale = 1:47.5

Loading	(psf)	Spacing	1-7-3	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.00	BC	0.02	Vert(TL)	n/a	-	n/a	999	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	24	n/a	n/a	
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-MR							Weight: 106 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.

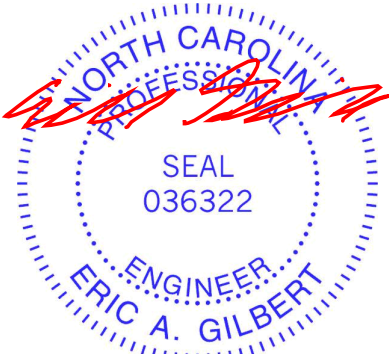
REACTIONS (size) 24=27-1-0, 25=27-1-0, 26=27-1-0, 27=27-1-0, 28=27-1-0, 29=27-1-0, 30=27-1-0, 31=27-1-0, 32=27-1-0, 33=27-1-0, 34=27-1-0, 36=27-1-0, 37=27-1-0, 38=27-1-0, 39=27-1-0, 40=27-1-0, 41=27-1-0, 42=27-1-0, 43=27-1-0, 44=27-1-0, 45=27-1-0
Max Grav 24=49 (LC 1), 25=109 (LC 1), 26=119 (LC 1), 27=117 (LC 1), 28=117 (LC 1), 29=117 (LC 1), 30=117 (LC 1), 31=117 (LC 1), 32=117 (LC 1), 33=117 (LC 1), 34=117 (LC 1), 36=117 (LC 1), 37=117 (LC 1), 38=117 (LC 1), 39=117 (LC 1), 40=117 (LC 1), 41=117 (LC 1), 42=118 (LC 1), 43=113 (LC 1), 44=131 (LC 1), 45=68 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 23-24=-43/0, 1-45=0/9, 1-2=0/1, 2-3=-14/0, 3-4=-14/0, 4-5=-14/0, 5-6=-14/0, 6-7=-14/0, 7-8=-14/0, 8-9=-14/0, 9-10=-14/0, 10-11=-14/0, 11-12=-14/0, 12-13=-14/0, 13-15=-14/0, 15-16=-14/0, 16-17=-14/0, 17-18=-14/0, 18-19=-14/0, 19-20=-14/0, 20-21=-14/0, 21-22=-14/0, 22-23=-14/0

BOT CHORD 44-45=0/14, 43-44=0/14, 42-43=0/14, 41-42=0/14, 40-41=0/14, 39-40=0/14, 38-39=0/14, 37-38=0/14, 36-37=0/14, 34-36=0/14, 33-34=0/14, 32-33=0/14, 31-32=0/14, 30-31=0/14, 29-30=0/14, 28-29=0/14, 27-28=0/14, 26-27=0/14, 25-26=0/14, 24-25=0/14
WEBS 22-25=-102/0, 21-26=-108/0, 20-27=-106/0, 19-28=-107/0, 18-29=-107/0, 17-30=-107/0, 16-31=-107/0, 15-32=-107/0, 13-33=-107/0, 12-34=-107/0, 11-36=-107/0, 10-37=-107/0, 9-38=-107/0, 8-39=-107/0, 7-40=-107/0, 6-41=-106/0, 5-42=-107/0, 4-43=-104/0, 3-44=-115/0, 2-45=-75/0

- NOTES**
- 1) All plates are 1.5x3 MT20 unless otherwise indicated.
 - 2) Gable requires continuous bottom chord bearing.
 - 3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
 - 4) Gable studs spaced at 1-4-0 oc.
 - 5) All bearings are assumed to be SP No.2 .
 - 6) 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



May 5,2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
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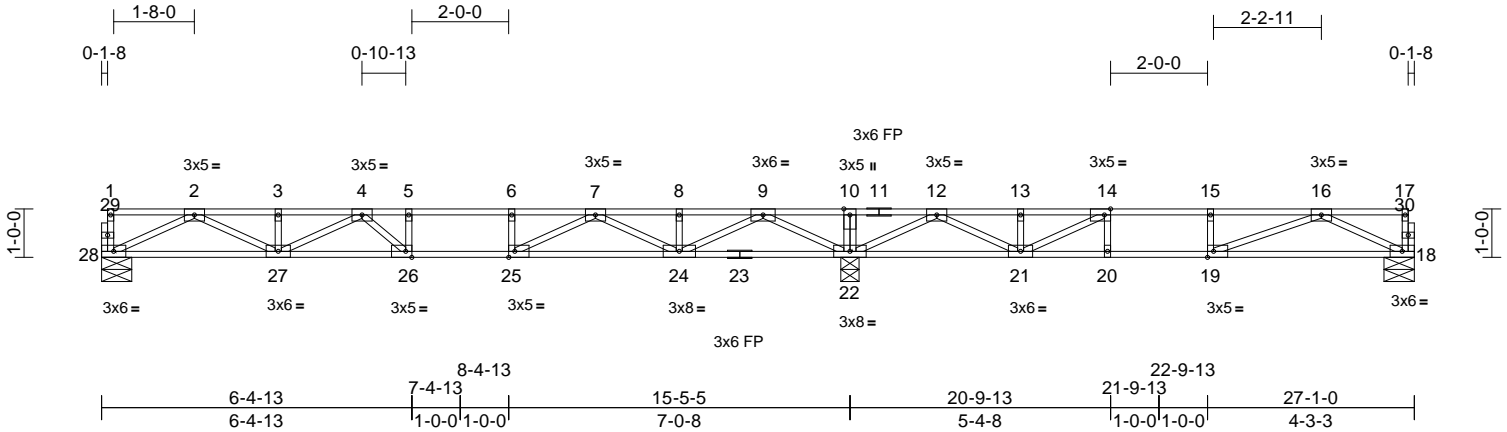
Job	Truss	Truss Type	Qty	Ply	Install 17 Magnolia Acres-Crawl-Greyson FA 3FL SP 3CG
25040195-02	F105	Floor	10	1	I73186498
Job Reference (optional)					

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu May 01 16:20:11

Page: 1

ID:Aq60S_lgT1DyJqleXEQjX6zTATC-RfC?PsB70Hq3NSgPqnL8w3uITxbGKWrCDoi7J4zJC?f



Scale = 1:47.5

Plate Offsets (X, Y): [14:0-1-8,Edge], [19:0-1-8,Edge], [25:0-1-8,Edge], [26:0-1-8,Edge]

Loading	(psf)	Spacing	1-7-3	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.69	Vert(LL)	-0.18	26	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.83	Vert(CT)	-0.24	26-27	>765	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.58	Horz(CT)	0.04	18	n/a	n/a		
BCDL	5.0	Code	IRC2021/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)

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)	18=0-7-8, 22=0-4-8, 28=0-7-8
	Max Grav	18=431 (LC 4), 22=1417 (LC 1), 28=592 (LC 3)

FORCES

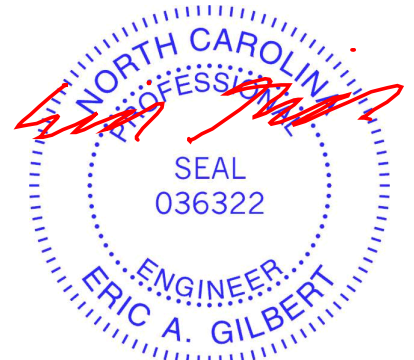
	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-28=-57/0, 17-18=-49/0, 1-2=-4/0, 2-3=-1802/0, 3-4=-1802/0, 4-5=-2263/0, 5-6=-2263/0, 6-7=-2263/0, 7-8=-1078/134, 8-9=-1078/134, 9-10=0/1779, 10-12=0/1779, 12-13=-783/553, 13-14=-783/553, 14-15=-1210/135, 15-16=-1210/135, 16-17=-4/0
BOT CHORD	27-28=0/1074, 26-27=0/2188, 25-26=0/2263, 24-25=0/1779, 22-24=-490/58, 21-22=-885/110, 20-21=-135/1210, 19-20=-135/1210, 18-19=0/751
WEBS	10-22=-165/0, 2-28=-1191/0, 2-27=0/816, 3-27=-136/0, 4-27=-433/0, 4-26=-190/260, 9-22=-1536/0, 9-24=0/1213, 8-24=-151/0, 7-24=-851/0, 7-25=0/767, 16-18=-832/0, 16-19=-172/491, 12-22=-1228/0, 12-21=0/879, 13-21=-122/58, 14-21=-825/0, 5-26=-148/65, 6-25=-254/0, 14-20=0/120, 15-19=-157/46

NOTES

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

- 3) All bearings are assumed to be SP No.2 .
- 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.
- 5) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



May 5, 2025

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

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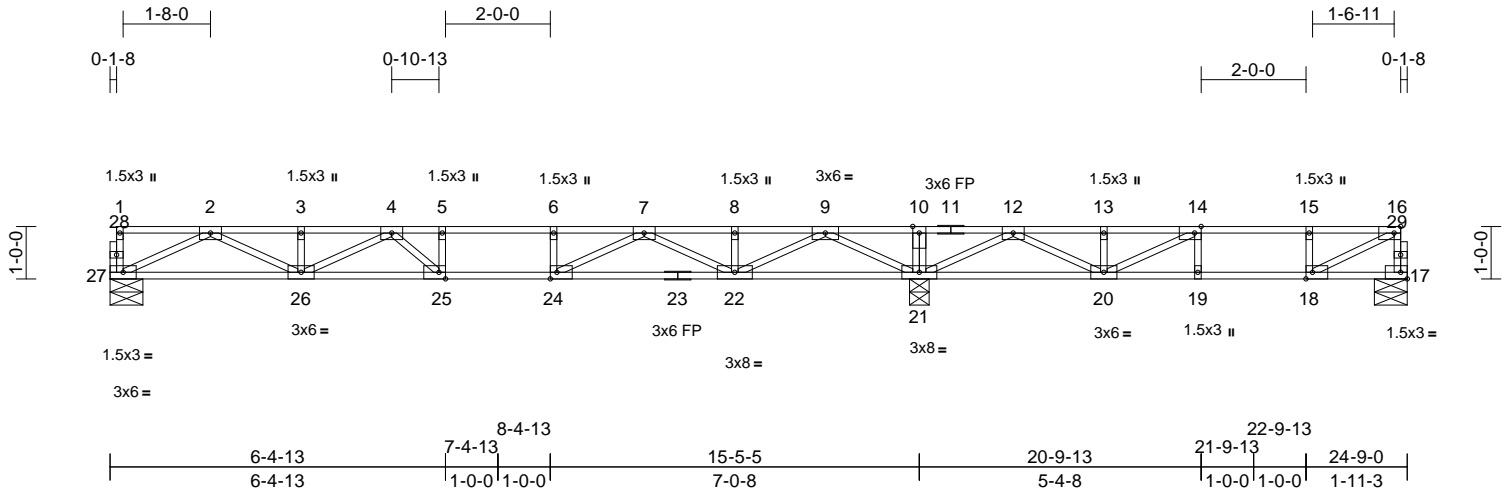
Job	Truss	Truss Type	Qty	Ply	Install 17 Magnolia Acres-Crawl-Greyson FA 3FL SP 3CG
25040195-02	F106	Floor	2	1	I73186499
Job Reference (optional)					

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu May 01 16:20:11

Page: 1

ID:Aq60S_lgT1DyJqleXEQjX6zTATC-RfC?PsB70Hq3NSgPqnL8w3uITxbGKWrcDoi7J4zJC?f



Scale = 1:44

Plate Offsets (X, Y): [14:0-1-8,Edge], [16:0-1-8,Edge], [18:0-1-8,Edge], [24:0-1-8,Edge], [25:0-1-8,Edge]

Loading	(psf)	Spacing	1-7-3	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.67	Vert(LL)	-0.18	25	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.83	Vert(CT)	-0.24	25-26	>766	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.58	Horz(CT)	0.03	21	n/a	n/a		
BCDL	5.0	Code	IRC2021/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 6-0-0 oc bracing.

REACTIONS (size) 17=0-7-8, 21=0-4-8, 27=0-7-8
Max Uplift 17=19 (LC 3)
Max Grav 17=304 (LC 4), 21=1358 (LC 1), 27=591 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension

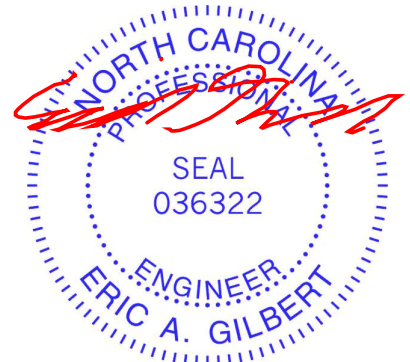
TOP CHORD 1-27=-57/0, 16-17=-316/50, 1-2=-4/0, 2-3=-1799/0, 3-4=-1799/0, 4-5=-2256/0, 5-6=-2256/0, 6-7=-2256/0, 7-8=-1067/185, 8-9=-1067/185, 9-10=0/1806, 10-12=0/1806, 12-13=-426/567, 13-14=-426/567, 14-15=-567/171, 15-16=-567/171
BOT CHORD 26-27=0/1073, 25-26=0/2184, 24-25=0/2256, 22-24=0/1770, 21-22=-550/46, 20-21=-902/0, 19-20=-171/567, 18-19=-171/567, 17-18=-4/23
WEBS 10-21=-166/0, 16-18=-189/614, 5-25=-143/71, 6-24=-258/0, 14-19=-37/86, 15-18=-219/37, 2-27=-1189/0, 2-26=0/814, 3-26=-136/0, 4-26=-431/0, 4-25=-201/249, 9-21=-1540/0, 9-22=0/1217, 8-22=-151/0, 7-22=-854/0, 7-24=0/780, 12-21=-1087/0, 12-20=0/764, 13-20=-163/21, 14-20=-593/0

NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x5 MT20 unless otherwise indicated.
- 3) All bearings are assumed to be SP No.2.

- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 19 lb uplift at joint 17.
- 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



May 5, 2025

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

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Carter Components (Sanford, NC), Sanford, NC - 27332, Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu May 01 16:20:11 Page: 1
ID:bPo940oYmybXA1DDM Q9IzTAT9-RfC?PsB70Hg3NSqPanL8w3uITXbGKWrcD0i7J4zJC?f



Plate Offsets (X, Y): [12:0-1-8,Edge], [13:0-1-8,Edge], [17:0-1-8,Edge], [19:0-1-8,Edge], [26:0-1-8,Edge], [27:0-1-8,Edge]

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

29=0-7-8
Max Uplift 18=-3 (LC 3)
Max Grav 18=295 (LC 4), 20=570 (LC 4),
23=1199 (LC 16), 29=630 (LC 14)

FORCES

Tension

TOP CHORD

1-29=60/0, 17-18=268/34, 1-2=0/0,
2-3=1930/0, 3-4=1930/0, 4-5=2533/0,
5-6=2533/0, 6-7=2533/0, 7-8=1516/0,
8-9=1516/0, 9-10=0/932, 10-12=0/932,
12-13=464/367, 13-14=229/213,
14-15=229/213, 15-16=326/165,
16-17=326/165

BOT CHORD

28-29=0/1140, 27-28=0/2386, 26-27=0/2533,
24-26=0/2153, 23-24=0/559, 22-23=367/464,
21-22=367/464, 20-21=367/464,
19-20=165/326, 18-19=2/19

WEBS

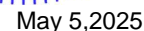
5-27=227/0, 6-26=201/0, 10-23=63/0,
12-22=0/175, 13-21=169/0, 14-20=83/470,
15-20=783/0, 16-19=201/30, 2-29=1269/0,
2-28=0/885, 3-28=139/0, 4-28=511/0,
4-27=39/422, 9-23=1493/0, 9-24=0/1102,
8-24=138/0, 7-24=735/0, 7-26=0/593,
12-23=959/0, 13-20=368/498,
17-19=183/346

NOTES

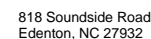
- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x5 MT20 unless otherwise indicated.
- 3) All bearings are assumed to be SP No.2 .
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 3 lb uplift at joint 18.
- 5) 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.
- 6) Recommend 2x6 strongbacks, on edge, spaced at 10'-0" 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.
- 7) CAUTION, Do not erect truss backwards.
- 8) 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

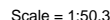
- 1) Dead + Floor Live (balanced): Lumber Increase=1.00,
Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 18-29=-8, 1-31=-80, 31-32=-80, 10-32=-80,
10-17=-130 (F=-50)



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Carter Components (Sanford, NC), Sanford, NC - 27332, Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu May 01 16:20:11 Page: 1
ID:3bMXHLpBXGkOnScPm4VfhvzTAT8-RfC?PsB70Hq3NSaPnL8w3uITXbGKWRcD0J74zJC?f



Loading	(psf)	Spacing	1-7-3	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.87	Vert(LL)	-0.18	29-30	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.99	Vert(CT)	-0.28	29	>654	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.66	Horz(CT)	0.04	26	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPi2014	Matrix-MSH							Weight: 137 lb	FT = 20%F, 11%E

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x5 MT20 unless otherwise indicated.
- 3) All bearings are assumed to be SP No.2 .
- 4) 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.
- 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) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
- 7) CAUTION, Do not erect truss backwards.
- 8) 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: 19-32=-8, 1-33=-80, 33-34=-127, 14-34=-80,
14-18=-180 (F=100)



May 5, 2025

NOTES

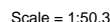


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Carter Components (Sanford, NC), Sanford, NC - 27332, Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu May 01 16:20:12 Page: 1
ID:3bMXHLpBXGkOnScPm4VfhvzTAT8-RfC?PsB70Hq3NSaPanL8w3uITXbGKWRCD0J74zJC?f



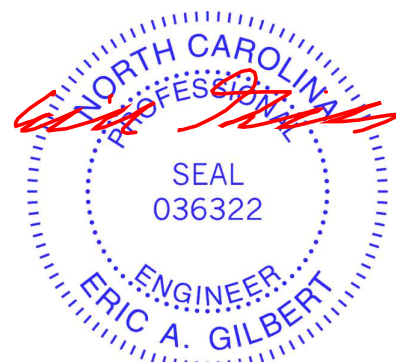
Loading	(psf)	Spacing	1-7-3	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.96	Vert(LL)	-0.18	29-30	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.84	Vert(CT)	-0.28	29-30	>659	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.65	Horz(CT)	0.04	26	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-MSH							Weight: 136 lb	FT = 20%F, 11%E

NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x5 MT20 unless otherwise indicated.
- 3) All bearings are assumed to be SP No.2 .
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 11 lb uplift at joint 18.
- 5) 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.
- 6) Recommend 2x6 strongbacks, on edge, spaced at 10'-0" 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.
- 7) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
- 8) CAUTION. Do not erect truss backwards.

LOAD CASE(S) Standard

- 1) Dead + Floor Live (balanced): Lumber Increase=1.00,
Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 19-32=-8, 1-34=-80, 34-35=-127, 18-35=-80



May 5, 2025



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITER REFERENCE PAGE MIT-141.5 Rev. 1/2/2023 BEFORE USE.

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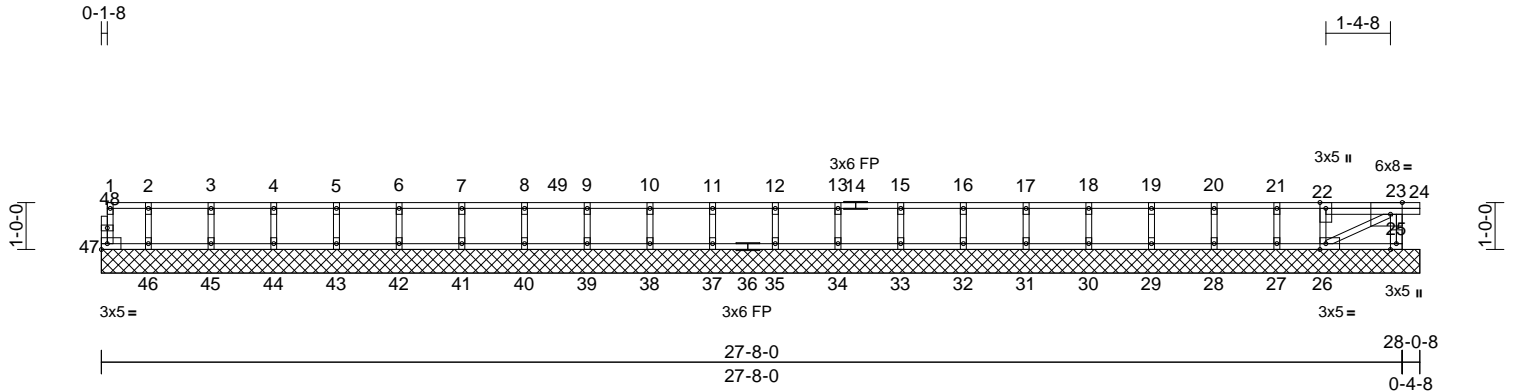
Job	Truss	Truss Type	Qty	Ply	Install 17 Magnolia Acres-Crawl-Greyson FA 3FL SP 3CG
25040195-02	F110	Floor Supported Gable	1	1	I73186503
Job Reference (optional)					

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu May 01 16:20:12

Page: 1

ID:XovvVhpplasFPbAcKn0uEAzTAT7-RfC?PsB70Hq3NSgPqnL8w3uITxbGKWrCDoi7J4zJC?f



Scale = 1:49									
Plate Offsets (X, Y): [23:0-3-0,Edge], [26:0-1-8,Edge]									
Loading	(psf)	Spacing	1-7-3	CSI		DEFL	in	(loc)	l/defl
TCLL	40.0	Plate Grip DOL	1.00	TC	0.07	Vert(LL)	n/a	-	n/a
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(CT)	n/a	-	n/a
BCLL	0.0	Rep Stress Incr	NO	WB	0.02	Horz(CT)	0.00	25	n/a
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-MSH					
PLATES MT20 GRIP 244/190									
Weight: 114 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) 25=28-0-8, 26=28-0-8, 27=28-0-8, 28=28-0-8, 29=28-0-8, 30=28-0-8, 31=28-0-8, 32=28-0-8, 33=28-0-8, 34=28-0-8, 35=28-0-8, 37=28-0-8, 38=28-0-8, 39=28-0-8, 40=28-0-8, 41=28-0-8, 42=28-0-8, 43=28-0-8, 44=28-0-8, 45=28-0-8, 46=28-0-8, 47=28-0-8
Max Grav 25=109 (LC 1), 26=112 (LC 1), 27=98 (LC 1), 28=121 (LC 1), 29=116 (LC 1), 30=118 (LC 1), 31=117 (LC 1), 32=117 (LC 1), 33=117 (LC 1), 34=117 (LC 1), 35=118 (LC 1), 37=118 (LC 1), 38=118 (LC 1), 39=118 (LC 1), 40=117 (LC 1), 41=117 (LC 1), 42=117 (LC 1), 43=117 (LC 1), 44=116 (LC 1), 45=120 (LC 1), 46=105 (LC 1), 47=23 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-47=-21/0, 23-25=-104/0, 1-2=-1/0, 2-3=-1/0, 3-4=-1/0, 4-5=-1/0, 5-6=-1/0, 6-7=-1/0, 7-8=-1/0, 8-9=-1/0, 9-10=-1/0, 10-11=-1/0, 11-12=-1/0, 12-13=-1/0, 13-15=-1/0, 15-16=-1/0, 16-17=-1/0, 17-18=-1/0, 18-19=-1/0, 19-20=-1/0, 20-21=-1/0, 21-22=-1/0, 22-23=-4/1, 23-24=0/0

BOT CHORD 46-47=0/1, 45-46=0/1, 44-45=0/1, 43-44=0/1, 42-43=0/1, 41-42=0/1, 40-41=0/1, 39-40=0/1, 38-39=0/1, 37-38=0/1, 35-37=0/1, 34-35=0/1, 33-34=0/1, 32-33=0/1, 31-32=0/1, 30-31=0/1, 29-30=0/1, 28-29=0/1, 27-28=0/1, 26-27=0/1, 25-26=0/0
WEBS 22-26=-100/0, 23-26=0/2, 21-27=-90/0, 20-28=-110/0, 19-29=-106/0, 18-30=-107/0, 17-31=-107/0, 16-32=-107/0, 15-33=-107/0, 13-34=-107/0, 12-35=-107/0, 11-37=-107/0, 10-38=-107/0, 9-39=-107/0, 8-40=-107/0, 7-41=-107/0, 6-42=-107/0, 5-43=-107/0, 4-44=-106/0, 3-45=-109/0, 2-46=-95/0

- NOTES**
- 1) All plates are 1.5x3 MT20 unless otherwise indicated.
 - 2) Gable requires continuous bottom chord bearing.
 - 3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
 - 4) Gable studs spaced at 1-4-0 oc.
 - 5) All bearings are assumed to be SP No.2 .
 - 6) 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.
 - 7) 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.
 - 8) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 25-47=-8, 1-49=-80, 12-49=-80, 12-23=-80, 23-24=-80



May 5, 2025

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

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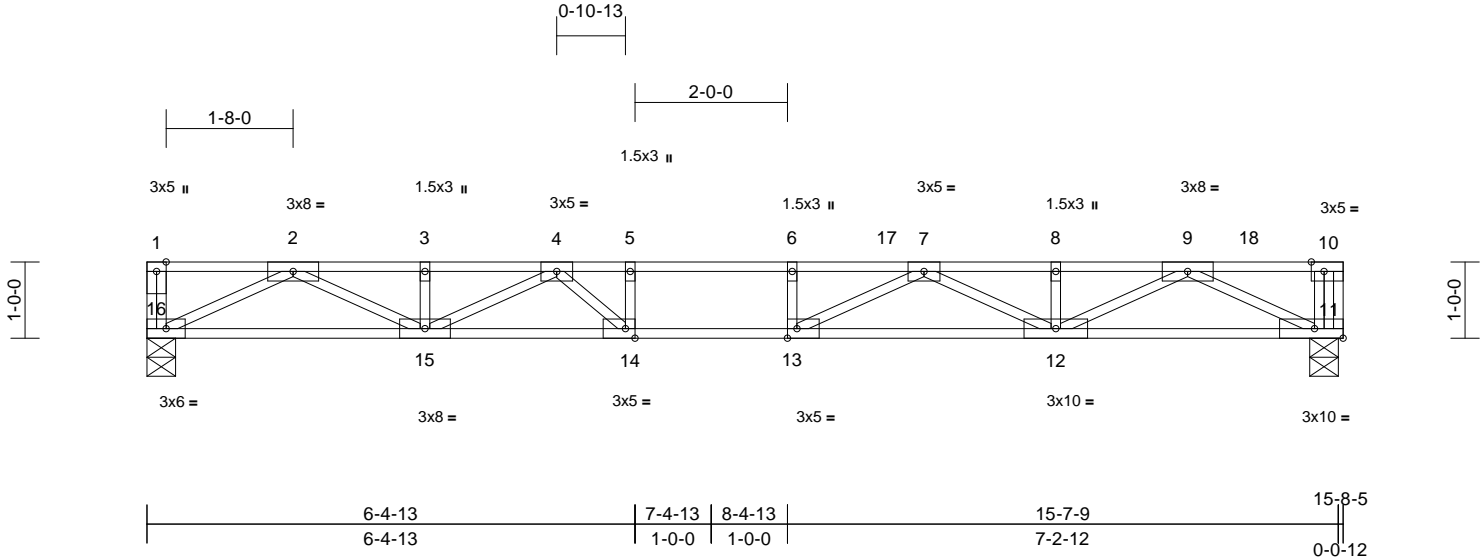
Job	Truss	Truss Type	Qty	Ply	Install 17 Magnolia Acres-Crawl-Greyson FA 3FL SP 3CG
25040195-02	F111	Floor	1	1	I73186504
Job Reference (optional)					

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu May 01 16:20:12

Page: 1

ID:XovvVhpplafFPbAckn0uEzTAT7-RfC?PsB70Hq3NSgPqnL8w3uITxbGKWrCDoi7J4zJC?f



Scale = 1:30.2

Plate Offsets (X, Y): [10:0-2-0,Edge], [13:0-1-8,Edge], [14:0-1-8,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.64	Vert(LL)	-0.24	12-13	>781	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	1.00	Vert(CT)	-0.38	12-13	>481	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.67	Horz(CT)	0.06	11	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-MSH							Weight: 77 lb	FT = 20%F, 11%E

LUMBER

TOP CHORD 2x4 SP 2400F 2.0E(flat)
BOT CHORD 2x4 SP No.1(flat)
WEBS 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=0-4-8, 16=0-4-8
Max Grav 11=993 (LC 1), 16=888 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-16=-77/0, 10-11=-82/0, 1-2=0/0,
2-3=-2812/0, 3-4=-2812/0, 4-5=-4005/0,
5-6=-4005/0, 6-7=-4005/0, 7-8=-3147/0,
8-9=-3147/0, 9-10=0/0

BOT CHORD 15-16=0/1622, 14-15=0/3585, 13-14=0/4005,
12-13=0/3841, 11-12=0/1897

WEBS 5-14=-457/0, 6-13=-183/20, 2-16=-1805/0,
2-15=0/1334, 3-15=-192/0, 4-15=-866/0,
4-14=0/846, 7-13=-170/507, 7-12=-778/0,
8-12=-230/0, 9-12=0/1400, 9-11=-2099/0

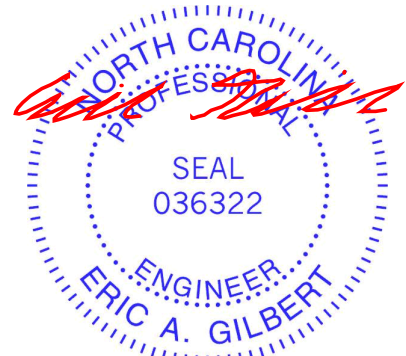
NOTES

- Unbalanced floor live loads have been considered for this design.
- All bearings are assumed to be SP No.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.

LOAD CASE(S)

- Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)

Vert: 11-16=-10, 1-17=-100, 17-18=-140, 10-18=-100



May 5,2025

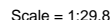
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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

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Carter Components (Sanford, NC), Sanford, NC - 27332, Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu May 01 16:20:12 Page: 1
ID:XovvVhqpplasFPbAcKn0uEAzTAT7-RfC?PsB70Hq3NSaPanL8w3uITXbGKWrcDOi7J4zJC?f



Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.93	Vert(LL)	-0.22	10-11	>620	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.79	Vert(CT)	-0.29	10-11	>479	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.79	Horz(CT)	0.03	8	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-MSH							Weight: 57 lb	FT = 20%F, 11%E

TOP CHORD	2x4 SP No.1(flat)
BOT CHORD	2x4 SP 2400F 2.0E(flat)
WEBS	2x4 SP No.3(flat)
OTHERS	2x4 SP No.3(flat)

TOP CHORD	Structural wood sheathing directly applied or 4-11-7 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

Max Grav 8=1089 (LC 1), 12=1101 (LC 1)

(Ib) - Maximum Compression/Maximum Tension

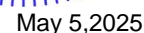
TOP CHORD 1-12=-141/0, 7-8=-125/0, 1-2=0/0,
2-3=-3174/0, 3-4=-3174/0, 4-5=-3512/0,
5-6=-3512/0, 6-7=-9/0

BOT CHORD 11-12=0/2011, 10-11=0/3512, 9-10=0/3512,
8-9=0/1966

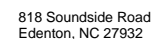
WEBS 4-10=-198/68, 5-9=-488/0, 6-8=-2178/0,
6-9=0/1660, 4-11=-835/45, 3-11=-393/0,
2-11=0/1303, 2-12=-2222/0

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All bearings are assumed to be SP 2400F 2.0E .
- 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.
- 5) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

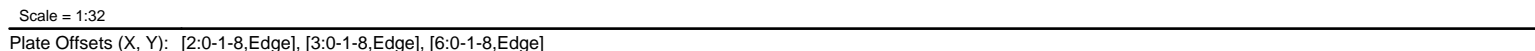
1) Dead + Floor Live (balanced): Lumber Increase=1.00,
Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 8-12=-10, 1-7=-180 (F=-80)



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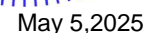
Carter Components (Sanford, NC), Sanford, NC - 27332, Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu May 01 16:20:12 Page: 1
ID:XovvVhpplasFPbAcKn0uEAzTAT7-RfC?PsB70Hq3NSaPnL8w3uITXbGKWrcDOI7J4zJC?f



LUMBER		Vert: 8-13=-10, 1-7=-180 (F=-80)
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)	8=0-7-8, 10=0-4-8, 13=0-4-8	
Max Grav	8=447 (LC 7), 10=803 (LC 9), 13=533 (LC 10)	
FORCES		
	(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-13=-60/47, 7-8=-149/0, 1-2=0/0, 2-3=-772/0, 3-4=-420/0, 4-5=-420/0, 5-6=-570/0, 6-7=-11/0	
BOT CHORD	12-13=0/772, 11-12=0/772, 10-11=0/772, 9-10=0/570, 8-9=0/570	
WEBS	2-12=0/116, 3-11=-108/0, 4-10=-152/501, 5-10=-818/0, 6-9=-59/0, 2-13=-930/0, 3-10=-673/99, 6-8=-626/0	

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All bearings are assumed to be SP No.2 .
- 3) Recommend 2x6 strongbacks, on edge, spaced at 10'-0"-0" 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.
- 5) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

1) Dead + Floor Live (balanced): Lumber Increase=1.00,
Plate Increase=1.00
Uniform Loads (lb/ft)



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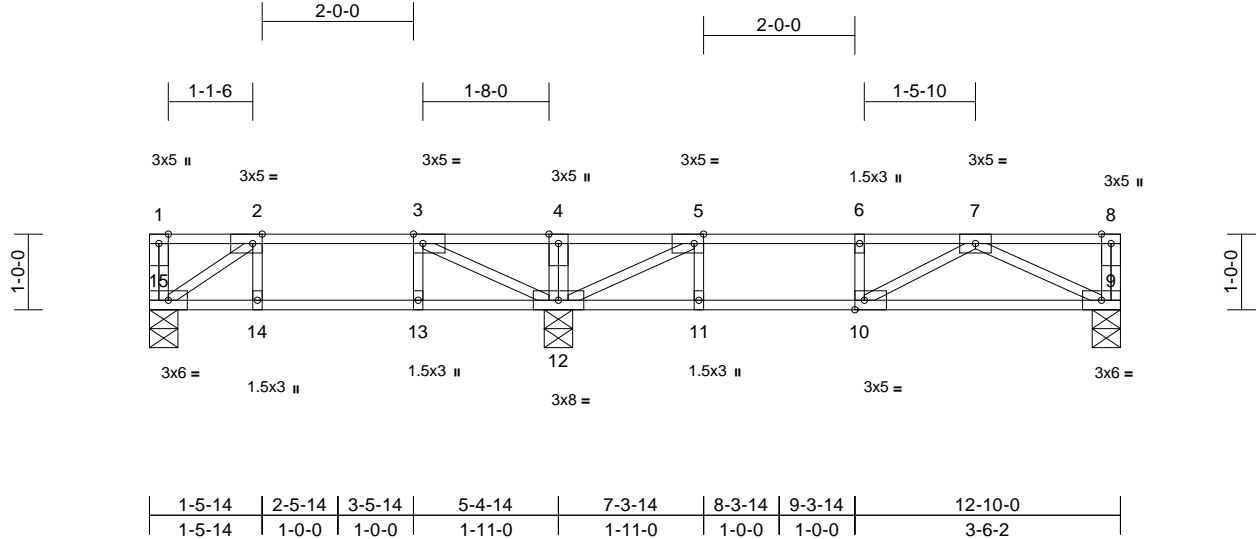
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Install 17 Magnolia Acres-Crawl-Greyson FA 3FL SP 3CG
25040195-02	F114	Floor	1	1	I73186507
Job Reference (optional)					

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu May 01 16:20:12
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Page: 1



Scale = 1:30.5

Plate Offsets (X, Y): [2:0-1-8,Edge], [3:0-1-8,Edge], [5:0-1-8,Edge], [10:0-1-8,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.98	Vert(LL)	-0.13	9-10	>673	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.96	Vert(CT)	-0.18	9-10	>490	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.36	Horz(CT)	0.02	9	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-MSH							Weight: 62 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)

Uniform Loads (lb/ft)

Vert: 9-15=-10, 1-8=-180 (F=-80)

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) 9=0-4-8, 12=0-4-8, 15=0-4-8
Max Grav 9=709 (LC 7), 12=1208 (LC 8), 15=514 (LC 10)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-15=-70/33, 8-9=-126/0, 1-2=0/0, 2-3=-734/0, 3-4=-140/194, 4-5=-140/194, 5-6=-1410/0, 6-7=-1410/0, 7-8=0/0

BOT CHORD 14-15=0/734, 13-14=0/734, 12-13=0/734, 11-12=0/1410, 10-11=0/1410, 9-10=0/1133

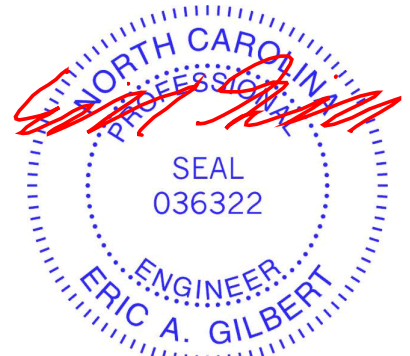
WEBS 2-14=0/85, 3-13=-35/8, 4-12=-302/0, 5-11=0/138, 6-10=-190/0, 2-15=-884/0, 3-12=-854/0, 5-12=-1476/0, 7-9=-1261/0, 7-10=0/350

NOTES

- Unbalanced floor live loads have been considered for this design.
- All plates are 3x5 MT20 unless otherwise indicated.
- All bearings are assumed to be SP No.2.
- 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.
- 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



May 5, 2025

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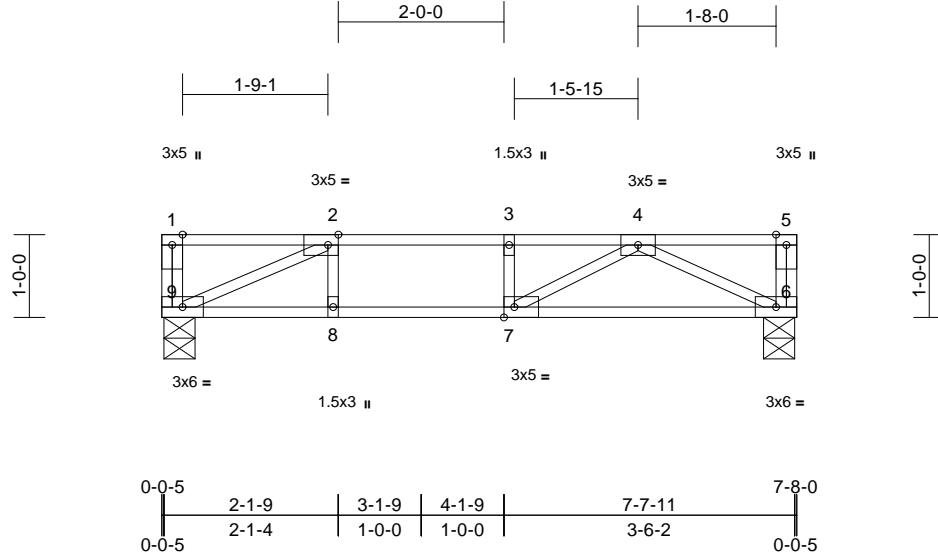
Job	Truss	Truss Type	Qty	Ply	Install 17 Magnolia Acres-Crawl-Greyson FA 3FL SP 3CG
25040195-02	F115	Floor	1	1	I73186508
Job Reference (optional)					

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu May 01 16:20:12

Page: 1

ID:?_THi1qR3t_61louVX7nNzTAT6-RfC?PsB70Hq3NSgPqnL8w3uTXbGKWrCDoi7J4zJC?f



Scale = 1:27.8

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

Loading	(psf)	Spacing	1-7-3	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.90	Vert(LL)	-0.12	6-7	>723	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.85	Vert(CT)	-0.16	6-7	>543	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.33	Horz(CT)	0.01	6	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-MSH							Weight: 38 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
6'-0'-0" oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10'-0'-0" oc
bracing.

REACTIONS (size) 6=0-4-8, 9=0-4-8
Max Grav 6=623 (LC 1), 9=623 (LC 1)

FORCES (lb) - Maximum Compression/Maximum
Tension

TOP CHORD 1-9=-117/28, 5-6=-111/0, 1-2=0/0,
2-3=-1224/0, 3-4=-1224/0, 4-5=0/0

BOT CHORD 8-9=0/1224, 7-8=0/1224, 6-7=0/995

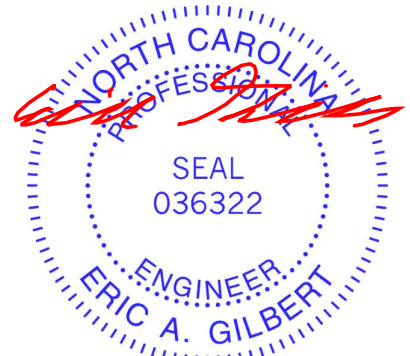
WEBS 2-8=0/120, 3-7=-186/0, 2-9=-1343/0,
4-6=-1107/0, 4-7=0/423

NOTES

- Unbalanced floor live loads have been considered for this design.
- All bearings are assumed to be SP No.2 .
- Recommend 2x6 strongbacks, on edge, spaced at 10'-0'-0" 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.
- 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: 6-9=-8, 1-5=-160 (F=-80)



May 5,2025

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

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

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

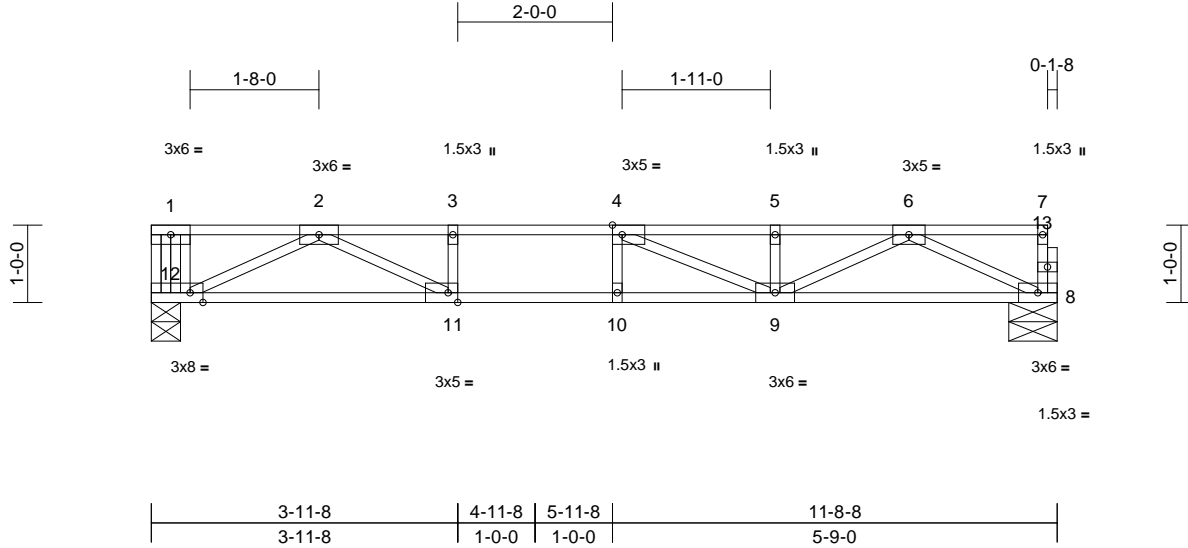
Job	Truss	Truss Type	Qty	Ply	Install 17 Magnolia Acres-Crawl-Greyson FA 3FL SP 3CG I73186509
25040195-02	F116	Floor	1	1	Job Reference (optional)

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu May 01 16:20:12

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Scale = 1:29.8

Plate Offsets (X, Y): [4:0-1-8,Edge], [11:0-1-8,Edge], [12:0-2-0,Edge]

Loading	(psf)	Spacing	1-7-3	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.80	Vert(LL)	-0.19	9-10	>713	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.96	Vert(CT)	-0.25	9-10	>543	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.53	Horz(CT)	0.03	8	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-MSH							Weight: 58 lb	FT = 20%F, 11%E

LUMBER

TOP CHORD 2x4 SP No.1(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
6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc
bracing.

REACTIONS (size) 8=0-7-8, 12=0-4-8
Max Grav 8=774 (LC 1), 12=782 (LC 1)

FORCES (lb) - Maximum Compression/Maximum
Tension

TOP CHORD 1-12=-115/0, 7-8=-97/0, 1-2=0/0,
2-3=-2399/0, 3-4=-2399/0, 4-5=-2239/0,
5-6=-2239/0, 6-7=-7/0

BOT CHORD 11-12=0/1461, 10-11=0/2399, 9-10=0/2399,
8-9=0/1373

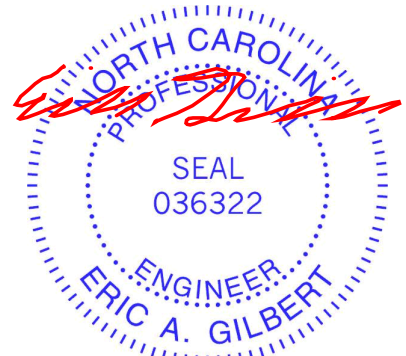
WEBS 3-11=-375/0, 4-10=-136/16, 6-8=-1520/0,
6-9=0/971, 5-9=-328/0, 4-9=-524/77,
2-12=-1606/0, 2-11=0/1106

NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All bearings are assumed to be SP No.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.
- 5) 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: 8-12=-8, 1-7=-130 (F=-50)



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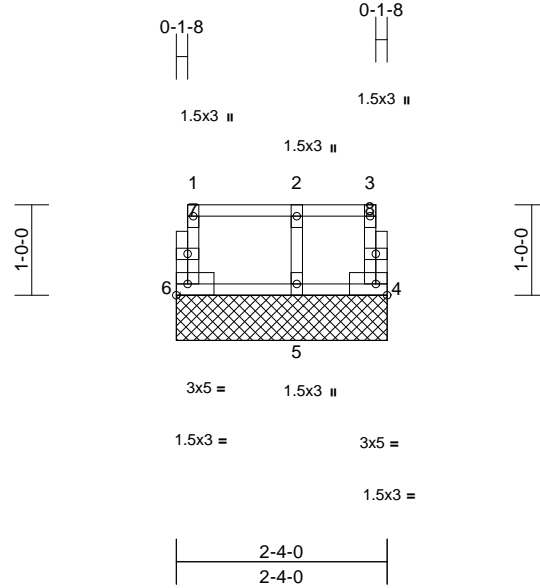
Job	Truss	Truss Type	Qty	Ply	Install 17 Magnolia Acres-Crawl-Greyson FA 3FL SP 3CG I73186510
25040195-02	F117	Floor Supported Gable	1	1	Job Reference (optional)

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

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Loading	(psf)	Spacing	1-7-3	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.04	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	4	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-MR							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
2-4-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc
bracing.

REACTIONS (size) 4=2-4-0, 5=2-4-0, 6=2-4-0
Max Grav 4=33 (LC 1), 5=93 (LC 1), 6=48
(LC 1)

FORCES (lb) - Maximum Compression/Maximum
Tension

TOP CHORD 1-6=-44/0, 3-4=-28/0, 1-2=-9/0, 2-3=-9/0
BOT CHORD 5-6=0/9, 4-5=0/9
WEBS 2-5=-86/0

NOTES

- 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.
- All bearings are assumed to be SP No.2 .
- 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



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Symbols

PLATE LOCATION AND ORIENTATION



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

PLATE SIZE

4 X 4

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

LATERAL BRACING LOCATION



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

BEARING

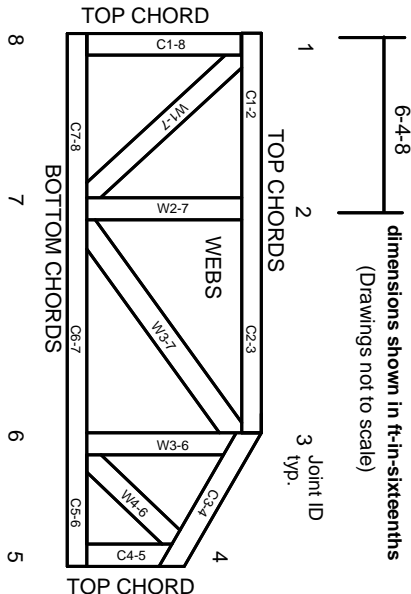


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

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

Numbering System



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

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

Product Code Approvals

ICC-ES Reports:

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

Design General Notes

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

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

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General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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

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