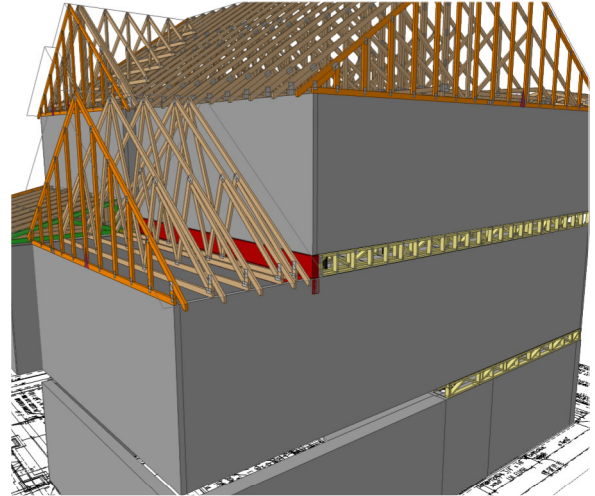




Carter Sanford Component Plant
298 Harvey Faulk Rd
Sanford, NC 27332

Phone #:919-775-1450

Builder: HH Hunt Homes
Model: Raleigh Durham
Install 15 Magnolia
Acres - -



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: _____

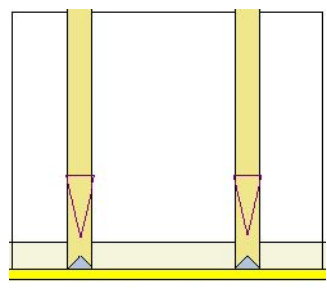
Date: _____

General Notes:

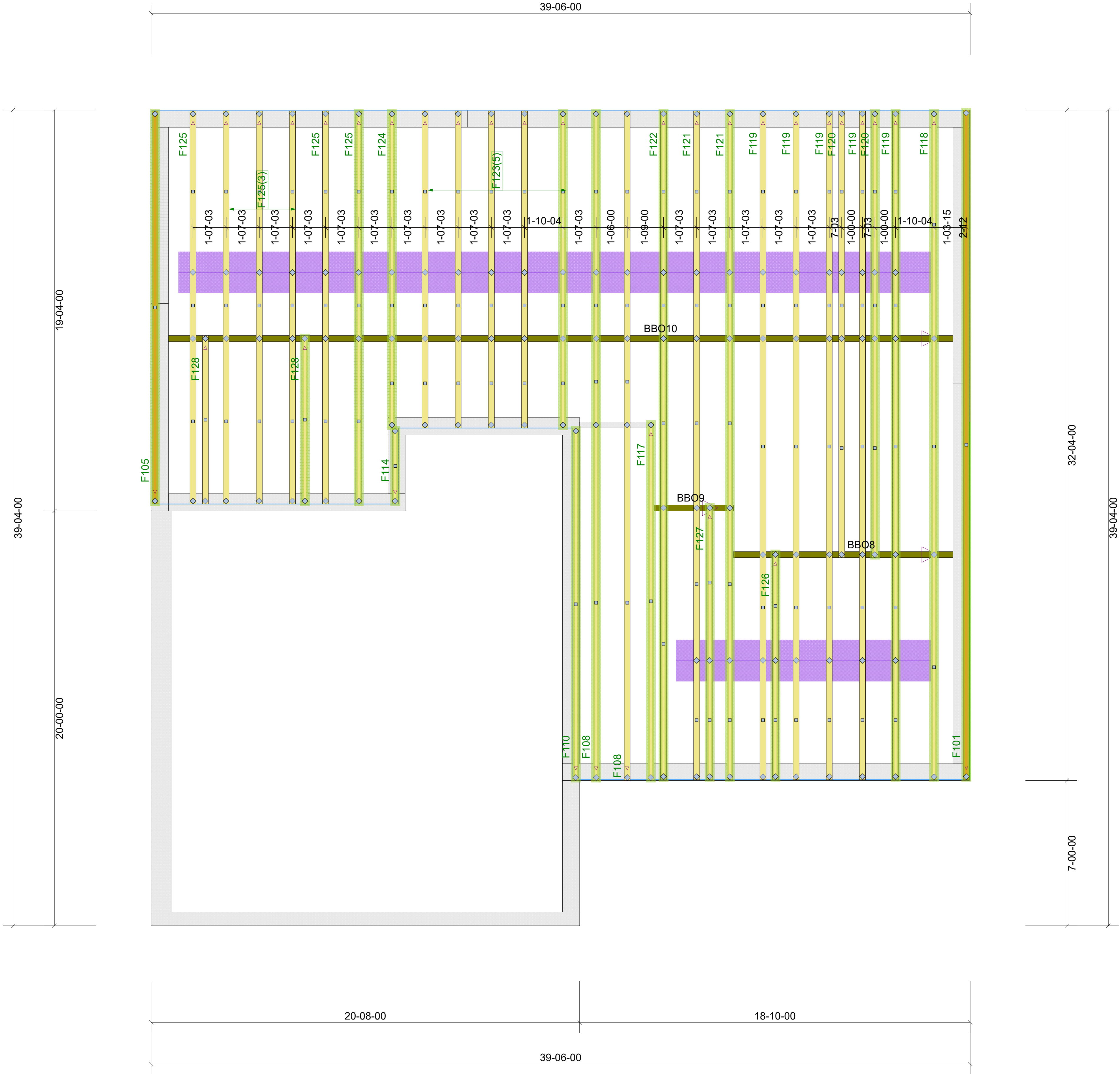
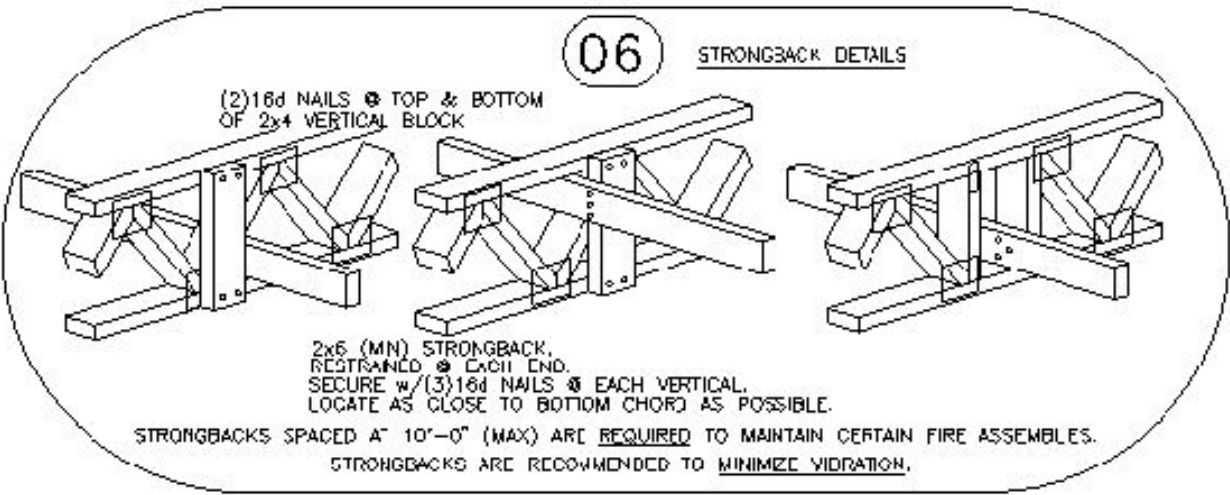
General Notes: ** CUTTING OR DRILLING OF COMPONENTS SHOULD NOT BE DONE WITHOUT CONTACTING COMPONENT SUPPLIER FIRST. CUSTOMER TAKES FULL RESPONSIBILITY FOR COMPONENTS IF CUT BEFORE AUTHORIZATION. ** ALL POINT LOADS FROM ABOVE MUST BE TRANSFERRED TO BEARING FROM UNDER SIDE OF SHEATHING.

Products					
Fab Type	Net Qty	Plies	Product	Length	PlotID

Truss Connector Total List		
Qty	Product	Manuf



Truss Drawing Left
End Indicator



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.

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 shall be responsible for the design of the building structure, including the truss 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 O'Donnell Drive.



HH Hunt Homes Raleigh Durham

Install 15 Magnolia Acres -

FLOOR PLACEMENT PLAN

Scale:

NTS

Date: _____

4/4/2025

Designer

Blake Scrivner

Project Number: 00040500

030167-

1/1

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: 25030167-02

Install 15 Magnolia Acres-Crawl-Franklin BA SP 3CG TMB FE 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: I72473804 thru I72473820

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

North Carolina COA: C-0844



April 3, 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.

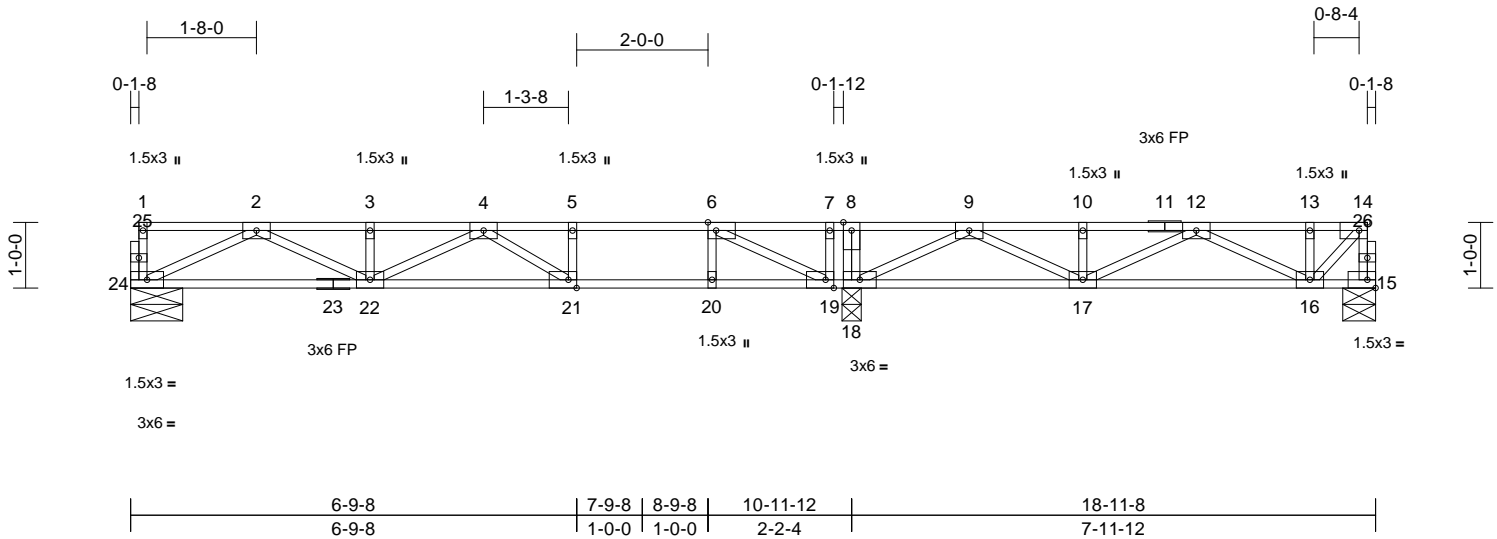
Job	Truss	Truss Type	Qty	Ply	Install 15 Magnolia Acres-Crawl-Franklin BA SP 3CG
25030167-02	F125	Floor	6	1	I72473804
Job Reference (optional)					

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Wed Apr 02 13:28:42

Page: 1

ID:IPexSy2Ox1Mty8IZz8y2uPzUI9?-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:35.1

Plate Offsets (X, Y): [6:0-1-8,Edge], [14:0-1-8,Edge], [19:0-1-8,Edge], [21:0-1-8,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	0.93	Vert(LL)	-0.20	21-22	>653	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.99	Vert(CT)	-0.27	21-22	>476	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.31	Horz(CT)	0.03	15	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 94 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.

LOAD CASE(S) Standard

BRACING

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

REACTIONS

(size) 15=0-6-0, 18=0-3-8, 24=0-9-8
 Max Grav 15=341 (LC 8), 18=845 (LC 1), 24=475 (LC 3)

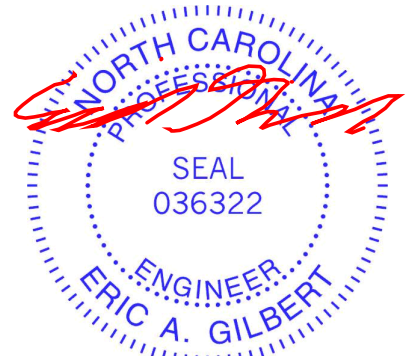
FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-24=-56/0, 14-15=-345/0, 1-2=-4/0, 2-3=-1344/0, 3-4=-1344/0, 4-5=-1231/0, 5-6=-1231/0, 6-7=-96/146, 7-8=-96/146, 8-9=-96/146, 9-10=-792/0, 10-12=-792/0, 12-13=-330/0, 13-14=-330/0
 BOT CHORD 22-24=0/847, 21-22=0/1488, 20-21=0/1231, 19-20=0/1231, 18-19=-146/96, 17-18=0/564, 16-17=0/701, 15-16=0/25
 WEBS 5-21=0/89, 6-20=0/192, 8-18=-351/0, 2-24=-938/0, 2-22=0/557, 3-22=-113/0, 4-22=-161/3, 4-21=-363/0, 6-19=-1300/0, 7-19=0/294, 9-18=-633/0, 9-17=0/301, 10-17=-140/0, 12-17=0/102, 12-16=-415/0, 13-16=-118/0, 14-16=0/449

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.
- 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 3,2025

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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 A MiTek Affiliate

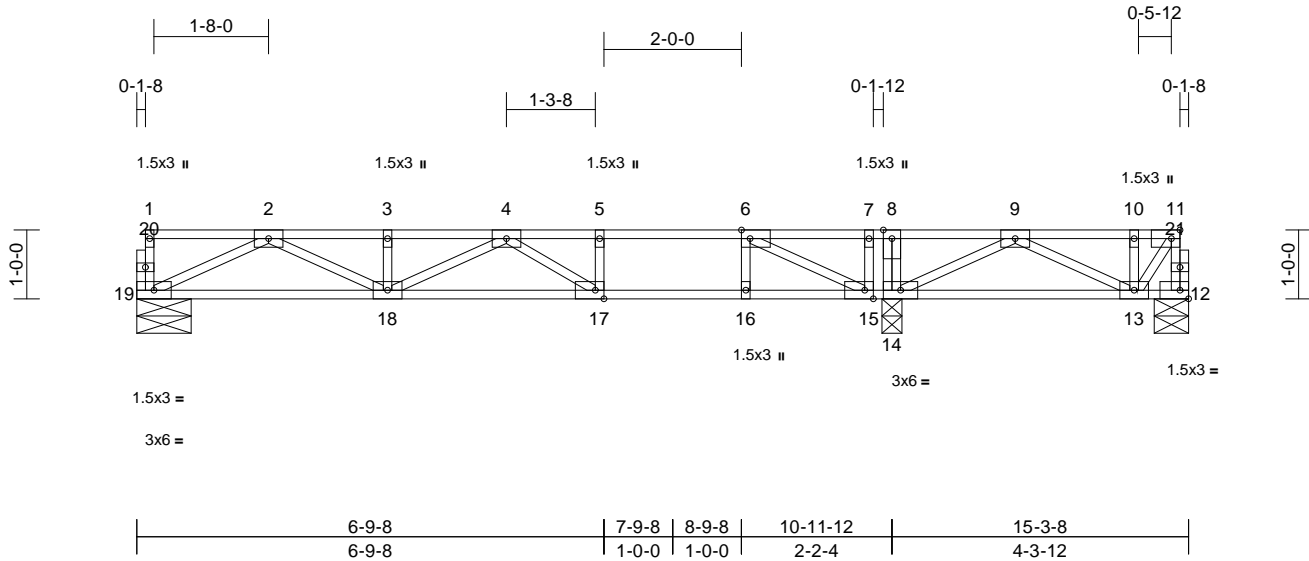
818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Install 15 Magnolia Acres-Crawl-Franklin BA SP 3CG
25030167-02	F123	Floor	5	1	I72473805
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. Wed Apr 02 13:28:42
ID:GD4ZFc1mAjE0K_jNPRRpMBzUI90-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:33.5

Plate Offsets (X, Y): [6:0-1-8,Edge], [11:0-1-8,Edge], [15:0-1-8,Edge], [17:0-1-8,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	0.88	Vert(LL)	-0.19	17-18	>677	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.97	Vert(CT)	-0.26	17-18	>493	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.30	Horz(CT)	0.02	12	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 77 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.

LOAD CASE(S) Standard

BRACING

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

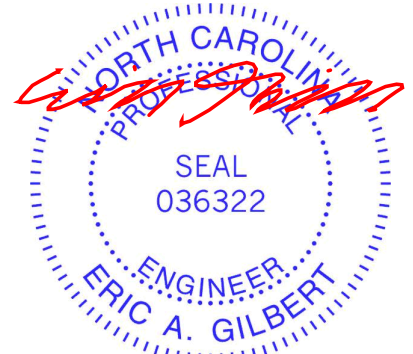
REACTIONS (size) 12=0-6-0, 14=0-3-8, 19=0-9-8
Max Grav 12=222 (LC 8), 14=641 (LC 1), 19=480 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-19=-56/0, 11-12=-227/0, 1-2=-4/0, 2-3=-1362/0, 3-4=-1362/0, 4-5=-1271/0, 5-6=-1271/0, 6-7=-239/0, 7-8=-239/0, 8-9=-239/0, 9-10=-172/0, 10-11=-172/0
BOT CHORD 18-19=0/856, 17-18=0/1515, 16-17=0/1271, 15-16=0/1271, 14-15=0/239, 13-14=0/349, 12-13=0/16
WEBS 5-17=0/71, 6-16=0/181, 8-14=-337/0, 2-19=-948/0, 2-18=0/567, 3-18=-114/0, 4-18=-172/0, 4-17=-311/0, 6-15=-1244/0, 7-15=0/277, 9-14=-218/49, 9-13=-199/0, 10-13=-120/0, 11-13=0/274

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 .
- 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 3, 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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A MiTek Affiliate

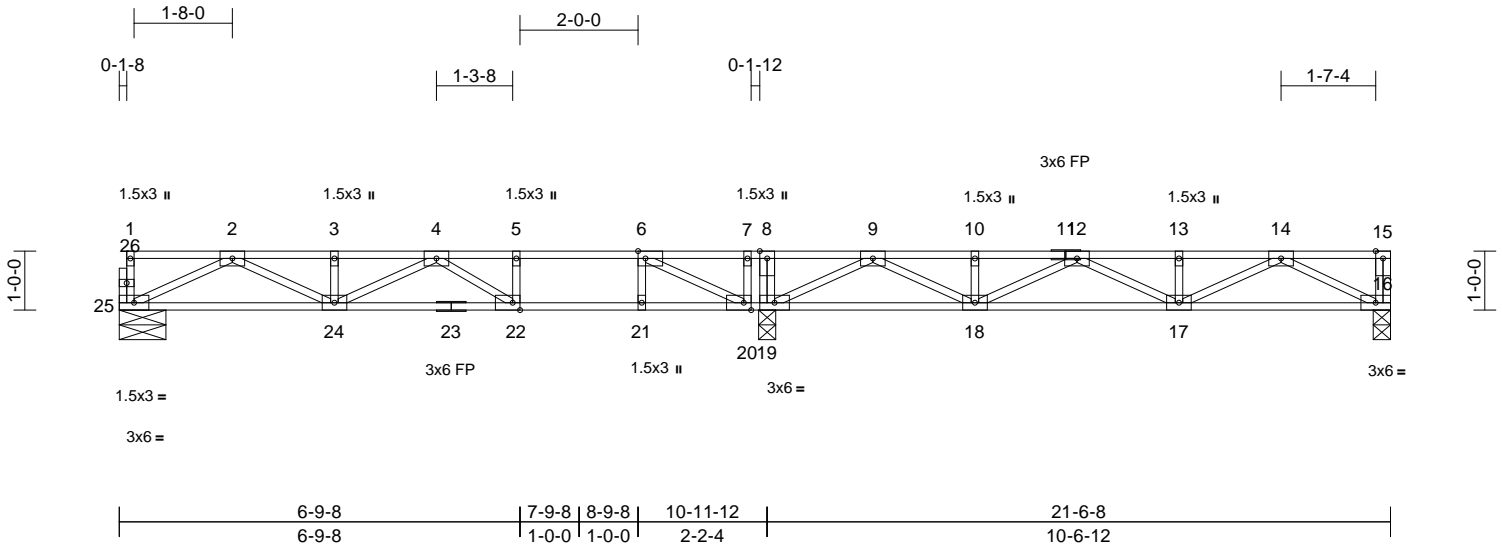
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Install 15 Magnolia Acres-Crawl-Franklin BA SP 3CG
25030167-02	F120	Floor	2	1	I72473807
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. Wed Apr 02 13:28:42
ID:o0XB1G07PQ59jr8Bsjwap_zUI91-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:39

Plate Offsets (X, Y): [6:0-1-8,Edge], [20:0-1-8,Edge], [22:0-1-8,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	0.77	Vert(LL)	-0.19	22-24	>693	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.75	Vert(CT)	-0.26	22-24	>505	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.33	Horz(CT)	0.03	16	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 106 lb	FT = 20%F, 11%E

LUMBER

TOP CHORD	2x4 SP No.1(flat) *Except* 11-15:2x4 SP No.2(flat)
BOT CHORD	2x4 SP No.2(flat) *Except* 23-16:2x4 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, Except: 6-0-0 oc bracing: 19-20.

REACTIONS	(size) 16=0-3-8, 19=0-3-8, 25=0-9-8
	Max Grav 16=435 (LC 8), 19=1000 (LC 1), 25=468 (LC 3)

FORCES

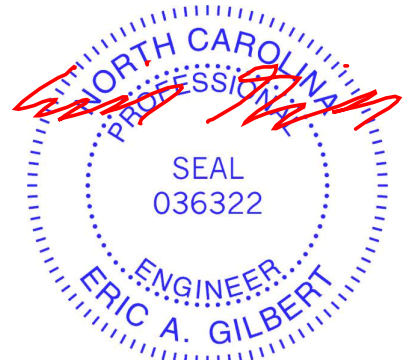
TOP CHORD	(lb) - Maximum Compression/Maximum Tension 1-25=-56/0, 15-16=-56/0, 1-2=-4/0, 2-3=-1316/0, 3-4=-1316/0, 4-5=-1171/0, 5-6=-1171/0, 6-7=-12/407, 7-8=-12/407, 8-9=-12/407, 9-10=-1057/0, 10-12=-1057/0, 12-13=-1141/0, 13-14=-1141/0, 14-15=0/0
BOT CHORD	24-25=0/832, 22-24=0/1446, 21-22=0/1171, 20-21=0/1171, 19-20=-407/12, 18-19=0/559, 17-18=0/1238, 16-17=0/725
WEBS	5-22=0/116, 6-21=0/208, 8-19=-365/0, 2-25=-922/0, 2-24=0/543, 3-24=-113/0, 4-24=-145/52, 4-22=-435/0, 6-20=-1387/0, 7-20=0/315, 9-19=-926/0, 9-18=0/588, 10-18=-141/0, 12-18=-233/0, 12-17=-108/0, 13-17=-132/0, 14-17=0/466, 14-16=-813/0

NOTES

- Unbalanced floor live loads have been considered for this design.
- All plates are 3x5 MT20 unless otherwise indicated.
- Bearings are assumed to be: Joint 25 SP No.2, Joint 19 SP No.1, Joint 16 SP No.1.

- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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 3, 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)

ENGINEERING BY
TRENCO
A MiTek Affiliate

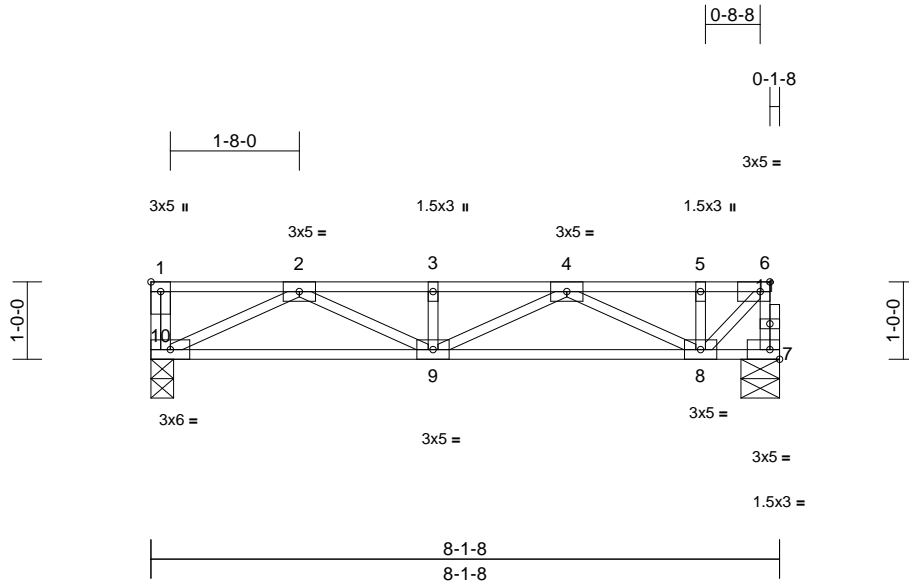
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Install 15 Magnolia Acres-Crawl-Franklin BA SP 3CG
25030167-02	F128	Floor	2	1	I72473808
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. Wed Apr 02 13:28:42
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Page: 1



Scale = 1:29.8

Plate Offsets (X, Y): [1:Edge,0-1-8], [6:0-1-8,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	0.13	Vert(LL)	-0.02	8-9	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.23	Vert(CT)	-0.03	9-10	>999	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.21	Horz(CT)	0.01	7	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 43 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) 7=0-6-0, 10=0-3-8
Max Grav 7=341 (LC 1), 10=346 (LC 1)

FORCES (lb) - Maximum Compression/Maximum
Tension

TOP CHORD 1-10=-58/0, 6-7=-343/0, 1-2=0/0, 2-3=-795/0,
3-4=-795/0, 4-5=-336/0, 5-6=-336/0

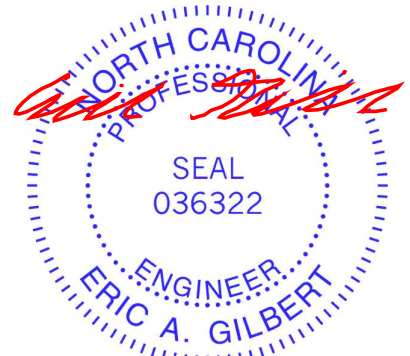
BOT CHORD 9-10=0/565, 8-9=0/707, 7-8=0/24

WEBS 2-10=-629/0, 2-9=0/258, 3-9=-130/0,
4-9=0/99, 4-8=-416/0, 5-8=-117/0, 6-8=0/451

NOTES

- 1) All bearings are assumed to be SP No.2 .
- 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 3, 2025

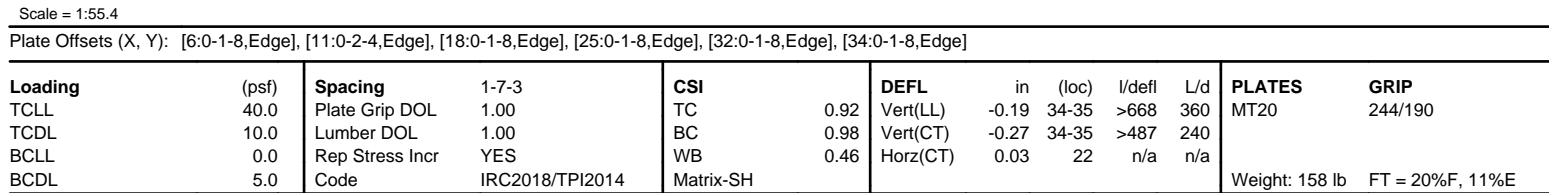
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

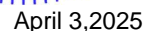
Carter Components (Sanford, NC), Sanford, NC - 27332, Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Wed Apr 02 13:28:42 Page: 1
ID:GD4ZFc1mAjE0K_jNPRRpMBzUI90-RIC?PsB70Hq3NSgPqnL8w3uITxBGKWrCDoi7J4zJC7f



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) 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



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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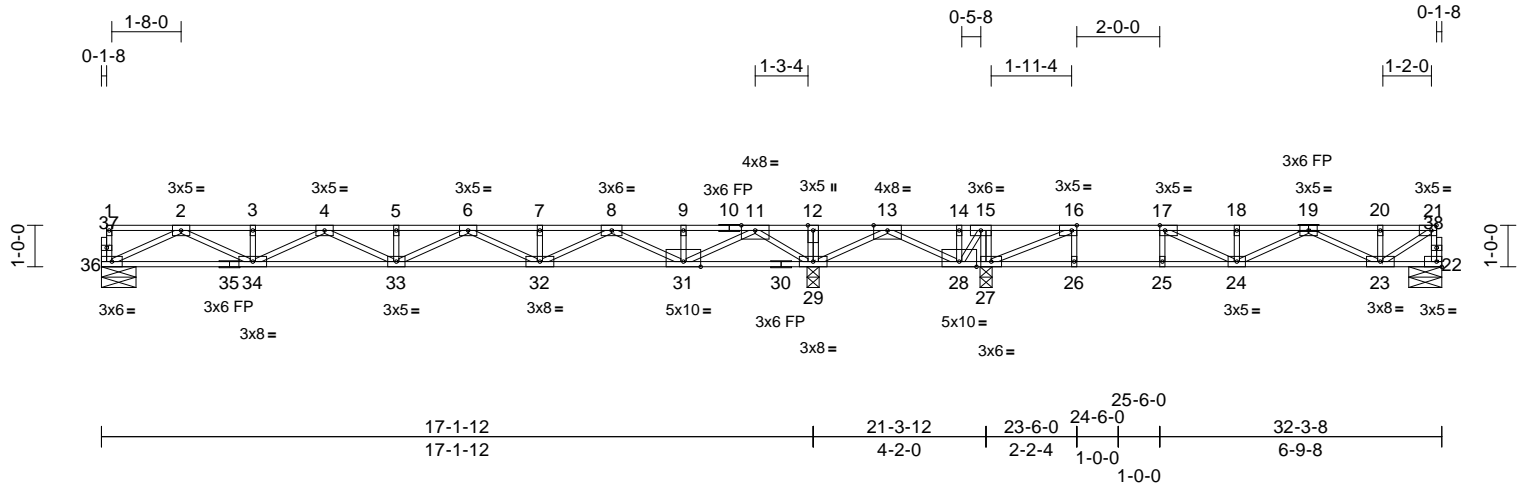
Job	Truss	Truss Type	Qty	Ply	Install 15 Magnolia Acres-Crawl-Franklin BA SP 3CG
25030167-02	F108	Floor	2	1	I72473810
Job Reference (optional)					

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Wed Apr 02 13:28:41

Page: 1

ID:zomhGLMcG134DTWwn_5cf6zREol-RfC?PsB70Hq3NSgPqnL8w3uITxBGKWrCDoi7J4zJC?f

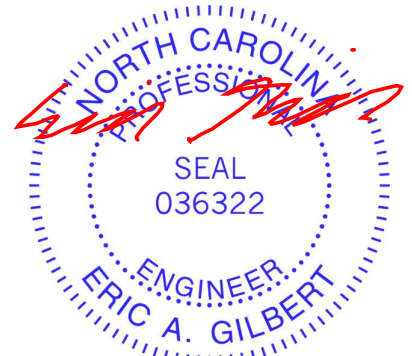


Scale = 1:55.5

Plate Offsets (X, Y): [16:0-1-8,Edge], [17:0-1-8,Edge], [21:0-1-8,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	0.77	Vert(LL)	-0.24	32-33	>869	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.92	Vert(CT)	-0.33	32-33	>627	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.54	Horz(CT)	0.05	22	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 161 lb	FT = 20%F, 11%E

LUMBER	
TOP CHORD	2x4 SP No.2(flat) *Except* 10-19:2x4 SP No.1(flat)
BOT CHORD	2x4 SP No.2(flat) *Except* 30-22:2x4 SP No.1(flat)
WEBS	2x4 SP No.2(flat)
OTHERS	2x4 SP No.2(flat) *Except* 22-38:2x4 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 2-2-0 oc bracing.
REACTIONS (size)	
	22=0-9-8, 27=0-3-8, 29=0-3-8, 36=0-10-0
	Max Uplift 27=353 (LC 3)
	Max Grav 22=606 (LC 5), 27=574 (LC 4), 29=2154 (LC 12), 36=752 (LC 5)
FORCES (lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-36=-72/0, 21-22=-599/0, 1-2=-5/0, 2-3=-2294/0, 3-4=-2294/0, 4-5=-3001/0, 5-6=-3001/0, 6-7=-2220/0, 7-8=-2220/0, 8-9=0/84, 9-11=0/84, 11-12=0/3419, 12-13=0/3422, 13-14=-141/516, 14-15=-141/516, 15-16=-230/154, 16-17=-1627/0, 17-18=-1995/0, 18-20=-1995/0, 20-21=-855/0
BOT CHORD	34-36=0/1365, 33-34=0/2821, 32-33=0/2782, 31-32=0/1250, 29-31=-1798/0, 28-29=-1826/0, 27-28=-154/230, 26-27=0/1627, 25-26=0/1627, 24-25=0/1627, 23-24=0/1571, 22-23=0/43



April 3,2025

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

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

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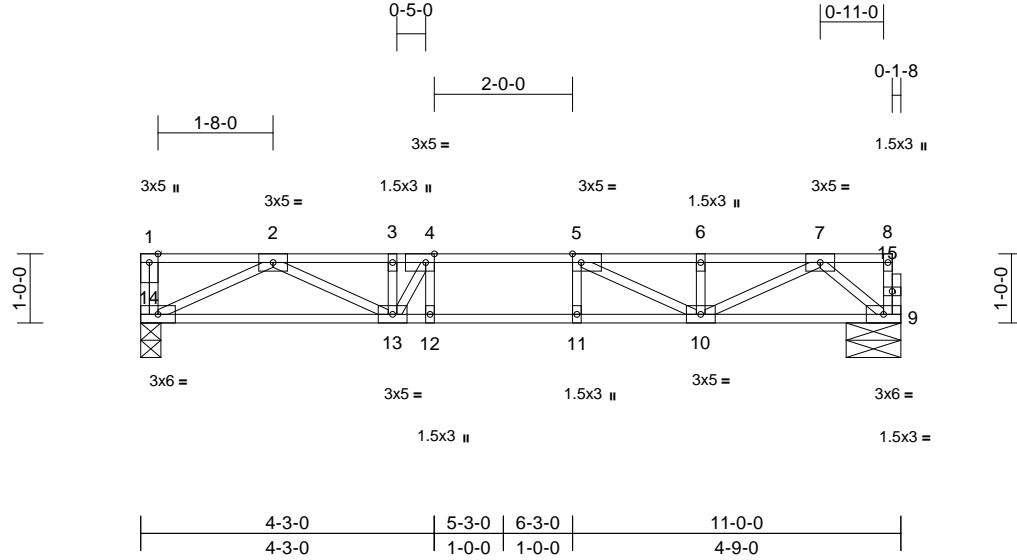
Job	Truss	Truss Type	Qty	Ply	Install 15 Magnolia Acres-Crawl-Franklin BA SP 3CG
25030167-02	F126	Floor	1	1	I72473811
Job Reference (optional)					

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Wed Apr 02 13:28:42

Page: 1

ID:IPexSy2Ox1Mty8IZz8y2uPzUI9?-RfC?PsB70Hq3NSgPqnL8w3uITxbGKWrCDoi7J4zJC?f



Scale = 1:33.3

Plate Offsets (X, Y): [4:0-1-8,Edge], [5:0-1-8,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	0.35	Vert(LL)	-0.07	10-11	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.55	Vert(CT)	-0.09	10-11	>999	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.33	Horz(CT)	0.02	9	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 55 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.

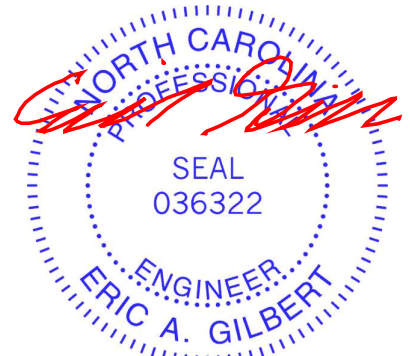
REACTIONS (size) 9=0-9-8, 14=0-3-8
 Max Grav 9=468 (LC 1), 14=473 (LC 1)

FORCES (lb) - Maximum Compression/Maximum
 Tension
 TOP CHORD 1-14=-58/0, 8-9=-26/0, 1-2=0/0, 2-3=-1286/0,
 3-4=-1286/0, 4-5=-1417/0, 5-6=-1135/0,
 6-7=-1135/0, 7-8=-2/0
 BOT CHORD 13-14=0/824, 12-13=0/1417, 11-12=0/1417,
 10-11=0/1417, 9-10=0/518
 WEBS 4-12=-75/113, 5-11=-44/48, 2-14=-917/0,
 2-13=0/518, 3-13=-98/126, 4-13=-440/5,
 5-10=-433/0, 6-10=-166/4, 7-10=0/691,
 7-9=-675/0

NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All bearings are assumed to be SP No.2 .
- 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.
- 5) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



April 3,2025

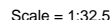
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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. Wed Apr 02 13:28:42 Page: 1
ID: iPxSy2Ox1Mty8Iz8y2uPzUI9?-RfC?PsB70Hq3NSaPanL8w3uITXbGKWrcDoi7J4zJC?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	0.56	Vert(LL)	-0.17	13-14	>945	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.84	Vert(CT)	-0.22	13-14	>699	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.42	Horz(CT)	0.03	10	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 65 lb	FT = 20%F, 11%E

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)

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.

Max Grav 10=567 (LC 1), 15=572 (LC 1)

(Ib) - Maximum Compression/Maximum Tension

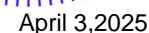
TOP CHORD 1-15=-59/0, 9-10=-24/3, 1-2=0/0,
2-3=-1702/0, 3-4=-1702/0, 4-5=-2044/0,
5-6=-2044/0, 6-7=-1421/0, 7-8=-1421/0,
8-9=-2/0

BOT CHORD 14-15=0/1026, 13-14=0/2033, 12-13=0/2044,
11-12=0/2044, 10-11=0/637

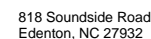
WEBS 5-13=-141/29, 6-12=-6/109, 2-15=-1142/0,
2-14=0/757, 3-14=-130/0, 4-14=-372/0,
4-13=-143/272, 6-11=-784/0, 7-11=-147/53,
8-11=0/878, 8-10=-830/0

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All bearings are assumed to be SP No.2 .
- 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.
- 5) CAUTION. Do not erect truss backwards.

LOAD CASE(S) Standard



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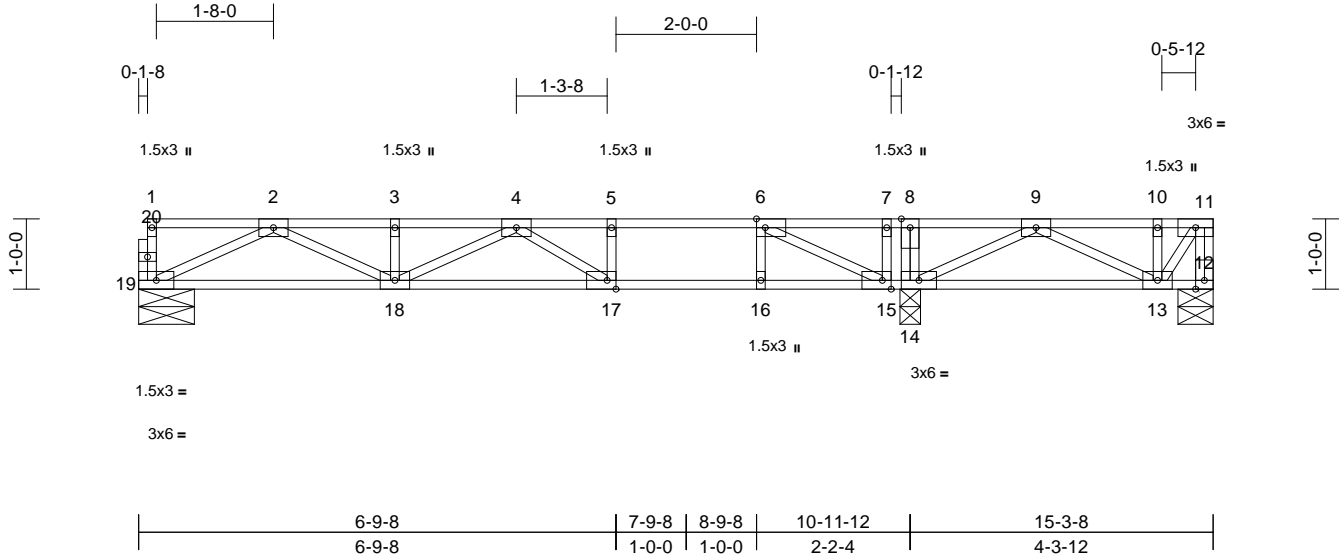


Job	Truss	Truss Type	Qty	Ply	Install 15 Magnolia Acres-Crawl-Franklin BA SP 3CG
25030167-02	F124	Floor	1	1	I72473813
Job Reference (optional)					

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Wed Apr 02 13:28:42
ID:I!PexSy2Ox1Mty8IZz8y2uPzUI9?-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:32.8																	
Plate Offsets (X, Y): [6:0-1-8,Edge], [15:0-1-8,Edge], [17:0-1-8,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		0.88		Vert(LL)	-0.19	17-18	>677	360	MT20	244/190
TCDL		10.0	Lumber DOL		1.00		BC		0.97		Vert(CT)	-0.26	17-18	>493	240		
BCLL		0.0	Rep Stress Incr		YES		WB		0.30		Horz(CT)	0.02	12	n/a	n/a		
BCDL		5.0	Code		IRC2018/TPI2014		Matrix-SH										
															Weight: 77 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)

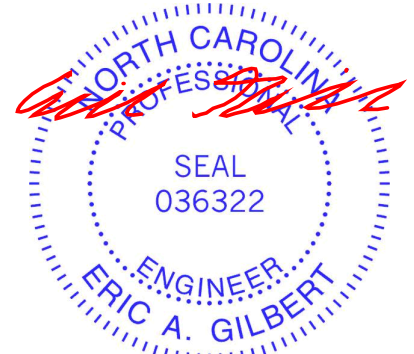
BRACING
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.

REACTIONS (size) 12=0-6-0, 14=0-3-8, 19=0-9-8
Max Grav 12=227 (LC 8), 14=641 (LC 1), 19=480 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-19=-56/0, 11-12=-231/0, 1-2=-4/0, 2-3=-1362/0, 3-4=-1362/0, 4-5=-1271/0, 5-6=-1271/0, 6-7=-238/0, 7-8=-238/0, 8-9=-238/0, 9-10=-172/0, 10-11=-172/0
BOT CHORD 18-19=0/856, 17-18=0/1515, 16-17=0/1271, 15-16=0/1271, 14-15=0/238, 13-14=0/349, 12-13=0/0
WEBS 5-17=0/71, 6-16=0/181, 8-14=-337/0, 2-19=-948/0, 2-18=0/567, 3-18=-114/0, 4-18=-172/0, 4-17=-311/0, 6-15=-1245/0, 7-15=0/277, 9-14=-218/49, 9-13=-199/0, 10-13=-120/0, 11-13=0/284

- 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

- 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) 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 3,2025

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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. Wed Apr 02 13:28:42 Page: 1
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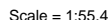


Plate Offsets (X, Y): [6:0-1-8,Edge], [11:0-2-4,Edge], [31:0-1-8,Edge], [33:0-1-8,Edge]

NUMBER
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 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.

REACTIONS (size) 22=0-9-8, 26=0-3-8, 30=0-3-8, 36=0-9-8
Max Grav 22=478 (LC 5), 26=1212 (LC 12), 30=783 (LC 3), 36=486 (LC 5)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-36=-56/0, 21-22=-9/0, 1-2=-4/0, 2-3=-1387/0, 3-4=-1387/0, 4-5=-1326/0, 5-6=-1326/0, 6-7=-228/105, 7-8=-228/105, 8-9=-228/105, 9-10=-535/229, 10-12=-535/964, 12-13=0/964, 13-14=0/1475, 14-15=-745/0, 15-16=-745/0, 16-17=-1520/0, 17-18=-1520/0, 18-19=-1099/0, 19-20=-1099/0, 20-21=-1/0

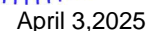
BOT CHORD 34-36=0/868, 33-34=0/1553, 32-33=0/1326, 31-32=0/1326, 30-31=-105/228, 29-30=0/396, 27-29=-566/356, 26-27=-1475/0, 25-26=-290/0, 24-25=0/1270, 23-24=0/1446, 22-23=0/428

WEBS 5-33=0/81, 6-32=0/189, 8-30=-349/0, 13-26=-603/0, 2-36=-962/0, 2-34=0/581, 3-34=-115/0, 4-34=-187/0, 4-33=-334/0, 6-31=-1287/0, 7-31=0/284, 9-30=-504/251, 9-29=-260/175, 10-29=-140/0, 11-29=0/465, 11-27=-785/0, 12-27=-119/0, 13-27=0/786, 14-26=-1320/0, 14-25=0/979, 15-25=-137/0, 16-25=-621/0, 16-24=0/314, 17-24=-137/0, 18-24=-6/83, 18-23=-389/0, 19-23=-139/0, 20-23=0/752, 20-22=-628/0

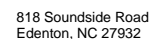
NOTES

- 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) 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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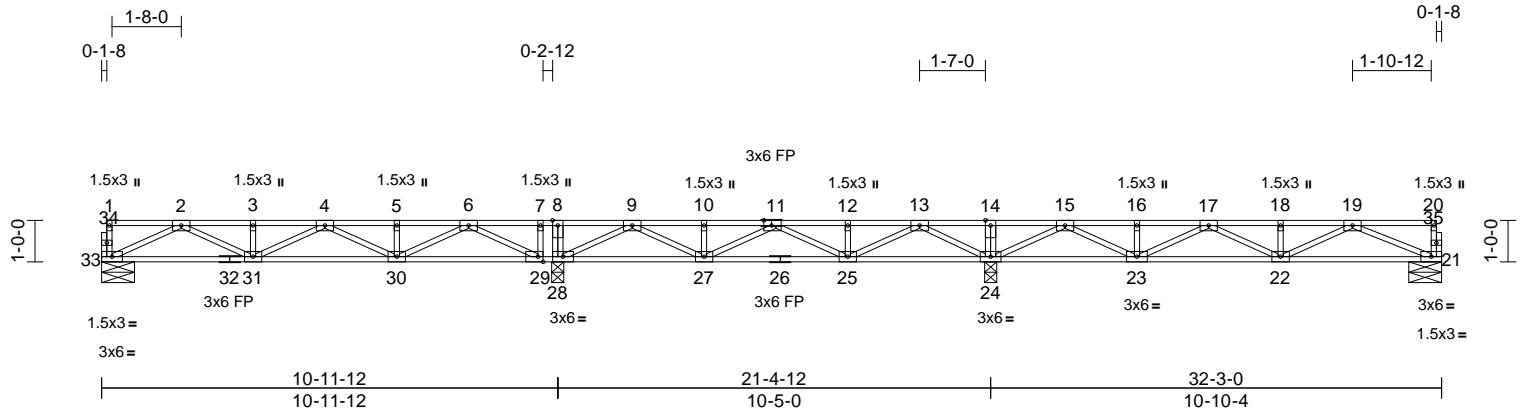


Job	Truss	Truss Type	Qty	Ply	Install 15 Magnolia Acres-Crawl-Franklin BA SP 3CG
25030167-02	F118	Floor	1	1	I72473815
Job Reference (optional)					

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Wed Apr 02 13:28:41
ID:o0XB1G07PQ59jr8Bsjwap_zUI91-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f

Page: 1



Scale = 1:55.4

Plate Offsets (X, Y): [11:0-2-4,Edge], [29:0-1-8,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		0.74	Vert(LL)		-0.06	29-30	>999	360	MT20	244/190
TCDL		10.0	Lumber DOL		1.00	BC		0.39	Vert(CT)		-0.08	29-30	>999	240		
BCLL		0.0	Rep Stress Incr		YES	WB		0.36	Horz(CT)		0.02	21	n/a	n/a		
BCDL		5.0	Code		IRC2018/TPI2014	Matrix-SH									Weight: 161 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) 21=0-9-8, 24=0-3-8, 28=0-3-8, 33=0-9-8
Max Grav 21=407 (LC 5), 24=1082 (LC 4), 28=1075 (LC 3), 33=419 (LC 5)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-33=-57/0, 20-21=-65/0, 1-2=-4/0, 2-3=-1101/0, 3-4=-1101/0, 4-5=-960/44, 5-6=-960/44, 6-7=0/974, 7-8=0/974, 8-9=0/974, 9-10=-572/344, 10-12=-572/358, 12-13=-553/358, 13-14=0/1150, 14-15=0/1151, 15-16=-807/100, 16-17=-807/100, 17-18=-1083/0, 18-19=-1083/0, 19-20=-5/0
BOT CHORD 31-33=0/719, 30-31=0/1173, 29-30=-276/424, 28-29=-974/0, 27-28=-466/124, 25-27=-329/699, 24-25=-511/89, 23-24=-353/215, 22-23=0/1085, 21-22=0/765
WEBS 8-28=-495/0, 14-24=-157/0, 2-33=-796/0, 2-31=0/428, 3-31=-131/0, 4-31=-81/76, 4-30=-325/0, 5-30=-119/0, 6-30=0/685, 6-29=-1137/0, 7-29=0/319, 9-28=-800/0, 9-27=0/607, 10-27=-154/0, 11-27=-250/0, 11-25=-277/0, 12-25=-140/0, 13-25=0/642, 13-24=-918/0, 15-24=-1077/0, 15-23=0/753, 16-23=-138/0, 17-23=-396/0, 17-22=-2/100, 18-22=-128/0, 19-22=0/356, 19-21=-829/0

- 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) 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 3, 2025

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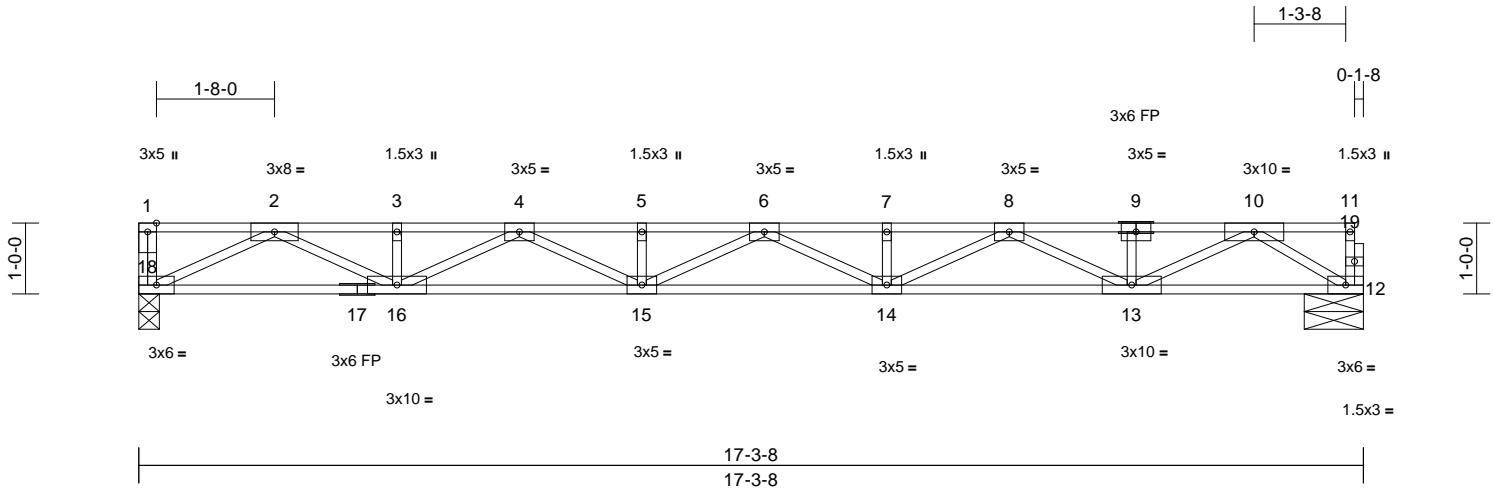
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Install 15 Magnolia Acres-Crawl-Franklin BA SP 3CG
25030167-02	F117	Floor	1	1	I72473816
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. Wed Apr 02 13:28:41
ID:zomhGLMcG134DTWwn_5cf6zREol-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:32.5

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	0.51	Vert(LL)	-0.38	14-15	>537	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.90	Vert(CT)	-0.53	14-15	>387	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.43	Horz(CT)	0.08	12	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 87 lb	FT = 20%F, 11%E

LUMBER

TOP CHORD	2x4 SP No.2(flat)
BOT CHORD	2x4 SP No.2(flat) *Except* 17-12:2x4 SP No.1(flat)
WEBS	2x4 SP No.2(flat)
OTHERS	2x4 SP No.2(flat)

BRACING

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

REACTIONS	(size) 12=0-10-0, 18=0-3-8
	Max Grav 12=931 (LC 1), 18=937 (LC 1)

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

TOP CHORD	1-18=-75/0, 11-12=-53/0, 1-2=0/0, 2-3=-3008/0, 3-4=-3008/0, 4-5=-4417/0, 5-6=-4417/0, 6-7=-4336/0, 7-8=-4336/0, 8-10=-2770/0, 10-11=-4/0
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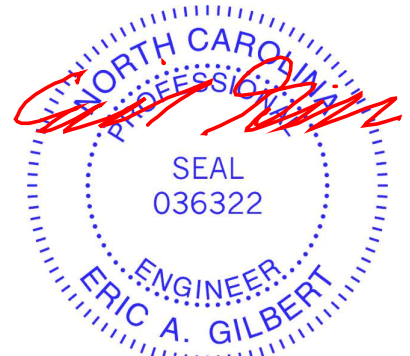
BOT CHORD	16-18=0/1732, 15-16=0/3890, 14-15=0/4554, 13-14=0/3729, 12-13=0/1401
-----------	----------------------------------------------------------------------

WEBS	2-18=-1927/0, 2-16=0/1430, 3-16=-162/0, 4-16=-989/0, 4-15=0/590, 5-15=-165/0, 6-15=-154/0, 6-14=-244/0, 7-14=-164/0, 8-14=0/681, 8-13=-1087/0, 9-13=-167/0, 10-13=0/1535, 10-12=-1642/0
------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

NOTES

- Bearings are assumed to be: Joint 18 SP No.2, Joint 12 SP No.1.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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 3, 2025

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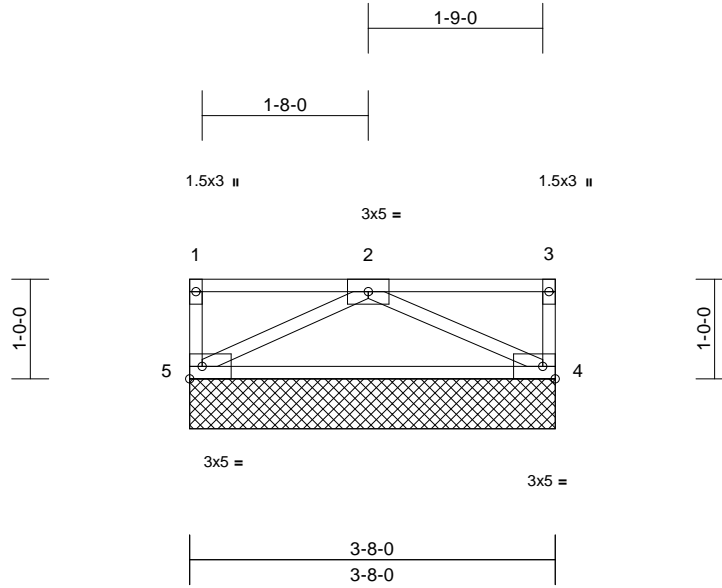
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Install 15 Magnolia Acres-Crawl-Franklin BA SP 3CG
25030167-02	F114	Floor	1	1	I72473817
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. Wed Apr 02 13:28:41
ID:zomhGLMcG134DTWwn_5cf6zREol-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f

Page: 1



Scale = 1:23.1

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	0.19	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.00	BC	0.17	Vert(TL)	n/a	-	n/a	999	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.04	Horiz(TL)	0.00	4	n/a	n/a	
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 19 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.2(flat)

BRACING

TOP CHORD Structural wood sheathing directly applied or
3-8-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc
bracing.

REACTIONS (size) 4=3-8-0, 5=3-8-0
Max Grav 4=195 (LC 1), 5=195 (LC 1)

FORCES (lb) - Maximum Compression/Maximum
Tension

TOP CHORD 1-5=-65/0, 3-4=-70/0, 1-2=0/0, 2-3=0/0
BOT CHORD 4-5=0/221
WEBS 2-5=-248/0, 2-4=-246/0

NOTES

- Gable requires continuous bottom chord bearing.
- All bearings are assumed to be SP No.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.
- 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 3, 2025

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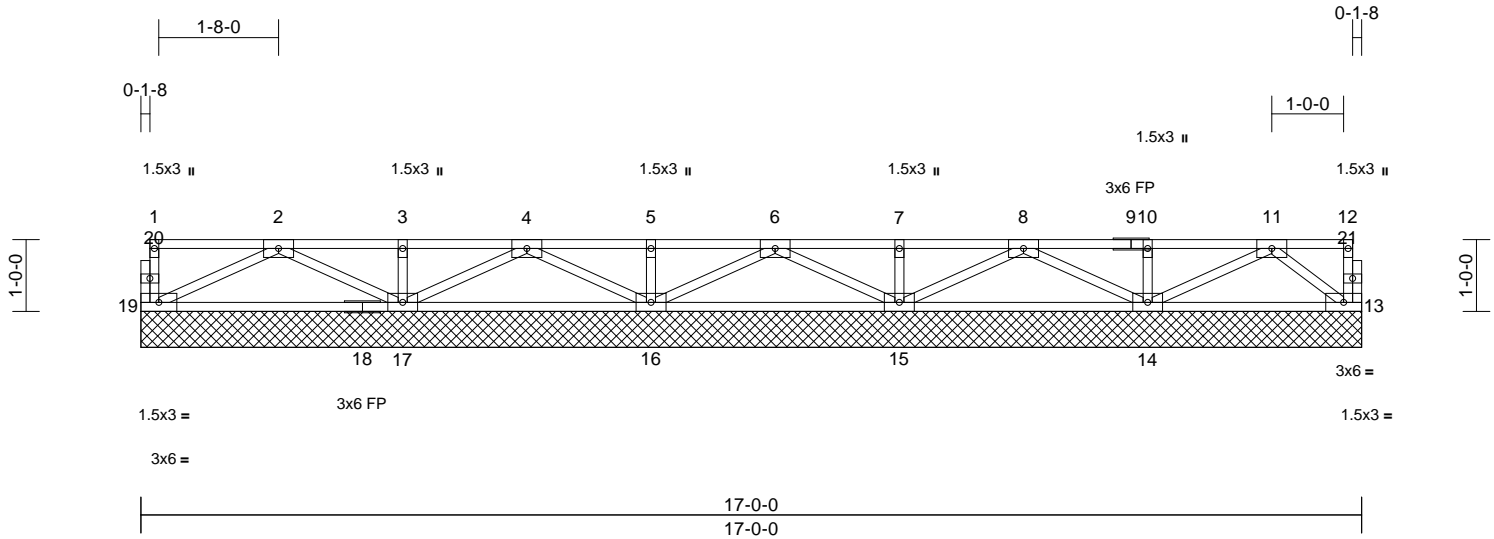
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Install 15 Magnolia Acres-Crawl-Franklin BA SP 3CG
25030167-02	F110	Floor	1	1	I72473818
					Job Reference (optional)

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

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Page: 1



Scale = 1:32.1

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	0.17	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.11	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.04	Horiz(TL)	0.00	13	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 85 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.2(flat)
OTHERS	2x4 SP No.2(flat) *Except* 13-21:2x4 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)	13=17-0-0, 14=17-0-0, 15=17-0-0, 16=17-0-0, 17=17-0-0, 19=17-0-0
Max Grav		13=121 (LC 1), 14=369 (LC 1), 15=387 (LC 1), 16=379 (LC 1), 17=418 (LC 1), 19=155 (LC 1)

FORCES

	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-19=-70/0, 12-13=-36/0, 1-2=-5/0, 2-3=0/88, 3-4=0/88, 4-5=0/83, 5-6=0/83, 6-7=0/81, 7-8=0/81, 8-10=0/52, 10-11=0/52, 11-12=-3/0
BOT CHORD	17-19=0/151, 16-17=0/81, 15-16=0/83, 14-15=0/98, 13-14=0/99
WEBS	2-19=-162/0, 2-17=-267/0, 3-17=-173/0, 4-17=-189/0, 4-16=-184/0, 5-16=-178/0, 6-16=-186/0, 6-15=-184/0, 7-15=-179/0, 8-15=-201/0, 8-14=-168/0, 10-14=-182/0, 11-14=-169/0, 11-13=-122/0

NOTES

- 1) All plates are 3x5 MT20 unless otherwise indicated.
- 2) Gable requires continuous bottom chord bearing.
- 3) All bearings are assumed to be SP No.2 .
- 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.

LOAD CASE(S)

Standard



April 3, 2025

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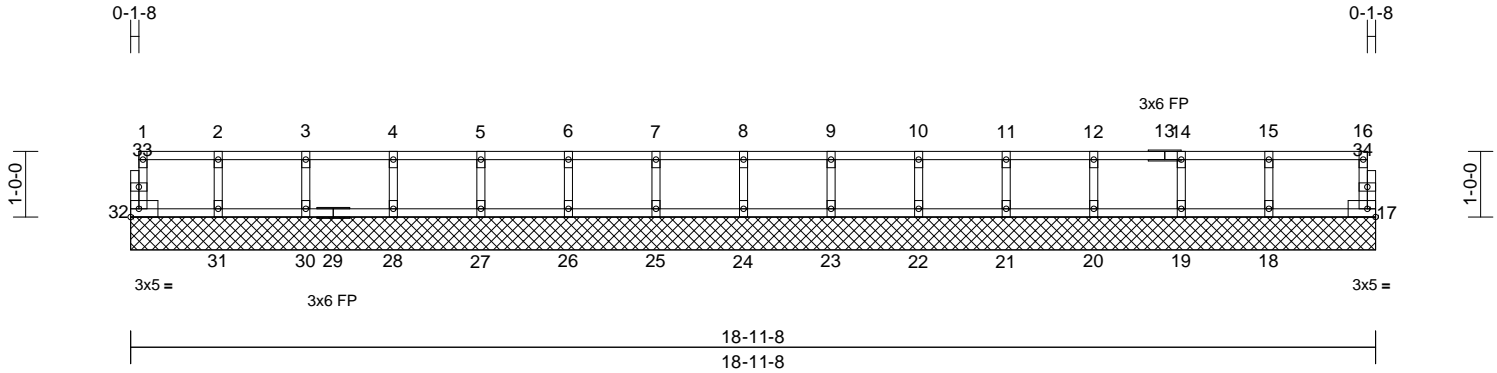
Job	Truss	Truss Type	Qty	Ply	Install 15 Magnolia Acres-Crawl-Franklin BA SP 3CG
25030167-02	F105	Floor Supported Gable	1	1	I72473819
Job Reference (optional)					

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Wed Apr 02 13:28:41

Page: 1

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Scale = 1:35.1

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	0.09	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.02	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.02	0.00	17	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-R						Weight: 74 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.2(flat)
OTHERS	2x4 SP No.2(flat)

WEBS

2-31=-128/0, 3-30=-135/0, 4-28=-133/0,
5-27=-133/0, 6-26=-133/0, 7-25=-133/0,
8-24=-133/0, 9-23=-133/0, 10-22=-133/0,
11-21=-133/0, 12-20=-134/0, 14-19=-129/0,
15-18=-147/0

BRACING

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

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) 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.
- 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.

LOAD CASE(S)

Standard

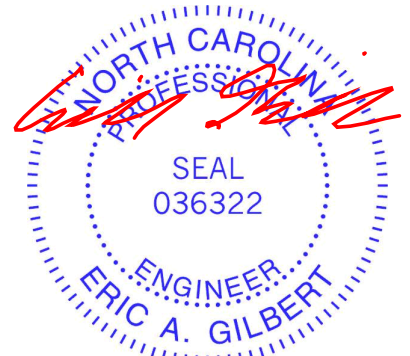
REACTIONS

(size)	17=18-11-8, 18=18-11-8, 19=18-11-8, 20=18-11-8, 21=18-11-8, 22=18-11-8, 23=18-11-8, 24=18-11-8, 25=18-11-8, 26=18-11-8, 27=18-11-8, 28=18-11-8, 30=18-11-8, 31=18-11-8, 32=18-11-8
Max Grav	17=72 (LC 1), 18=164 (LC 1), 19=142 (LC 1), 20=148 (LC 1), 21=146 (LC 1), 22=147 (LC 1), 23=147 (LC 1), 24=147 (LC 1), 25=147 (LC 1), 26=147 (LC 1), 27=147 (LC 1), 28=146 (LC 1), 30=149 (LC 1), 31=138 (LC 1), 32=60 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-32=-54/0, 16-17=-68/0, 1-2=-16/0, 2-3=-16/0, 3-4=-16/0, 4-5=-16/0, 5-6=-16/0, 6-7=-16/0, 7-8=-16/0, 8-9=-16/0, 9-10=-16/0, 10-11=-16/0, 11-12=-16/0, 12-14=-16/0, 14-15=-16/0, 15-16=-16/0
BOT CHORD	31-32=0/16, 30-31=0/16, 28-30=0/16, 27-28=0/16, 26-27=0/16, 25-26=0/16, 24-25=0/16, 23-24=0/16, 22-23=0/16, 21-22=0/16, 20-21=0/16, 19-20=0/16, 18-19=0/16, 17-18=0/16



April 3,2025

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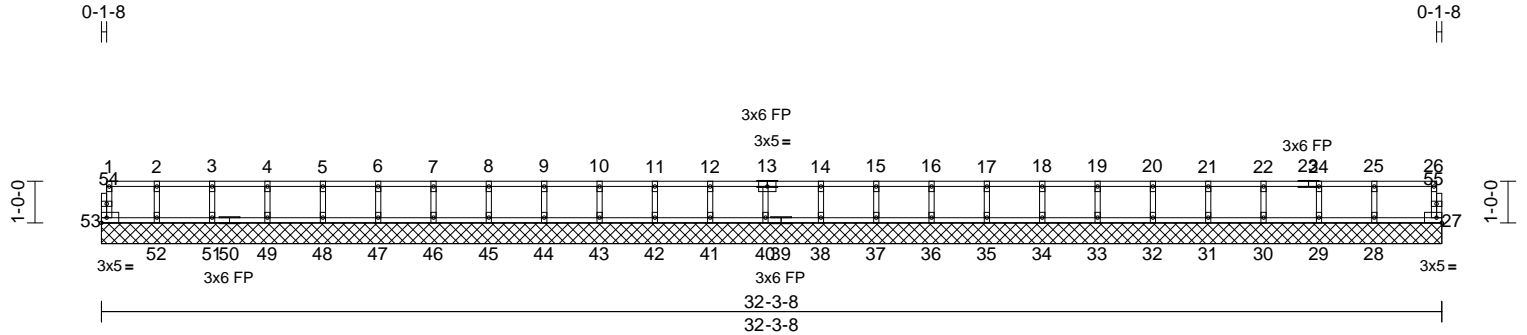
Job	Truss	Truss Type	Qty	Ply	Install 15 Magnolia Acres-Crawl-Franklin BA SP 3CG
25030167-02	F101	Floor Supported Gable	1	1	I72473820
Job Reference (optional)					

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Wed Apr 02 13:28:40

Page: 1

ID:1PexrfKlkQpM_9MYfZ28ahzREoK-RfC?PsB70Hq3NSgPqnL8w3uITxbGKWrCDoi7J4zJC?i



Scale = 1:55.5

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	0.09	Vert(LL)	n/a	-	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.02	Vert(TL)	n/a	-	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.02	Horiz(TL)	0.00	27	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-R							
Weight: 125 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.2(flat)
OTHERS 2x4 SP No.2(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)
27=32-3-8, 28=32-3-8, 29=32-3-8, 30=32-3-8, 31=32-3-8, 32=32-3-8, 33=32-3-8, 34=32-3-8, 35=32-3-8, 36=32-3-8, 37=32-3-8, 38=32-3-8, 40=32-3-8, 41=32-3-8, 42=32-3-8, 43=32-3-8, 44=32-3-8, 45=32-3-8, 46=32-3-8, 47=32-3-8, 48=32-3-8, 49=32-3-8, 51=32-3-8, 52=32-3-8, 53=32-3-8
Max Grav 27=73 (LC 1), 28=162 (LC 1), 29=142 (LC 1), 30=148 (LC 1), 31=146 (LC 1), 32=147 (LC 1), 33=147 (LC 1), 34=147 (LC 1), 35=147 (LC 1), 36=146 (LC 1), 37=148 (LC 1), 38=143 (LC 1), 40=147 (LC 1), 41=150 (LC 1), 42=146 (LC 1), 43=147 (LC 1), 44=147 (LC 1), 45=147 (LC 1), 46=147 (LC 1), 47=147 (LC 1), 48=147 (LC 1), 49=146 (LC 1), 51=148 (LC 1), 52=143 (LC 1), 53=56 (LC 1)

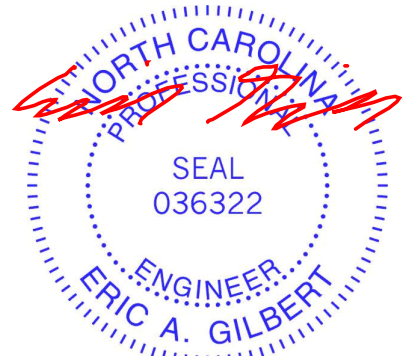
FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-53=-51/0, 26-27=-68/0, 1-2=-11/0, 2-3=-11/0, 3-4=-11/0, 4-5=-11/0, 5-6=-11/0, 6-7=-11/0, 7-8=-11/0, 8-9=-11/0, 9-10=-11/0, 10-11=-11/0, 11-12=-11/0, 12-14=-18/0, 14-15=-18/0, 15-16=-18/0, 16-17=-18/0, 17-18=-18/0, 18-19=-18/0, 19-20=-18/0, 20-21=-18/0, 21-22=-18/0, 22-24=-18/0, 24-25=-18/0, 25-26=-18/0
BOT CHORD 52-53=0/11, 51-52=0/11, 49-51=0/11, 48-49=0/11, 47-48=0/11, 46-47=0/11, 45-46=0/11, 44-45=0/11, 43-44=0/11, 42-43=0/11, 41-42=0/11, 40-41=0/11, 38-40=0/18, 37-38=0/18, 36-37=0/18, 35-36=0/18, 34-35=0/18, 33-34=0/18, 32-33=0/18, 31-32=0/18, 30-31=0/18, 29-30=0/18, 28-29=0/18, 27-28=0/18
WEBS 2-52=-130/0, 3-51=-134/0, 4-49=-133/0, 5-48=-133/0, 6-47=-133/0, 7-46=-133/0, 8-45=-133/0, 9-44=-133/0, 10-43=-134/0, 11-42=-132/0, 12-41=-137/0, 13-40=-134/0, 14-38=-130/0, 15-37=-134/0, 16-36=-133/0, 17-35=-133/0, 18-34=-133/0, 19-33=-133/0, 20-32=-133/0, 21-31=-133/0, 22-30=-134/0, 24-29=-130/0, 25-28=-146/0

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) 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.
- 7) 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.

LOAD CASE(S) Standard



April 3, 2025

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

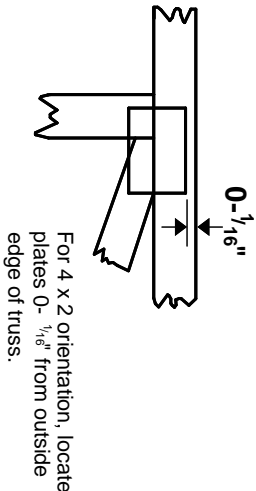
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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

Symbols

PLATE LOCATION AND ORIENTATION



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

PLATE SIZE

4 X 4

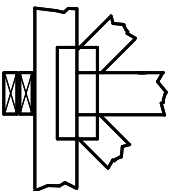
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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.

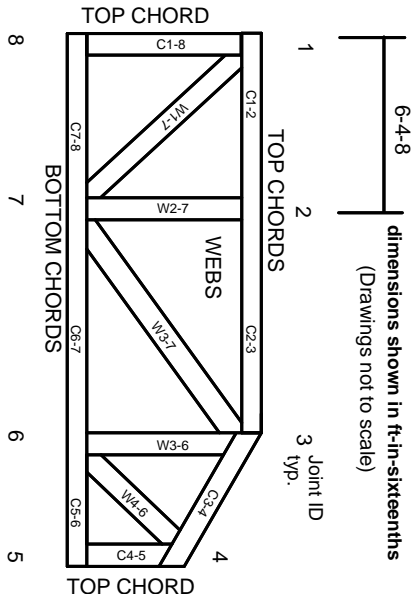
BEARING



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