

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: 25080114-02
55 Magnolia Acres-2nd Floor-Taylor FA TMB FL 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: I75894242 thru I75894247

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

North Carolina COA: C-0844



August 25, 2025

Gilbert, Eric

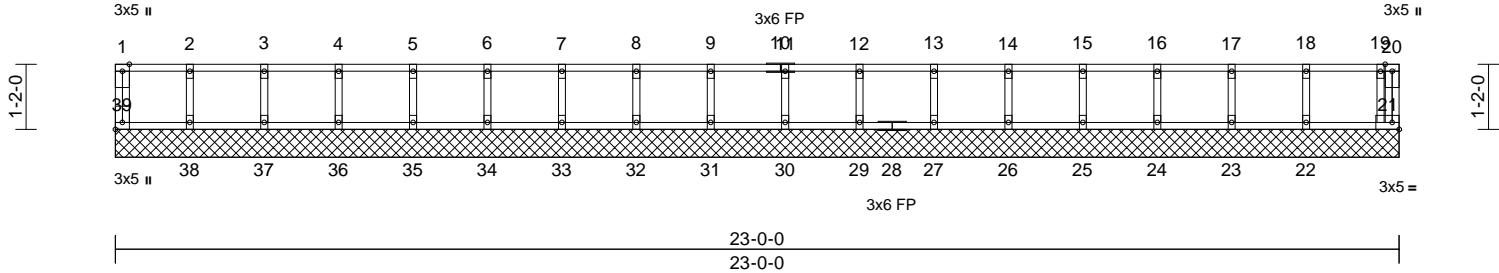
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which 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	55 Magnolia Acres-2nd Floor-Taylor FA TMB FL GLH I75894242
25080114-02	F201	Floor Supported Gable	1	1	Job Reference (optional)

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

Run: 8.73 S Aug 13 2025 Print: 8.730 S Aug 13 2025 MiTek Industries, Inc. Mon Aug 25 14:32:55
ID:00N6mFNHhJzgznLhqrVa16zo52d-RfC?PsB70Hq3NSgPqnL8w3uITxbGKWrcDoi7J4zJC?fi

Page: 1

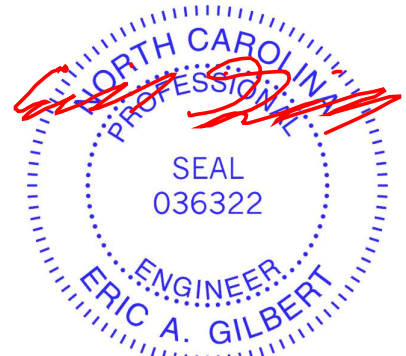


Scale = 1:41.3									
Plate Offsets (X, Y): [39:Edge,0-1-8]									
Loading	(psf)	Spacing	1-7-3	CSI		DEFL	in (loc)	l/defl	L/d
TCLL	40.0	Plate Grip DOL	1.00	TC	0.07	Vert(LL)	n/a	-	999
TCDL	10.0	Lumber DOL	1.00	BC	0.02	Vert(TL)	n/a	-	999
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	21	n/a
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-MR					
						PLATES		GRIP	
						MT20		244/190	
						Weight: 97 lb		FT = 20%F, 11%E	

LUMBER		WEBS	2-38=-102/0, 3-37=-108/0, 4-36=-106/0, 5-35=-107/0, 6-34=-107/0, 7-33=-107/0, 8-32=-107/0, 9-31=-107/0, 11-30=-107/0, 12-29=-107/0, 13-27=-107/0, 14-26=-107/0, 15-25=-106/0, 16-24=-107/0, 17-23=-105/0, 18-22=-114/0, 19-21=-74/0
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		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) 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.
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)		
	21=23-0-0, 22=23-0-0, 23=23-0-0, 24=23-0-0, 25=23-0-0, 26=23-0-0, 27=23-0-0, 29=23-0-0, 30=23-0-0, 31=23-0-0, 32=23-0-0, 33=23-0-0, 34=23-0-0, 35=23-0-0, 36=23-0-0, 37=23-0-0, 38=23-0-0, 39=23-0-0		
Max Grav	21=68 (LC 1), 22=128 (LC 1), 23=114 (LC 1), 24=118 (LC 1), 25=117 (LC 1), 26=117 (LC 1), 27=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), 35=117 (LC 1), 36=117 (LC 1), 37=119 (LC 1), 38=110 (LC 1), 39=54 (LC 1)		

FORCES	(lb) - Maximum Compression/Maximum Tension	LOAD CASE(S)	Standard
TOP CHORD	1-39=-47/0, 20-21=0/9, 1-2=-12/0, 2-3=-12/0, 3-4=-12/0, 4-5=-12/0, 5-6=-12/0, 6-7=-12/0, 7-8=-12/0, 8-9=-12/0, 9-11=-12/0, 11-12=-12/0, 12-13=-12/0, 13-14=-12/0, 14-15=-12/0, 15-16=-12/0, 16-17=-12/0, 17-18=-12/0, 18-19=-12/0, 19-20=-2/0		
BOT CHORD	38-39=0/12, 37-38=0/12, 36-37=0/12, 35-36=0/12, 34-35=0/12, 33-34=0/12, 32-33=0/12, 31-32=0/12, 30-31=0/12, 29-30=0/12, 27-29=0/12, 26-27=0/12, 25-26=0/12, 24-25=0/12, 23-24=0/12, 22-23=0/12, 21-22=0/12		



August 25,2025

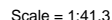
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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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TRENCO
A MITEK Affiliate

818 Soundside Road
Edenton, NC 27932

Carter Components (Sanford, NC), Sanford, NC - 27332, Run: 8.73 S Aug 13 2025 Print: 8.730 S Aug 13 2025 MiTek Industries, Inc. Mon Aug 25 14:32:56 Page: 1
ID:bfPqS_Ao2bCmoR4HQZf_R1zo5??-RfC?PsB70Hg3NSqPnL8w3uITXbGKWkRcDci7J4zJC?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	0.64	Vert(LL)	-0.18	23-24	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.79	Vert(CT)	-0.24	23-24	>783	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.50	Horz(CT)	0.03	19	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-MSH							Weight: 115 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)

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) 16= Mechanical, 19=0-3-8, 25= Mechanical
 Max Uplift 16=63 (LC 3)
 Max Grav 16=234 (LC 4), 19=1248 (LC 1), 25=629 (LC 10)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-25=47/0, 15-16=92/0, 1-2=0/0,
2-3=1532/0, 3-4=1532/0, 4-5=2117/0,
5-6=2117/0, 6-7=2117/0, 7-9=1082/0,
9-10=1082/0, 10-11=0/1159, 11-12=0/1159,
12-13=293/244, 13-14=293/244, 14-15=0/0

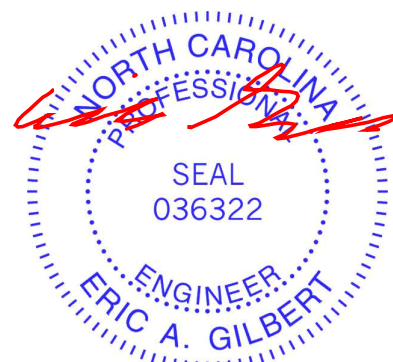
BOT CHORD 24-25=0/825, 23-24=0/1960, 22-23=0/2117,
21-22=0/1684, 19-21=145/201,
18-19=625/49, 17-18=244/293,
16-17=244/293

WEBS 5-23=140/0, 6-22=246/0, 11-19=170/0,
13-18=218/0, 14-17=78/9, 10-19=1339/0,
10-21=0/1058, 9-21=151/0, 7-21=733/0,
7-22=0/656, 4-23=58/346, 4-24=500/0,
3-24=129/0, 2-24=0/826, 2-25=1004/0,
12-19=764/0, 12-18=0/566, 14-16=337/280

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x5 MT20 unless otherwise indicated.
- 3) Refer to girder(s) for truss to truss connections.

- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 63 lb uplift at joint 16.
- 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



August 25, 2025



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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TP1 Quality Criteria and DS8-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Components Association (www.sbcacomponents.com)



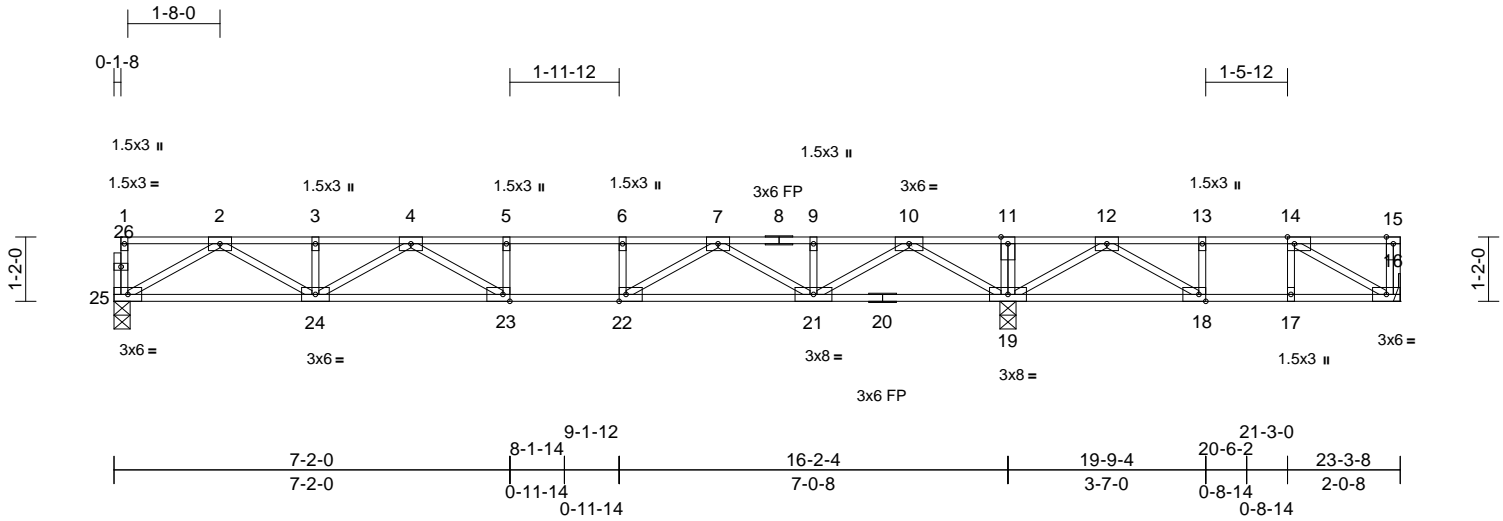
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	55 Magnolia Acres-2nd Floor-Taylor FA TMB FL GLH I75894244
25080114-02	F203	Floor	7	1	Job Reference (optional)

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

Run: 8.73 S Aug 13 2025 Print: 8.730 S Aug 13 2025 MiTek Industries, Inc. Mon Aug 25 14:32:56
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Page: 1



Scale = 1:41.7

Plate Offsets (X, Y): [14:0-1-8,Edge], [18:0-1-8,Edge], [22:0-1-8,Edge], [23:0-1-8,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)	-0.20	23-24	>981	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.85	Vert(CT)	-0.27	23-24	>721	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.52	Horz(CT)	0.04	19	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-MSH							Weight: 116 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) 16= Mechanical, 19=0-3-8, 25=0-3-8
Max Uplift 16=67 (LC 3)
Max Grav 16=233 (LC 4), 19=1265 (LC 1), 25=636 (LC 10)

FORCES (lb) - Maximum Compression/Maximum Tension

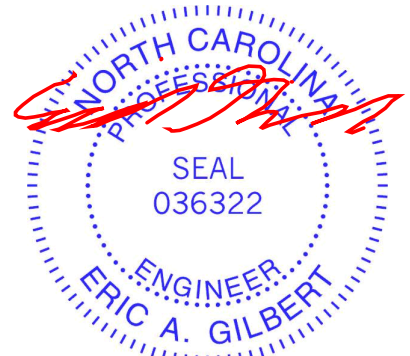
TOP CHORD 1-25=-56/0, 15-16=-93/0, 1-2=-3/0, 2-3=-1666/0, 3-4=-1666/0, 4-5=-2193/0, 5-6=-2193/0, 6-7=-2193/0, 7-9=-1100/0, 9-10=-1100/0, 10-11=0/1184, 11-12=0/1184, 12-13=-291/254, 13-14=-291/254, 14-15=0/0
BOT CHORD 24-25=0/983, 23-24=0/2073, 22-23=0/2193, 21-22=0/1725, 19-21=-146/197, 18-19=-644/44, 17-18=-254/291, 16-17=-254/291
WEBS 5-23=-134/3, 6-22=-259/0, 11-19=-171/0, 2-25=-1133/0, 2-24=0/798, 3-24=-124/0, 4-24=-474/0, 4-23=-96/327, 10-19=-1364/0, 10-21=0/1083, 9-21=-153/0, 7-21=-759/0, 7-22=0/693, 13-18=-221/0, 14-17=-80/9, 12-19=-772/0, 12-18=0/577, 14-16=-333/291

NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x5 MT20 unless otherwise indicated.
- 3) Refer to girder(s) for truss to truss connections.

- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 67 lb uplift at joint 16.
- 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



August 25, 2025

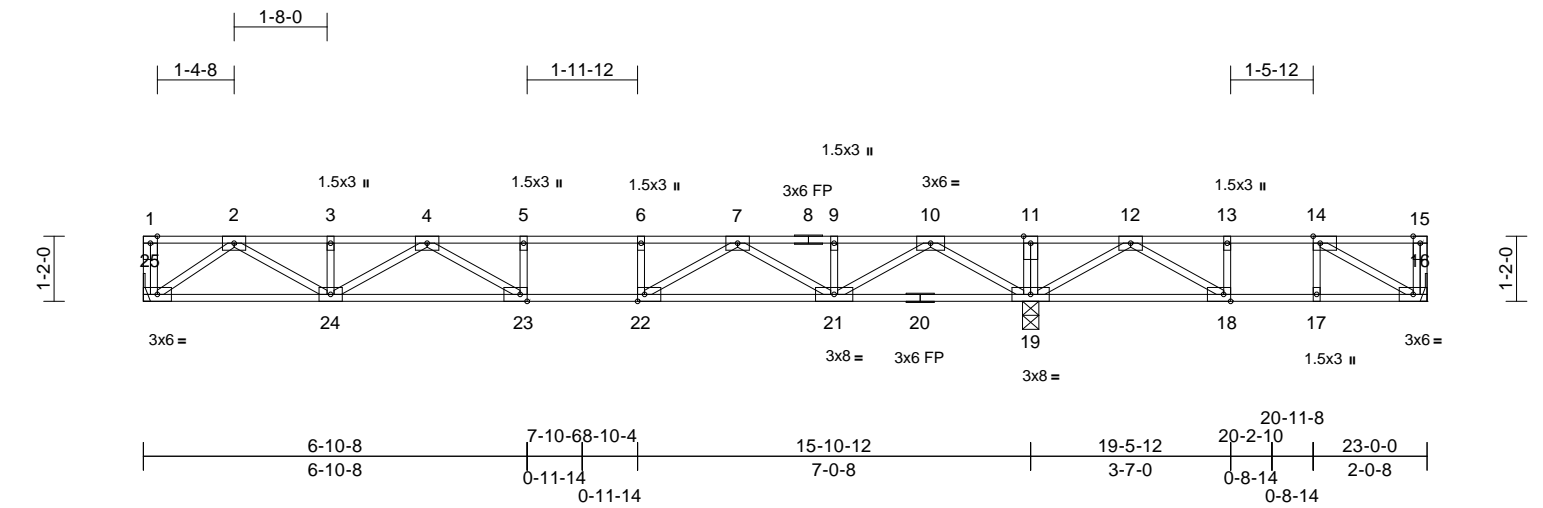
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	55 Magnolia Acres-2nd Floor-Taylor FA TMB FL GLH I75894245
25080114-02	F204	Floor	1	1	Job Reference (optional)



Scale = 1:41.3									
Plate Offsets (X, Y): [14:0-1-8,Edge], [18:0-1-8,Edge], [22:0-1-8,Edge], [23:0-1-8,Edge]									
Loading	(psf)	Spacing	1-7-3	CSI		DEFL	in (loc)	l/defl	L/d
TCLL	40.0	Plate Grip DOL	1.00	TC	0.91	Vert(LL)	-0.18 23-24	>999	480
TCDL	10.0	Lumber DOL	1.00	BC	0.93	Vert(CT)	-0.25 23-24	>763	360
BCLL	0.0	Rep Stress Incr	NO	WB	0.54	Horz(CT)	0.03 16	n/a	n/a
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-MSH					
Weight: 115 lb FT = 20%F, 11%E									

LUMBER		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.
TOP CHORD	2x4 SP No.2(flat)	
BOT CHORD	2x4 SP No.2(flat)	
WEBS	2x4 SP No.3(flat)	
BRACING		6) CAUTION, Do not erect truss backwards.
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.	LOAD CASE(S) Standard
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.	1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
REACTIONS (size)		Uniform Loads (lb/ft)
16= Mechanical, 19=0-3-8, 25= Mechanical		Vert: 16-25=-8, 1-11=-80, 11-15=-280
Max Grav 16=855 (LC 4), 19=2057 (LC 1), 25=595 (LC 10)		
FORCES (lb) - Maximum Compression/Maximum Tension		
TOP CHORD	1-25=-46/0, 15-16=-227/0, 1-2=0/0, 2-3=-1429/0, 3-4=-1429/0, 4-5=-1864/0, 5-6=-1864/0, 6-7=-1864/0, 7-9=-680/273, 9-10=-680/273, 10-11=0/1637, 11-12=0/1637, 12-13=-1180/0, 13-14=-1180/0, 14-15=0/0	
BOT CHORD	24-25=0/777, 23-24=0/1799, 22-23=0/1864, 21-22=-37/1339, 19-21=-608/0, 18-19=-63/610, 17-18=0/1180, 16-17=0/1180	
WEBS	5-23=-104/36, 6-22=-283/0, 11-19=-351/0, 13-18=-456/0, 14-17=-33/54, 4-23=-165/240, 4-24=-432/0, 3-24=-124/0, 2-24=0/760, 2-25=-946/0, 7-22=0/764, 7-21=-799/0, 9-21=-163/0, 10-21=0/1129, 10-19=-1357/0, 12-19=-1968/0, 12-18=0/946, 14-16=-1354/0	

NOTES	
1) Unbalanced floor live loads have been considered for this design.	
2) All plates are 3x5 MT20 unless otherwise indicated.	
3) Refer to girder(s) for truss to truss connections.	
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.	



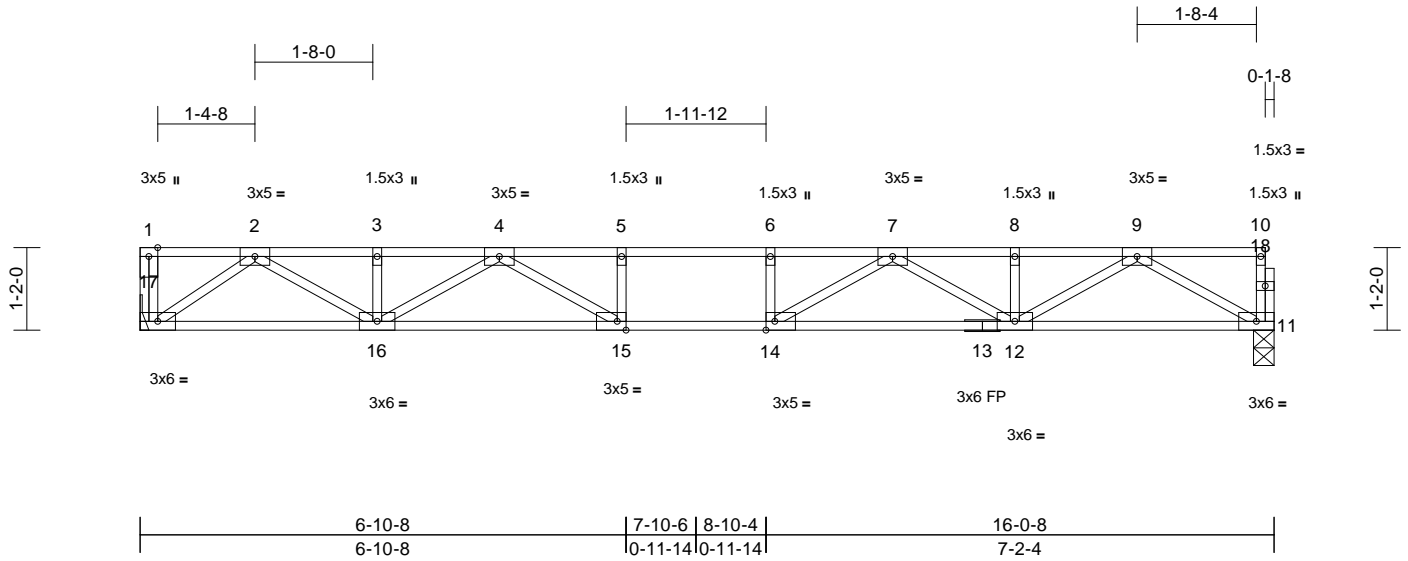
August 25,2025

Job	Truss	Truss Type	Qty	Ply	55 Magnolia Acres-2nd Floor-Taylor FA TMB FL GLH
25080114-02	F205	Floor	5	1	I75894246
Job Reference (optional)					

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

Run: 8.73 S Aug 13 2025 Print: 8.730 S Aug 13 2025 MiTek Industries, Inc. Mon Aug 25 14:32:57
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Page: 1



Scale = 1:32.6

Plate Offsets (X, Y): [14:0-1-8,Edge], [15:0-1-8,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	0.56	Vert(LL)	-0.19	12-14	>977	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.80	Vert(CT)	-0.26	12-14	>726	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.45	Horz(CT)	0.05	11	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-MSH							Weight: 80 lb	FT = 20%F, 11%E

LUMBER

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

BRACING

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

REACTIONS (size) 11=0-3-8, 17= Mechanical
Max Grav 11=689 (LC 1), 17=694 (LC 1)

FORCES (lb) - Maximum Compression/Maximum
Tension

TOP CHORD 1-17=-47/0, 10-11=-58/0, 1-2=0/0,
2-3=-1730/0, 3-4=-1730/0, 4-5=-2600/0,
5-6=-2600/0, 6-7=-2600/0, 7-8=-1850/0,
8-9=-1850/0, 9-10=-3/0

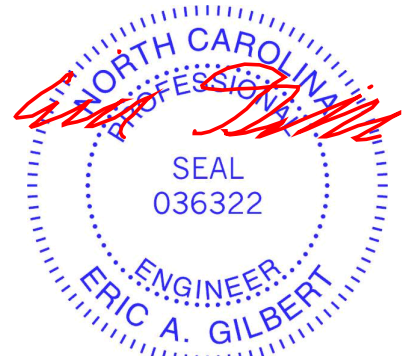
BOT CHORD 16-17=0/915, 15-16=0/2269, 14-15=0/2600,
12-14=0/2343, 11-12=0/1082

WEBS 5-15=-221/0, 6-14=-201/0, 4-15=0/580,
4-16=-629/0, 3-16=-139/0, 2-16=0/952,
2-17=-1113/0, 7-14=0/520, 7-12=-576/0,
8-12=-132/0, 9-12=0/897, 9-11=-1244/0

NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Refer to girder(s) for truss to truss connections.
- 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



August 25, 2025

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ENGINEERING BY
TRENCO
A MITEK Affiliate

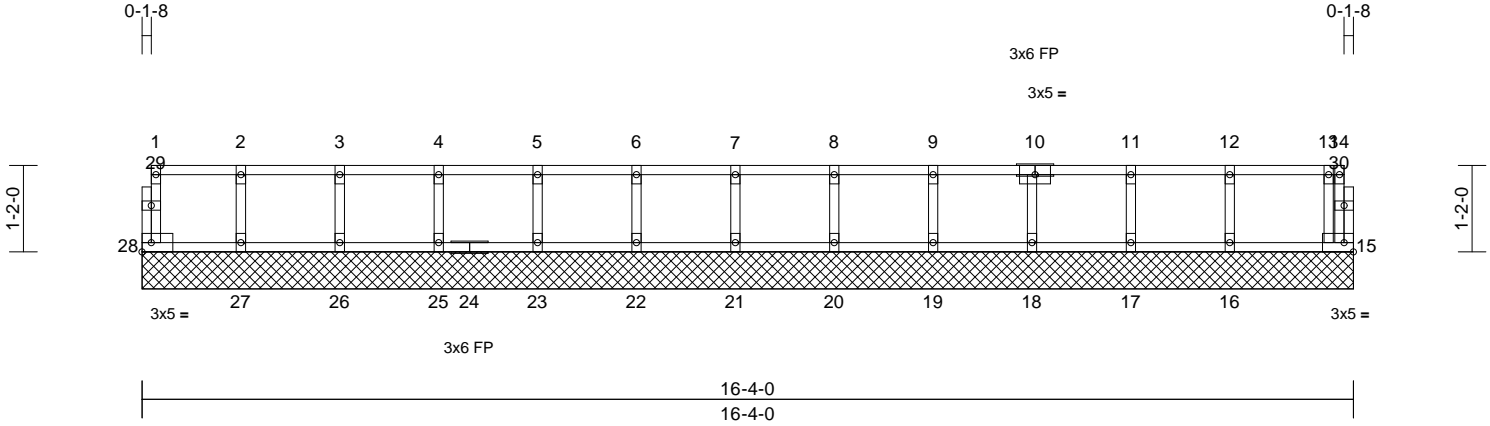
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	55 Magnolia Acres-2nd Floor-Taylor FA TMB FL GLH I75894247
25080114-02	F206	Floor Supported Gable	1	1	Job Reference (optional)

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

Run: 8.73 S Aug 13 2025 Print: 8.730 S Aug 13 2025 MiTek Industries, Inc. Mon Aug 25 14:32:57
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Scale = 1:31.1

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	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.01	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	15	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-MR						Weight: 70 lb	FT = 20%F, 11%E

LUMBER

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

BRACING

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

REACTIONS (size)	15=16-4-0, 16=16-4-0, 17=16-4-0, 18=16-4-0, 19=16-4-0, 20=16-4-0, 21=16-4-0, 22=16-4-0, 23=16-4-0, 25=16-4-0, 26=16-4-0, 27=16-4-0, 28=16-4-0
Max Grav	15=65 (LC 1), 16=126 (LC 1), 17=112 (LC 1), 18=118 (LC 1), 19=120 (LC 1), 20=117 (LC 1), 21=117 (LC 1), 22=117 (LC 1), 23=117 (LC 1), 25=117 (LC 1), 26=119 (LC 1), 27=112 (LC 1), 28=47 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-28=-42/0, 14-15=0/20, 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, 9-11=-14/0, 11-12=-14/0, 12-13=-14/0, 13-14=-3/0
BOT CHORD	27-28=0/9, 26-27=0/9, 25-26=0/9, 23-25=0/9, 22-23=0/9, 21-22=0/9, 20-21=0/9, 19-20=0/9, 18-19=0/9, 17-18=0/14, 16-17=0/14, 15-16=0/14
WEBS	2-27=-103/0, 3-26=-108/0, 4-25=-106/0, 5-23=-107/0, 6-22=-107/0, 7-21=-107/0, 8-20=-106/0, 9-19=-109/0, 10-18=-107/0, 11-17=-102/0, 12-16=-114/0, 13-15=-81/0

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) 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



August 25, 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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TRENCO
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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

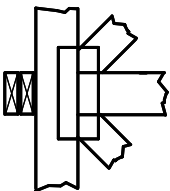
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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.

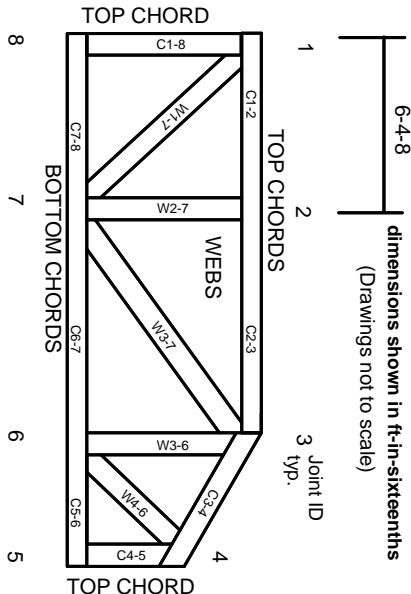
BEARING



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