

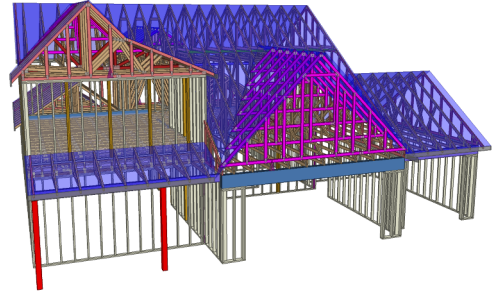


Carter Sanford Component Plant  
298 Harvey Faulk Rd  
Sanford, NC 27332

Phone #:919-775-1450

**Builder:** HH Hunt Homes Raleigh  
Durham

**Model:** Maxwekk FA 3CG SP BR4 FE  
GRH



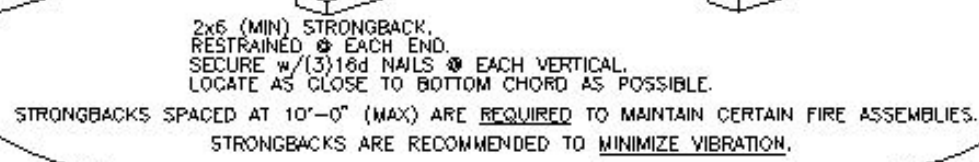
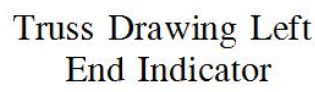
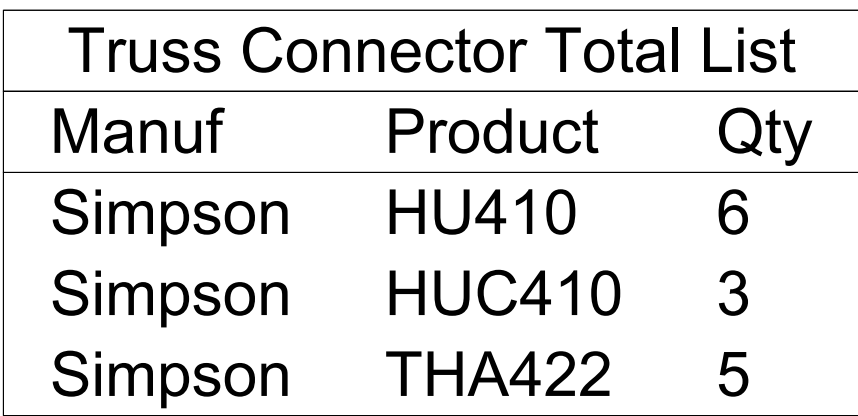
THE PLACEMENT PLAN NOTES:

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

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



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

Trenco  
818 Soundside Rd  
Edenton, NC 27932

Re: 25040237-B

Install 2 Oak Meadow-2nd Floor-Maxwell FA 3CG SP BR4 FE 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 (Chesapeake, VA).

Pages or sheets covered by this seal: I73126484 thru I73126495

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

North Carolina COA: C-0844



May 1, 2025

Gilbert, Eric

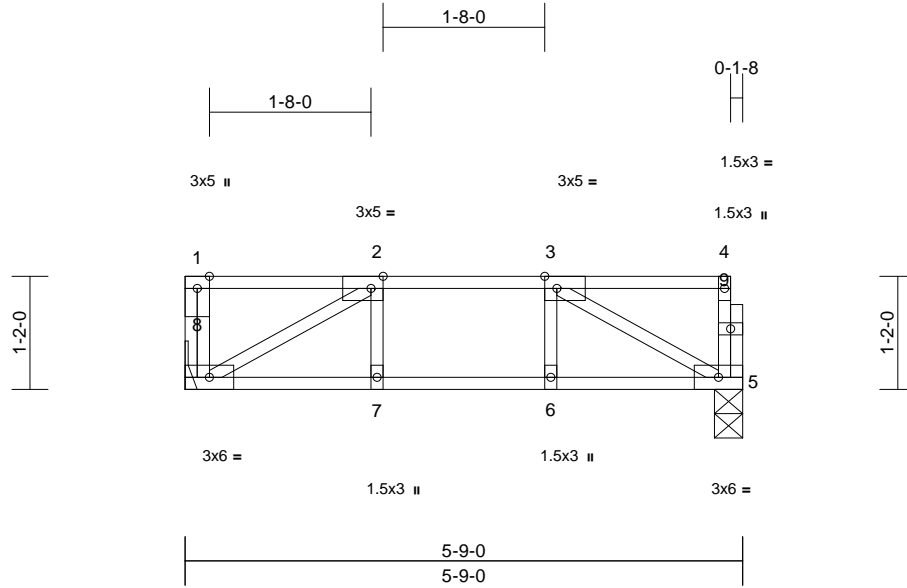
**IMPORTANT NOTE:** The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), 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 2 Oak Meadow-2nd Floor-Maxwell FA 3CG SP BR4 I73126484
25040237-B	F11	Floor	2	1	Job Reference (optional)

Carter Components (Chesapeake), Chesapeake, VA - 23323,

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Wed Apr 30 07:44:38  
ID:eVLNCRifGV?R0n3f909rc0zhKNp-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWRCD0i7J4zJC?f

Page: 1



Scale = 1:23.8

Plate Offsets (X, Y): [2:0-1-8,Edge], [3:0-1-8,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	0.17	Vert(LL)	-0.01	7-8	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.16	Vert(CT)	-0.01	7-8	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	5	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MSH							Weight: 30 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 5-9-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS	(size) 5=0-3-8, 8= Mechanical
	Max Grav 5=237 (LC 1), 8=242 (LC 1)

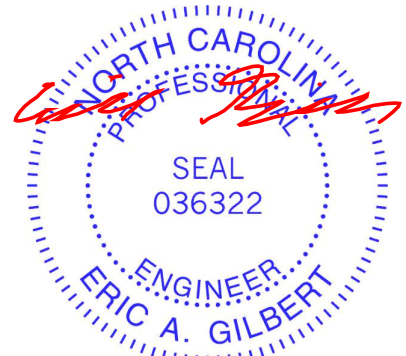
FORCES	(lb) - Maximum Compression/Maximum Tension
--------	--

TOP CHORD	1-8=-66/0, 4-5=-64/0, 1-2=0/0, 2-3=-310/0, 3-4=-4/0
BOT CHORD	7-8=0/310, 6-7=0/310, 5-6=0/310
WEBS	3-5=-351/0, 2-8=-355/0, 2-7=-7/37, 3-6=-6/38

#### NOTES

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



May 1, 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](http://www.tpinst.org)) and **BCSI Building Component Safety Information** available from the Structural Building Component Association ([www.sbcacompnents.com](http://www.sbcacompnents.com))

ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

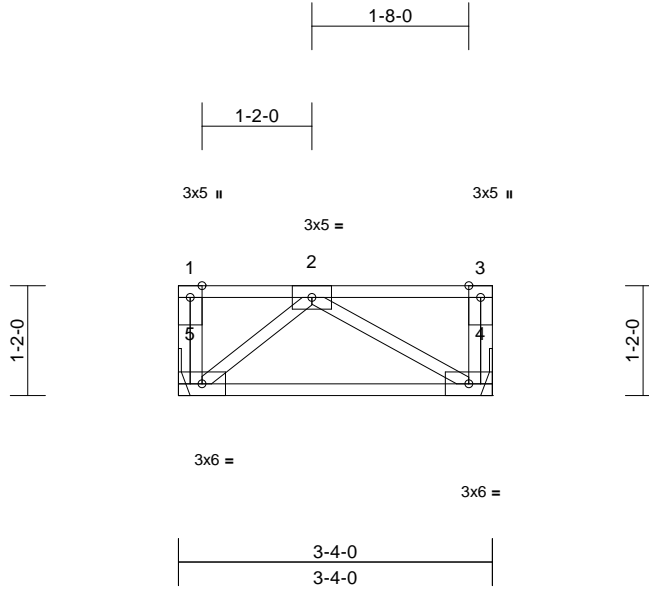


Job	Truss	Truss Type	Qty	Ply	Install 2 Oak Meadow-2nd Floor-Maxwell FA 3CG SP BR4
25040237-B	F07	Floor	2	1	I73126485
					Job Reference (optional)

Carter Components (Chesapeake), Chesapeake, VA - 23323,

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Wed Apr 30 07:44:37  
ID:adxi3lWFou6ZjTPnnNOKVdzhKO2-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:24.5

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	0.13	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.10	Vert(CT)	-0.01	4-5	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	4	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MP							Weight: 20 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  
3-4-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc  
bracing.

REACTIONS (size) 4= Mechanical, 5= Mechanical  
Max Grav 4=136 (LC 1), 5=136 (LC 1)

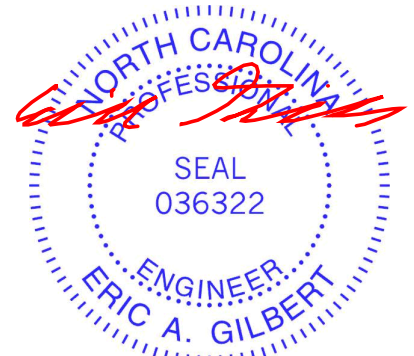
FORCES (lb) - Maximum Compression/Maximum  
Tension

TOP CHORD 1-5=-33/0, 3-4=-58/0, 1-2=0/0, 2-3=0/0  
BOT CHORD 4-5=0/112  
WEBS 2-4=-130/0, 2-5=-144/0

#### NOTES

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

LOAD CASE(S) Standard



May 1, 2025

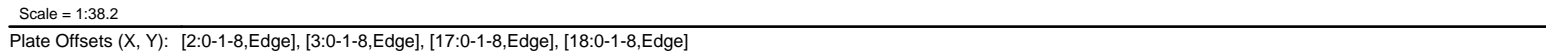
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.**

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](http://www.tpinst.org)) and **BCSI Building Component Safety Information** available from the Structural Building Component Association ([www.sbcacompnents.com](http://www.sbcacompnents.com))

ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

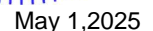
Carter Components (Chesapeake), Chesapeake, VA - 23323, Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Wed Apr 30 07:44:37 Page: 1  
ID:Si7Mm29QsgLq6s6004rIHlzhKOW-RfC?PsB70Hq3NSgPqnL8w3uITxBGKWCDoi7J4zC?#f



<b>LUMBER</b>		4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 36 lb uplift at joint 24.
TOP CHORD	2x4 SP No.2(flat)	5) 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.
BOT CHORD	2x4 SP No.2(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.
WEBS	2x4 SP No.3(flat)	7) CAUTION. Do not erect truss backwards.
OTHERS	2x4 SP No.3(flat)	<b>LOAD CASE(S)</b> Standard
<b>BRACING</b>		
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.	
<b>REACTIONS</b>	(size) 15=0-3-8, 21=0-3-8, 24= Mechanical	

### 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.

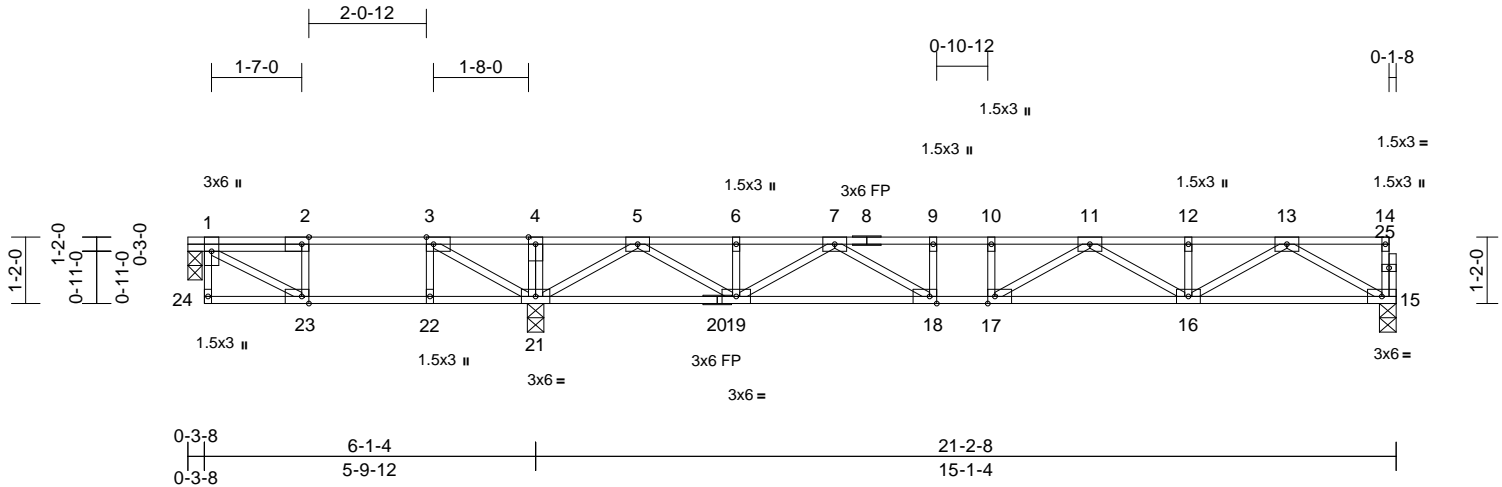


Job	Truss	Truss Type	Qty	Ply	Install 2 Oak Meadow-2nd Floor-Maxwell FA 3CG SP BR4 I73126487
25040237-B	F05	Floor	4	1	Job Reference (optional)

Carter Components (Chesapeake), Chesapeake, VA - 23323,

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Wed Apr 30 07:44:37  
ID:wE5SGyY3eJ1w6AIP5ayaGmzhKPI-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:40.4

Plate Offsets (X, Y): [2:0-1-8,Edge], [3:0-1-8,Edge], [17:0-1-8,Edge], [18:0-1-8,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	0.63	Vert(LL)	-0.13	16-17	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.60	Vert(CT)	-0.18	16-17	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.44	Horz(CT)	-0.03	21	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MSH							Weight: 108 lb	FT = 20%F, 11%E

#### LUMBER

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

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:  
6-0-0 oc bracing: 22-23,21-22.

**REACTIONS** (size) 1=0-3-0, 15=0-3-8, 21=0-3-8  
Max Uplift 1=-38 (LC 4)  
Max Grav 1=216 (LC 3), 15=617 (LC 7),  
21=1068 (LC 1)

#### FORCES

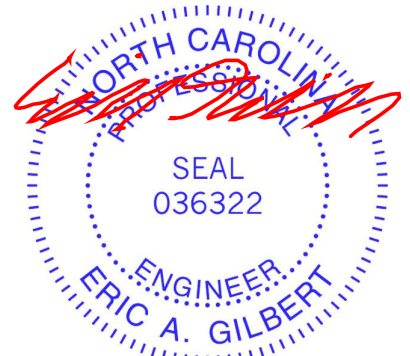
(lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-24=0/37, 14-15=-56/0, 1-2=-226/208,  
2-3=-224/209, 3-4=0/663, 4-5=0/663,  
5-6=-1313/0, 6-7=-1313/0, 7-9=-2096/0,  
9-10=-2096/0, 10-11=-2096/0, 11-12=-1597/0,  
12-13=-1597/0, 13-14=-3/0  
BOT CHORD 23-24=0/0, 22-23=-209/224, 21-22=-209/224,  
19-21=0/543, 18-19=0/1817, 17-18=0/2096,  
16-17=0/1976, 15-16=0/947  
WEBS 2-23=-133/64, 1-23=-241/259, 4-21=-111/0,  
3-21=-713/0, 3-22=0/94, 5-21=-1244/0,  
13-15=-1091/0, 5-19=0/923, 13-16=0/759,  
6-19=-136/0, 12-16=-128/0, 7-19=-607/0,  
11-16=-443/0, 7-18=0/469, 11-17=-98/316,  
9-18=-164/0, 10-17=-112/5

#### NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x5 MT20 unless otherwise indicated.
- 3) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 1.

- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 38 lb uplift at joint 1.
- 5) 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.
- 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.
- 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



May 1, 2025

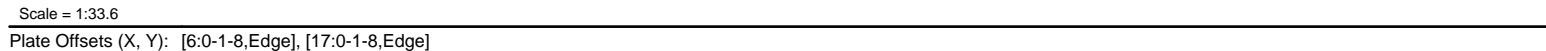
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.**

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](http://www.tpinst.org)) and **BCSI Building Component Safety Information** available from the Structural Building Component Association ([www.sbcacompnents.com](http://www.sbcacompnents.com))

ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

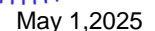
818 Soundside Road  
Edenton, NC 27932

Carter Components (Chesapeake), Chesapeake, VA - 23323, Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Wed Apr 30 07:44:37 Page: 1  
ID:wE5SGgy3eJ1w6AIP5ayaGmzhKPI-RfC?PsB70Hq3NSgPqnL8w3uITXbGKwRCDoi7J4zJC?f



<b>LUMBER</b>		6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 208 lb down and 75 lb up at 17'-7-12 on top chord. The design/selection of such connection device(s) is the responsibility of others.
TOP CHORD	2x4 SP No.2(flat)	
BOT CHORD	2x4 SP No.2(flat) *Except* 18-13:2x4 SP No.1(flat)	
WEBS	2x4 SP No.3(flat)	
OTHERS	2x4 SP No.3(flat)	
<b>BRACING</b>		<b>LOAD CASE(S)</b> Standard
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.	1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.	Uniform Loads (lb/ft) Vert: 13-20=-8, 1-12=-80 Concentrated Loads (lb) Vert: 12=-179
<b>REACTIONS</b>	(size) 13=0-3-8, 20=0-3-8 Max Grav 13=943 (LC 1), 20=772 (LC 1)	
<b>FORCES</b>	(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-20=-57/0, 12-13=-267/18, 1-2=-3/0, 2-3=-2115/0, 3-4=-2115/0, 4-5=-3226/0, 5-6=-3226/0, 6-7=-3187/0, 7-9=-3187/0, 9-10=-2158/0, 10-11=-2158/0, 11-12=-32/2	
BOT CHORD	19-20=0/1208, 17-19=0/2756, 16-17=0/3226, 15-16=0/3226, 14-15=0/2783, 13-14=0/1264	
WEBS	11-13=-1421/0, 2-20=-1393/0, 11-14=0/1047, 2-19=0/1060, 10-14=-136/0, 3-19=-142/0, 9-14=-733/0, 4-19=-748/0, 9-15=0/475, 4-17=0/713, 7-15=-210/11, 5-17=-242/0, 6-15=-417/250, 6-16=-128/61	

- ## NOTES
- 1) Unbalanced floor live loads have been considered for this design.
  - 2) All plates are MT20 plates unless otherwise indicated.
  - 3) All plates are 1.5x3 MT20 unless otherwise indicated.
  - 4) 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.



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

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

**ENGINEERING BY**  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

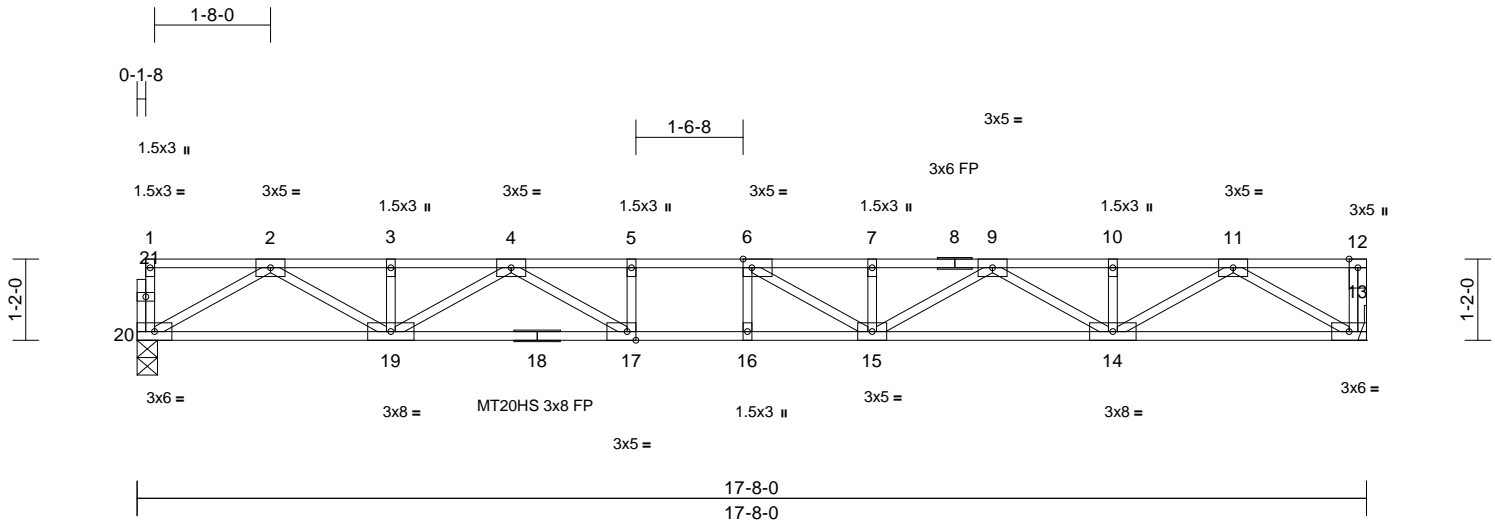


Job	Truss	Truss Type	Qty	Ply	Install 2 Oak Meadow-2nd Floor-Maxwell FA 3CG SP BR4
25040237-B	F02	Floor	5	1	I73126489
Job Reference (optional)					

Carter Components (Chesapeake), Chesapeake, VA - 23323,

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Wed Apr 30 07:44:37  
ID:1BKWsmIuasOv5yBMMf4evKzhKpD-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:33.1

Plate Offsets (X, Y): [6:0-1-8,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	0.57	Vert(LL)	-0.27	15-16	>788	480	MT20HS	187/143
TCDL	10.0	Lumber DOL	1.00	BC	0.79	Vert(CT)	-0.36	15-16	>575	360	MT20	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.49	Horz(CT)	0.06	13	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MSH							Weight: 90 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD	2x4 SP No.2(flat)
BOT CHORD	2x4 SP No.2(flat) *Except* 18-13:2x4 SP No.1(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 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 13= Mechanical, 20=0-3-8  
Max Grav 13=766 (LC 1), 20=761 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-20=-57/0, 12-13=-59/0, 1-2=-3/0, 2-3=-2078/0, 3-4=-2078/0, 4-5=-3139/0, 5-6=-3139/0, 6-7=-3097/0, 7-9=-3097/0, 9-10=-2079/0, 10-11=-2079/0, 11-12=0/0
BOT CHORD	19-20=0/1189, 17-19=0/2699, 16-17=0/3139, 15-16=0/3139, 14-15=0/2699, 13-14=0/1193, 11-13=-1380/0, 2-20=-1371/0, 11-14=0/1034, 2-19=0/1038, 10-14=-134/0, 3-19=-140/0, 9-14=-723/0, 4-19=-726/0, 9-15=0/464, 4-17=0/672, 7-15=-204/7, 5-17=-225/0, 6-15=-401/239, 6-16=-123/61
WEBS	

#### NOTES

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



May 1, 2025

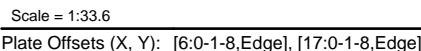
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.**

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](http://www.tpinst.org)) and **BCSI Building Component Safety Information** available from the Structural Building Component Association ([www.sbcacompnents.com](http://www.sbcacompnents.com))

ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

Carter Components (Chesapeake), Chesapeake, VA - 23323, Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Wed Apr 30 07:44:36 Page: 1  
ID:K?CJCXzvZ kMODAHU5JJeZhKQ2-RfC?PsB70Hg3NSqPnL8w3ulTXbGKWrcDd?J4zJC?f



**LUMBER**  
TOP CHORD 2x4 SP No.2(flat)  
BOT CHORD 2x4 SP No.2(flat) \*Except\* 18-13:2x4 SP No.1(flat)  
WEBS 2x4 SP No.3(flat)  
OTHERS 2x4 SP No.3(flat)

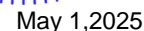
**BRACING**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 13=0-3-8, 20=0-3-8  
Max Grav 13=774 (LC 1), 20=774 (LC 1)

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

TOP CHORD 1-20=-57/0, 12-13=-57/0, 1-2=-3/0, 2-3=-2120/0, 3-4=-2120/0, 4-5=-3240/0, 5-6=-3240/0, 6-7=-3183/0, 7-9=-3183/0, 9-10=-2123/0, 10-11=-2123/0, 11-12=-3/0  
BOT CHORD 19-20=0/1210, 17-19=0/2763, 16-17=0/3240  
15-16=0/3240, 14-15=0/2763, 13-14=0/1214  
WEBS 11-13=-1040/0, 2-20=-1396/0, 11-14=0/1061  
2-19=0/1063, 10-14=-136/0, 3-19=-143/0, 9-14=-748/0, 4-19=-750/0, 9-15=0/490, 4-17=0/725, 7-15=-211/15, 5-17=-249/0, 6-15=-438/236, 6-16=-128/64

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) All plates are 1.5x3 MT20 unless otherwise indicated.
- 4) 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.



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.tpinet.org](http://www.tpinet.org)) and **BCSI Building Component Safety Information** available from the Structural Building Components Association ([www.sbcacomponents.com](http://www.sbcacomponents.com))

**ENGINEERING BY**  
**TRENCO**  
A MiTek Affiliat

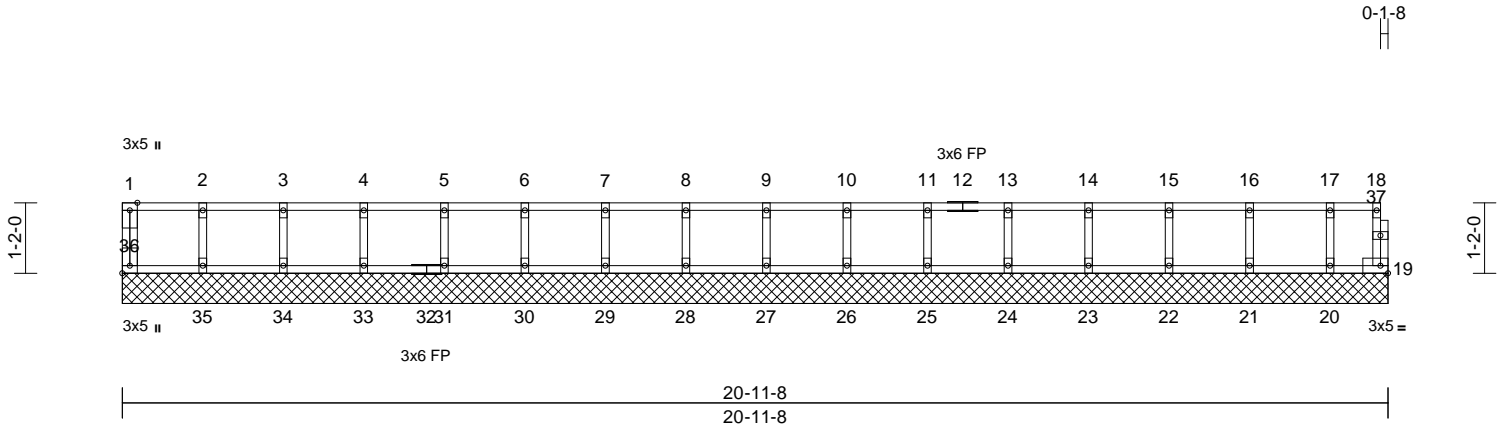
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Install 2 Oak Meadow-2nd Floor-Maxwell FA 3CG SP BR4 I73126491
25040237-B	FW20	Floor Supported Gable	1	1	Job Reference (optional)

Carter Components (Chesapeake), Chesapeake, VA - 23323,

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Wed Apr 30 07:44:38  
ID:hq8ZjEHXy3taBjBkW02SiOzsOdH-RfC?PsB70Hq3NSgPqnL8w3uITxbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:38.2									
Plate Offsets (X, Y): [36:Edge,0-1-8]									
<b>Loading</b>	(psf)	<b>Spacing</b>	2-0-0	<b>CSI</b>		<b>DEFL</b>	in	(loc)	l/defl
TCLL	40.0	Plate Grip DOL	1.00	TC	0.08	Vert(LL)	n/a	-	n/a
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(TL)	n/a	-	n/a
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	19	n/a
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MR					
						<b>PLATES</b>		<b>GRIP</b>	
						MT20		244/190	
						Weight: 88 lb		FT = 20%F, 11%E	

<b>LUMBER</b>		<b>WEBS</b>	2-35=-132/0, 3-34=-134/0, 4-33=-133/0, 5-31=-133/0, 6-30=-133/0, 7-29=-133/0, 8-28=-133/0, 9-27=-133/0, 10-26=-133/0, 11-25=-133/0, 13-24=-133/0, 14-23=-134/0, 15-22=-132/0, 16-21=-138/0, 17-20=-112/0
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)		

<b>BRACING</b>		<b>NOTES</b>	
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.	1) All plates are 1.5x3 MT20 unless otherwise indicated.	
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.	2) Gable requires continuous bottom chord bearing.	
<b>REACTIONS</b>	(size)	3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).	
	19=20-11-8, 20=20-11-8, 21=20-11-8, 22=20-11-8, 23=20-11-8, 24=20-11-8, 25=20-11-8, 26=20-11-8, 27=20-11-8, 28=20-11-8, 29=20-11-8, 30=20-11-8, 31=20-11-8, 33=20-11-8, 34=20-11-8, 35=20-11-8, 36=20-11-8	4) Gable studs spaced at 1-4-0 oc.	
Max Grav	19=34 (LC 1), 20=120 (LC 1), 21=152 (LC 1), 22=145 (LC 1), 23=147 (LC 1), 24=147 (LC 1), 25=147 (LC 1), 26=147 (LC 1), 27=147 (LC 1), 28=147 (LC 1), 29=147 (LC 1), 30=147 (LC 1), 31=147 (LC 1), 33=147 (LC 1), 34=147 (LC 1), 35=147 (LC 1), 36=59 (LC 1)	5) 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.	
		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.	
		7) CAUTION, Do not erect truss backwards.	

<b>LOAD CASE(S)</b>	Standard
<b>FORCES</b>	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-36=-55/0, 18-19=-29/0, 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, 10-11=-7/0, 11-13=-7/0, 13-14=-7/0, 14-15=-7/0, 15-16=-7/0, 16-17=-7/0, 17-18=-7/0
BOT CHORD	35-36=0/7, 34-35=0/7, 33-34=0/7, 31-33=0/7, 30-31=0/7, 29-30=0/7, 28-29=0/7, 27-28=0/7, 26-27=0/7, 25-26=0/7, 24-25=0/7, 23-24=0/7, 22-23=0/7, 21-22=0/7, 20-21=0/7, 19-20=0/7



May 1,2025

**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

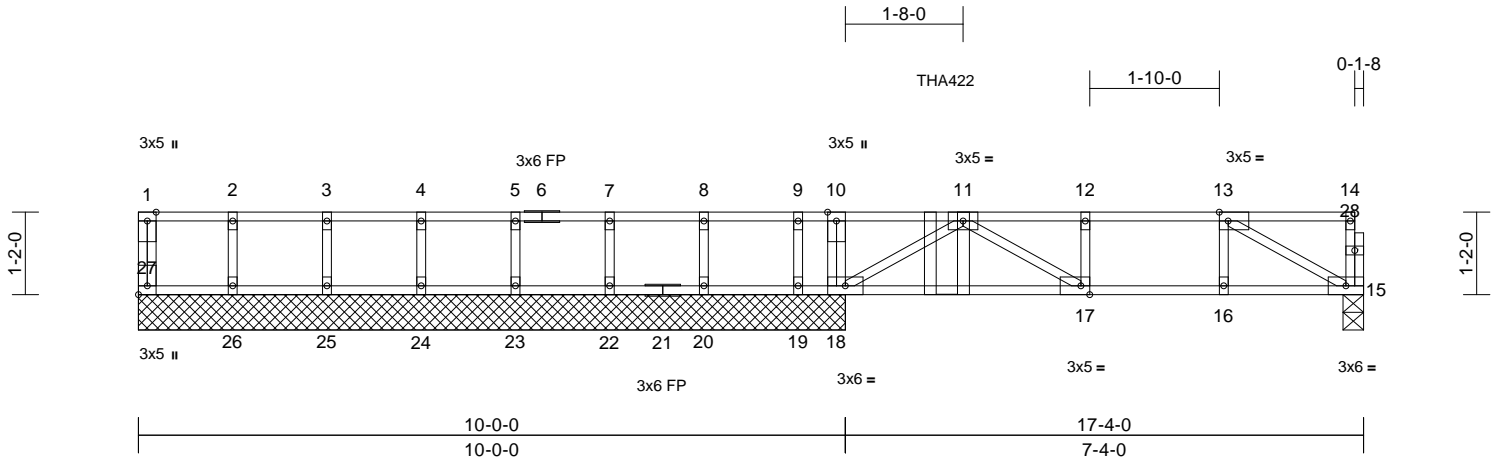
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Install 2 Oak Meadow-2nd Floor-Maxwell FA 3CG SP BR4 I73126492
25040237-B	F10	Floor Girder	1	1	Job Reference (optional)

Carter Components (Chesapeake), Chesapeake, VA - 23323,

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Wed Apr 30 07:44:38  
ID:yhCk2FFWHIVYSX6tZNIKAXzsNhw-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWRCDoi7J4zJC?f

Page: 1



Scale = 1:32.6

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

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	0.81	Vert(LL)	-0.11	17-18	>815	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.89	Vert(CT)	-0.15	17-18	>607	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.26	Horz(CT)	0.01	15	n/a	n/a		
BCDL	5.0	Code	IRC2018/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)	15=0-3-8, 18=10-0-0, 19=10-0-0, 20=10-0-0, 22=10-0-0, 23=10-0-0, 24=10-0-0, 25=10-0-0, 26=10-0-0, 27=10-0-0
	Max Uplift	19=219 (LC 4)
	Max Grav	15=472 (LC 7), 18=971 (LC 23), 19=34 (LC 3), 20=175 (LC 23), 22=144 (LC 3), 23=148 (LC 23), 24=147 (LC 3), 25=145 (LC 23), 26=156 (LC 3), 27=52 (LC 23)

#### FORCES

	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-27=-47/0, 14-15=-60/46, 1-2=0/0, 2-3=0/0, 3-4=0/0, 4-5=0/0, 5-7=0/0, 7-8=0/0, 8-9=0/0, 9-10=0/0, 10-11=0/0, 11-12=-856/0, 12-13=-856/0, 13-14=-4/3
BOT CHORD	26-27=0/0, 25-26=0/0, 24-25=0/0, 23-24=0/0, 22-23=0/0, 20-22=0/0, 19-20=0/0, 18-19=0/0, 17-18=0/934, 16-17=0/856, 15-16=0/856
WEBS	10-18=-237/0, 11-18=-1080/0, 13-15=-980/0, 11-17=-149/174, 12-17=-85/3, 13-16=0/156, 2-26=-142/0, 3-25=-132/0, 4-24=-134/0, 5-23=-134/0, 7-22=-132/0, 8-20=-147/0, 9-19=-79/97

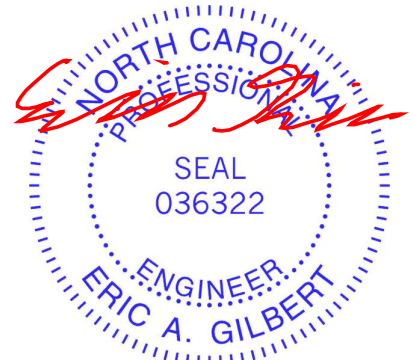
#### NOTES

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

- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 1-4-0 oc.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 19. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- CAUTION, Do not erect truss backwards.
- Use Simpson Strong-Tie THA422 (Single Chord Girder) or equivalent at 11-5-4 from the left end to connect truss (es) to front face of top chord.
- Fill all nail holes where hanger is in contact with lumber.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

#### LOAD CASE(S) Standard

- Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
Uniform Loads (lb/ft)  
Vert: 15-27=-10, 1-14=-100  
Concentrated Loads (lb)  
Vert: 11=-293 (F)



May 1, 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](http://www.tpinst.org)) and **BCSI Building Component Safety Information** available from the Structural Building Component Association ([www.sbcacompnents.com](http://www.sbcacompnents.com))

ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

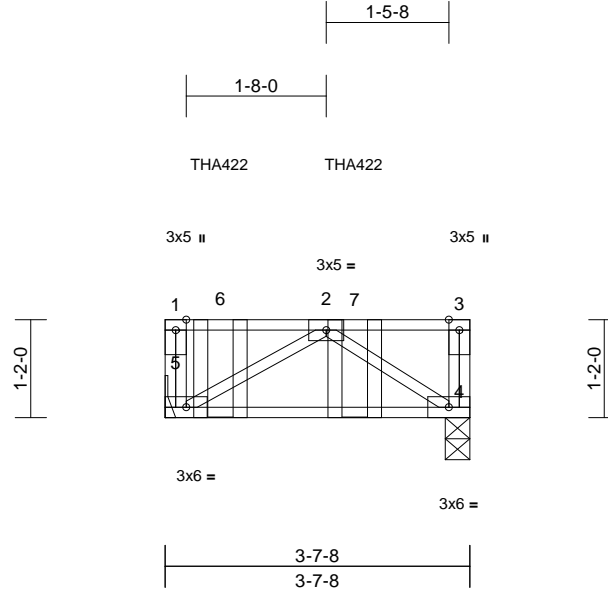
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Install 2 Oak Meadow-2nd Floor-Maxwell FA 3CG SP BR4 I73126493
25040237-B	F09	Floor Girder	1	1	Job Reference (optional)

Carter Components (Chesapeake), Chesapeake, VA - 23323,

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Wed Apr 30 07:44:38  
ID: jy9L9A8tPXNqt9w8X\_2DJdzsNi3-RfC?PsB70Hq3NSgPqnL8w3uTXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:27.4

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	0.55	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.21	Vert(CT)	-0.02	4-5	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.10	Horz(CT)	0.00	4	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MP							Weight: 22 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  
3-7-8 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc  
bracing.

**REACTIONS** (size) 4=0-3-8, 5= Mechanical  
Max Grav 4=315 (LC 1), 5=393 (LC 1)

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

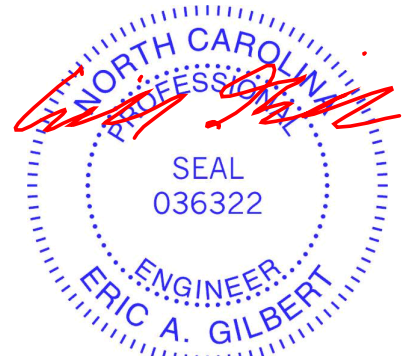
TOP CHORD 1-5=-172/0, 3-4=-68/0, 1-2=0/0, 2-3=0/0  
BOT CHORD 4-5=0/351  
WEBS 2-5=-406/0, 2-4=-420/0

#### NOTES

- 1) Refer to girder(s) for truss to truss connections.
- 2) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 3) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 4) Use Simpson Strong-Tie THA422 (Single Chord Girder) or equivalent spaced at 1-7-3 oc max. starting at 0-7-14 from the left end to 2-3-1 to connect truss(es) to back face of top chord.
- 5) Fill all nail holes where hanger is in contact with lumber.
- 6) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

#### LOAD CASE(S) Standard

- 1) Dead + Floor Live (balanced): Lumber Increase=1.00,  
Plate Increase=1.00  
Uniform Loads (lb/ft)  
Vert: 4-5=-10, 1-3=-100  
Concentrated Loads (lb)  
Vert: 6=-175 (B), 7=-162 (B)



May 1, 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](http://www.tpinst.org)) and **BCSI Building Component Safety Information** available from the Structural Building Component Association ([www.sbcacompnents.com](http://www.sbcacompnents.com))

ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

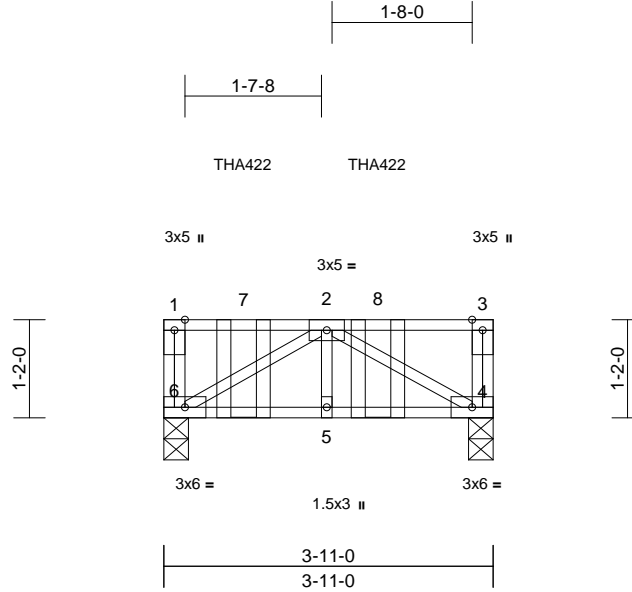


Job	Truss	Truss Type	Qty	Ply	Install 2 Oak Meadow-2nd Floor-Maxwell FA 3CG SP BR4
25040237-B	F08	Floor Girder	1	1	I73126494
Job Reference (optional)					

Carter Components (Chesapeake), Chesapeake, VA - 23323,

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Wed Apr 30 07:44:37  
ID:QLiG7zsp29LE\_T5X7xcbLZzsNiR-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



<b>Loading</b>	(psf)	<b>Spacing</b>	2-0-0	<b>CSI</b>		<b>DEFL</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL	40.0	Plate Grip DOL	1.00	TC	0.34	Vert(LL)	0.00	5	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.11	Vert(CT)	0.00	5	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.08	Horz(CT)	0.00	4	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MP							Weight: 24 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 3-11-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 4=0-3-8, 6=0-3-8  
Max Grav 4=251 (LC 1), 6=264 (LC 1)

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

TOP CHORD 1-6=-89/0, 3-4=-80/0, 1-2=0/0, 2-3=0/0  
BOT CHORD 5-6=0/289, 4-5=0/289  
WEBS 2-4=-332/0, 2-5=0/20, 2-6=-334/0

#### NOTES

- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- Use Simpson Strong-Tie THA422 (Single Chord Girder) or equivalent spaced at 1-7-3 oc max. starting at 0-11-6 from the left end to 2-6-9 to connect truss(es) to front face of top chord.
- Fill all nail holes where hanger is in contact with lumber.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

#### LOAD CASE(S) Standard

- Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
Uniform Loads (lb/ft)  
Vert: 4-6=-10, 1-3=-100  
Concentrated Loads (lb)  
Vert: 7=-56 (F), 8=-56 (F)



May 1, 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](http://www.tpinst.org)) and **BCSI Building Component Safety Information** available from the Structural Building Component Association ([www.sbcacompnents.com](http://www.sbcacompnents.com))

ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

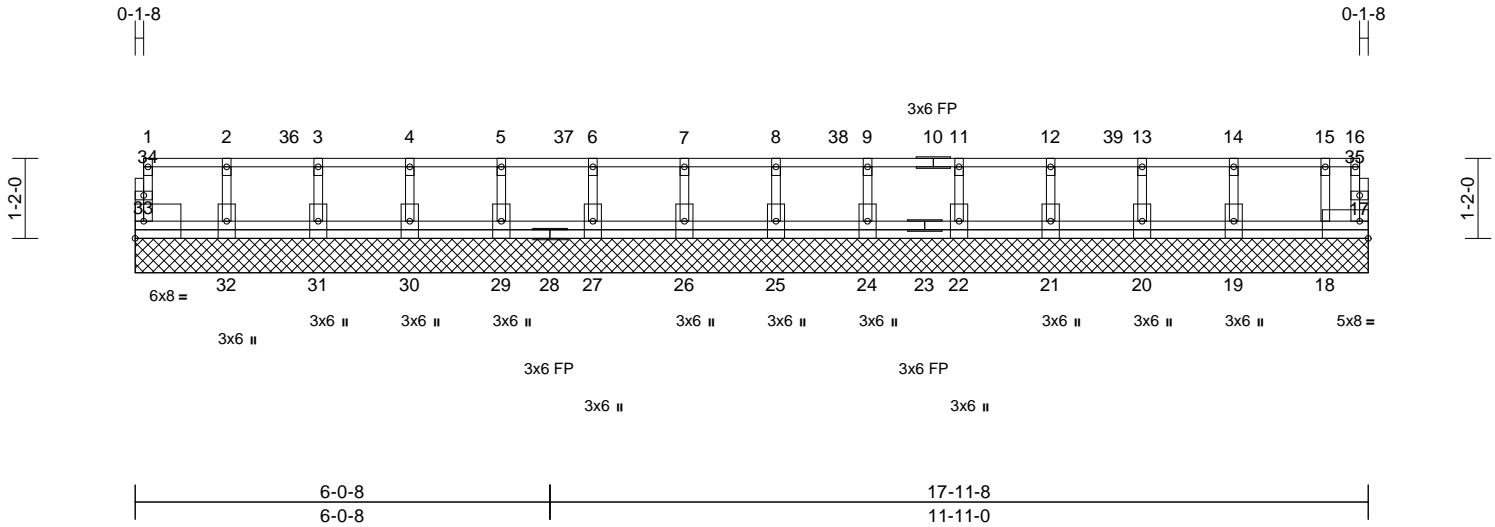
Job	Truss	Truss Type	Qty	Ply	Install 2 Oak Meadow-2nd Floor-Maxwell FA 3CG SP BR4 I73126495
25040237-B	FW17	Floor Supported Gable	1	1	Job Reference (optional)

Carter Components (Chesapeake), Chesapeake, VA - 23323,

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Wed Apr 30 07:44:38

Page: 1

ID:Djiun85ZAeJ4j0pcxalAwXzsOcE-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

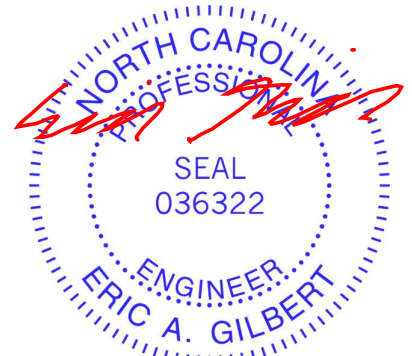


Scale = 1:33.6									
Plate Offsets (X, Y): [18:Edge,0-3-0]									
<b>Loading</b>	(psf)	<b>Spacing</b>	2-0-0	<b>CSI</b>		<b>DEFL</b>	in	(loc)	<b>PLATES</b>
TCLL	40.0	Plate Grip DOL	1.00	TC	0.32	Vert(LL)	n/a	-	<b>GRIP</b>
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(TL)	n/a	-	MT20
BCLL	0.0	Rep Stress Incr	YES	WB	0.07	Horiz(TL)	0.00	17	244/190
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MR					
									Weight: 99 lb FT = 20%F, 11%E

<b>LUMBER</b>		<b>TOP CHORD</b>		1-33=-43/12, 16-17=-5/12, 1-2=-4/4, 2-3=-4/4, 3-4=-4/4, 4-5=-4/4, 5-6=-4/4, 6-7=-4/4, 7-8=-4/4, 8-9=-4/4, 9-11=-4/4, 11-12=-4/4, 12-13=-4/4, 13-14=-4/4, 14-15=-4/4, 15-16=-4/4	9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 258 lb down and 95 lb up at 2-3-0, 258 lb down and 95 lb up at 6-3-0, and 258 lb down and 95 lb up at 10-3-0, and 258 lb down and 95 lb up at 14-3-0 on top chord. The design/selection of such connection device(s) is the responsibility of others.
<b>BOT CHORD</b>		<b>BOT CHORD</b>		32-33=-4/4, 31-32=-4/4, 30-31=-4/4, 29-30=-4/4, 27-29=-4/4, 26-27=-4/4, 25-26=-4/4, 24-25=-4/4, 22-24=-4/4, 21-22=-4/4, 20-21=-4/4, 19-20=-4/4, 18-19=-4/4, 17-18=-4/4	
<b>WEBS</b>		<b>WEBS</b>		2-32=-184/19, 3-31=-287/64, 4-30=-275/58, 5-29=-189/20, 6-27=-286/63, 7-26=-275/58, 8-25=-189/20, 9-24=-286/63, 11-22=-275/58, 12-21=-190/21, 13-20=-280/61, 14-19=-296/65, 15-18=-112/0	
<b>OTHERS</b>		<b>OTHERS</b>			
<b>BRACING</b>		<b>TOP CHORD</b>		Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.	<b>LOAD CASE(S)</b> Standard 1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (lb/ft) Vert: 17-33=-10, 1-16=-100 Concentrated Loads (lb) Vert: 4=-83, 7=-83, 11=-83, 14=-83, 36=-83, 37=-83, 38=-83, 39=-83
<b>BOT CHORD</b>		<b>BOT CHORD</b>		Rigid ceiling directly applied or 6-0-0 oc bracing.	
<b>REACTIONS</b>		<b>REACTIONS</b>		(size) 17=17-11-8, 18=17-11-8, 19=17-11-8, 20=17-11-8, 21=17-11-8, 22=17-11-8, 24=17-11-8, 25=17-11-8, 26=17-11-8, 27=17-11-8, 29=17-11-8, 30=17-11-8, 31=17-11-8, 32=17-11-8, 33=17-11-8	
<b>Max Uplift</b>		<b>Max Uplift</b>		17=-16 (LC 3), 19=-57 (LC 8), 20=-54 (LC 8), 21=-13 (LC 8), 22=-50 (LC 8), 24=-55 (LC 8), 25=-12 (LC 8), 26=-51 (LC 8), 27=-55 (LC 8), 29=-12 (LC 8), 30=-50 (LC 8), 31=-56 (LC 8), 32=-10 (LC 8), 33=-6 (LC 3)	
<b>Max Grav</b>		<b>Max Grav</b>		17=9 (LC 8), 18=114 (LC 1), 19=310 (LC 6), 20=293 (LC 6), 21=204 (LC 6), 22=288 (LC 6), 24=299 (LC 6), 25=202 (LC 6), 26=288 (LC 6), 27=299 (LC 6), 29=202 (LC 6), 30=288 (LC 6), 31=300 (LC 6), 32=199 (LC 6), 33=45 (LC 1)	
<b>FORCES</b>		<b>FORCES</b>		(lb) - Maximum Compression/Maximum Tension	

#### NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 1.5x3 MT20 unless otherwise indicated.
- 3) Gable requires continuous bottom chord bearing.
- 4) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 5) Gable studs spaced at 1-4-0 oc.
- 6) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 33, 32, 31, 30, 29, 27, 26, 25, 24, 22, 21, 20, 19, and 17. This connection is for uplift only and does not consider lateral forces.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.



May 1, 2025

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

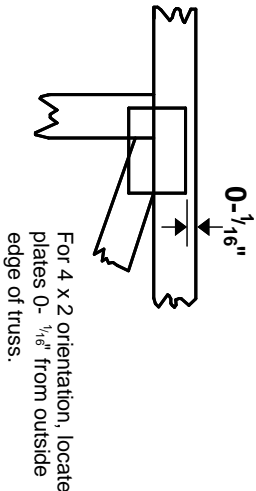
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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](http://www.tpinst.org)) and **BCSI Building Component Safety Information** available from the Structural Building Component Association ([www.sbcacomponents.com](http://www.sbcacomponents.com))

ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

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

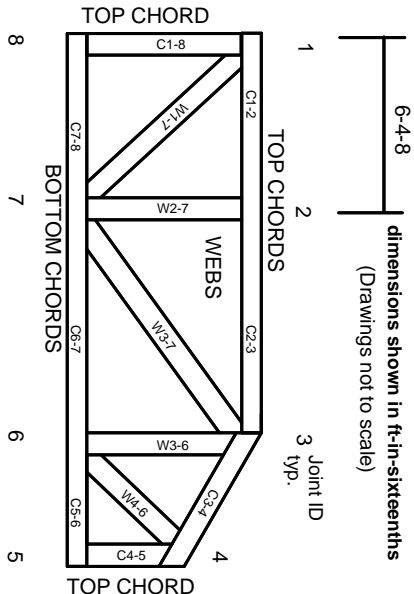


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

## 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.

© 2023 MITek® All Rights Reserved

# 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.

**MITek**

ENGINEERING BY  
**TRENCO**  
A MITek Affiliate

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