

AMERICA'S BEST
HOUSE PLANS

TYPICAL CRACK DETAILS

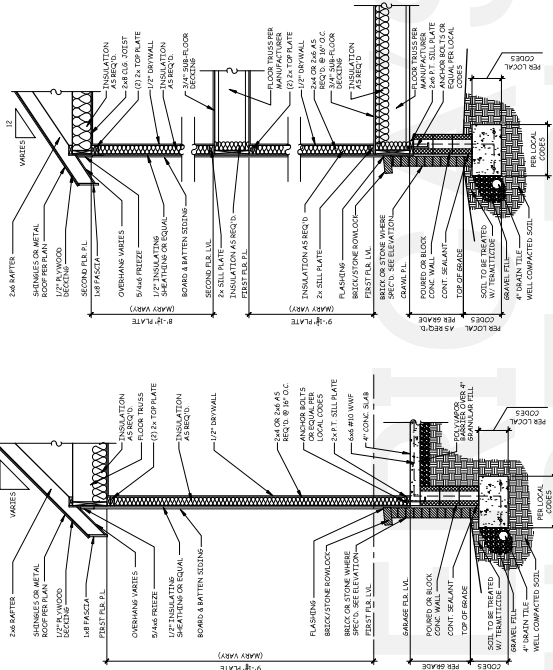
REVISIONS:

01.1

GENERAL NOTES:
1. THESE BIDDING ARE NEGOTIATED TO MEET THE 2021

3. AMERICA'S BEST HOUSE PLANS, INC. ASSUMES NO LIABILITY FOR ANY CHANGES OR MODIFICATIONS MADE TO THESE PLANS BY OTHERS.

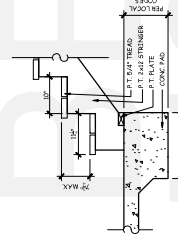
4. CONCRETE REINFORCEMENT SHOWN TO BE SIZED PER LOCAL CODE REQUIREMENTS OR CONTACT A STRUCTURAL ENGINEER FOR PROPER SPECIFICATIONS.



1 TYPICAL WALL
D1.1 SCALE: 1/2" = 1'-0"

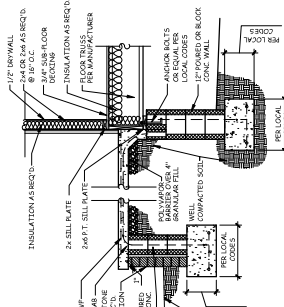
2 TYP. WALL SECTION
D1.1 SCALE: 1/2" = 1'-0"

3 TYP. 2-STORY WALL
D.I. SCALE: 1/2" = 1'-0"



4 TYP. DECK S
D11 SCALE: 3/4" = 1'-0"

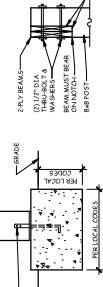
5 TYPICAL ST.
D1.1 SCALE: 1/2" = 1'-0"



6 GARAGE FLOOR
D.I.I. SCALE: 1/2" = 1'-0"

7 PORCH/STO
D11 SCALE: 1/2" = 1'-0"

PIU
SCA
8
D1.1



9 TYPICAL DI
D11 SCALE: 3/4" = 1'-0"

POST-TO-BEAM CONNECTION

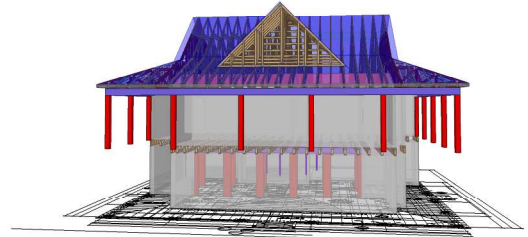


Carter Sanford Component Plant
298 Harvey Faulk Rd
Sanford, NC 27332

Phone #:919-775-1450

Builder: Tim Johnson Construction

Model: 93 Dewey



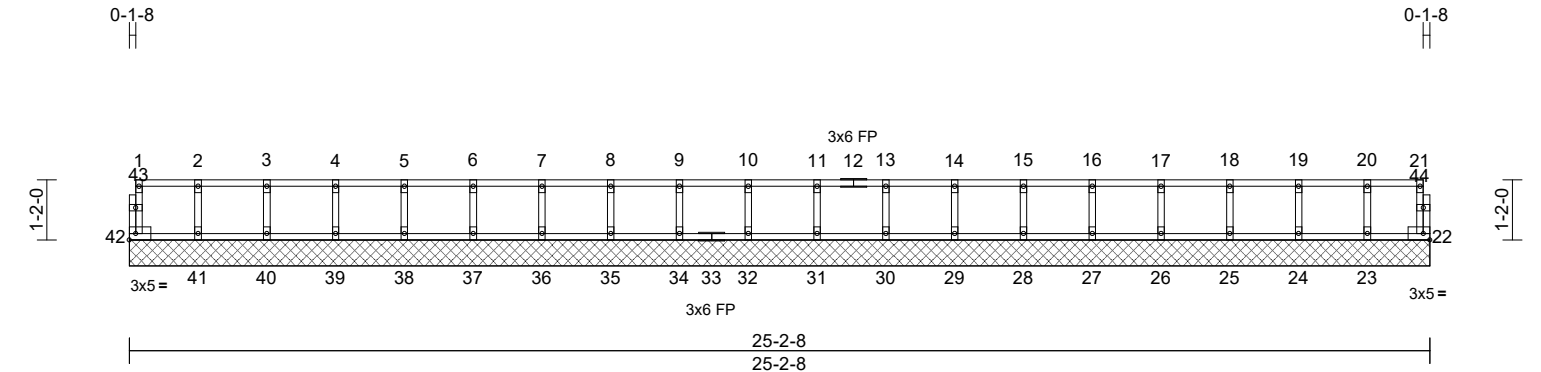
THE PLACEMENT PLAN NOTES:

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: _____

Job	Truss	Truss Type	Qty	Ply	93 Dewey-Tim Johnson Const.-Crawl-Fitzgerald VKDRFR 177311147
24120007-B	FGE	Floor Supported Gable	1	1	Job Reference (optional)




Scale = 1:44.7

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	0.08	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	22	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R						Weight: 104 lb	FT = 20%F, 11%E

LUMBER		WEBS	2-41=-131/0, 3-40=-134/0, 4-39=-133/0, 5-38=-133/0, 6-37=-133/0, 7-36=-133/0, 8-35=-133/0, 9-34=-133/0, 10-32=-133/0, 11-31=-133/0, 13-30=-133/0, 14-29=-133/0, 15-28=-133/0, 16-27=-133/0, 17-26=-133/0, 18-25=-133/0, 19-24=-136/0, 20-23=-124/0
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) All bearings are assumed to be SP No.2 . 6) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
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)	22=25-2-8, 23=25-2-8, 24=25-2-8, 25=25-2-8, 26=25-2-8, 27=25-2-8, 28=25-2-8, 29=25-2-8, 30=25-2-8, 31=25-2-8, 32=25-2-8, 34=25-2-8, 35=25-2-8, 36=25-2-8, 37=25-2-8, 38=25-2-8, 39=25-2-8, 40=25-2-8, 41=25-2-8, 42=25-2-8	braced against lateral movement (i.e. diagonal web).
			4) Gable studs spaced at 1-4-0 oc.
			5) All bearings are assumed to be SP No.2 .
			6) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
Max Grav		22=49 (LC 1), 23=135 (LC 1), 24=150 (LC 1), 25=146 (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), 32=147 (LC 1), 34=147 (LC 1), 35=147 (LC 1), 36=147 (LC 1), 37=147 (LC 1), 38=147 (LC 1), 39=147 (LC 1), 40=147 (LC 1), 41=145 (LC 1), 42=54 (LC 1)	LOAD CASE(S) Standard

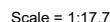


FORCES	(lb) - Maximum Compression/Maximum Tension	LOAD CASE(S)	Standard
TOP CHORD	1-42=-50/0, 21-22=-44/0, 1-2=-8/0, 2-3=-8/0, 3-4=-8/0, 4-5=-8/0, 5-6=-8/0, 6-7=-8/0, 7-8=-8/0, 8-9=-8/0, 9-10=-8/0, 10-11=-8/0, 11-13=-8/0, 13-14=-8/0, 14-15=-8/0, 15-16=-8/0, 16-17=-8/0, 17-18=-8/0, 18-19=-8/0, 19-20=-8/0, 20-21=-8/0		
BOT CHORD	41-42=0/8, 40-41=0/8, 39-40=0/8, 38-39=0/8, 37-38=0/8, 36-37=0/8, 35-36=0/8, 34-35=0/8, 32-34=0/8, 31-32=0/8, 30-31=0/8, 29-30=0/8, 28-29=0/8, 27-28=0/8, 26-27=0/8, 25-26=0/8, 24-25=0/8, 23-24=0/8, 22-23=0/8		



October 27,2025

Carter Components (Sanford, NC), Sanford, NC - 27332, Run: 8.73 S Aug 13 2025 Print: 8.730 S Aug 13 2025 MiTek Industries, Inc. Fri Oct 24 09:46:08 Page: 1
ID:IW3rWbk1e3vvt0Od?BrUBQvBtMx-RfC?PsB70Hq3NSqPanL8w3uITXBKWKrCDoi7J4zJC?f



LUMBER

BRACING

NOTES

- 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.

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITER REFERENCE PAGE MIT-14715 Rev. 1/2/2023 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only on 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 Components Association (www.sbcacompnents.com)

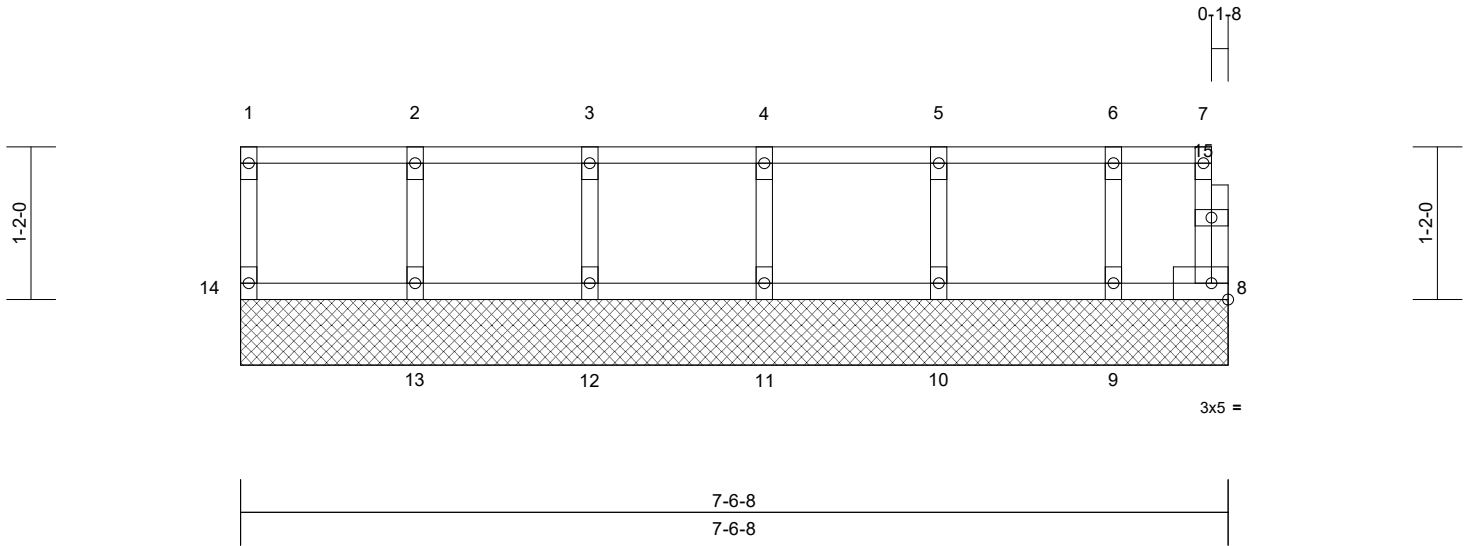
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	93 Dewey-Tim Johnson Const.-Crawl-Fitzgerald VKDRFR I77311149
24120007-B	FGE2	Floor Supported Gable	1	1	Job Reference (optional)

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

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Page: 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	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.02	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	8	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R							Weight: 33 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) 8=7-6-8, 9=7-6-8, 10=7-6-8, 11=7-6-8, 12=7-6-8, 13=7-6-8, 14=7-6-8
Max Grav 8=29 (LC 1), 9=115 (LC 1), 10=153 (LC 1), 11=145 (LC 1), 12=146 (LC 1), 13=152 (LC 1), 14=62 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-14=-56/0, 7-8=-23/0, 1-2=-7/0, 2-3=-7/0, 3-4=-7/0, 4-5=-7/0, 5-6=-7/0, 6-7=-7/0
BOT CHORD 13-14=0/7, 12-13=0/7, 11-12=0/7, 10-11=0/7, 9-10=0/7, 8-9=0/7
WEBS 2-13=-139/0, 3-12=-132/0, 4-11=-132/0, 5-10=-138/0, 6-9=-109/0

NOTES

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



October 27, 2025

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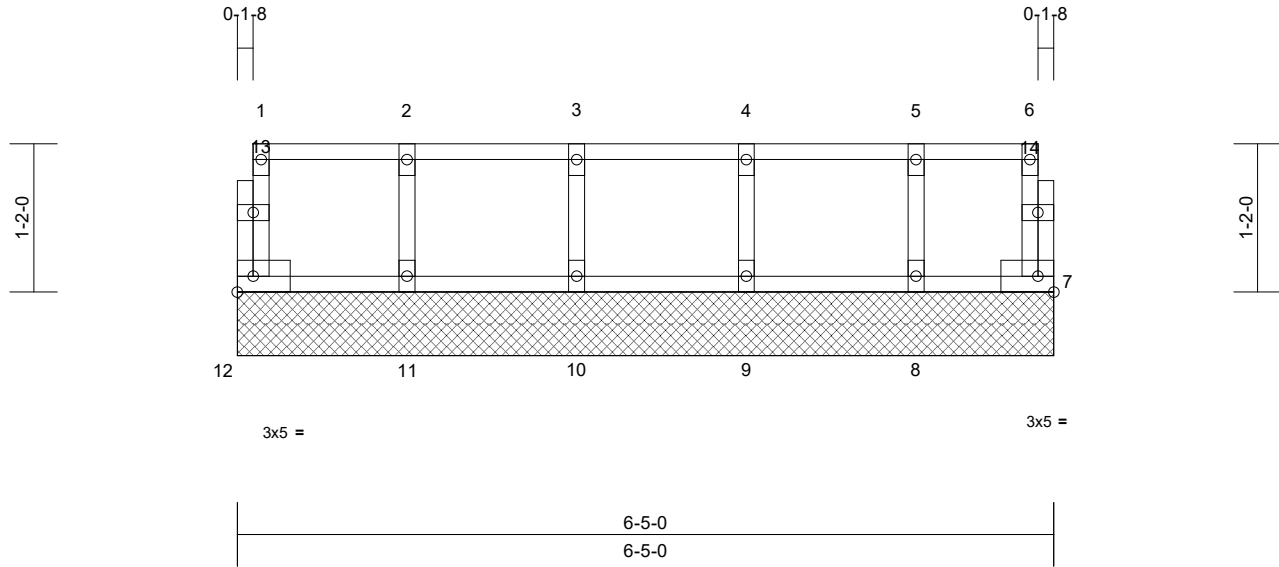
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	93 Dewey-Tim Johnson Const.-Crawl-Fitzgerald VKDRFR I77311150
24120007-B	FGE3	Floor Supported Gable	1	1	Job Reference (optional)

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

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Page: 1



Scale = 1:18.1

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	0.08	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	7	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R						Weight: 29 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=6-5-0, 8=6-5-0, 9=6-5-0,
10=6-5-0, 11=6-5-0, 12=6-5-0
Max Grav 7=42 (LC 1), 8=126 (LC 1), 9=151
(LC 1), 10=146 (LC 1), 11=146 (LC
1), 12=54 (LC 1)

FORCES (lb) - Maximum Compression/Maximum
Tension
TOP CHORD 1-12=-50/0, 6-7=-37/0, 1-2=-8/0, 2-3=-8/0,
3-4=-8/0, 4-5=-8/0, 5-6=-8/0
BOT CHORD 11-12=0/8, 10-11=0/8, 9-10=0/8, 8-9=0/8,
7-8=0/8
WEBS 2-11=-131/0, 3-10=-133/0, 4-9=-137/0,
5-8=-117/0

NOTES

- 1) All plates are 1.5x3 MT20 unless otherwise indicated.
- 2) Gable requires continuous bottom chord bearing.
- 3) Truss to be fully sheathed from one face or securely
braced against lateral movement (i.e. diagonal web).
- 4) Gable studs spaced at 1-4-0 oc.
- 5) All bearings are assumed to be SP No.2 .
- 6) Recommend 2x6 strongbacks, on edge, spaced at
10-00-00 oc and fastened to each truss with 3-10d
(0.131" X 3") nails. Strongbacks to be attached to walls
at their outer ends or restrained by other means.

LOAD CASE(S) Standard



October 27, 2025

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818 Soundside Road
Edenton, NC 27932

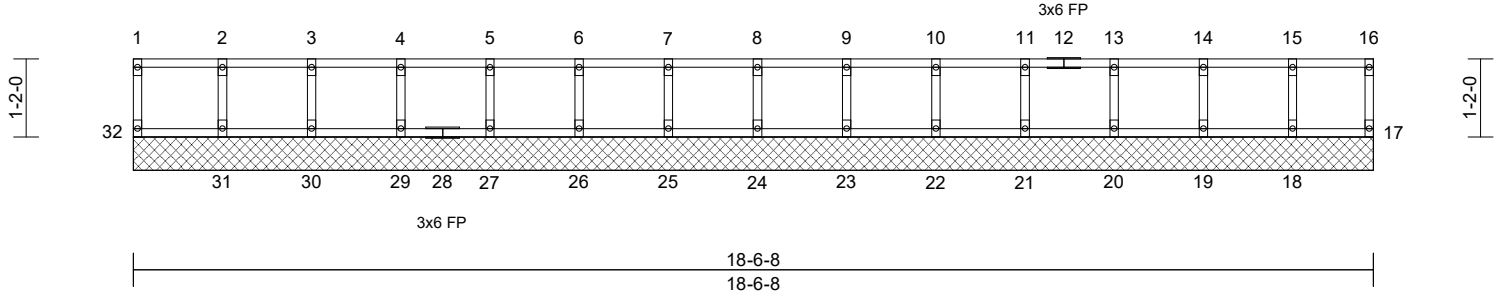
Job	Truss	Truss Type	Qty	Ply	93 Dewey-Tim Johnson Const.-Crawl-Fitzgerald VKDRFR I77311151
24120007-B	FGE4	Floor Supported Gable	1	1	Job Reference (optional)

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

Run: 8.73 S Aug 13 2025 Print: 8.730 S Aug 13 2025 MiTek Industries, Inc. Fri Oct 24 09:46:08

Page: 1

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Scale = 1:34.4

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	0.08	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	0.00	17	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R						Weight: 76 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)	17=18-6-8, 18=18-6-8, 19=18-6-8, 20=18-6-8, 21=18-6-8, 22=18-6-8, 23=18-6-8, 24=18-6-8, 25=18-6-8, 26=18-6-8, 27=18-6-8, 29=18-6-8, 30=18-6-8, 31=18-6-8, 32=18-6-8
Max Grav	17=57 (LC 1), 18=142 (LC 1), 19=148 (LC 1), 20=146 (LC 1), 21=147 (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), 29=147 (LC 1), 30=146 (LC 1), 31=151 (LC 1), 32=63 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-32=-56/0, 16-17=-50/0, 1-2=-8/0, 2-3=-8/0, 3-4=-8/0, 4-5=-8/0, 5-6=-8/0, 6-7=-8/0, 7-8=-8/0, 8-9=-8/0, 9-10=-8/0, 10-11=-8/0, 11-13=-8/0, 13-14=-8/0, 14-15=-8/0, 15-16=-8/0
BOT CHORD	31-32=0/8, 30-31=0/8, 29-30=0/8, 27-29=0/8, 26-27=0/8, 25-26=0/8, 24-25=0/8, 23-24=0/8, 22-23=0/8, 21-22=0/8, 20-21=0/8, 19-20=0/8, 18-19=0/8, 17-18=0/8
WEBS	2-31=-139/0, 3-30=-132/0, 4-29=-134/0, 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, 13-20=-133/0, 14-19=-134/0, 15-18=-131/0

NOTES

- 1) All plates are 1.5x3 MT20 unless otherwise indicated.
- 2) Gable requires continuous bottom chord bearing.
- 3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 4) Gable studs spaced at 1-4-0 oc.
- 5) All bearings are assumed to be SP No.2 .
- 6) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard



October 27, 2025

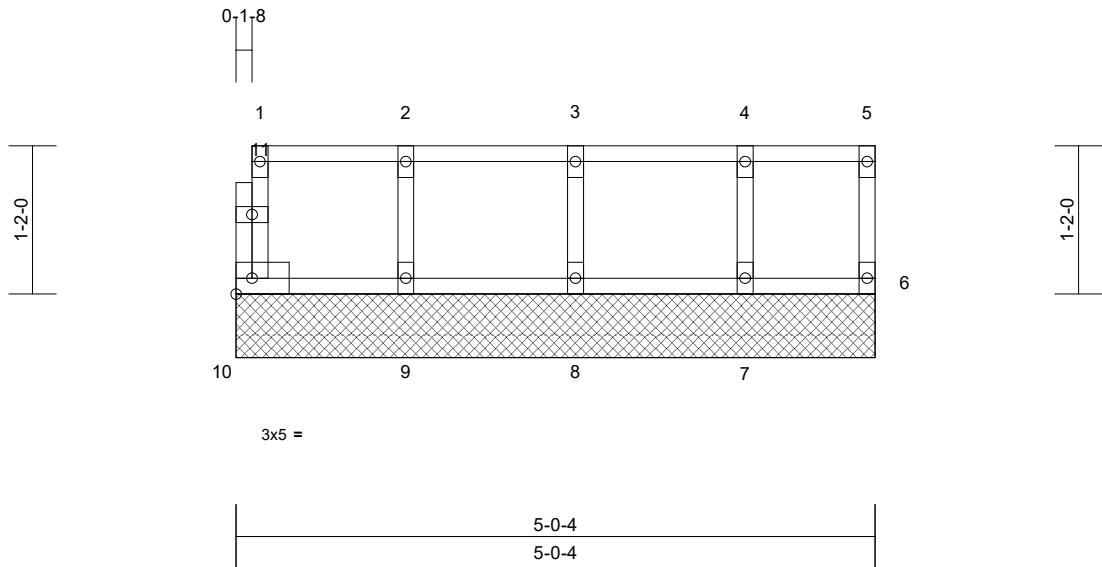
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	93 Dewey-Tim Johnson Const.-Crawl-Fitzgerald VKDRFR I77311152
24120007-B	FGE5	Floor Supported Gable	1	1	Job Reference (optional)



Scale = 1:18.1

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	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.02	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	6	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R							Weight: 23 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 5-0-4 oc purlins, except end verticals.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 6=5-0-4, 7=5-0-4, 8=5-0-4, 9=5-0-4, 10=5-0-4

Max Grav 6=47 (LC 1), 7=129 (LC 1), 8=151 (LC 1), 9=146 (LC 1), 10=53 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-10=-49/0, 5-6=-40/0, 1-2=-7/0, 2-3=-7/0, 3-4=-7/0, 4-5=-7/0

BOT CHORD 9-10=0/7, 8-9=0/7, 7-8=0/7, 6-7=0/7

WEBS 2-9=-131/0, 3-8=-137/0, 4-7=-120/0

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



October 27,2025

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
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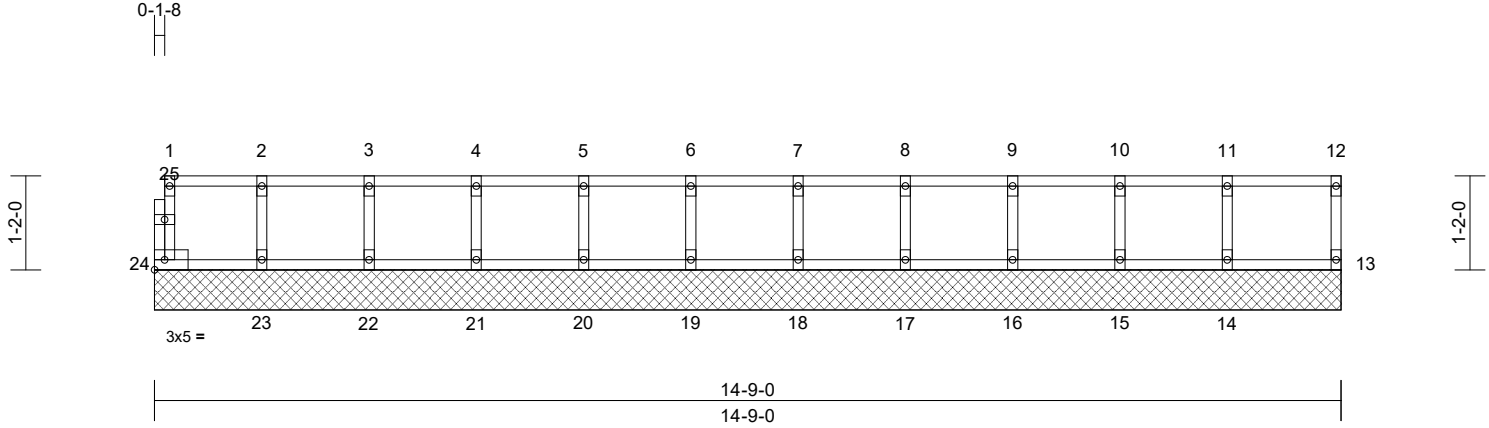
Job	Truss	Truss Type	Qty	Ply	93 Dewey-Tim Johnson Const.-Crawl-Fitzgerald VKDRFR I77311153
24120007-B	FGE6	Floor Supported Gable	1	1	Job Reference (optional)

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

Run: 8.73 S Aug 13 2025 Print: 8.730 S Aug 13 2025 MiTek Industries, Inc. Fri Oct 24 09:46:08

Page: 1

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Scale = 1:28.6

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	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.00	BC	0.02	Vert(TL)	n/a	-	n/a	999	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	13	n/a	n/a	
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R							
										Weight: 61 lb	FT = 20%F, 11%E

LUMBER

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

BRACING

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

REACTIONS (size)	13=14-9-0, 14=14-9-0, 15=14-9-0, 16=14-9-0, 17=14-9-0, 18=14-9-0, 19=14-9-0, 20=14-9-0, 21=14-9-0, 22=14-9-0, 23=14-9-0, 24=14-9-0
Max Grav	13=69 (LC 1), 14=155 (LC 1), 15=145 (LC 1), 16=147 (LC 1), 17=147 (LC 1), 18=147 (LC 1), 19=147 (LC 1), 20=147 (LC 1), 21=146 (LC 1), 22=148 (LC 1), 23=142 (LC 1), 24=57 (LC 1)

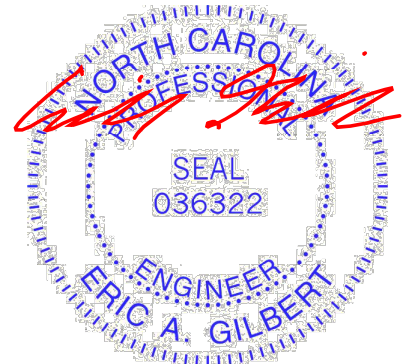
FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-24=-51/0, 12-13=-61/0, 1-2=-10/0, 2-3=-10/0, 3-4=-10/0, 4-5=-10/0, 5-6=-10/0, 6-7=-10/0, 7-8=-10/0, 8-9=-10/0, 9-10=-10/0, 10-11=-10/0, 11-12=-10/0
BOT CHORD	23-24=0/10, 22-23=0/10, 21-22=0/10, 20-21=0/10, 19-20=0/10, 18-19=0/10, 17-18=0/10, 16-17=0/10, 15-16=0/10, 14-15=0/10, 13-14=0/10
WEBS	2-23=-130/0, 3-22=-134/0, 4-21=-133/0, 5-20=-133/0, 6-19=-133/0, 7-18=-133/0, 8-17=-133/0, 9-16=-134/0, 10-15=-131/0, 11-14=-143/0

NOTES

- 1) All plates are 1.5x3 MT20 unless otherwise indicated.
- 2) Gable requires continuous bottom chord bearing.
- 3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 4) Gable studs spaced at 1'-4" oc.

- 5) All bearings are assumed to be SP No.2 .
 - 6) Recommend 2x6 strongbacks, on edge, spaced at 10'-0" oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
 - 7) CAUTION, Do not erect truss backwards.
- LOAD CASE(S)** Standard



October 27, 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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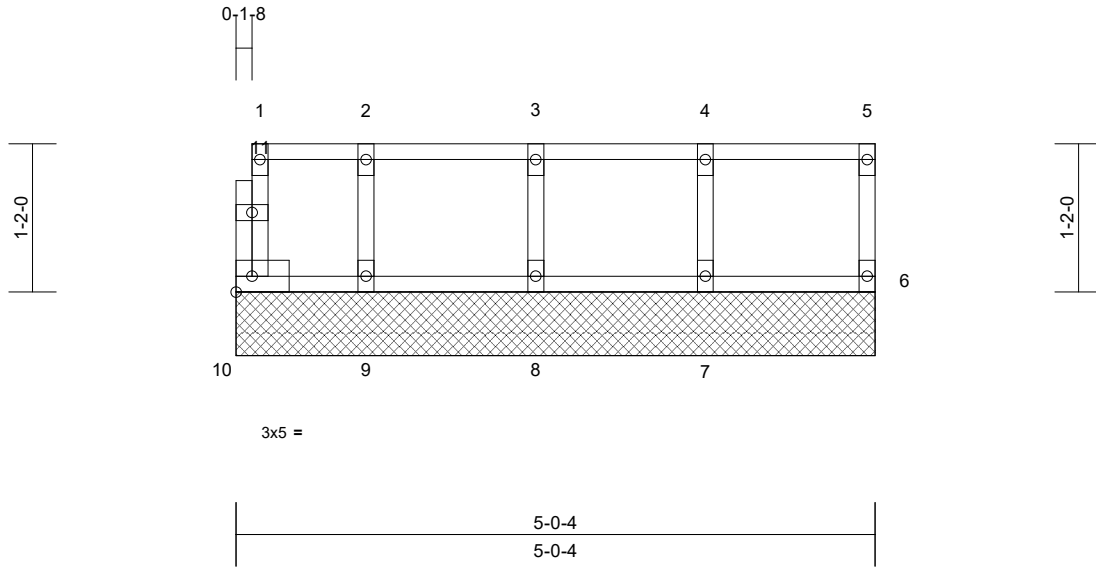
818 Soundside Road
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Job	Truss	Truss Type	Qty	Ply	93 Dewey-Tim Johnson Const.-Crawl-Fitzgerald VKDRFR I77311154
24120007-B	FGE7	Floor Supported Gable	1	1	Job Reference (optional)

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

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Page: 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	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	6	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R							Weight: 23 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 5-0-4 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS	(size)	6=5-0-4, 7=5-0-4, 8=5-0-4, 9=5-0-4, 10=5-0-4
	Max Grav	6=63 (LC 1), 7=150 (LC 1), 8=151 (LC 1), 9=124 (LC 1), 10=38 (LC 1)

FORCES

	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-10=-33/0, 5-6=-56/0, 1-2=-7/0, 2-3=-7/0, 3-4=-7/0, 4-5=-7/0
BOT CHORD	9-10=0/7, 8-9=0/7, 7-8=0/7, 6-7=0/7
WEBS	4-7=-138/0, 3-8=-136/0, 2-9=-115/0

NOTES

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



October 27, 2025

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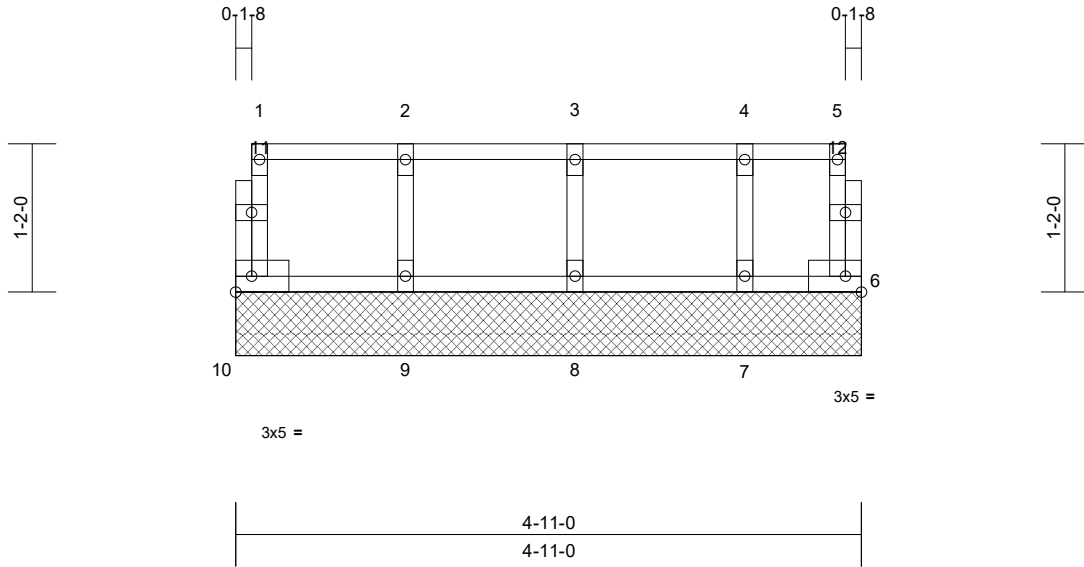
Job	Truss	Truss Type	Qty	Ply	93 Dewey-Tim Johnson Const.-Crawl-Fitzgerald VKDRFR I77311155
24120007-B	FGE8	Floor Supported Gable	1	1	Job Reference (optional)

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

Run: 8.73 S Aug 13 2025 Print: 8.730 S Aug 13 2025 MiTek Industries, Inc. Fri Oct 24 09:46:09

Page: 1

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Scale = 1:18.1

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	0.08	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	0.03	0.00	6	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R						Weight: 23 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 4-11-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size)	6=4-11-0, 7=4-11-0, 8=4-11-0, 9=4-11-0, 10=4-11-0
Max Grav	6=33 (LC 1), 7=117 (LC 1), 8=153 (LC 1), 9=145 (LC 1), 10=54 (LC 1)

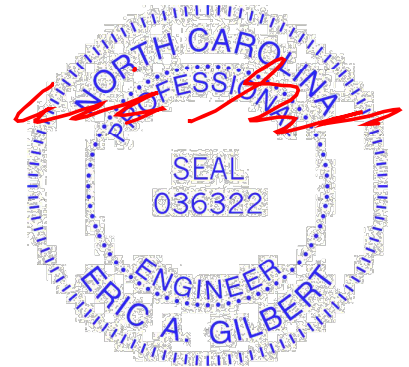
FORCES

	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-10=-50/0, 5-6=-27/0, 1-2=-7/0, 2-3=-7/0, 3-4=-7/0, 4-5=-7/0
BOT CHORD	9-10=0/7, 8-9=0/7, 7-8=0/7, 6-7=0/7
WEBS	2-9=-130/0, 3-8=-139/0, 4-7=-109/0

NOTES

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



October 27, 2025

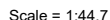
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Carter Components (Sanford, NC), Sanford, NC - 27332, Run: 8.73 S Aug 13 2025 Print: 8.730 S Aug 13 2025 MiTek Industries, Inc. Fri Oct 24 09:46:09 Page: 1
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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.64	Vert(LL)	-0.08	25-26	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.67	Vert(CT)	-0.11	25-26	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.52	Horz(CT)	0.02	18	n/a	n/a		
BCDL	5.0	Code	IRC2021/TP12014	Matrix-SH							Weight: 130 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 6-0-0 oc bracing.

REACTIONS (size) 18=0-3-8, 23=0-3-8, 29=0-7-8
Max Grav 18=566 (LC 4), 23=1660 (LC 1),
29=611 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-29=-71/0, 17-18=-73/0, 1-2=-4/0, 2-3=-1458/0, 3-4=-1458/0, 4-5=-1667/0, 5-6=-1667/0, 6-7=-922/252, 7-8=-922/252, 8-9=0/1659, 9-10=0/1659, 10-12=-870/399, 12-13=-870/399, 13-14=-1384/68, 14-15=-1320/0, 15-16=-1320/0, 16-17=-4/0
BOT CHORD	28-29=0/907, 27-28=0/1667, 26-27=0/1667 25-26=-27/1447, 23-25=-606/66, 22-23=-735/117, 21-22=-68/1384, 20-21=-68/1384, 19-20=-68/1384, 18-19=0/831
WEBS	9-23=-199/0, 8-23=-1448/0, 2-29=-1044/0, 8-25=0/1088, 2-28=0/644, 7-25=-173/0, 3-28=-202/0, 6-25=-698/0, 4-28=-258/151, 6-26=0/497, 4-27=-105/37, 5-26=-138/0, 10-23=-1366/0, 16-18=-956/0, 10-22=0/990 16-19=0/571, 12-22=-168/32, 15-19=-241/0 13-22=-822/0, 14-19=-73/283, 13-21=0/170 14-20=-147/0

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

- 3) All bearings are assumed to be SP No.2 .
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10'-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.
- 5) CAUTION. Do not erect truss backwards.

LOAD CASE(S) Standard



October 27, 2025

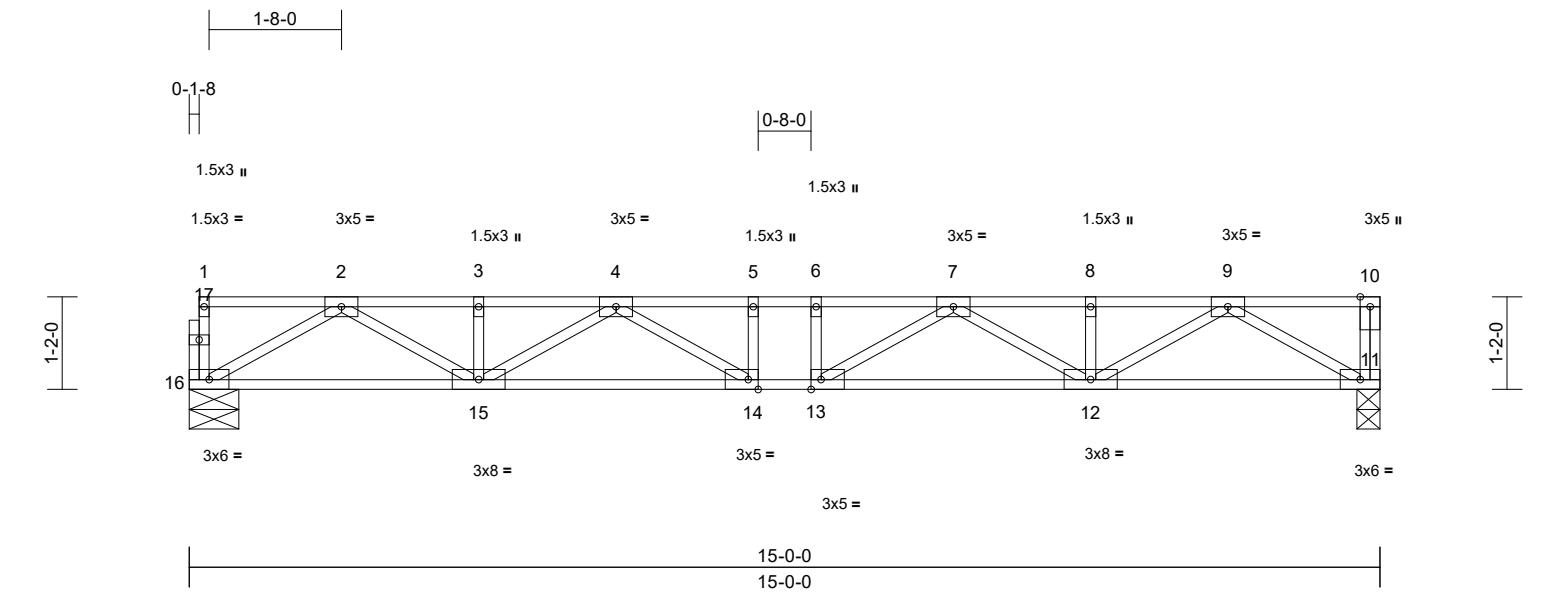


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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	93 Dewey-Tim Johnson Const.-Crawl-Fitzgerald VKDRFR
24120007-B	FL1	Floor	16	1	I77311157
					Job Reference (optional)



Scale = 1:29													
Plate Offsets (X, Y): [13:0-1-8,Edge], [14:0-1-8,Edge]													
Loading		(psf)	Spacing		2-0-0	CSI		DEFL		in (loc)	l/defl L/d	PLATES	GRIP
TCLL		40.0	Plate Grip DOL		1.00	TC		0.32	Vert(LL)	-0.17 13-14	>999 480	MT20	244/190
TCDL		10.0	Lumber DOL		1.00	BC		0.77	Vert(CT)	-0.23 13-14	>768 360		
BCLL		0.0	Rep Stress Incr		YES	WB		0.48	Horz(CT)	0.05 11	n/a n/a		
BCDL		5.0	Code		IRC2021/TPI2014	Matrix-SH						Weight: 78 lb	FT = 20%F, 11%E

- LUMBER**
- TOP CHORD 2x4 SP No.2(flat)
 - BOT CHORD 2x4 SP No.2(flat)
 - WEBS 2x4 SP No.3(flat)
 - OTHERS 2x4 SP No.3(flat)
- BRACING**
- TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
 - BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
- REACTIONS** (size) 11=0-3-8, 16=0-7-8
Max Grav 11=811 (LC 1), 16=805 (LC 1)
- FORCES** (lb) - Maximum Compression/Maximum Tension
- TOP CHORD 1-16=-71/0, 10-11=-73/0, 1-2=-4/0, 2-3=-2110/0, 3-4=-2110/0, 4-5=-2869/0, 5-6=-2869/0, 6-7=-2869/0, 7-8=-2109/0, 8-9=-2109/0, 9-10=0/0
 - BOT CHORD 15-16=0/1241, 14-15=0/2641, 13-14=0/2869, 12-13=0/2641, 11-12=0/1242
 - WEBS 9-11=-1437/0, 2-16=-1430/0, 9-12=0/1012, 2-15=0/1015, 8-12=-162/0, 3-15=-164/0, 7-12=-621/0, 4-15=-621/0, 7-13=-54/466, 4-14=-54/466, 5-14=-159/0, 6-13=-159/0

- NOTES**
- Unbalanced floor live loads have been considered for this design.
 - All bearings are assumed to be SP No.2 .
 - Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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



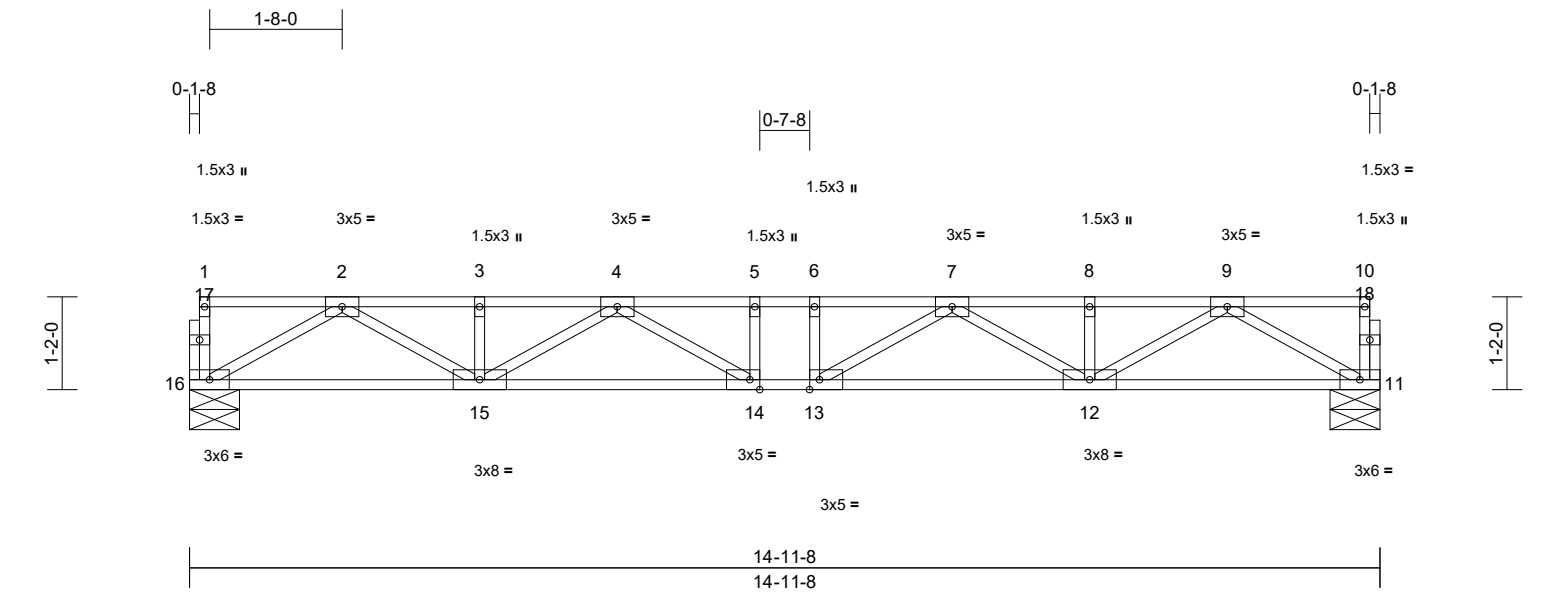
October 27,2025

Job	Truss	Truss Type	Qty	Ply	93 Dewey-Tim Johnson Const.-Crawl-Fitzgerald VKDRFR
24120007-B	FL2	Floor	2	1	I77311158
					Job Reference (optional)

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

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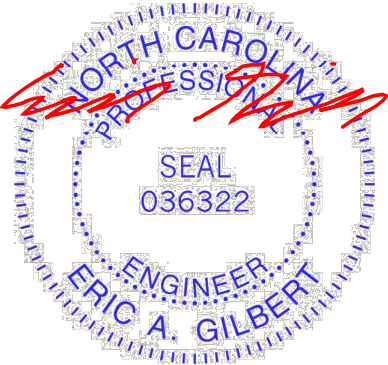
Scale = 1:29

Plate Offsets (X, Y): [13:0-1-8,Edge], [14:0-1-8,Edge]												
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.31	Vert(LL)	-0.17	13-14	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.76	Vert(CT)	-0.23	13-14	>774	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.48	Horz(CT)	0.05	11	n/a	n/a		
BCDL	5.0	Code	IRC2021/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 6-0-0 oc purlins, except end verticals.
- BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
- REACTIONS (size) 11=0-7-8, 16=0-7-8
- Max Grav 11=803 (LC 1), 16=803 (LC 1)
- FORCES (lb) - Maximum Compression/Maximum Tension
- TOP CHORD 1-16=-71/0, 10-11=-71/0, 1-2=-4/0, 2-3=-2102/0, 3-4=-2102/0, 4-5=-2854/0, 5-6=-2854/0, 6-7=-2854/0, 7-8=-2102/0, 8-9=-2102/0, 9-10=-4/0
- BOT CHORD 15-16=0/1237, 14-15=0/2630, 13-14=0/2854, 12-13=0/2630, 11-12=0/1237
- WEBS 9-11=-1426/0, 2-16=-1426/0, 9-12=0/1010, 2-15=0/1010, 8-12=-164/0, 3-15=-164/0, 7-12=-616/0, 4-15=-616/0, 7-13=-56/459, 4-14=-56/459, 5-14=-156/0, 6-13=-156/0

- NOTES
- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 1.5x3 MT20 unless otherwise indicated.
- 3) All bearings are assumed to be SP No.2 .
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard



October 27,2025

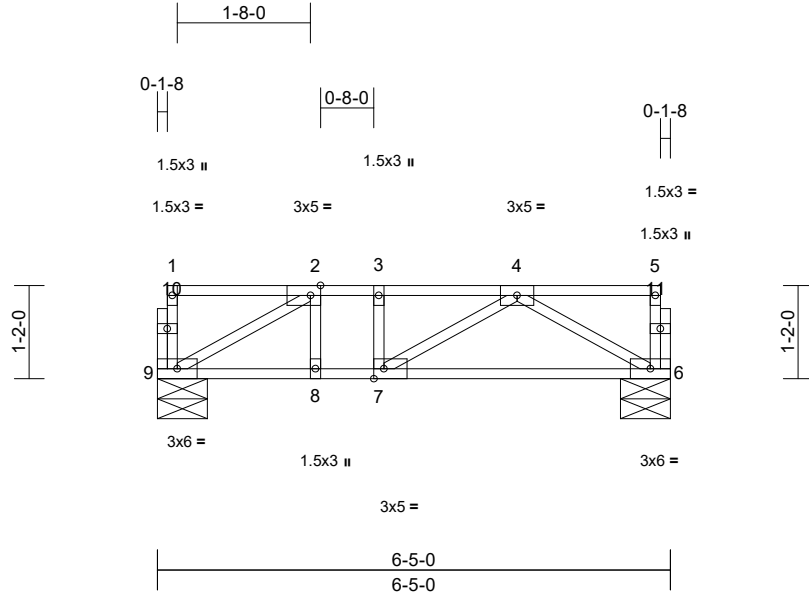
Job	Truss	Truss Type	Qty	Ply	93 Dewey-Tim Johnson Const.-Crawl-Fitzgerald VKDRFR
24120007-B	FL3	Floor	6	1	I77311159
					Job Reference (optional)

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

Run: 8.73 S Aug 13 2025 Print: 8.730 S Aug 13 2025 MiTek Industries, Inc. Fri Oct 24 09:46:09

Page: 1

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Scale = 1:28.8

Plate Offsets (X, Y): [2:0-1-8,Edge], [7:0-1-8,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	0.24	Vert(LL)	-0.03	6-7	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.28	Vert(CT)	-0.04	6-7	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.00	6	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-SH							Weight: 35 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) 6=0-7-8, 9=0-7-8
Max Grav 6=333 (LC 1), 9=333 (LC 1)

FORCES (lb) - Maximum Compression/Maximum
Tension

TOP CHORD 1-9=-75/2, 5-6=-65/0, 1-2=-5/0, 2-3=-480/0,
3-4=-480/0, 4-5=-4/0

BOT CHORD 8-9=0/480, 7-8=0/480, 6-7=0/434
WEBS 4-6=-498/0, 2-9=-546/0, 4-7=-6/132,
2-8=-8/73, 3-7=-28/0

NOTES

- Unbalanced floor live loads have been considered for this design.
- All bearings are assumed to be SP No.2 .
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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



October 27,2025

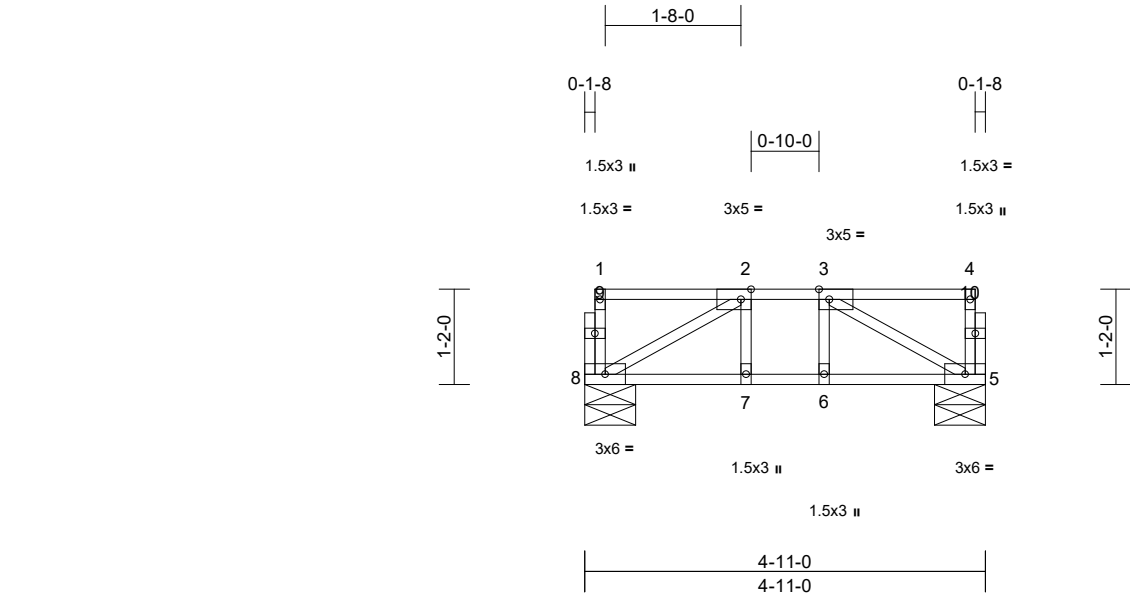
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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 COMPANY

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	93 Dewey-Tim Johnson Const.-Crawl-Fitzgerald VKDRFR
24120007-B	FL4	Floor	1	1	I77311160
					Job Reference (optional)



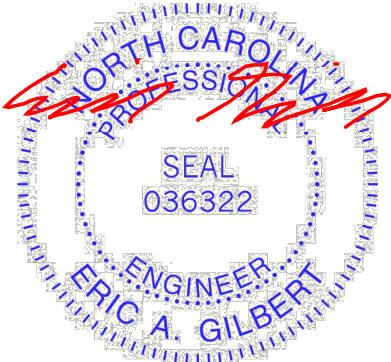
Scale = 1:28.3

Plate Offsets (X, Y): [2:0-1-8,Edge], [3:0-1-8,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	0.20	Vert(LL)	-0.01	7-8	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.14	Vert(CT)	-0.01	7-8	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00	5	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-SH							Weight: 28 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 4-11-0 oc purlins, except end verticals.
- BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
- REACTIONS** (size) 5=0-7-8, 8=0-7-8
- Max Grav 5=250 (LC 1), 8=250 (LC 1)
- FORCES** (lb) - Maximum Compression/Maximum Tension
- TOP CHORD 1-8=-82/0, 4-5=-82/0, 1-2=-5/0, 2-3=-299/0, 3-4=-5/0
- BOT CHORD 7-8=0/299, 6-7=0/299, 5-6=0/299
- WEBS 3-5=-337/0, 2-8=-337/0, 2-7=-20/49, 3-6=-20/49

- NOTES**
- 1) Unbalanced floor live loads have been considered for this design.
- 2) All bearings are assumed to be SP No.2 .
- 3) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard



October 27,2025



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. Fri Oct 24 09:46:09 Page: 1
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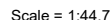


Plate Offsets (X, Y): [4:0-1-8,Edge], [13:0-1-8,Edge], [14:0-1-8,Edge], [26:0-1-8,Edge]

LUMBER		3) All bearings are assumed to be SP No.2 .
TOP CHORD	2x4 SP No.2(flat)	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.
BOT. CHORD	2x4 SP No.2(flat)	5) CAUTION. Do not erect truss backwards.
WEBS	2x4 SP No.3(flat)	
OTHERS	2x4 SP No.3(flat)	
BRACING		

BRACING

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

REACTIONS

(size)	18=0-3-8, 23=0-3-8, 29=0-3-8
Max Grav	18=566 (LC 4), 23=1663 (LC 1), 29=619 (LC 3)

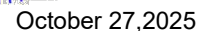
FORCES

(Ib) - Maximum Compression/Maximum Tension

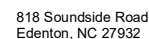
TOP CHORD	1-29=-74/0, 17-18=-73/0, 1-2=0/0, 2-3=-1465/0, 3-4=-1465/0, 4-5=-1677/0, 5-6=-1677/0, 6-7=-923/251, 7-8=-923/251, 8-9=0/1665, 9-10=0/1665, 10-12=-871/404, 12-13=-871/404, 13-14=-1384/72, 14-15=-1320/0, 15-16=-1320/0, 16-17=-4/0
BOT CHORD	28-29=0/912, 27-28=0/1677, 26-27=0/1677, 25-26=-25/1453, 23-25=-604/63, 22-23=-742/117, 21-22=-72/1384, 20-21=-72/1384, 19-20=-72/1384, 18-19=0/831
WEBS	9-23=-199/0, 8-23=-1452/0, 2-29=-1055/0, 8-25=0/1092, 2-28=0/645, 7-25=-173/0, 3-28=-202/0, 6-25=-702/0, 4-28=-263/148, 6-26=0/504, 4-27=-104/37, 5-26=-143/0, 10-23=-1367/0, 16-18=-956/0, 10-22=0/991, 16-19=0/571, 12-22=-167/32, 15-19=-241/0, 13-22=-823/0, 14-19=-74/285, 13-21=0/170, 14-20=-147/0

NOTES

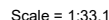
- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x5 MT20 unless otherwise indicated.



Design valid for use only with MiTeC® 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 Components Association (www.sbcacomponents.com)



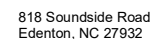
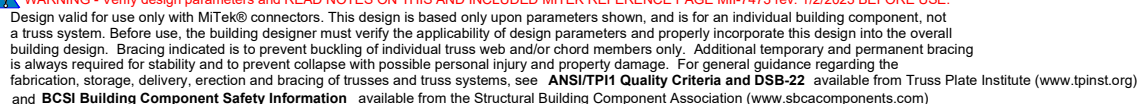
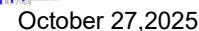
Carter Components (Sanford, NC), Sanford, NC - 27332, Run: 8.73 S Aug 13 2025 Print: 8.730 S Aug 13 2025 MiTek Industries, Inc. Fri Oct 24 09:46:09 Page: 1
ID:TW2w2dAUMyUuuN5vVp9naWYQGJB-RfC?PsB70Hg3NSqPanL8w3uITxbGKWRCDoi7J4zJC?F



Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.62	Vert(LL)	-0.08	18-20	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.48	Vert(CT)	-0.11	18-20	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.48	Horz(CT)	0.02	17	n/a	n/a		
BCDL	5.0	Code	IRC2021/TP12014	Matrix-SH							Weight: 94 lb	FT = 20%F, 11%E

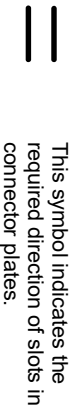
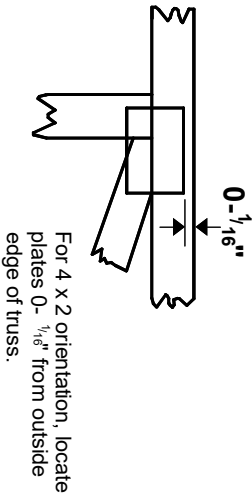
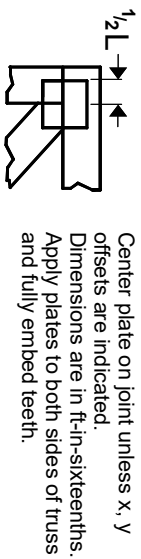
- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x5 MT20 unless otherwise indicated.
- 3) All bearings are assumed to be SP No.2 .

- LOAD CASE(S) Standard



Symbols

PLATE LOCATION AND ORIENTATION



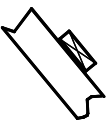
* Plate location details available in MITek software or upon request.

PLATE SIZE

4 X 4

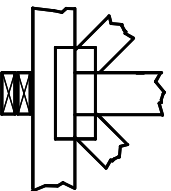
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

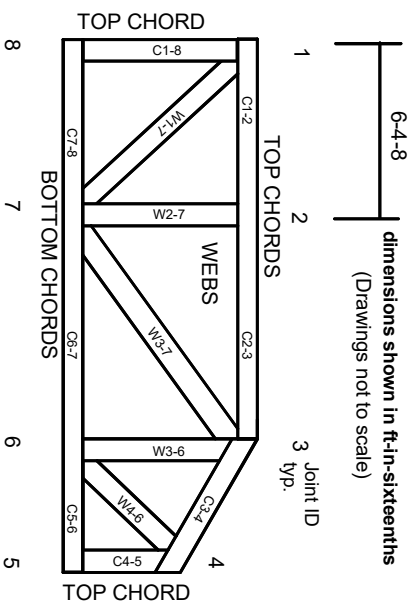


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TP11: 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-EES 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 1 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.



Customer:
Job Name:
City:
Customer Ph...

Job Name: **A**
Level: **2nd floor**
Label: **BM1 - i139**
Type: **Beam**

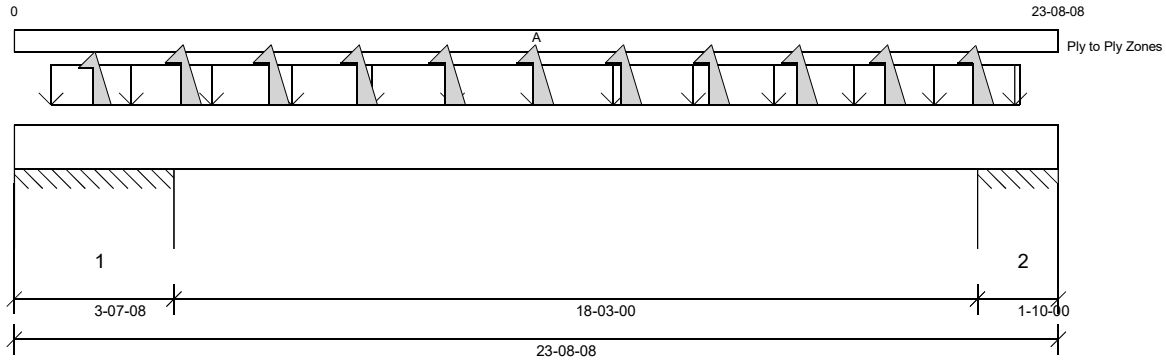
2 Ply Member
2.1 RigidLam SP LVL 1-3/4
x 11-7/8

Status:
Design
Passed

Illustration Not to Scale. Pitch: 0/12

Designed by Single Member Design Engine in MiTek® Structure Version
8.7.3.303.Update13.26

Report Version: 2023.09.18 10/24/2025 10:53



DESIGN INFORMATION a

Building Code: IRC 2021
Design Methodology: ASD
Risk Category: II (General Construction)
Residential
Service Condition: Dry
System Spacing: -
LL Deflection Limit: L/360, 0.75" (absolute)
TL Deflection Limit: L/240, 1.00" (absolute)

Lateral Restraint Requirements:

Both ends of the member and the outer supports must be laterally restrained. Top and bottom edges of the member must be fully restrained or have the following maximum unbraced length:

Top: 1'- 10 1/2" Bottom: 23'- 6 1/2"

Bearing Stress of Support Material:

- 875 psi Wall @ 0'- 1 1/2"
- 875 psi Wall @ 3'- 6"
- 875 psi Wall @ 22'
- 875 psi Wall @ 23'- 7"

ANALYSIS RESULTS

Design Criteria	Location	Load Combination	LDF	Design	Limit	Result
Max Pos. Moment:	11'- 10"	D + Lr	1.15	8950 lb ft	24315 lb ft	Passed - 37%
Max Neg. Moment:	22'	D + Lr	1.15	15119 lb ft	15840 lb ft	Passed - 95%
Max Shear:	20'- 10 5/8"	D + Lr	1.15	4517 lb	9241 lb	Passed - 49%
Live Load (LL) Pos. Defl.:	12'- 6 3/4"	0.75(L + Lr + 0.6W)		0.206"	L/360	Passed - L/999
Total Load (TL) Pos. Defl.:	12'- 6 13/16"	D + 0.75(L + Lr + 0.6W)		0.388"	L/240	Passed - L/564

SUPPORT AND REACTION INFORMATION

ID	Input Bearing Length	Controlling Load Combination	LDF	Downward Reaction	Uplift Reaction	Resistance of Member	Resistance of Support	Result
1	11-12	0.6D + 0.6W	1.60	733 lb		42913 lb	35984 lb	Passed - 2%
1	11-12	D + Lr	1.15		-3614 lb	-	-	
1	1-06-00	D + 0.75(L + Lr + 0.6W)	1.60	9702 lb		47250 lb	55125 lb	Passed - 21%
1	1-06-00	0.6D + 0.6W	1.60		-1970 lb	-	-	
2	1-01-08	D + 0.75(L + Lr + 0.6W)	1.60	15111 lb		35438 lb	41344 lb	Passed - 43%
2	1-01-08	0.6D + 0.6W	1.60		-3115 lb	-	-	
2	8-08	0.6D + 0.6W	1.60	1979 lb		22313 lb	26031 lb	Passed - 9%
2	8-08	D + 0.75(L + Lr + 0.6W)	1.60		-9552 lb	-	-	

LOADING

Type	Start Loc	End Loc	Source	Face	Dead (D)	Live (L)	Snow (S)	Roof Live (Lr)	Wind (W)
Self Weight	0'	23'- 8 1/2"	Self Weight	Top	11 lb/ft	-	-	-	-
Uniform	0'- 10"	22'- 10"	Smoothed Load	Top	258 lb/ft	-	134 lb/ft	268 lb/ft	83 lb/ft
Point	1'- 10"	1'- 10"	B2(Cond11)	Top	-	-	-	-	-635 lb
Point	3'- 10"	3'- 10"	B2(Cond10)	Top	-	-	-	-	-746 lb
Point	5'- 10"	5'- 10"	B2(Cond09)	Top	-	-	-	-	-746 lb
Point	7'- 10"	7'- 10"	B2(Cond08)	Top	-	-	-	-	-746 lb
Point	9'- 10"	9'- 10"	B2(Cond07)	Top	-	-	-	-	-746 lb
Point	11'- 10"	11'- 10"	B2(Cond06)	Top	-	-	-	-	-746 lb
Point	13'- 10"	13'- 10"	B2(Cond05)	Top	-	-	-	-	-746 lb
Point	15'- 10"	15'- 10"	B2(Cond04)	Top	-	-	-	-	-746 lb
Point	17'- 10"	17'- 10"	B2(Cond03)	Top	-	-	-	-	-746 lb
Point	19'- 10"	19'- 10"	B2(Cond02)	Top	-	-	-	-	-746 lb
Point	21'- 10"	21'- 10"	B2(Cond01)	Top	-	-	-	-	-735 lb

UNFACTORED REACTIONS

ID	Start Loc	End Loc	Source	Dead (D)	Live (L)	Snow (S)	Roof Live (Lr)	Wind (W)
1	0'	3'- 7 1/2"	W26(i45)	3262 lb	-	1622 lb	3478 lb	1773 lb/-5227 lb
==>	0'- 1 1/2"	0'- 1 1/2"	W26(i45)	-	-	-	240 lb	-
==>	3'- 6"	3'- 6"	W26(i45)	3262 lb	-	1622 lb	3238 lb	-
2	21'- 10 1/2"	23'- 8 1/2"	-	2685 lb	-	1337 lb	2735/-24 lb	-
++>	22'	22'	W45(i79)	2685 lb	-	1337 lb	2716/-24 lb	-
++>	23'- 7"	23'- 7"	W27(i60)	-	-	-	19 lb	-

DESIGN NOTES

- CAUTION: The maximum net analysis reaction exceeds the user-defined maximum uplift value at one or more supports.
- The dead loads used in the design of this member were applied to the structure as projected dead loads.
- Analysis and Design has been performed using precision loading from actual modeled conditions. Some loads may have been modified to simplify reporting.



Customer:
Job Name:
City:
Customer Ph...

Job Name: **A**
Level: **2nd floor**
Label: **BM1 - i139**
Type: **Beam**

2 Ply Member
2.1 RigidLam SP LVL 1-3/4
x 11-7/8

Status:
Design
Passed

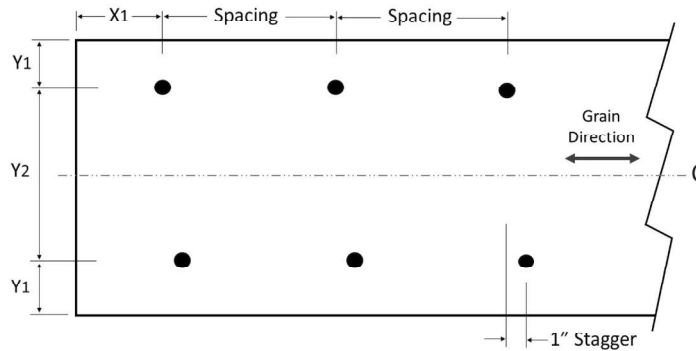
DESIGN NOTES

- Tributary Loads have been generated based on actual spacing between members in the model which may differ from the default system spacing. The actual loads applied to the member are shown in the Specified Loads table.
- Transfer reactions may differ from design results as allowed per building codes and standard load distribution practices.
- This report is based on modeled conditions input by the user. Source information for the loads and supports are provided for reference only. Verify that all loads and support conditions are correct.
- Review all loads and reactions to ensure that the member/bearing/connector/structure can resist adequately. Unless already specified on this report, anchorage for uplift reactions to be specified by others. Installation of member and accessories (if required) as per manufacturer's instruction.
- Beam Stability Factor used in the calculation for Allowable Max Pos Moment (CL) = 0.99
- Beam Stability Factor used in the calculation for Allowable Max Neg Moment (CL) = 0.48

PLY TO PLY CONNECTION

- Zone A: Factored load = 0 plf. Use 12d (0.148"x3.25") nails. LDF = 1.00. Qty = 48. Row = 2, Spacing = 12"
12d (0.148"x3.25") nails properties: D = 0.148" , L = 3.25". Fastener capacity = 128 lbs. X1 = 2.25" , Y1 = 0.75", Y2 = 1.5"
Install fasteners from one face.
X1 = Minimum end distance, X2 = Minimum edge distance, Y2 = Minimum row spacing.

FASTENER INSTALLATION – 2 ROWS (FROM ONE FACE)



MENT DIAGRAM ONLY. These trusses are components to be incorporated into the building design by the building designer. See individual design sheets for details on the placement drawing. The building designer shall verify and permanent bracing of the roof and floor structure. The design of the truss support structure and columns is the responsibility of the building designer. For additional guidance regarding the bracing, consult "Bracing of Steel Plate Girders," 583 D'Orfino Drive, from the Truss Plate Institute.

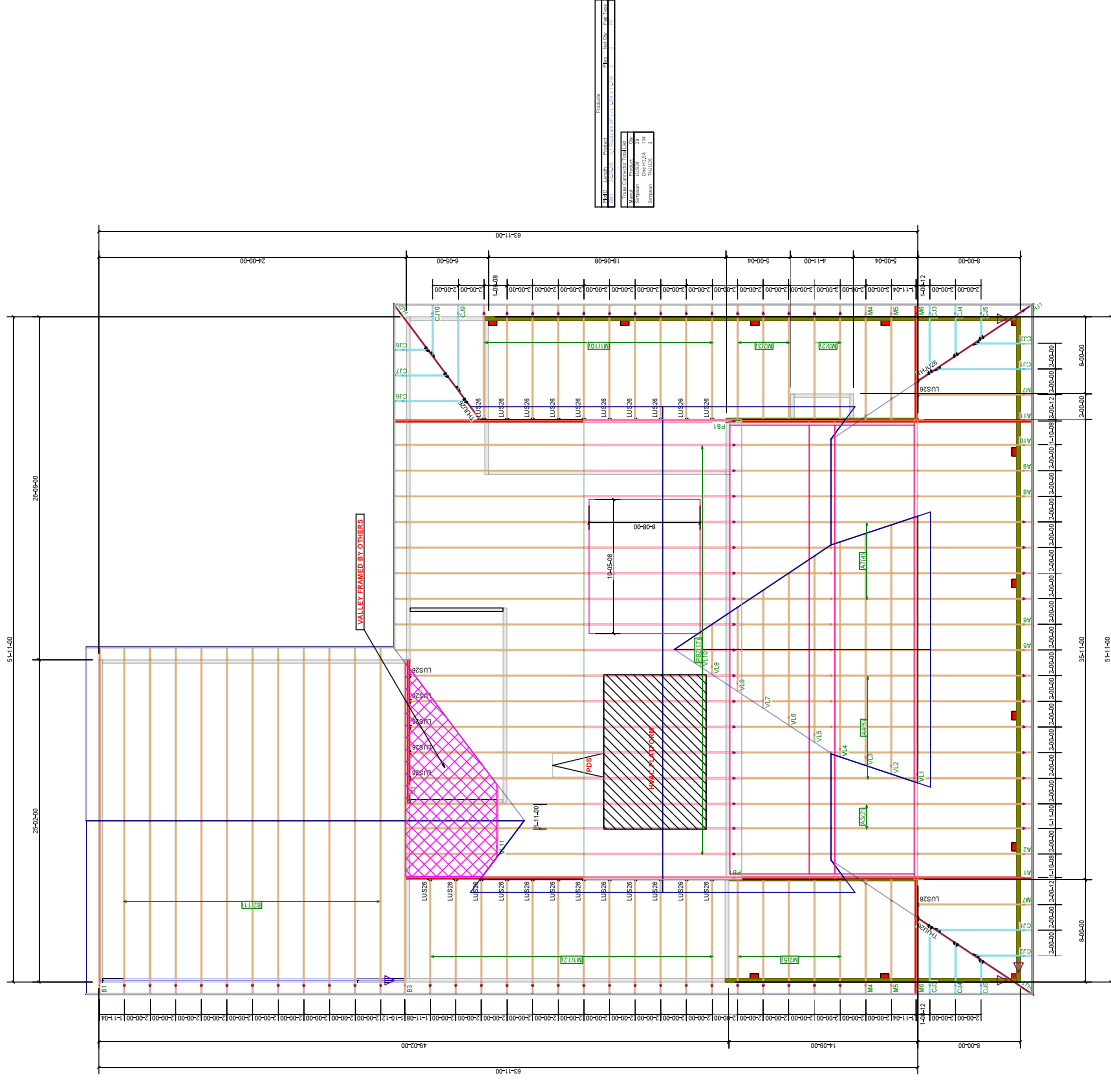
00/00/00	Name
00/00/00	Name

Truss Drawing Left
End Indicator

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

*** CUTTING OR DRILLING OF COMPONENTS SHOULD NOT BE DONE WITHOUT CONTACTING COMPONENT SUPPLIER FIRST. CUSTOMER TAKES FULL RESPONSIBILITY FOR COMPONENTS IF CUT BEFORE AUTHORIZATION.

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



* PLUMBING DROPS NOTED ARE IN THE APPROXIMATE LOCATIONS PER PLAN. RII/LL DER TO VERIFY LOCATIONS BEFORE SETTING TRISSES.

*** TRIANGLE AB SYMBOL NEAR END OF TRISS INDICATES LEFT END OF TRISS AS SHOWN ON INDIVIDUAL TRISS DRAWINGS

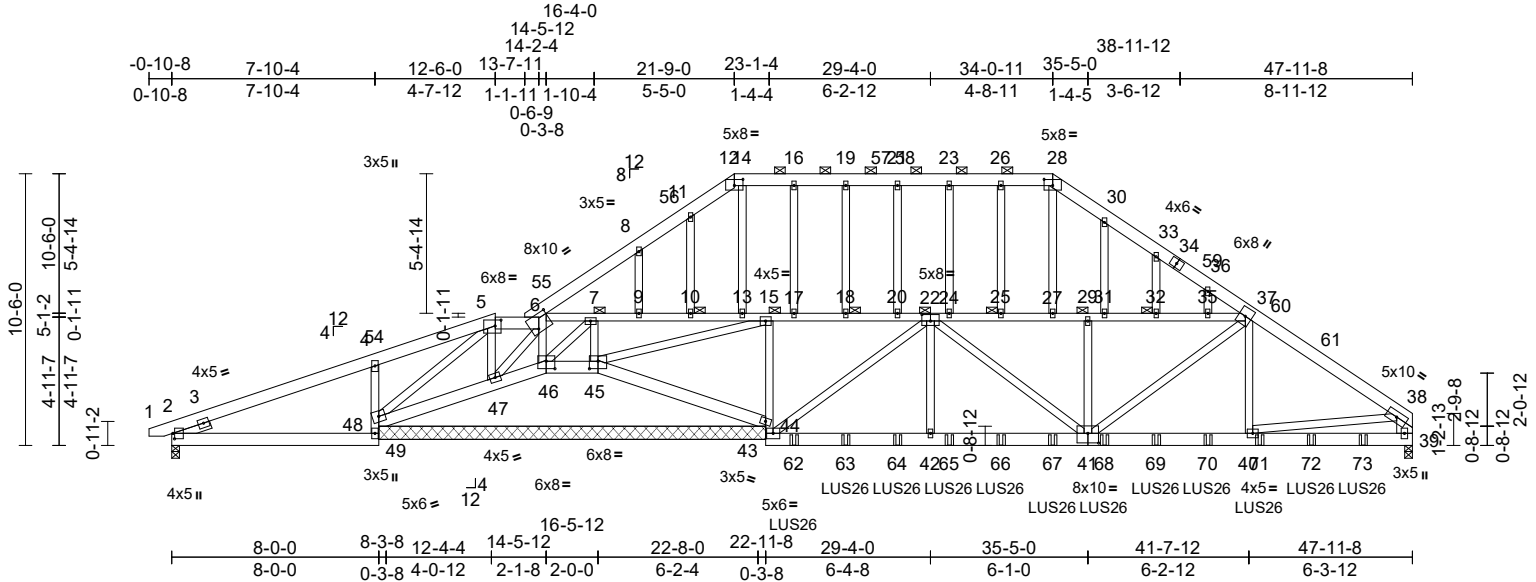
Job	Truss	Truss Type	Qty	Ply	93 Dewey-Tim Johnson Const.-Roof-Fitzgerald VKDRFR
24120007-A	A1	Piggyback Base Girder	1	2	I77311757
Job Reference (optional)					

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

Run: 8.73 S Aug 13 2025 Print: 8.730 S Aug 13 2025 MiTek Industries, Inc. Fri Oct 24 10:03:09

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ID:1FDMgcQP4cTeWg2l?Xr8xTyBttc-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWRCDoi7J4zJC?f



Scale = 1:89.1									
Plate Offsets (X, Y): [2:0-2-8,0-0-12], [5:0-2-12,0-2-12], [6:0-6-12,0-6-4], [12:0-4-0,0-2-13], [22:0-4-0,0-3-0], [28:0-4-0,0-2-13], [41:0-5-0,0-4-8], [45:0-4-0,0-3-8], [46:0-4-0,0-3-8]									
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in (loc)	l/defl	L/d
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	-0.07 40-41	>999	240
Snow (Pf/Pg)	18.9/20.0	Lumber DOL	1.15	BC	0.76	Vert(CT)	-0.12 40-41	>999	180
TCDL	10.0	Rep Stress Incr	NO	WB	0.97	Horz(CT)	0.02 39	n/a	n/a
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH					
BCDL	10.0								
Weight: 925 lb FT = 20%									

LUMBER		TOP CHORD		1-2=0/18, 2-4=-349/87, 4-5=-562/130, 6-8=-1127/90, 8-11=-1005/119, 11-12=-905/131, 12-14=-803/126, 14-16=-803/126, 16-19=-803/126, 19-21=-803/126, 21-23=-803/126, 23-26=-803/126, 26-28=-804/126, 28-30=-914/128, 30-33=-990/115, 33-36=-1064/99, 36-37=-1178/88, 37-38=-4035/288, 38-39=-2665/196, 6-7=-29/562, 7-9=-25/613, 9-10=-25/613, 10-13=-25/613, 13-15=-25/613, 15-17=-31/1117, 17-18=-31/1117, 18-20=-31/1117, 20-24=-2857/1117, 24-25=-2857/291, 25-27=-2857/291, 27-29=-2857/291, 29-31=-2857/291, 31-32=-2857/291, 32-35=-2857/291, 35-37=-2857/291, 5-6=-229/128		1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows: Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x8 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc. Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc. Web connected as follows: 2x4 - 1 row at 0-9-0 oc.	
TOP CHORD	2x6 SP No.2 *Except* 6-22,22-37:2x4 SP No.2	BOT CHORD		2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.			
BOT CHORD	2x6 SP No.2 *Except* 49-4:2x4 SP No.3, 15-43:2x4 SP No.2	WEBS		3) Unbalanced roof live loads have been considered for this design.			
WEBS	2x4 SP No.3 *Except* 39-38:2x8 SP 2400F 2.0E	BOT CHORD		4) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.33			
OTHERS	2x4 SP No.3	WEBS					
SLIDER	Left 2x4 SP No.3 -- 1-6-0	WEBS					
BRACING		TOP CHORD					
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 12-28, 6-37, 5-6.	BOT CHORD					
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 44-45.	WEBS					
JOINTS		JOINTS					
JOINTS	1 Brace at Jt(s): 15, 29, 22, 7, 25, 18, 10, 32	JOINTS					
REACTIONS (size)		REACTIONS (size)					
REACTIONS	2=0-3-8, 39=0-3-8, 44=14-11-8, 45=14-11-8, 46=14-11-8, 47=14-11-8, 48=14-11-8, 49=14-11-8	REACTIONS (size)					
Max Horiz	2=202 (LC 10)	REACTIONS (size)					
Max Uplift	2=-49 (LC 66), 39=-201 (LC 12), 44=-134 (LC 7), 45=-205 (LC 56), 46=-68 (LC 11), 48=-152 (LC 7)	REACTIONS (size)					
Max Grav	2=470 (LC 41), 39=3105 (LC 41), 44=3270 (LC 40), 45=146 (LC 7), 46=595 (LC 41), 47=440 (LC 41), 48=1254 (LC 41), 49=102 (LC 41)	REACTIONS (size)					
FORCES		FORCES					
FORCES	(lb) - Maximum Compression/Maximum Tension	FORCES					
NOTES		NOTES					



October 27,2025

Continued on page 2

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

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



818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	93 Dewey-Tim Johnson Const.-Roof-Fitzgerald VKDRFR I77311757
24120007-A	A1	Piggyback Base Girder	1	2	Job Reference (optional)

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

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Page: 2

- 5) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 6) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=18.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10, Lu=50-0-0
- 7) Unbalanced snow loads have been considered for this design.
- 8) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
- 9) Provide adequate drainage to prevent water ponding.
- 10) All plates are 2x4 MT20 unless otherwise indicated.
- 11) Gable studs spaced at 2-0-0 oc.
- 12) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 13) All bearings are assumed to be SP No.2 .
- 14) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 68 lb uplift at joint 46.
- 15) N/A

- 16) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 17) Use Simpson Strong-Tie LUS26 (4-10d Girder, 3-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 24-0-12 from the left end to 46-0-12 to connect truss(es) to back face of bottom chord.
- 18) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-5=-48, 6-12=-48, 12-28=-58, 28-37=-48, 37-38=-48, 49-50=-20, 46-48=-20, 45-46=-20, 44-45=-20, 39-43=-20, 5-6=-58
Concentrated Loads (lb)
Vert: 54=-850, 62=-332 (B), 63=-332 (B), 64=-332 (B), 65=-332 (B), 66=-332 (B), 67=-332 (B), 68=-332 (B), 69=-332 (B), 70=-332 (B), 71=-332 (B), 72=-332 (B), 73=-332 (B)

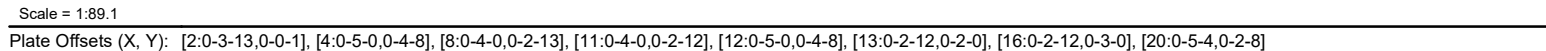
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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ID:M k?vw6kdQSt?InJZg5aCyBuFG-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWRcdJ7J4zJC?f



LUMBER		WEBS	6-21=0/224, 6-20=-407/70, 7-20=-437/225, 10-18=-1313/141, 10-17=0/342, 10-16=-42/690, 11-16=-46/137, 12-16=-693/197, 12-15=0/231, 13-15=-100/883, 5-22=-382/127, 5-21=-4/223, 8-19=-683/105, 8-20=-215/890	10) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 22, and 14. This connection is for uplift only and does not consider lateral forces.
TOP CHORD	2x6 SP No.2			
BOT CHORD	2x4 SP No.2 *Except* 23-4:2x4 SP No.3			11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
WEBS	2x4 SP No.3 *Except* 18-10,16-10:2x4 SP No.2			
SLIDER	Left 2x4 SP No.3 -- 1-6-0			
BRACING		NOTES		LOAD CASE(S) Standard
TOP CHORD	Structural wood sheathing directly applied or 5-11-12 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 8-11.	1) Unbalanced roof live loads have been considered for this design.		
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 19-20.	2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-7-1 to 4-2-8, Interior (1) 4-2-8 to 21-9-0, Exterior(2R) 21-9-0 to 26-6-9, Interior (1) 26-6-9 to 34-0-11, Exterior(2R) 34-0-11 to 38-10-4, Interior (1) 38-10-4 to 47-9-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33		
1 Row at midpt	9-19	3) TCELL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=18.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10, Lu=50-0-0		
WEBS	1 Row at midpt 10-18, 11-16, 12-16, 8-19	4) Unbalanced snow loads have been considered for this design.		
REACTIONS	(size) 2=0-3-8, 14=0-3-8, 19=0-3-8, 22=0-3-8 Max Horiz 2=204 (LC 14) Max Uplift 2=-48 (LC 11), 14=-29 (LC 16), 22=-64 (LC 15) Max Grav 2=363 (LC 34), 14=1087 (LC 62), 19=2085 (LC 3), 22=843 (LC 41)	5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads. 6) Provide adequate drainage to prevent water ponding. 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.		
FORCES	(lb) - Maximum Compression/Maximum Tension	8) All bearings are assumed to be SP No.2 .		
TOP CHORD	1-2=0/14, 2-5=-418/137, 5-6=-595/250, 6-7=-394/264, 7-8=-556/393, 8-9=0/344, 9-10=0/338, 10-11=-664/345, 11-13=-1427/333, 13-14=-1033/221	9) Bearing at joint(s) 22, 19 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.		
BOT CHORD	2-23=-216/136, 22-23=0/142, 4-22=-521/179, 21-22=-79/418, 20-21=-69/468, 19-20=-316/131, 18-19=-89/1242, 9-19=-397/101, 17-18=0/352, 15-17=-133/1102, 14-15=-58/228			



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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.sbccomponents.com).



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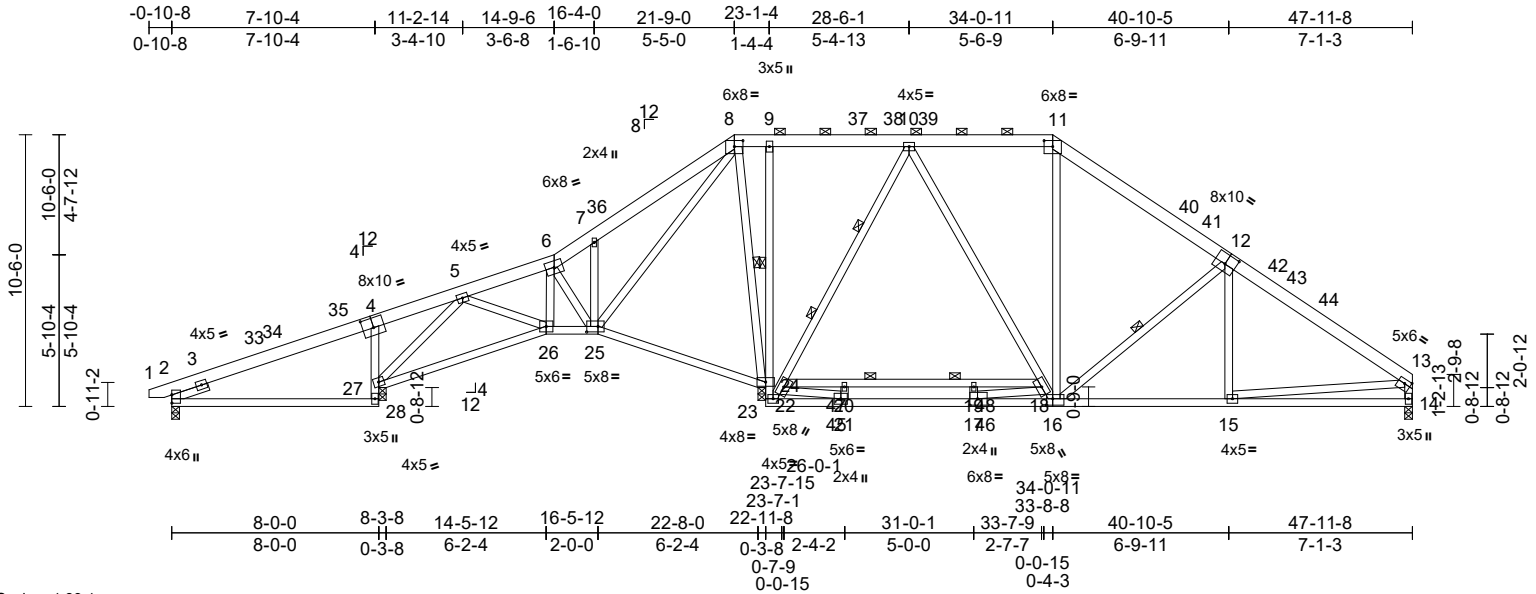
Job	Truss	Truss Type	Qty	Ply	93 Dewey-Tim Johnson Const.-Roof-Fitzgerald VKDRFR
24120007-A	A3	Piggyback Base	2	1	I77311759
Job Reference (optional)					

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

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Scale = 1:89.1

Plate Offsets (X, Y): [2:0-3-13,0-0-1], [4:0-5-0,0-4-8], [8:0-4-0,0-2-12], [11:0-4-0,0-2-12], [12:0-5-0,0-4-8], [13:0-2-12,0-2-0], [16:0-2-12,0-3-0], [17:0-3-8,0-3-0], [25:0-5-4,0-2-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.44	Vert(LL)	-0.13	17-21	>999	240	MT20	244/190
Snow (Pf/Pg)	18.9/20.0	Lumber DOL	1.15	BC	0.96	Vert(CT)	-0.25	17-21	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.99	Horz(CT)	0.03	24	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0											
Weight: 374 lb FT = 20%												

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x4 SP No.2 *Except* 28-4:2x4 SP No.3
WEBS 2x4 SP No.3 *Except* 10-23,10-16:2x4 SP No.2
SLIDER Left 2x4 SP No.3 -- 1-6-0

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-7-9 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 8-11.
Rigid ceiling directly applied or 3-6-1 oc bracing. Except:

1 Row at midpt 9-24
WEBS 1 Row at midpt 12-16, 8-24
WEBS 2 Rows at 1/3 pts 10-23

REACTIONS (size) 2=0-3-8, 14=0-3-8, 24=0-3-8, 27=0-3-8
Max Horiz 2=204 (LC 14)
Max Uplift 2=-47 (LC 11), 27=-66 (LC 15)
Max Grav 2=366 (LC 34), 14=1212 (LC 62), 24=2594 (LC 3), 27=820 (LC 41)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/14, 2-5=-419/137, 5-6=-551/250, 6-7=-346/263, 7-8=-508/393, 8-9=0/367, 9-10=0/358, 10-11=-836/249, 11-13=-1613/218, 13-14=-1155/153
BOT CHORD 2-28=-213/142, 27-28=0/142, 4-27=-520/179, 26-27=-79/402, 25-26=-71/427, 24-25=-345/132, 23-24=0/1720, 9-24=-425/89, 21-23=0/1030, 17-21=0/2269, 15-17=-49/1256, 14-15=-52/238, 20-22=-2086/0, 19-20=-2086/0, 18-19=-2086/0

WEBS 6-26=0/232, 6-25=-401/69, 7-25=-436/225, 11-16=0/259, 12-16=-673/211, 12-15=0/205, 13-15=-20/1029, 8-24=-669/113, 8-25=-217/869, 5-27=-359/128, 5-26=-5/197, 22-23=-2110/0, 10-22=-1360/82, 10-18=0/1098, 16-18=-108/571, 20-21=-189/0, 17-19=-254/0, 17-18=0/1927, 21-22=0/1535

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-7-1 to 4-2-8, Interior (1) 4-2-8 to 21-9-0, Exterior(2R) 21-9-0 to 26-6-9, Interior (1) 26-6-9 to 34-0-11, Exterior(2R) 34-0-11 to 38-10-4, Interior (1) 38-10-4 to 47-9-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=18.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10, Lu=50-0-0
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
- 200.0lb AC unit load placed on the bottom chord, 28-6-1 from left end, supported at two points, 5-0-0 apart.
- Provide adequate drainage to prevent water ponding.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- All bearings are assumed to be SP No.2.

- Bearing at joint(s) 27, 24 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 27. This connection is for uplift only and does not consider lateral forces.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



October 27, 2025

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TRENCO
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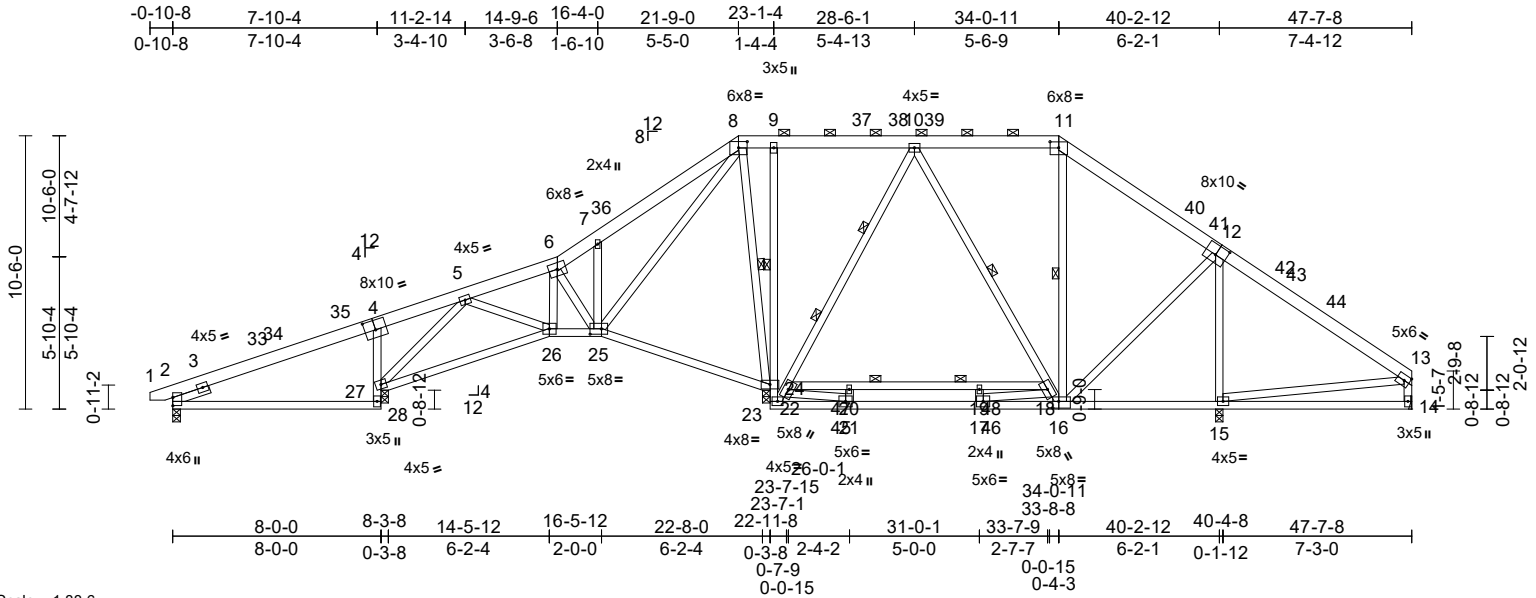
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	93 Dewey-Tim Johnson Const.-Roof-Fitzgerald VKDRFR
24120007-A	A4	Piggyback Base	5	1	I77311760
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. Fri Oct 24 10:03:11
ID:eZBgMRnIZzyWFnOSkxJhQ7yBuNQ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKwRCdoi7J4zJC?f

Page: 1



Scale = 1:88.6

Plate Offsets (X, Y): [2:0-3-13,0-0-1], [4:0-5-0,0-4-8], [8:0-4-0,0-2-13], [11:0-4-0,0-2-12], [12:0-5-0,0-4-8], [16:0-2-12,0-3-0], [25:0-5-4,0-2-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.41	Vert(LL)	-0.13	17-21	>999	240	MT20	244/190
Snow (Pf/Pg)	18.9/20.0	Lumber DOL	1.15	BC	0.95	Vert(CT)	-0.23	17-21	>906	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.74	Horz(CT)	0.04	24	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 373 lb FT = 20%	

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x4 SP No.2 *Except* 28-4:2x4 SP No.3
WEBS 2x4 SP No.3 *Except* 10-23,10-16:2x4 SP No.2
SLIDER Left 2x4 SP No.3 -- 1-6-0

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 8-11.
BOT CHORD Rigid ceiling directly applied or 3-6-5 oc bracing. Except:

1 Row at midpt 9-24
WEBS 1 Row at midpt 11-16, 8-24, 10-16
WEBS 2 Rows at 1/3 pts 10-23

REACTIONS (size) 2=0-3-8, 14= Mechanical, 15=0-3-8, 24=0-3-8, 27=0-3-8
Max Horiz 2=206 (LC 14)
Max Uplift 2=48 (LC 11), 14=38 (LC 16), 27=57 (LC 15)
Max Grav 2=359 (LC 34), 14=295 (LC 62), 15=1331 (LC 62), 24=2144 (LC 3), 27=861 (LC 41)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/14, 2-5=-418/136, 5-6=-669/255, 6-7=-480/269, 7-8=-642/398, 8-9=-3/298, 9-10=-6/292, 10-11=-457/234, 11-13=-609/210, 13-14=-216/123
BOT CHORD 2-28=-221/128, 27-28=0/142, 4-27=-521/180, 26-27=-85/451, 25-26=-78/542, 24-25=-269/129, 23-24=0/1321, 9-24=-400/86, 21-23=0/775, 17-21=0/2137, 15-17=-61/464, 14-15=-48/168, 20-22=-2074/0, 19-20=-2074/0, 18-19=-2074/0

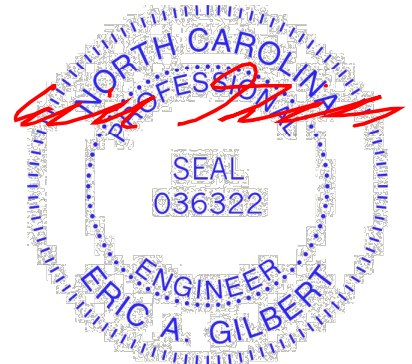
WEBS 6-26=0/219, 6-25=-418/70, 7-25=-437/225, 11-16=-151/70, 12-16=0/557, 12-15=-1130/126, 13-15=-178/41, 5-27=-441/130, 5-26=-7/263, 8-24=-667/118, 8-25=-219/925, 22-23=-1600/0, 10-22=-894/72, 10-18=0/534, 16-18=-220/110, 20-21=-205/0, 21-22=0/1615, 17-19=-240/0, 17-18=0/1875

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-7-1 to 4-2-2, Interior (1) 4-2-2 to 21-9-0, Exterior(2R) 21-9-0 to 26-6-2, Interior (1) 26-6-2 to 34-0-11, Exterior(2R) 34-0-11 to 38-9-13, Interior (1) 38-9-13 to 47-5-12 zone; cantilever left and right exposed; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=18.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10, Lu=50-0-0
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
- 200.0lb AC unit load placed on the bottom chord, 28-6-1 from left end, supported at two points, 5-0-0 apart.
- Provide adequate drainage to prevent water ponding.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

- Bearings are assumed to be: Joint 2 SP No.2, Joint 27 SP No.2, Joint 24 SP No.2, Joint 15 SP No.2.
- Refer to girder(s) for truss to truss connections.
- Bearing at joint(s) 27, 24 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 38 lb uplift at joint 14.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 27. This connection is for uplift only and does not consider lateral forces.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



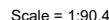
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Page: 1

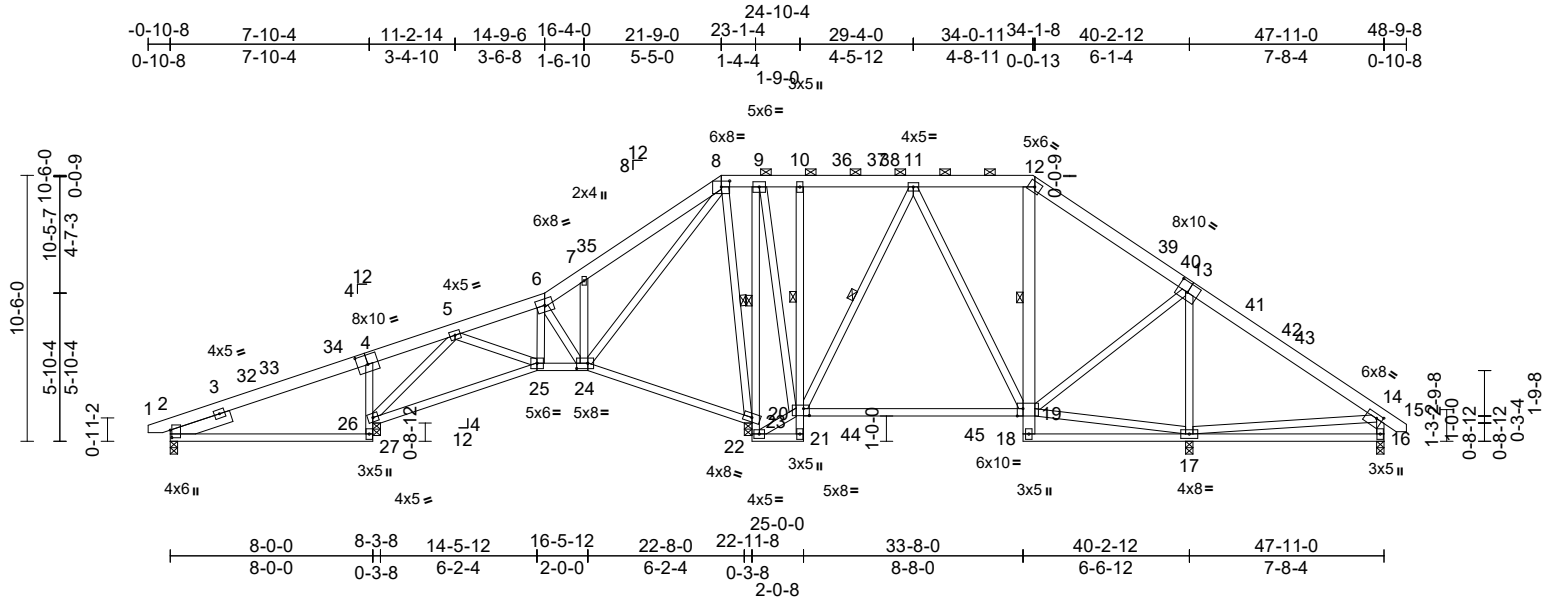
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Job	Truss	Truss Type	Qty	Ply	93 Dewey-Tim Johnson Const.-Roof-Fitzgerald VKDRFR
24120007-A	A6	Piggyback Base	1	1	I77311762
Job Reference (optional)					

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

Run: 8.73 S Aug 13 2025 Print: 8.730 S Aug 13 2025 MiTek Industries, Inc. Fri Oct 24 10:03:12
ID:EH9FznAFqUUMaUwHYU_tcGyBuUg-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWRCDoi7J4zJC?f

Page: 1



Scale = 1:91

Plate Offsets (X, Y): [2:0-3-9,0-0-11], [4:0-5-0,0-4-8], [8:0-4-0,0-2-13], [13:0-5-0,0-4-8], [14:0-2-12,0-2-0], [19:0-2-12,Edge], [20:0-2-12,0-3-4], [24:0-5-4,0-2-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.52	Vert(LL)	-0.26	19-20	>805	240	MT20	244/190
Snow (Pf/Pg)	18.9/20.0	Lumber DOL	1.15	BC	0.61	Vert(CT)	-0.41	19-20	>505	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.63	Horz(CT)	0.03	16	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 400 lb FT = 20%	

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x4 SP No.2 *Except* 27-4,9-22,21-10:2x4
SP No.3, 20-19:2x4 SP 2400F 2.0E,
12-18:2x6 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 -- 2-6-0

BRACING
TOP CHORD Structural wood sheathing directly applied or
6-0-0 oc purlins, except end verticals, and
2-0-0 oc purlins (6-0-0 max.): 8-12.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc
bracing. Except:
1 Row at midpt 9-23, 10-20, 12-19
WEBS 1 Row at midpt 11-20, 8-23

REACTIONS (size) 2=0-3-8, 16=0-3-8, 17=0-3-8,
23=0-3-8, 26=0-3-8
Max Horiz 2=206 (LC 14)
Max Uplift 2=-53 (LC 11), 16=-55 (LC 16),
26=-60 (LC 15)
Max Grav 2=351 (LC 34), 16=315 (LC 62),
17=1163 (LC 62), 23=1719 (LC 3),
26=859 (LC 41)

FORCES (lb) - Maximum Compression/Maximum
Tension
TOP CHORD 1-2=0/14, 2-5=-598/149, 5-6=-565/264,
6-7=-383/277, 7-8=-539/407, 8-9=0/354,
9-10=-29/282, 10-11=-31/281,
11-12=-312/284, 12-14=-434/272,
14-15=0/35, 14-16=-221/171
BOT CHORD 2-27=-185/100, 26-27=0/135, 4-26=-529/170,
25-26=-69/377, 24-25=-60/445,
23-24=-312/137, 22-23=-49/109,
9-23=-1049/44, 21-22=-188/0, 20-21=-29/68,
10-20=-191/77, 19-20=-41/216, 18-19=0/101,
12-19=-197/11, 17-18=-145/0, 16-17=-74/249

WEBS 6-25=0/209, 6-24=-389/72, 7-24=-428/226,
13-17=-960/232, 14-17=-333/100,
17-19=-61/90, 13-19=0/453, 11-20=-608/96,
11-19=0/321, 5-26=-394/134, 5-25=-3/236,
8-23=-746/101, 8-24=-215/868,
20-22=-228/201, 9-20=-13/872

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-7-1 to 4-2-7, Interior (1) 4-2-7 to 21-9-0, Exterior(2R) 21-9-0 to 26-6-8, Interior (1) 26-6-8 to 34-1-8, Exterior(2R) 34-1-8 to 38-11-0, Interior (1) 38-11-0 to 48-7-3 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=18.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10, Lu=50-0-0
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - All bearings are assumed to be SP No.2 .
 - Bearing at joint(s) 26, 23 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 26, and 16. This connection is for uplift only and does not consider lateral forces.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



October 27,2025

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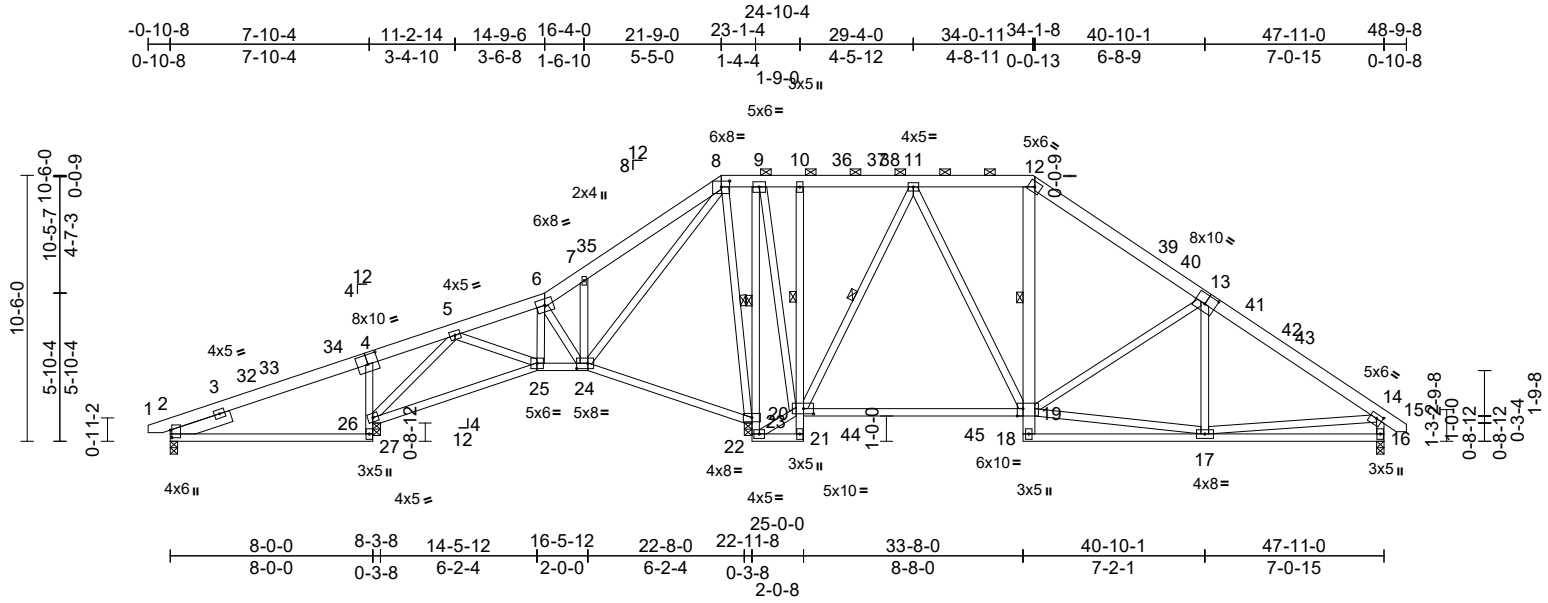
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	93 Dewey-Tim Johnson Const.-Roof-Fitzgerald VKDRFR
24120007-A	A7	Piggyback Base	4	1	I77311763
Job Reference (optional)					

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

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Page: 1



Scale = 1:91

Plate Offsets (X, Y): [2:0-3-9,0-0-11], [4:0-5-0,0-4-8], [8:0-4-0,0-2-13], [13:0-5-0,0-4-8], [14:0-2-12,0-2-0], [19:0-2-12,Edge], [20:0-4-12,0-2-8], [24:0-5-4,0-2-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.50	Vert(LL)	-0.27	19-20	>999	240	MT20	244/190
Snow (Pf/Pg)	18.9/20.0	Lumber DOL	1.15	BC	0.75	Vert(CT)	-0.43	19-20	>685	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.74	Horz(CT)	0.04	16	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0											
Weight: 400 lb FT = 20%												

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x4 SP No.2 *Except* 27-4,9-22,21-10:2x4
SP No.3, 20-19:2x4 SP 2400F 2.0E,
12-18:2x6 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 -- 2-6-0

BRACING
TOP CHORD Structural wood sheathing directly applied or
6-0-0 oc purlins, except end verticals, and
2-0-0 oc purlins (6-0-0 max.): 8-12.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc
bracing. Except:
1 Row at midpt 9-23, 10-20, 12-19
WEBS 1 Row at midpt 8-23, 11-20

REACTIONS (size) 2=0-3-8, 16=0-3-8, 23=0-3-8,
26=0-3-8
Max Horiz 2=206 (LC 14)
Max Uplift 2=-53 (LC 11), 16=-40 (LC 16),
26=-67 (LC 15)
Max Grav 2=360 (LC 34), 16=1089 (LC 62),
23=2134 (LC 3), 26=814 (LC 41)

FORCES (lb) - Maximum Compression/Maximum
Tension
TOP CHORD 1-2=0/14, 2-5=-599/152, 5-6=-431/246,
6-7=-234/258, 7-8=-386/387, 8-9=0/429,
9-10=-21/279, 10-11=-24/279,
11-12=-677/336, 12-14=-1367/322,
14-15=0/35, 14-16=-1024/260
BOT CHORD 2-27=-173/115, 26-27=0/135, 4-26=-526/169,
25-26=-68/324, 24-25=-47/327,
23-24=-400/149, 22-23=-54/148,
9-23=-1388/91, 21-22=-178/0, 20-21=-31/83,
10-20=-180/76, 19-20=0/347, 18-19=0/123,
12-19=-41/140, 17-18=-73/30, 16-17=-61/244

WEBS 6-25=0/223, 6-24=-373/70, 7-24=-422/225,
11-19=-6/800, 13-17=-77/152,
14-17=-75/814, 8-23=-786/105,
17-19=-76/1088, 13-19=-588/184,
20-22=-337/216, 9-20=-59/1208,
8-24=-207/801, 5-26=-320/120, 5-25=-3/164,
11-20=-1035/149

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-7-1 to 4-2-7, Interior (1) 4-2-7 to 21-9-0, Exterior(2R) 21-9-0 to 26-6-8, Interior (1) 26-6-8 to 34-1-8, Exterior(2R) 34-1-8 to 38-11-0, Interior (1) 38-11-0 to 48-7-3 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=18.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10, Lu=50-0-0
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) All bearings are assumed to be SP No.2.
9) Bearing at joint(s) 26, 23 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

10) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 26, and 16. This connection is for uplift only and does not consider lateral forces.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



October 27, 2025

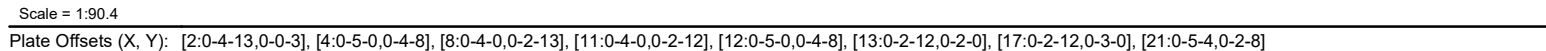
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ID:65UWqs02FeeyYwAaj t4BVyBv7i-RfC?PsB70Hg3NSgPqnL8w3uITXbGKWCrDoi7J4zJC?f



LUMBER		WEBS	6-22=0/223, 6-21=-406/71, 7-21=-437/226, 10-19=-1308/128, 10-18=0/342, 10-17=-31/685, 11-17=-48/136, 12-17=-683/195, 12-16=0/230, 13-16=-75/838, 8-20=-683/91, 8-21=-215/890, 5-23=-382/136, 5-22=-5/227	10) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at j(t)s 2, 23, and 15. This connection is for uplift only and does not consider lateral forces. 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or
TOP CHORD	2x6 SP No.2			
BOT CHORD	2x4 SP No.2 *Except* 24-4:2x4 SP No.3			
WEBS	2x4 SP No.3 *Except* 19-10,17-10:2x4 SP No.2			
SLIDER	Left 2x6 SP No.2 -- 1-6-0			

October 27, 2025

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818 Soundside Road
Edenton, NC 27932

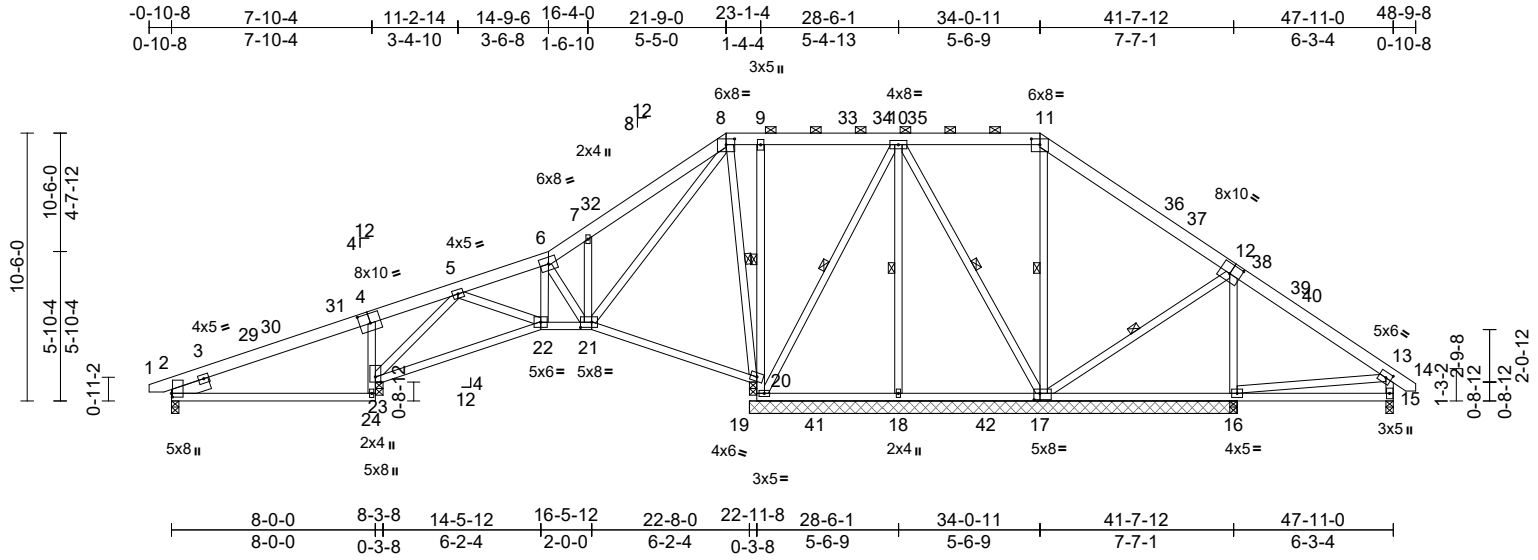
Job	Truss	Truss Type	Qty	Ply	93 Dewey-Tim Johnson Const.-Roof-Fitzgerald VKDRFR
24120007-A	A9	Piggyback Base	1	1	I77311765
Job Reference (optional)					

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

Run: 8.73 S Aug 13 2025 Print: 8.730 S Aug 13 2025 MiTek Industries, Inc. Fri Oct 24 10:03:13

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Scale = 1:90.4

Plate Offsets (X, Y): [2:0-1-12,0-0-7], [4:0-5-0,0-4-8], [8:0-4-0,0-2-12], [11:0-4-0,0-2-12], [12:0-5-0,0-4-8], [13:0-2-9,0-2-8], [17:0-2-12,0-3-0], [21:0-5-4,0-2-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.43	Vert(LL)	-0.10	22-23	>999	240	MT20	244/190
Snow (Pf/Pg)	18.9/20.0	Lumber DOL	1.15	BC	0.56	Vert(CT)	-0.11	24-27	>833	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.34	Horz(CT)	0.04	20	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 366 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x4 SP No.2 *Except* 9-19:2x4 SP No.3
WEBS 2x4 SP No.3 *Except* 10-17,19-10:2x4 SP No.2
SLIDER Left 2x6 SP No.2 ~ 1-6-10

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (10-0-0 max.): 8-11.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. Except:
1 Row at midpt 9-20
WEBS 1 Row at midpt 8-20, 10-18, 11-17, 12-17, 10-17, 10-19

REACTIONS (size)
2=0-3-8, 15=0-3-8, 16=19-1-8, 17=19-1-8, 18=19-1-8, 19=19-1-8, 20=19-1-8, 23=0-3-8
Max Horiz 2=207 (LC 14)
Max Uplift 2=49 (LC 11), 15=-26 (LC 16), 16=-33 (LC 16), 17=-6 (LC 16), 20=-19 (LC 12), 23=-66 (LC 15)
Max Grav 2=361 (LC 34), 15=307 (LC 34), 16=698 (LC 62), 17=635 (LC 70), 18=452 (LC 53), 19=329 (LC 65), 20=934 (LC 33), 23=889 (LC 41)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/14, 2-5=-298/158, 5-6=-726/283, 6-7=-537/302, 7-8=-699/431, 8-9=-12/294, 9-10=-14/299, 10-11=-61/254, 11-13=-168/271, 13-14=0/35, 13-15=-242/135
BOT CHORD 2-24=-205/92, 22-23=-76/453, 21-22=-79/596, 20-21=-230/121, 19-20=0/0, 9-20=-360/97, 18-19=-160/97, 16-18=-160/97, 15-16=-32/117

WEBS
23-24=0/116, 4-23=-565/175, 5-22=-12/313, 5-23=-472/137, 6-22=0/219, 7-21=-436/225, 6-21=-438/72, 8-20=-685/88, 8-21=-223/954, 10-18=-225/45, 11-17=-451/71, 12-16=-475/194, 12-17=-209/123, 13-16=-75/59, 10-17=-82/126, 10-19=-300/22

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-7-1 to 4-2-7, Interior (1) 4-2-7 to 21-9-0, Exterior(2R) 21-9-0 to 26-6-8, Interior (1) 26-6-8 to 34-0-11, Exterior(2R) 34-0-11 to 38-10-3, Interior (1) 38-10-3 to 48-7-3 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=18.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10, Lu=50-0-0
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
 - N/A
 - Provide adequate drainage to prevent water ponding.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - All bearings are assumed to be SP No.2.

- Bearing at joint(s) 23, 20 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 19 lb uplift at joint 20.
- N/A

- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



October 27, 2025

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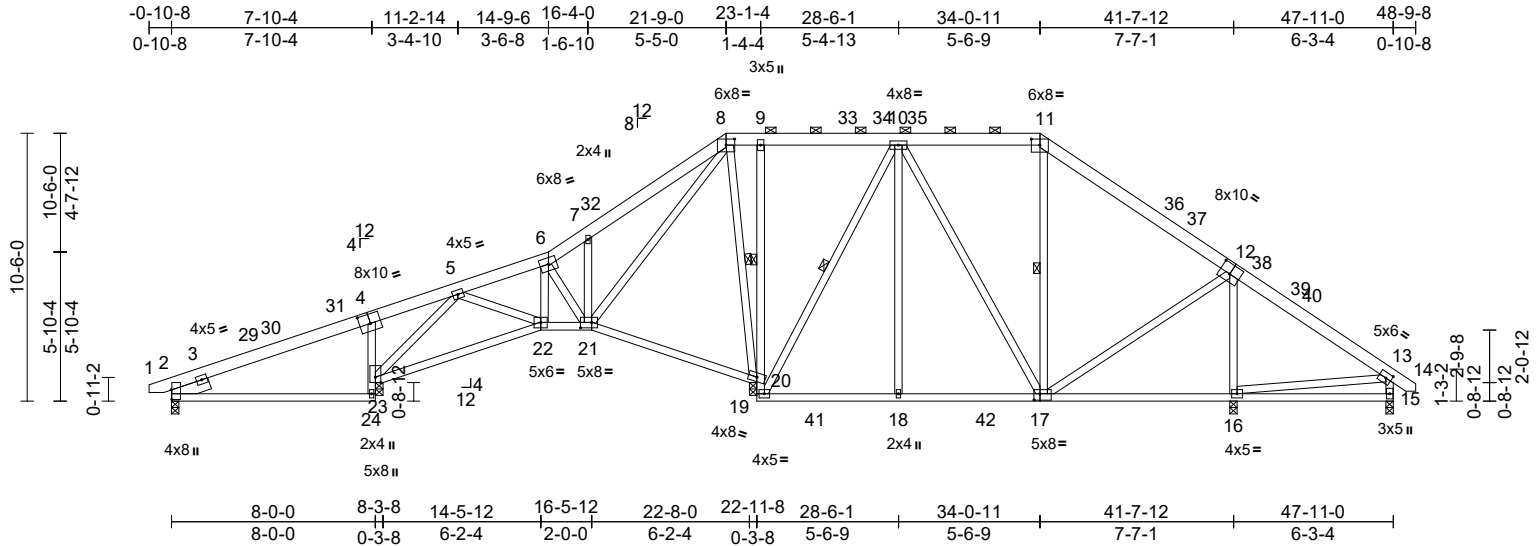
Job	Truss	Truss Type	Qty	Ply	93 Dewey-Tim Johnson Const.-Roof-Fitzgerald VKDRFR
24120007-A	A10	Piggyback Base	1	1	177311766
Job Reference (optional)					

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

Run: 8.73 S Aug 13 2025 Print: 8.730 S Aug 13 2025 MiTek Industries, Inc. Fri Oct 24 10:03:14

Page: 1

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Scale = 1:90.4

Plate Offsets (X, Y): [2:0-4-9,0-0-3], [4:0-5-0,0-4-8], [8:0-4-0,0-2-13], [11:0-4-0,0-2-12], [12:0-5-0,0-4-8], [13:0-2-9,0-2-8], [17:0-2-12,0-3-0], [21:0-5-4,0-2-8]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.43	Vert(LL)	-0.10	22-23	>999	240	MT20	244/190
Snow (Pf/Pg)	18.9/20.0	Lumber DOL	1.15	BC	0.90	Vert(CT)	-0.12	24-27	>818	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.59	Horz(CT)	0.04	20	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0											
Weight: 366 lb											FT = 20%	

LUMBER		
TOP CHORD	2x6 SP No.2	
BOT CHORD	2x4 SP No.2 *Except* 9-19:2x4 SP No.3	
WEBS	2x4 SP No.3 *Except* 19-10,17-10:2x4 SP No.2	
SLIDER	Left 2x6 SP No.2 ~ 1-6-10	
BRACING		
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 8-11.	
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 20-21.	
1 Row at midpt	9-20	
WEBS	1 Row at midpt	10-19, 11-17, 8-20
REACTIONS (size)		
	2=0-3-8, 15=0-3-8, 16=0-3-8, 20=0-3-8, 23=0-3-8	
Max Horiz	2=207 (LC 14)	
Max Uplift	2=-49 (LC 11), 15=-26 (LC 16), 16=-18 (LC 16), 23=-67 (LC 15)	
Max Grav	2=364 (LC 34), 15=325 (LC 34), 16=1122 (LC 62), 20=1776 (LC 3), 23=880 (LC 41)	
FORCES (lb) - Maximum Compression/Maximum Tension		
TOP CHORD	1-2=0/14, 2-5=-416/159, 5-6=-709/282, 6-7=-519/299, 7-8=-680/428, 8-9=-9/293, 9-10=-11/297, 10-11=-434/312, 11-13=-604/281, 13-14=0/35, 13-15=-260/139	
BOT CHORD	2-24=-199/99, 22-23=-75/450, 21-22=-77/579, 20-21=-243/122, 19-20=-31/977, 9-20=-383/98, 18-19=-6/282, 16-18=-6/282, 15-16=-33/119	

WEBS	
6-22=0/223, 6-21=-438/72, 7-21=-436/225, 10-19=-1007/76, 10-18=0/331, 10-17=0/333, 11-17=-248/32, 12-17=0/351, 12-16=-927/265, 13-16=-53/55, 23-24=0/116, 4-23=-564/175, 5-23=-453/135, 5-22=-11/303, 8-20=-676/88, 8-21=-222/947	

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-7-1 to 4-2-7, Interior (1) 4-2-7 to 21-9-0, Exterior(2R) 21-9-0 to 26-6-8, Interior (1) 26-6-8 to 34-0-11, Exterior(2R) 34-0-11 to 38-10-3, Interior (1) 38-10-3 to 48-7-3 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=18.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10, Lu=50-0-0
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- All bearings are assumed to be SP No.2 .
- Bearing at joint(s) 23, 20 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 23, 16, and 15. This connection is for uplift only and does not consider lateral forces.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



October 27,2025

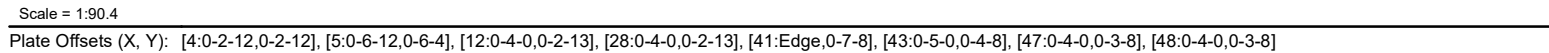
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Carter Components (Sanford, NC), Sanford, NC - 27332, Run: 8.73 S Aug 13 2025 Print: 8.730 S Aug 13 2025 MiTek Industries, Inc. Fri Oct 24 10:03:14 Page: 1
ID:6aPlxPYxCBYPNPpJJ8m9ybyBu9X-RfC?PsB70Hq3NSgPqnL8w3uITXbGKwRCDoi7J4ZC?f




LUMBER		TOP CHORD	1-2=0/14, 2-3=-373/83, 3-4=-352/119, 5-6=-913/61, 6-8=-876/81, 8-10=-799/107, 10-12=-695/118, 12-14=-627/114, 14-16=-627/114, 16-18=-627/114, 18-21=-627/114, 21-24=-627/114, 24-26=-627/114, 26-28=-628/114, 28-31=-725/116, 31-33=-764/102, 33-35=-833/86, 35-39=-941/76, 39-40=0/34, 39-41=-252/37, 4-5=-244/131, 5-7=-28/376, 7-9=-22/366, 9-11=-22/366, 11-13=-22/366, 13-15=-22/366, 15-17=-25/578, 17-19=-25/578, 19-22=-25/578, 22-23=-25/578, 23-25=-1138/164, 25-27=-1138/164, 27-29=-1138/164, 29-30=-1138/164, 30-32=-1138/164, 32-34=-1138/164, 34-36=-1138/164, 36-38=-1138/164	1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows: Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc. Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc. Web connected as follows: 2x4 - 1 row at 0-6-0 oc.
TOP CHORD	2x6 SP No.2 *Except* 5-20,20-37:2x4 SP No.2			2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
BOT CHORD	2x6 SP No.2 *Except* 51-3,15-45:2x4 SP No.3			3) Unbalanced roof live loads have been considered for this design.
WEBS	2x4 SP No.3			4) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.33
OTHERS	2x4 SP No.3			
WEDGE	Left: 2x4 SP No.3			
BRACING		BOT CHORD	2-51=-113/288, 50-51=0/107, 3-50=-534/105, 49-50=-47/239, 48-49=-49/387, 47-48=-44/293, 46-47=-90/75, 45-46=-105/1990, 15-46=-226/142, 44-45=-110/1952, 42-44=-110/1952, 41-42=-40/73	
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 12-28, 4-5, 5-38.			
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 46-47,42-43.			
JOINTS	1 Brace at Jt(s): 15, 7, 23, 30, 38, 27, 19, 11, 34, 36			
REACTIONS	(size) 2=0-3-8, 41=0-3-8, 42=0-3-8, 46=14-11-8, 47=14-11-8, 48=14-11-8, 49=14-11-8, 50=14-11-8 Max Horiz 2=198 (LC 10) Max Uplift 2=-39 (LC 7), 41=-20 (LC 69), 42=-321 (LC 12), 46=-86 (LC 8), 47=-79 (LC 68), 48=-75 (LC 11), 50=-61 (LC 7) Max Grav 2=466 (LC 41), 41=271 (LC 2), 42=3534 (LC 41), 46=2307 (LC 40), 47=223 (LC 53), 48=543 (LC 41), 49=375 (LC 41), 50=547 (LC 41)	WEBS	4-50=-36/74, 4-49=-131/26, 38-42=-2144/211, 37-38=-992/139, 39-42=-86/89, 5-49=-292/16, 7-47=-189/110, 5-48=-401/68, 7-48=-67/20, 23-44=-38/1239, 30-43=-82/173, 23-43=-364/82, 38-43=-162/2091, 15-47=-5/262, 23-45=-2450/155, 28-29=-24/141, 26-27=-31/6, 24-25=-310/78, 21-22=-198/46, 18-19=-14/17, 16-17=-176/70, 13-14=-27/128, 10-11=-30/27, 8-9=-203/99, 31-32=-101/108, 33-34=-50/11, 35-36=-10/39	
FORCES	(lb) - Maximum Compression/Maximum Tension	NOTES		



Continued on page 2

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	93 Dewey-Tim Johnson Const.-Roof-Fitzgerald VKDRFR I77311767
24120007-A	A11	Piggyback Base Girder	1	2	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. Fri Oct 24 10:03:14
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Page: 2

- 5) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 6) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=18.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10, Lu=50-0-0
- 7) Unbalanced snow loads have been considered for this design.
- 8) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
- 9) Provide adequate drainage to prevent water ponding.
- 10) All plates are 2x4 MT20 unless otherwise indicated.
- 11) Gable studs spaced at 2-0-0 oc.
- 12) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 13) All bearings are assumed to be SP No.2 .
- 14) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 75 lb uplift at joint 48.
- 15) N/A

- 16) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 17) Use Simpson Strong-Tie LUS26 (4-10d Girder, 3-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 24-0-12 from the left end to 41-10-4 to connect truss(es) to front face of bottom chord.
- 18) Fill all nail holes where hanger is in contact with lumber.
- 19) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 480 lb down and 99 lb up at 42-2-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-4=-46, 5-12=-46, 12-28=-56, 28-39=-46, 39-40=-46, 51-52=-19, 48-50=-19, 47-48=-19, 46-47=-19, 41-45=-19, 4-5=-56
Concentrated Loads (lb)
Vert: 42=-332 (F), 64=-332 (F), 65=-332 (F), 66=-332 (F), 67=-332 (F), 68=-332 (F), 69=-332 (F), 70=-332 (F), 71=-332 (F), 72=-332 (F), 73=-480 (F)

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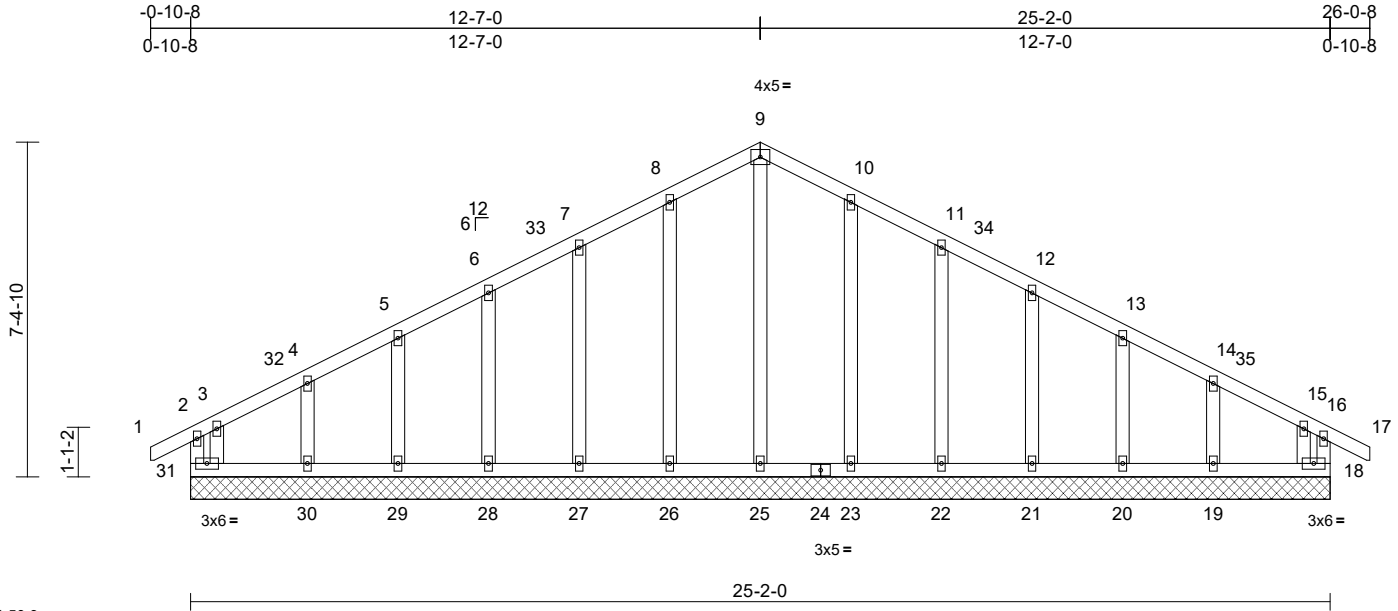
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	93 Dewey-Tim Johnson Const.-Roof-Fitzgerald VKDRFR 177311768
24120007-A	B1	Common Supported Gable	1	1	Job Reference (optional)

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

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Scale = 1:50.9

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.08	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.03	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.00	18	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MR							
BCDL	10.0										
Weight: 154 lb FT = 20%											

LUMBER

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

BRACING

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

REACTIONS (size) 18=25-2-0, 19=25-2-0, 20=25-2-0, 21=25-2-0, 22=25-2-0, 23=25-2-0, 25=25-2-0, 26=25-2-0, 27=25-2-0, 28=25-2-0, 29=25-2-0, 30=25-2-0, 31=25-2-0
Max Horiz 31=92 (LC 13)
Max Uplift 18=13 (LC 12), 19=41 (LC 16), 20=8 (LC 16), 21=17 (LC 16), 22=17 (LC 16), 23=14 (LC 16), 26=14 (LC 15), 27=17 (LC 15), 28=18 (LC 15), 29=7 (LC 15), 30=45 (LC 15), 31=25 (LC 11)
Max Grav 18=170 (LC 2), 19=180 (LC 40), 20=155 (LC 2), 21=162 (LC 40), 22=179 (LC 23), 23=206 (LC 23), 25=143 (LC 36), 26=206 (LC 22), 27=179 (LC 22), 28=162 (LC 39), 29=155 (LC 2), 30=181 (LC 33), 31=170 (LC 2)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-31=-106/129, 1-2=0/33, 2-3=-23/44, 3-4=-75/52, 4-5=-63/89, 5-6=-72/130, 6-7=-84/176, 7-8=-95/223, 8-9=-109/265, 9-10=-109/265, 10-11=-95/223, 11-12=-84/176, 12-13=-71/130, 13-14=-62/88, 14-15=-61/37, 15-16=-22/44, 16-17=0/33, 16-18=-106/132

BOT CHORD 30-31=-30/55, 29-30=-30/55, 28-29=-30/55, 27-28=-30/55, 26-27=-30/55, 25-26=-30/55, 23-25=-30/55, 22-23=-30/55, 21-22=-30/55, 20-21=-30/55, 19-20=-30/55, 18-19=-30/55
WEBS 9-25=-170/37, 8-26=-166/71, 7-27=-139/80, 6-28=-128/79, 5-29=-125/70, 4-30=-146/116, 3-31=-113/57, 10-23=-166/71, 11-22=-139/81, 12-21=-127/79, 13-20=-124/70, 14-19=-143/118, 15-18=-94/32

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Corner (3E) -0-10-1 to 2-1-15, Exterior(2N) 2-1-15 to 12-7-0, Corner(3R) 12-7-0 to 15-7-0, Exterior(2N) 15-7-0 to 26-0-1 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf, Pf=13.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).

- Gable studs spaced at 2-0-0 oc.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 25 lb uplift at joint 31, 13 lb uplift at joint 18, 14 lb uplift at joint 26, 17 lb uplift at joint 27, 18 lb uplift at joint 28, 7 lb uplift at joint 29, 45 lb uplift at joint 30, 14 lb uplift at joint 23, 17 lb uplift at joint 22, 17 lb uplift at joint 21, 8 lb uplift at joint 20 and 41 lb uplift at joint 19.

LOAD CASE(S) Standard



October 27, 2025

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

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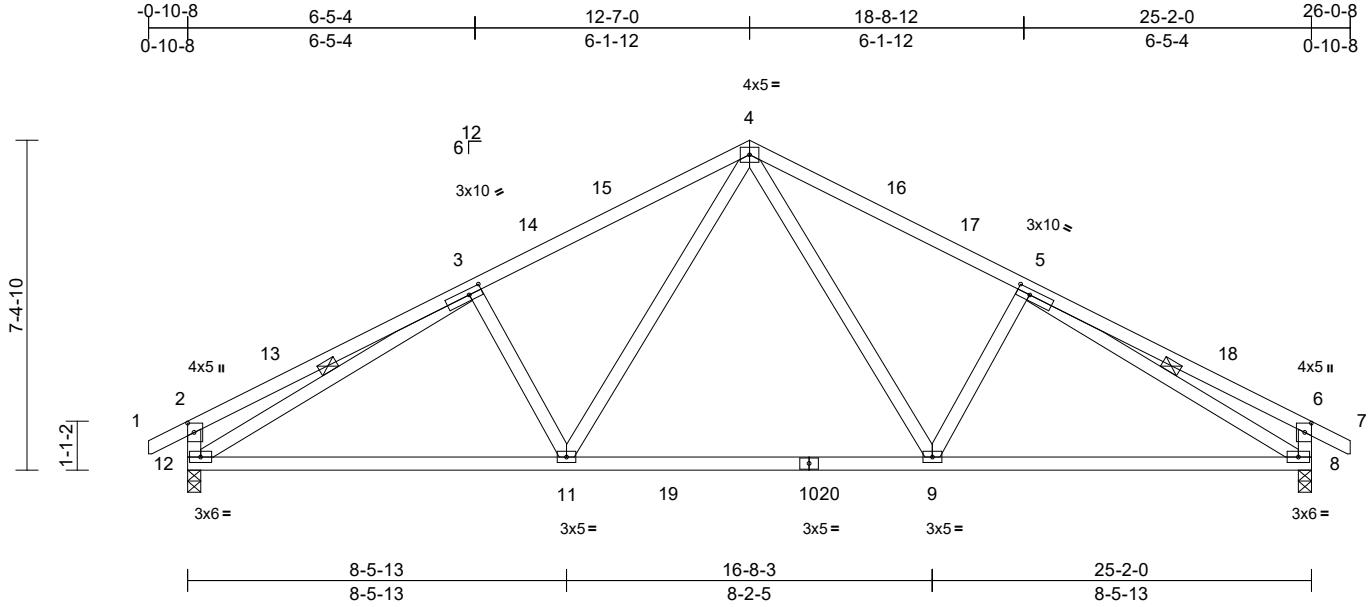
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	93 Dewey-Tim Johnson Const.-Roof-Fitzgerald VKDRFR
24120007-A	B2	Common	11	1	I77311769
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. Fri Oct 24 10:03:15
ID:7EIPo0W0Vej5qo29CQYmkyBvYf-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:51.6

Plate Offsets (X, Y): [2:0-2-8,0-1-12], [3:0-3-8,0-1-8], [5:0-3-8,0-1-8], [6:0-2-8,0-1-12]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.62	Vert(LL)	-0.16	9-11	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.82	Vert(CT)	-0.24	9-11	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.40	Horz(CT)	0.05	8	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 141 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-1-7 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 3-12, 5-8

REACTIONS

(size) 8=0-3-8, 12=0-3-8
Max Horiz 12=92 (LC 14)
Max Grav 8=1134 (LC 3), 12=1134 (LC 3)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/33, 2-3=-473/124, 3-4=-1654/242, 4-5=-1654/242, 5-6=-473/124, 6-7=0/33, 2-12=-414/150, 6-8=-414/150
BOT CHORD 11-12=-125/1484, 9-11=-23/1067, 8-9=-112/1481
WEBS 4-9=-49/617, 5-9=-267/166, 4-11=-49/617, 3-11=-267/166, 3-12=-1353/103, 5-8=-1353/103

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-10-1 to 2-1-15, Interior (1) 2-1-15 to 12-7-0, Exterior(2R) 12-7-0 to 15-7-0, Interior (1) 15-7-0 to 26-0-1 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33

- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=13.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- All bearings are assumed to be SP No.2.

LOAD CASE(S) Standard



October 27, 2025

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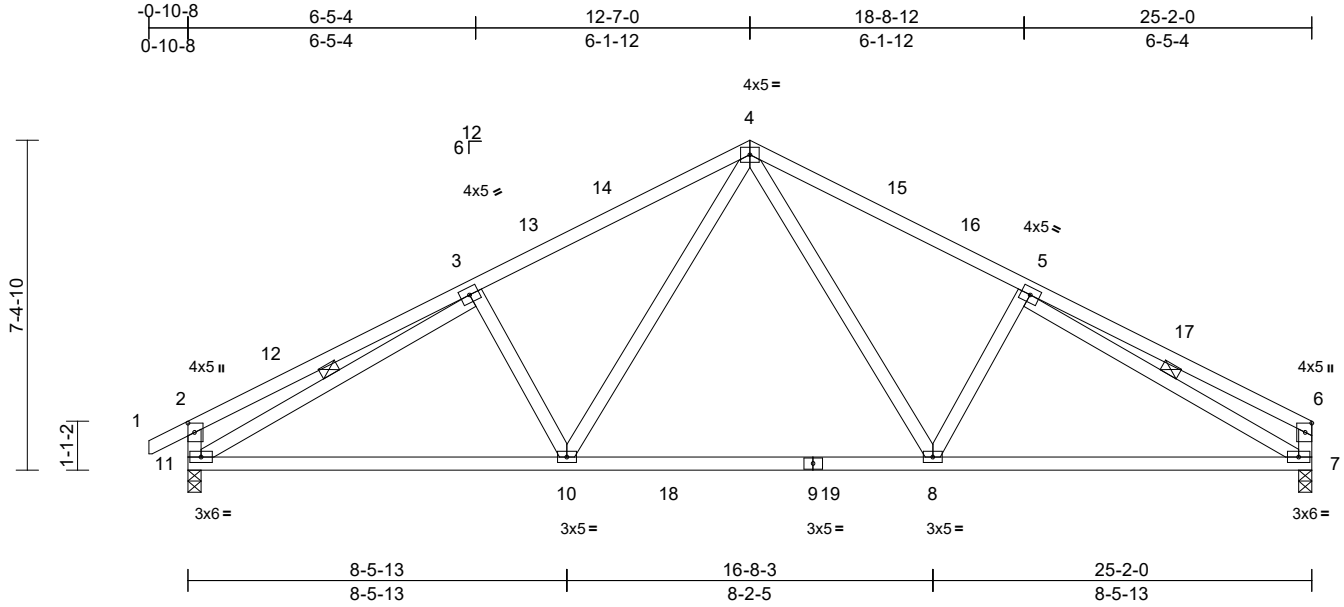
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	93 Dewey-Tim Johnson Const.-Roof-Fitzgerald VKDRFR I77311770
24120007-A	B3	Common	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. Fri Oct 24 10:03:15
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Page: 1



Scale = 1:51.6

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.64	Vert(LL)	-0.16	8-10	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.83	Vert(CT)	-0.24	8-10	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.43	Horz(CT)	0.05	7	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 140 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-0-10 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 3-11, 5-7

REACTIONS

(size) 7=0-3-8, 11=0-3-8
Max Horiz 11=93 (LC 14)
Max Grav 7=1083 (LC 3), 11=1135 (LC 3)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/33, 2-3=-467/121, 3-4=-1655/241, 4-5=-1661/245, 5-6=-389/87, 2-11=-409/148, 6-7=-315/84
BOT CHORD 10-11=-155/1490, 8-10=-51/1072, 7-8=-146/1495
WEBS 4-8=-49/622, 5-8=-274/167, 4-10=-48/615, 3-10=-266/166, 3-11=-1362/107, 5-7=-1446/144

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-10-1 to 2-1-15, Interior (1) 2-1-15 to 12-7-0, Exterior(2R) 12-7-0 to 15-7-0, Interior (1) 15-7-0 to 25-0-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33

- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=13.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- All bearings are assumed to be SP No.2.

LOAD CASE(S) Standard



October 27, 2025

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818 Soundside Road
Edenton, NC 27932

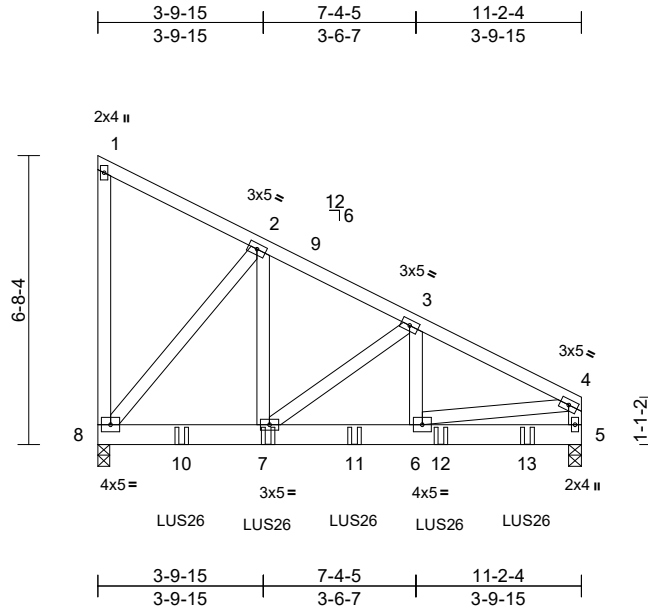
Job	Truss	Truss Type	Qty	Ply	93 Dewey-Tim Johnson Const.-Roof-Fitzgerald VKDRFR I77311771
24120007-A	C1	Roof Special Girder	1	2	Job Reference (optional)

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

Run: 8.73 S Aug 13 2025 Print: 8.730 S Aug 13 2025 MiTek Industries, Inc. Fri Oct 24 10:03:15

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Scale = 1:53.3

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	-0.01	6-7	>999	240	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	-0.02	6-7	>999	180	
TCDL	10.0	Rep Stress Incr	NO	WB	0.20	Horz(CT)	0.00	5	n/a	n/a	
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH							
BCDL	10.0										
Weight: 165 lb FT = 20%											

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3

BRACING

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

REACTIONS (size)

5=0-3-8, 8=0-3-4
Max Horiz 8=-182 (LC 9)
Max Uplift 5=-121 (LC 12), 8=-146 (LC 12)
Max Grav 5=1131 (LC 24), 8=1076 (LC 18)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-8=-119/29, 1-2=-109/52, 2-3=-850/108, 3-4=-1322/147, 4-5=-871/99
BOT CHORD 7-8=-51/746, 6-7=-105/1153, 5-6=-32/202
WEBS 2-8=-1075/178, 2-7=-123/956, 3-7=-553/102, 3-6=-51/382, 4-6=-75/976

NOTES

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed;
Lumber DOL=1.60 plate grip DOL=1.33

- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=13.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 5 and 8. This connection is for uplift only and does not consider lateral forces.
- Use Simpson Strong-Tie LUS26 (4-10d Girder, 3-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 1-11-4 from the left end to 9-11-4 to connect truss(es) to front face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

- Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-4=-48, 5-8=-20
Concentrated Loads (lb)
Vert: 7=-256 (F), 10=-256 (F), 11=-256 (F), 12=-256 (F), 13=-256 (F)



October 27, 2025

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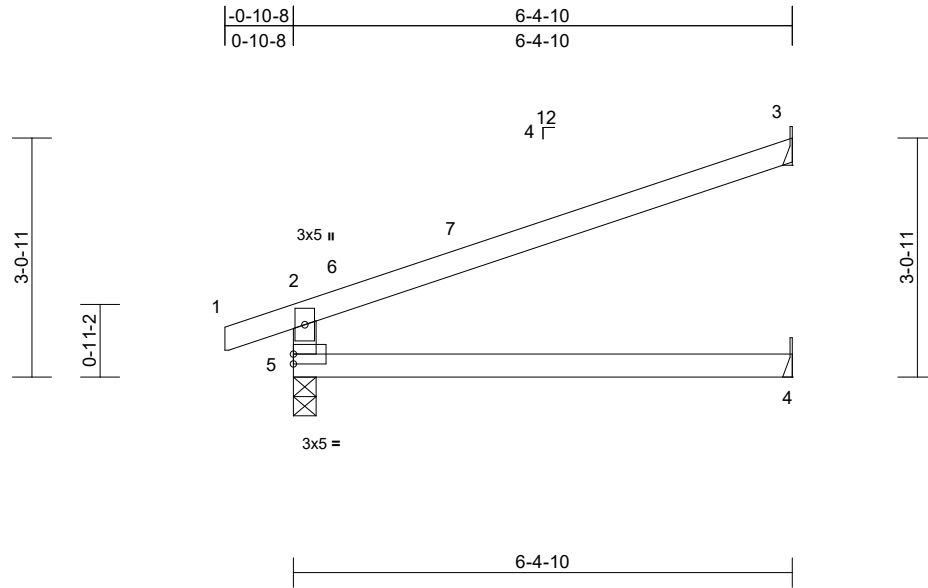
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	93 Dewey-Tim Johnson Const.-Roof-Fitzgerald VKDRFR 177311772
24120007-A	CJ1	Jack-Open	2	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. Fri Oct 24 10:03:16
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Page: 1



Scale = 1:29.5

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.76	Vert(LL)	0.08	4-5	>963	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.42	Vert(CT)	-0.14	4-5	>523	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.07	3	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MR								
BCDL	10.0											
Weight: 22 lb											FT = 20%	

LUMBER

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

BRACING

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

REACTIONS (size) 3= Mechanical, 4= Mechanical,
5=0-3-8
Max Horiz 5=58 (LC 11)
Max Uplift 3=-44 (LC 15), 5=-17 (LC 11)
Max Grav 3=200 (LC 22), 4=78 (LC 22),
5=322 (LC 22)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 2-5=-287/187, 1-2=0/24, 2-3=-82/54
BOT CHORD 4-5=0/0

NOTES

- Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-10-3 to 2-1-13, Interior (1) 2-1-13 to 6-3-14 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=13.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.

- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Bearings are assumed to be: , Joint 5 SP No.2 .
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 44 lb uplift at joint 3.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 5. This connection is for uplift only and does not consider lateral forces.

LOAD CASE(S) Standard



October 27, 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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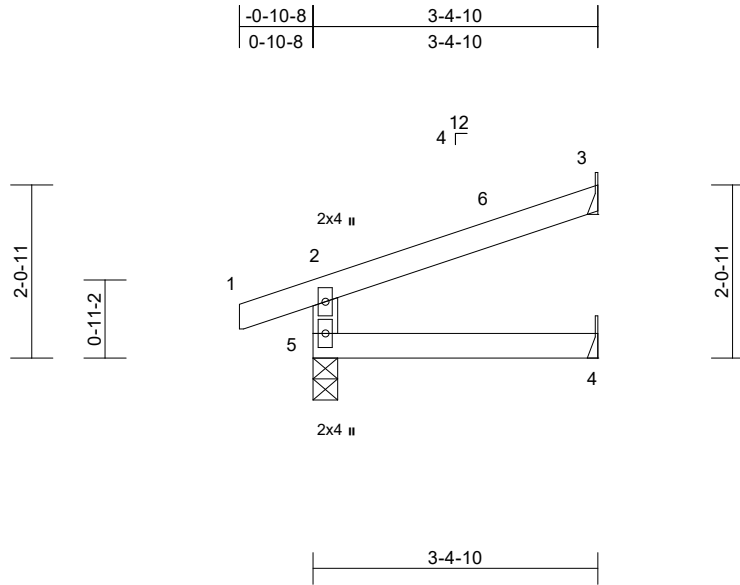
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	93 Dewey-Tim Johnson Const.-Roof-Fitzgerald VKDRFR I77311773
24120007-A	CJ2	Jack-Open	2	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. Fri Oct 24 10:03:16
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Page: 1



Scale = 1:27.4

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	0.01	4-5	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	-0.01	4-5	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MR								
BCDL	10.0											
Weight: 12 lb											FT = 20%	

LUMBER

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

BRACING

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

REACTIONS (size) 3= Mechanical, 4= Mechanical,
5=0-3-8
Max Horiz 5=36 (LC 12)
Max Uplift 3=-24 (LC 15), 5=-21 (LC 11)
Max Grav 3=96 (LC 22), 4=35 (LC 22), 5=222 (LC 22)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 2-5=-193/153, 1-2=0/24, 2-3=-46/28
BOT CHORD 4-5=0/0

NOTES

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-10-3 to 2-1-13, Interior (1) 2-1-13 to 3-3-14 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=13.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.

- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 6) Bearings are assumed to be: , Joint 5 SP No.2 .
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 24 lb uplift at joint 3.
- 9) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 5. This connection is for uplift only and does not consider lateral forces.

LOAD CASE(S) Standard



October 27, 2025

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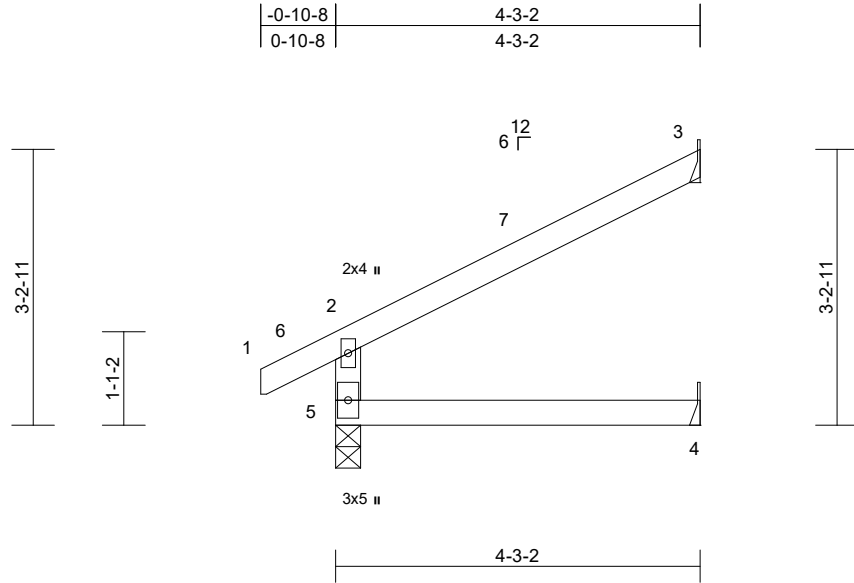
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	93 Dewey-Tim Johnson Const.-Roof-Fitzgerald VKDRFR I77311774
24120007-A	CJ3	Jack-Open	2	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. Fri Oct 24 10:03:16
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Page: 1



Scale = 1:26.9

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.37	Vert(LL)	0.02	4-5	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.25	Vert(CT)	-0.03	4-5	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.03	3	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MR								
BCDL	10.0											
											Weight: 16 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-3-2 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 3= Mechanical, 4= Mechanical,
5=0-3-8
Max Horiz 5=58 (LC 12)
Max Uplift 3=-39 (LC 15)
Max Grav 3=139 (LC 22), 4=50 (LC 22),
5=267 (LC 22)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 2-5=-235/137, 1-2=0/33, 2-3=-80/54
BOT CHORD 4-5=0/0

NOTES

- Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-10-1 to 2-1-15, Interior (1) 2-1-15 to 4-2-6 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=13.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.

- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Bearings are assumed to be: , Joint 5 SP No.2 .
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 39 lb uplift at joint 3.

LOAD CASE(S) Standard



October 27,2025

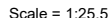
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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 Aug 13 2025 Print: 8.730 S Aug 13 2025 MiTek Industries, Inc. Fri Oct 24 10:03:16 Page: 1
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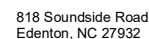


NOTES

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-10-1 to 1-2-15, Interior (1) 2-1-15 to 2-10-6 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
- 2) TCELL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=13.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.



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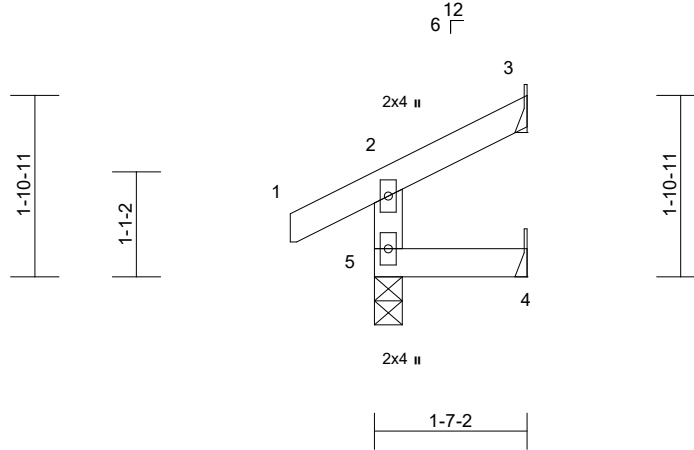
Job	Truss	Truss Type	Qty	Ply	93 Dewey-Tim Johnson Const.-Roof-Fitzgerald VKDRFR I77311776
24120007-A	CJ5	Jack-Open	2	1	Job Reference (optional)

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

Run: 8.73 S Aug 13 2025 Print: 8.730 S Aug 13 2025 MiTek Industries, Inc. Fri Oct 24 10:03:16
ID:ToosK6KgmwSEr_DYTnZuvgyBvSR-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f

Page: 1

-0-10-8	1-7-2
0-10-8	1-7-2



Scale = 1:24

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	0.00	4-5	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	0.00	4-5	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MR								
BCDL	10.0											
											Weight: 8 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or
1-7-2 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc
bracing.

REACTIONS (size) 3= Mechanical, 4= Mechanical,
5=0-3-8
Max Horiz 5=34 (LC 12)
Max Uplift 3=-17 (LC 15), 4=-1 (LC 12)
Max Grav 3=30 (LC 22), 4=16 (LC 13), 5=153
(LC 22)

FORCES (lb) - Maximum Compression/Maximum
Tension

TOP CHORD 2-5=-134/88, 1-2=0/33, 2-3=-32/18
BOT CHORD 4-5=0/0

NOTES

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat.
II; Exp B; Enclosed; MWFRS (envelope) and C-C
Exterior(2E) zone; cantilever left and right exposed ; end
vertical left and right exposed;C-C for members and
forces & MWFRS for reactions shown; Lumber
DOL=1.60 plate grip DOL=1.33
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15
Plate DOL=1.15); Pg=20.0 psf; Pf=13.9 psf (Lum
DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully
Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this
design.
- 4) This truss has been designed for greater of min roof live
load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on
overhangs non-concurrent with other live loads.

- 5) * This truss has been designed for a live load of 20.0psf
on the bottom chord in all areas where a rectangle
3-06-00 tall by 2-00-00 wide will fit between the bottom
chord and any other members.
- 6) Bearings are assumed to be: , Joint 5 SP No.2 .
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to
bearing plate capable of withstanding 1 lb uplift at joint 4
and 17 lb uplift at joint 3.

LOAD CASE(S) Standard



October 27, 2025

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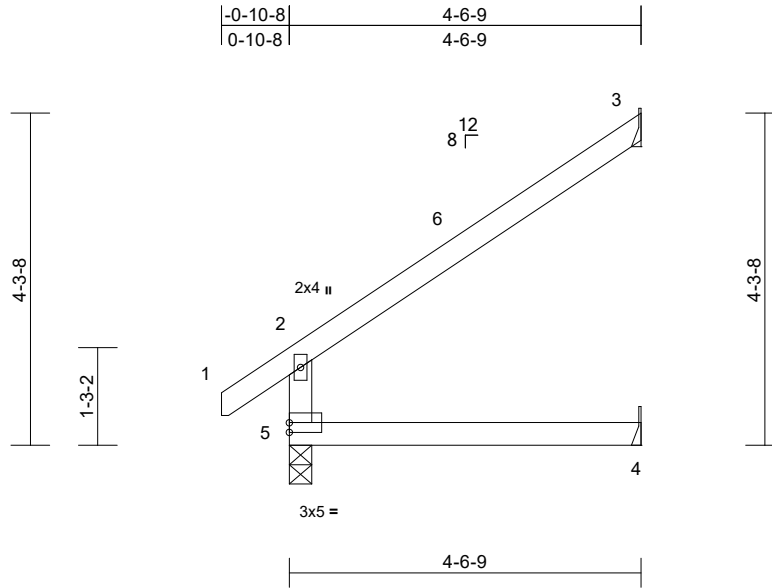
Job	Truss	Truss Type	Qty	Ply	93 Dewey-Tim Johnson Const.-Roof-Fitzgerald VKDRFR I77311777
24120007-A	CJ6	Jack-Open	1	1	Job Reference (optional)

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

Run: 8.73 S Aug 13 2025 Print: 8.730 S Aug 13 2025 MiTek Industries, Inc. Fri Oct 24 10:03:16

Page: 1

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Scale = 1:29.8

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.47	Vert(LL)	0.03	4-5	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.33	Vert(CT)	-0.04	4-5	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.05	3	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MR								
BCDL	10.0											
											Weight: 18 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-6-9 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 3= Mechanical, 4= Mechanical,
5=0-3-8
Max Horiz 5=80 (LC 13)
Max Uplift 3=-55 (LC 13)
Max Grav 3=126 (LC 29), 4=56 (LC 29),
5=239 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 2-5=-206/96, 1-2=0/41, 2-3=-104/76
BOT CHORD 4-5=0/0

NOTES

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-10-0 to 2-2-0, Interior (1) 2-2-0 to 4-5-13 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=13.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 3) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.

- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 5) Bearings are assumed to be: , Joint 5 SP No.2 .
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 55 lb uplift at joint 3.

LOAD CASE(S) Standard



October 27, 2025

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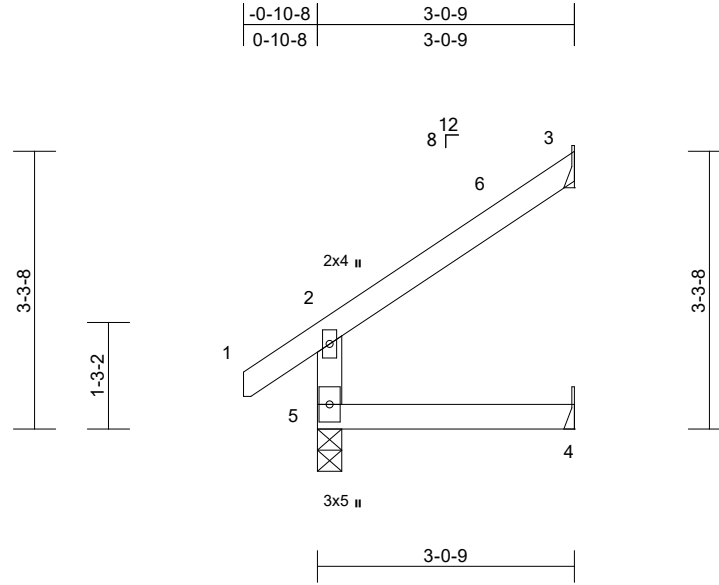
Job	Truss	Truss Type	Qty	Ply	93 Dewey-Tim Johnson Const.-Roof-Fitzgerald VKDRFR I77311778
24120007-A	CJ7	Jack-Open	1	1	Job Reference (optional)

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

Run: 8.73 S Aug 13 2025 Print: 8.730 S Aug 13 2025 MiTek Industries, Inc. Fri Oct 24 10:03:16

Page: 1

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Scale = 1:27.3

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.29	Vert(LL)	0.01	4-5	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.19	Vert(CT)	-0.01	4-5	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.02	3	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MR								
BCDL	10.0											
											Weight: 13 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-0-9 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 3= Mechanical, 4= Mechanical, 5=0-3-8
Max Horiz 5=59 (LC 10)
Max Uplift 3=-39 (LC 13)
Max Grav 3=81 (LC 29), 4=37 (LC 11), 5=182 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 2-5=-160/86, 1-2=0/41, 2-3=-76/52
BOT CHORD 4-5=0/0

NOTES

- Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-10-0 to 2-2-0, Interior (1) 2-2-0 to 2-11-13 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=13.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.

- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Bearings are assumed to be: , Joint 5 SP No.2 .
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 39 lb uplift at joint 3.

LOAD CASE(S) Standard



October 27, 2025

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

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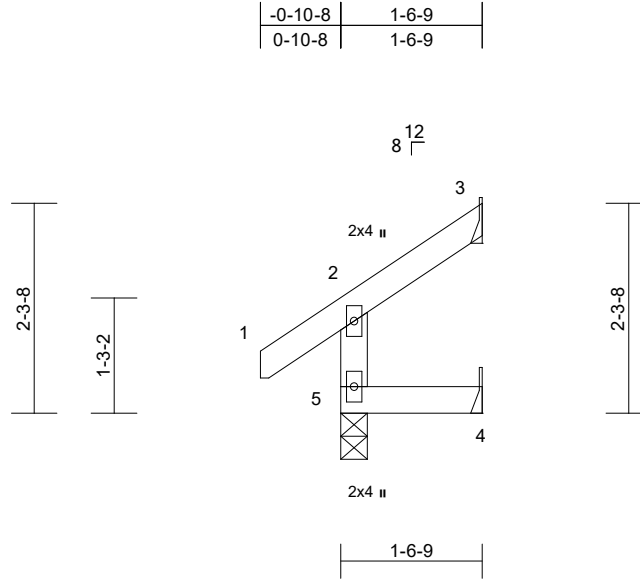
Job	Truss	Truss Type	Qty	Ply	93 Dewey-Tim Johnson Const.-Roof-Fitzgerald VKDRFR 177311779
24120007-A	CJ8	Jack-Open	1	1	Job Reference (optional)

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

Run: 8.73 S Aug 13 2025 Print: 8.730 S Aug 13 2025 MiTek Industries, Inc. Fri Oct 24 10:03:16

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Scale = 1:25.2

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.17	Vert(LL)	0.00	4-5	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	0.00	4-5	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MR								
BCDL	10.0											
											Weight: 8 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 1-6-9 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 3= Mechanical, 4= Mechanical,
5=0-3-8
Max Horiz 5=42 (LC 10)
Max Uplift 3=-23 (LC 13), 4=-6 (LC 10)
Max Grav 3=33 (LC 29), 4=23 (LC 11), 5=135 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

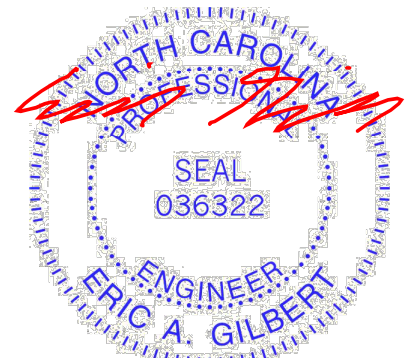
TOP CHORD 2-5=-124/77, 1-2=0/41, 2-3=-45/29
BOT CHORD 4-5=0/0

NOTES

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=13.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 3) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3'-06"-00 tall by 2'-00"-00 wide will fit between the bottom chord and any other members.

- 5) Bearings are assumed to be: , Joint 5 SP No.2 .
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 6 lb uplift at joint 4 and 23 lb uplift at joint 3.

LOAD CASE(S) Standard



October 27, 2025

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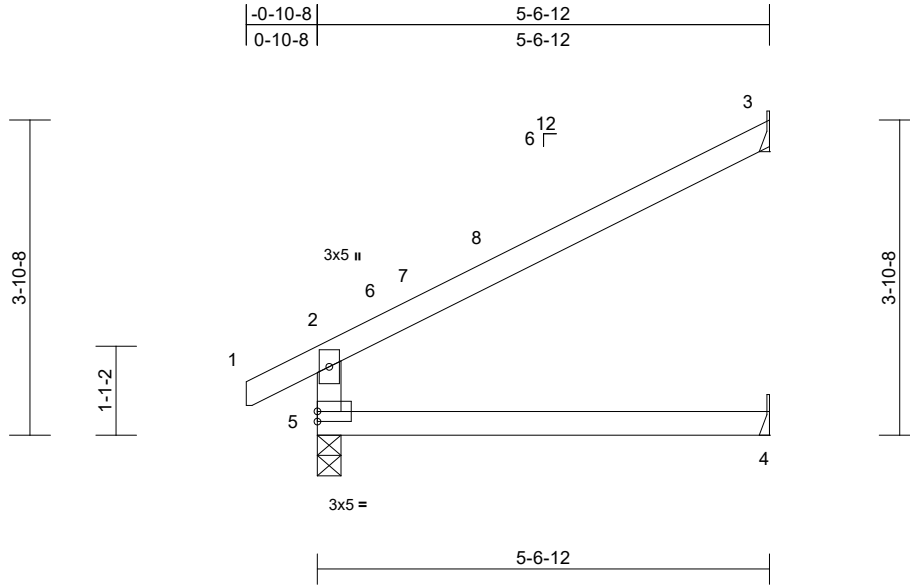
Job	Truss	Truss Type	Qty	Ply	93 Dewey-Tim Johnson Const.-Roof-Fitzgerald VKDRFR I77311780
24120007-A	CJ9	Jack-Open	1	1	Job Reference (optional)

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

Run: 8.73 S Aug 13 2025 Print: 8.730 S Aug 13 2025 MiTek Industries, Inc. Fri Oct 24 10:03:16

Page: 1

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Scale = 1:28.3

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.60	Vert(LL)	0.06	4-5	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.38	Vert(CT)	-0.08	4-5	>791	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.06	3	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MR								
BCDL	10.0											
											Weight: 20 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 5-6-12 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 3= Mechanical, 4= Mechanical,
5=0-3-8
Max Horiz 5=73 (LC 15)
Max Uplift 3=50 (LC 15)
Max Grav 3=185 (LC 22), 4=68 (LC 22),
5=291 (LC 22)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 2-5=-252/156, 1-2=0/33, 2-3=-104/70
BOT CHORD 4-5=0/0

NOTES

- Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-10-1 to 2-1-15, Interior (1) 2-1-15 to 5-6-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=13.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.

- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Bearings are assumed to be: , Joint 5 SP No.2 .
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 50 lb uplift at joint 3.

LOAD CASE(S) Standard



October 27, 2025

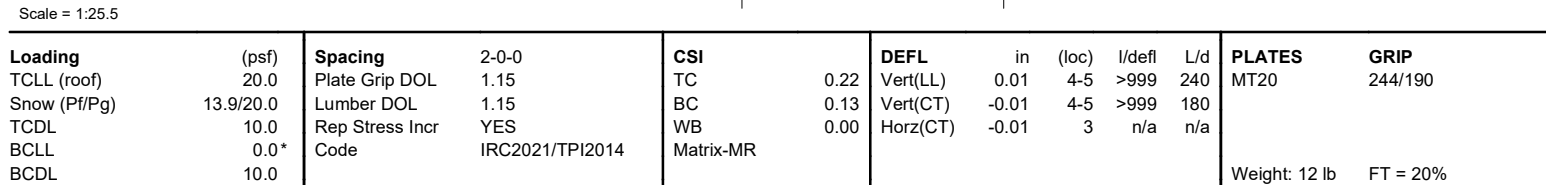
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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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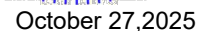
818 Soundside Road
Edenton, NC 27932

Carter Components (Sanford, NC), Sanford, NC - 27332, Run: 8.73 S Aug 13 2025 Print: 8.730 S Aug 13 2025 MiTek Industries, Inc. Fri Oct 24 10:03:16 Page: 1
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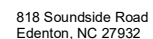
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 6) Bearings are assumed to be: , Joint 5 SP No.2 .
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 28 lb uplift at joint 3

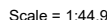
LOAD CASE(S) Standard



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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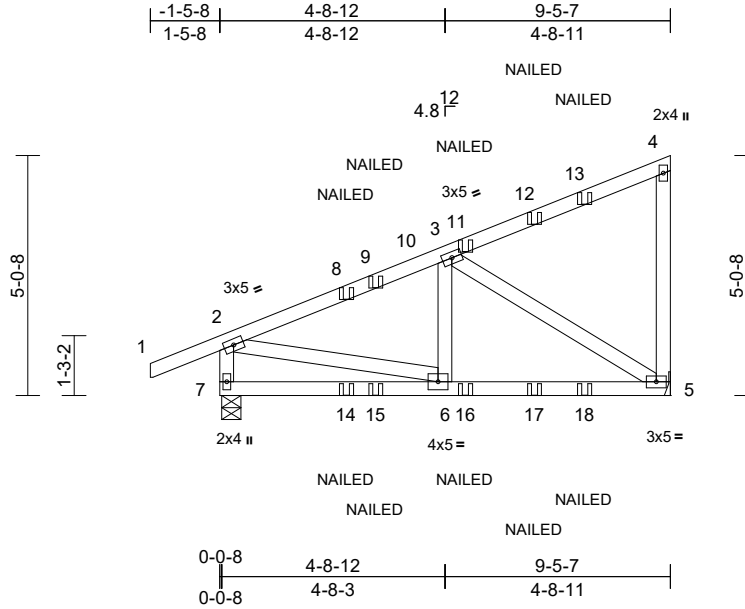
Page: 1October 27, 2025

Job	Truss	Truss Type	Qty	Ply	93 Dewey-Tim Johnson Const.-Roof-Fitzgerald VKDRFR I77311783
24120007-A	HJ2	Diagonal Hip Girder	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. Fri Oct 24 10:03:17
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Page: 1



Scale = 1:48.4

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.48	Vert(LL)	-0.01	5-6	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	-0.03	5-6	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.28	Horz(CT)	0.00	5	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 57 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS (size) 5= Mechanical, 7=0-4-13
Max Horiz 7=147 (LC 10)
Max Uplift 5=-85 (LC 8), 7=-57 (LC 7)
Max Grav 5=505 (LC 18), 7=506 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-7=-469/73, 1-2=0/44, 2-3=-521/54, 3-4=-144/48, 4-5=-175/68
BOT CHORD 6-7=-133/33, 5-6=-107/438
WEBS 2-6=-32/433, 3-6=0/97, 3-5=-495/92

NOTES

- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.33
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=13.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

- Bearings are assumed to be: Joint 7 SP No.2 .
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 85 lb uplift at joint 5.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 7. This connection is for uplift only and does not consider lateral forces.
- "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidelines.
- 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 + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-2=-48, 2-4=-48, 5-7=-20
Concentrated Loads (lb)
Vert: 9=-12 (B), 11=-1 (F), 12=-106 (B), 13=-34 (F), 14=1 (F), 15=-3 (B), 16=-4 (F), 17=-35 (B), 18=-23 (F)



October 27, 2025

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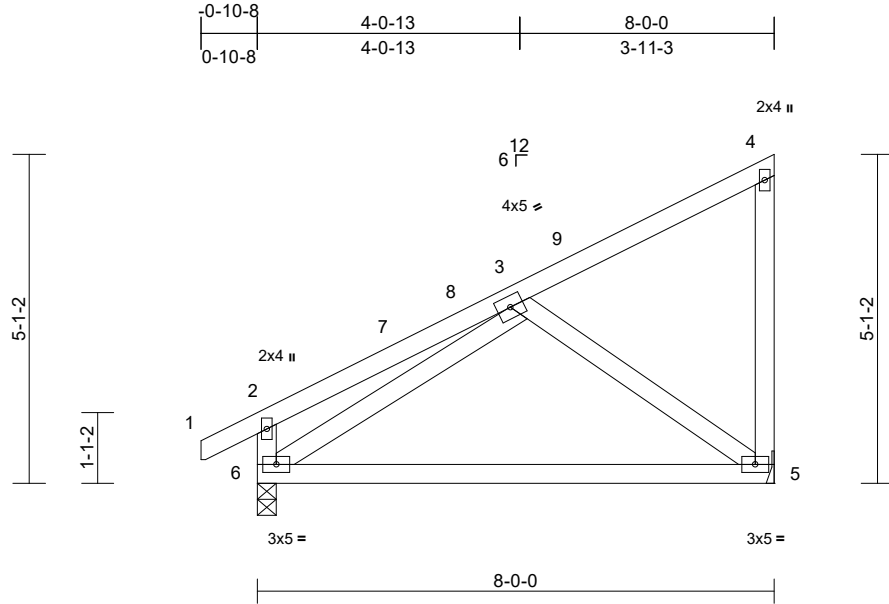
Job	Truss	Truss Type	Qty	Ply	93 Dewey-Tim Johnson Const.-Roof-Fitzgerald VKDRFR
24120007-A	M1	Monopitch	22	1	I77311784
Job Reference (optional)					

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

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.38	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.57	Vert(CT)	-0.21	5-6	>437	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.00	5	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 48 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS (size)

5= Mechanical, 6=0-3-8
Max Horiz 6=144 (LC 12)
Max Uplift 5=-22 (LC 15)
Max Grav 5=352 (LC 22), 6=371 (LC 2)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/33, 2-3=-47/96, 3-4=-124/99,
4-5=-130/118, 2-6=-172/164
BOT CHORD 5-6=-271/297
WEBS 3-6=-280/59, 3-5=-306/263

NOTES

- Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-10-1 to 2-1-15, Interior (1) 2-1-15 to 7-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=13.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.

- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3'-06"-00 tall by 2'-00"-00 wide will fit between the bottom chord and any other members.
- Bearings are assumed to be: Joint 6 SP No.2 .
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 22 lb uplift at joint 5.

LOAD CASE(S) Standard



October 27, 2025

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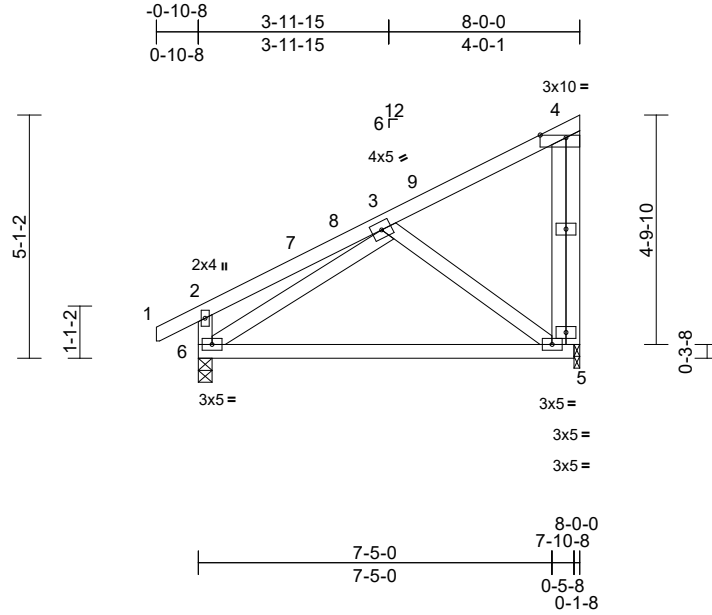
Job	Truss	Truss Type	Qty	Ply	93 Dewey-Tim Johnson Const.-Roof-Fitzgerald VKDRFR I77311785
24120007-A	M2	Monopitch	8	1	Job Reference (optional)

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

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Scale = 1:48.3

Plate Offsets (X, Y): [4:0-6-8,Edge]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.55	Vert(CT)	-0.20	5-6	>463	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.00	5	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MP								
BCDL	10.0											
Weight: 54 lb											FT = 20%	

LUMBER

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

BRACING

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

REACTIONS	(size)	5=0-1-8, 6=0-3-8
	Max Horiz	6=142 (LC 12)
	Max Uplift	5=-21 (LC 12)
	Max Grav	5=346 (LC 22), 6=366 (LC 2)

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

TOP CHORD	1-2=0/33, 2-3=-46/95, 3-4=-122/97, 4-5=-127/116, 2-6=-171/163
-----------	---

BOT CHORD	5-6=-266/290
WEBS	3-6=-274/57, 3-5=-299/259

NOTES

- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-10-1 to 2-1-15, Interior (1) 2-1-15 to 7-8-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=13.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.

- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Bearings are assumed to be: Joint 6 SP No.2 , Joint 5 SP No.3 .
- Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate at joint(s) 5.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 5. This connection is for uplift only and does not consider lateral forces.

LOAD CASE(S) Standard



October 27,2025

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818 Soundside Road
Edenton, NC 27932

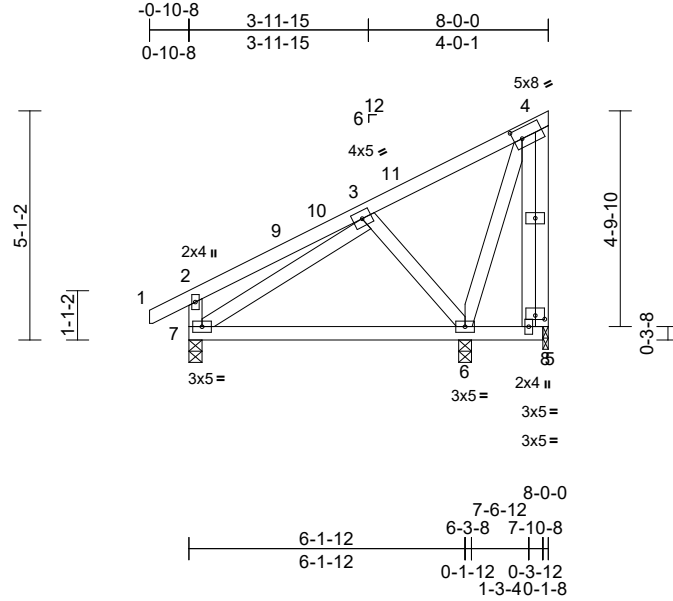
Job	Truss	Truss Type	Qty	Ply	93 Dewey-Tim Johnson Const.-Roof-Fitzgerald VKDRFR I77311786
24120007-A	M3	Monopitch	2	1	Job Reference (optional)

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

Run: 8.73 S Aug 13 2025 Print: 8.730 S Aug 13 2025 MiTek Industries, Inc. Fri Oct 24 10:03:17

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Scale = 1:51.3

Plate Offsets (X, Y): [4:0-2-4,0-2-12], [5:0-2-8,0-1-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.24	Vert(LL)	0.00	5	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.23	Vert(CT)	-0.04	6-7	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00	8	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MP								
BCDL	10.0											
											Weight: 59 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS	(size)	6=0-3-8, 7=0-3-8, 8=0-1-8
	Max Horiz	7=101 (LC 15)
	Max Uplift	6=-4 (LC 15), 8=-36 (LC 15)
	Max Grav	6=422 (LC 22), 7=287 (LC 2), 8=11 (LC 22)

FORCES

	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=0/33, 2-3=-46/95, 3-4=-69/74, 4-5=-31/0, 2-7=-170/162
BOT CHORD	6-7=-144/155, 5-6=-4/1
WEBS	3-7=-164/0, 3-6=-281/238, 4-6=-97/36, 4-8=-11/76

NOTES

- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-10-1 to 2-1-15, Interior (1) 2-1-15 to 7-8-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=13.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.

- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Bearings are assumed to be: Joint 7 SP No.2 , Joint 6 SP No.2 , Joint 8 SP No.3 .
- Bearing at joint(s) 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate at joint(s) 8.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 6 and 8. This connection is for uplift only and does not consider lateral forces.

LOAD CASE(S) Standard



October 27,2025

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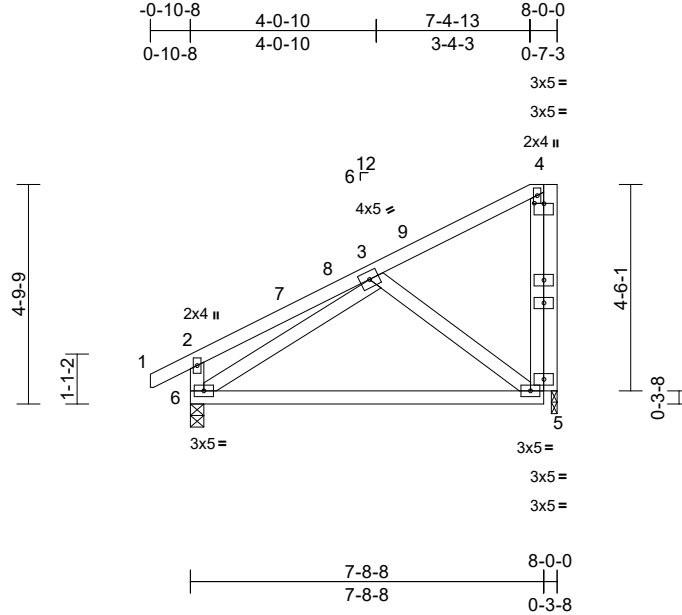
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	93 Dewey-Tim Johnson Const.-Roof-Fitzgerald VKDRFR I77311787
24120007-A	M4	Half Hip	2	1	Job Reference (optional)

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

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Scale = 1:50.3

Plate Offsets (X, Y): [4:0-2-8,0-0-2]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.24	Vert(LL)	n/a	-	n/a	999	MT20
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.55	Vert(CT)	-0.20	5-6	>463	180	244/190
TCDL	10.0	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.00	5	n/a	n/a	
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MP							
BCDL	10.0										
										Weight: 53 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS	(size) 5=0-1-8, 6=0-3-8
	Max Horiz 6=142 (LC 12)
	Max Uplift 5=-24 (LC 12)
	Max Grav 5=356 (LC 22), 6=365 (LC 2)

FORCES	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=0/33, 2-3=-47/90, 3-4=-126/101,
	4-5=-132/121, 2-6=-172/163

BOT CHORD	5-6=-239/289
WEBS	3-6=-273/45, 3-5=-305/231

NOTES

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat.
II; Exp B; Enclosed; MWFRS (envelope) and C-C
Exterior(2E) -0-10-1 to 2-1-15, Interior (1) 2-1-15 to
7-10-4 zone; cantilever left and right exposed; end
vertical left and right exposed; C-C for members and
forces & MWFRS for reactions shown; Lumber
DOL=1.60 plate grip DOL=1.33
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15
Plate DOL=1.15); Pg=20.0 psf; Pf=13.9 psf (Lum
DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully
Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this
design.

- 4) This truss has been designed for greater of min roof live
load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on
overhangs non-concurrent with other live loads.
- 5) Provide adequate drainage to prevent water ponding.
- 6) * This truss has been designed for a live load of 20.0psf
on the bottom chord in all areas where a rectangle
3-06-00 tall by 2-00-00 wide will fit between the bottom
chord and any other members.
- 7) Bearings are assumed to be: Joint 6 SP No.2, Joint 5
SP No.3.
- 8) Bearing at joint(s) 5 considers parallel to grain value
using ANSI/TPI 1 angle to grain formula. Building
designer should verify capacity of bearing surface.
- 9) Provide mechanical connection (by others) of truss to
bearing plate at joint(s) 5.
- 10) One H2.5A Simpson Strong-Tie connectors
recommended to connect truss to bearing walls due to
UPLIFT at jt(s) 5. This connection is for uplift only and
does not consider lateral forces.

LOAD CASE(S) Standard



October 27, 2025

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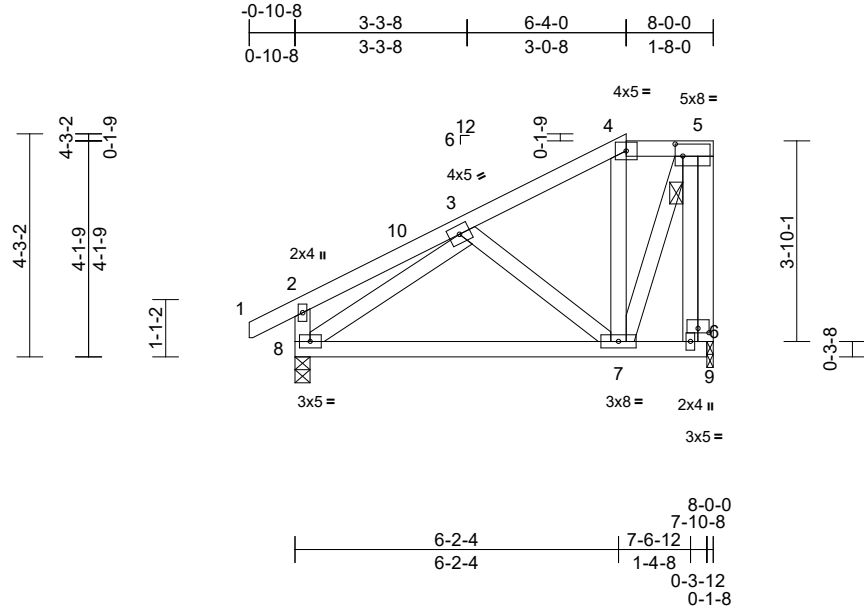
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	93 Dewey-Tim Johnson Const.-Roof-Fitzgerald VKDRFR I77311788
24120007-A	M5	Half Hip	2	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. Fri Oct 24 10:03:17
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Page: 1



Scale = 1:44.1									
Plate Offsets (X, Y): [5:0-1-12,0-2-12], [6:0-2-8,0-1-0]									
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in (loc)	l/defl	L/d
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	0.00	7-8	>999
Snow (Pf/Pg)	18.9/20.0	Lumber DOL	1.15	BC	0.25	Vert(CT)	-0.05	7-8	>999
TCDL	10.0	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.00	9	n/a
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MP					
BCDL	10.0								
								PLATES	GRIP
								MT20	244/190
								Weight: 59 lb	FT = 20%

LUMBER	
TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.3
OTHERS	2x4 SP No.3
BRACING	
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-5.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
REACTIONS (size) 8=0-3-8, 9=0-1-8	
Max Horiz 8=81 (LC 15)	
Max Uplift 9=-17 (LC 15)	
Max Grav 8=486 (LC 41), 9=310 (LC 41)	
FORCES (lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=0/37, 2-3=-56/81, 3-4=-226/27, 4-5=-156/56, 5-6=-32/0, 2-8=-198/153
BOT CHORD	7-8=-201/341, 6-7=-10/21
WEBS	3-8=-388/19, 4-7=-62/76, 5-7=-120/366, 3-7=-240/191, 5-9=-346/165

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-10-1 to 2-1-15, Interior (1) 2-1-15 to 6-4-0, Exterior(2E) 6-4-0 to 7-8-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33

- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=18.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10, Lu=50-0-0
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Bearings are assumed to be: Joint 8 SP No.2 , Joint 9 SP No.3 .
- Bearing at joint(s) 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate at joint(s) 9.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 9. This connection is for uplift only and does not consider lateral forces.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



October 27,2025

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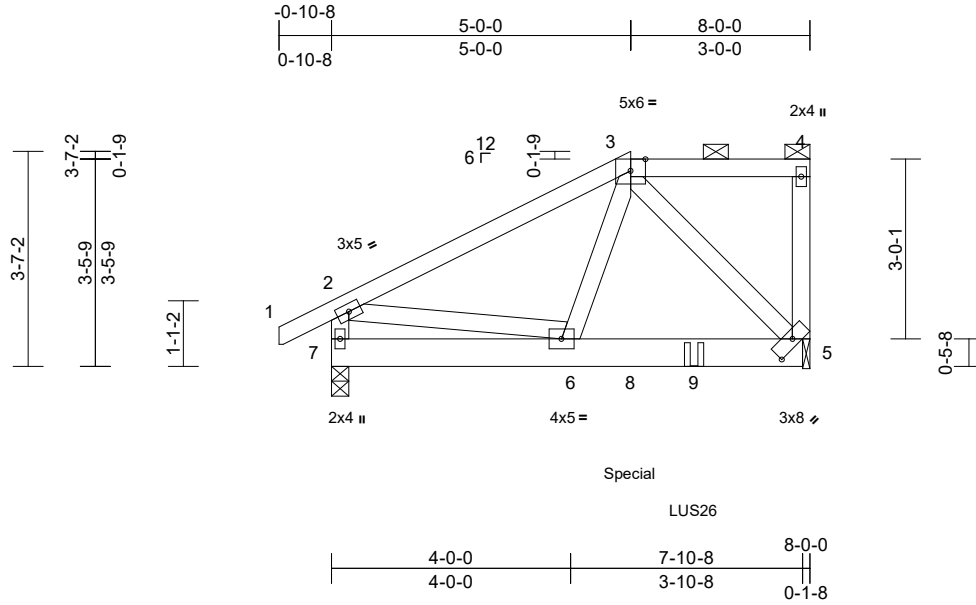
Job	Truss	Truss Type	Qty	Ply	93 Dewey-Tim Johnson Const.-Roof-Fitzgerald VKDRFR
24120007-A	M6	Half Hip Girder	2	2	I77311789
Job Reference (optional)					

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

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Scale = 1:38.5

Plate Offsets (X, Y): [5:0-4-7,0-1-7]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.37	Vert(LL)	-0.01	5-6	>999	240	MT20	244/190
Snow (Pf/Pg)	18.9/20.0	Lumber DOL	1.15	BC	0.32	Vert(CT)	-0.02	5-6	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.14	Horz(CT)	0.00	5	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MP								
BCDL	10.0											
											Weight: 106 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3

BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 5=0-1-8, 7=0-3-8
Max Horiz 7=96 (LC 8)
Max Uplift 5=-70 (LC 8), 7=-30 (LC 11)
Max Grav 5=898 (LC 32), 7=733 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/37, 2-3=-830/42, 3-4=-34/26, 4-5=-120/20, 2-7=-763/54

BOT CHORD 6-7=-93/30, 5-6=-59/481
WEBS 3-6=-17/667, 3-5=-714/62, 2-6=-9/693

NOTES

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.

- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.33
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=18.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10, Lu=50-0-0
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Bearings are assumed to be: Joint 7 SP No.2, Joint 5 SP No.3.
- Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate at joint(s) 5.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 7 and 5. This connection is for uplift only and does not consider lateral forces.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Use Simpson Strong-Tie LUS26 (4-10d Girder, 3-10d Truss, Single Ply Girder) or equivalent at 6-0-12 from the left end to connect truss(es) to back face of bottom chord, skewed 0.0 deg.to the right, sloping 0.0 deg. down.

- Fill all nail holes where hanger is in contact with lumber.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 533 lb down and 59 lb up at 5-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

- Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-2=-48, 2-3=-48, 3-4=-58, 5-7=-20
Concentrated Loads (lb)
Vert: 8=-533 (B), 9=-323 (B)



October 27, 2025

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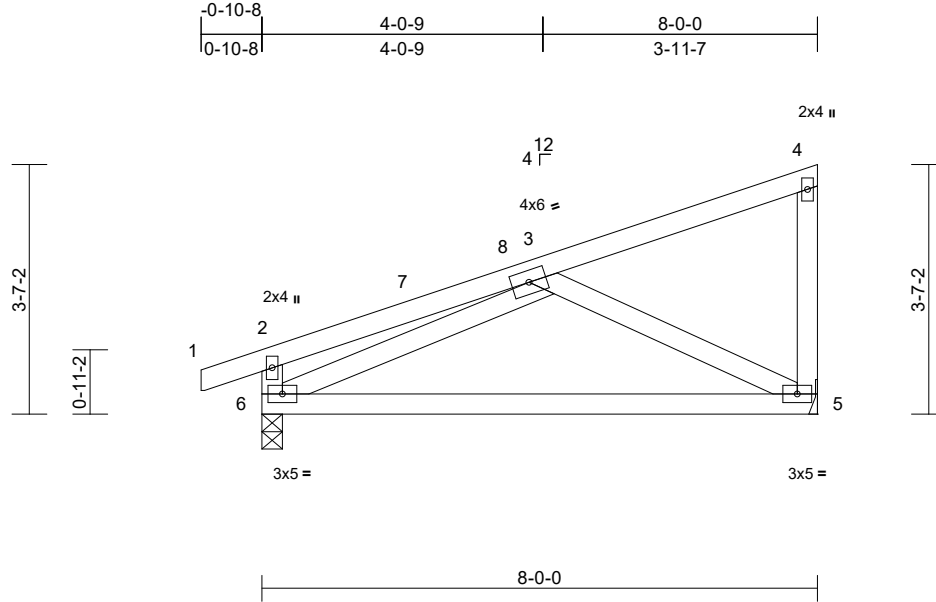
Job	Truss	Truss Type	Qty	Ply	93 Dewey-Tim Johnson Const.-Roof-Fitzgerald VKDRFR 177311790
24120007-A	M7	Monopitch	2	1	Job Reference (optional)

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

Run: 8.73 S Aug 13 2025 Print: 8.730 S Aug 13 2025 MiTek Industries, Inc. Fri Oct 24 10:03:18

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.24	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.21	5-6	>437	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.00	5	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 43 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 6'-0" oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 9'-9" oc bracing.

REACTIONS

(size) 5= Mechanical, 6=0-3-8
Max Horiz 6=101 (LC 12)
Max Uplift 5=-13 (LC 15), 6=-27 (LC 11)
Max Grav 5=343 (LC 22), 6=372 (LC 2)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-6=-171/146, 1-2=0/24, 2-3=-38/60,
3-4=-88/65, 4-5=-114/113
BOT CHORD 5-6=-318/361
WEBS 3-5=-367/313, 3-6=-349/128

NOTES

- Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-10-3 to 2-1-13, Interior (1) 2-1-13 to 7-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=13.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.

- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3'-06"-00 tall by 2'-00"-00 wide will fit between the bottom chord and any other members.
- Bearings are assumed to be: Joint 6 SP No.2 .
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 13 lb uplift at joint 5.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 6. This connection is for uplift only and does not consider lateral forces.

LOAD CASE(S) Standard



October 27, 2025

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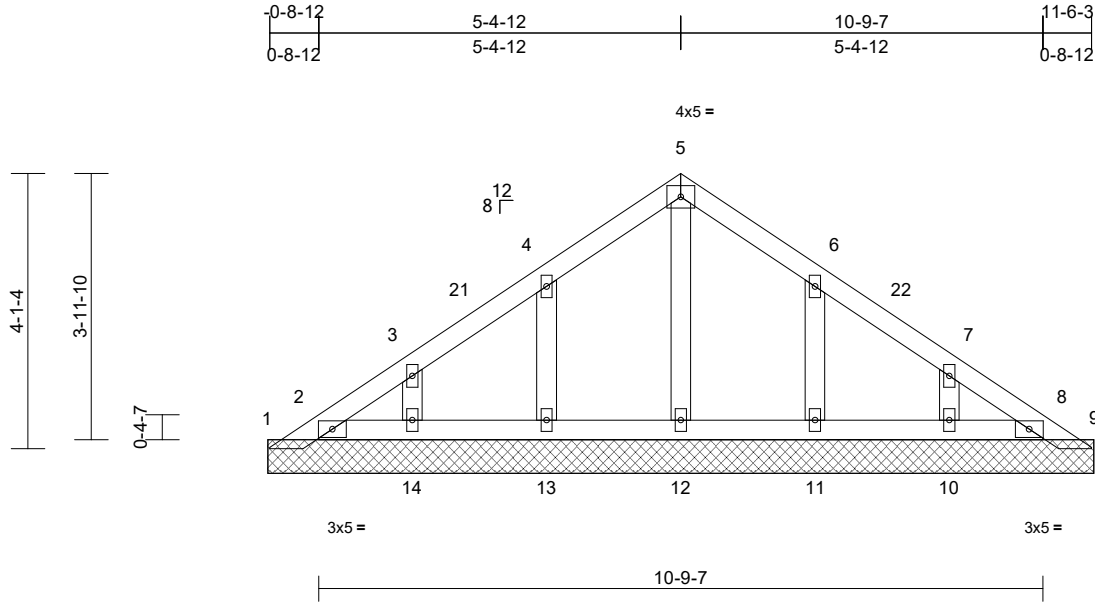
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	93 Dewey-Tim Johnson Const.-Roof-Fitzgerald VKDRFR
24120007-A	PB1	Piggyback	2	2	I77311791
Job Reference (optional)					

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

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Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.03	Vert(LL)	n/a	-	n/a	999	MT20
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.01	Vert(TL)	n/a	-	n/a	999	244/190
TCDL	10.0	Rep Stress Incr	YES	WB	0.02	Horiz(TL)	0.00	9	n/a	n/a	
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH							
BCDL	10.0										
Weight: 103 lb FT = 20%											

LUMBER

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

BRACING

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

REACTIONS (size) 1=12-3-11, 2=12-3-11, 8=12-3-11, 9=12-3-11, 10=12-3-11, 11=12-3-11, 12=12-3-11, 13=12-3-11, 14=12-3-11
Max Horiz 1=-74 (LC 9)
Max Uplift 1=-43 (LC 9), 10=-25 (LC 14), 11=-28 (LC 14), 13=-29 (LC 13), 14=-23 (LC 13)
Max Grav 1=48 (LC 12), 2=105 (LC 29), 8=87 (LC 2), 9=9 (LC 2), 10=148 (LC 30), 11=176 (LC 30), 12=126 (LC 2), 13=177 (LC 29), 14=149 (LC 29)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-87/95, 2-3=-61/53, 3-4=-70/44, 4-5=-88/93, 5-6=-88/92, 6-7=-51/24, 7-8=-42/27, 8-9=-4/17
BOT CHORD 2-14=-31/64, 13-14=-31/64, 12-13=-31/64, 11-12=-31/64, 10-11=-31/64, 8-10=-31/64
WEBS 5-12=-86/0, 4-13=-165/102, 3-14=-133/82, 6-11=-165/102, 7-10=-133/82

NOTES

- 2-ply truss to be connected together as follows:
Top chords connected with 10d (0.131"x3") nails as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected with 10d (0.131"x3") nails as follows: 2x4 - 1 row at 0-9-0 oc.

- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-3-5 to 3-3-5, Interior (1) 3-3-5 to 6-1-13, Exterior(2R) 6-1-13 to 9-1-13, Interior (1) 9-1-13 to 12-0-6 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=13.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 43 lb uplift at joint 1.
- N/A

- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard



October 27, 2025

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LUMBER

BRACING

NOTES

- LOAD CASE(S) Standard



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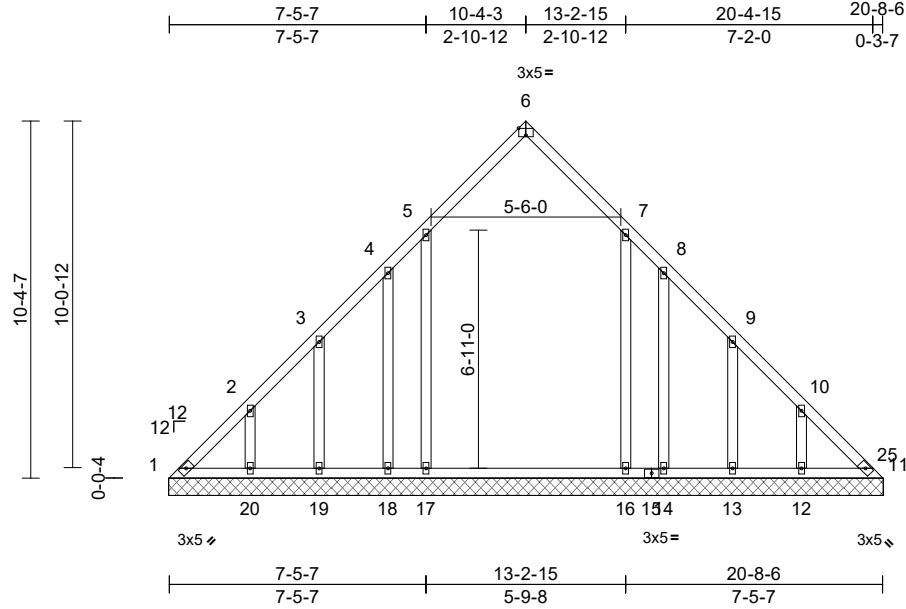
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	93 Dewey-Tim Johnson Const.-Roof-Fitzgerald VKDRFR I77311793
24120007-A	VL1	Valley	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. Fri Oct 24 10:03:18
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Scale = 1:66.9

Plate Offsets (X, Y): [6:0-2-8,Edge]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	n/a	-	n/a	999	MT20
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.31	Vert(TL)	n/a	-	n/a	999	244/190
TCDL	10.0	Rep Stress Incr	YES	WB	0.21	Horiz(TL)	0.01	11	n/a	n/a	
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH							
BCDL	10.0										
Weight: 128 lb FT = 20%											

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

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

REACTIONS (size)
1=20-8-14, 11=20-8-14,
12=20-8-14, 13=20-8-14,
14=20-8-14, 16=20-8-14,
17=20-8-14, 18=20-8-14,
19=20-8-14, 20=20-8-14
Max Horiz 1=191 (LC 10)
Max Uplift 1=25 (LC 11), 11=-18 (LC 12),
12=-16 (LC 14), 13=-63 (LC 14),
14=-88 (LC 19), 16=-12 (LC 14),
17=-15 (LC 13), 18=-87 (LC 19),
19=-60 (LC 13), 20=-27 (LC 13)
Max Grav 1=189 (LC 30), 11=170 (LC 31),
12=244 (LC 29), 13=218 (LC 29),
14=44 (LC 2), 16=458 (LC 29),
17=462 (LC 28), 18=44 (LC 2),
19=213 (LC 28), 20=261 (LC 28)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-308/218, 2-3=-230/139, 3-4=-178/54,
4-5=-140/32, 5-6=-195/61, 6-7=-195/61,
7-8=-136/27, 8-9=-177/54, 9-10=-230/139,
10-11=-308/217
BOT CHORD 1-20=-171/254, 19-20=-171/254,
18-19=-171/254, 17-18=-171/254,
16-17=-171/254, 14-16=-171/254,
13-14=-171/254, 12-13=-171/254,
11-12=-171/254

WEBS
4-18=-110/75, 3-19=-190/124, 2-20=-197/90,
8-14=-110/75, 9-13=-190/124,
10-12=-196/90, 5-17=-217/117,
7-16=-217/117

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Corner (3E) 0-0-0 to 3-0-0, Exterior(2N) 3-0-0 to 10-4-7, Corner (3R) 10-4-7 to 13-3-3, Exterior(2N) 13-3-3 to 20-4-10 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=13.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- All bearings are assumed to be SP No.2 .
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 25 lb uplift at joint 1, 18 lb uplift at joint 11, 87 lb uplift at joint 18, 60 lb uplift at joint 19, 27 lb uplift at joint 20, 88 lb uplift at joint 14, 63 lb uplift at joint 13, 16 lb uplift at joint 12, 15 lb uplift at joint 17 and 12 lb uplift at joint 16.

11) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 11.

LOAD CASE(S) Standard



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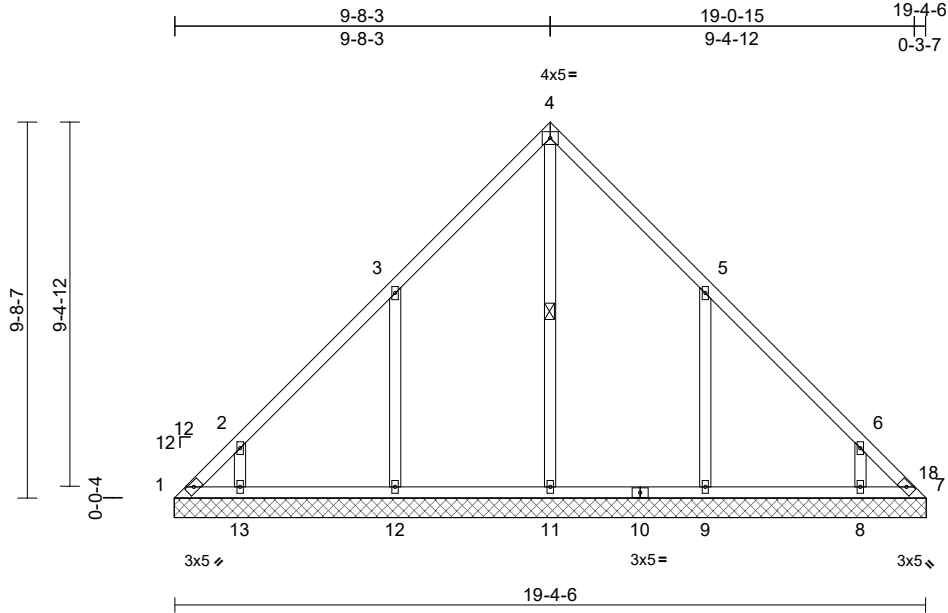
Job	Truss	Truss Type	Qty	Ply	93 Dewey-Tim Johnson Const.-Roof-Fitzgerald VKDRFR
24120007-A	VL2	Valley	1	1	I77311794
Job Reference (optional)					

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

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Scale = 1:59.4

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.22	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.17	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.22	Horiz(TL)	0.00	7	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH							
BCDL	10.0										
Weight: 100 lb FT = 20%											

LUMBER

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

BRACING

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

WEBS 1 Row at midpt 4-11

REACTIONS (size) 1=19-4-14, 7=19-4-14, 8=19-4-14, 9=19-4-14, 11=19-4-14, 12=19-4-14, 13=19-4-14
Max Horiz 1=178 (LC 10)
Max Uplift 1=-77 (LC 11), 7=-46 (LC 12), 8=-53 (LC 14), 9=-125 (LC 14), 12=-125 (LC 13), 13=-59 (LC 13)
Max Grav 1=130 (LC 10), 7=102 (LC 14), 8=318 (LC 29), 9=472 (LC 29), 11=352 (LC 31), 12=472 (LC 28), 13=328 (LC 28)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-210/169, 2-3=-192/117, 3-4=-236/177, 4-5=-236/177, 5-6=-159/74, 6-7=-209/168
BOT CHORD 1-13=-99/146, 12-13=-99/146, 11-12=-99/146, 9-11=-99/146, 8-9=-99/146, 7-8=-99/146
WEBS 4-11=-146/57, 3-12=-407/252, 2-13=-313/189, 5-9=-407/252, 6-8=-311/188

NOTES

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

- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Corner (3E) 0-0-0 to 3-0-0, Exterior(2N) 3-0-0 to 9-8-7, Corner (3R) 9-8-7 to 12-8-7, Exterior(2N) 12-8-7 to 19-0-10 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=13.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- All bearings are assumed to be SP No.2 .
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 77 lb uplift at joint 1, 46 lb uplift at joint 7, 125 lb uplift at joint 12, 59 lb uplift at joint 13, 125 lb uplift at joint 9 and 53 lb uplift at joint 8.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 7.

LOAD CASE(S) Standard



October 27, 2025

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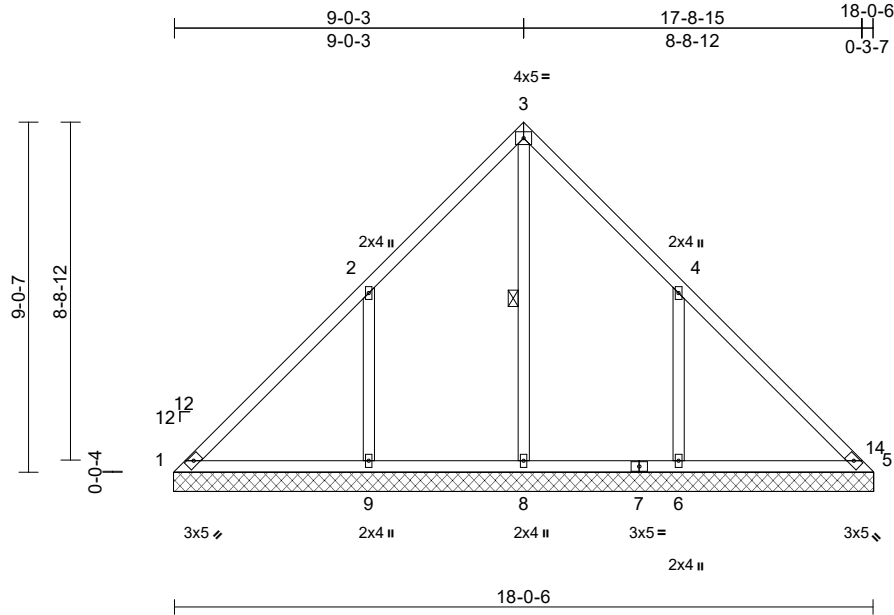
Job	Truss	Truss Type	Qty	Ply	93 Dewey-Tim Johnson Const.-Roof-Fitzgerald VKDRFR
24120007-A	VL3	Valley	1	1	I77311795
Job Reference (optional)					

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

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Scale = 1:59.5

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.34	Vert(LL)	n/a	-	n/a	999	MT20
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.23	Vert(TL)	n/a	-	n/a	999	244/190
TCDL	10.0	Rep Stress Incr	YES	WB	0.19	Horiz(TL)	0.01	5	n/a	n/a	
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH							
BCDL	10.0										
Weight: 89 lb FT = 20%											

LUMBER

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

BRACING

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

WEBS 1 Row at midpt 3-8

REACTIONS (size) 1=18-0-14, 5=18-0-14, 6=18-0-14, 8=18-0-14, 9=18-0-14
Max Horiz 1=166 (LC 10)
Max Uplift 1=-28 (LC 11), 6=-137 (LC 14), 9=-140 (LC 13)
Max Grav 1=121 (LC 29), 5=88 (LC 31), 6=573 (LC 29), 8=538 (LC 28), 9=578 (LC 28)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-166/342, 2-3=-15/215, 3-4=-13/196, 4-5=-168/341

BOT CHORD 1-9=-222/184, 8-9=-222/184, 6-8=-222/184, 5-6=-222/184

WEBS 3-8=-373/0, 2-9=-464/274, 4-6=-463/273

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Corner (3E) 0-0-0 to 3-0-0, Exterior(2N) 3-0-0 to 9-0-7, Corner (3R) 9-0-7 to 12-0-7, Exterior(2N) 12-0-7 to 17-8-10 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33

- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=13.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- All bearings are assumed to be SP No.2 .
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 28 lb uplift at joint 1, 140 lb uplift at joint 9 and 137 lb uplift at joint 6.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 5.

LOAD CASE(S) Standard



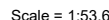
October 27, 2025

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818 Soundside Road
Edenton, NC 27932

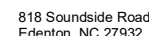
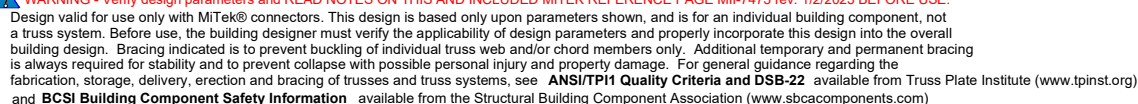
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LUMBER

NOTES

- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=13.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 4-0-00 oc.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-0-00 tall by 2-0-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 8) All bearings are assumed to be SP No.2 .
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 23 lb uplift at joint 1, 127 lb uplift at joint 9 and 124 lb uplift at joint 6.
- 10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 5.

LOAD CASE(S) Standard



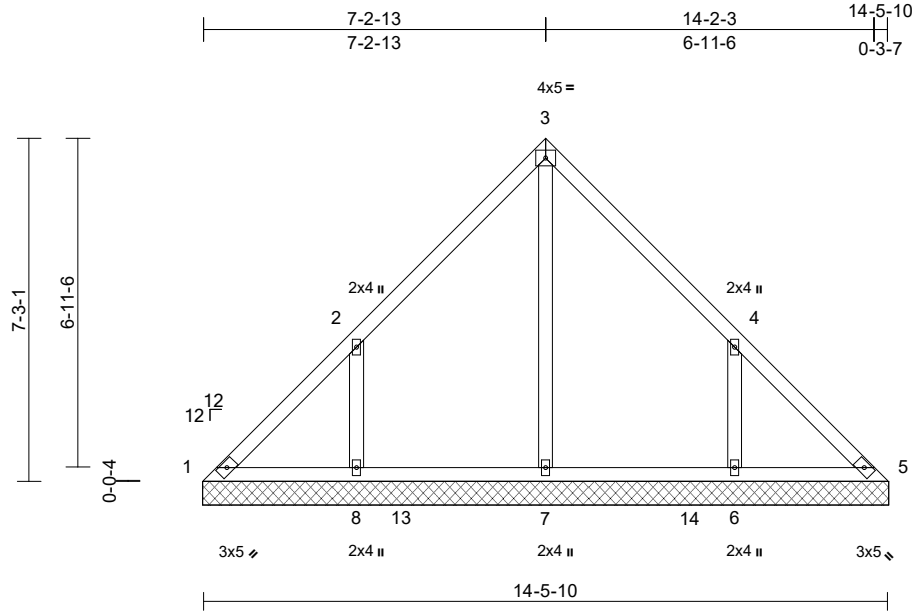
Job	Truss	Truss Type	Qty	Ply	93 Dewey-Tim Johnson Const.-Roof-Fitzgerald VKDRFR
24120007-A	VL5	Valley	1	1	I77311797
Job Reference (optional)					

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

Run: 8.73 S Aug 13 2025 Print: 8.730 S Aug 13 2025 MiTek Industries, Inc. Fri Oct 24 10:03:19

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Scale = 1:48.7

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.20	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.17	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.19	Horiz(TL)	0.00	5	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH							
BCDL	10.0									Weight: 68 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS (size) 1=14-6-2, 5=14-6-2, 6=14-6-2, 7=14-6-2, 8=14-6-2
Max Horiz 1=-132 (LC 9)
Max Uplift 1=-25 (LC 9), 6=-106 (LC 14), 8=-109 (LC 13)
Max Grav 1=134 (LC 29), 5=111 (LC 28), 6=440 (LC 29), 7=398 (LC 28), 8=444 (LC 28)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-153/142, 2-3=-127/148, 3-4=-127/149, 4-5=-134/113
BOT CHORD 1-8=-72/165, 7-8=-72/165, 6-7=-72/165, 5-6=-72/165
WEBS 3-7=-205/0, 2-8=-333/321, 4-6=-333/321

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Corner (3E) 0-0-0 to 3-3-1, Exterior(2N) 3-3-1 to 7-3-1, Corner (3R) 7-3-1 to 10-3-1, Exterior(2N) 10-3-1 to 14-6-2 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33

- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=13.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- All bearings are assumed to be SP No.2 .
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 25 lb uplift at joint 1, 109 lb uplift at joint 8 and 106 lb uplift at joint 6.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 5.

LOAD CASE(S) Standard



October 27, 2025

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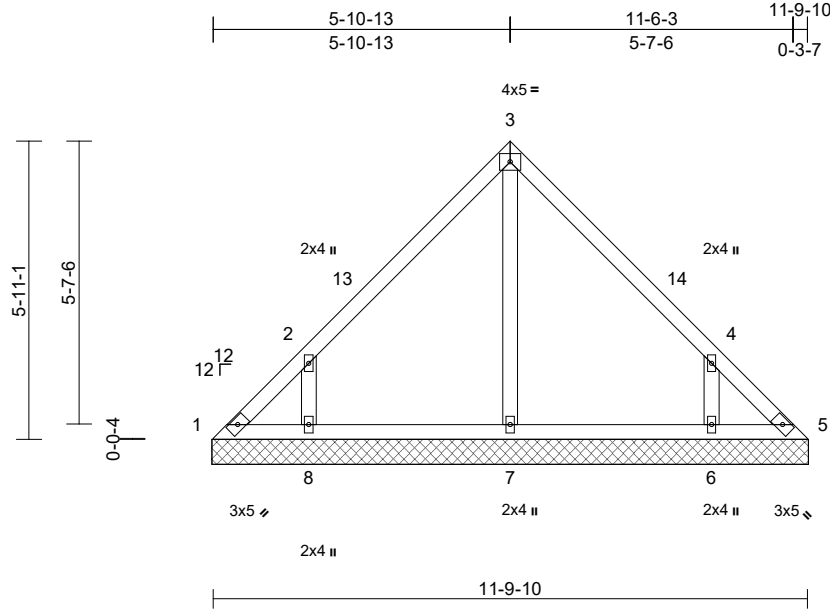
Job	Truss	Truss Type	Qty	Ply	93 Dewey-Tim Johnson Const.-Roof-Fitzgerald VKDRFR
24120007-A	VL6	Valley	1	1	I77311798
Job Reference (optional)					

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

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Scale = 1:45.8												
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.09	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.11	Horiz(TL)	0.00	5	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 53 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS

(size) 1=11-10-2, 5=11-10-2, 6=11-10-2, 7=11-10-2, 8=11-10-2
Max Horiz 1=-107 (LC 9)
Max Uplift 1=-34 (LC 9), 5=-9 (LC 10), 6=-92 (LC 14), 8=-95 (LC 13)
Max Grav 1=97 (LC 29), 5=78 (LC 28), 6=322 (LC 29), 7=222 (LC 2), 8=326 (LC 28)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-152/102, 2-3=-181/158, 3-4=-181/157, 4-5=-144/72
BOT CHORD 1-8=-32/114, 7-8=-32/114, 6-7=-32/114, 5-6=-32/114
WEBS 3-7=-136/0, 2-8=-335/364, 4-6=-335/363

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Corner (3E) 0-0-0 to 3-0-0, Exterior(2N) 3-0-0 to 5-11-1, Corner (3R) 5-11-1 to 8-11-1, Exterior(2N) 8-11-1 to 11-10-2 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33

- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=13.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 34 lb uplift at joint 1, 9 lb uplift at joint 5, 95 lb uplift at joint 8 and 92 lb uplift at joint 6.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 5.

LOAD CASE(S) Standard



October 27, 2025

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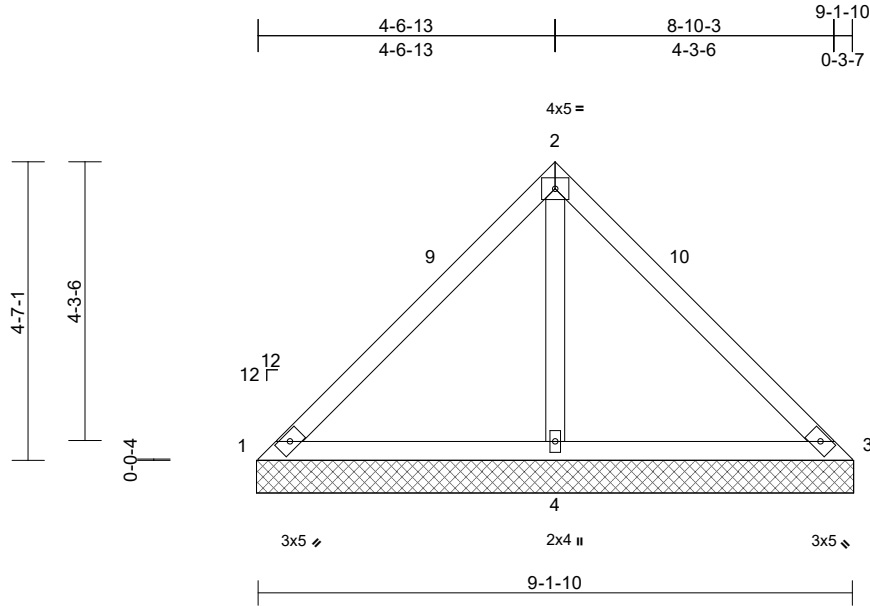
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	93 Dewey-Tim Johnson Const.-Roof-Fitzgerald VKDRFR
24120007-A	VL7	Valley	1	1	I77311799
Job Reference (optional)					

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

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Scale = 1:35.4

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.24	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.29	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.21	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 37 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 9-1-10 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS

(size) 1=9-2-2, 3=9-2-2, 4=9-2-2
Max Horiz 1=-82 (LC 9)
Max Uplift 1=-20 (LC 35), 3=-20 (LC 34), 4=-38 (LC 13)
Max Grav 1=72 (LC 34), 3=72 (LC 35), 4=661 (LC 2)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-184/300, 2-3=-174/300
BOT CHORD 1-4=-208/267, 3-4=-208/267
WEBS 2-4=-607/400

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Corner (3E) 0-0-0 to 3-0-0, Exterior(2N) 3-0-0 to 4-7-1, Corner (3R) 4-7-1 to 7-7-1, Exterior(2N) 7-7-1 to 9-2-2 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=13.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 20 lb uplift at joint 1, 20 lb uplift at joint 3 and 38 lb uplift at joint 4.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 3.

LOAD CASE(S) Standard



October 27, 2025

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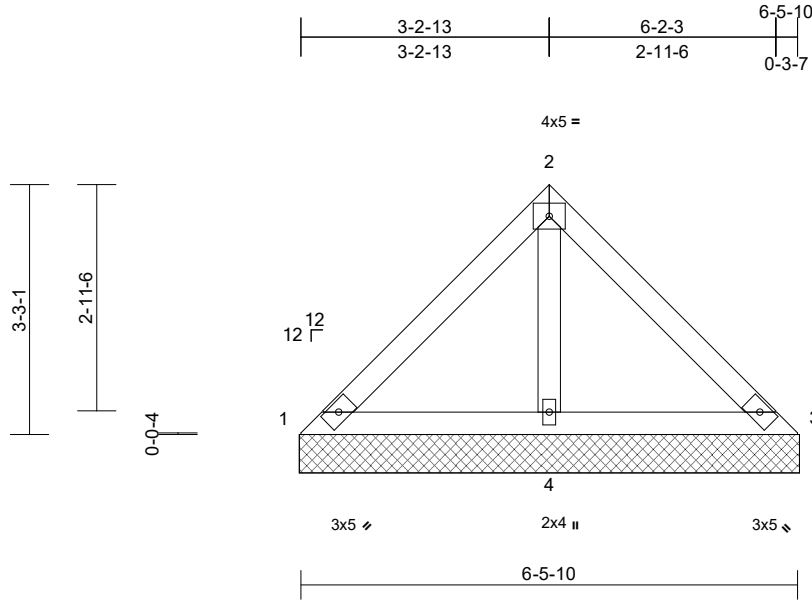
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	93 Dewey-Tim Johnson Const.-Roof-Fitzgerald VKDRFR
24120007-A	VL8	Valley	1	1	I77311800
					Job Reference (optional)

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

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Page: 1



Scale = 1:30

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.15	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.20	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.09	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MP								
BCDL	10.0											
											Weight: 26 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 6-5-10 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS

(size) 1=6-6-2, 3=6-6-2, 4=6-6-2
Max Horiz 1=57 (LC 10)
Max Uplift 4=-21 (LC 13)
Max Grav 1=66 (LC 34), 3=66 (LC 35), 4=429 (LC 2)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-122/171, 2-3=-122/171
BOT CHORD 1-4=-141/222, 3-4=-141/222
WEBS 2-4=-364/294

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Corner (3E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=13.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Gable requires continuous bottom chord bearing.

- Gable studs spaced at 4-0-0 oc.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2 .
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 21 lb uplift at joint 4.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 3.

LOAD CASE(S) Standard



October 27, 2025

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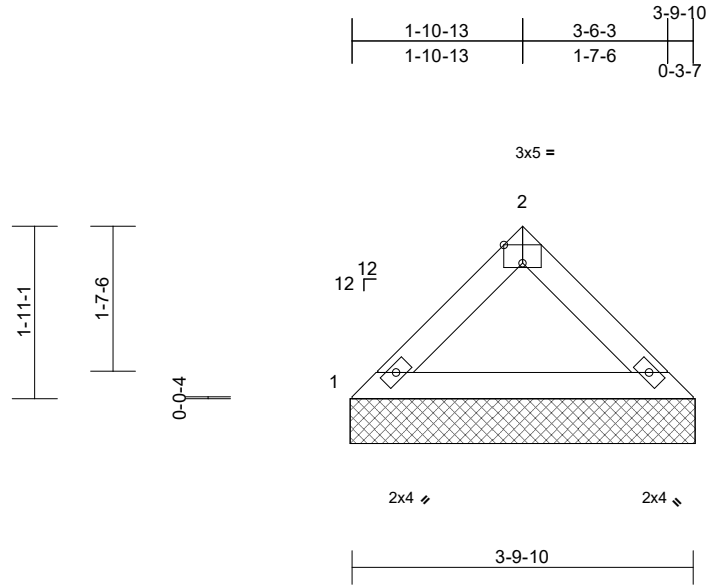
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	93 Dewey-Tim Johnson Const.-Roof-Fitzgerald VKDRFR I77311801
24120007-A	VL9	Valley	1	1	Job Reference (optional)

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

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Page: 1



Scale = 1:25.7

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	n/a	-	n/a	999	MT20
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.09	Vert(TL)	n/a	-	n/a	999	244/190
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a	
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MP							
BCDL	10.0										
										Weight: 12 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-9-10 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=3-10-2, 3=3-10-2
Max Horiz 1=-32 (LC 11)
Max Grav 1=154 (LC 2), 3=154 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-221/128, 2-3=-221/128
BOT CHORD 1-3=-73/149

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Corner (3E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=13.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.

- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2 .
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 3.

LOAD CASE(S) Standard



October 27,2025

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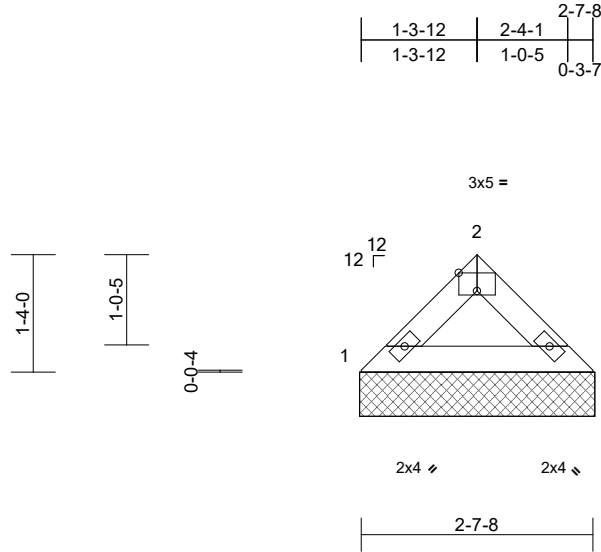
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	93 Dewey-Tim Johnson Const.-Roof-Fitzgerald VKDRFR I77311802
24120007-A	VL10	Valley	1	1	Job Reference (optional)

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

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Page: 1



Scale = 1:26.1

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.05	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 8 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-7-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=2-8-0, 3=2-8-0
Max Horiz 1=-21 (LC 9)
Max Grav 1=107 (LC 2), 3=107 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-146/92, 2-3=-146/92
BOT CHORD 1-3=-47/96

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Corner (3E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=13.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.

- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2 .
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 3.

LOAD CASE(S) Standard



October 27, 2025

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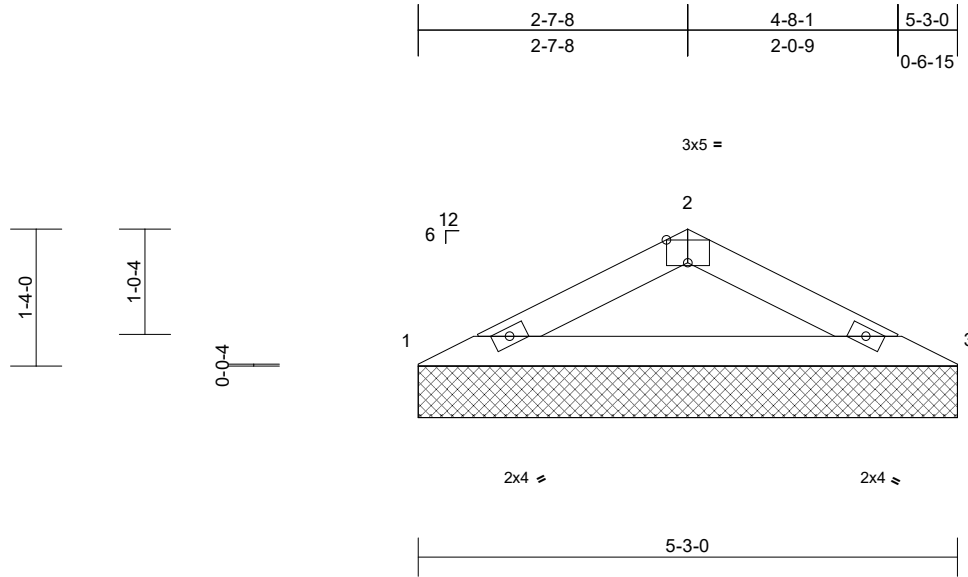
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	93 Dewey-Tim Johnson Const.-Roof-Fitzgerald VKDRFR I77311803
24120007-A	VL11	Valley	1	1	Job Reference (optional)

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

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Page: 1



Scale = 1:22.4

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	n/a	-	n/a	999	MT20
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.17	Vert(TL)	n/a	-	n/a	999	244/190
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.01	3	n/a	n/a	
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MP							
BCDL	10.0										
										Weight: 15 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2

BRACING

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

REACTIONS (size) 1=5-3-0, 3=5-3-0
Max Horiz 1=12 (LC 12)
Max Grav 1=210 (LC 2), 3=210 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-426/230, 2-3=-426/212
BOT CHORD 1-3=-205/370

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.33
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=13.9 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.

- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

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

LOAD CASE(S) Standard



October 27,2025

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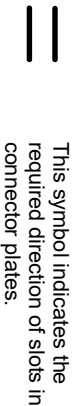
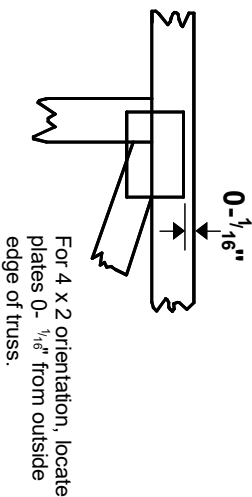
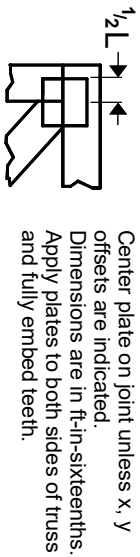
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818 Soundside Road
Edenton, NC 27932

Symbols

PLATE LOCATION AND ORIENTATION



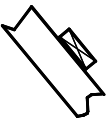
* Plate location details available in MITek software or upon request.

PLATE SIZE

4 X 4

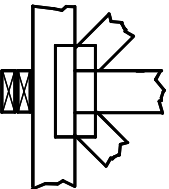
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

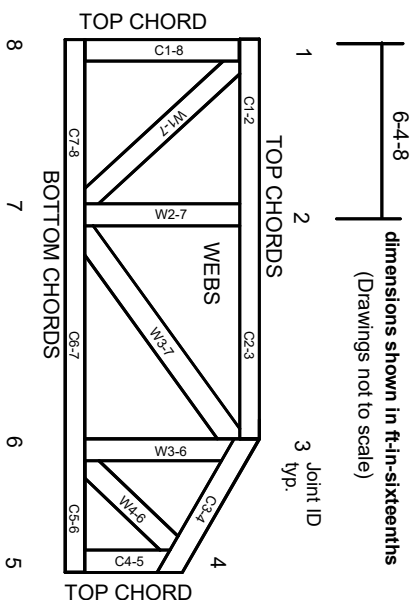


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TP11: 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-EES 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 1 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.