

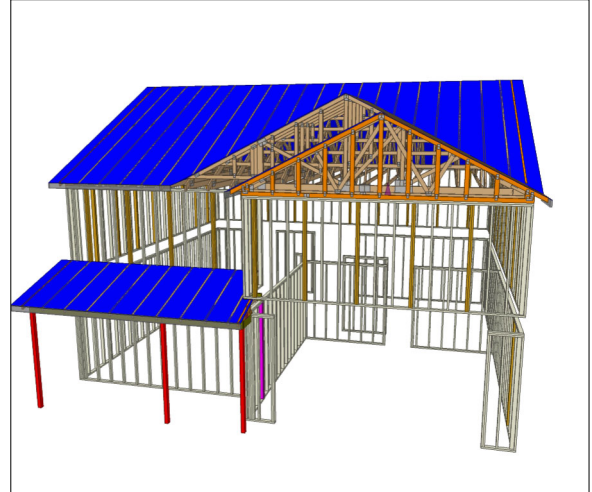


Carter Sanford Component Plant
298 Harvey Faulk Rd
Sanford, NC 27332

Phone #:919-775-1450

Builder: DR Horton Inc

**Model: 25 Mason Ridge -
Hayden - B**



THE PLACEMENT PLAN NOTES:

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

Approved By: _____

Date: _____

General Notes:

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

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

Revisions	
00/00/00	Name
00/00/00	Name
00/00/00	Name
00/00/00	Name
00/00/00	Name

THIS IS A TRUSS PLACEMENT DIAGRAM ONLY. These trusses are designed and fabricated to be installed in accordance with the design at the specification of the building designer. See individual design sheets for each truss design identified on the placement drawing. The building designer is responsible for temporary and permanent bracing of the roof and floor systems and for the overall structure. The design of the truss support structure (including headers, beams, walls, and columns) is the responsibility of the building designer. For general guidance regarding the bracing, consult "Bracing of Wood Trusses" available from the Truss Plate Institute, 533 O'Donoghue Drive.



DR Horton Inc

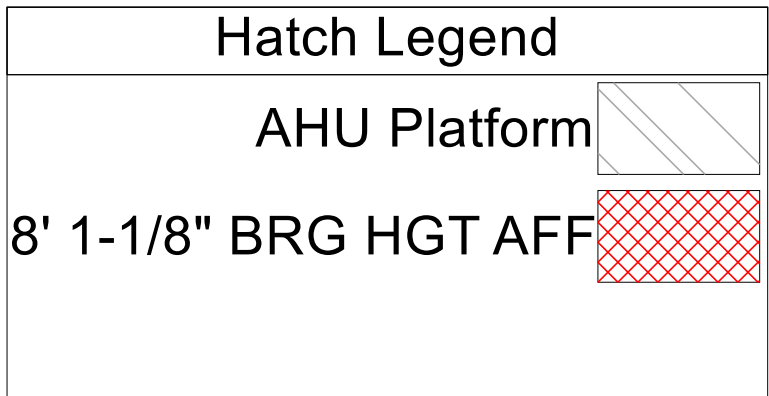
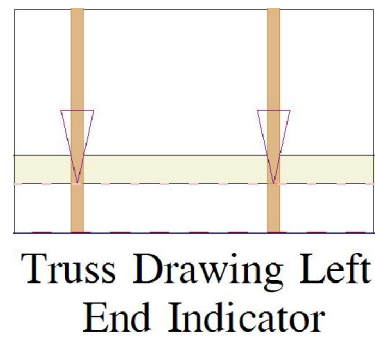
25 Mason Ridge - Hayden - B

Roof Truss Layout

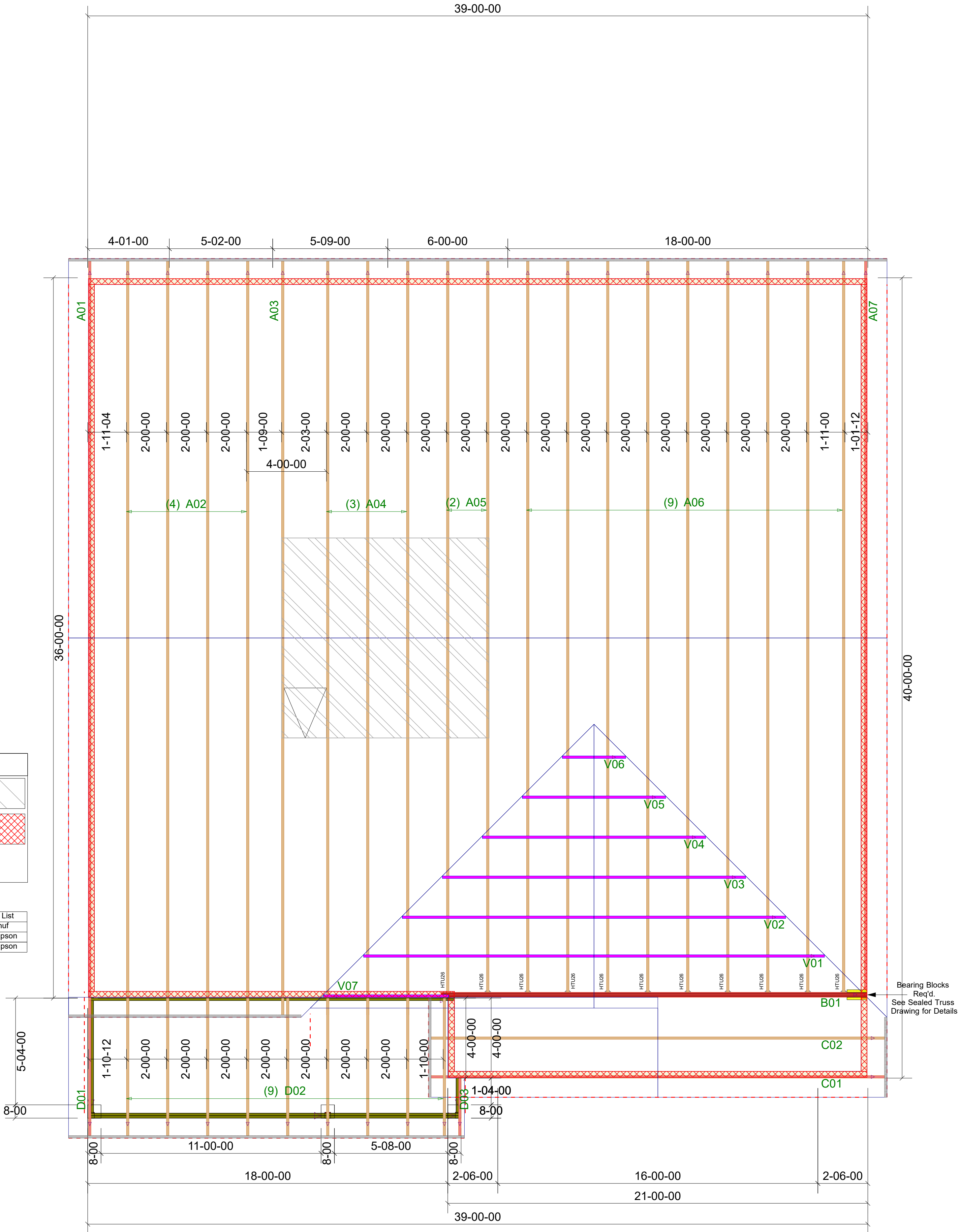
Scale:	NTS
Date:	10/27/2025
Designer:	Nate Donaldson
Project Number:	TM240370-A
Sheet Number:	

1/1

*** FRAMER MUST REFER TO PLANS WHILE SETTING COMPONENTS. ***
*** DAMAGED COMPONENTS SHOULD NOT BE INSTALLED UNLESS TOLD TO BY THE COMPONENT PLANT. ***
*** TRUSS TO TRUSS CONNECTIONS ARE TOE-NAILED, UNLESS NOTED OTHERWISE. ***



Truss Connector Total List		
Qty	Product	Manuf
11	HTU26	Simpson
50	One H2.5A	Simpson



Bearing Blocks
Req'd.
See Sealed Truss
Drawing for Details

ROOF PLACEMENT PLAN

*** TRIANGULAR SYMBOL NEAR END OF TRUSS INDICATES LEFT END OF TRUSS AS SHOWN ON INDIVIDUAL TRUSS DRAWINGS

PLUMBING DROPS NOTED ARE IN THE APPROXIMATE LOCATIONS PER PLAN. BUILDER TO VERIFY LOCATIONS BEFORE SETTING TRUSSES.

REFER TO FINAL TRUSS ENGINEERING SHEETS FOR PLY TO PLY CONNECTIONS.

*** GIRDERS MUST BE FULLY CONNECTED TOGETHER PRIOR TO ADDING ANY LOADS. ***

*** ALL UPLIFT CONNECTORS SHOWN WITHIN THESE DOCUMENTS ARE RECOMMENDATIONS ONLY. PER ANSII/TPI 1 ALL UPLIFT CONNECTORS ARE THE RESPONSIBILITY OF THE BLDG DESIGNER AND OR CONTRACTOR. ***

DIMENSIONS ARE READ AS: FOOT-INCH-SIXTEENTH.

RE: 25100149
25 Mason Ridge - Hayden B - Roof

Trenco
818 Soundside Rd
Edenton, NC 27932

Site Information:

Customer: DR Horton Inc Project Name: 25100149
Lot/Block: 25 Model: Hayden B
Address: Subdivision: Mason Ridge
City: State:

General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):

Design Code: IRC2018/TPI2014 Design Program: MiTek 20/20 8.7
Wind Code: ASCE 7-16 Wind Speed: 150 mph
Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 20 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date
1	I77132146	A01	10/20/2025
2	I77132147	A02	10/20/2025
3	I77132148	A03	10/20/2025
4	I77132149	A04	10/20/2025
5	I77132150	A05	10/20/2025
6	I77132151	A06	10/20/2025
7	I77132152	A07	10/20/2025
8	I77132153	B01	10/20/2025
9	I77132154	C01	10/20/2025
10	I77132155	C02	10/20/2025
11	I77132156	D01	10/20/2025
12	I77132157	D02	10/20/2025
13	I77132158	D03	10/20/2025
14	I77132159	V01	10/20/2025
15	I77132160	V02	10/20/2025
16	I77132161	V03	10/20/2025
17	I77132162	V04	10/20/2025
18	I77132163	V05	10/20/2025
19	I77132164	V06	10/20/2025
20	I77132165	V07	10/20/2025

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

Truss Design Engineer's Name: Galinski, John

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

North Carolina COA: C-0844

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

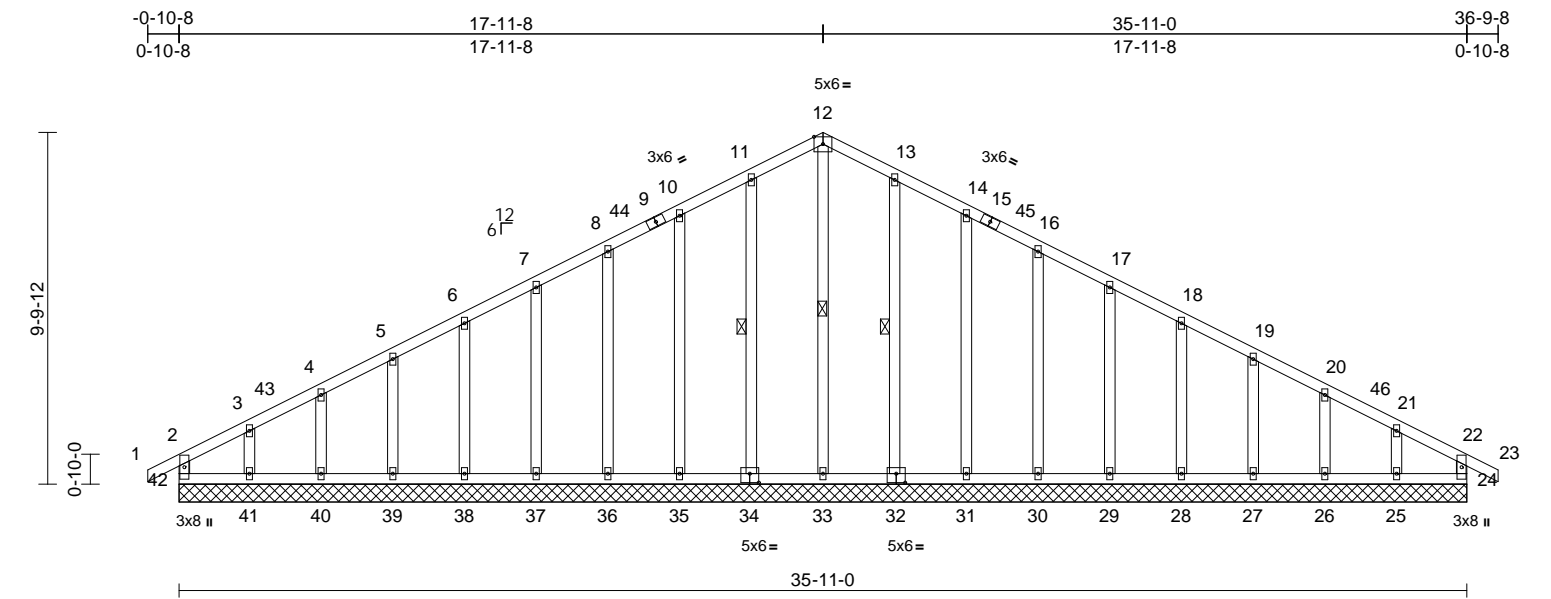


October 20, 2025

Job	Truss	Truss Type	Qty	Ply	25 Mason Ridge - Hayden B - Roof	I77132146
25100149	A01	Common 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. Thu Oct 16 19:04:04
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Scale = 1:64.3									
Plate Offsets (X, Y): [32:0-3-0,0-3-0], [34:0-3-0,0-3-0]									
Loading	(psf)	Spacing	1-11-4	CSI		DEFL	in	(loc)	l/defl
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	n/a	-	n/a
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	n/a	-	n/a
TCDL	10.0	Rep Stress Incr	YES	WB	0.20	Horz(CT)	0.01	24	n/a
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MR					
BCDL	10.0								
Weight: 245 lb FT = 20%									

LUMBER		Max Grav		NOTES	
TOP CHORD	2x4 SP No.2	24=138 (LC 22), 25=139 (LC 37),		1) Unbalanced roof live loads have been considered for this design.	
BOT CHORD	2x4 SP No.2	26=159 (LC 22), 27=154 (LC 37),		2) Wind: ASCE 7-16; Vult=150mph (3-second gust)	
WEBS	2x4 SP No.3	28=156 (LC 22), 29=155 (LC 37),		Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 2-8-11, Exterior(2N) 2-8-11 to 14-4-5, Corner(3R) 14-4-5 to 21-6-11, Exterior (2N) 21-6-11 to 33-2-5, Corner(3E) 33-2-5 to 36-9-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60	
OTHERS	2x4 SP No.3	30=170 (LC 22), 31=220 (LC 22),		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.	
BRACING		FORCES		4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 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	
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.	(lb) - Maximum Compression/Maximum Tension		5) Unbalanced snow loads have been considered for this design.	
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.	TOP CHORD			
WEBS	1 Row at midpt 12-33, 11-34, 13-32	2-42=-123/84, 1-2=0/27, 2-3=-202/103, 3-4=-129/108, 4-5=-94/132, 5-6=-61/162, 6-7=-64/192, 7-8=-84/244, 8-10=-104/302, 10-11=-125/363, 11-12=-145/416, 12-13=-145/416, 13-14=-125/363, 14-16=-104/302, 16-17=-84/244, 17-18=-64/185, 18-19=-48/127, 19-20=-48/80, 20-21=-78/58, 21-22=-144/50, 22-23=0/27, 22-24=-121/84			
REACTIONS (size)	24=35-11-0, 25=35-11-0, 26=35-11-0, 27=35-11-0, 28=35-11-0, 29=35-11-0, 30=35-11-0, 31=35-11-0, 32=35-11-0, 33=35-11-0, 34=35-11-0, 35=35-11-0, 36=35-11-0, 37=35-11-0, 38=35-11-0, 39=35-11-0, 40=35-11-0, 41=35-11-0, 42=35-11-0	BOT CHORD			
Max Horiz	42=-192 (LC 15)	41-42=-31/154, 40-41=-31/154, 39-40=-31/154, 38-39=-31/154, 37-38=-31/154, 36-37=-31/154, 35-36=-31/154, 33-35=-31/154, 31-33=-31/155, 30-31=-31/155, 29-30=-31/155, 28-29=-31/155, 27-28=-31/155, 26-27=-31/155, 25-26=-31/155, 24-25=-31/155			
Max Uplift	24=-29 (LC 11), 25=-137 (LC 15), 26=-57 (LC 15), 27=-76 (LC 15), 28=-71 (LC 15), 29=-72 (LC 15), 30=-71 (LC 15), 31=-78 (LC 15), 32=-63 (LC 15), 34=-66 (LC 14), 35=-77 (LC 14), 36=-71 (LC 14), 37=-72 (LC 14), 38=-71 (LC 14), 39=-77 (LC 14), 40=-51 (LC 14), 41=-160 (LC 14), 42=-61 (LC 15)	WEBS			
		12-33=-272/49, 11-34=-198/93, 10-35=-182/115, 8-36=-131/106, 7-37=-131/108, 6-38=-131/107, 5-39=-131/108, 4-40=-131/106, 3-41=-130/169, 13-32=-198/93, 14-31=-182/115, 16-30=-131/106, 17-29=-131/108, 18-28=-131/107, 19-27=-131/108, 20-26=-131/106, 21-25=-130/169			



Job	Truss	Truss Type	Qty	Ply	25 Mason Ridge - Hayden B - Roof
25100149	A01	Common Supported Gable	1	1	I77132146
					Job Reference (optional)

- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 7) All plates are 2x4 MT20 unless otherwise indicated.
- 8) Gable requires continuous bottom chord bearing.
- 9) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 10) Gable studs spaced at 2-0-0 oc.
- 11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 61 lb uplift at joint 42, 29 lb uplift at joint 24, 66 lb uplift at joint 34, 77 lb uplift at joint 35, 71 lb uplift at joint 36, 72 lb uplift at joint 37, 71 lb uplift at joint 38, 77 lb uplift at joint 39, 51 lb uplift at joint 40, 160 lb uplift at joint 41, 63 lb uplift at joint 32, 78 lb uplift at joint 31, 71 lb uplift at joint 30, 72 lb uplift at joint 29, 71 lb uplift at joint 28, 76 lb uplift at joint 27, 57 lb uplift at joint 26 and 137 lb uplift at joint 25.
- 14) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

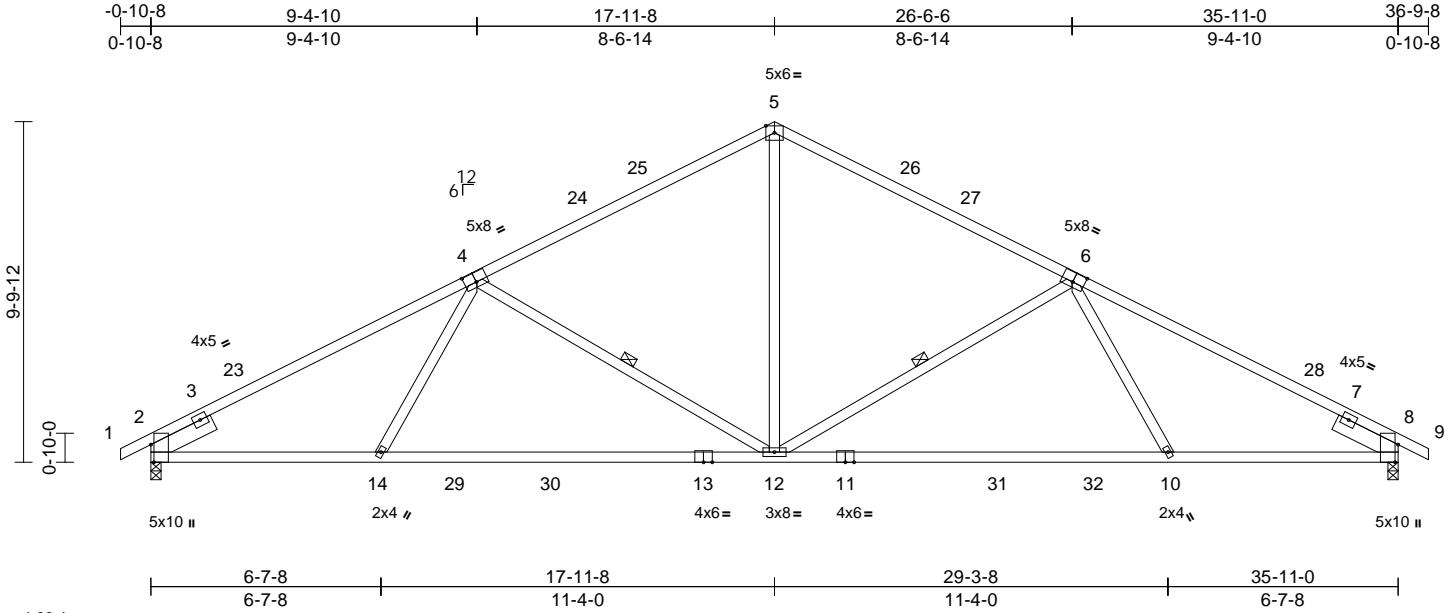
Job	Truss	Truss Type	Qty	Ply	25 Mason Ridge - Hayden B - Roof	177132147
25100149	A02	Common	4	1	Job Reference (optional)	

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

Run: 8.73 S Aug 13 2025 Print: 8.730 S Aug 13 2025 MiTek Industries, Inc. Thu Oct 16 19:04:05

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Scale = 1:66.4									
Plate Offsets (X, Y): [2:0-6-1,Edge], [4:0-4-0,0-3-4], [6:0-4-0,0-3-4], [8:0-6-1,Edge]									
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in (loc)	l/defl	L/d
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.86	Vert(LL)	-0.38 10-12	>999	240
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.73	Vert(CT)	-0.71 10-12	>603	180
TCDL	10.0	Rep Stress Incr	YES	WB	0.47	Horz(CT)	0.12 8	n/a	n/a
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH					
BCDL	10.0								
									Weight: 185 lb FT = 20%

LUMBER
TOP CHORD 2x4 SP 2400F 2.0E
BOT CHORD 2x4 SP 2400F 2.0E
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 -- 2-0-0, Right 2x6 SP No.2 -- 2-0-0

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 4-12, 6-12

REACTIONS (size) 2=0-3-8, 8=0-3-8
Max Horiz 2=-199 (LC 15)
Max Uplift 2=-351 (LC 14), 8=-351 (LC 15)
Max Grav 2=1612 (LC 3), 8=1612 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/23, 2-5=-3030/547, 5-8=-3030/547, 8-9=0/23
BOT CHORD 2-14=-508/2593, 12-14=-538/2442, 10-12=-386/2442, 8-10=-334/2593
WEBS 4-14=0/394, 4-12=-806/439, 5-12=-155/1309, 6-12=-806/440, 6-10=0/394

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-8-11, Interior (1) 2-8-11 to 14-4-5, Exterior(2R) 14-4-5 to 21-6-11, Interior (1) 21-6-11 to 33-2-5, Exterior(2E) 33-2-5 to 36-9-8 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=1.60

- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 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 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any 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.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 8. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



October 20,2025

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

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

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

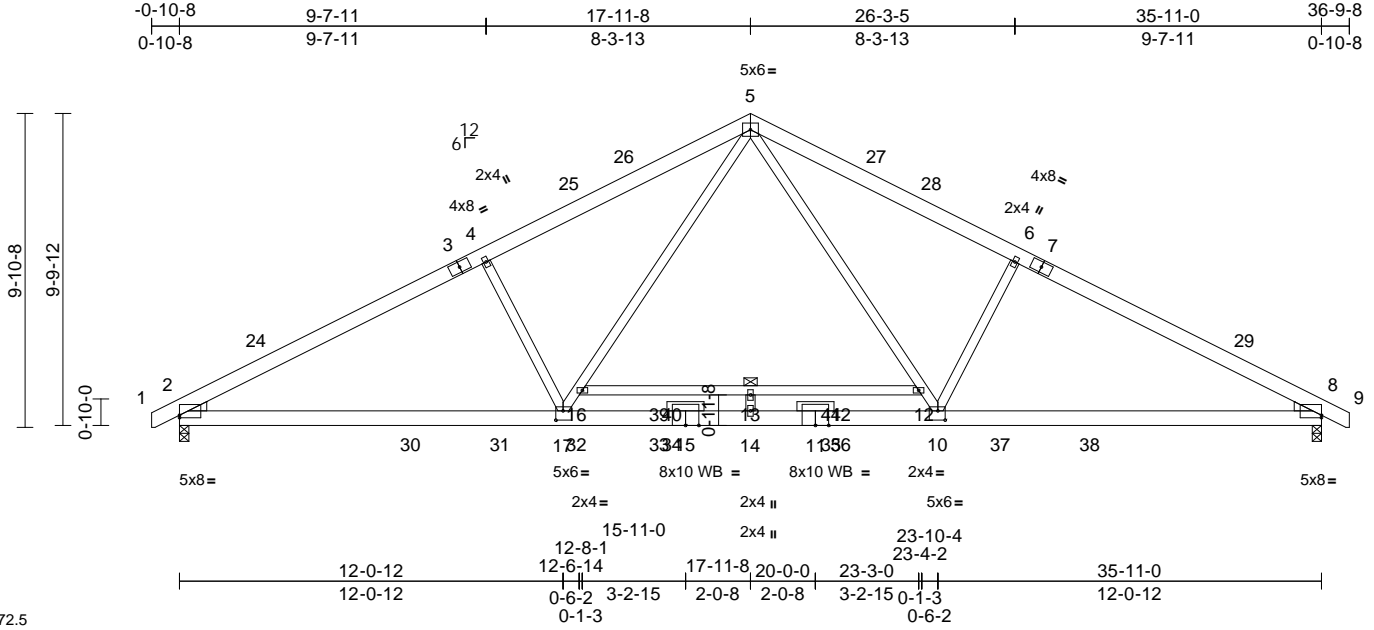
Job	Truss	Truss Type	Qty	Ply	25 Mason Ridge - Hayden B - Roof	177132148
25100149	A03	Common	1	1	Job Reference (optional)	

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

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Scale = 1:72.5

Plate Offsets (X, Y): [2:Edge,0-0-15], [8:Edge,0-0-15], [10:0-2-12,0-3-8], [17:0-2-12,0-3-8]

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	0.71	Vert(LL)	-0.35	13	>999	240	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.73	Vert(CT)	-0.71	13	>603	180	
TCDL	10.0	Rep Stress Incr	YES	WB	0.46	Horz(CT)	0.07	8	n/a	n/a	
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH							
BCDL	10.0										
Weight: 253 lb FT = 20%											

LUMBER

TOP CHORD	2x6 SP No.2
BOT CHORD	2x6 SP 2400F 2.0E *Except* 16-12:2x4 SP No.2
WEBS	2x4 SP No.3 *Except* 10-5,17-5:2x4 SP No.2
OTHERS	2x4 SP No.3
WEDGE	Left: 2x4 SP No.3 Right: 2x4 SP No.3

BRACING

TOP CHORD	Structural wood sheathing directly applied or 3-0-9 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS

(size)	2=0-3-8, 8=0-3-8
Max Horiz	2=-198 (LC 15)
Max Uplift	2=-185 (LC 14), 8=-185 (LC 15)
Max Grav	2=1987 (LC 3), 8=1987 (LC 3)

FORCES

(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=0/22, 2-4=-3838/233, 4-5=-3633/279, 5-6=-3634/278, 6-8=-3839/232, 8-9=0/22
BOT CHORD	2-17=-318/3298, 14-17=0/2450, 10-14=0/2450, 8-10=-132/3299, 13-16=-237/0, 12-13=-237/0
WEBS	5-12=-98/1577, 10-12=-143/1361, 6-10=-545/444, 16-17=-145/1359, 5-16=-100/1575, 4-17=-545/444, 13-14=-294/0

NOTES

- Unbalanced roof live loads have been considered for this design.

- Wind: ASCE 7-16; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-9-14 to 2-9-6, Interior (1) 2-9-6 to 14-4-5, Exterior(2R) 14-4-5 to 21-6-11, Interior (1) 21-6-11 to 33-1-11, Exterior(2E) 33-1-11 to 36-8-14 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 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 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 200.0lb AC unit load placed on the bottom chord, 18-0-0 from left end, supported at two points, 5-0-0 apart.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any 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.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 8. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



October 20,2025

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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ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	25 Mason Ridge - Hayden B - Roof	177132149
25100149	A04	Common	3	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. Thu Oct 16 19:04:06
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Page: 1

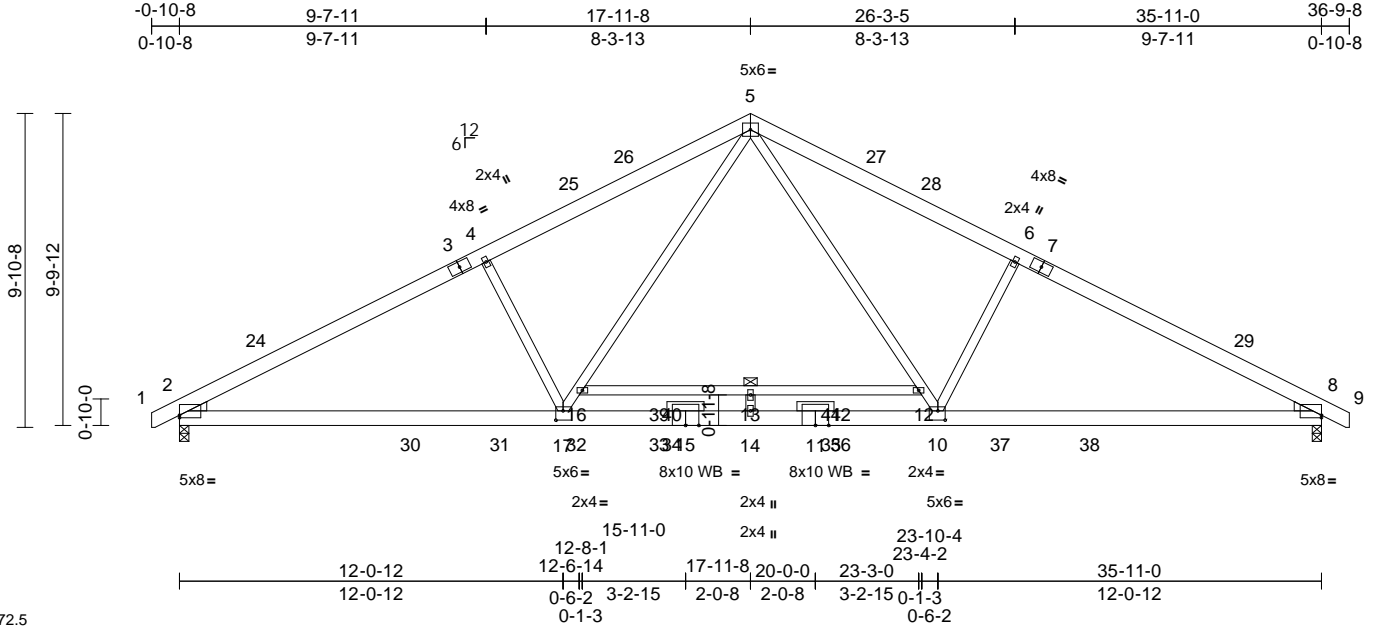


Plate Offsets (X, Y): [2:Edge,0-0-15], [8:Edge,0-0-15], [10:0-2-12,0-3-8], [17:0-2-12,0-3-8]

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	0.71	Vert(LL)	-0.35	13	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.73	Vert(CT)	-0.71	13	>603	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.46	Horz(CT)	0.07	8	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 253 lb	FT = 20%

LUMBER

TOP CHORD	2x6 SP No.2
BOT CHORD	2x6 SP 2400F 2.0E *Except* 16-12:2x4 SP No.2
WEBS	2x4 SP No.3 *Except* 10-5,17-5:2x4 SP No.2
OTHERS	2x4 SP No.3
WEDGE	Left: 2x4 SP No.3 Right: 2x4 SP No.3

BRACING

TOP CHORD	Structural wood sheathing directly applied or 3-0-9 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS

(size)	2=0-3-8, 8=0-3-8
Max Horiz	2=-198 (LC 15)
Max Uplift	2=-185 (LC 14), 8=-185 (LC 15)
Max Grav	2=1987 (LC 3), 8=1987 (LC 3)

FORCES

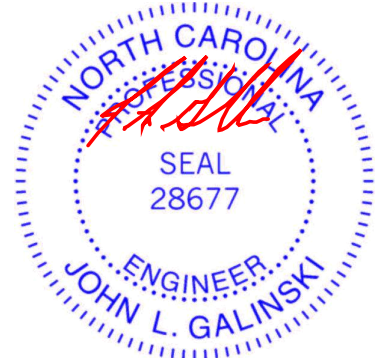
(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=0/22, 2-4=-3838/233, 4-5=-3633/279, 5-6=-3634/278, 6-8=-3839/232, 8-9=0/22
BOT CHORD	2-17=-318/3298, 14-17=0/2450, 10-14=0/2450, 8-10=-132/3299, 13-16=-237/0, 12-13=-237/0
WEBS	5-12=-98/1577, 10-12=-143/1361, 6-10=-545/444, 16-17=-145/1359, 5-16=-100/1575, 4-17=-545/444, 13-14=-294/0

NOTES

- Unbalanced roof live loads have been considered for this design.

- Wind: ASCE 7-16; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-9-14 to 2-9-6, Interior (1) 2-9-6 to 14-4-5, Exterior(2R) 14-4-5 to 21-6-11, Interior (1) 21-6-11 to 33-1-11, Exterior(2E) 33-1-11 to 36-8-14 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 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 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 200.0lb AC unit load placed on the bottom chord, 18-0-0 from left end, supported at two points, 5-0-0 apart.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any 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.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 8. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



October 20,2025

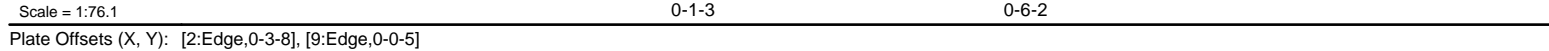
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ENGINEERING BY
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818 Soundside Road
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Carter Components (Sanford, NC), Sanford, NC - 27332, Run: 8.73 S Aug 13 2025 Print: 8.730 S Aug 13 2025 MiTek Industries, Inc. Thu Oct 16 19:04:06 Page: 1
ID:ZxUg4o5WaT_uCnUoMvmIxyTIV-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



LUMBER		2) Wind: ASCE 7-16; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-9-14 to 2-9-0, Interior (1) 2-9-0 to 14-4-11, Exterior(2R) 14-4-11 to 21-6-6, Interior (1) 21-6-6 to 32-0-7, Exterior(2E) 32-0-7 to 35-7-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
TOP CHORD	2x6 SP No.2	
BOT CHORD	2x6 SP 2400F 2.0E *Except* 16-12:2x4 SP No.2	
WEBS	2x4 SP No.3 *Except* 10-5,17-5:2x4 SP No.2	
OTHERS	2x4 SP No.3	
WEDGE	Left: 2x4 SP No.3	
SLIDER	Right 2x4 SP No.3 -- 2-6-0	
BRACING		
TOP CHORD	Structural wood sheathing directly applied or 2-10-13 oc purlins.	3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 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
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.	4) Unbalanced snow loads have been considered for this design.
REACTIONS	(size) 2=0-3-8, 9= Mechanical Max Horiz 2=211 (LC 14) Max Uplift 2=185 (LC 14), 9=154 (LC 15) Max Grav 2=1970 (LC 3), 9=1936 (LC 3)	5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads. 6) 200.0lb AC unit load placed on the bottom chord, 18-0-0 from left end, supported at two points, 5-0-0 apart.
FORCES	(lb) - Maximum Compression/Maximum Tension	7) All plates are MT20 plates unless otherwise indicated.
TOP CHORD	1-2=0/22, 2-4=-3788/231, 4-5=-3597/278, 5-7=-3529/277, 7-9=-3690/230	8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
BOT CHORD	2-17=-212/3261, 14-17=0/2408, 10-14=0/2408, 9-10=-88/3178, 13-16=-232/0, 12-13=-232/0	9) * 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.
WEBS	5-12=-91/1477, 10-12=-136/1264, 7-10=-493/434, 16-17=-144/1368, 5-16=-99/1582, 4-17=-539/438, 13-14=-293/0	10) Refer to girder(s) for truss to truss connections.
NOTES		11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 154 lb uplift at joint 9.
1) Unbalanced roof live loads have been considered for this design.		12) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
		13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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Edenton, NC 27932

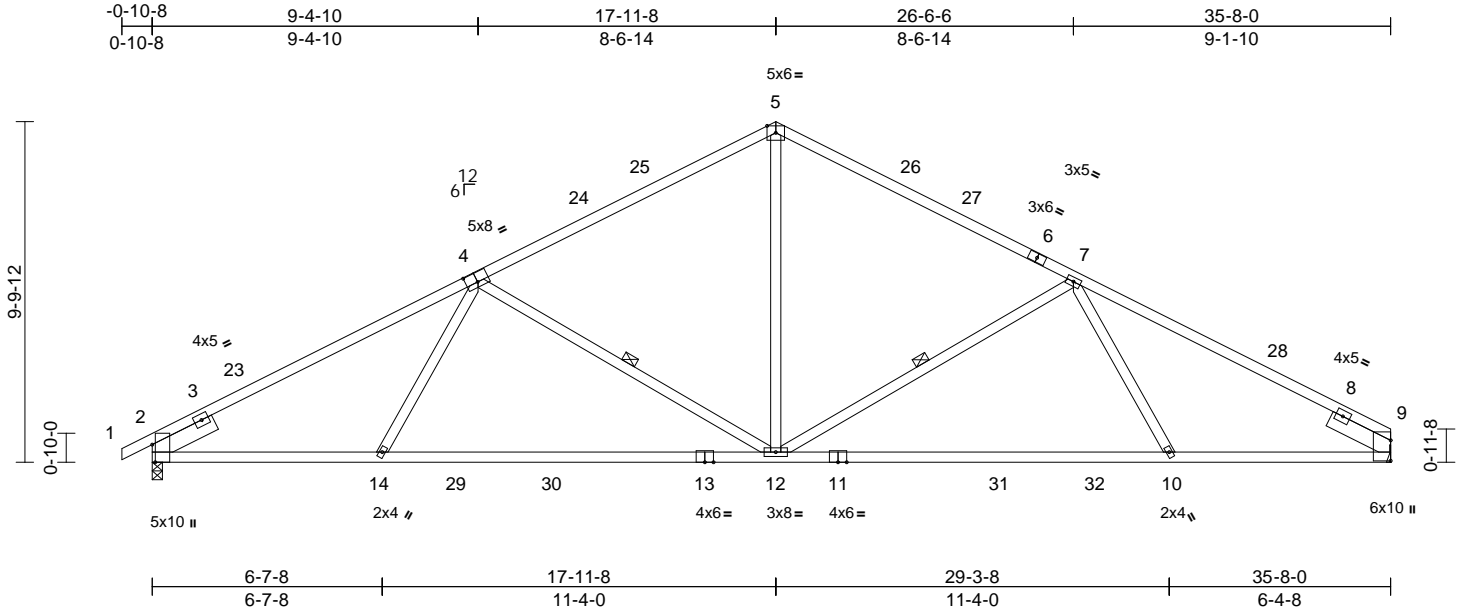
Job	Truss	Truss Type	Qty	Ply	25 Mason Ridge - Hayden B - Roof	177132151
25100149	A06	Common	9	1	Job Reference (optional)	

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

Run: 8.73 S Aug 13 2025 Print: 8.730 S Aug 13 2025 MiTek Industries, Inc. Thu Oct 16 19:04:06

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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	0.92	Vert(LL)	-0.41	10-12	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.74	Vert(CT)	-0.78	10-12	>550	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.46	Horz(CT)	0.14	9	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 183 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP 2400F 2.0E
BOT CHORD	2x4 SP 2400F 2.0E
WEBS	2x4 SP No.3
SLIDER	Left 2x6 SP No.2 -- 2-0-0, Right 2x6 SP No.2 -- 2-0-0

BRACING

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

WEBS	1 Row at midpt 7-12, 4-12
REACTIONS	(size) 2=0-3-8, 9= Mechanical
	Max Horiz 2=211 (LC 14)
	Max Uplift 2=-350 (LC 14), 9=-321 (LC 15)
	Max Grav 2=1601 (LC 3), 9=1557 (LC 3)

FORCES

	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=0/23, 2-5=-3005/544, 5-7=-2134/522, 7-9=-2923/537
BOT CHORD	2-14=-519/2568, 12-14=-548/2418, 10-12=-413/2355, 9-10=-358/2487
WEBS	5-12=-155/1284, 7-12=-736/427, 7-10=0/366, 4-12=-806/439, 4-14=0/394

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-8-6, Interior (1) 2-8-6 to 14-4-11, Exterior(2R) 14-4-11 to 21-6-6, Interior (1) 21-6-6 to 32-1-3, Exterior(2E) 32-1-3 to 35-8-0 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=1.60

- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 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 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any 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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 321 lb uplift at joint 9.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



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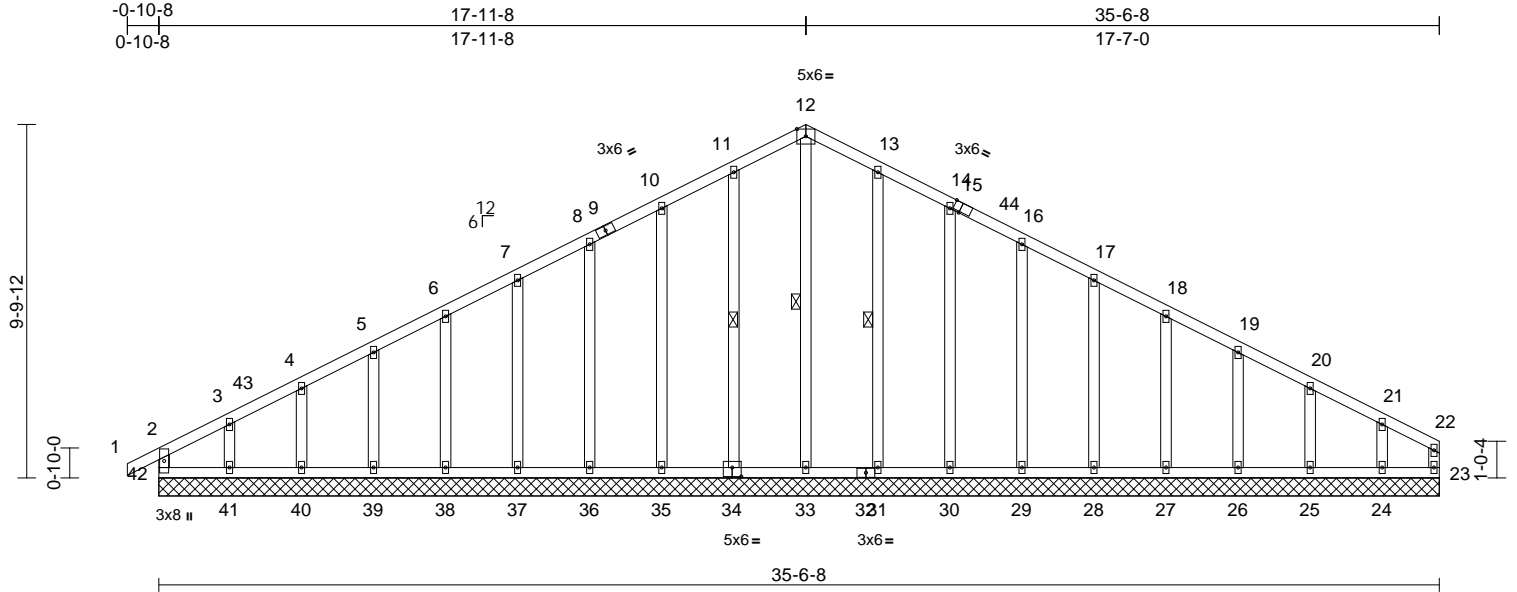
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	25 Mason Ridge - Hayden B - Roof	177132152
25100149	A07	Common 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. Thu Oct 16 19:04:06
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Page: 1



Scale = 1:64									
Plate Offsets (X, Y): [15:0-2-6,Edge], [34:0-3-0,0-3-0]									
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	n/a	-	n/a
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a
TCDL	10.0	Rep Stress Incr	YES	WB	0.21	Horz(CT)	0.00	23	n/a
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MR					
BCDL	10.0								
PLATES MT20 GRIP 244/190									
Weight: 242 lb FT = 20%									

LUMBER		FORCES		2) Wind: ASCE 7-16; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 2-8-2, Exterior(2N) 2-8-2 to 14-4-14, Corner(3R) 14-4-14 to 21-6-3, Exterior(2N) 21-6-3 to 31-10-2, Corner(3E) 31-10-2 to 35-4-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60	
TOP CHORD	2x4 SP 2400F 2.0E	TOP CHORD		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.	
BOT CHORD	2x4 SP 2400F 2.0E	BOT CHORD		4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 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	
WEBS	2x4 SP No.3	WEBS		5) Unbalanced snow loads have been considered for this design.	
OTHERS	2x4 SP No.3	NOTES		6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.	
BRACING		1) Unbalanced roof live loads have been considered for this design.			
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.				
WEBS	1 Row at midpt 12-33, 11-34, 13-31				
REACTIONS	(size)				
	23=35-6-8, 24=35-6-8, 25=35-6-8, 26=35-6-8, 27=35-6-8, 28=35-6-8, 29=35-6-8, 30=35-6-8, 31=35-6-8, 33=35-6-8, 34=35-6-8, 35=35-6-8, 36=35-6-8, 37=35-6-8, 38=35-6-8, 39=35-6-8, 40=35-6-8, 41=35-6-8, 42=35-6-8				
Max Horiz	42=214 (LC 14)				
Max Uplift	23=13 (LC 13), 24=162 (LC 15), 25=60 (LC 15), 26=78 (LC 15), 27=73 (LC 15), 28=74 (LC 15), 29=73 (LC 15), 30=82 (LC 15), 31=59 (LC 15), 34=63 (LC 14), 35=81 (LC 14), 36=73 (LC 14), 37=75 (LC 14), 38=73 (LC 14), 39=79 (LC 14), 40=53 (LC 14), 41=168 (LC 14), 42=71 (LC 15)				
Max Grav	23=120 (LC 15), 24=147 (LC 37), 25=164 (LC 22), 26=159 (LC 37), 27=161 (LC 22), 28=160 (LC 37), 29=176 (LC 22), 30=229 (LC 22), 31=243 (LC 22), 33=238 (LC 15), 34=243 (LC 21), 35=231 (LC 21), 36=182 (LC 21), 37=160 (LC 36), 38=161 (LC 21), 39=159 (LC 36), 40=164 (LC 1), 41=154 (LC 25), 42=175 (LC 27)				



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Continued on page 2

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	25 Mason Ridge - Hayden B - Roof
25100149	A07	Common Supported Gable	1	1	I77132152
					Job Reference (optional)

- 7) All plates are 2x4 MT20 unless otherwise indicated.
- 8) Gable requires continuous bottom chord bearing.
- 9) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 10) Gable studs spaced at 2-0-0 oc.
- 11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 71 lb uplift at joint 42, 63 lb uplift at joint 34, 81 lb uplift at joint 35, 73 lb uplift at joint 36, 75 lb uplift at joint 37, 73 lb uplift at joint 38, 79 lb uplift at joint 39, 53 lb uplift at joint 40, 168 lb uplift at joint 41, 59 lb uplift at joint 31, 82 lb uplift at joint 30, 73 lb uplift at joint 29, 74 lb uplift at joint 28, 73 lb uplift at joint 27, 78 lb uplift at joint 26, 60 lb uplift at joint 25, 162 lb uplift at joint 24 and 13 lb uplift at joint 23.
- 14) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

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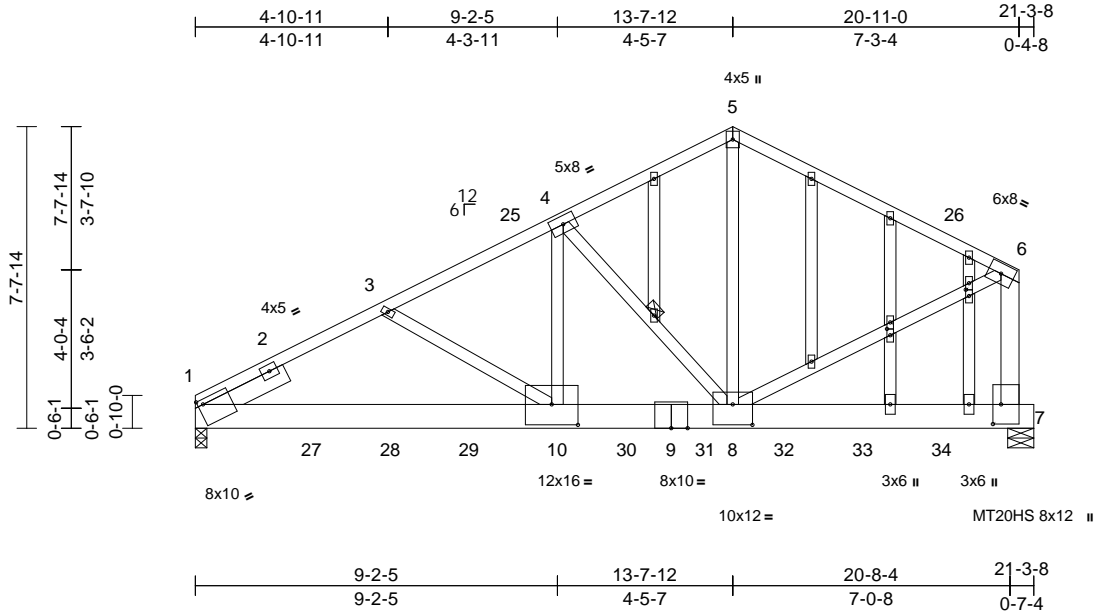
Job	Truss	Truss Type	Qty	Ply	25 Mason Ridge - Hayden B - Roof	I77132153
25100149	B01	Common Girder	1	2	Job Reference (optional)	

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

Run: 8.73 E Nov 16 2023 Print: 8.730 E Nov 16 2023 MiTek Industries, Inc. Mon Oct 20 16:40:51

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Scale = 1:58.5

Plate Offsets (X, Y): [1:0-1-10,0-1-8], [7:0-6-0,0-2-8], [8:0-6-0,0-6-4], [10:0-8-0,0-6-4], [17:0-1-15,0-1-0], [20:0-1-15,0-1-0]

Loading	(psf)	Spacing	1-11-4	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.69	Vert(LL)	-0.21	10-23	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.89	Vert(CT)	-0.39	10-23	>630	180	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	NO	WB	0.80	Horz(CT)	0.04	7	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 366 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP 2400F 2.0E
BOT CHORD	2x8 SP 2400F 2.0E
WEBS	2x4 SP No.2 *Except* 10-3-8-4:2x4 SP No.3, 7-6:2x6 SP No.2
OTHERS	2x4 SP No.3
SLIDER	Left 2x6 SP No.2 -- 2-3-2

BRACING

TOP CHORD	Structural wood sheathing directly applied or 4-9-15 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 4-8

REACTIONS

(size)	1=0-3-8, (req. 0-3-10), 7=0-8-0
Max Horiz	1=225 (LC 12)
Max Uplift	1=-1904 (LC 12), 7=-1768 (LC 12)
Max Grav	1=8763 (LC 5), 7=10367 (LC 6)

FORCES

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	1-2=-10182/2108, 2-3=-11052/2438, 3-25=-10795/2326, 4-25=-10718/2338, 4-5=-6812/1482, 5-26=-6760/1494, 6-26=-6815/1466, 6-7=-6181/1346
BOT CHORD	1-27=-2342/9921, 27-28=-2342/9921, 28-29=-2342/9921, 10-29=-2342/9921, 10-30=-2143/9601, 9-30=-2143/9601, 9-31=-2143/9601, 8-31=-2143/9601, 8-32=-80/334, 32-33=-80/334, 33-34=-80/334, 7-34=-80/334
WEBS	3-10=-410/233, 4-10=-1195/5508, 4-8=-5326/1305, 5-8=-1187/5772, 6-8=-1368/6481

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, 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 3 rows staggered at 0-8-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc, Except member 4-10 2x4 - 1 row at 0-6-0 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=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 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); Pf=20.0 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.
- All plates are MT20 plates unless otherwise indicated.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any 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.
- WARNING: Required bearing size at joint(s) 1 greater than input bearing size.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1904 lb uplift at joint 1 and 1768 lb uplift at joint 7.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



October 20,2025

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.

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	25 Mason Ridge - Hayden B - Roof
25100149	B01	Common Girder	1	2	I77132153
					Job Reference (optional)

16) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1538 lb down and 333 lb up at 1-2-0, 1538 lb down and 333 lb up at 2-11-8, 1538 lb down and 333 lb up at 4-11-8, 1538 lb down and 333 lb up at 6-11-8, 1538 lb down and 333 lb up at 8-11-8, 1538 lb down and 333 lb up at 10-11-8, 1538 lb down and 333 lb up at 12-11-8, 1538 lb down and 333 lb up at 14-11-8, 1538 lb down and 333 lb up at 16-11-8, and 1917 lb down and 165 lb up at 18-11-8, and 1923 lb down and 161 lb up at 20-8-4 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: 1-5=-58, 5-6=-58, 7-21=-19
Concentrated Loads (lb)
Vert: 10=-1407 (B), 7=-1622 (B), 23=-1407 (B), 27=-1407 (B), 28=-1407 (B), 29=-1407 (B), 30=-1407 (B), 31=-1407 (B), 32=-1407 (B), 33=-1407 (B), 34=-1616 (B)

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

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



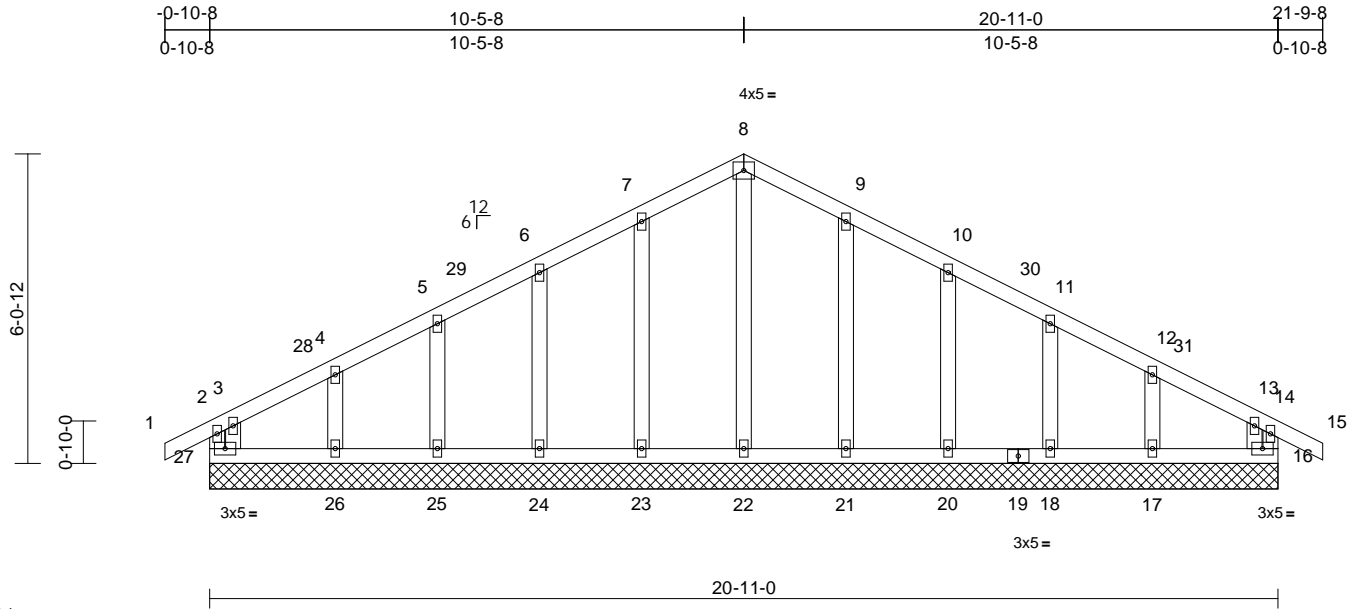
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	25 Mason Ridge - Hayden B - Roof	I77132154
25100149	C01	Common Supported Gable	1	1	Job Reference (optional)	

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

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Loading	(psf)	Spacing	1-11-4	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.11	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.04	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.00	16	n/a	n/a	
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MR							
BCDL	10.0										
Weight: 116 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) 16=20-11-0, 17=20-11-0, 18=20-11-0, 20=20-11-0, 21=20-11-0, 22=20-11-0, 23=20-11-0, 24=20-11-0, 25=20-11-0, 26=20-11-0, 27=20-11-0
Max Horiz 27=116 (LC 14)
Max Uplift 16=35 (LC 14), 17=111 (LC 15), 18=60 (LC 15), 20=76 (LC 15), 21=72 (LC 15), 23=72 (LC 14), 24=76 (LC 14), 25=57 (LC 14), 26=121 (LC 14), 27=55 (LC 15)
Max Grav 16=159 (LC 22), 17=168 (LC 37), 18=166 (LC 22), 20=222 (LC 22), 21=237 (LC 22), 22=162 (LC 28), 23=237 (LC 21), 24=222 (LC 21), 25=166 (LC 21), 26=168 (LC 36), 27=159 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-27=-89/171, 1-2=0/27, 2-3=-14/25, 3-4=-87/76, 4-5=-56/103, 5-6=-70/155, 6-7=-85/216, 7-8=-105/273, 8-9=-105/273, 9-10=-85/216, 10-11=-70/155, 11-12=-56/100, 12-13=-65/47, 13-14=-14/25, 14-15=0/27, 14-16=-89/171

BOT CHORD 26-27=-15/83, 25-26=-15/83, 24-25=-15/83, 23-24=-15/83, 22-23=-15/83, 21-22=-15/83, 20-21=-15/83, 18-20=-15/83, 17-18=-15/83, 16-17=-15/83
WEBS 8-22=-156/21, 7-23=-199/105, 6-24=-182/114, 5-25=-130/98, 4-26=-143/152, 3-27=-120/71, 9-21=-199/105, 10-20=-182/114, 11-18=-130/98, 12-17=-143/152, 13-16=-96/38

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 7-5-8, Corner(3R) 7-5-8 to 13-5-8, Exterior(2N) 13-5-8 to 18-9-8, Corner(3E) 18-9-8 to 21-9-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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); Pf=20.0 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 1.00 times flat roof load of 20.0 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 10.0 psf bottom chord live load nonconcurrent with any 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 55 lb uplift at joint 27, 35 lb uplift at joint 16, 72 lb uplift at joint 23, 76 lb uplift at joint 24, 57 lb uplift at joint 25, 121 lb uplift at joint 26, 72 lb uplift at joint 21, 76 lb uplift at joint 20, 60 lb uplift at joint 18 and 111 lb uplift at joint 17.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



October 20,2025

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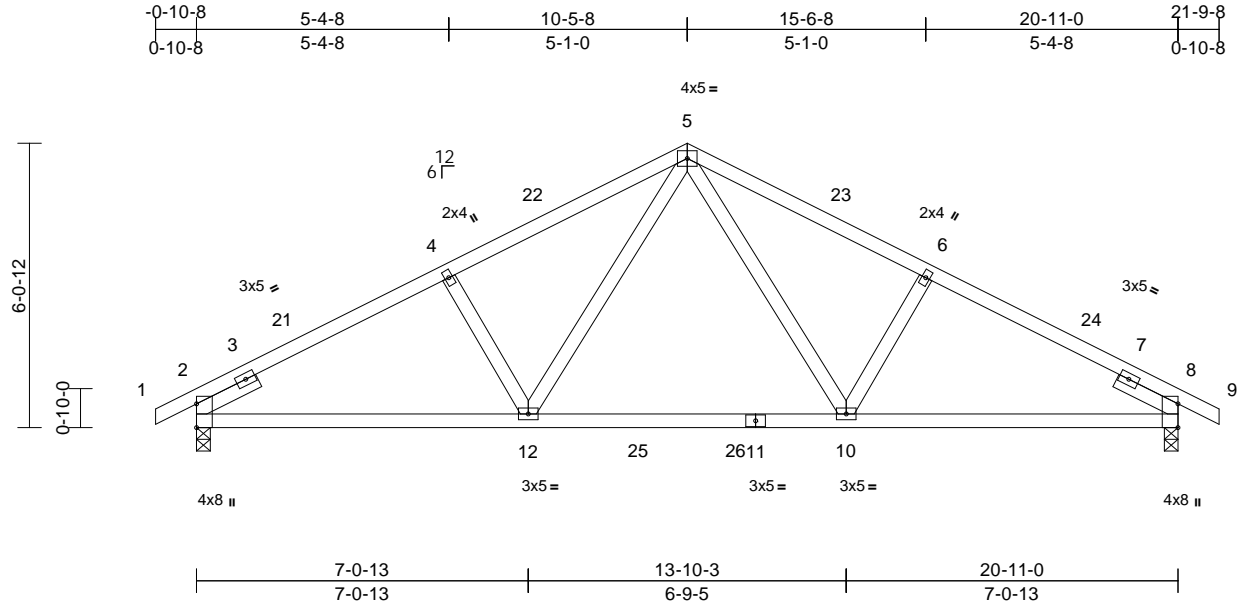
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	25 Mason Ridge - Hayden B - Roof	177132155
25100149	C02	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. Thu Oct 16 19:04:07
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Page: 1



Scale = 1:49.1									
Plate Offsets (X, Y): [8:0-0-0,0-0-0]									
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in (loc)	l/defl	L/d
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.28	Vert(LL)	-0.10 10-12	>999	240
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.34	Vert(CT)	-0.16 10-12	>999	180
TCDL	10.0	Rep Stress Incr	YES	WB	0.21	Horz(CT)	0.04 8	n/a	n/a
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH					
BCDL	10.0								
									PLATES MT20
									GRIP 244/190
									Weight: 103 lb FT = 20%

LUMBER
TOP CHORD 2x4 SP 2400F 2.0E
BOT CHORD 2x4 SP 2400F 2.0E
WEBS 2x4 SP No.3
SLIDER Left 2x4 SP No.3 -- 1-6-0, Right 2x4 SP No.3 -- 1-6-0

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) 2=0-3-8, 8=0-3-8
Max Horiz 2=120 (LC 14)
Max Uplift 2=-214 (LC 14), 8=-214 (LC 15)
Max Grav 2=979 (LC 5), 8=979 (LC 6)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/23, 2-4=-1558/433, 4-5=-1452/451, 5-6=-1452/451, 6-8=-1558/433, 8-9=0/23
BOT CHORD 2-12=-288/1319, 10-12=-111/932, 8-10=-267/1319
WEBS 5-10=-142/525, 6-10=-318/235, 5-12=-142/525, 4-12=-318/235

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 7-5-8, Exterior(2R) 7-5-8 to 13-5-8, Interior (1) 13-5-8 to 18-9-8, Exterior(2E) 18-9-8 to 21-9-8 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=1.60

- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 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 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any 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.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 8. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



October 20,2025

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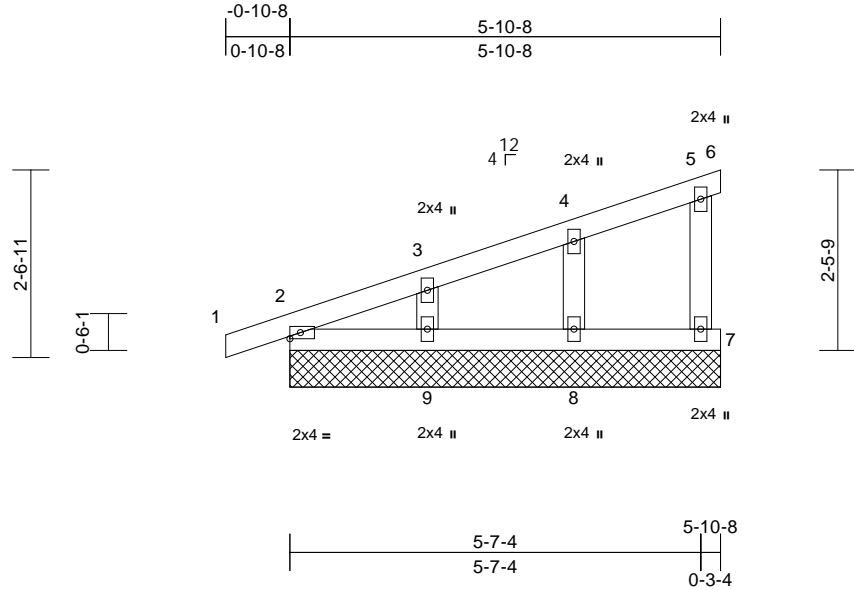
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	25 Mason Ridge - Hayden B - Roof	177132156
25100149	D01	Monopitch Supported Gable	1	1	Job Reference (optional)	

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

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Loading	(psf)	Spacing	1-11-4	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)	20.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999	244/190
TCDL	10.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	6	n/a	n/a	
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP							
BCDL	10.0										
										Weight: 25 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 5-10-8 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS	(size)	2=5-10-8, 6=5-10-8, 7=5-10-8, 8=5-10-8, 9=5-10-8
	Max Horiz	2=111 (LC 10)
	Max Uplift	2=-35 (LC 10), 6=-16 (LC 21), 7=-42 (LC 14), 8=-56 (LC 10), 9=-71 (LC 14)
	Max Grav	2=175 (LC 21), 6=8 (LC 14), 7=114 (LC 21), 8=215 (LC 21), 9=203 (LC 21)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/24, 2-3=-206/65, 3-4=-127/41, 4-5=-45/20, 5-6=-12/7, 5-7=-101/140
BOT CHORD	2-9=-80/44, 8-9=0/0, 7-8=0/0
WEBS	4-8=-175/237, 3-9=-163/234

NOTES

- Wind: ASCE 7-16; Vult=150mph (3-second gust)
Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 1-10-8, Exterior(2N) 1-10-8 to 5-10-8 zone; cantilever left and right exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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); Pf=20.0 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 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 35 lb uplift at joint 2, 16 lb uplift at joint 6, 42 lb uplift at joint 7, 56 lb uplift at joint 8, 71 lb uplift at joint 9 and 35 lb uplift at joint 2.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



October 20,2025

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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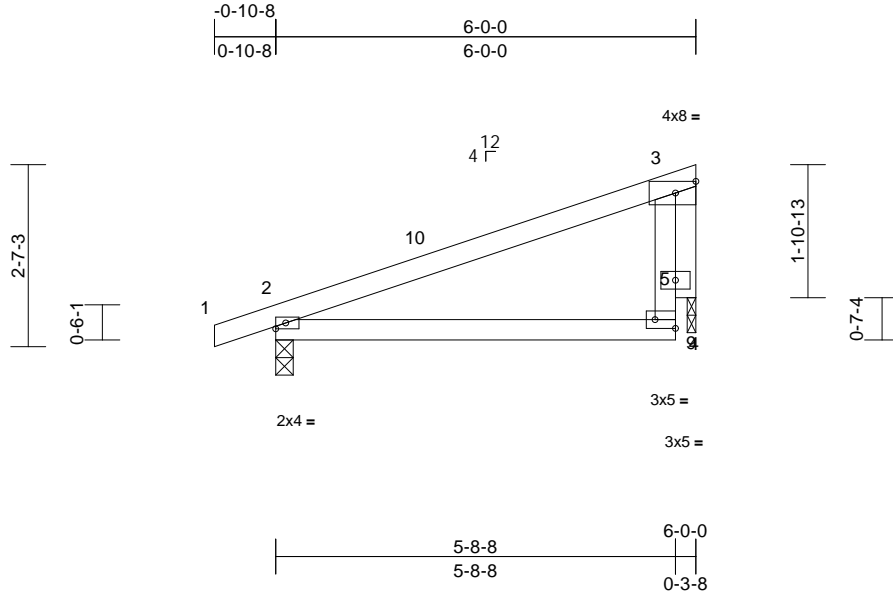
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	25 Mason Ridge - Hayden B - Roof
25100149	D02	Monopitch	9	1	177132157
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. Thu Oct 16 19:04:07
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Scale = 1:32.9

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

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)	0.05	4-8	>999	240	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	-0.05	4-8	>999	180	
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	2	n/a	n/a	
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MR							
BCDL	10.0										
Weight: 24 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) 2=0-3-0, 9=0-1-8
Max Horiz 2=110 (LC 10)
Max Uplift 2=-175 (LC 10), 9=-139 (LC 10)
Max Grav 2=406 (LC 21), 9=278 (LC 21)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/25, 2-3=-298/172, 4-5=-113/121, 3-5=-198/148
BOT CHORD 2-4=-242/221
WEBS 3-9=-130/81

NOTES

- 1) Wind: ASCE 7-16; Vult=150mph (3-second gust)
Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 5-6-12 zone; cantilever left and right exposed; end vertical left exposed; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 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 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 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) 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.
- 8) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 9.
- 9) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 9. This connection is for uplift only and does not consider lateral forces.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



October 20,2025

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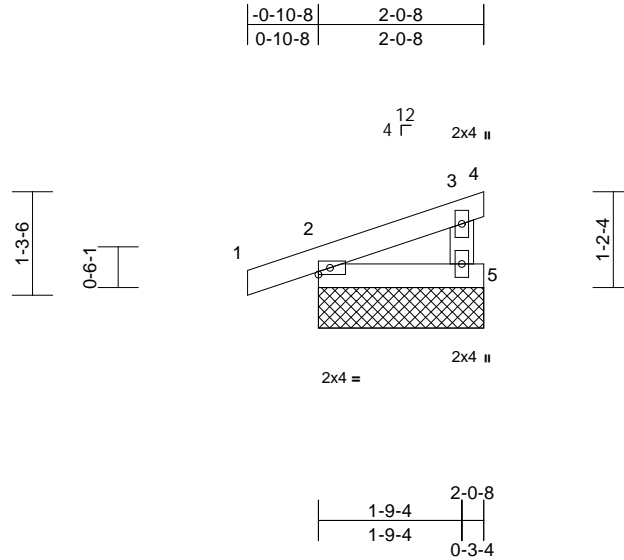
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	25 Mason Ridge - Hayden B - Roof
25100149	D03	Monopitch Supported Gable	1	1	177132158
					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. Thu Oct 16 19:04:07
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Loading	(psf)	Spacing	1-11-4	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	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 9 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 2-0-8 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(size)	2=2-0-8, 4=2-0-8, 5=2-0-8
Max Horiz	2=51 (LC 10)
Max Uplift	2=-65 (LC 10), 4=-31 (LC 21), 5=-54 (LC 14)
Max Grav	2=168 (LC 21), 4=16 (LC 14), 5=129 (LC 21)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-0/22, 2-3=-113/50, 3-4=-18/12, 3-5=-132/160
BOT CHORD	2-5=-21/26

NOTES

- 1) Wind: ASCE 7-16; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) zone; cantilever left and right exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) 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.
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 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
- 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 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 6) Gable requires continuous bottom chord bearing.
- 7) Gable studs spaced at 2-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) * 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.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 65 lb uplift at joint 2, 31 lb uplift at joint 4, 54 lb uplift at joint 5 and 65 lb uplift at joint 2.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



October 20,2025

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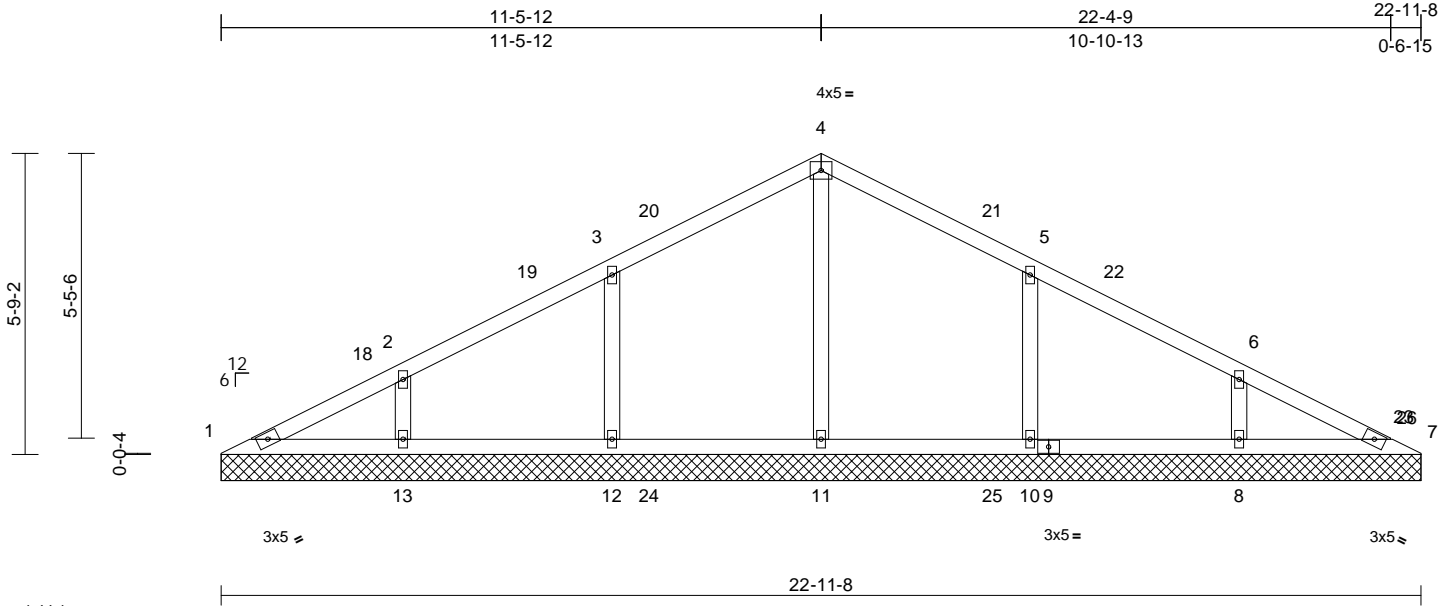
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	25 Mason Ridge - Hayden B - Roof	177132159
25100149	V01	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. Thu Oct 16 19:04:07
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Loading	(psf)	Spacing	1-11-4	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.30	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.16	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.14	Horiz(TL)	0.00	7	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH							
BCDL	10.0									Weight: 91 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=22-11-8, 7=22-11-8, 8=22-11-8,
10=22-11-8, 11=22-11-8,
12=22-11-8, 13=22-11-8
Max Horiz 1=120 (LC 14)
Max Uplift 1=-20 (LC 15), 8=-130 (LC 15),
10=-160 (LC 15), 12=-160 (LC 14),
13=-134 (LC 14)
Max Grav 1=101 (LC 20), 7=71 (LC 21),
8=326 (LC 3), 10=456 (LC 6),
11=404 (LC 5), 12=456 (LC 5),
13=329 (LC 3)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-156/101, 2-3=-54/122, 3-4=-80/157,
4-5=-81/146, 5-6=-36/89, 6-7=-121/87
BOT CHORD 1-13=-48/145, 12-13=-48/97, 11-12=-48/97,
10-11=-48/97, 8-10=-48/97, 7-8=-48/108
WEBS 4-11=-238/26, 3-12=-378/209,
2-13=-249/166, 5-10=-379/210, 6-8=-247/164

NOTES

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

- Wind: ASCE 7-16; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-8 to 3-0-8, Interior (1) 3-0-8 to 8-6-4, Exterior(2R) 8-6-4 to 14-6-4, Interior (1) 14-6-4 to 19-5-1, Exterior(2E) 19-5-1 to 22-5-1 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=1.60
- 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); Pf=20.0 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.
- 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 10.0 psf bottom chord live load nonconcurrent with any 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 20 lb uplift at joint 1, 160 lb uplift at joint 12, 134 lb uplift at joint 13, 160 lb uplift at joint 10 and 130 lb uplift at joint 8.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



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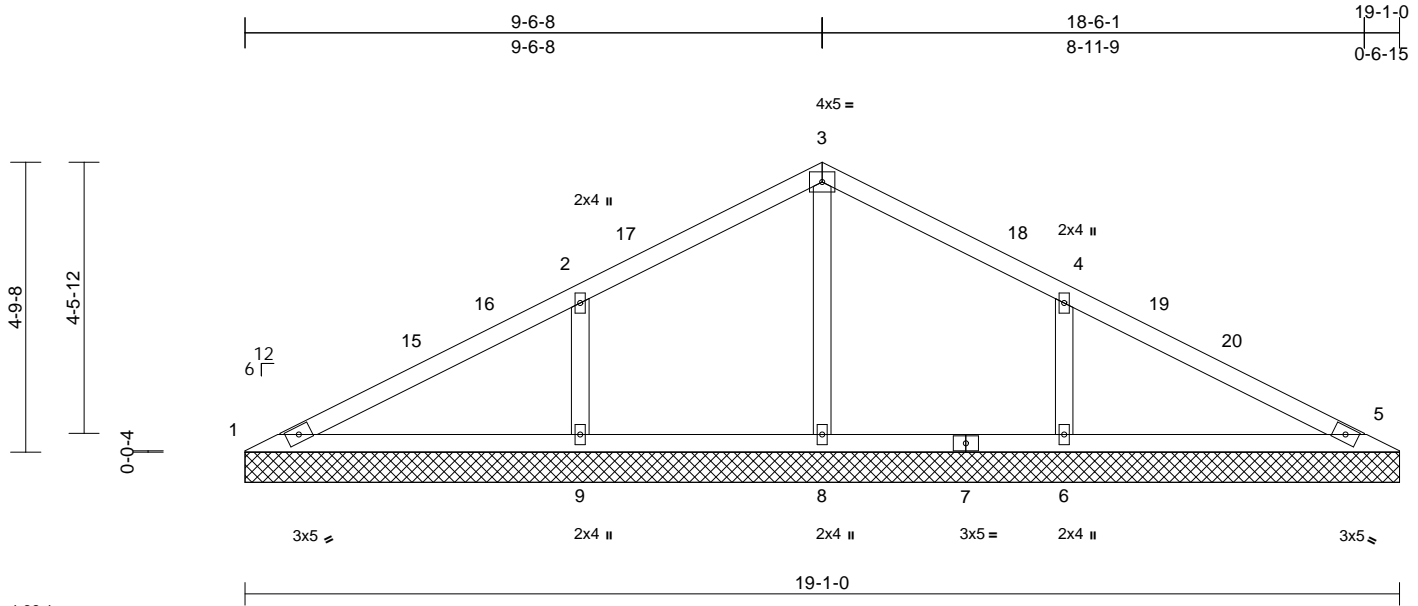
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	25 Mason Ridge - Hayden B - Roof	177132160
25100149	V02	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. Thu Oct 16 19:04:07
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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	0.49	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.26	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.21	Horiz(TL)	-0.01	5	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH							
BCDL	10.0									Weight: 71 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.

REACTIONS

(size) 1=19-1-0, 5=19-1-0, 6=19-1-0,
8=19-1-0, 9=19-1-0
Max Horiz 1=102 (LC 14)
Max Uplift 1=-45 (LC 36), 6=-209 (LC 15),
9=-217 (LC 14)
Max Grav 1=109 (LC 35), 5=1 (LC 1), 6=578
(LC 21), 8=565 (LC 21), 9=586 (LC 20)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-146/427, 2-3=0/391, 3-4=0/411,
4-5=-203/439
BOT CHORD 1-9=-344/159, 8-9=-344/159, 6-8=-344/159,
5-6=-344/159
WEBS 3-8=-515/129, 2-9=-447/249, 4-6=-444/249

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=150mph (3-second gust)
Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-8 to 3-0-8, Interior (1) 3-0-8 to 6-7-0, Exterior(2R) 6-7-0 to 12-7-0, Interior (1) 12-7-0 to 16-1-8, Exterior(2E) 16-1-8 to 19-1-8 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=1.60

- 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); Pf=20.0 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 10.0 psf bottom chord live load nonconcurrent with any 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 45 lb uplift at joint 1, 217 lb uplift at joint 9 and 209 lb uplift at joint 6.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



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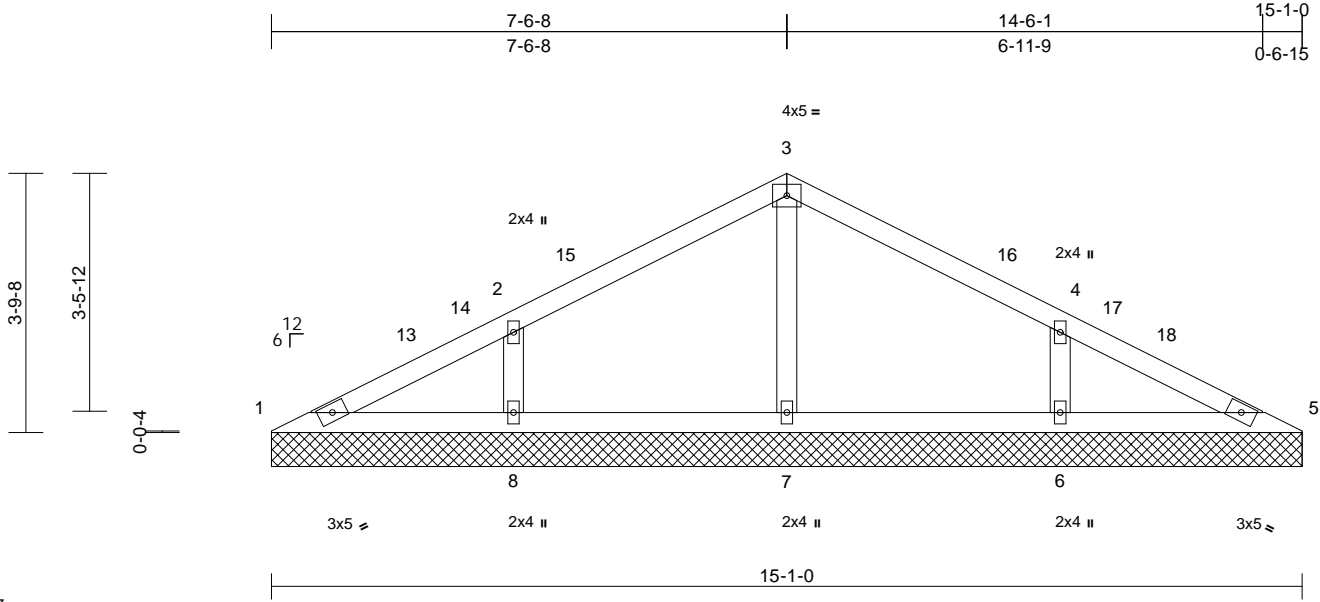
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	25 Mason Ridge - Hayden B - Roof	177132161
25100149	V03	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. Thu Oct 16 19:04:08
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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	0.31	Vert(LL)	n/a	-	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.11	Vert(TL)	n/a	-	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.08	Horiz(TL)	0.00	5	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH							
BCDL	10.0									Weight: 54 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=15-1-0, 5=15-1-0, 6=15-1-0, 7=15-1-0, 8=15-1-0
Max Horiz	1=77 (LC 14)
Max Uplift	1=-19 (LC 15), 5=-16 (LC 15), 6=-163 (LC 15), 7=-5 (LC 14), 8=-164 (LC 14)
Max Grav	1=93 (LC 35), 5=93 (LC 36), 6=481 (LC 21), 7=336 (LC 21), 8=481 (LC 20)

FORCES

(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=-127/107, 2-3=-67/122, 3-4=-67/108, 4-5=-127/107
BOT CHORD	1-8=-61/111, 7-8=-61/75, 6-7=-61/75, 5-6=-61/105
WEBS	3-7=-260/120, 2-8=-390/244, 4-6=-390/244

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-8 to 3-0-8, Interior (1) 3-0-8 to 4-7-0, Exterior(2R) 4-7-0 to 10-7-0, Interior (1) 10-7-0 to 12-1-8, Exterior(2E) 12-1-8 to 15-1-8 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=1.60

- 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); Pf=20.0 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 10.0 psf bottom chord live load nonconcurrent with any 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 19 lb uplift at joint 1, 16 lb uplift at joint 5, 5 lb uplift at joint 7, 164 lb uplift at joint 8 and 163 lb uplift at joint 6.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



October 20,2025

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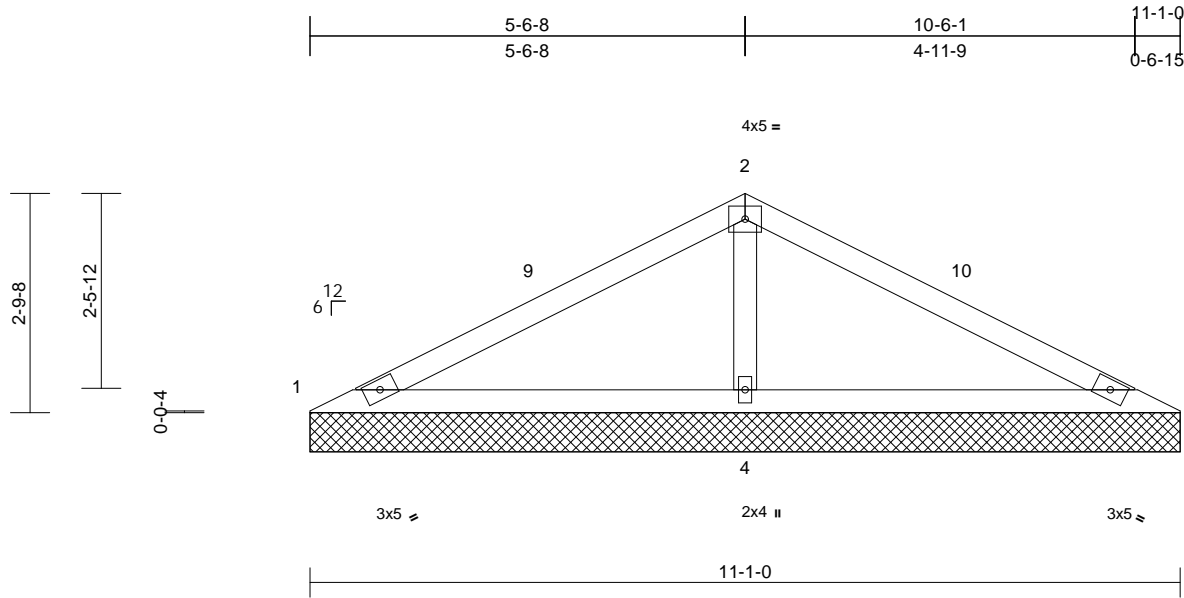
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	25 Mason Ridge - Hayden B - Roof	177132162
25100149	V04	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. Thu Oct 16 19:04:08
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Scale = 1:29.3

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	0.54	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.50	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.15	Horiz(TL)	0.00	4	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH							
BCDL	10.0									Weight: 36 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.

REACTIONS

(size)	1=11-1-0, 3=11-1-0, 4=11-1-0
Max Horiz	1=55 (LC 14)
Max Uplift	1=-50 (LC 21), 3=-50 (LC 20), 4=-176 (LC 14)
Max Grav	1=126 (LC 20), 3=126 (LC 21), 4=852 (LC 21)

FORCES

(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=-250/488, 2-3=-250/488
BOT CHORD	1-4=-399/318, 3-4=-399/318
WEBS	2-4=-705/505

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-8 to 3-0-8, Exterior(2R) 3-0-8 to 8-1-8, Exterior(2E) 8-1-8 to 11-1-8 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=1.60
- 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); Pf=20.0 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 10.0 psf bottom chord live load nonconcurrent with any 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 50 lb uplift at joint 1, 50 lb uplift at joint 3 and 176 lb uplift at joint 4.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



October 20,2025

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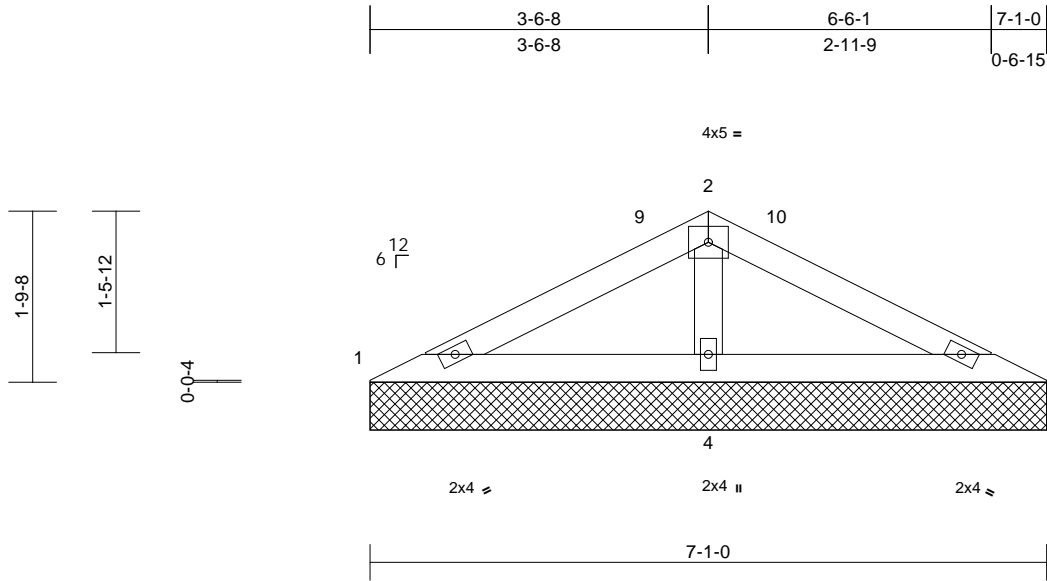
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	25 Mason Ridge - Hayden B - Roof	177132163
25100149	V05	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. Thu Oct 16 19:04:08
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Scale = 1:24.1

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	Vert(LL)	n/a	-	n/a	999	MT20
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.22	Vert(TL)	n/a	-	n/a	999	244/190
TCDL	10.0	Rep Stress Incr	YES	WB	0.08	Horiz(TL)	0.00	4	n/a	n/a	
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP							
BCDL	10.0										
Weight: 22 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 7-1-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS

(size) 1=7-1-0, 3=7-1-0, 4=7-1-0
Max Horiz 1=-34 (LC 15)
Max Uplift 1=-19 (LC 14), 3=-27 (LC 15),
4=-93 (LC 14)
Max Grav 1=109 (LC 20), 3=109 (LC 21),
4=458 (LC 21)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-125/229, 2-3=-125/229
BOT CHORD 1-4=-210/191, 3-4=-210/191
WEBS 2-4=-357/266

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-8 to 3-0-8, Exterior(2R) 3-0-8 to 4-1-8, Exterior(2E) 4-1-8 to 7-1-8 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=1.60
- 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); Pf=20.0 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 10.0 psf bottom chord live load nonconcurrent with any 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 19 lb uplift at joint 1, 27 lb uplift at joint 3 and 93 lb uplift at joint 4.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



October 20,2025

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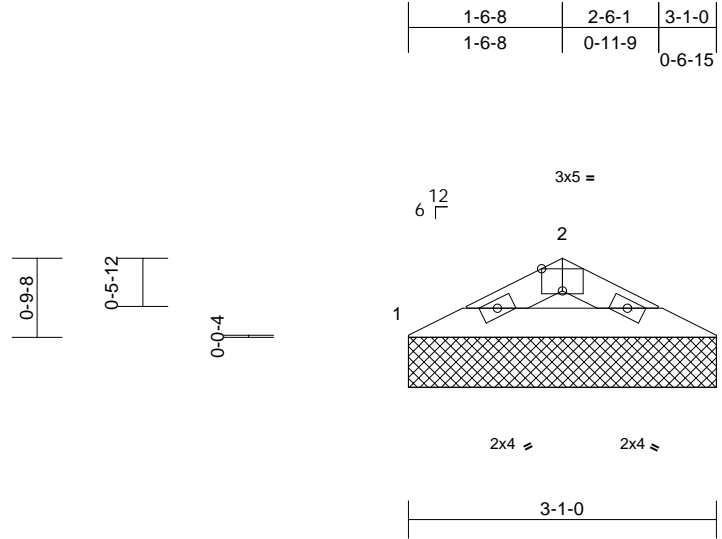
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	25 Mason Ridge - Hayden B - Roof	177132164
25100149	V06	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. Thu Oct 16 19:04:08
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Page: 1



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)	20.0	Lumber DOL	1.15	BC	0.09	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2018/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 3-1-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(size) 1=3-1-0, 3=3-1-0
Max Horiz 1=13 (LC 14)
Max Uplift 1=-29 (LC 14), 3=-29 (LC 15)
Max Grav 1=136 (LC 20), 3=136 (LC 21)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-236/148, 2-3=-236/148
BOT CHORD 1-3=-115/202

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone 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=1.60
- 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); Pf=20.0 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 10.0 psf bottom chord live load nonconcurrent with any 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 29 lb uplift at joint 1 and 29 lb uplift at joint 3.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



October 20,2025

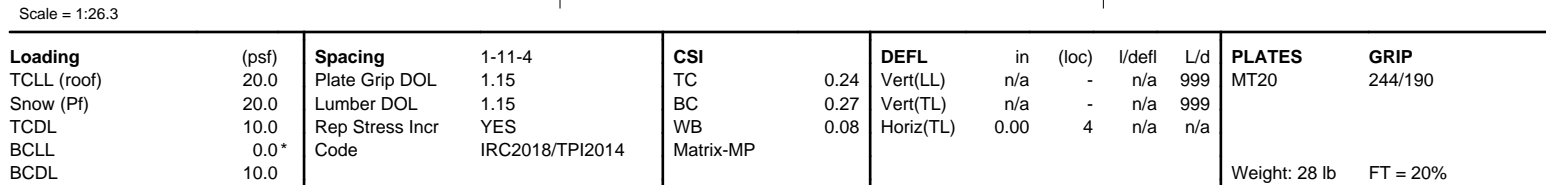
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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Edenton, NC 27932

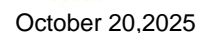
Carter Components (Sanford, NC), Sanford, NC - 27332, Run: 8.73 S Aug 13 2025 Print: 8.730 S Aug 13 2025 MiTek Industries, Inc. Thu Oct 16 19:04:08 Page: 1
ID:dpjoZ7HsHGKqZgcCIBKjXhz70b6-RfC?PsB70Hq3NSgPqnL8w3uITxbGKWRcD0J74zJC?f



NOTES

- 1) Wind: ASCE 7-16; Vult=150mph (3-second gust)
Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; and vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grfp DOL=1.60
- 2) 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.
- 3) TCELL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 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

- 4) Unbalanced snow loads have been considered for this design.
 - 5) Gable requires continuous bottom chord bearing.
 - 6) Gable studs spaced at 2'-0" oc.
 - 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 8) * This truss has been designed for a live load of 20.0 psf on the bottom chord in all areas where a rectangle 3'-0" x 6'-0" tall by 2'-0" x 0'-0" wide will fit between the bottom chord and any other members.
 - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 25 lb uplift at joint 4, 13 lb uplift at joint 1 and 144 lb uplift at joint 5.
 - 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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

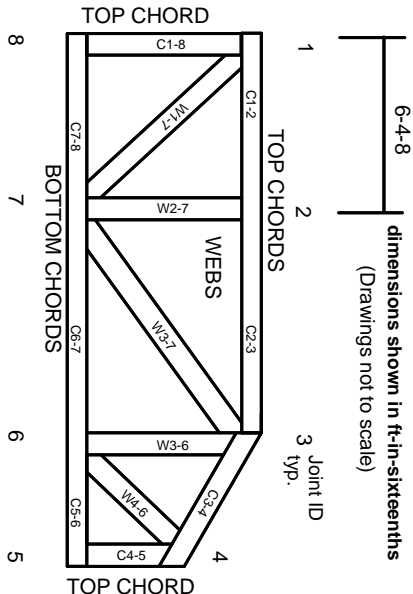


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

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

Numbering System



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

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

Product Code Approvals

ICC-ES Reports:

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

Design General Notes

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

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

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General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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

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