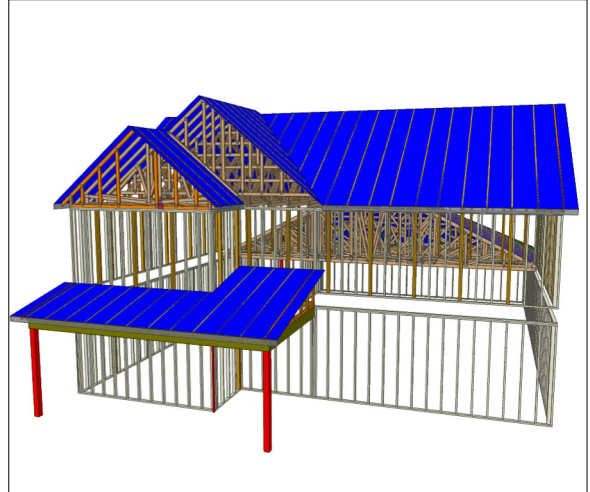




Carter Sanford Component Plant  
298 Harvey Faulk Rd  
Sanford, NC 27332

Phone #:919-775-1450

**Builder: DR Horton Inc**  
**Model: 23 Eagle Creek -**  
**Hartwell - C**



**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.

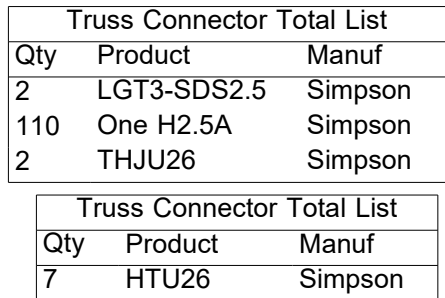
**Approved By:** \_\_\_\_\_

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

REFER TO FINAL TRUSS ENGINEERING SHEETS FOR PLY TO PLY CONNECTIONS

TRUSS TO TRUSS CONNECTIONS ARE TOE-NAILED, UNLESS NOTED OTHERWISE

ALL BEARING POINTS MUST BE INSTALLED PRIOR TO SETTING ANY COMPONENTS



1, all uplift connectors are the responsibility of the bldg designer and or contractor.

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

RE: 25100186  
23 Eagle Creek - Hartwell C - Roof

Trenco  
818 Soundside Rd  
Edenton, NC 27932

**Site Information:**

Customer: DR Horton Inc Project Name: 25100186  
Lot/Block: 23 Model: Hartwell C  
Address: Subdivision: Eagle Creek  
City: State:

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

Design Code: IRC2021/TPI2014 Design Program: MiTek 20/20 8.7  
Wind Code: ASCE 7-16 Wind Speed: 130 mph  
Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 37 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I75829974	A01	8/25/2025	21	I75829994	C06	8/25/2025
2	I75829975	A02	8/25/2025	22	I75829995	C07	8/25/2025
3	I75829976	A03	8/25/2025	23	I75829996	C08	8/25/2025
4	I75829977	A04	8/25/2025	24	I75829997	C09	8/25/2025
5	I75829978	A05	8/25/2025	25	I75829998	C10	8/25/2025
6	I75829979	A06	8/25/2025	26	I75829999	C13	8/25/2025
7	I75829980	A07	8/25/2025	27	I75830000	D01	8/25/2025
8	I75829981	A08	8/25/2025	28	I75830001	D02	8/25/2025
9	I75829982	A09	8/25/2025	29	I75830002	D03	8/25/2025
10	I75829983	B01	8/25/2025	30	I75830003	PB01	8/25/2025
11	I75829984	B02	8/25/2025	31	I75830004	V01	8/25/2025
12	I75829985	B03	8/25/2025	32	I75830005	V02	8/25/2025
13	I75829986	B04	8/25/2025	33	I75830006	V03	8/25/2025
14	I75829987	B05	8/25/2025	34	I75830007	V04	8/25/2025
15	I75829988	B06	8/25/2025	35	I75830008	V05	8/25/2025
16	I75829989	B07	8/25/2025	36	I75830009	V06	8/25/2025
17	I75829990	C01	8/25/2025	37	I75830010	V07	8/25/2025
18	I75829991	C02	8/25/2025				
19	I75829992	C03	8/25/2025				
20	I75829993	C04	8/25/2025				

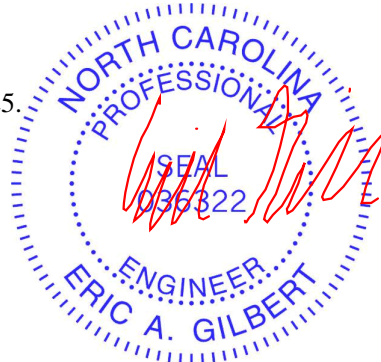
The truss drawing(s) referenced above have been prepared by  
Truss Engineering Co. under my direct supervision  
based on the parameters provided by Carter Components (Sanford, NC)).

Truss Design Engineer's Name: Gilbert, Eric

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.



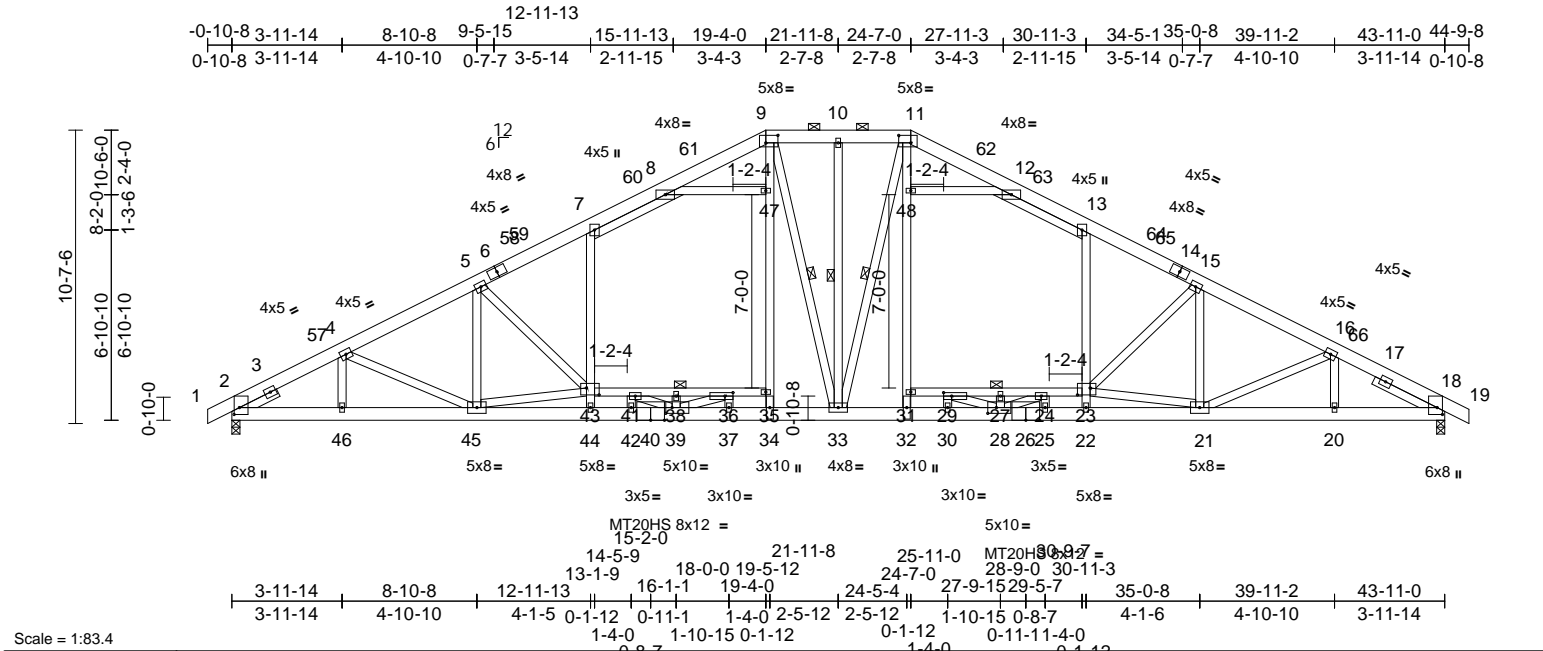
Job	Truss	Truss Type	Qty	Ply	23 Eagle Creek - Hartwell C - Roof	175829974
25100186	A01	Piggyback Base	2	1	Job Reference (optional)	

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

Run: 8.73 E May 9 2024 Print: 8.730 E May 9 2024 MiTek Industries, Inc. Mon Aug 25 11:12:10

Page: 1

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[2:0-3-0,0-2-5], [9:0-5-4,0-3-4], [11:0-5-4,0-3-4], [18:0-3-0,0-2-5], [23:0-5-8,0-3-0], [28:0-3-12,0-2-8], [29:0-3-8,0-1-8], [36:0-3-8,0-1-8], [39:0-2-12,0-2-8],  
Plate Offsets (X, Y): [43:0-5-8,0-3-0]

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	0.30	Vert(LL)	-0.30	43	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.83	Vert(CT)	-0.50	43	>999	180	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	YES	WB	0.96	Horz(CT)	0.11	18	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 432 lb	FT = 20%

<b>LUMBER</b>		<b>BOT CHORD</b>		2-46=-194/3759, 45-46=-194/3759, 44-45=-427/5794, 42-44=-439/5883, 39-42=-439/5883, 37-39=0/2908, 34-37=0/2908, 33-34=0/3180, 32-33=0/3181, 30-32=0/2908, 28-30=0/2908, 25-28=-298/5885, 22-25=-298/5885, 21-22=-286/5796, 20-21=-110/3788, 18-20=-110/3788, 41-43=-2644/509, 38-41=-1493/127, 36-38=-1493/127, 35-36=-42/331, 29-31=-38/331, 27-29=-1492/136, 24-27=-1492/136, 23-24=-2646/530		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) exterior zone and C-C Exterior(2E) -0-10-8 to 3-6-3, Interior (1) 3-6-3 to 14-11-5, Exterior(2R) 14-11-5 to 28-11-11, Interior (1) 28-11-11 to 40-4-13, Exterior(2E) 40-4-13 to 44-9-8 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	
TOP CHORD		2x6 SP 2400F 2.0E *Except* 7-8,12-13:2x4 SP No.2		44-45=-427/5794, 42-44=-439/5883, 39-42=-439/5883, 37-39=0/2908, 34-37=0/2908, 33-34=0/3180, 32-33=0/3181, 30-32=0/2908, 28-30=0/2908, 25-28=-298/5885, 22-25=-298/5885, 21-22=-286/5796, 20-21=-110/3788, 18-20=-110/3788, 41-43=-2644/509, 38-41=-1493/127, 36-38=-1493/127, 35-36=-42/331, 29-31=-38/331, 27-29=-1492/136, 24-27=-1492/136, 23-24=-2646/530		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		2x6 SP 2400F 2.0E *Except* 43-35,31-23:2x4 SP No.2		34-35=-60/1446, 35-47=-51/1488, 9-47=-53/1505, 31-32=-60/1446, 31-48=-51/1488, 11-48=-52/1505, 5-45=-93/617, 43-44=-534/233, 7-43=-83/268, 22-23=-531/232, 13-23=-84/267, 15-21=-96/617, 8-47=-278/27, 12-48=-278/26, 38-39=-116/0, 27-28=-116/0, 41-42=-190/505, 36-37=-844/53, 24-25=-194/506, 29-30=-844/55, 10-33=-48/306, 11-33=-704/171, 9-33=-703/173, 4-45=0/438, 4-46=-215/68, 16-21=0/404, 16-20=-149/66, 43-45=-1697/315, 5-43=-1219/259, 21-23=-1702/336, 15-23=-1214/259, 39-41=-1281/425, 36-39=-183/1974, 28-29=-189/1973, 24-28=-1284/438		4) Unbalanced snow loads have been considered for this design.	
WEBS		2x4 SP No.3 *Except* 34-9,32-11,33-10:2x4 SP No.2		34-35=-60/1446, 35-47=-51/1488, 9-47=-53/1505, 31-32=-60/1446, 31-48=-51/1488, 11-48=-52/1505, 5-45=-93/617, 43-44=-534/233, 7-43=-83/268, 22-23=-531/232, 13-23=-84/267, 15-21=-96/617, 8-47=-278/27, 12-48=-278/26, 38-39=-116/0, 27-28=-116/0, 41-42=-190/505, 36-37=-844/53, 24-25=-194/506, 29-30=-844/55, 10-33=-48/306, 11-33=-704/171, 9-33=-703/173, 4-45=0/438, 4-46=-215/68, 16-21=0/404, 16-20=-149/66, 43-45=-1697/315, 5-43=-1219/259, 21-23=-1702/336, 15-23=-1214/259, 39-41=-1281/425, 36-39=-183/1974, 28-29=-189/1973, 24-28=-1284/438		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.	
SLIDER		Left 2x4 SP No.3 -- 1-6-0, Right 2x4 SP No.3 -- 2-6-0		8-47=-278/27, 12-48=-278/26, 38-39=-116/0, 27-28=-116/0, 41-42=-190/505, 36-37=-844/53, 24-25=-194/506, 29-30=-844/55, 10-33=-48/306, 11-33=-704/171, 9-33=-703/173, 4-45=0/438, 4-46=-215/68, 16-21=0/404, 16-20=-149/66, 43-45=-1697/315, 5-43=-1219/259, 21-23=-1702/336, 15-23=-1214/259, 39-41=-1281/425, 36-39=-183/1974, 28-29=-189/1973, 24-28=-1284/438		6) Provide adequate drainage to prevent water ponding.	
<b>BRACING</b>		<b>TOP CHORD</b>		Structural wood sheathing directly applied or 4-8-15 oc purlins, except 2-0-0 oc purlins (5-8-8 max.): 9-11.		7) All plates are MT20 plates unless otherwise indicated.	
<b>BOT CHORD</b>		Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 3-7-4 oc bracing: 41-43,23-24 4-9-6 oc bracing: 38-41,24-27 4-9-11 oc bracing: 36-38,27-29.		<b>WEBS</b>			
<b>REACTIONS</b>		(lb/size) 2=1936/0-3-8, 18=1936/0-3-8 Max Horiz 2=-161 (LC 19) Max Uplift 2=-92 (LC 14), 18=-92 (LC 15) Max Grav 2=2453 (LC 47), 18=2453 (LC 47)		1 Row at midpt 10-33, 11-33, 9-33			
<b>FORCES</b>		(lb) - Maximum Compression/Maximum Tension		<b>TOP CHORD</b>			
<b>TOP CHORD</b>		1-2=0/27, 2-4=-4370/208, 4-5=-4662/245, 5-7=-3859/206, 7-8=-3694/278, 8-9=-3371/285, 9-10=-3124/304, 10-11=-3124/304, 11-12=-3371/285, 12-13=-3695/278, 13-15=-3859/206, 15-16=-4659/245, 16-18=-4401/210, 18-19=0/27					

NOTES

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



August 25,2025

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.sbcacomponents.com)



818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	23 Eagle Creek - Hartwell C - Roof
25100186	A01	Piggyback Base	2	1	Job Reference (optional)

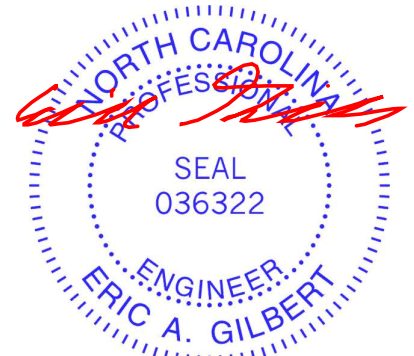
Carter Components (Sanford, NC), Sanford, NC - 27332,

Run: 8.73 E May 9 2024 Print: 8.730 E May 9 2024 MiTek Industries, Inc. Mon Aug 25 11:12:10  
ID:ybxQ5SPAUGgEKRmJ6l6hZzuPcy-6P2uM3rb07PiZX8lZoNU6mvmqO59l0BvAAxMQyL0r

Page: 2

- 8) All plates are 2x4 MT20 unless otherwise indicated.
- 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) \* 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.
- 11) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 18. This connection is for uplift only and does not consider lateral forces.
- 12) 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.
- 13) 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



August 25, 2025

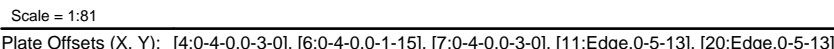
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.**

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

ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

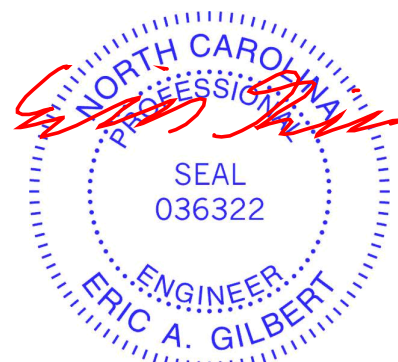
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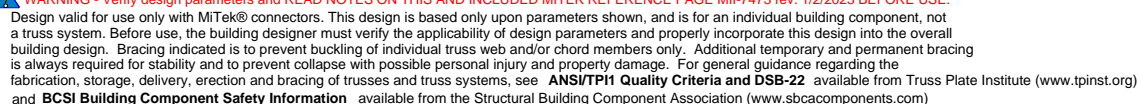
<b>LUMBER</b>					2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCdL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed: MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 3-6-3, Interior (1) 3-6-3 to 13-9-0, Exterior(2R) 13-9-0 to 30-2-0, Interior (1) 30-2-0 to 40-4-13, Exterior(2E) 40-4-13 to 44-9-8 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
TOP CHORD	2x4 SP 2400F 2.0E				
BOT CHORD	2x4 SP 2400F 2.0E				
WEBS	2x4 SP No.3 *Except*				
	16-5,16-6,15-6,20-2,19-2,11-9,12-9:2x4 SP No.2				
<b>BRACING</b>					
TOP CHORD	Structural wood sheathing directly applied or 4-0-8 oc purlins, except end verticals, and 2-0-0 oc purlins (5-2-0 max.): 5-6.				
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.				
WEBS	1 Row at midpt      4-16, 6-16, 7-15				
<b>REACTIONS</b>	(size)	11=0-3-8, 20=0-3-8			
	Max Horiz	20=146 (LC 14)			
	Max Uplift	11=-191 (LC 15), 20=-191 (LC 14)			
	Max Grav	11=2112 (LC 47), 20=2111 (LC 47)			
<b>FORCES</b>	(lb) - Maximum Compression/Maximum Tension				
TOP CHORD	1-2=0/27, 2-3=-3883/300, 3-5=-3579/357, 5-6=-2527/358, 6-8=-3583/357, 8-9=-3884/302, 9-10=0/27, 2-20=-2210/254, 9-11=-2212/253				
BOT CHORD	19-20=-256/730, 18-19=-321/3397, 16-18=-205/3106, 15-16=-14/2439, 13-15=-91/3109, 12-13=-175/3397, 11-12=-120/720				
WEBS	4-16=-949/216, 5-16=-56/903, 6-16=-251/259, 6-15=-91/911, 7-15=-953/216, 2-19=-91/2678, 9-12=-78/2689, 3-19=-99/112, 3-18=-369/136, 4-18=0/471, 7-13=0/473, 8-13=-366/136, 8-12=-100/111				
					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) Provide adequate drainage to prevent water ponding.
					7) All plates are MT20 plates unless otherwise indicated.
					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, with BCDL = 10.0psf.
					10) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 20 and 11. 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

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

## LOAD CASE(S) Standard



August 25, 2025



818 Soundside Road  
Edenton, NC 27932

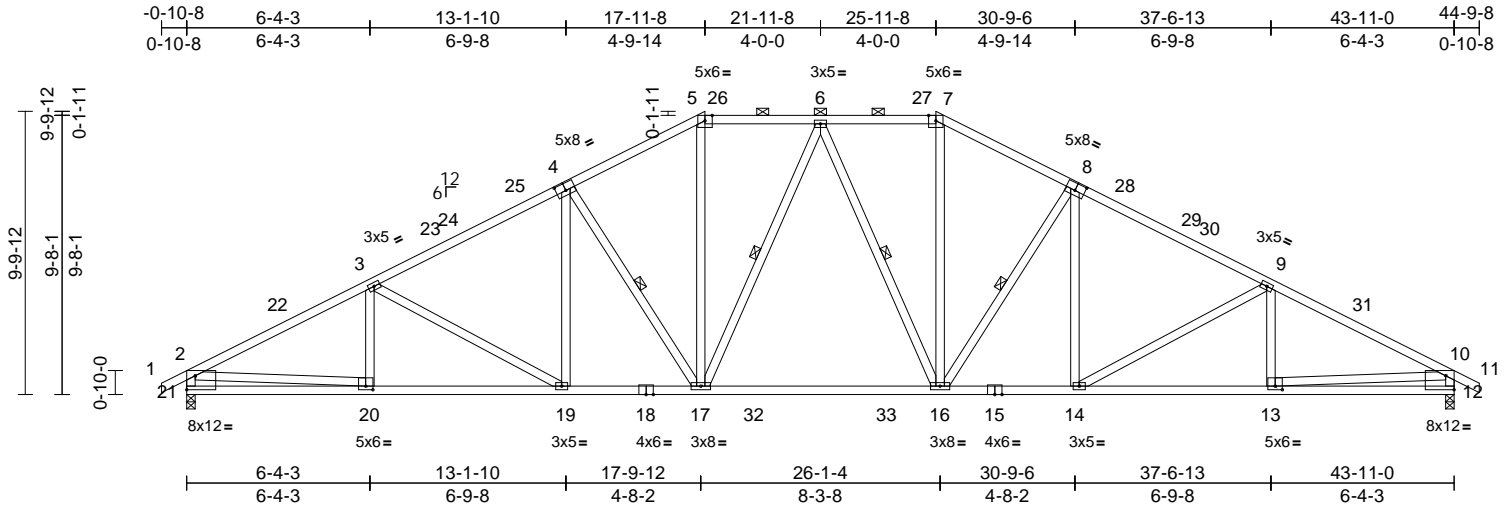
Job	Truss	Truss Type	Qty	Ply	23 Eagle Creek - Hartwell C - Roof	I75829976
25100186	A03	Hip	1	1	Job Reference (optional)	

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 Aug 21 14:39:54

Page: 1

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Scale = 1:79.8

Plate Offsets (X, Y): [4:0-4-0,0-3-0], [8:0-4-0,0-3-0], [12:Edge,0-5-13], [13:0-3-0,0-1-8], [20:0-3-0,0-1-8], [21:Edge,0-5-13]

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	0.87	Vert(LL)	-0.27	16-17	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.44	Vert(CT)	-0.47	16-17	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	1.00	Horz(CT)	0.10	12	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 293 lb	FT = 20%

#### LUMBER

TOP CHORD 2x4 SP 2400F 2.0E  
BOT CHORD 2x4 SP 2400F 2.0E  
WEBS 2x4 SP No.3

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 4-1-12 oc purlins, except end verticals, and 2-0-0 oc purlins (5-2-8 max.): 5-7.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

WEBS 1 Row at midpt 4-17, 8-16, 6-17, 6-16

**REACTIONS** (size) 12=0-3-8, 21=0-3-8  
Max Horiz 21=-129 (LC 15)  
Max Uplift 12=-194 (LC 15), 21=-194 (LC 14)  
Max Grav 12=2037 (LC 47), 21=2037 (LC 47)

#### FORCES

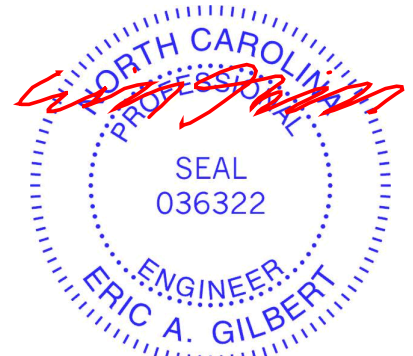
(lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=0/27, 2-3=-3760/320, 3-5=-3398/383, 5-6=-2568/367, 6-7=-2568/367, 7-9=-3397/383, 9-10=-3758/323, 10-11=0/27, 2-21=-2147/261, 10-12=-2147/261  
BOT CHORD 20-21=-221/643, 19-20=-317/3295, 17-19=-192/2936, 16-17=-61/2534, 14-16=-109/2936, 13-14=-188/3294, 12-13=-101/632  
WEBS 4-17=-773/195, 5-17=-78/1034, 7-16=-78/1034, 8-16=-773/195, 2-20=-128/2664, 10-13=-114/2674, 4-19=-9/365, 8-14=-9/365, 6-17=-338/138, 6-16=-338/138, 3-19=-414/143, 3-20=-99/122, 9-14=-413/142, 9-13=-99/122

#### 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) exterior zone and C-C Exterior(2E) -0-10-8 to 3-6-3, Interior (1) 3-6-3 to 11-9-0, Exterior(2R) 11-9-0 to 32-2-0, Interior (1) 32-2-0 to 40-4-13, Exterior(2E) 40-4-13 to 44-9-8 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
- 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) Provide adequate drainage to prevent water ponding.
- 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 20.0psf 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.
- 9) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 21 and 12. This connection is for uplift only and does not consider lateral forces.
- 10) 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



August 25, 2025

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

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

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Edenton, NC 27932

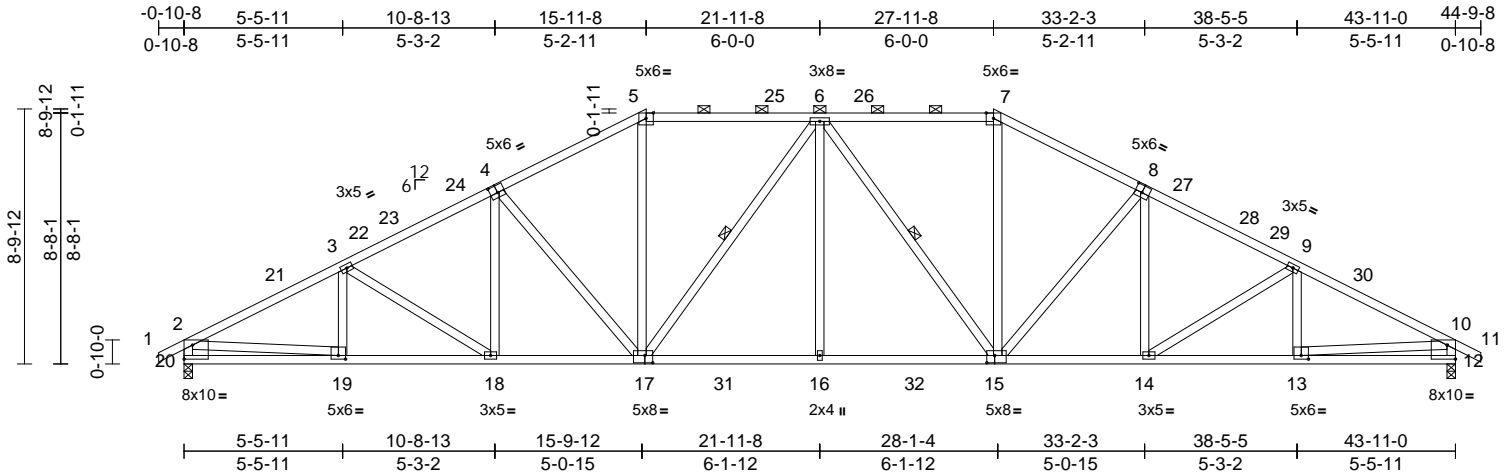
Job	Truss	Truss Type	Qty	Ply	23 Eagle Creek - Hartwell C - Roof	175829977
25100186	A04	Hip	1	1	Job Reference (optional)	

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 Aug 21 14:39:54

Page: 1

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Scale = 1:79.6

Plate Offsets (X, Y): [4:0-3-0,0-3-0], [8:0-3-0,0-3-0], [12:Edge,0-5-13], [13:0-3-0,0-1-8], [15:0-3-4,0-3-0], [17:0-3-4,0-3-0], [19:0-3-0,0-1-8], [20:Edge,0-5-13]

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)	-0.18	15-16	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.34	Vert(CT)	-0.33	15-16	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.99	Horz(CT)	0.11	12	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 287 lb	FT = 20%

#### LUMBER

TOP CHORD 2x4 SP 2400F 2.0E  
BOT CHORD 2x4 SP 2400F 2.0E  
WEBS 2x4 SP No.3 \*Except\* 20-2:2x4 SP No.2

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 4-2-13 oc purlins, except end verticals, and 2-0-0 oc purlins (4-11-14 max.): 5-7.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

WEBS 1 Row at midpt 6-17, 6-15

REACTIONS (size) 12=0-3-8, 20=0-3-8  
Max Horiz 20=-117 (LC 12)  
Max Uplift 12=-198 (LC 15), 20=-198 (LC 14)  
Max Grav 12=2009 (LC 47), 20=2009 (LC 47)

#### FORCES

(lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=0/27, 2-3=-3645/334, 3-5=-3486/396, 5-6=-2659/384, 6-7=-2659/385, 7-9=-3485/396, 9-10=-3643/337, 10-11=0/27, 2-20=-2123/269, 10-12=-2124/269  
BOT CHORD 19-20=-189/586, 18-19=-311/3198, 16-18=-225/3037, 14-16=-153/3036, 13-14=-198/3196, 12-13=-82/569  
WEBS 5-17=-57/1010, 6-17=-553/121, 6-16=0/353, 6-15=-554/121, 7-15=-57/1010, 2-19=-160/2629, 10-13=-148/2644, 4-17=-671/163, 3-19=-163/89, 3-18=-199/101, 4-18=0/280, 8-15=-670/163, 8-14=0/280, 9-14=-199/101, 9-13=-163/88

#### 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) exterior zone and C-C Exterior(2E) -0-10-8 to 3-6-3, Interior (1) 3-6-3 to 9-9-0, Exterior(2R) 9-9-0 to 34-2-0, Interior (1) 34-2-0 to 40-4-13, Exterior(2E) 40-4-13 to 44-9-8 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
- 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) Provide adequate drainage to prevent water ponding.
- 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 20.0psf 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.
- 9) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 20 and 12. This connection is for uplift only and does not consider lateral forces.
- 10) 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



August 25, 2025

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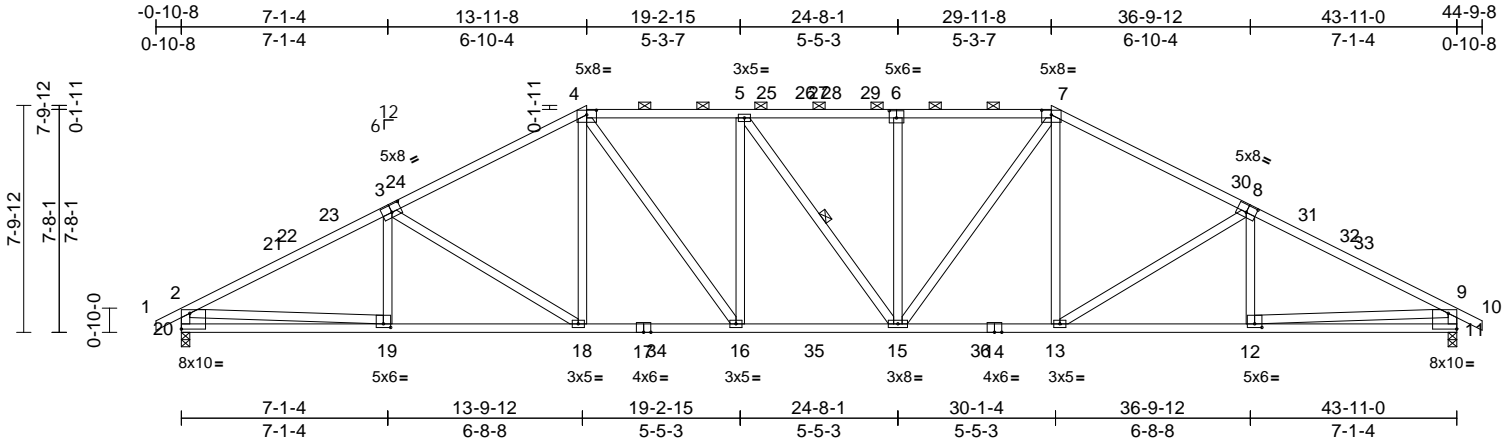
Job	Truss	Truss Type	Qty	Ply	23 Eagle Creek - Hartwell C - Roof	I75829978
25100186	A05	Hip	1	1	Job Reference (optional)	

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

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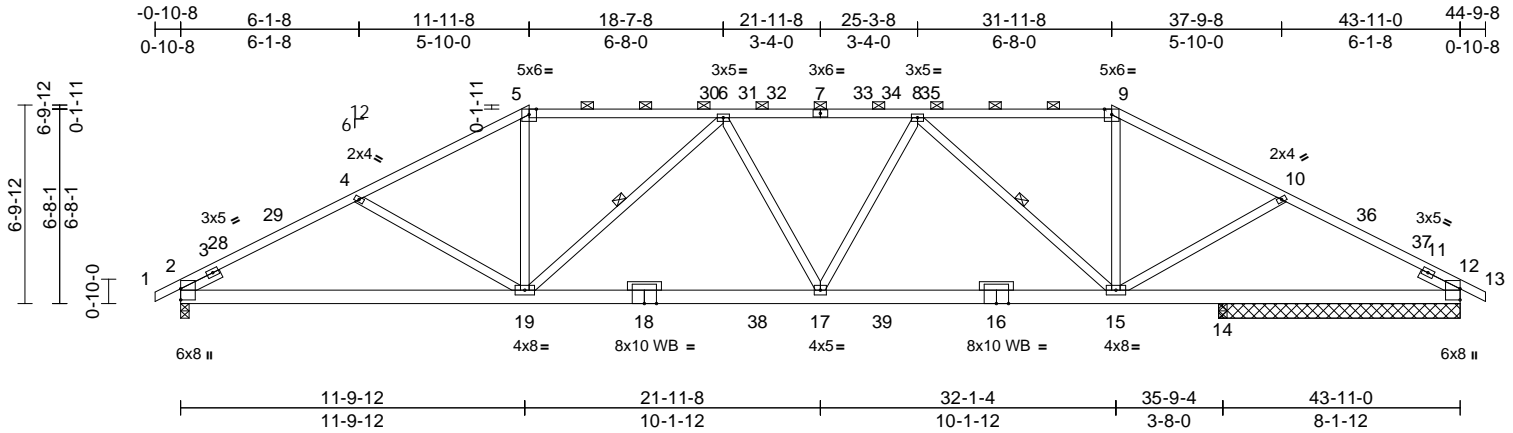
Job	Truss	Truss Type	Qty	Ply	23 Eagle Creek - Hartwell C - Roof	175829979
25100186	A06	Hip	1	1	Job Reference (optional)	

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

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Scale = 1:79.1

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	0.59	Vert(LL)	-0.28	15-17	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.40	Vert(CT)	-0.50	15-17	>864	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.60	Horz(CT)	0.11	12	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 267 lb	FT = 20%

**LUMBER**  
TOP CHORD 2x4 SP 2400F 2.0E  
BOT CHORD 2x6 SP 2400F 2.0E  
WEBS 2x4 SP No.3  
OTHERS 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 3-9-12 oc purlins, except 2-0-0 oc purlins (4-1-2 max.): 5-9.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
WEBS 1 Row at midpt 6-19, 8-15

**REACTIONS** (size) 2=0-3-8, 12=8-3-8, 14=0-3-8  
Max Horiz 2=100 (LC 15)  
Max Uplift 2=208 (LC 14), 12=222 (LC 15)  
Max Grav 2=1906 (LC 5), 12=1631 (LC 6), 14=438 (LC 46)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=0/23, 2-4=3538/418, 4-5=3353/362, 5-6=2987/361, 6-8=3847/424, 8-9=2637/374, 9-10=2953/378, 10-12=3115/434, 12-13=0/23  
BOT CHORD 2-19=356/3082, 17-19=280/3704, 15-17=265/3587, 14-15=290/2687, 12-14=290/2687  
WEBS 4-19=524/196, 5-19=16/1093, 6-19=1059/224, 6-17=43/266, 8-17=26/473, 8-15=1377/199, 9-15=23/905, 10-15=491/199

**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) exterior zone and C-C Exterior(2E) 0-10-8 to 3-6-3, Interior (1) 3-6-3 to 5-9-0, Exterior(2R) 5-9-0 to 18-2-0, Interior (1) 18-2-0 to 25-9-0, Exterior(2R) 25-9-0 to 37-11-5, Interior (1) 37-11-5 to 40-4-13, Exterior(2E) 40-4-13 to 44-9-8 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.
- Provide adequate drainage to prevent water ponding.
- 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 12. 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



August 25, 2025

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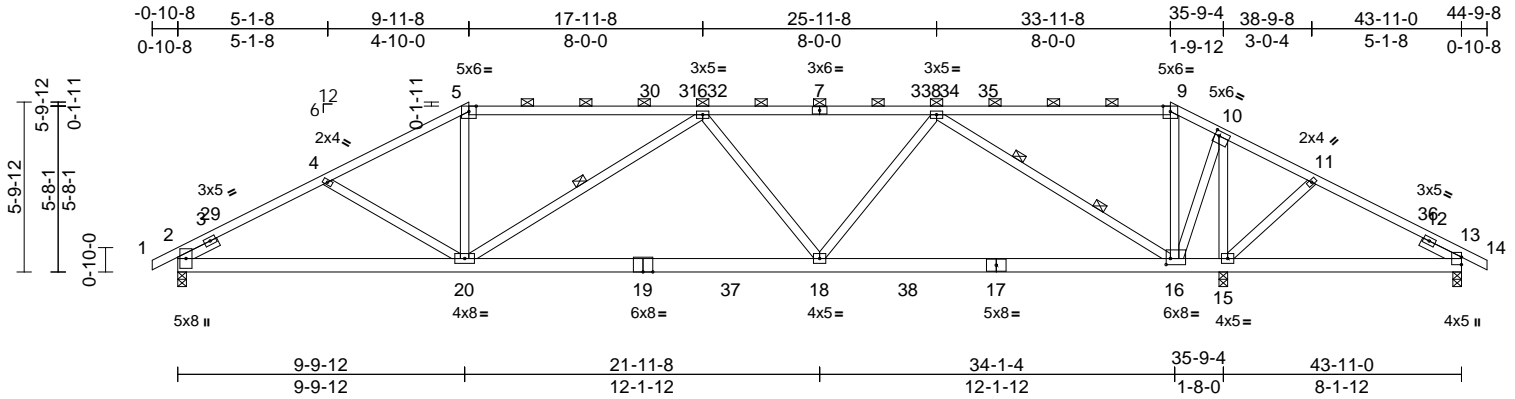
Job	Truss	Truss Type	Qty	Ply	23 Eagle Creek - Hartwell C - Roof	I75829980
25100186	A07	Hip	1	1	Job Reference (optional)	

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 Aug 21 14:39:55

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Scale = 1:78.8

Plate Offsets (X, Y): [2:0-4-9,0-0-13], [10:0-1-12,0-2-0], [16:0-1-12,0-2-8]

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	0.71	Vert(LL)	-0.20	18-20	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.36	Vert(CT)	-0.36	18-20	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.94	Horz(CT)	0.05	15	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0											
Weight: 268 lb											FT = 20%	

#### LUMBER

TOP CHORD 2x4 SP 2400F 2.0E  
 BOT CHORD 2x6 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 4-8-4 oc purlins, except 2-0-0 oc purlins (4-3-8 max.): 5-9.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
 WEBS 1 Row at midpt 6-20  
 WEBS 2 Rows at 1/3 pts 8-16

#### REACTIONS

(size) 2=0-3-8, 13=0-3-8, 15=0-3-8  
 Max Horiz 2=84 (LC 14)  
 Max Uplift 2=-182 (LC 14), 13=-213 (LC 58), 15=-220 (LC 10)  
 Max Grav 2=1575 (LC 37), 13=317 (LC 45), 15=2547 (LC 46)

#### FORCES

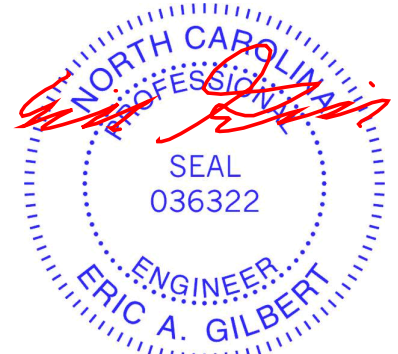
(lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=0/37, 2-4=-2724/321, 4-5=-2633/266, 5-6=-2360/273, 6-8=-2713/243, 8-9=-32/110, 9-10=-54/168, 10-11=-132/876, 11-13=-188/752, 13-14=0/37  
 BOT CHORD 2-20=-292/2359, 18-20=-278/2864, 16-18=-198/2068, 15-16=-820/185, 13-15=-637/153  
 WEBS 4-20=-400/151, 5-20=0/717, 6-20=-662/206, 6-18=-416/227, 8-18=-39/990, 8-16=-2557/341, 9-16=-528/136, 10-16=-191/2110, 10-15=-2283/181, 11-15=-412/131

#### 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) exterior zone and C-C Exterior(2E) -0-10-8 to 3-6-3, Exterior(2R) 3-6-3 to 16-2-0, Interior (1) 16-2-0 to 27-9-0, Exterior(2R) 27-9-0 to 40-4-13, Exterior(2E) 40-4-13 to 44-9-8 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.
- Provide adequate drainage to prevent water ponding.
- 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, 13, 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



August 25, 2025

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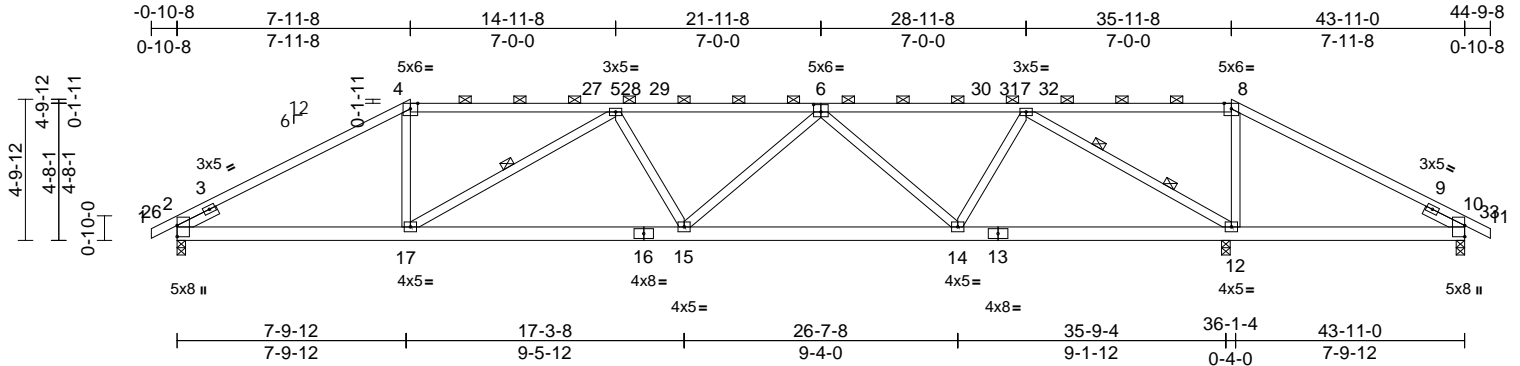
Job	Truss	Truss Type	Qty	Ply	23 Eagle Creek - Hartwell C - Roof	I75829981
25100186	A08	Hip	1	1	Job Reference (optional)	

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 Aug 21 14:39:55

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Scale = 1:78.6

Plate Offsets (X, Y): [6:0-3-0,0-3-0]

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	0.54	Vert(LL)	-0.15	15-17	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.33	Vert(CT)	-0.29	15-17	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.87	Horz(CT)	0.06	12	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 246 lb	FT = 20%

#### LUMBER

TOP CHORD 2x4 SP 2400F 2.0E  
 BOT CHORD 2x6 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 4-7-12 oc purlins, except 2-0-0 oc purlins (4-6-7 max.): 4-8.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 10-12.  
 WEBS 1 Row at midpt 5-17  
 WEBS 2 Rows at 1/3 pts 7-12

#### REACTIONS

(size) 2=0-3-8, 10=0-3-8, 12=0-3-8  
 Max Horiz 2=-68 (LC 19)  
 Max Uplift 2=-195 (LC 14), 10=-429 (LC 40), 12=-279 (LC 11)  
 Max Grav 2=1408 (LC 43), 10=377 (LC 45), 12=2715 (LC 40)

#### FORCES

(lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=0/38, 2-4=-2281/304, 4-5=-2000/316, 5-7=-2848/349, 7-8=-152/1049, 8-10=-381/1278, 10-11=0/38  
 BOT CHORD 2-17=-227/2000, 15-17=-349/2895, 14-15=-322/2513, 12-14=-168/1320, 10-12=-1079/209  
 WEBS 4-17=-4/628, 5-17=-1069/248, 5-15=-98/165, 6-15=-30/456, 6-14=-1021/212, 7-14=-29/946, 7-12=-2762/415, 8-12=-961/162

#### 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) exterior zone and C-C Exterior(2E) -0-10-8 to 3-6-3, Exterior(2R) 3-6-3 to 14-2-0, Interior (1) 14-2-0 to 29-9-0, Exterior(2R) 29-9-0 to 40-4-13, Exterior(2E) 40-4-13 to 44-9-8 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
- 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) Provide adequate drainage to prevent water ponding.
- 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 20.0psf 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.
- 9) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 12. This connection is for uplift only and does not consider lateral forces.
- 10) H10A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 10. 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



August 25, 2025

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

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

ENGINEERING BY  
**TRENCO**  
 A MiTek Affiliate

818 Soundside Road  
 Edenton, NC 27932

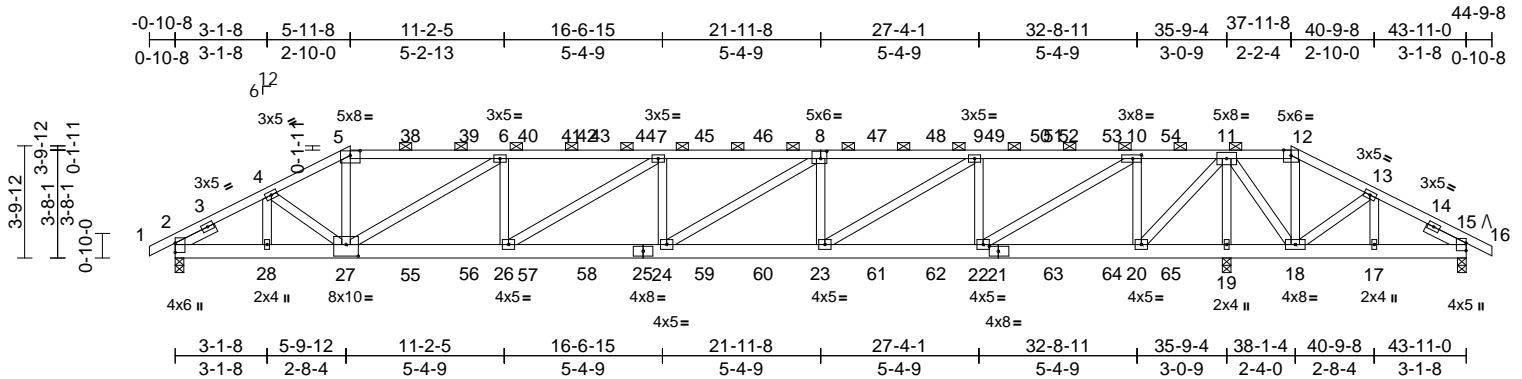
Job	Truss	Truss Type	Qty	Ply	23 Eagle Creek - Hartwell C - Roof	I75829982
25100186	A09	Hip Girder	1	3	Job Reference (optional)	

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

Run: 8.73 E May 9 2024 Print: 8.730 E May 9 2024 MiTek Industries, Inc. Mon Aug 25 10:08:16

Page: 1

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Scale = 1:78.4

Plate Offsets (X, Y): [5:0-4-0,0-1-15], [8:0-2-8,0-3-0], [10:0-3-8,0-1-8], [21:0-3-11,0-2-0], [27:0-5-0,0-4-12]

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	0.20	Vert(LL)	-0.21	23-24	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.22	Vert(CT)	-0.34	23-24	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.71	Horz(CT)	0.05	19	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 844 lb	FT = 20%

**LUMBER**  
TOP CHORD 2x4 SP 2400F 2.0E  
BOT CHORD 2x6 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, except 2-0-0 oc purlins (6-0-0 max.): 5-12.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

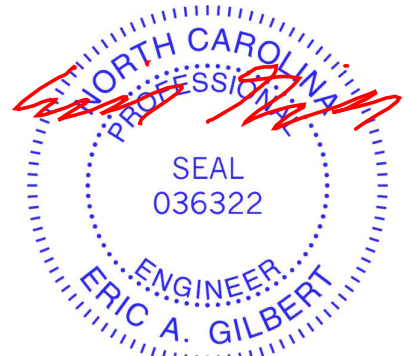
**REACTIONS** (lb/size) 2=3365/0-3-8, 15=0/0-3-8, 19=5100/0-3-8  
Max Horiz 2=-52 (LC 13)  
Max Uplift 2=-496 (LC 12), 15=REL, 19=-1127 (LC 8)  
Max Grav 2=3447 (LC 39), 15=350 (LC 9), 19=5115 (LC 20)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=0/38, 2-4=-5253/774, 4-5=-6220/908, 5-6=-5574/839, 6-7=-8624/1176, 7-9=-9736/1239, 9-10=-6569/534, 10-11=-2230/0, 11-12=-568/847, 12-13=-655/1003, 13-15=-547/438, 15-16=0/38  
BOT CHORD 2-28=-675/4559, 27-28=-675/4559, 26-27=-1126/8624, 24-26=-1200/9736, 23-24=-986/9036, 22-23=-486/6569, 20-22=0/2230, 19-20=-1610/848, 18-19=-1610/848, 17-18=-323/493, 15-17=-323/493

**WEBS** 4-28=-881/135, 4-27=-214/1397, 5-27=-181/2052, 12-18=-699/359, 13-18=-692/231, 13-17=-100/321, 6-26=0/911, 6-27=-3582/459, 7-26=-1347/104, 7-24=-186/278, 8-24=-298/893, 8-23=-1283/438, 9-23=-595/2949, 9-22=-2387/617, 10-22=-943/5120, 10-20=-3387/739, 11-20=-780/4590, 11-19=-4393/992, 11-18=-434/1320

**NOTES**  
1) 3-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.  
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.  
3) Unbalanced roof live loads have been considered for this design.  
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) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60  
5) 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  
6) 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.
- Provide adequate drainage to prevent water ponding.
- 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 496 lb uplift at joint 2 and 1127 lb uplift at joint 19.
- "A" indicates Released bearing: allow for upward movement at joint(s) 15.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



August 25, 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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ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	23 Eagle Creek - Hartwell C - Roof
25100186	A09	Hip Girder	1	<b>3</b>	175829982
					Job Reference (optional)

14) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 214 lb down and 83 lb up at 5-11-8, 214 lb down and 83 lb up at 8-0-4, 214 lb down and 83 lb up at 10-0-4, 214 lb down and 83 lb up at 12-0-4, 214 lb down and 83 lb up at 14-0-4, 214 lb down and 83 lb up at 16-0-4, 214 lb down and 83 lb up at 18-0-4, 214 lb down and 83 lb up at 20-0-4, 214 lb down and 82 lb up at 21-11-8, 214 lb down and 83 lb up at 23-10-12, 214 lb down and 83 lb up at 25-10-12, 214 lb down and 83 lb up at 27-10-12, 214 lb down and 83 lb up at 29-10-12, 214 lb down and 83 lb up at 31-10-12, 214 lb down and 83 lb up at 33-10-12, and 3 lb down and 13 lb up at 35-10-12, and 214 lb down and 83 lb up at 37-11-8 on top chord, and 515 lb down and 81 lb up at 5-11-8, 69 lb down at 8-0-4, 69 lb down at 10-0-4, 69 lb down at 12-0-4, 69 lb down at 14-0-4, 69 lb down at 16-0-4, 69 lb down at 18-0-4, 69 lb down at 20-0-4, 69 lb down at 21-11-8, 69 lb down at 23-10-12, 69 lb down at 25-10-12, 69 lb down at 27-10-12, 69 lb down at 29-10-12, 69 lb down at 31-10-12, and 69 lb down at 33-10-12, and 515 lb down and 81 lb up at 37-10-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

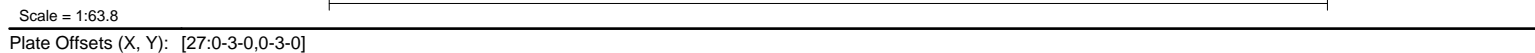
LOAD CASE(S) Standard

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (lb/ft)
- Vert: 1-5=-60, 5-12=-60, 12-16=-60, 29-33=-20
- Concentrated Loads (lb)
- Vert: 5=-186 (B), 25=-60 (B), 27=-515 (B), 18=-515 (B), 12=-186 (B), 21=-60 (B), 8=-186 (B), 23=-60 (B), 38=-186 (B), 39=-186 (B), 40=-186 (B), 42=-186 (B), 44=-186 (B), 45=-186 (B), 46=-186 (B), 47=-186 (B), 48=-186 (B), 49=-186 (B), 51=-186 (B), 53=-186 (B), 54=-186 (B), 55=-60 (B), 56=-60 (B), 57=-60 (B), 58=-60 (B), 59=-60 (B), 60=-60 (B), 61=-60 (B), 62=-60 (B), 63=-60 (B), 64=-60 (B), 65=-60 (B)



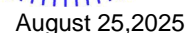
August 25,2025

Carter Components (Sanford, NC), Sanford, NC - 27332, Run: 8.73 S Aug 13 2025 Print: 8.730 S Aug 13 2025 MiTek Industries, Inc. Thu Aug 21 14:39:57 Page: 1  
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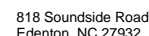
<b>LUMBER</b>		TOP CHORD	2-34=171/96, 1-2=0/34, 2-3=185/173, 3-4=137/131, 4-5=126/131, 5-7=108/162, 7-8=103/195, 8-9=137/253, 9-10=166/302, 10-11=166/302, 11-12=137/253, 12-13=103/195, 13-15=73/141, 15-16=80/105, 16-17=93/89, 17-18=136/122, 18-19=0/34, 18-20=144/61	4) TCLL: ASCE 7-16; Pr=20.0 psf (roof 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	2x4 SP No.2			
BOT CHORD	2x4 SP No.2			5) Unbalanced snow loads have been considered for this design.
WEBS	2x4 SP No.3			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.
OTHERS	2x4 SP No.3			7) All plates are 2x4 MT20 unless otherwise indicated.
<b>BRACING</b>				8) Gable requires continuous bottom chord bearing.
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.	BOT CHORD	33-34=113/129, 32-33=113/129, 31-32=113/129, 30-31=113/129, 29-30=113/129, 28-29=113/129, 26-28=113/129, 25-26=113/129, 24-25=113/129, 23-24=113/129, 22-23=113/129, 21-22=113/129, 20-21=113/129	9) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.			10) Gable studs spaced at 2-0-0 oc.
WEBS	1 Row at midpt 10-27, 9-28, 11-26			11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
<b>REACTIONS</b>	(size)			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.
	20=27-7-8, 21=27-7-8, 22=27-7-8, 23=27-7-8, 24=27-7-8, 25=27-7-8, 26=27-7-8, 27=27-7-8, 28=27-7-8, 29=27-7-8, 30=27-7-8, 31=27-7-8, 32=27-7-8, 33=27-7-8, 34=27-7-8	WEBS	10-27=271/90, 9-28=219/73, 8-29=182/87, 7-30=143/81, 5-31=143/84, 4-32=144/75, 3-33=147/123, 11-26=219/72, 12-25=182/88, 13-24=143/81, 15-23=143/84, 16-22=145/76, 17-21=136/116	
	Max Horiz 34=257 (LC 12)			
	Max Uplift 20=74 (LC 11), 21=129 (LC 15), 22=43 (LC 15), 23=62 (LC 15),			

- 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) exterior zone and C-C Corner(3E) 10-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 10-9-12, Corner(3R) 10-9-12 to 16-9-12, Exterior(2N) 16-9-12 to 25-6-0, Corner(3E) 25-6-0 to 28-6-0 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=1.60
- 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



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Job	Truss	Truss Type	Qty	Ply	23 Eagle Creek - Hartwell C - Roof
25100186	B01	Common Supported Gable	1	1	Job Reference (optional)

I75829983

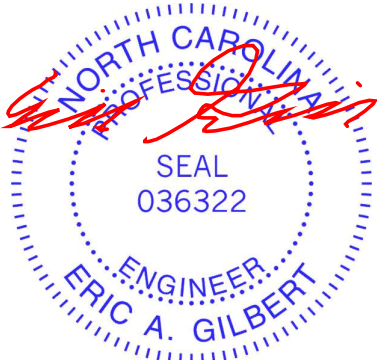
Carter Components (Sanford, NC), Sanford, NC - 27332,

Run: 8.73 S Aug 13 2025 Print: 8.730 S Aug 13 2025 MiTek Industries, Inc. Thu Aug 21 14:39:57  
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Page: 2

13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 118 lb uplift at joint 34, 74 lb uplift at joint 20, 49 lb uplift at joint 28, 63 lb uplift at joint 29, 56 lb uplift at joint 30, 62 lb uplift at joint 31, 41 lb uplift at joint 32, 142 lb uplift at joint 33, 48 lb uplift at joint 26, 64 lb uplift at joint 25, 56 lb uplift at joint 24, 62 lb uplift at joint 23, 43 lb uplift at joint 22 and 129 lb uplift at joint 21.

LOAD CASE(S) Standard



August 25,2025

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A MiTek Affiliate  
818 Soundside Road  
Edenton, NC 27932

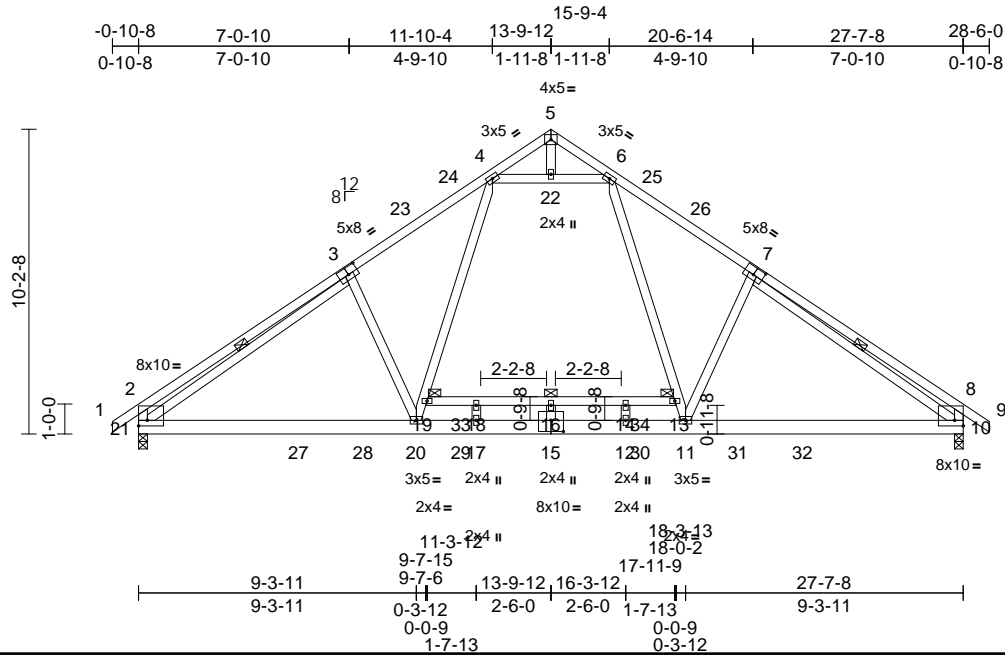
Job	Truss	Truss Type	Qty	Ply	23 Eagle Creek - Hartwell C - Roof	175829984
25100186	B02	Common	7	1	Job Reference (optional)	

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

Run: 8.73 S Aug 13 2025 Print: 8.730 S Aug 13 2025 MiTek Industries, Inc. Thu Aug 21 14:39:58

Page: 1

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Scale = 1:77.2

Plate Offsets (X, Y): [2:Edge,0-2-4], [3:0-4-0,0-3-0], [7:0-4-0,0-3-0], [10:Edge,0-2-4], [15:0-5-0,0-4-8]

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	0.83	Vert(LL)	-0.21	20-21	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.94	Vert(CT)	-0.34	14-16	>968	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.60	Horz(CT)	0.04	10	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 207 lb	FT = 20%

#### LUMBER

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x6 SP No.2 \*Except\* 19-13:2x4 SP No.2  
WEBS 2x4 SP No.3

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 3-6-1 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.  
WEBS 1 Row at midpt 3-21, 7-10

#### REACTIONS

(size) 10=0-3-8, 21=0-3-8  
Max Horiz 21=254 (LC 12)  
Max Grav 10=1636 (LC 26), 21=1636 (LC 25)

#### FORCES

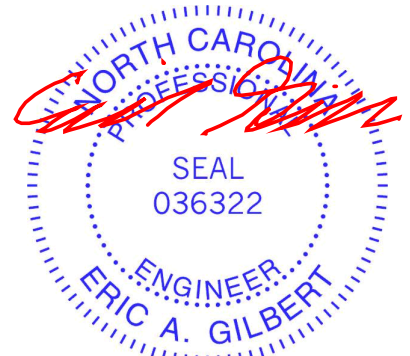
(lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=0/34, 2-4=-2282/260, 4-5=-315/51, 5-6=-315/51, 6-8=-2281/260, 8-9=0/34, 2-21=-703/229, 8-10=-696/229  
BOT CHORD 20-21=0/1865, 17-20=0/1538, 12-17=0/1538, 11-12=0/1538, 10-11=0/1864, 18-19=-71/0, 16-18=-71/0, 14-16=-71/0, 13-14=-71/0  
WEBS 6-13=0/1001, 11-13=0/926, 7-11=-305/278, 19-20=0/928, 4-19=0/1003, 3-20=-305/278, 3-21=-1581/0, 7-10=-1581/0, 4-22=-1359/37, 6-22=-1359/37, 5-22=-7/253, 15-16=-82/0, 17-18=-129/0, 12-14=-129/0

#### 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) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 10-9-12, Exterior(2R) 10-9-12 to 16-9-12, Interior (1) 16-9-12 to 25-6-0, Exterior(2E) 25-6-0 to 28-6-0 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=1.60
- 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) 200.0lb AC unit load placed on the bottom chord, 13-9-12 from left end, supported at two points, 5-0-0 apart.
- 7) All plates are 2x4 MT20 unless otherwise indicated.
- 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, with BCDL = 10.0psf.

LOAD CASE(S) Standard



August 25, 2025

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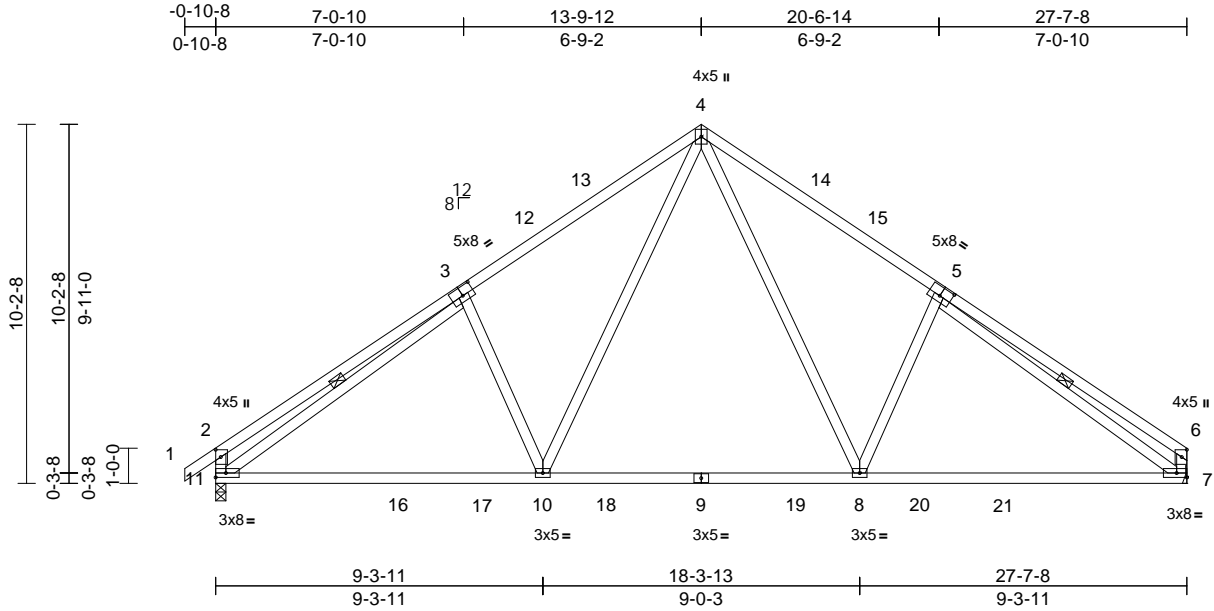
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	23 Eagle Creek - Hartwell C - Roof	175829985
25100186	B03	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 Aug 21 14:39:58  
ID:J5oMcQxt\_tA8QKwsVoykmozuPcL-RfC?PsB70Hq3NSgPqnL8w3uITxbGKWrCDoi7J4zJC7f

Page: 1



Scale = 1:65.5

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

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	0.69	Vert(LL)	-0.13	10-11	>999	240	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.43	Vert(CT)	-0.26	10-11	>999	180	
TCDL	10.0	Rep Stress Incr	YES	WB	0.50	Horz(CT)	0.03	7	n/a	n/a	
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH							
BCDL	10.0										
Weight: 167 lb FT = 20%											

#### LUMBER

TOP CHORD 2x4 SP 2400F 2.0E  
BOT CHORD 2x4 SP 2400F 2.0E  
WEBS 2x4 SP No.3 \*Except\* 8-4,10-4:2x4 SP No.2

#### 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.  
WEBS 1 Row at midpt 3-11, 5-7

#### REACTIONS

(size) 7= Mechanical, 11=0-3-8  
Max Horiz 11=251 (LC 11)  
Max Uplift 7=91 (LC 15), 11=111 (LC 14)  
Max Grav 7=1281 (LC 26), 11=1340 (LC 25)

#### FORCES

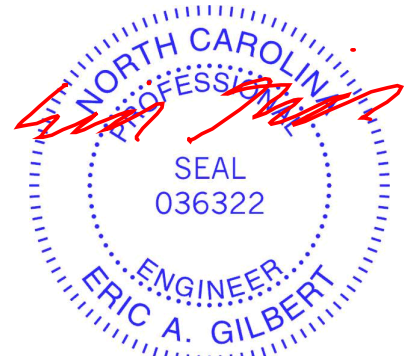
(lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=0/34, 2-4=-1769/245, 4-6=-1774/248, 2-11=-614/194, 6-7=-484/135  
BOT CHORD 10-11=-161/1438, 8-10=0/968, 7-8=-42/1443  
WEBS 4-8=-147/797, 5-8=-373/272, 4-10=-144/791, 3-10=-365/269, 3-11=-1163/27, 5-7=-1307/59

#### 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) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 10-9-12, Exterior(2R) 10-9-12 to 16-9-12, Interior (1) 16-9-12 to 24-5-12, Exterior(2E) 24-5-12 to 27-5-12 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=1.60

- 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 91 lb uplift at joint 7.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 11. This connection is for uplift only and does not consider lateral forces.

LOAD CASE(S) Standard



August 25, 2025

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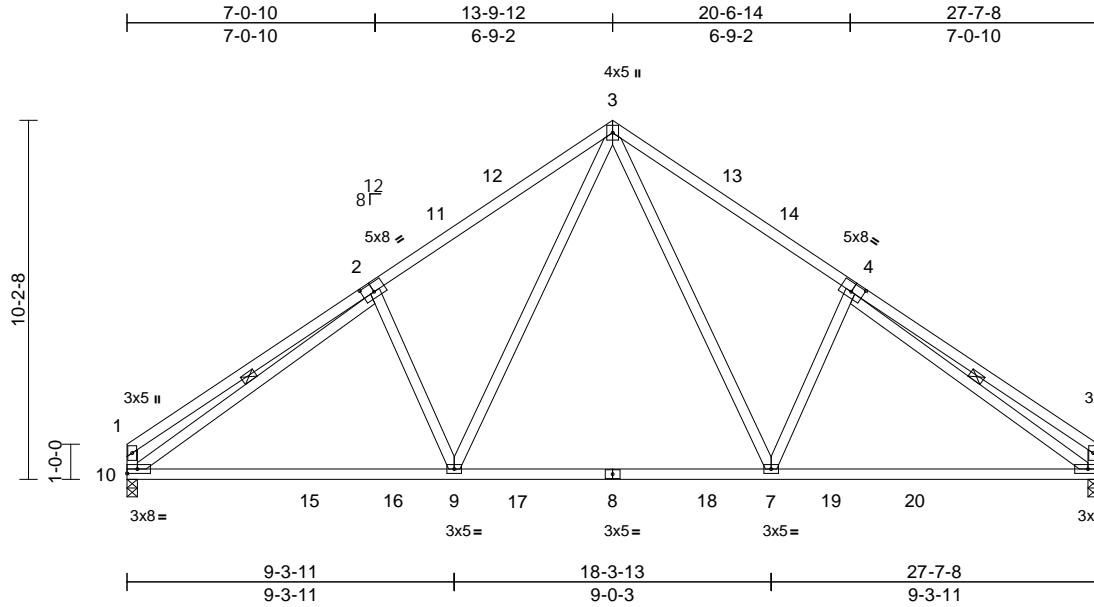
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	23 Eagle Creek - Hartwell C - Roof	I75829986
25100186	B04	Common	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. Thu Aug 21 14:39:58  
ID:Bs2sSo\_O26gZvxDdke1gxazuPcH-RfC?PsB70Hq3NSgPqnL8w3uITxbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:65.5

Plate Offsets (X, Y): [2:0-4-0,0-3-0], [4:0-4-0,0-3-0]

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	0.57	Vert(LL)	-0.13	9-10	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.43	Vert(CT)	-0.26	6-7	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.50	Horz(CT)	0.03	6	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 2400F 2.0E  
BOT CHORD 2x4 SP 2400F 2.0E  
WEBS 2x4 SP No.3 \*Except\* 7-3,9-3:2x4 SP No.2

#### 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.

WEBS 1 Row at midpt 2-10, 4-6

#### REACTIONS

(size) 6=0-3-8, 10=0-3-8  
Max Horiz 10=-241 (LC 10)  
Max Uplift 6=-91 (LC 15), 10=-91 (LC 14)  
Max Grav 6=1282 (LC 25), 10=1282 (LC 24)

#### FORCES

(lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-3=-1776/247, 3-5=-1775/249,  
1-10=-494/135, 5-6=-484/135  
BOT CHORD 9-10=-163/1446, 7-9=0/969, 6-7=-42/1444  
WEBS 3-7=-147/798, 4-7=-374/272, 3-9=-147/800,  
2-9=-374/272, 2-10=-1291/75, 4-6=-1309/59

#### 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) exterior zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior (1) 3-1-12 to 10-9-12, Exterior(2R) 10-9-12 to 16-9-12, Interior (1) 16-9-12 to 24-5-12, Exterior(2E) 24-5-12 to 27-5-12 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=1.60

- 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 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, with BCDL = 10.0psf.
- 7) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 10 and 6. This connection is for uplift only and does not consider lateral forces.

LOAD CASE(S) Standard



August 25, 2025

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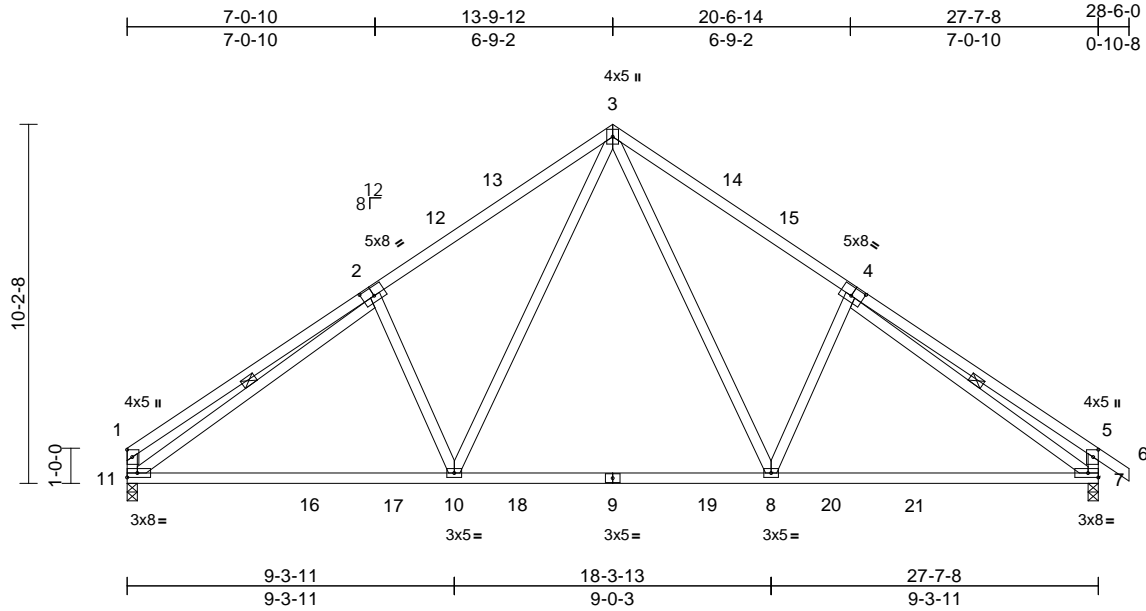
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	23 Eagle Creek - Hartwell C - Roof	I75829987
25100186	B05	Common	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. Thu Aug 21 14:39:58  
ID:4MlyjMqE562Prxk7TPldvuzuPcU-RfC?PsB70Hq3NSgPqnL8w3uTXbGKWrCDoi7J4zJC?i

Page: 1



Scale = 1:65.5

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

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	0.69	Vert(LL)	-0.13	7-8	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.43	Vert(CT)	-0.26	7-8	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.50	Horz(CT)	0.03	7	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 167 lb	FT = 20%

#### LUMBER

TOP CHORD 2x4 SP 2400F 2.0E  
BOT CHORD 2x4 SP 2400F 2.0E  
WEBS 2x4 SP No.3 \*Except\* 8-3,10-3:2x4 SP No.2

#### 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.  
WEBS 1 Row at midpt 2-11, 4-7

#### REACTIONS

(size) 7=0-3-8, 11=0-3-8  
Max Horiz 11=251 (LC 10)  
Max Uplift 7=111 (LC 15), 11=91 (LC 14)  
Max Grav 7=1340 (LC 26), 11=1281 (LC 25)

#### FORCES

(lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-3=-1775/247, 3-5=-1768/247, 5-6=0/34, 1-11=-494/135, 5-7=-604/194  
BOT CHORD 10-11=-152/1452, 8-10=0/976, 7-8=-19/1444  
WEBS 3-8=-144/789, 4-8=-365/269, 3-10=-146/799, 2-10=-373/272, 2-11=-1289/74, 4-7=-1181/25

#### 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) exterior zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior (1) 3-1-12 to 10-9-12, Exterior(2R) 10-9-12 to 16-9-12, Interior (1) 16-9-12 to 25-6-0, Exterior(2E) 25-6-0 to 28-6-0 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=1.60

- 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) 11 and 7. This connection is for uplift only and does not consider lateral forces.

LOAD CASE(S) Standard



August 25, 2025

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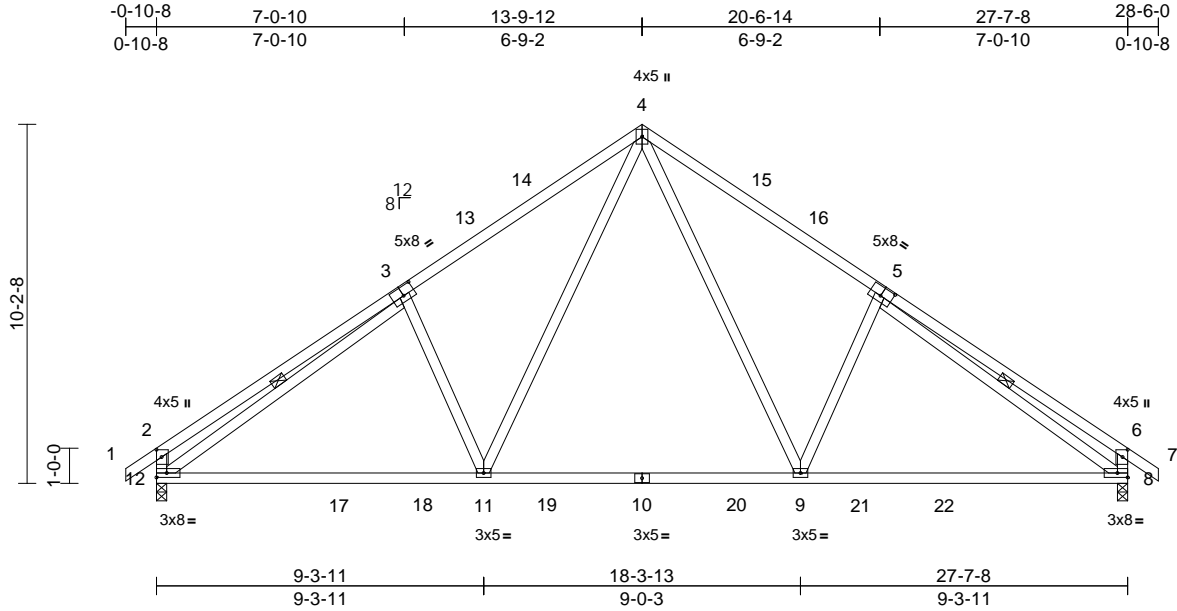
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	23 Eagle Creek - Hartwell C - Roof	I75829988
25100186	B06	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 Aug 21 14:39:58  
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Page: 1



Scale = 1:65.5

Plate Offsets (X, Y): [2:0-2-8,0-1-12], [3:0-4-0,0-3-0], [5:0-4-0,0-3-0], [6:0-2-8,0-1-12]												
<b>Loading</b>	(psf)	<b>Spacing</b>	2-0-0	<b>CSI</b>		<b>DEFL</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.69	Vert(LL)	-0.13	11-12	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.43	Vert(CT)	-0.26	8-9	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.45	Horz(CT)	0.03	8	n/a	n/a		
BCLL	0.0 *	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 168 lb	FT = 20%

**LUMBER**  
TOP CHORD 2x4 SP 2400F 2.0E  
BOT CHORD 2x4 SP 2400F 2.0E  
WEBS 2x4 SP No.3 \*Except\* 9-4,11-4:2x4 SP No.2

**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.  
WEBS 1 Row at midpt 3-12, 5-8

**REACTIONS**  
(size) 8=0-3-8, 12=0-3-8  
Max Horiz 12=-257 (LC 12)  
Max Uplift 8=-111 (LC 15), 12=-111 (LC 14)  
Max Grav 8=1339 (LC 26), 12=1339 (LC 25)

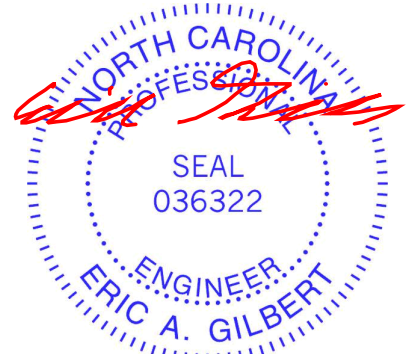
**FORCES**  
(lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=0/34, 2-4=-1767/245, 4-6=-1766/246, 6-7=0/34, 2-12=-614/194, 6-8=-605/194  
BOT CHORD 11-12=-150/1444, 9-11=0/975, 8-9=-19/1443  
WEBS 4-9=-144/789, 5-9=-365/269, 4-11=-144/791, 3-11=-365/269, 3-12=-1161/26, 5-8=-1178/24

- 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) 12 and 8. This connection is for uplift only and does not consider lateral forces.

**LOAD CASE(S)** Standard

#### 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) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 10-9-12, Exterior(2R) 10-9-12 to 16-9-12, Interior (1) 16-9-12 to 25-6-0, Exterior(2E) 25-6-0 to 28-6-0 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=1.60



August 25,2025

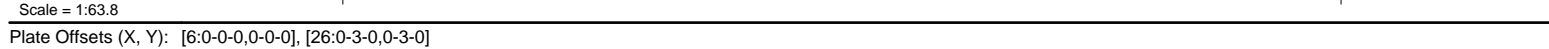
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.**

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**TRENCO**  
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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. Thu Aug 21 14:39:58 Page: 1  
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Continued on page 2

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Job	Truss	Truss Type	Qty	Ply	23 Eagle Creek - Hartwell C - Roof
25100186	B07	Common Supported Gable	1	1	Job Reference (optional)

I75829989

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 Aug 21 14:39:58  
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Page: 2

13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 122 lb uplift at joint 33, 71 lb uplift at joint 19, 50 lb uplift at joint 27, 63 lb uplift at joint 28, 56 lb uplift at joint 29, 63 lb uplift at joint 30, 40 lb uplift at joint 31, 145 lb uplift at joint 32, 48 lb uplift at joint 25, 64 lb uplift at joint 24, 56 lb uplift at joint 23, 62 lb uplift at joint 22, 43 lb uplift at joint 21 and 129 lb uplift at joint 20.

LOAD CASE(S) Standard



August 25,2025

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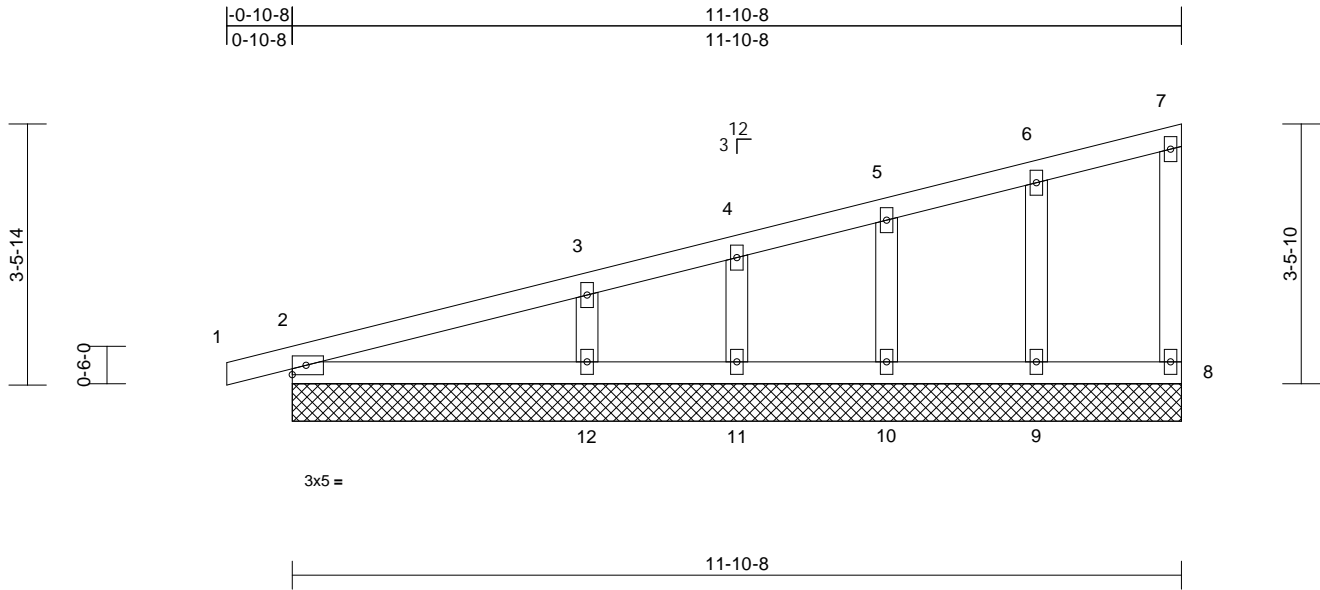
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Job	Truss	Truss Type	Qty	Ply	23 Eagle Creek - Hartwell C - Roof	175829990
25100186	C01	Monopitch Supported Gable	1	1	Job Reference (optional)	

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

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Page: 1



<b>Loading</b>	(psf)	<b>Spacing</b>	2'-0'-0	<b>CSI</b>		<b>DEFL</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.15	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 52 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=11-10-8, 8=11-10-8, 9=11-10-8, 10=11-10-8, 11=11-10-8, 12=11-10-8  
Max Horiz 2=123 (LC 13)  
Max Uplift 2=-36 (LC 10), 8=-8 (LC 11), 9=-28 (LC 10), 10=-34 (LC 14), 11=-16 (LC 10), 12=-65 (LC 14)  
Max Grav 2=189 (LC 1), 8=80 (LC 21), 9=210 (LC 21), 10=225 (LC 21), 11=151 (LC 21), 12=331 (LC 21)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=0/13, 2-3=-91/113, 3-4=-71/86, 4-5=-61/84, 5-6=-56/73, 6-7=-48/63, 7-8=-63/38  
BOT CHORD 2-12=-61/112, 11-12=-40/71, 10-11=-40/71, 9-10=-40/71, 8-9=-40/71  
WEBS 4-11=-136/83, 3-12=-236/192, 5-10=-178/125, 6-9=-172/99

#### 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) exterior zone and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 8-8-12, Corner(3E) 8-8-12 to 11-8-12 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=1.60
- 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) All plates are 2x4 MT20 unless otherwise indicated.
- 7) Gable requires continuous bottom chord bearing.
- 8) Gable studs spaced at 2'-0'-0 oc.
- 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3'-0'-0 tall by 2'-0'-0 wide will fit between the bottom chord and any other members.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 36 lb uplift at joint 2, 8 lb uplift at joint 8, 16 lb uplift at joint 11, 65 lb uplift at joint 12, 34 lb uplift at joint 10, 28 lb uplift at joint 9 and 36 lb uplift at joint 2.

**LOAD CASE(S)** Standard



August 25, 2025

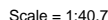
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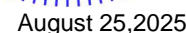
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Carter Components (Sanford, NC), Sanford, NC - 27332, Run: 8.73 S Aug 13 2025 Print: 8.730 S Aug 13 2025 MiTek Industries, Inc. Thu Aug 21 14:39:59 Page: 1  
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LOAD CASE(S) Standard

- 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) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 11-6-12 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=1.60
- 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.



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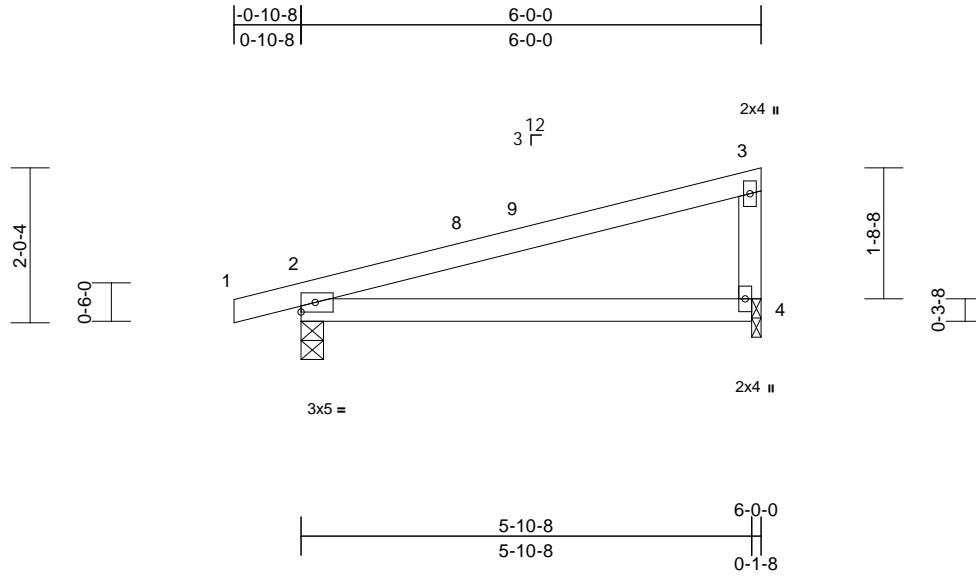
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Job	Truss	Truss Type	Qty	Ply	23 Eagle Creek - Hartwell C - Roof	
25100186	C03	Monopitch	8	1	Job Reference (optional)	I75829992

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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	0.74	Vert(LL)	-0.08	4-7	>923	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.49	Vert(CT)	-0.14	4-7	>487	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.02	2	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 21 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)	2=0-3-8, 4=0-1-8
Max Horiz	2=66 (LC 13)
Max Uplift	2=-68 (LC 10), 4=-40 (LC 14)
Max Grav	2=388 (LC 21), 4=302 (LC 21)

#### FORCES

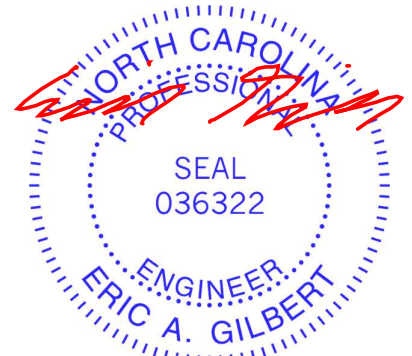
(lb) - Maximum Compression/Maximum Tension	
--	--

TOP CHORD	1-2=0/18, 2-3=-134/67, 3-4=-218/163
BOT CHORD	2-4=-95/128

#### 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) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 2-10-4, Exterior(2E) 2-10-4 to 5-10-4 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=1.60
- 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) 4 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) 4.
  - 9) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 4. This connection is for uplift only and does not consider lateral forces.
- LOAD CASE(S)** Standard



August 25, 2025

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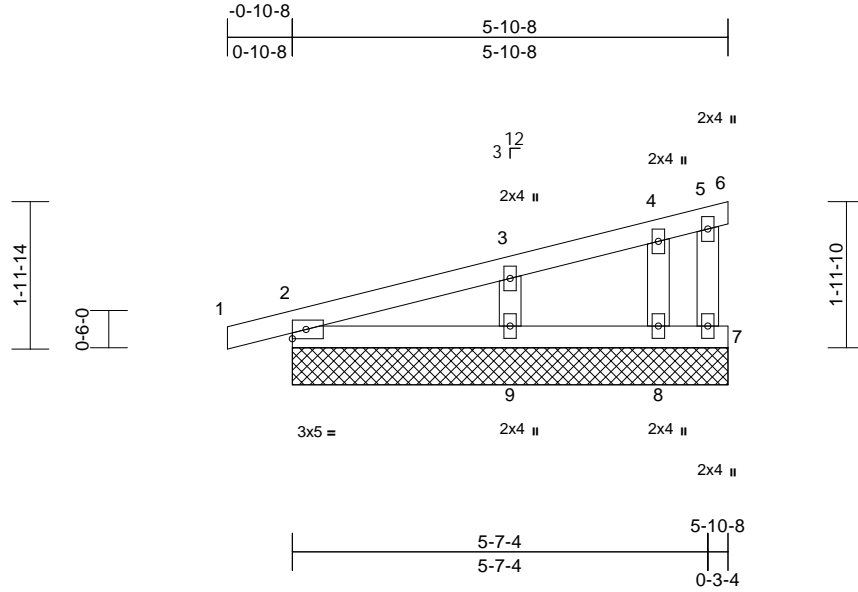
Job	Truss	Truss Type	Qty	Ply	23 Eagle Creek - Hartwell C - Roof	175829993
25100186	C04	Monopitch Supported Gable	1	1	Job Reference (optional)	

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

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Scale = 1:31.1

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	0.12	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	6	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MP								
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 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=64 (LC 13)
Max Uplift	2=-43 (LC 10), 6=-3 (LC 11), 7=-7 (LC 14), 8=-16 (LC 10), 9=-48 (LC 14)
Max Grav	2=214 (LC 21), 6=10 (LC 21), 7=32 (LC 21), 8=123 (LC 21), 9=307 (LC 21)

#### FORCES

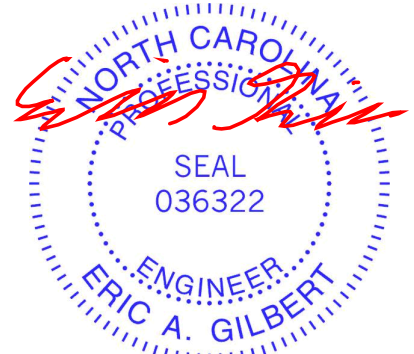
(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=0/18, 2-3=-87/67, 3-4=-35/43, 4-5=-25/33, 5-6=-3/2, 5-7=-24/18
BOT CHORD	2-9=-30/71, 8-9=-20/37, 7-8=-20/37
WEBS	3-9=-231/221, 4-8=-110/110

#### 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) exterior zone and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 5-10-8 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
- 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 43 lb uplift at joint 2, 3 lb uplift at joint 6, 7 lb uplift at joint 7, 48 lb uplift at joint 9, 16 lb uplift at joint 8 and 43 lb uplift at joint 2.

LOAD CASE(S) Standard



August 25, 2025

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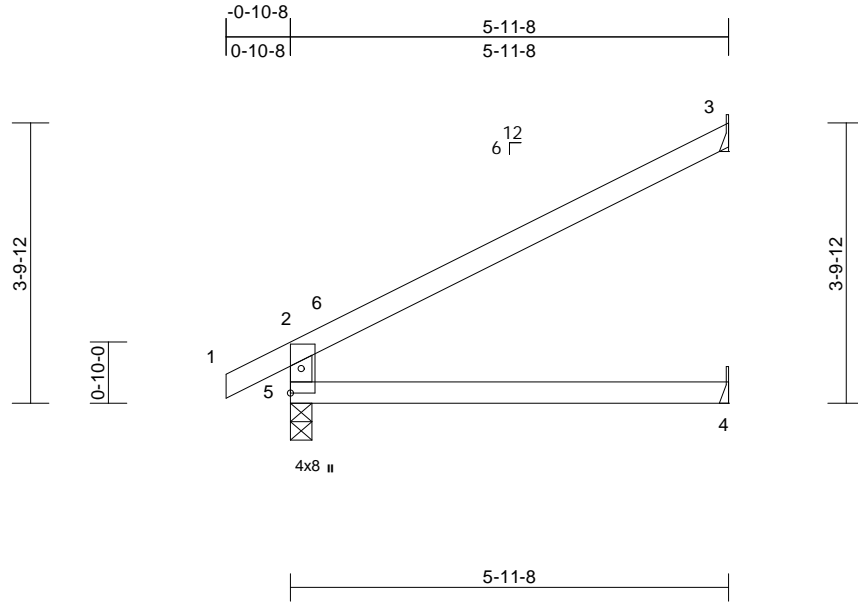
Job	Truss	Truss Type	Qty	Ply	23 Eagle Creek - Hartwell C - Roof	
25100186	C06	Jack-Open	15	1	Job Reference (optional)	I75829994

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Scale = 1:31.3

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	0.85	Vert(LL)	0.07	4-5	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.45	Vert(CT)	-0.13	4-5	>537	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: 21 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, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

<b>REACTIONS</b>	(size)	3= Mechanical, 4= Mechanical, 5=0-3-8
	Max Horiz	5=114 (LC 14)
	Max Uplift	3=-87 (LC 14), 5=-20 (LC 14)
	Max Grav	3=246 (LC 21), 4=109 (LC 7), 5=385 (LC 21)

<b>FORCES</b>	(lb) - Maximum Compression/Maximum Tension
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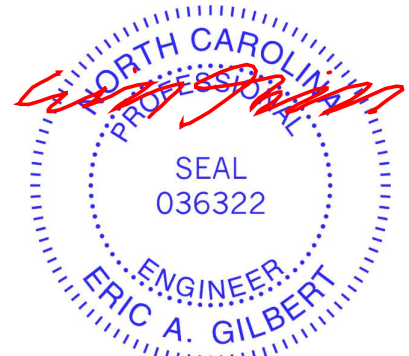
TOP CHORD	2-5=-350/180, 1-2=0/27, 2-3=-129/85
BOT CHORD	4-5=0/0

#### 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) 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
- 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.
- All bearings are assumed to be User Defined .
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 87 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



August 25, 2025

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Page: 1

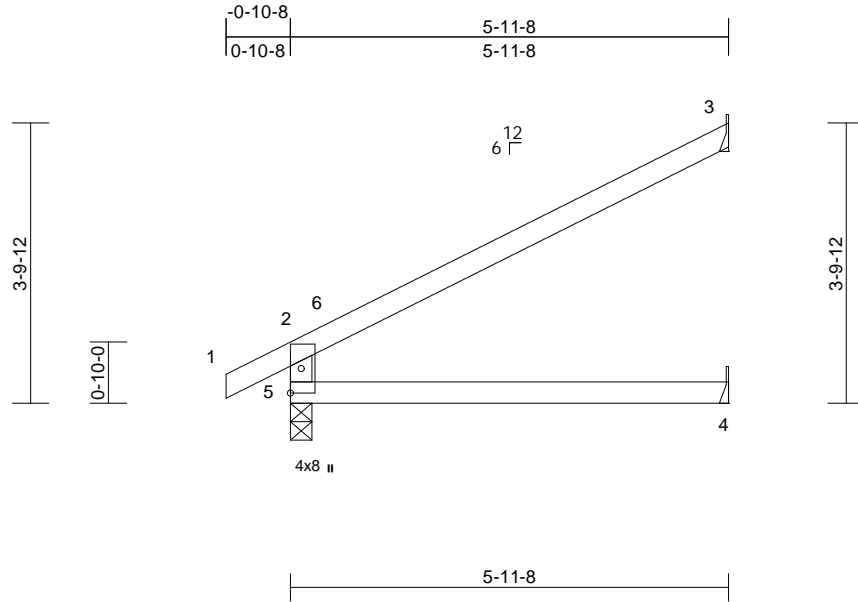
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	23 Eagle Creek - Hartwell C - Roof	I75829996
25100186	C08	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. Thu Aug 21 14:39:59  
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Scale = 1:31.3

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	0.85	Vert(LL)	0.07	4-5	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.45	Vert(CT)	-0.13	4-5	>537	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: 21 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, 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=114 (LC 14)  
Max Uplift 3=-87 (LC 14), 5=-20 (LC 14)  
Max Grav 3=246 (LC 21), 4=109 (LC 7),  
5=385 (LC 21)

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

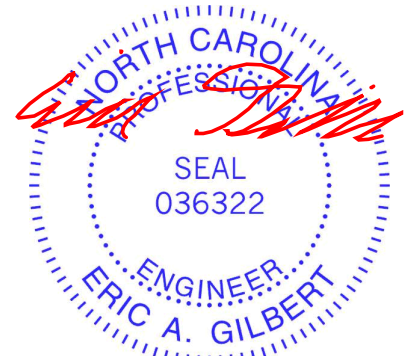
TOP CHORD 2-5=-350/180, 1-2=0/27, 2-3=-129/85  
BOT CHORD 4-5=0/0

#### 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) 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
- 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.
- All bearings are assumed to be User Defined .
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 87 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



August 25, 2025

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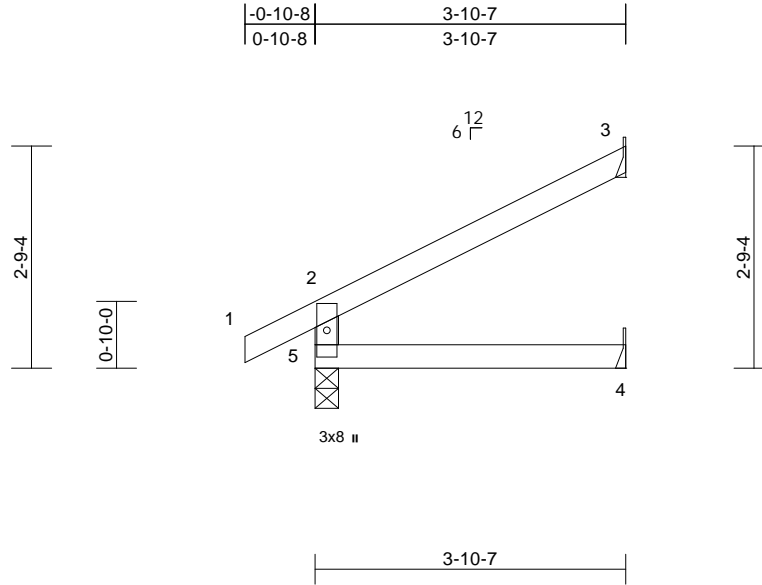
Job	Truss	Truss Type	Qty	Ply	23 Eagle Creek - Hartwell C - Roof	I75829997
25100186	C09	Jack-Open	4	1	Job Reference (optional)	

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 Aug 21 14:39:59

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<b>Loading</b>	(psf)	<b>Spacing</b>	2-0-0	<b>CSI</b>		<b>DEFL</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.30	Vert(LL)	0.01	4-5	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	-0.02	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: 14 lb	FT = 20%

<b>LUMBER</b>		
TOP CHORD	2x4	SP No.2
BOT CHORD	2x4	SP No.2
WEBS	2x4	SP No.3
<b>BRACING</b>		
TOP CHORD	Structural wood sheathing directly applied or 3-10-7 oc purlins, except end verticals.	
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.	
<b>REACTIONS</b>	(size)	3= Mechanical, 4= Mechanical, 5=0-3-8
	Max Horiz	5=76 (LC 14)
	Max Uplift	3=-57 (LC 14), 5=-17 (LC 14)
	Max Grav	3=151 (LC 21), 4=69 (LC 7), 5=320 (LC 21)
<b>FORCES</b>		
	(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	2-5=-292/139, 1-2=0/43, 2-3=-88/52	
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) 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
  - 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.
  - All bearings are assumed to be User Defined .
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 57 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



August 25, 2025

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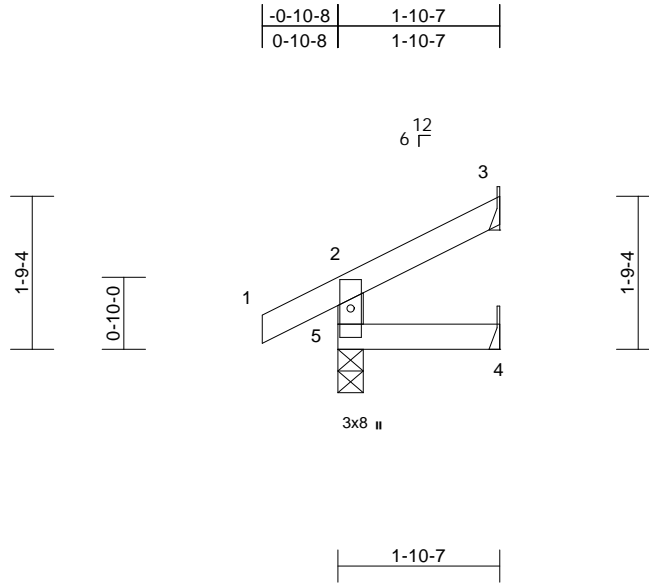
Job	Truss	Truss Type	Qty	Ply	23 Eagle Creek - Hartwell C - Roof	
25100186	C10	Jack-Open	4	1	Job Reference (optional)	I75829998

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 Aug 21 14:39:59

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<b>Loading</b>	(psf)	<b>Spacing</b>	2-0-0	<b>CSI</b>		<b>DEFL</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	0.00	4-5	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.04	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%

<b>LUMBER</b>		
TOP CHORD	2x4 SP No.2	
BOT CHORD	2x4 SP No.2	
WEBS	2x4 SP No.3	
<b>BRACING</b>		
TOP CHORD	Structural wood sheathing directly applied or 1-10-7 oc purlins, except end verticals.	
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.	
<b>REACTIONS</b>	(size)	3= Mechanical, 4= Mechanical, 5=0-3-8
	Max Horiz	5=40 (LC 14)
	Max Uplift	3=-28 (LC 14), 5=-16 (LC 14)
	Max Grav	3=52 (LC 21), 4=31 (LC 7), 5=206 (LC 21)
<b>FORCES</b>	(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	2-5=-184/101, 1-2=0/39, 2-3=-43/21	
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) 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
  - 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.
  - All bearings are assumed to be User Defined .
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 28 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



August 25, 2025

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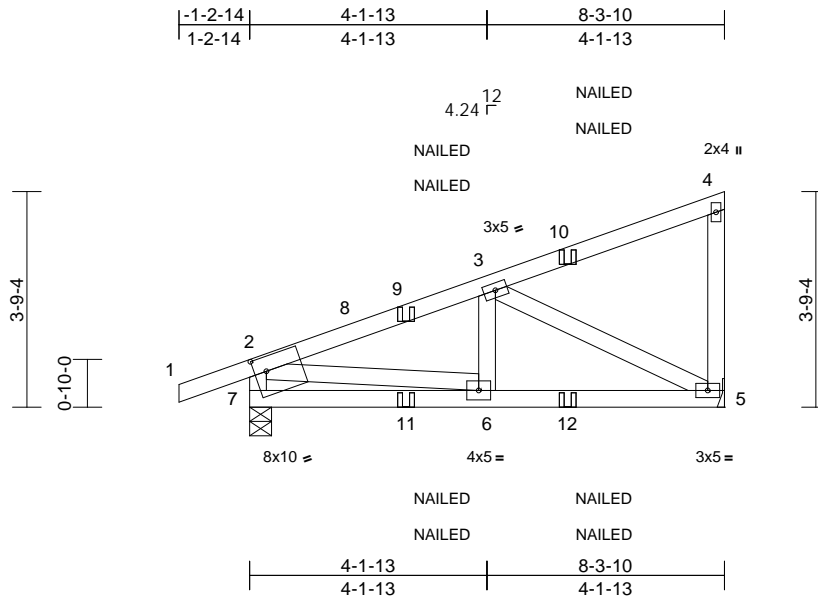
818 Soundside Road  
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Job	Truss	Truss Type	Qty	Ply	23 Eagle Creek - Hartwell C - Roof	I75829999
25100186	C13	Diagonal Hip Girder	2	1	Job Reference (optional)	

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

Run: 8.73 S Aug 13 2025 Print: 8.730 S Aug 13 2025 MiTek Industries, Inc. Thu Aug 21 14:39:59  
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Page: 1



Scale = 1:40.3

Plate Offsets (X, Y): [7:0-2-8,0-3-0]

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	0.46	Vert(LL)	-0.01	5-6	>999	240	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	-0.03	5-6	>999	180	
TCDL	10.0	Rep Stress Incr	NO	WB	0.26	Horz(CT)	0.00	5	n/a	n/a	
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MP							
BCDL	10.0										
Weight: 47 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, 7=0-4-9  
Max Horiz 7=144 (LC 9)  
Max Uplift 5=-86 (LC 12), 7=-105 (LC 8)  
Max Grav 5=483 (LC 19), 7=512 (LC 19)

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

TOP CHORD 2-7=-481/122, 1-2=0/28, 2-3=-641/80,  
3-4=-108/40, 4-5=-156/54  
BOT CHORD 6-7=-142/12, 5-6=-118/568  
WEBS 2-6=-38/574, 3-6=0/169, 3-5=-635/133

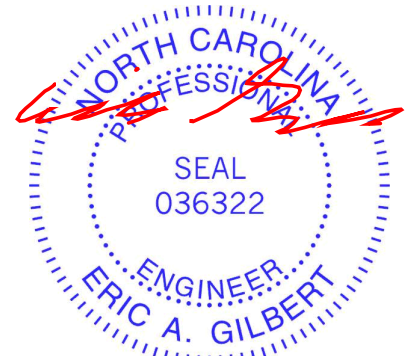
#### NOTES

- 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) exterior zone; cantilever left and right exposed; end vertical left and right exposed; 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'-0"-0" tall by 2'-0"-0" wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 86 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=-60, 2-4=-60, 5-7=-20  
Concentrated Loads (lb)  
Vert: 10=-132 (F=-66, B=-66), 11=1 (F=0, B=0), 12=-35 (F=-17, B=-17)



August 25, 2025

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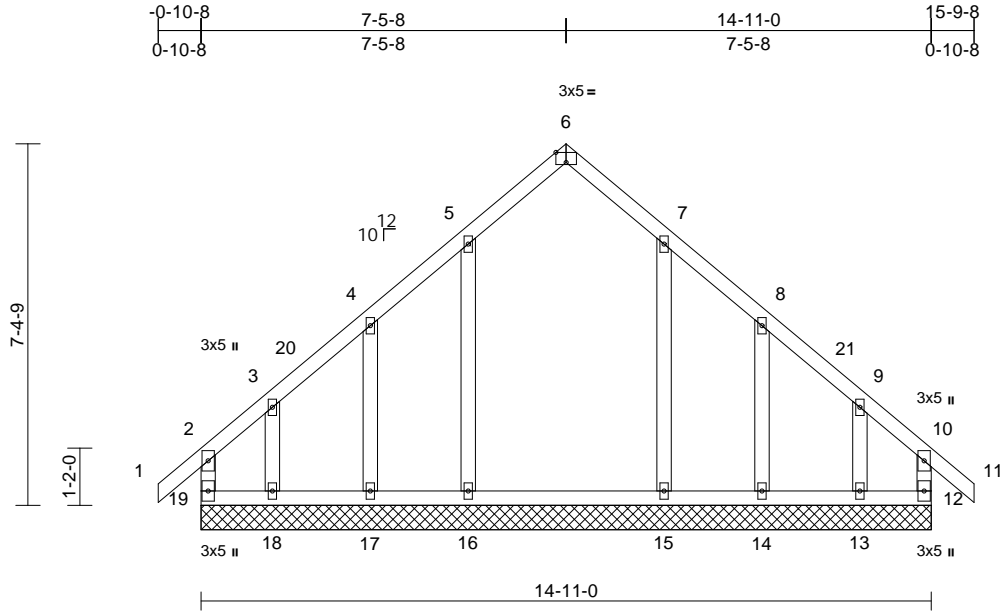
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	23 Eagle Creek - Hartwell C - Roof	175830000
25100186	D01	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 Aug 21 14:40:00  
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Page: 1



Scale = 1:47.1

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	0.33	Vert(LL)	n/a	-	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.19	Vert(CT)	n/a	-	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.00	12	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MR							
BCDL	10.0										
										Weight: 89 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)  
12=14-11-0, 13=14-11-0,  
14=14-11-0, 15=14-11-0,  
16=14-11-0, 17=14-11-0,  
18=14-11-0, 19=14-11-0  
Max Horiz 19=196 (LC 12)  
Max Uplift 12=44 (LC 13), 13=202 (LC 15),  
14=88 (LC 15), 15=16 (LC 15),  
16=19 (LC 14), 17=86 (LC 14),  
18=204 (LC 14), 19=52 (LC 12)  
Max Grav 12=257 (LC 28), 13=198 (LC 26),  
14=193 (LC 22), 15=368 (LC 6),  
16=368 (LC 5), 17=193 (LC 21),  
18=202 (LC 25), 19=260 (LC 27)

#### FORCES

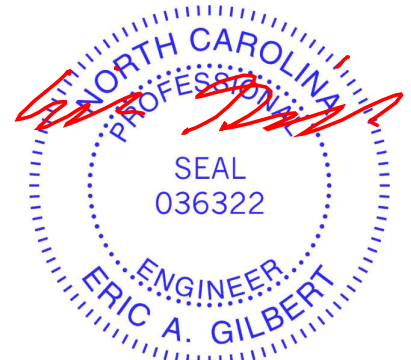
(lb) - Maximum Compression/Maximum Tension  
TOP CHORD 2-19=-193/44, 1-2=0/39, 2-3=-212/101,  
3-4=-126/59, 4-5=-128/57, 5-6=-158/104,  
6-7=-158/104, 7-8=-128/57, 8-9=-124/54,  
9-10=-209/94, 10-11=0/39, 10-12=-191/38  
BOT CHORD 18-19=-89/253, 17-18=-89/253,  
16-17=-89/253, 15-16=-89/253,  
14-15=-89/253, 13-14=-89/253,  
12-13=-89/253  
WEBS 5-16=-259/58, 4-17=-160/161,  
3-18=-135/179, 7-15=-259/56,  
8-14=-160/159, 9-13=-124/194

#### 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) exterior zone and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 4-5-8, Corner(3R) 4-5-8 to 10-5-8, Exterior(2N) 10-5-8 to 12-9-8, Corner(3E) 12-9-8 to 15-9-8 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
- 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, with BCDL = 10.0psf.

- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 52 lb uplift at joint 19, 44 lb uplift at joint 12, 19 lb uplift at joint 16, 86 lb uplift at joint 17, 204 lb uplift at joint 18, 16 lb uplift at joint 15, 88 lb uplift at joint 14 and 202 lb uplift at joint 13.

LOAD CASE(S) Standard



August 25, 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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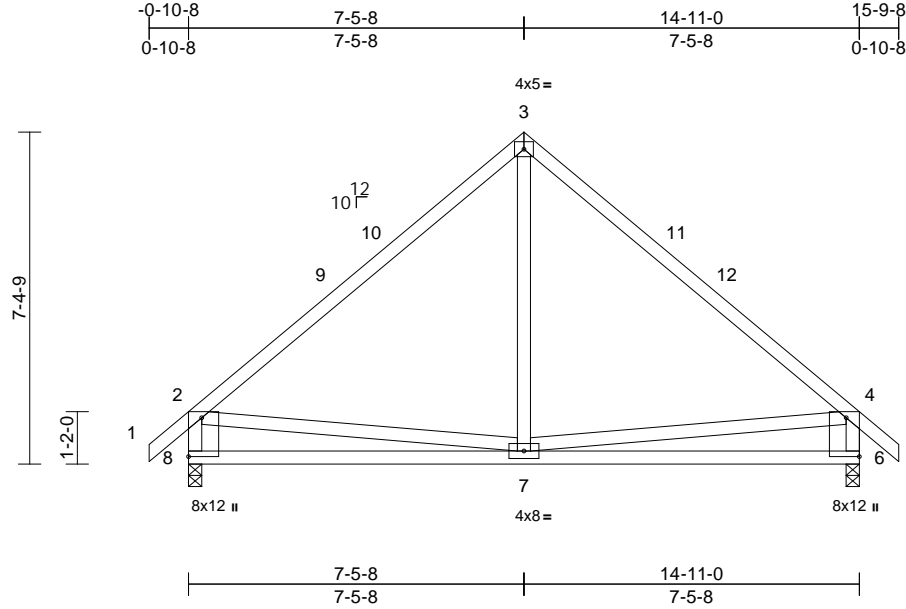
Job	Truss	Truss Type	Qty	Ply	23 Eagle Creek - Hartwell C - Roof	I75830001
25100186	D02	Common	2	1	Job Reference (optional)	

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

Run: 8.73 S Aug 13 2025 Print: 8.730 S Aug 13 2025 MiTek Industries, Inc. Thu Aug 21 14:40:00

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Scale = 1:51.2

Plate Offsets (X, Y): [6:Edge,0-3-8], [8:Edge,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	0.99	Vert(LL)	-0.06	6-7	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.48	Vert(CT)	-0.12	6-7	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.01	6	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 88 lb	FT = 20%

#### LUMBER

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3 \*Except\* 8-2,6-4:2x4 SP No.2

#### BRACING

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

**REACTIONS** (size) 6=0-3-8, 8=0-3-8  
Max Horiz 8=-196 (LC 12)  
Max Uplift 6=-58 (LC 15), 8=-58 (LC 14)  
Max Grav 6=717 (LC 22), 8=717 (LC 21)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=0/39, 2-3=-659/126, 3-4=-659/126, 4-5=0/39, 2-8=-653/159, 4-6=-653/155  
BOT CHORD 7-8=-290/487, 6-7=-211/449  
WEBS 3-7=0/308, 2-7=-161/328, 4-7=-167/331

#### 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) exterior zone and C-C Exterior(2E) 0-10-8 to 2-1-8, Interior (1) 2-1-8 to 4-5-8, Exterior(2R) 4-5-8 to 10-5-8, Interior (1) 10-5-8 to 12-9-8, Exterior(2E) 12-9-8 to 15-9-8 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.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 8 and 6. This connection is for uplift only and does not consider lateral forces.

**LOAD CASE(S)** Standard



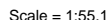
August 25, 2025

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Page: 1

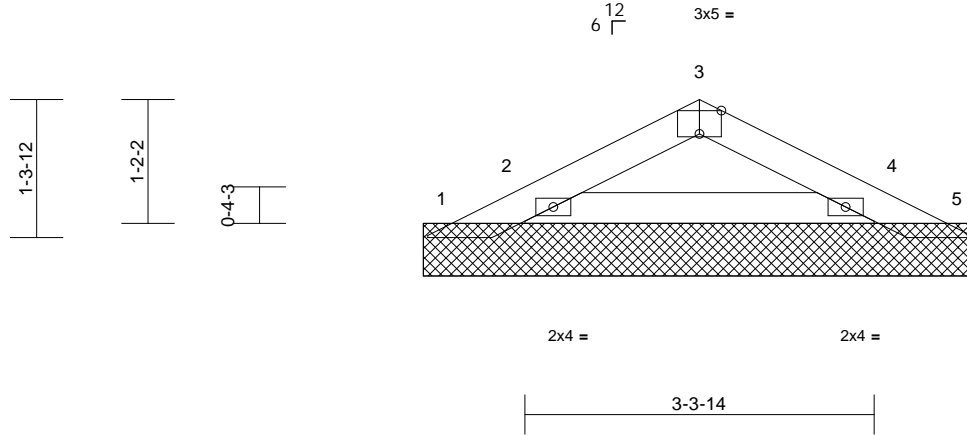
Job	Truss	Truss Type	Qty	Ply	23 Eagle Creek - Hartwell C - Roof	175830003
25100186	PB01	Piggyback	2	1	Job Reference (optional)	

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

Run: 8.73 S Aug 13 2025 Print: 8.730 S Aug 13 2025 MiTek Industries, Inc. Thu Aug 21 14:40:00  
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Page: 1

-0-11-1	1-7-15	3-3-14	4-2-15
0-11-1	1-7-15	1-7-15	0-11-1



Scale = 1:21.9

Plate Offsets (X, Y): [3:0-2-8,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	0.08	Vert(LL)	n/a	-	n/a	999	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.04	Vert(TL)	n/a	-	n/a	999	
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	9	n/a	n/a	
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MP							
BCDL	10.0										
										Weight: 14 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, 2=5-3-0, 4=5-3-0, 5=5-3-0  
Max Horiz 1=18 (LC 14)  
Max Uplift 1=30 (LC 7), 2=21 (LC 14), 4=19 (LC 15), 5=28 (LC 7)  
Max Grav 1=6 (LC 14), 2=255 (LC 21), 4=242 (LC 22), 5=1 (LC 15)

#### FORCES

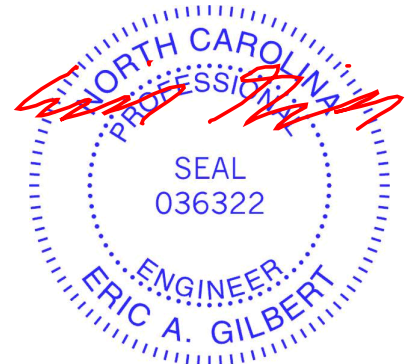
(lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=18/43, 2-3=112/66, 3-4=113/66, 4-5=2/39  
BOT CHORD 2-4=2/83

#### 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) 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
- 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); 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

- 5) Unbalanced snow loads have been considered for this design.
- 6) Gable requires continuous bottom chord bearing.
- 7) Gable studs spaced at 4-0-0 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 21 lb uplift at joint 2, 19 lb uplift at joint 4, 30 lb uplift at joint 1, 28 lb uplift at joint 5, 21 lb uplift at joint 2 and 19 lb uplift at joint 4.
- 11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

**LOAD CASE(S)** Standard



August 25, 2025

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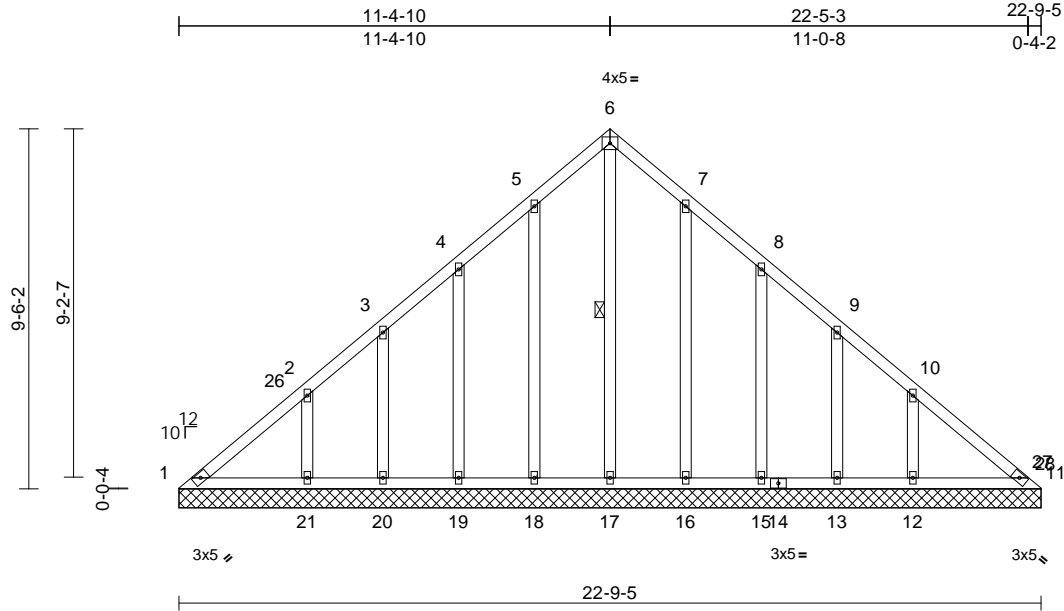
Job	Truss	Truss Type	Qty	Ply	23 Eagle Creek - Hartwell C - Roof	175830004
25100186	V01	Valley	1	1	Job Reference (optional)	

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 Aug 21 14:40:00

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Scale = 1:60.9

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	0.12	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.12	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.25	Horiz(TL)	0.01	11	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH							
BCDL	10.0										
Weight: 147 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 6-17

**REACTIONS** (size)  
1=22-9-5, 11=22-9-5, 12=22-9-5, 13=22-9-5, 15=22-9-5, 16=22-9-5, 17=22-9-5, 18=22-9-5, 19=22-9-5, 20=22-9-5, 21=22-9-5  
Max Horiz 1=218 (LC 11)  
Max Uplift 1=44 (LC 10), 12=96 (LC 15), 13=69 (LC 15), 15=82 (LC 15), 16=71 (LC 15), 18=74 (LC 14), 19=81 (LC 14), 20=67 (LC 14), 21=103 (LC 14)  
Max Grav 1=147 (LC 25), 11=108 (LC 27), 12=281 (LC 25), 13=133 (LC 25), 15=214 (LC 21), 16=270 (LC 21), 17=234 (LC 27), 18=270 (LC 20), 19=214 (LC 20), 20=130 (LC 24), 21=290 (LC 24)

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

**TOP CHORD** 1-2=-225/201, 2-3=-137/147, 3-4=-94/129, 4-5=-75/144, 5-6=-95/190, 6-7=-95/190, 7-8=-52/116, 8-9=-31/76, 9-10=-80/85, 10-11=-177/142

**BOT CHORD** 1-21=-102/177, 20-21=-102/177, 19-20=-102/177, 18-19=-102/177, 17-18=-102/177, 16-17=-102/177, 15-16=-102/177, 13-15=-102/177, 12-13=-102/177, 11-12=-102/177

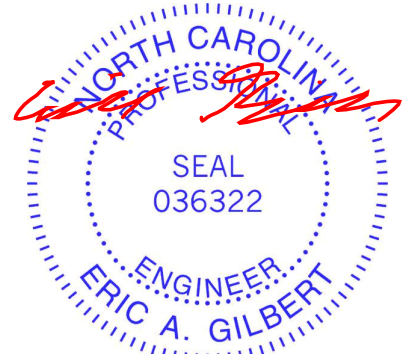
**WEBS** 6-17=-193/34, 5-18=-231/98, 4-19=-168/105, 3-20=-129/93, 2-21=-214/133, 7-16=-231/95, 8-15=-168/106, 9-13=-129/94, 10-12=-213/135

#### 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) exterior zone and C-C Corner(3E) 0-0-5 to 3-0-5, Exterior(2N) 3-0-5 to 8-4-15, Corner(3R) 8-4-15 to 14-4-15, Exterior(2N) 14-4-15 to 19-4-15, Corner(3E) 19-4-15 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 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.

11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 44 lb uplift at joint 1, 74 lb uplift at joint 18, 81 lb uplift at joint 19, 67 lb uplift at joint 20, 103 lb uplift at joint 21, 71 lb uplift at joint 16, 82 lb uplift at joint 15, 69 lb uplift at joint 13 and 96 lb uplift at joint 12.

**LOAD CASE(S)** Standard



August 25, 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. Thu Aug 21 14:40:00 Page: 1  
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<b>LUMBER</b>		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) exterior zone and C-C Exterior(2E) 0-0-5 to 3-0-5, Interior (1) 3-0-5 to 6-10-6, Exterior(2R) 6-10-6 to 12-10-6, Interior (1) 12-10-6 to 16-8-6, Exterior(2E) 16-8-6 to 19-8-6 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=1.60
TOP CHORD	2x4 SP No.2	
BOT CHORD	2x4 SP No.2	
OTHERS	2x4 SP No.3	
<b>BRACING</b>		
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.	
<b>REACTIONS</b> (size)		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.
	1=19-8-2, 7=19-8-2, 8=19-8-2, 10=19-8-2, 11=19-8-2, 12=19-8-2, 13=19-8-2	4) 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
Max Horiz	1=188 (LC 11)	
Max Uplift	1=99 (LC 10), 8=67 (LC 15), 10=191 (LC 15), 12=174 (LC 14), 13=105 (LC 14)	
Max Grav	1=129 (LC 13), 7=0 (LC 13), 8=316 (LC 25), 10=474 (LC 6), 11=498 (LC 27), 12=480 (LC 5), 13=318 (LC 24)	5) Unbalanced snow loads have been considered for this design.
<b>FORCES</b> (lb) - Maximum Compression/Maximum Tension		6) All plates are 2x4 MT20 unless otherwise indicated.
TOP CHORD	1-2=-215/220, 2-3=-198/200, 3-4=-186/281, 4-5=-186/255, 5-6=-104/88, 6-7=-58/60	7) Gable requires continuous bottom chord bearing.
BOT CHORD	1-13=-45/60, 12-13=-25/51, 11-12=-25/51, 10-11=-25/51, 8-10=-25/51, 7-8=-25/51	8) Gable studs spaced at 4-0-0 oc.
WEBS	4-11=-290/52, 3-12=-379/222, 2-13=-254/166, 5-10=-376/229, 6-8=-251/151	9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
<b>NOTES</b>		10) * 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.
1) Unbalanced roof live loads have been considered for this design.		11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 99 lb uplift at joint 1, 174 lb uplift at joint 12, 105 lb uplift at joint 13, 191 lb uplift at joint 10 and 67 lb uplift at joint 8.

LOAD CASE(S) Standard



August 25, 2025



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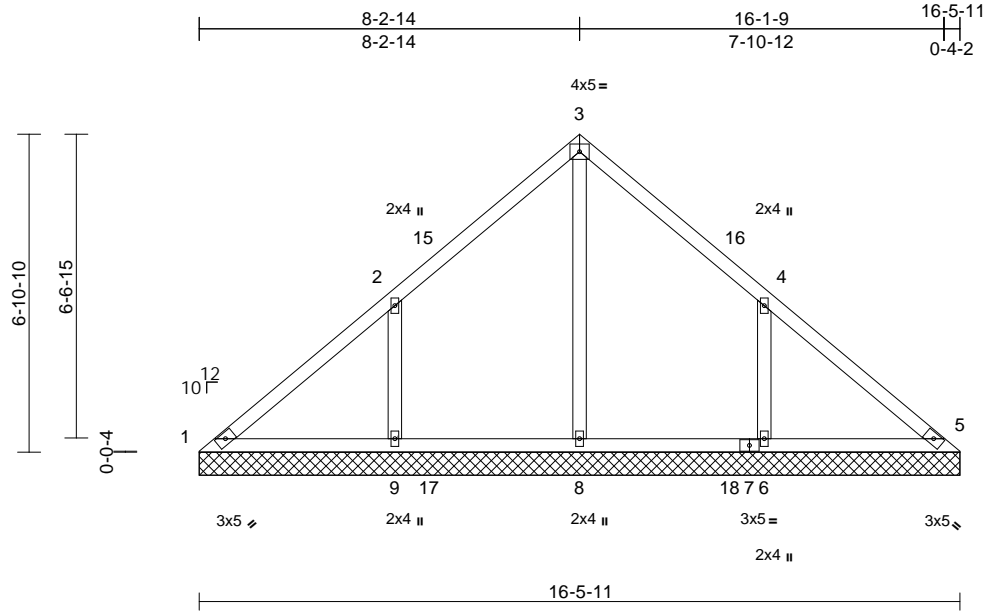
Job	Truss	Truss Type	Qty	Ply	23 Eagle Creek - Hartwell C - Roof	175830006
25100186	V03	Valley	1	1	Job Reference (optional)	

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

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<b>Loading</b>	(psf)	<b>Spacing</b>	2-0-0	<b>CSI</b>		<b>DEFL</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.37	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.17	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.38	Horiz(TL)	0.00	5	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 73 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=16-5-11, 5=16-5-11, 6=16-5-11, 8=16-5-11, 9=16-5-11  
Max Horiz 1=157 (LC 11)  
Max Uplift 1=-59 (LC 10), 6=-178 (LC 15), 9=-184 (LC 14)  
Max Grav 1=80 (LC 13), 5=0 (LC 25), 6=498 (LC 6), 8=644 (LC 24), 9=498 (LC 5)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=-105/356, 2-3=-32/309, 3-4=-6/288, 4-5=-125/286  
BOT CHORD 1-9=-186/73, 8-9=-186/70, 6-8=-186/70, 5-6=-186/70  
WEBS 3-8=-457/0, 2-9=-388/216, 4-6=-388/214

**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) exterior zone and C-C Exterior(2E) 0-0-5 to 3-0-5, Interior (1) 3-0-5 to 5-3-2, Exterior(2R) 5-3-2 to 11-3-2, Interior (1) 11-3-2 to 13-6-0, Exterior(2E) 13-6-0 to 16-6-0 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=1.60

- 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, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 59 lb uplift at joint 1, 184 lb uplift at joint 9 and 178 lb uplift at joint 6.

**LOAD CASE(S)** Standard



August 25, 2025

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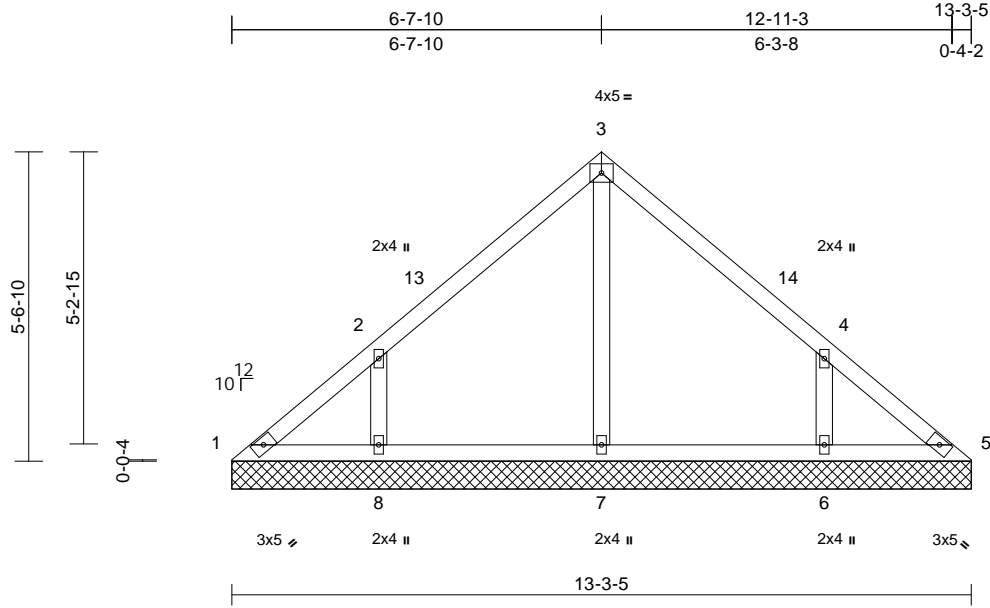
Job	Truss	Truss Type	Qty	Ply	23 Eagle Creek - Hartwell C - Roof	I75830007
25100186	V04	Valley	1	1	Job Reference (optional)	

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

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Scale = 1:41.4

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	0.32	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.12	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.10	Horiz(TL)	0.00	5	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH							
BCDL	10.0									Weight: 56 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=13-3-5, 5=13-3-5, 6=13-3-5, 7=13-3-5, 8=13-3-5
Max Horiz	1=-126 (LC 10)
Max Uplift	1=-27 (LC 10), 6=-144 (LC 15), 8=-147 (LC 14)
Max Grav	1=110 (LC 30), 5=87 (LC 24), 6=439 (LC 21), 7=279 (LC 21), 8=439 (LC 20)

#### FORCES

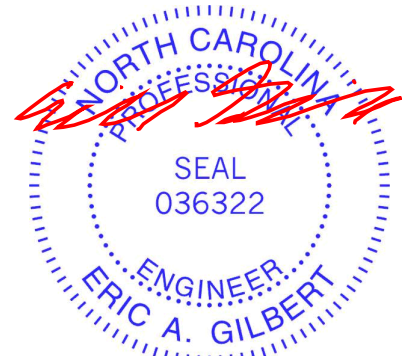
(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=-138/113, 2-3=-199/115, 3-4=-199/115, 4-5=-109/72
BOT CHORD	1-8=-44/105, 7-8=-44/85, 6-7=-44/85, 5-6=-44/85
WEBS	3-7=-195/0, 2-8=-377/195, 4-6=-377/195

#### 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) exterior zone and C-C Exterior(2E) 0-0-5 to 3-0-5, Interior (1) 3-0-5 to 3-7-15, Exterior(2R) 3-7-15 to 9-7-15, Interior (1) 9-7-15 to 10-3-10, Exterior(2E) 10-3-10 to 13-3-10 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=1.60

- 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 27 lb uplift at joint 1, 147 lb uplift at joint 8 and 144 lb uplift at joint 6.

LOAD CASE(S) Standard



August 25, 2025

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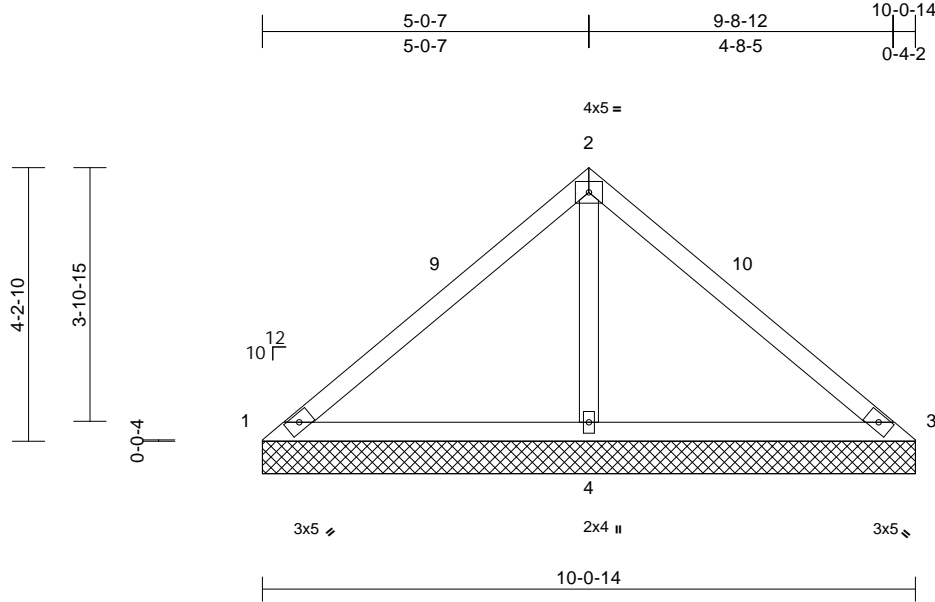
Job	Truss	Truss Type	Qty	Ply	23 Eagle Creek - Hartwell C - Roof	
25100186	V05	Valley	1	1	Job Reference (optional)	I75830008

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

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Scale = 1:35.5

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	0.50	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.47	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.21	Horiz(TL)	0.01	4	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 38 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" oc purlins.  
BOT CHORD Rigid ceiling directly applied or 6'-0" oc bracing.

#### REACTIONS

(size) 1=10'-0" x 14", 3=10'-0" x 14", 4=10'-0" x 14"  
Max Horiz 1=-95 (LC 10)  
Max Uplift 1=-60 (LC 21), 3=-60 (LC 20), 4=-119 (LC 14)  
Max Grav 1=92 (LC 20), 3=92 (LC 21), 4=828 (LC 20)

#### FORCES

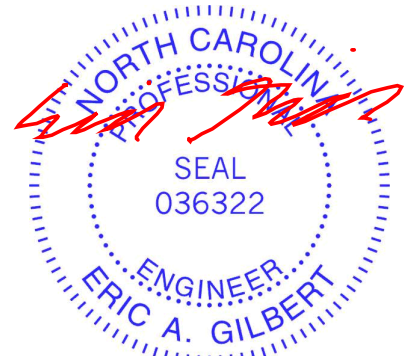
(lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=-125/406, 2-3=-125/406  
BOT CHORD 1-4=-265/182, 3-4=-265/182  
WEBS 2-4=-685/286

#### 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) exterior zone and C-C Exterior(2E) 0-0-5 to 3-0-5, Exterior(2R) 3-0-5 to 7-1-3, Exterior(2E) 7-1-3 to 10-1-3 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=1.60
- 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" 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 60 lb uplift at joint 1, 60 lb uplift at joint 3 and 119 lb uplift at joint 4.

LOAD CASE(S) Standard



August 25, 2025

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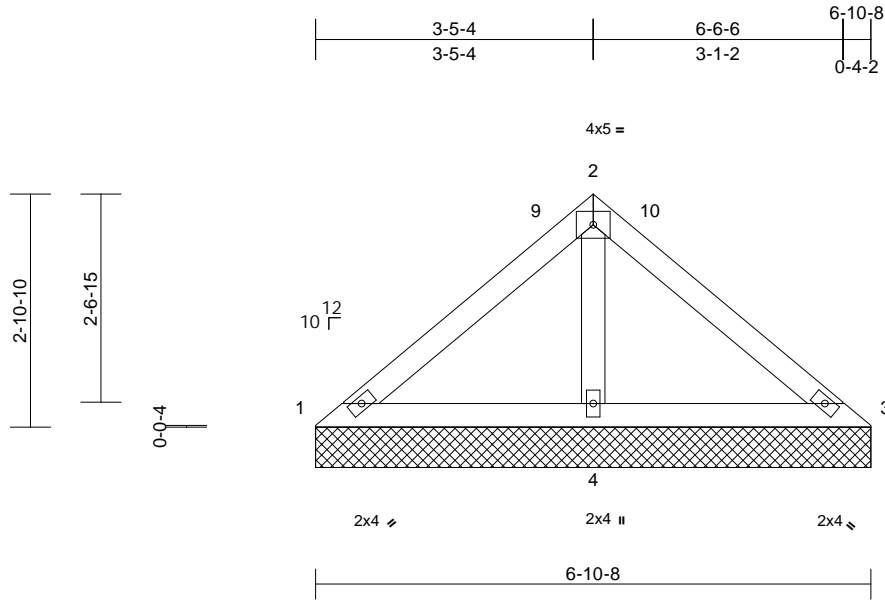
Job	Truss	Truss Type	Qty	Ply	23 Eagle Creek - Hartwell C - Roof	175830009
25100186	V06	Valley	1	1	Job Reference (optional)	

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

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<b>Loading</b>	(psf)	<b>Spacing</b>	2-0-0	<b>CSI</b>		<b>DEFL</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.24	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.08	Horiz(TL)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 25 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 6-10-8 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

#### REACTIONS

(size) 1=6-10-8, 3=6-10-8, 4=6-10-8  
Max Horiz 1=-63 (LC 10)  
Max Uplift 1=-10 (LC 21), 3=-10 (LC 20), 4=-66 (LC 14)  
Max Grav 1=104 (LC 20), 3=104 (LC 21), 4=492 (LC 21)

#### FORCES

(lb) - Maximum Compression/Maximum Tension

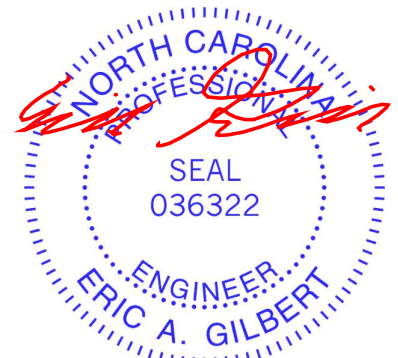
TOP CHORD 1-2=-86/207, 2-3=-86/207  
BOT CHORD 1-4=-163/142, 3-4=-163/142  
WEBS 2-4=-386/184

#### 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) exterior zone and C-C Exterior(2E) 0-0-5 to 3-0-5, Exterior(2R) 3-0-5 to 3-10-13, Exterior(2E) 3-10-13 to 6-10-13 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=1.60
- 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 10 lb uplift at joint 1, 10 lb uplift at joint 3 and 66 lb uplift at joint 4.

LOAD CASE(S) Standard



August 25, 2025

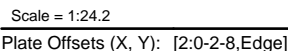
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.**

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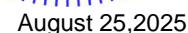
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<b>LUMBER</b>		7) Gable studs spaced at 4-0-0 oc.
TOP CHORD	2x4 SP No.2	8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
BOT CHORD	2x4 SP No.2	9) * This truss has been designed for a live 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.
<b>BRACING</b>		10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 12 lb uplift at joint 1 and 12 lb uplift at joint 3.
TOP CHORD	Structural wood sheathing directly applied or 3-8-2 oc purlins.	
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.	
<b>REACTIONS</b>	(size) 1=3-8-2, 3=3-8-2	
	Max Horiz 1=-32 (LC 10)	
	Max Uplift 1=-12 (LC 14), 3=-12 (LC 15)	
	Max Grav 1=173 (LC 20), 3=173 (LC 21)	
<b>FORCES</b>	(lb) - Maximum Compression/Maximum Tension	<b>LOAD CASE(S)</b> Standard
TOP CHORD	1-2=-225/84, 2-3=-225/84	
BOT CHORD	1-3=-51/163	

- ## 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) 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
  - 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); 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
  - 5) Unbalanced snow loads have been considered for this design.
  - 6) Gable requires continuous bottom chord bearing.



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

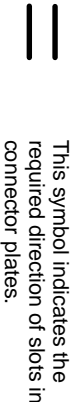
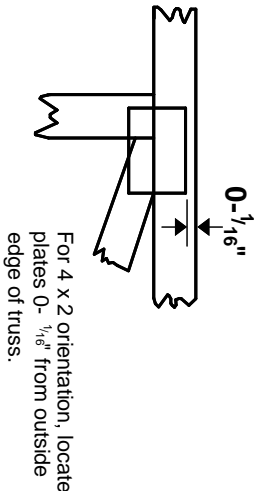
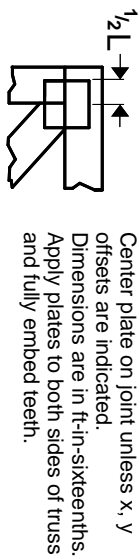
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

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Edenton, NC 27932

# Symbols

## PLATE LOCATION AND ORIENTATION



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

## PLATE SIZE

**4 X 4**

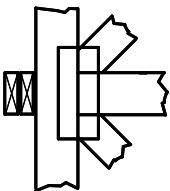
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## LATERAL BRACING LOCATION



Indicated by symbol shown and/or by text in the bracing section of the output. Use T or I bracing if indicated.

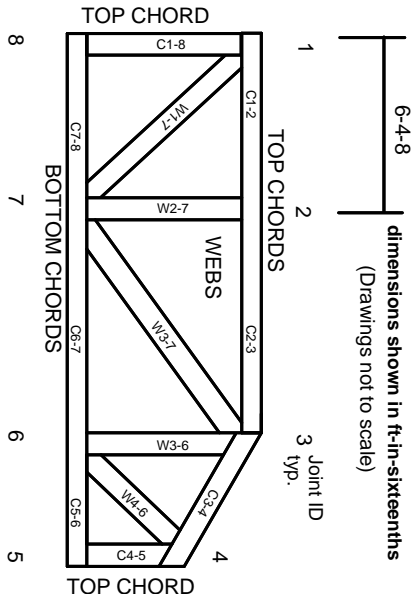
## BEARING



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

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

# Numbering System



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

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

# Product Code Approvals

ICC-ES Reports:  
ESR-1988, ESR-2362, ESR-2685, ESR-3282  
ESR-4722, ESL-1388

# Design General Notes

Trusses are designed for wind loads in the plane of the truss unless otherwise shown.  
Lumber design values are in accordance with ANSI/TP1 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.

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