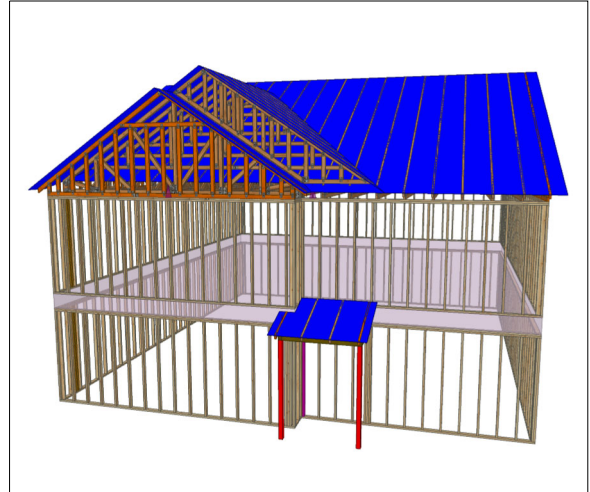




Carter Sanford Component Plant
298 Harvey Faulk Rd
Sanford, NC 27332

Phone #:919-775-1450

Builder: DR Horton Inc
Model: 1 Cross Creek -
Hanover - D2



THE PLACEMENT PLAN NOTES:

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

Approved By: _____

Date: _____

General Notes:

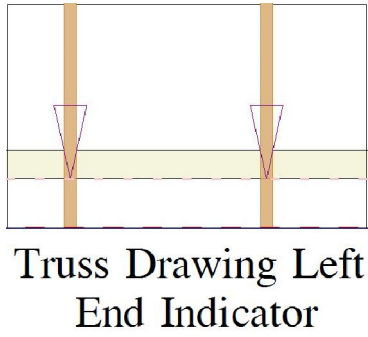
** CUTTING OR DRILLING OF COMPONENTS SHOULD NOT BE DONE WITHOUT CONTACTING COMPONENT SUPPLIER FIRST. CUSTOMER TAKES FULL RESPONSIBILITY FOR COMPONENTS IF CUT BEFORE AUTHORIZATION.

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

** FRAMER MUST REFER TO PLANS WHILE SETTING COMPONENTS.

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

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

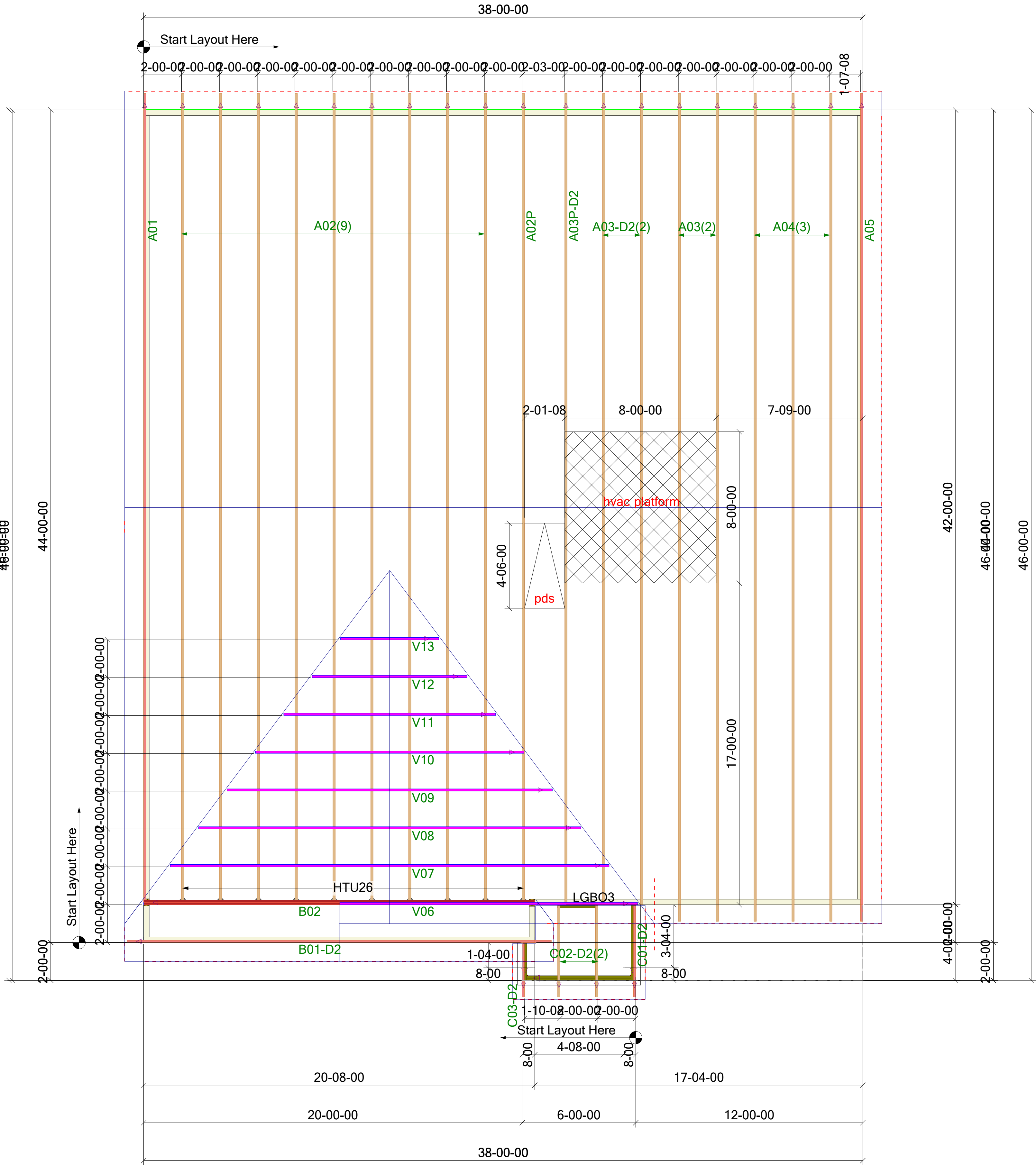


Truss Drawing Left
End Indicator

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

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

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



ROOF PLACEMENT PLAN

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

** DIMENSIONS ARE READ AS: FOOT-INCH-SIXTEENTH.

** All uplift connectors shown within these documents are recommendations only. Per ANS/ITPI 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

THIS IS A TRUSS PLACEMENT DIAGRAM ONLY. These trusses are designed as individual components to be incorporated into the building design at the specification of the building designer. See individual design sheets for each truss design identified on the placement drawing. The building designer is responsible for temporary and permanent bracing of the roof and floor systems and for the overall structure. The design of the truss support structure including headers, beams, walls, and columns is the responsibility of the building designer. For general guidance regarding the bracing, consult "Bracing of Wood Trusses" available from the Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53179



DR Horton Inc	1 Cross Creek - Hanover - D2	Roof Truss Layout

Scale:	NTS
Date:	10/2/2025
Designer:	Nate Donaldson
Project Number:	25090184-B
Sheet Number:	

1/1

Trenco

818 Soundside Rd
Edenton, NC 27932

Re: 25090184-B
1 Cross Creek-Hanover D2

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

Pages or sheets covered by this seal: I76803152 thru I76803172

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

North Carolina COA: C-0844



October 3, 2025

Gilbert, Eric

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

Carter Components (Sanford, NC), Sanford, NC - 27332, Run: 8.73 S Aug 13 2025 Print: 8.730 S Aug 13 2025 MiTek Industries, Inc. Thu Oct 02 14:35:07 Page: 1
ID:zgjStoPZF6y_dmtvQ9Hai?zE3jt-RIC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCdoi7J4zJC?f



LUMBER		Max Grav	27=151 (LC 14), 28=219 (LC 25),	WEBS	14-39=-257/63, 13-40=-201/62,
TOP CHORD	2x4 SP No.2		29=166 (LC 22), 30=159 (LC 1),		12-41=-184/85, 11-42=-132/76,
BOT CHORD	2x4 SP No.2		31=160 (LC 22), 32=160 (LC 35),		10-44=-120/77, 9-45=-120/77, 8-46=-120/77,
WEBS	2x4 SP No.2		33=161 (LC 22), 34=160 (LC 35),		6-47=-120/78, 5-48=-119/77, 4-49=-126/107,
OTHERS	2x4 SP No.2		36=179 (LC 22), 37=230 (LC 22),		3-50=-124/132, 15-38=-204/62,

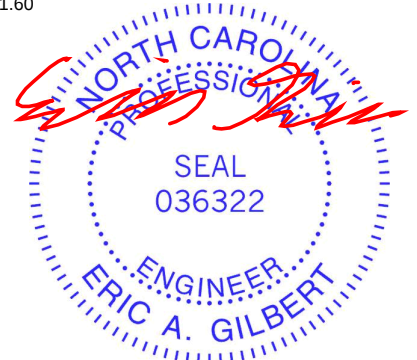
REACTIONS	(size)			
		27=41-9-0, 28=41-9-0, 29=41-9-0, 30=41-9-0, 31=41-9-0, 32=41-9-0, 33=41-9-0, 34=41-9-0, 36=41-9-0, 37=41-9-0, 38=41-9-0, 39=41-9-0, 40=41-9-0, 41=41-9-0, 42=41-9-0, 44=41-9-0, 45=41-9-0, 46=41-9-0, 47=41-9-0, 48=41-9-0, 49=41-9-0, 50=41-9-0, 51=41-9-0	TOP CHORD	Tension 2-51=-179/96, 1-2=0/46, 2-3=-190/177, 3-4=-149/143, 4-5=-143/133, 5-6=-131/122, 6-8=-120/111, 8-9=-110/150, 9-10=-99/196, 10-11=-94/241, 11-12=-110/286, 12-13=-127/333, 13-14=-142/373, 14-15=-142/373, 15-16=-127/333, 16-17=-110/286, 17-18=-94/241, 18-19=-79/196, 19-20=-63/150, 20-22=-53/105, 22-23=-61/60, 23-24=-69/59, 24-25=-77/70, 25-26=-153/99, 26-27=-129/86
Max Horiz		51=235 (LC 15)		
Max Uplift		27=-155 (LC 15), 28=-120 (LC 16), 29=-21 (LC 16), 30=-25 (LC 16), 31=-24 (LC 16), 32=-24 (LC 16), 33=-24 (LC 16), 34=-24 (LC 16), 36=-23 (LC 16), 37=-29 (LC 16), 38=-13 (LC 16), 40=-13 (LC 16), 41=-29 (LC 16), 42=-23 (LC 16), 44=-24 (LC 16), 45=-24 (LC 16), 46=-24 (LC 16), 47=-24 (LC 16), 48=-25 (LC 16), 49=-20 (LC 16), 50=-116 (LC 15), 51=-159 (LC 14)	BOT CHORD	50-51=-84/106, 49-50=-84/106, 48-49=-84/106, 47-48=-84/106, 46-47=-84/106, 45-46=-84/106, 44-45=-84/106, 42-44=-84/106, 41-42=-84/106, 40-41=-84/106, 39-40=-84/106, 38-39=-84/106, 37-38=-84/106, 36-37=-84/106, 34-36=-84/106, 33-34=-84/106, 32-33=-84/106, 31-32=-84/106, 30-31=-84/106, 29-30=-84/106, 28-29=-84/106, 27-28=-84/106

2) Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCdL=6.0psf; BCDL=6.0psf; h=25ft;
B=45ft; L=42ft; eave=2ft; Cat. II; Exp B; Enclosed;
MWFRS (directional) and C-C Corner(3E) -0-10-8 to
3-3-10, Exterior(2N) 3-3-10 to 21-0-0, Corner(3R) 21-0-0
to 25-0-0, Exterior(2N) 25-0-0 to 41-7-4 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



NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDF=6.0psf; BCDF=6.0psf; h=25ft;
B=45ft; L=42ft; eave=2ft; Cat. II; Exp B; Enclosed;
MWFRS (directional) and C-C Corner(3E) -0-10-8 to
3-3-10, Exterior(2N) 3-3-10 to 21-0-0, Corner(3R) 21-0-0
to 25-0-0, Exterior(2N) 25-0-0 to 41-7-4 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



October 3, 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.tpinet.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	1 Cross Creek-Hanover D2
25090184-B	A01	Common Supported Gable	1	1	I76803152
			Job Reference (optional)		

- 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=1.25 Plate DOL=1.25); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 5) Unbalanced snow loads have been considered for this design.
- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 7) All plates are 2x4 MT20TZ unless otherwise indicated.
- 8) Gable requires continuous bottom chord bearing.
- 9) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 10) Gable studs spaced at 2-0-0 oc.
- 11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 12) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 13) All bearings are assumed to be SP No.2 .
- 14) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 159 lb uplift at joint 51, 155 lb uplift at joint 27, 13 lb uplift at joint 40, 29 lb uplift at joint 41, 23 lb uplift at joint 42, 24 lb uplift at joint 44, 24 lb uplift at joint 45, 24 lb uplift at joint 46, 24 lb uplift at joint 47, 25 lb uplift at joint 48, 20 lb uplift at joint 49, 116 lb uplift at joint 50, 13 lb uplift at joint 38, 29 lb uplift at joint 37, 23 lb uplift at joint 36, 24 lb uplift at joint 34, 24 lb uplift at joint 33, 24 lb uplift at joint 32, 24 lb uplift at joint 31, 25 lb uplift at joint 30, 21 lb uplift at joint 29 and 120 lb uplift at joint 28.

LOAD CASE(S) Standard

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

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



818 Soundside Road
Edenton, NC 27932

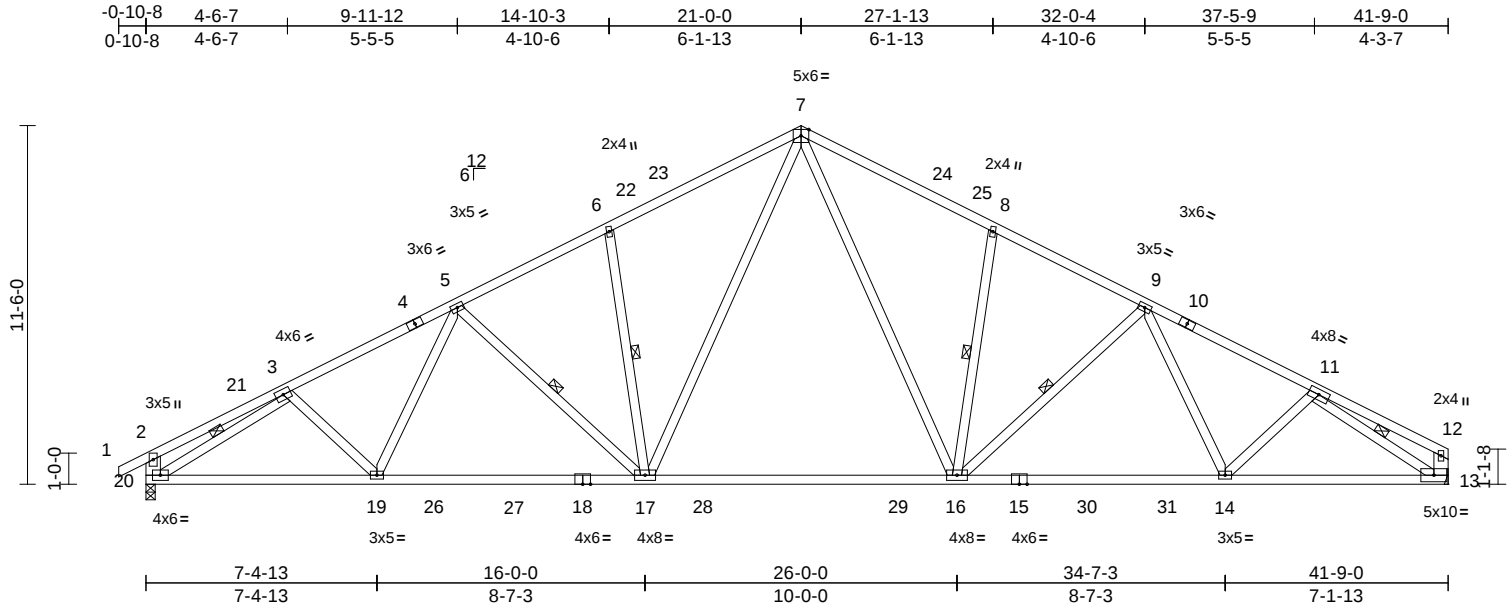
Job	Truss	Truss Type	Qty	Ply	1 Cross Creek-Hanover D2	I76803153
25090184-B	A02	Common	9	1	Job Reference (optional)	

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

Run: 8.73 S Aug 13 2025 Print: 8.730 S Aug 13 2025 MiTek Industries, Inc. Thu Oct 02 14:35:09

Page: 1

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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	1.25	TC	0.84	-0.39	16-17	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.25	BC	0.92	-0.65	16-17	>759	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.59	0.14	13	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MS							
BCDL	10.0										
										Weight: 263 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2 *Except* 4-7,10-7:2x4 SP No.1
BOT CHORD 2x4 SP No.1 *Except* 15-13:2x4 SP No.2
WEBS 2x4 SP No.3 *Except* 20-2,13-12:2x6 SP No.2

BRACING
TOP CHORD Sheathed or 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 6-17, 8-16, 5-17, 9-16, 3-20, 11-13

REACTIONS (size) 13= Mechanical, 20=0-3-8
Max Horiz 20=237 (LC 15)
Max Uplift 13=100 (LC 16), 20=-135 (LC 16)
Max Grav 13=1891 (LC 25), 20=1952 (LC 24)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/49, 2-3=-407/68, 3-5=-2935/258, 5-6=-2500/283, 6-7=-2491/356, 7-8=-2477/357, 8-9=-2486/284, 9-11=-2863/260, 11-12=-270/48, 2-20=-356/116, 12-13=-211/48
BOT CHORD 19-20=-208/2600, 17-19=-159/2617, 16-17=-32/1799, 14-16=-149/2425, 13-14=-197/2313
WEBS 6-17=-424/158, 8-16=-438/158, 3-19=0/226, 5-19=0/214, 5-17=-436/92, 7-17=-108/1117, 7-16=-106/1089, 9-16=-394/91, 9-14=0/172, 11-14=0/284, 3-20=-2601/204, 11-13=-2650/229

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; B=45ft; L=42ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 3-3-10, Interior (1) 3-3-10 to 21-0-0, Exterior(2R) 21-0-0 to 25-2-2, Interior (1) 25-2-2 to 41-6-4 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
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 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.
- Bearings are assumed to be: Joint 20 SP No.1 .
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint 13.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 20. This connection is for uplift only and does not consider lateral forces.

LOAD CASE(S) Standard



October 3,2025

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

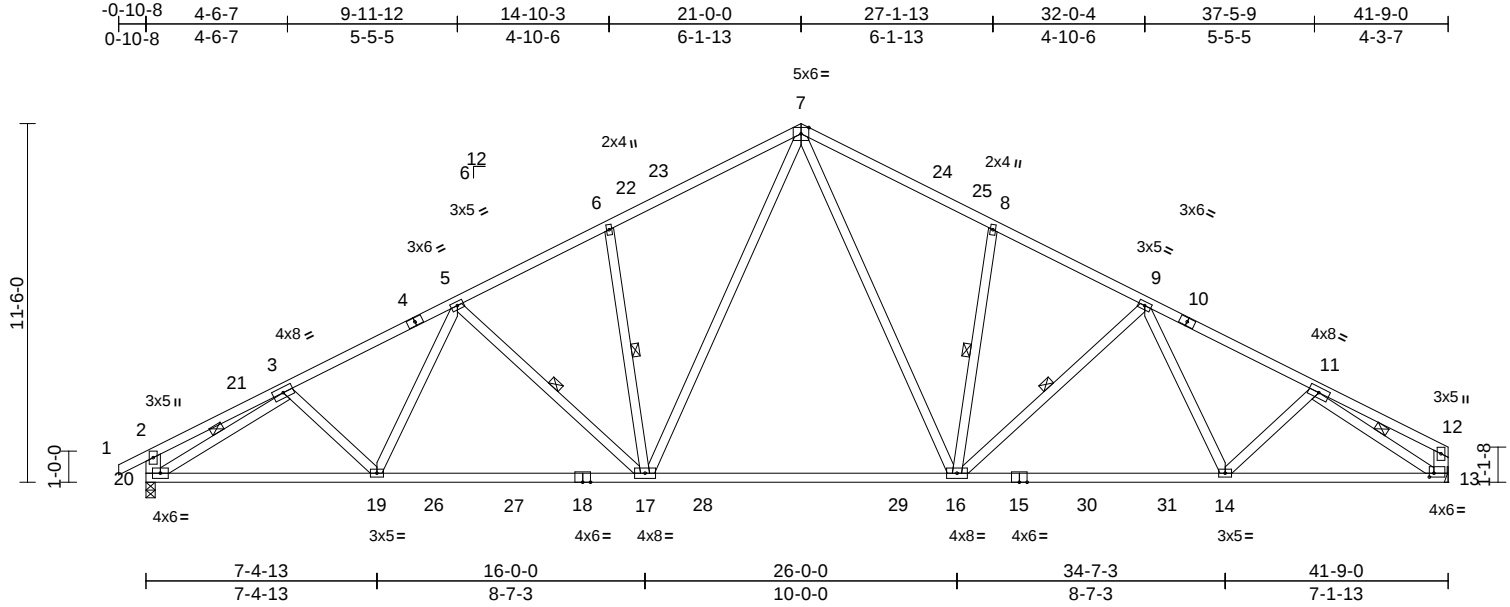
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	1 Cross Creek-Hanover D2	I76803154
25090184-B	A02P	Common	1	1	Job Reference (optional)	

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

Run: 8.73 S Aug 13 2025 Print: 8.730 S Aug 13 2025 MiTek Industries, Inc. Thu Oct 02 14:35:09
ID:rvv6aX1lJuAE09a8gskYUgzE3kL-RFC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:73.9

Plate Offsets (X, Y): [13:0-1-12,0-1-8]

Loading	(psf)	Spacing	2-3-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.65	Vert(LL)	-0.36	16-17	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.25	BC	0.78	Vert(CT)	-0.61	16-17	>814	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.66	Horz(CT)	0.13	13	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MS								
BCDL	10.0											
											Weight: 263 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2 *Except* 4-7,10-7:2x4 SP 2400F 2.0E
BOT CHORD 2x4 SP 2400F 2.0E *Except* 15-13:2x4 SP No.1
WEBS 2x4 SP No.3 *Except* 20-2,13-12:2x6 SP No.2

BRACING

TOP CHORD Sheathed or 2-9-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 6-17, 8-16, 5-17, 9-16, 3-20, 11-13

REACTIONS

(size) 13= Mechanical, 20=0-3-8
Max Horiz 20=266 (LC 15)
Max Uplift 13=-112 (LC 16), 20=-152 (LC 16)
Max Grav 13=2128 (LC 25), 20=2196 (LC 24)

FORCES

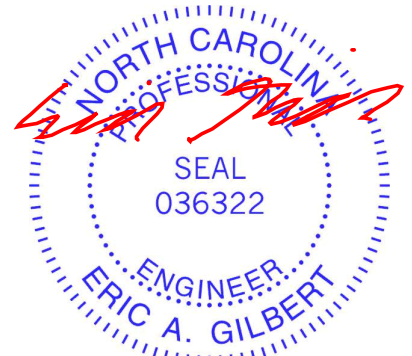
(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/56, 2-3=-470/78, 3-5=-3301/290, 5-6=-2813/318, 6-7=-2801/400, 7-8=-2786/401, 8-9=-2797/319, 9-11=-3220/293, 11-12=-309/55, 2-20=-406/132, 12-13=-241/55
BOT CHORD 19-20=-233/2925, 17-19=-180/2946, 16-17=-35/2025, 14-16=-168/2730, 13-14=-222/2602
WEBS 6-17=-472/176, 8-16=-488/176, 3-19=0/253, 5-19=0/239, 5-17=-494/105, 7-17=-121/1254, 7-16=-118/1224, 9-16=-447/104, 9-14=0/192, 11-14=0/320, 3-20=-2913/227, 11-13=-2975/256

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; B=45ft; L=42ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 3-3-10, Interior (1) 3-3-10 to 21-0-0, Exterior(2R) 21-0-0 to 25-2-2, Interior (1) 25-2-2 to 41-6-4 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
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; 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 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 8) Bearings are assumed to be: Joint 20 SP 2400F 2.0E .
- 9) Refer to girder(s) for truss to truss connections.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 112 lb uplift at joint 13.
- 11) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 20. This connection is for uplift only and does not consider lateral forces.

LOAD CASE(S) Standard



October 3, 2025

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

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818 Soundside Road
Edenton, NC 27932

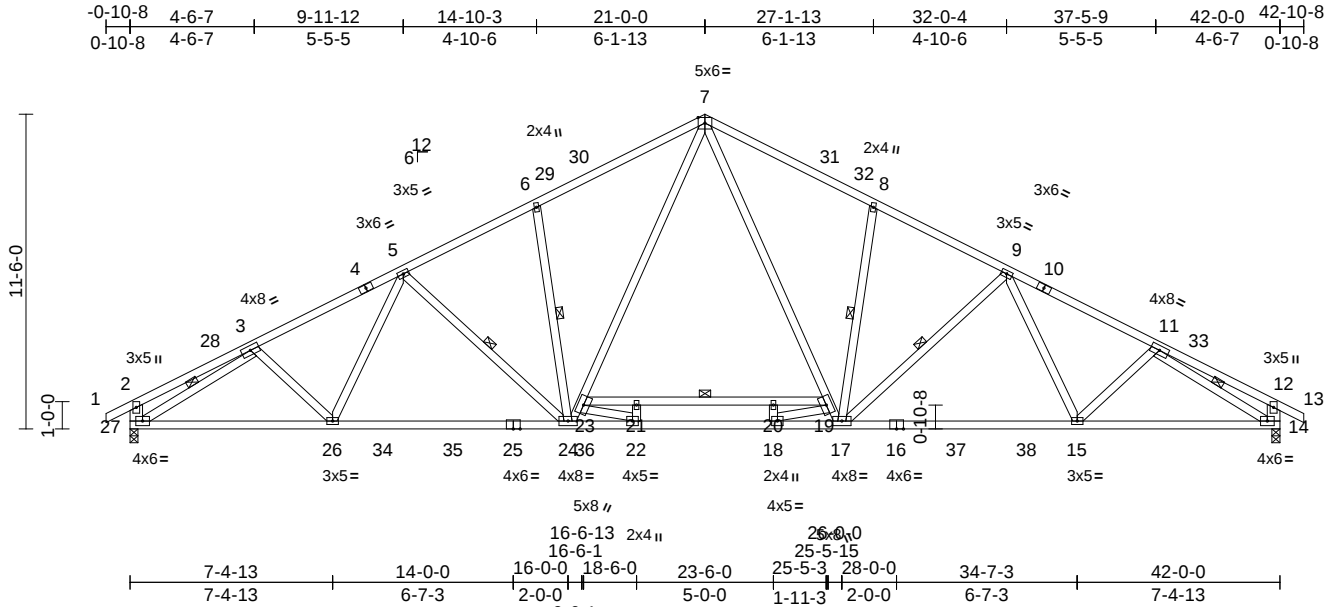
Job	Truss	Truss Type	Qty	Ply	1 Cross Creek-Hanover D2	
25090184-B	A03	Common	2	1	Job Reference (optional)	I76803155

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

Run: 8.73 S Aug 13 2025 Print: 8.730 S Aug 13 2025 MiTek Industries, Inc. Thu Oct 02 14:35:09

Page: 1

ID: QD2r?32B9vm44cAdU9SchBzE3yX-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrcD0i7J4zJC?f



Scale = 1:84.2

Loading	(psf)	Spacing	2-0-0	CSI	1-11-3	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.94	Vert(LL)	-0.27	15-17	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.25	BC	0.85	Vert(CT)	-0.51	15-17	>979	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.71	Horz(CT)	0.17	14	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MS								
BCDL	10.0											
											Weight: 286 lb	FT = 20%

LUMBER		
TOP CHORD	2x4 SP No.1 *Except* 1-4,10-13:2x4 SP No.2	
BOT CHORD	2x4 SP No.1 *Except* 23-19:2x4 SP No.2	
WEBS	2x4 SP No.3 *Except* 27-2,14-12:2x6 SP No.2	
BRACING		
TOP CHORD	Sheathed, except end verticals.	
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except:	
	6-0-0 oc bracing: 21-23,19-20	
	5-7-9 oc bracing: 20-21.	
WEBS	1 Row at midpt 5-24, 6-24, 8-17, 9-17, 3-27, 11-14	
REACTIONS (size)		
	14=0-3-8, 27=0-3-8	
	Max Horiz 27=-237 (LC 14)	
	Max Grav 14=2244 (LC 25), 27=2244 (LC 24)	
FORCES (lb) - Maximum Compression/Maximum Tension		
TOP CHORD	1-2=0/49, 2-3=-436/49, 3-5=-3473/0, 5-6=-3076/0, 6-7=-3066/51, 7-8=-3066/51, 8-9=-3075/0, 9-11=-3473/0, 11-12=-436/49, 12-13=0/49, 2-27=-375/105, 12-14=-375/105	
BOT CHORD	26-27=0/3030, 24-26=0/3121, 22-24=0/2125, 18-22=0/2939, 17-18=0/2166, 15-17=0/2965, 14-15=0/2852, 21-23=-910/0, 20-21=-910/0, 19-20=-910/0	
WEBS	7-19=0/1380, 17-19=-153/1099, 23-24=-153/1102, 7-23=0/1380, 3-26=0/307, 5-26=0/175, 5-24=-412/110, 6-24=-436/159, 8-17=-436/159, 9-17=-413/110, 9-15=0/183, 11-15=0/307, 21-22=-226/0, 22-23=0/1017, 18-20=-226/0, 18-19=0/1017, 3-27=-3087/0, 11-14=-3088/0	

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; B=45ft; L=42ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 3-3-14, Interior (1) 3-3-14 to 21-0-0, Exterior(2R) 21-0-0 to 25-2-6, Interior (1) 25-2-6 to 42-10-8 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
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; 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 2.00 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, 21-0-0 from left end, supported at two points, 5-0-0 apart.
- 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) All bearings are assumed to be SP No.1 .

LOAD CASE(S) Standard



October 3,2025

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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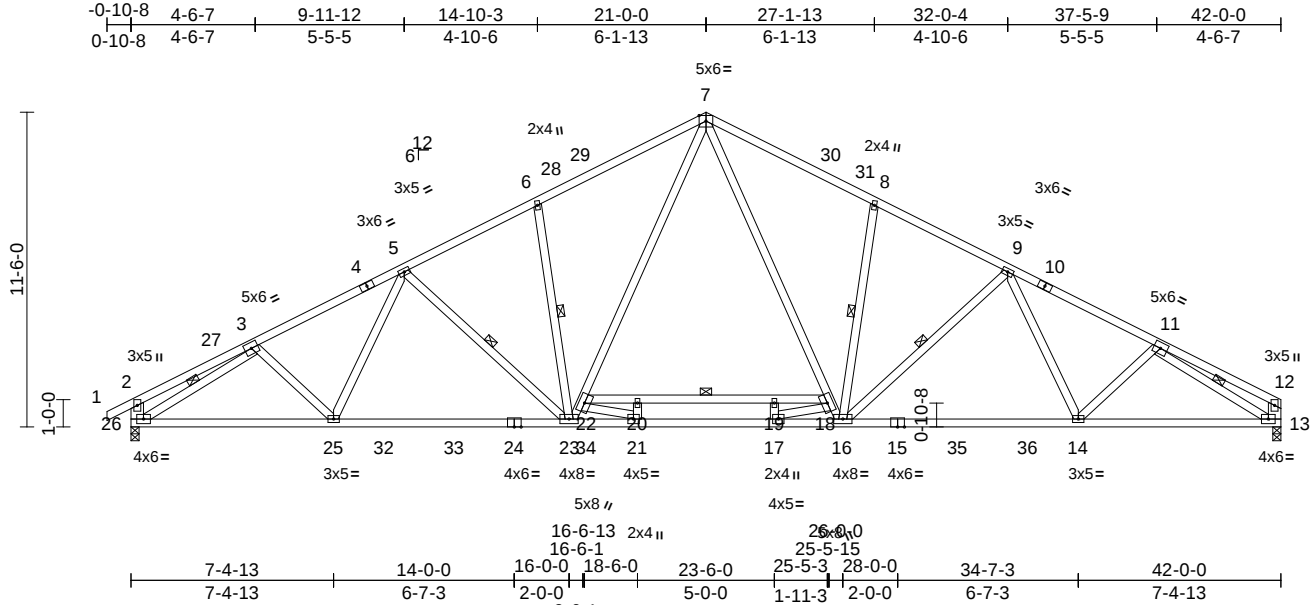
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	1 Cross Creek-Hanover D2	I76803156
25090184-B	A03-D2	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 Oct 02 14:35:09
ID: aZXdu4l5ypgGY7mxwBUSckzBVX5-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKwRCdoi7J4zJC?f

Page: 1



Scale = 1:84.2

Loading	(psf)	Spacing	2-0-0	CSI	1-11-3	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.94	Vert(LL)	-0.27	14-16	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.25	BC	0.85	Vert(CT)	-0.51	14-16	>975	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.73	Horz(CT)	0.17	13	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MS								
BCDL	10.0											
											Weight: 284 lb	FT = 20%

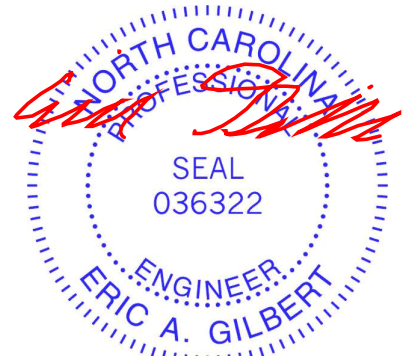
LUMBER	
TOP CHORD	2x4 SP No.2 *Except* 4-7,10-7:2x4 SP No.1
BOT CHORD	2x4 SP No.1 *Except* 22-18:2x4 SP No.2
WEBS	2x4 SP No.3 *Except* 26-2,13-12:2x6 SP No.2
BRACING	
TOP CHORD	Sheathed, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
	6-0-0 oc bracing: 20-22,18-19
	5-7-9 oc bracing: 19-20.
WEBS	1 Row at midpt 6-23, 8-16, 5-23, 9-16, 3-26, 11-13
REACTIONS	(size) 13=0-3-8, 26=0-3-8
	Max Horiz 26=235 (LC 15)
	Max Grav 13=2184 (LC 25), 26=2244 (LC 24)
FORCES	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=0/49, 2-3=-436/49, 3-5=-3474/0, 5-6=-3077/0, 6-7=-3068/51, 7-8=-3069/54, 8-9=-3078/0, 9-11=-3483/0, 11-12=-361/37, 2-26=-375/105, 12-13=-264/48
BOT CHORD	25-26=0/3024, 23-25=0/3116, 21-23=0/2120, 17-21=0/2934, 16-17=0/2160, 14-16=0/2967, 13-14=0/2870, 20-22=-909/0, 19-20=-909/0, 18-19=-909/0
WEBS	6-23=-426/159, 8-16=-437/159, 3-25=0/307, 5-25=0/174, 5-23=-412/110, 22-23=-154/1102, 7-22=0/1380, 7-18=0/1382, 16-18=-153/1102, 9-16=-414/111, 9-14=0/187, 11-14=0/298, 20-21=-226/0, 21-22=0/1017, 17-19=-226/0, 17-18=0/1017, 3-26=-3088/0, 11-13=-3178/0

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; B=45ft; L=42ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 3-3-14, Interior (1) 3-3-14 to 21-0-0, Exterior(2R) 21-0-0 to 25-2-6, Interior (1) 25-2-6 to 41-9-4 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
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; 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 2.00 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, 21-0-0 from left end, supported at two points, 5-0-0 apart.
- 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) All bearings are assumed to be SP No.1 .

LOAD CASE(S) Standard



October 3,2025

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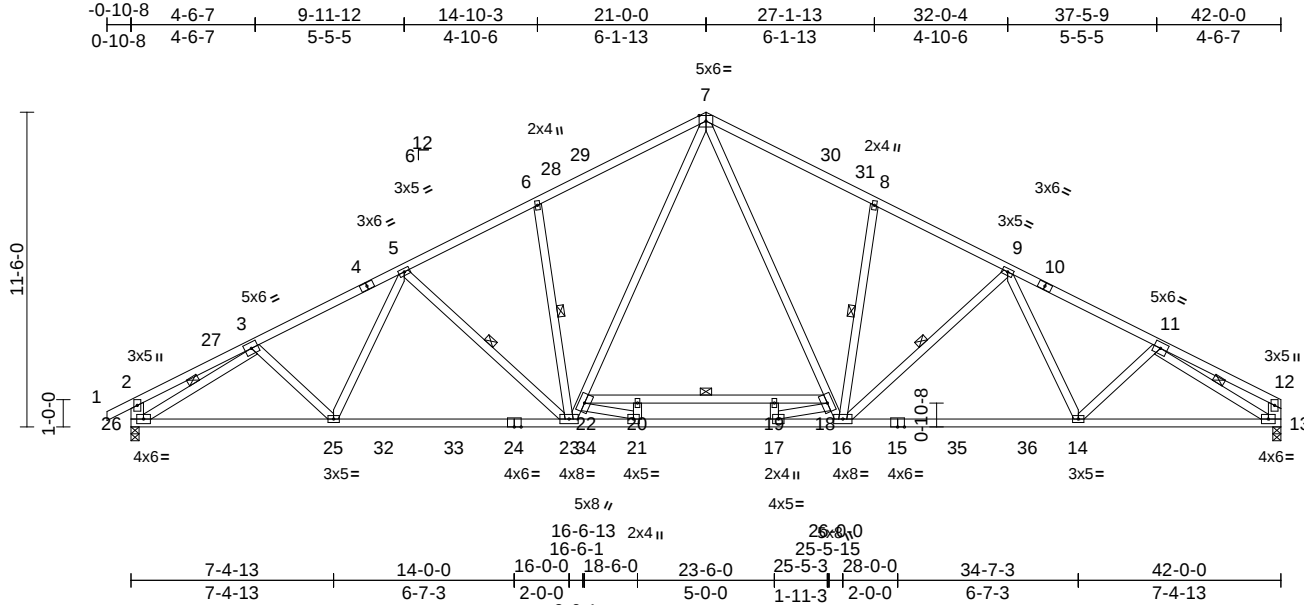
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	1 Cross Creek-Hanover D2	I76803157
25090184-B	A03P-D2	Common	1	1	Job Reference (optional)	

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

Run: 8.73 S Aug 13 2025 Print: 8.730 S Aug 13 2025 MiTek Industries, Inc. Thu Oct 02 14:35:09
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Page: 1



Scale = 1:84.2

Loading	(psf)	Spacing	2-3-0	CSI	1-11-3	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.80	Vert(LL)	-0.26	14-16	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.25	BC	0.70	Vert(CT)	-0.49	14-16	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.81	Horz(CT)	0.15	13	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 284 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2 *Except* 4-7,10-7:2x4 SP 2400F 2.0E
BOT CHORD	2x4 SP 2400F 2.0E *Except* 22-18:2x4 SP No.2
WEBS	2x4 SP No.3 *Except* 26-2,13-12:2x6 SP No.2

BRACING

TOP CHORD	Sheathed or 2-4-7 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 5-8-12 oc bracing: 20-22,18-19 5-3-15 oc bracing: 19-20.
WEBS	1 Row at midpt 6-23, 8-16, 5-23, 9-16, 3-26, 11-13

REACTIONS

(size)	13=0-3-8, 26=0-3-8
Max Horiz	26=264 (LC 15)
Max Grav	13=2445 (LC 25), 26=2512 (LC 24)

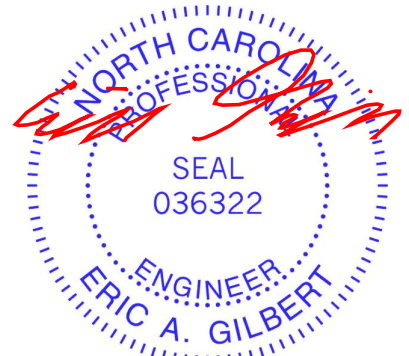
FORCES

	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=0/56, 2-3=-504/58, 3-5=-3884/2, 5-6=-3437/1, 6-7=-3425/82, 7-8=-3427/86, 8-9=-3438/4, 9-11=-3894/13, 11-12=-421/44, 2-26=-428/120, 12-13=-303/55
BOT CHORD	25-26=0/3384, 23-25=0/3486, 21-23=0/2366, 17-21=0/3253, 16-17=0/2411, 14-16=0/3317, 13-14=-1/3211, 20-22=-990/0, 19-20=-990/0, 18-19=-990/0
WEBS	6-23=-474/177, 8-16=-487/177, 3-25=0/341, 5-25=0/195, 5-23=-469/124, 22-23=-170/1239, 7-22=0/1539, 7-18=0/1542, 16-18=-170/1240, 9-16=-470/125, 9-14=0/211, 11-14=0/330, 20-21=-256/0, 21-22=0/1111, 17-19=-256/0, 17-18=0/1111, 3-26=-3438/0, 11-13=-3537/0

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; B=45ft; L=42ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 3-3-14, Interior (1) 3-3-14 to 21-0-0, Exterior(2R) 21-0-0 to 25-2-6, Interior (1) 25-2-6 to 41-9-4 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
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 200.0lb AC unit load placed on the bottom chord, 21-0-0 from left end, supported at two points, 5-0-0 apart.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- All bearings are assumed to be SP 2400F 2.0E .

LOAD CASE(S) Standard



October 3,2025

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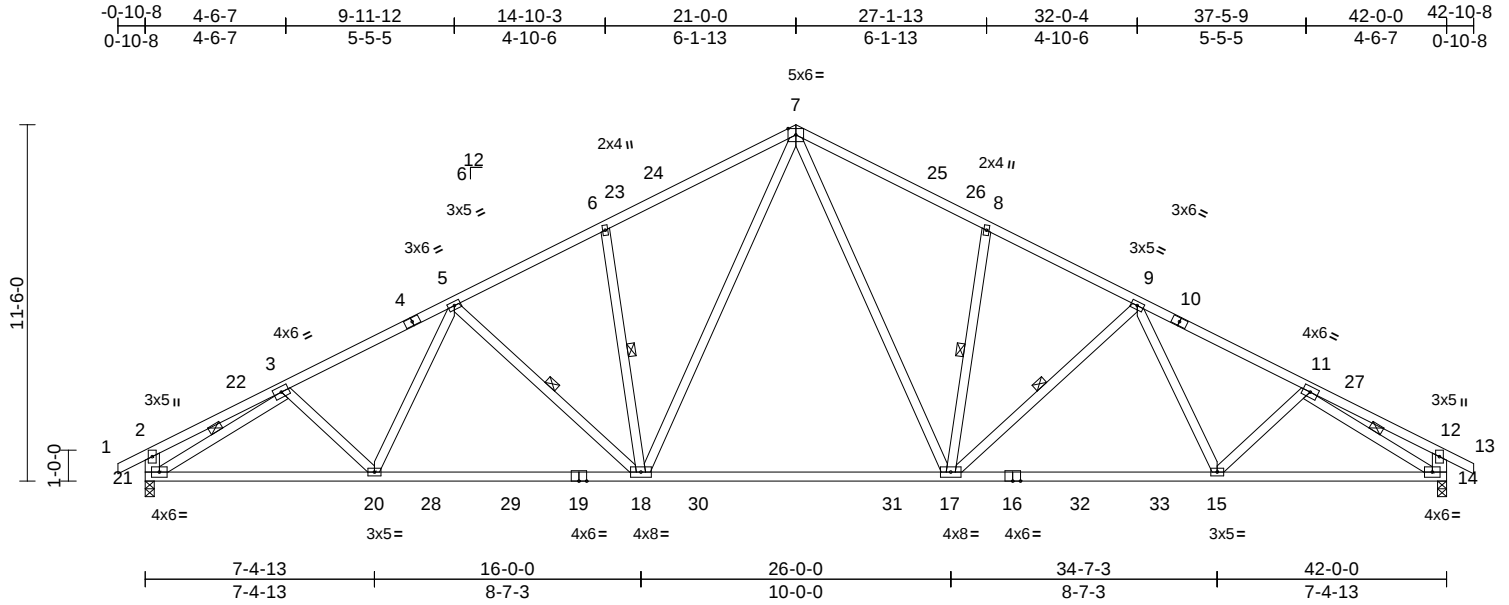
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	1 Cross Creek-Hanover D2	176803158
25090184-B	A04	Common	3	1	Job Reference (optional)	

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

Run: 8.73 S Aug 13 2025 Print: 8.730 S Aug 13 2025 MiTek Industries, Inc. Thu Oct 02 14:35:10
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Page: 1



Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.84	Vert(LL)	-0.39	17-18	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.25	BC	0.92	Vert(CT)	-0.66	17-18	>754	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.60	Horz(CT)	0.13	14	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MS								
BCDL	10.0											
											Weight: 265 lb	FT = 20%

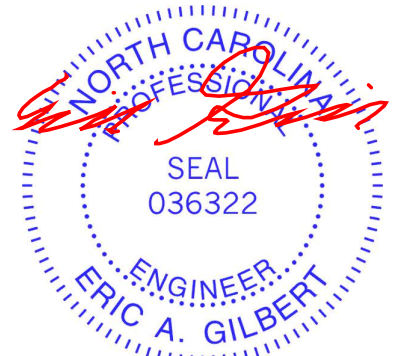
LUMBER	
TOP CHORD	2x4 SP No.2 *Except* 4-7,10-7:2x4 SP No.1
BOT CHORD	2x4 SP No.1
WEBS	2x4 SP No.3 *Except* 21-2,14-12:2x6 SP No.2
BRACING	
TOP CHORD	Sheathed or 2-2-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS	1 Row at midpt 6-18, 8-17, 5-18, 9-17, 3-21, 11-14
REACTIONS	(size) 14=0-3-8, 21=0-3-8
	Max Horiz 21=237 (LC 15)
	Max Uplift 14=135 (LC 16), 21=-135 (LC 16)
	Max Grav 14=1963 (LC 25), 21=1963 (LC 24)
FORCES	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=0/49, 2-3=-409/68, 3-5=-2954/259, 5-6=-2521/284, 6-7=-2512/357, 7-8=-2512/357, 8-9=-2521/284, 9-11=-2954/259, 11-12=-409/68, 12-13=0/49, 2-21=-357/116, 12-14=-357/116
BOT CHORD	20-21=-172/2621, 18-20=-123/2642, 17-18=0/1825, 15-17=-112/2486, 14-15=-160/2444
WEBS	6-18=-436/158, 8-17=-436/158, 3-20=0/229, 5-20=0/212, 5-18=-435/92, 7-18=-108/1117, 7-17=-108/1116, 9-17=-435/92, 9-15=0/212, 11-15=0/229, 3-21=-2617/205, 11-14=-2618/205

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; B=45ft; L=42ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 3-3-14, Interior (1) 3-3-14 to 21-0-0, Exterior(2R) 21-0-0 to 25-2-6, Interior (1) 25-2-6 to 42-10-8 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
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; 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 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 8) All bearings are assumed to be SP No.1 .
- 9) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 21 and 14. This connection is for uplift only and does not consider lateral forces.

LOAD CASE(S) Standard



October 3,2025

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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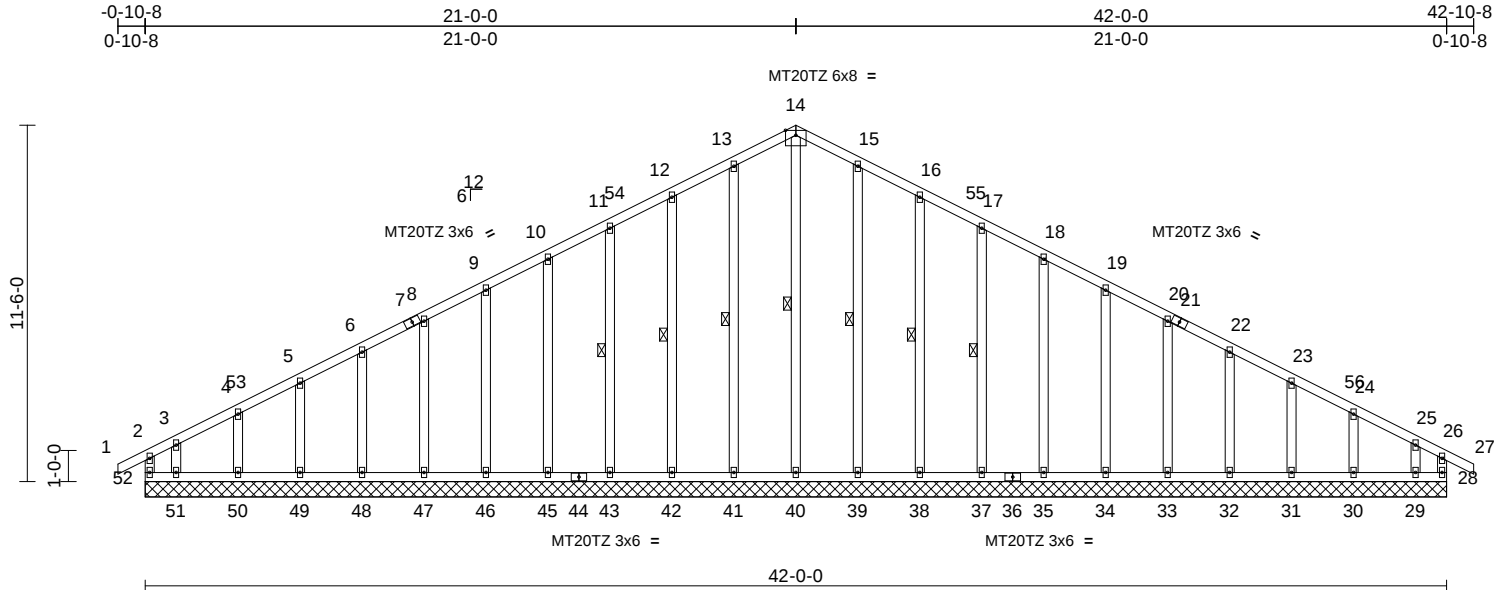
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	1 Cross Creek-Hanover D2	I76803159
25090184-B	A05	Common Supported Gable	1	1	Job Reference (optional)	

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

Run: 8.73 S Aug 13 2025 Print: 8.730 S Aug 13 2025 MiTek Industries, Inc. Thu Oct 02 14:35:10
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Page: 1



Scale = 1:74.4

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.12	Vert(LL)	n/a	-	999	MT20TZ	244/190
Snow (Pf)	20.0	Lumber DOL	1.25	BC	0.09	Vert(CT)	n/a	-	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.15	Horz(CT)	-0.01	28	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MR							
BCDL	10.0										
Weight: 316 lb FT = 20%											

LUMBER		Max Grav	28=164 (LC 28), 29=159 (LC 29), 30=168 (LC 22), 31=158 (LC 1), 32=160 (LC 22), 33=160 (LC 35), 34=161 (LC 22), 35=160 (LC 35), 37=179 (LC 22), 38=230 (LC 22), 39=244 (LC 22), 40=212 (LC 16), 41=244 (LC 21), 42=230 (LC 21), 43=179 (LC 21), 45=160 (LC 34), 46=161 (LC 21), 47=160 (LC 34), 48=160 (LC 21), 49=158 (LC 24), 50=168 (LC 21), 51=220 (LC 14), 52=230 (LC 29)	WEBS	14-40=-256/64, 13-41=-204/62, 12-42=-190/85, 11-43=-139/76, 10-45=-120/77, 9-46=-121/77, 8-47=-120/77, 6-48=-120/78, 5-49=-119/77, 4-50=-126/108, 3-51=-125/132, 15-39=-204/62, 16-38=-190/85, 17-37=-139/76, 18-35=-120/77, 19-34=-121/77, 20-33=-120/77, 22-32=-120/78, 23-31=-119/77, 24-30=-126/108, 25-29=-100/133
TOP CHORD		2x4 SP No.2			
BOT CHORD		2x4 SP No.2			
WEBS		2x4 SP No.2			
OTHERS		2x4 SP No.2			
BRACING					
TOP CHORD		Sheathed or 6-0-0 oc purlins, except end verticals.			
BOT CHORD		Rigid ceiling directly applied or 6-0-0 oc bracing.			
WEBS		1 Row at midpt	14-40, 13-41, 12-42, 11-43, 15-39, 16-38, 17-37		
REACTIONS (size)		28=42-0-0, 29=42-0-0, 30=42-0-0, 31=42-0-0, 32=42-0-0, 33=42-0-0, 34=42-0-0, 35=42-0-0, 37=42-0-0, 38=42-0-0, 39=42-0-0, 40=42-0-0, 41=42-0-0, 42=42-0-0, 43=42-0-0, 45=42-0-0, 46=42-0-0, 47=42-0-0, 48=42-0-0, 49=42-0-0, 50=42-0-0, 51=42-0-0, 52=42-0-0			
Max Horiz		52=236 (LC 15)			
Max Uplift		28=69 (LC 15), 29=79 (LC 12), 30=20 (LC 16), 31=25 (LC 16), 32=24 (LC 16), 33=24 (LC 16), 34=24 (LC 16), 35=24 (LC 16), 37=23 (LC 16), 38=29 (LC 16), 39=13 (LC 16), 41=13 (LC 16), 42=29 (LC 16), 43=23 (LC 16), 45=24 (LC 16), 46=24 (LC 16), 47=24 (LC 16), 48=24 (LC 16), 49=25 (LC 16), 50=20 (LC 16), 51=109 (LC 15), 52=157 (LC 14)			
FORCES		(lb) - Maximum Compression/Maximum Tension			
TOP CHORD		2-52=-172/94, 1-2=0/46, 2-3=-182/175, 3-4=-142/141, 4-5=-135/131, 5-6=-124/120, 6-8=-113/109, 8-9=-102/150, 9-10=-92/195, 10-11=-89/240, 11-12=-107/285, 12-13=-127/333, 13-14=-143/372, 14-15=-143/372, 15-16=-127/333, 16-17=-107/285, 17-18=-89/240, 18-19=-72/195, 19-20=-57/150, 20-22=-52/105, 22-23=-60/59, 23-24=-71/66, 24-25=-78/77, 25-26=-121/97, 26-27=0/46, 26-28=-150/34			
BOT CHORD		51-52=-91/124, 50-51=-91/124, 49-50=-91/124, 48-49=-91/124, 47-48=-91/124, 46-47=-91/124, 45-46=-91/124, 43-45=-91/124, 42-43=-91/124, 41-42=-91/124, 40-41=-91/124, 39-40=-91/124, 38-39=-91/124, 37-38=-91/124, 35-37=-91/124, 34-35=-91/124, 33-34=-91/124, 32-33=-91/124, 31-32=-91/124, 30-31=-91/124, 29-30=-91/124, 28-29=-91/124			

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; B=45ft; L=42ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) -0-10-8 to 3-3-14, Exterior(2N) 3-3-14 to 21-0-0, Corner(3R) 21-0-0 to 25-0-0, Exterior(2N) 25-0-0 to 42-10-8 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



October 3, 2025

Continued on page 2

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

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

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	1 Cross Creek-Hanover D2
25090184-B	A05	Common Supported Gable	1	1	I76803159
					Job Reference (optional)

- 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=1.25 Plate DOL=1.25); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 5) Unbalanced snow loads have been considered for this design.
- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 7) All plates are 2x4 MT20TZ unless otherwise indicated.
- 8) Gable requires continuous bottom chord bearing.
- 9) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 10) Gable studs spaced at 2-0-0 oc.
- 11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 12) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 13) All bearings are assumed to be SP No.2 .
- 14) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 157 lb uplift at joint 52, 69 lb uplift at joint 28, 13 lb uplift at joint 41, 29 lb uplift at joint 42, 23 lb uplift at joint 43, 24 lb uplift at joint 45, 24 lb uplift at joint 46, 24 lb uplift at joint 47, 24 lb uplift at joint 48, 25 lb uplift at joint 49, 20 lb uplift at joint 50, 109 lb uplift at joint 51, 13 lb uplift at joint 39, 29 lb uplift at joint 38, 23 lb uplift at joint 37, 24 lb uplift at joint 35, 24 lb uplift at joint 34, 24 lb uplift at joint 33, 24 lb uplift at joint 32, 25 lb uplift at joint 31, 20 lb uplift at joint 30 and 79 lb uplift at joint 29.

LOAD CASE(S) Standard

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

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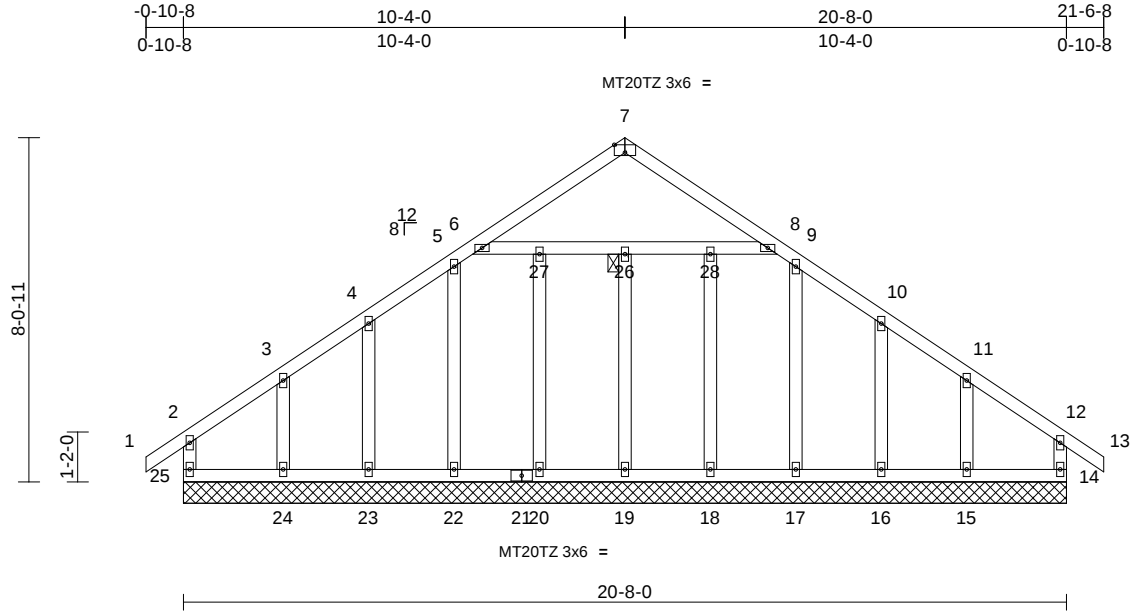
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	1 Cross Creek-Hanover D2	I76803160
25090184-B	B01-D2	Common Supported Gable	1	1	Job Reference (optional)	

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

Run: 8.73 S Aug 13 2025 Print: 8.730 S Aug 13 2025 MiTek Industries, Inc. Thu Oct 02 14:35:10
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Page: 1



Scale = 1:53.9												
Plate Offsets (X, Y): [7:0-3-0,Edge]												
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.20	Vert(LL)	n/a	-	n/a	999	MT20TZ	244/190
Snow (Pf)	20.0	Lumber DOL	1.25	BC	0.08	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.00	14	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 138 lb	FT = 20%

LUMBER	
TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.2
OTHERS	2x4 SP No.2
BRACING	
TOP CHORD	Sheathed or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
JOINTS	1 Brace at Jt(s): 26
REACTIONS (size)	14=20-8-0, 15=20-8-0, 16=20-8-0, 17=20-8-0, 18=20-8-0, 19=20-8-0, 20=20-8-0, 22=20-8-0, 23=20-8-0, 24=20-8-0, 25=20-8-0
Max Horiz	25=180 (LC 13)
Max Uplift	14=64 (LC 14), 15=42 (LC 10), 16=29 (LC 14), 23=29 (LC 14), 24=47 (LC 11), 25=64 (LC 14)
Max Grav	14=203 (LC 20), 15=200 (LC 21), 16=111 (LC 1), 17=345 (LC 1), 18=89 (LC 5), 19=70 (LC 5), 20=89 (LC 5), 22=345 (LC 1), 23=111 (LC 1), 24=208 (LC 20), 25=217 (LC 21)
FORCES (lb) - Maximum Compression/Maximum Tension	
TOP CHORD	2-25=-173/124, 1-2=0/57, 2-3=-150/86, 3-4=-112/135, 4-5=-109/189, 5-6=-172/209, 6-7=-266/93, 7-8=-266/93, 8-9=-172/209, 9-10=-108/189, 10-11=-104/135, 11-12=-134/68, 12-13=0/57, 12-14=-165/121, 24-25=-70/94, 23-24=-70/94, 22-23=-70/94, 20-22=-70/94, 19-20=-70/94, 18-19=-70/94, 17-18=-70/94, 16-17=-70/94, 15-16=-70/94, 14-15=-70/94
BOT CHORD	

WEBS	6-27=-26/170, 26-27=-26/170, 26-28=-26/170, 8-28=-26/170, 19-26=-6/31, 20-27=-29/6, 5-22=-305/35, 4-23=-70/74, 3-24=-151/99, 18-28=-29/6, 9-17=-305/35, 10-16=-70/73, 11-15=-146/98
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- 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; B=45ft; L=25ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) -0-10-8 to 2-4-0, Exterior(2N) 2-4-0 to 10-4-0, Corner(3R) 10-4-0 to 13-4-0, Exterior(2N) 13-4-0 to 21-6-8 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=1.25 Plate DOL=1.25); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - All plates are 2x4 MT20TZ 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).
 - Vertical gable studs spaced at 2-0-0 oc and horizontal 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.
 - All bearings are assumed to be SP No.2.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 64 lb uplift at joint 25, 64 lb uplift at joint 14, 29 lb uplift at joint 23, 47 lb uplift at joint 24, 29 lb uplift at joint 16 and 42 lb uplift at joint 15.
- LOAD CASE(S)** Standard



October 3, 2025

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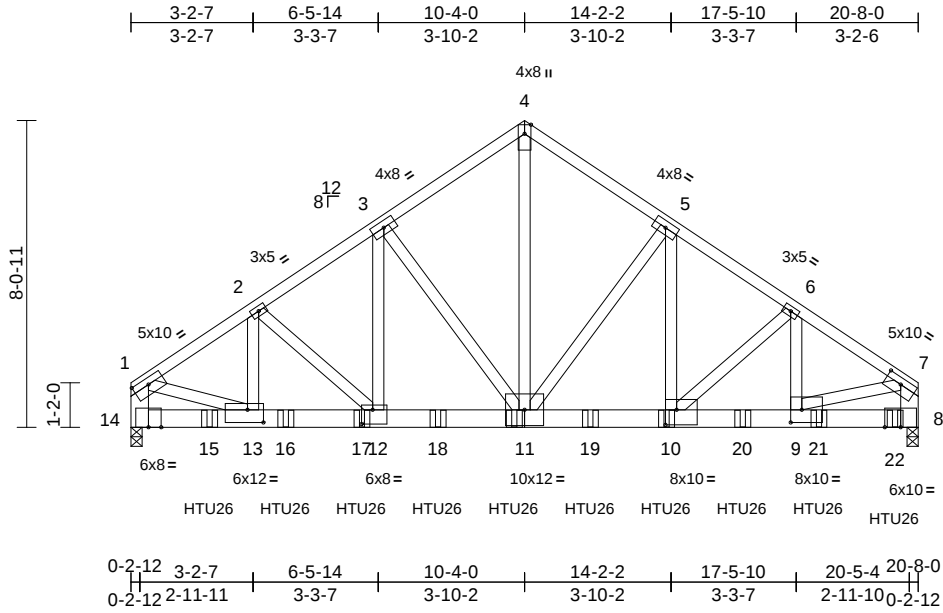
ENGINEERING BY
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A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	1 Cross Creek-Hanover D2	I76803161
25090184-B	B02	Common Girder	1	2	Job Reference (optional)	

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

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Page: 1



Scale = 1:60.5

Plate Offsets (X, Y): [1:0-5-0,0-2-0], [7:0-5-0,0-2-0], [9:0-3-8,0-4-0], [10:0-3-8,0-4-12], [12:0-3-8,0-4-8], [13:0-5-0,0-4-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.60	Vert(LL)	-0.13	10-11	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.25	BC	0.52	Vert(CT)	-0.24	10-11	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.98	Horz(CT)	0.05	8	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MS								
BCDL	10.0											
											Weight: 318 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP 2400F 2.0E
WEBS 2x4 SP No.3 *Except* 14-1,8-7:2x6 SP No.2,
13-1,9-7:2x4 SP No.2, 11-4:2x4 SP No.1

BRACING

TOP CHORD Sheathed or 3-4-11 oc purlins, except end
verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc
bracing.

REACTIONS

(size) 8=0-3-8, 14=0-3-8
Max Horiz 14=164 (LC 9)
Max Uplift 8=-660 (LC 10), 14=-566 (LC 10)
Max Grav 8=11030 (LC 16), 14=9375 (LC 15)

FORCES

(lb) - Maximum Compression/Maximum
Tension
TOP CHORD 1-2=-10729/671, 2-3=-10476/693,
3-4=-8309/601, 4-5=-8309/601,
5-6=-10606/700, 6-7=-10891/680,
1-14=-8474/529, 7-8=-8569/534
BOT CHORD 13-14=-133/1108, 12-13=-501/8961,
10-12=-466/8823, 9-10=-508/8995,
8-9=-62/1126
WEBS 1-13=-467/8227, 7-9=-467/8234,
2-13=-37/228, 2-12=-243/55,
3-11=-3057/247, 3-12=-185/3448,
4-11=-591/8936, 5-11=-3235/258,
5-10=-197/3661, 6-10=-277/57, 6-9=-36/269

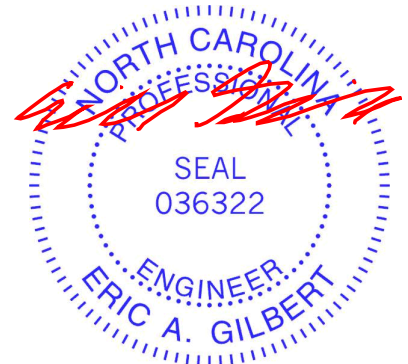
NOTES

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 3 rows staggered at 0-4-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.

- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=25ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); 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=1.25 Plate DOL=1.25); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 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 SP No.2.
- Bearing at joint(s) 14, 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 14 and 8. This connection is for uplift only and does not consider lateral forces.
- Use Simpson Strong-Tie HTU26 (20-10d Girder, 14-10dx1 1/2 Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 2-0-12 from the left end to 20-0-12 to connect truss(es) to back face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

- Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-4=-60, 4-7=-60, 8-14=-20
Concentrated Loads (lb)
Vert: 11=-1631 (B), 10=-1631 (B), 15=-1631 (B), 16=-1631 (B), 17=-1631 (B), 18=-1631 (B), 19=-1631 (B), 20=-1631 (B), 21=-1631 (B), 22=-1842 (B)



October 3,2025

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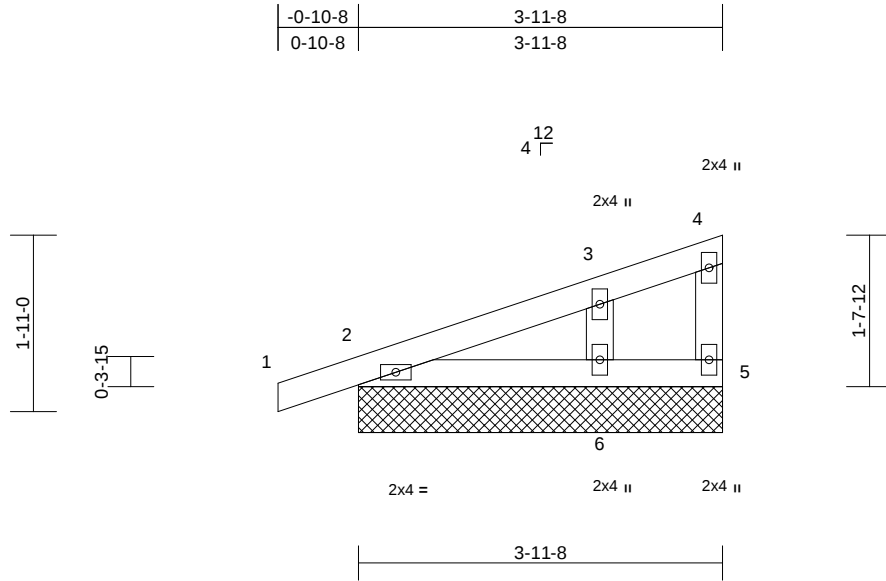
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	1 Cross Creek-Hanover D2	176803162
25090184-B	C01-D2	Monopitch Supported Gable	1	1	Job Reference (optional)	

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

Run: 8.73 S Aug 13 2025 Print: 8.730 S Aug 13 2025 MiTek Industries, Inc. Thu Oct 02 14:35:10
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Page: 1



Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.11	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.25	BC	0.16	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MP							Weight: 16 lb	FT = 20%
BCDL	10.0											

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 Sheathed or 3-11-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=3-11-8, 5=3-11-8, 6=3-11-8
Max Horiz 2=49 (LC 16)
Max Uplift 2=-30 (LC 16)
Max Grav 2=213 (LC 21), 5=78 (LC 7), 6=262 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/28, 2-3=-77/38, 3-4=-28/1, 4-5=-13/30
BOT CHORD 2-6=-23/41, 5-6=0/0
WEBS 3-6=-211/183

NOTES

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft;
B=45ft; L=25ft; eave=2ft; Cat. II; Exp B; Enclosed;
MWFRS (directional) and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 3-9-12 zone; cantilever 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=1.25 Plate DOL=1.25); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; 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 2.00 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 1-4-0 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) All bearings are assumed to be SP No.2 .
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 30 lb uplift at joint 2 and 30 lb uplift at joint 2.

LOAD CASE(S) Standard



October 3, 2025

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

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

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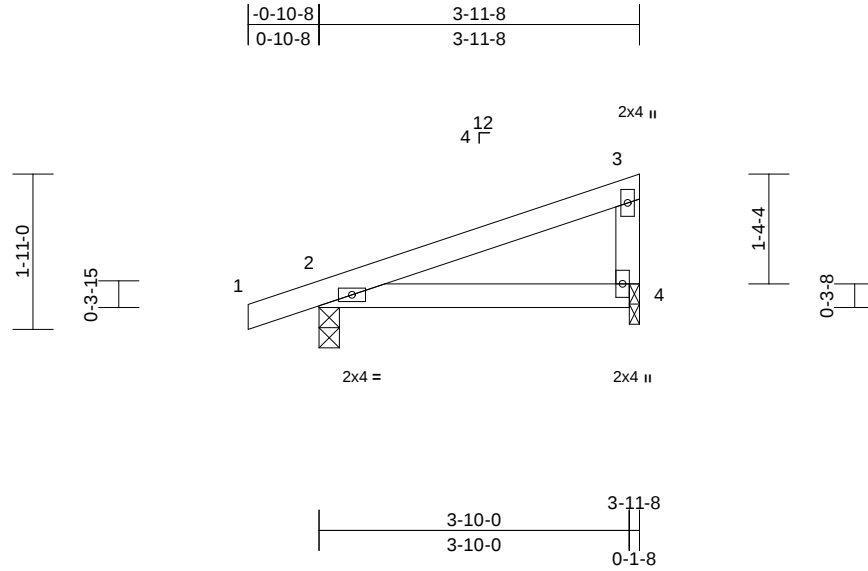
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	1 Cross Creek-Hanover D2
25090184-B	C02-D2	Monopitch	2	1	Job Reference (optional)
					I76803163

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

Run: 8.73 S Aug 13 2025 Print: 8.730 S Aug 13 2025 MiTek Industries, Inc. Thu Oct 02 14:35:11
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Page: 1



Scale = 1:28.5

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.26	Vert(LL)	-0.02	4-7	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.25	BC	0.22	Vert(CT)	-0.03	4-7	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 15 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD	Sheathed or 3-11-8 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(size)	2=0-3-0, 4=0-1-8
Max Horiz	2=49 (LC 15)
Max Uplift	2=-39 (LC 16), 4=-7 (LC 16)
Max Grav	2=288 (LC 21), 4=194 (LC 21)

FORCES

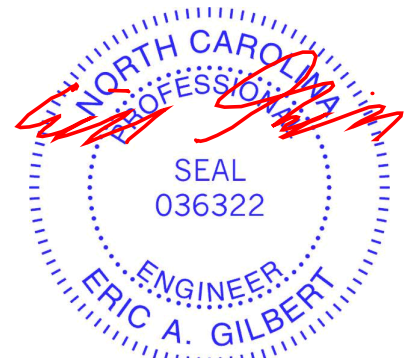
(lb) - Maximum Compression/Maximum Tension	
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TOP CHORD	1-2=0/28, 2-3=-87/42, 3-4=-134/88
BOT CHORD	2-4=-44/83

NOTES

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft;
B=45ft; L=25ft; eave=4ft; Cat. II; Exp B; Enclosed;
MWFRS (directional) and C-C Exterior(2E) -0-10-8 to
2-1-8, Interior (1) 2-1-8 to 3-9-12 zone; cantilever left
and right exposed; end vertical left and right exposed; C-
C for members and forces & MWFRS for reactions
shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25
Plate DOL=1.25); Pf=20.0 psf (Lum DOL=1.15 Plate
DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0;
Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this
design.
- 4) This truss has been designed for greater of min roof live
load of 12.0 psf or 2.00 times flat roof load of 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) Bearings are assumed to be: Joint 2 SP No.2, Joint 4
SP No.3.
 - 8) 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.
 - 9) Provide mechanical connection (by others) of truss to
bearing plate at joint(s) 4.
 - 10) 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



October 3, 2025

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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 Oct 02 14:35:11 Page: 1
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LUMBER	
TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.3
BRACING	
TOP CHORD	Sheathed or 1-11-8 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
REACTIONS	
(size)	2=1-11-8, 4=1-11-8
Max Horiz	2=30 (LC 16)
Max Uplift	2=-36 (LC 16)
Max Grav	2=178 (LC 21), 4=77 (LC 21)
FORCES	
	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=0/28, 2-3=-28/21, 3-4=-48/48
BOT CHORD	2-4=-23/29

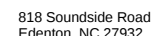
- 6) Gable requires continuous bottom chord bearing.
- 7) Gable studs spaced at 2'-0" o.c.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3'-0" 0" tall by 2'-0" 0" wide will fit between the bottom chord and any other members.
- 10) All bearings are assumed to be SP No.2 .
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 36 lb uplift at joint 2 and 36 lb uplift at joint 2.
- 12) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2, 5.

LOAD CASE(S) Standard

- ## NOTES
- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=25ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) zone; cantilever 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/TP1 1.
 - 3) TCCL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; 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 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.



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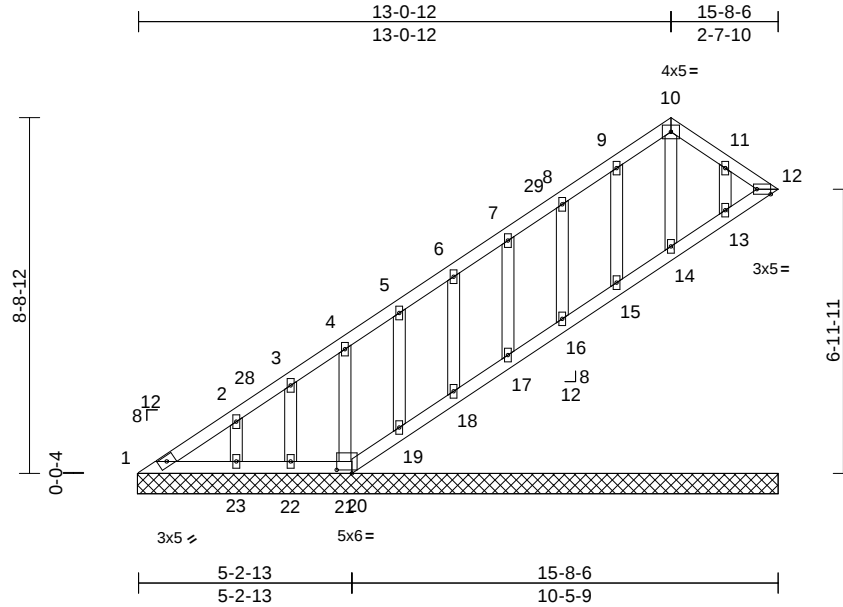


Job	Truss	Truss Type	Qty	Ply	1 Cross Creek-Hanover D2	176803165
25090184-B	V06	Valley	1	1	Job Reference (optional)	

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

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Page: 1



Scale = 1:56.5

Plate Offsets (X, Y): [12'-0-4-1,Edge], [20'-0-4-8,0-1-0]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.06	Vert(LL)	n/a	-	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.25	BC	0.06	Vert(TL)	n/a	-	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.02	Horiz(TL)	0.00	12	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MS							
BCDL	10.0										
										Weight: 91 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Sheathed or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size) 1=15-8-12, 12=15-8-12, 13=15-8-12, 14=15-8-12, 15=15-8-12, 16=15-8-12, 17=15-8-12, 18=15-8-12, 19=15-8-12, 20=15-8-12, 21=15-8-12, 22=15-8-12, 23=15-8-12
Max Horiz 1=196 (LC 14)
Max Uplift 12=35 (LC 14), 13=33 (LC 14), 15=21 (LC 14), 16=25 (LC 14), 17=23 (LC 14), 18=24 (LC 14), 19=24 (LC 14), 20=19 (LC 12), 21=22 (LC 14), 22=25 (LC 14), 23=21 (LC 14)
Max Grav 1=92 (LC 20), 12=44 (LC 19), 13=123 (LC 30), 14=104 (LC 1), 15=114 (LC 19), 16=107 (LC 19), 17=108 (LC 19), 18=108 (LC 19), 19=108 (LC 19), 20=16 (LC 11), 21=123 (LC 1), 22=78 (LC 19), 23=192 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=199/150, 2-3=165/113, 3-4=131/95, 4-5=98/72, 5-6=65/55, 6-7=32/46, 7-8=25/38, 8-9=32/52, 9-10=55/86, 10-11=55/88, 11-12=39/57

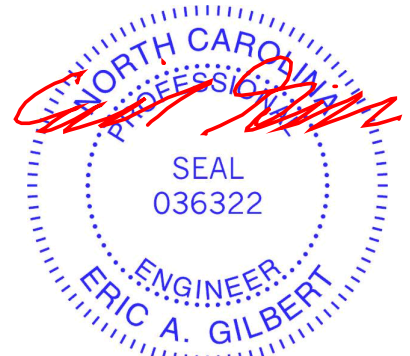
BOT CHORD 1-23=-68/96, 22-23=-29/22, 21-22=-29/22, 20-21=-29/22, 19-20=-41/34, 18-19=-42/33, 17-18=-42/33, 16-17=-42/33, 15-16=-42/33, 14-15=-42/33, 13-14=-42/34, 12-13=-42/26
WEBS 10-14=-80/5, 9-15=-86/51, 8-16=-81/53, 7-17=-82/44, 6-18=-82/44, 5-19=-81/44, 4-21=-83/44, 3-22=-69/45, 2-23=-119/45, 11-13=-85/40

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; B=45ft; L=25ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior (1) 3-0-0 to 13-1-2, Exterior(2E) 13-1-2 to 15-8-12 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
- 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=1.25 Plate DOL=1.25); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 1-4-0 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.
- All bearings are assumed to be SP No.2 .

- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 19 lb uplift at joint 20, 35 lb uplift at joint 12, 21 lb uplift at joint 15, 25 lb uplift at joint 16, 23 lb uplift at joint 17, 24 lb uplift at joint 18, 24 lb uplift at joint 19, 22 lb uplift at joint 21, 25 lb uplift at joint 22, 21 lb uplift at joint 23 and 33 lb uplift at joint 13.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 12, 14, 15, 16, 17, 18, 19, 13.

LOAD CASE(S) Standard



October 3,2025

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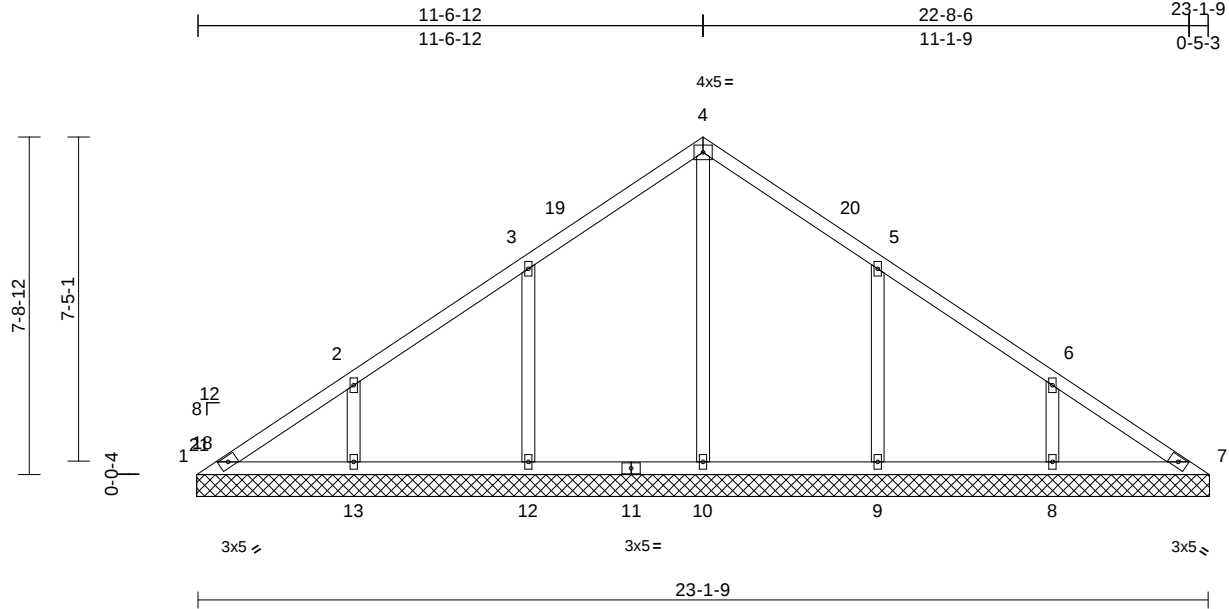
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	1 Cross Creek-Hanover D2	I76803166
25090184-B	V07	Valley	1	1	Job Reference (optional)	

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

Run: 8.73 S Aug 13 2025 Print: 8.730 S Aug 13 2025 MiTek Industries, Inc. Thu Oct 02 14:35:11
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Page: 1



Scale = 1:52.8

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.22	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.25	BC	0.17	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.25	Horiz(TL)	0.00	7	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MS							
BCDL	10.0										
										Weight: 104 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD	Sheathed or 6-0-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS

(size)	1=23-2-5, 7=23-2-5, 8=23-2-5, 9=23-2-5, 10=23-2-5, 12=23-2-5, 13=23-2-5
Max Horiz	1=149 (LC 13)
Max Uplift	1=-7 (LC 12), 8=-62 (LC 14), 9=-78 (LC 14), 12=-79 (LC 14), 13=-61 (LC 14)
Max Grav	1=110 (LC 20), 7=105 (LC 30), 8=389 (LC 20), 9=429 (LC 20), 10=440 (LC 19), 12=429 (LC 19), 13=388 (LC 19)

FORCES

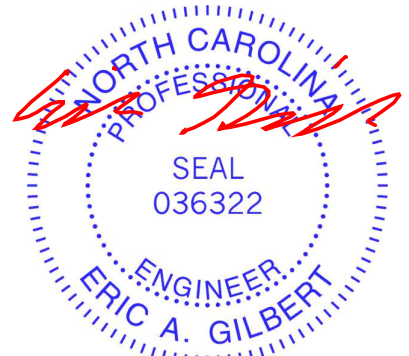
(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=-169/159, 2-3=-89/139, 3-4=-88/142, 4-5=-88/138, 5-6=-48/96, 6-7=-144/117
BOT CHORD	1-13=-74/146, 12-13=-74/86, 10-12=-74/86, 9-10=-74/86, 8-9=-74/86, 7-8=-74/118
WEBS	4-10=-235/0, 3-12=-264/140, 2-13=-236/103, 5-9=-263/140, 6-8=-236/103

NOTES

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

- Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft;
B=45ft; L=25ft; eave=4ft; Cat. II; Exp B; Enclosed;
MWFRS (directional) and C-C Exterior(2E) 0-5-12 to
3-7-2, Interior (1) 3-7-2 to 11-7-2, Exterior(2R) 11-7-2 to
14-7-2, Interior (1) 14-7-2 to 23-2-5 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=1.25
Plate DOL=1.25); Pf=20.0 psf (Lum DOL=1.15 Plate
DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0;
Cs=1.00; Ct=1.10
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 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.
- All bearings are assumed to be SP No.2 .
- Provide mechanical connection (by others) of truss to
bearing plate capable of withstanding 7 lb uplift at joint 1,
79 lb uplift at joint 12, 61 lb uplift at joint 13, 78 lb uplift at
joint 9 and 62 lb uplift at joint 8.
- Beveled plate or shim required to provide full bearing
surface with truss chord at joint(s) 1, 7.

LOAD CASE(S) Standard



October 3, 2025

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

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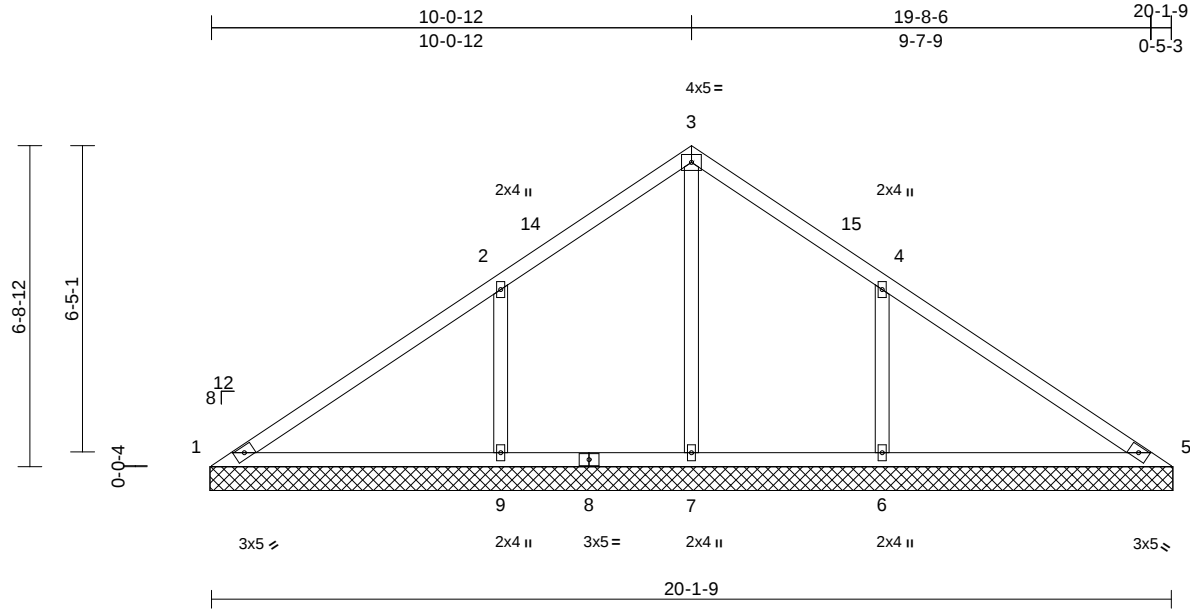
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	1 Cross Creek-Hanover D2	176803167
25090184-B	V08	Valley	1	1	Job Reference (optional)	

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

Run: 8.73 S Aug 13 2025 Print: 8.730 S Aug 13 2025 MiTek Industries, Inc. Thu Oct 02 14:35:11
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Page: 1



Scale = 1:48.3

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.45	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.25	BC	0.31	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.39	Horiz(TL)	0.01	5	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MS							
BCDL	10.0									Weight: 84 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS

(size)	1=20-2-5, 5=20-2-5, 6=20-2-5, 7=20-2-5, 9=20-2-5
Max Horiz	1=-131 (LC 12)
Max Uplift	1=-9 (LC 30), 5=-9 (LC 29), 6=-105 (LC 14), 9=-105 (LC 14)
Max Grav	1=89 (LC 29), 5=89 (LC 30), 6=619 (LC 20), 7=637 (LC 19), 9=621 (LC 19)

FORCES

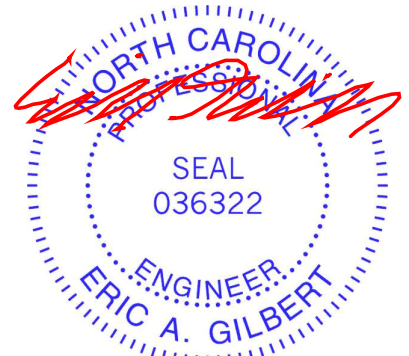
(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=-85/452, 2-3=0/354, 3-4=0/349, 4-5=-83/412
BOT CHORD	1-9=-284/113, 7-9=-284/113, 6-7=-284/113, 5-6=-284/113
WEBS	3-7=-488/0, 2-9=-356/162, 4-6=-356/162

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; B=45ft; L=25ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior (1) 3-0-0 to 10-1-2, Exterior(2R) 10-1-2 to 13-1-2, Interior (1) 13-1-2 to 20-2-5 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=1.25 Plate DOL=1.25); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 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.
- All bearings are assumed to be SP No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 9 lb uplift at joint 1, 9 lb uplift at joint 5, 105 lb uplift at joint 9 and 105 lb uplift at joint 6.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 5.

LOAD CASE(S) Standard



October 3, 2025

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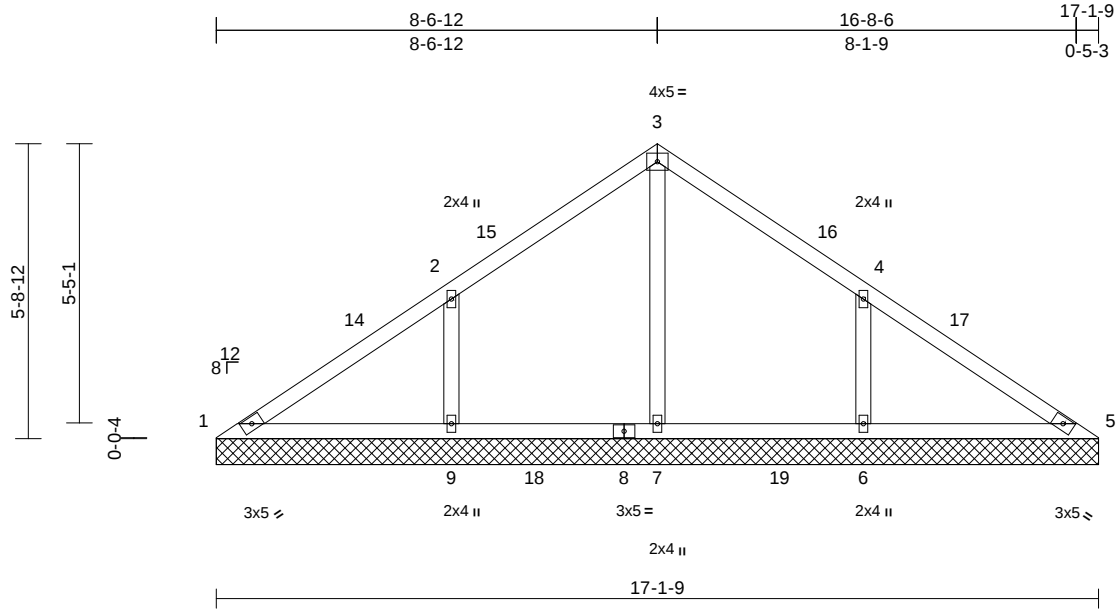
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	1 Cross Creek-Hanover D2	176803168
25090184-B	V09	Valley	1	1	Job Reference (optional)	

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

Run: 8.73 S Aug 13 2025 Print: 8.730 S Aug 13 2025 MiTek Industries, Inc. Thu Oct 02 14:35:11
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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	1.25	TC	0.28	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.25	BC	0.17	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.19	Horiz(TL)	0.00	5	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MS								
BCDL	10.0											
Weight: 70 lb											FT = 20%	

LUMBER

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

BRACING

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

REACTIONS	(size)	1=17-1-9, 5=17-1-9, 6=17-1-9, 7=17-1-9, 9=17-1-9
	Max Horiz	1=-111 (LC 12)
	Max Uplift	6=-86 (LC 14), 9=-86 (LC 14)
	Max Grav	1=102 (LC 29), 5=102 (LC 30), 6=486 (LC 20), 7=493 (LC 19), 9=488 (LC 23)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-125/244, 2-3=0/191, 3-4=0/173, 4-5=-119/210
BOT CHORD	1-9=-128/123, 7-9=-128/75, 6-7=-128/75, 5-6=-128/95
WEBS	3-7=-327/0, 2-9=-294/140, 4-6=-294/140

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; B=45ft; L=25ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-6 to 3-0-6, Interior (1) 3-0-6 to 8-7-2, Exterior(2R) 8-7-2 to 11-7-2, Interior (1) 11-7-2 to 17-1-15 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=1.25 Plate DOL=1.25); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 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.
- All bearings are assumed to be SP No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 86 lb uplift at joint 9 and 86 lb uplift at joint 6.

LOAD CASE(S) Standard



October 3, 2025

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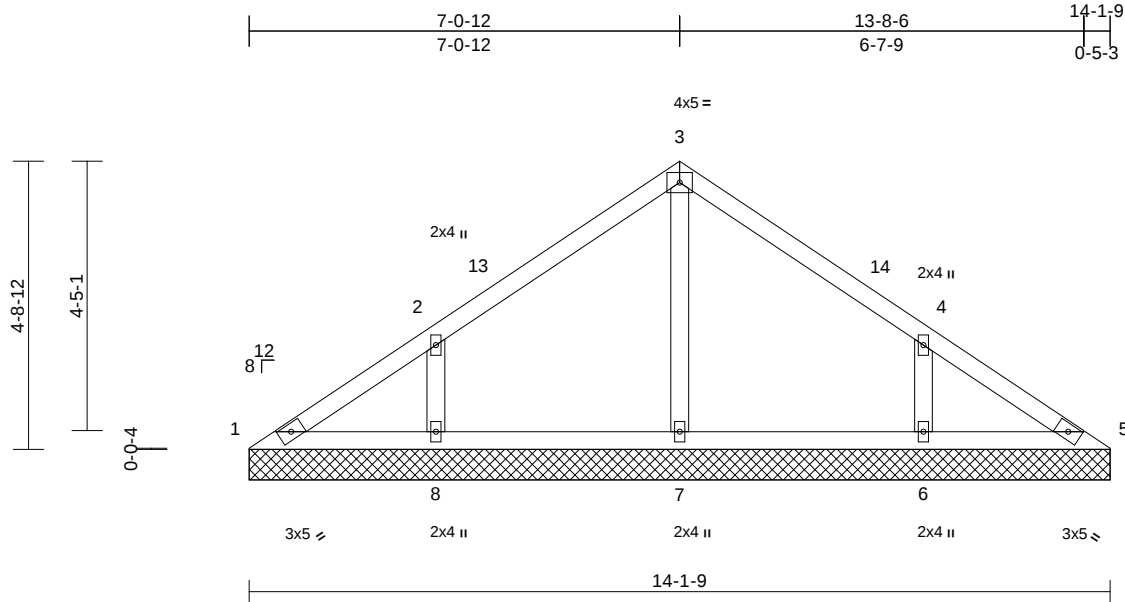
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	1 Cross Creek-Hanover D2	176803169
25090184-B	V10	Valley	1	1	Job Reference (optional)	

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

Run: 8.73 S Aug 13 2025 Print: 8.730 S Aug 13 2025 MiTek Industries, Inc. Thu Oct 02 14:35:11
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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	1.25	TC	0.19	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.25	BC	0.11	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.09	Horiz(TL)	0.00	5	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MS							
BCDL	10.0									Weight: 55 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD	Sheathed or 6-0-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS	(size)	1=14-1-9, 5=14-1-9, 6=14-1-9, 7=14-1-9, 8=14-1-9
	Max Horiz	1=-91 (LC 12)
	Max Uplift	6=-70 (LC 14), 8=-70 (LC 14)
	Max Grav	1=94 (LC 20), 5=86 (LC 1), 6=334 (LC 30), 7=301 (LC 1), 8=334 (LC 19)

FORCES

(lb) - Maximum Compression/Maximum Tension

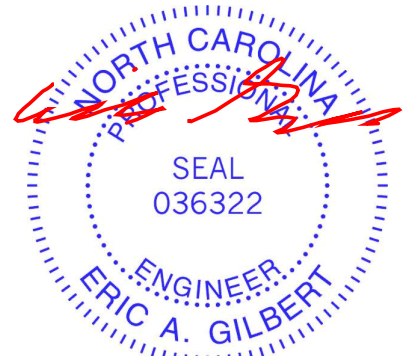
TOP CHORD	1-2=-125/103, 2-3=-81/93, 3-4=-71/90, 4-5=-104/76
BOT CHORD	1-8=-41/106, 7-8=-41/52, 6-7=-41/52, 5-6=-41/81
WEBS	3-7=-222/7, 2-8=-249/149, 4-6=-249/149

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=25ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-6 to 3-1-2, Interior (1) 3-1-2 to 7-1-2, Exterior(2R) 7-1-2 to 10-1-2, Interior (1) 10-1-2 to 14-1-15 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=1.25 Plate DOL=1.25); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 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 SP No.2 .
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 70 lb uplift at joint 8 and 70 lb uplift at joint 6.

LOAD CASE(S) Standard



October 3, 2025

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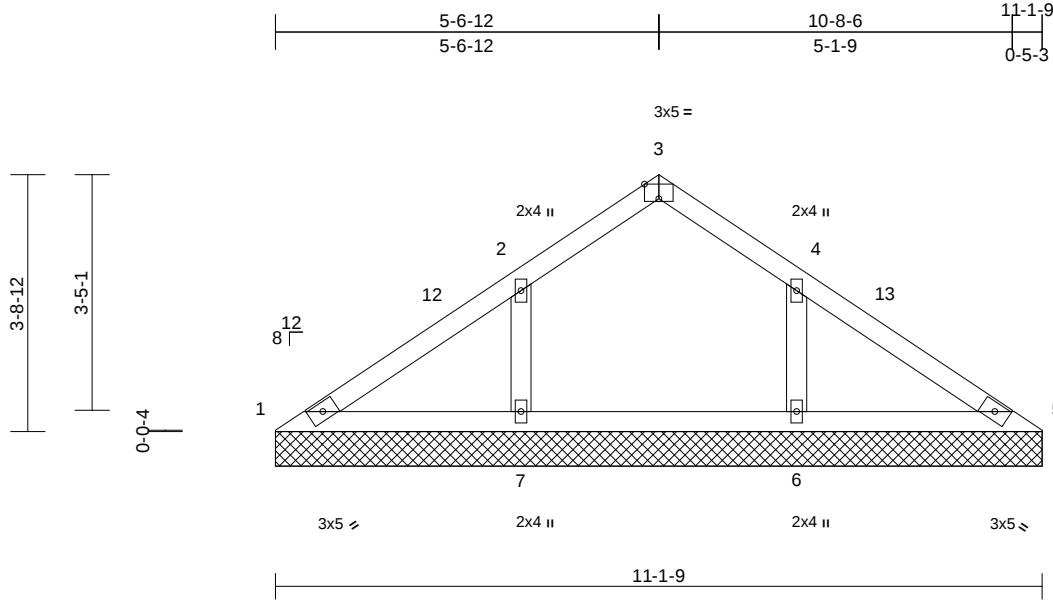
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	1 Cross Creek-Hanover D2	
T25090184-B	V11	Valley	1	1	Job Reference (optional)	I76803170

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

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Page: 1



Scale = 1:33.4

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	1.25	TC	0.15	Vert(LL)	n/a	-	n/a	999	MT20
Snow (Pf)	20.0	Lumber DOL	1.25	BC	0.14	Vert(TL)	n/a	-	n/a	999	244/190
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horiz(TL)	0.00	5	n/a	n/a	
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MS							
BCDL	10.0										
Weight: 40 lb FT = 20%											

LUMBER

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

BRACING

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

REACTIONS (size) 1=11-1-9, 5=11-1-9, 6=11-1-9, 7=11-1-9
Max Horiz 1=-71 (LC 12)
Max Uplift 6=-39 (LC 14), 7=-39 (LC 14)
Max Grav 1=134 (LC 1), 5=134 (LC 1), 6=311 (LC 1), 7=315 (LC 19)

FORCES

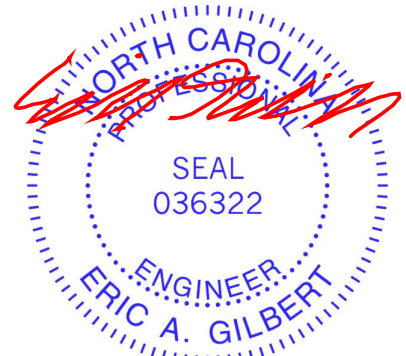
(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-182/46, 2-3=-95/44, 3-4=-95/43, 4-5=-182/45
BOT CHORD 1-7=-46/169, 6-7=-46/93, 5-6=-46/148
WEBS 2-7=-212/131, 4-6=-210/130

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; B=45ft; L=25ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-6 to 3-0-6, Interior (1) 3-0-6 to 5-7-2, Exterior(2R) 5-7-2 to 8-7-2, Interior (1) 8-7-2 to 11-1-15 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=1.25 Plate DOL=1.25); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 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.
- All bearings are assumed to be SP No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 39 lb uplift at joint 7 and 39 lb uplift at joint 6.

LOAD CASE(S) Standard



October 3, 2025

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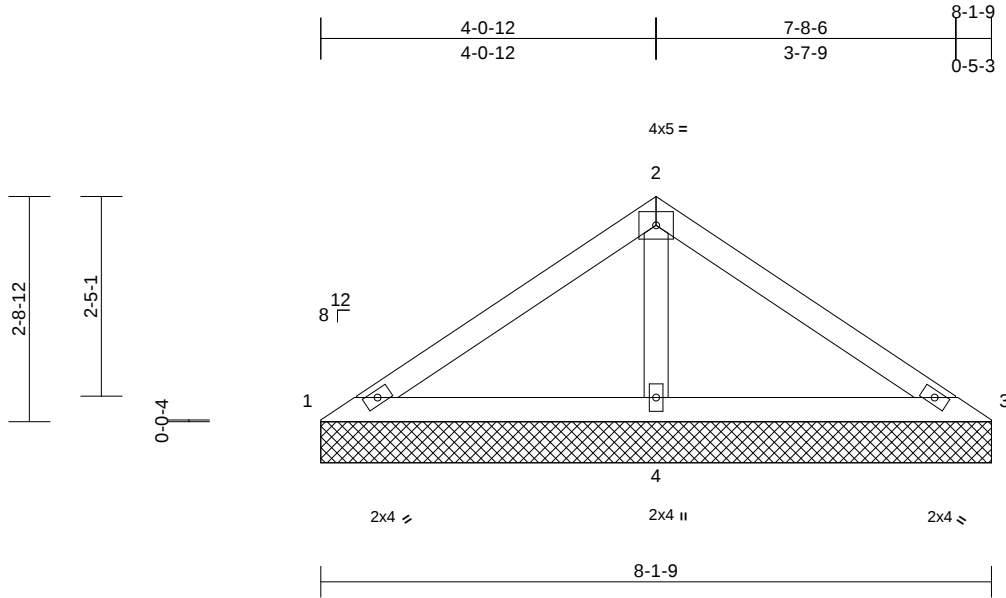
Job	Truss	Truss Type	Qty	Ply	1 Cross Creek-Hanover D2	I76803171
25090184-B	V12	Valley	1	1	Job Reference (optional)	

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

Run: 8.73 S Aug 13 2025 Print: 8.730 S Aug 13 2025 MiTek Industries, Inc. Thu Oct 02 14:35:11

Page: 1

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Scale = 1:27.9

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.22	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.25	BC	0.19	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.09	Horiz(TL)	0.00	3	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MP							
BCDL	10.0									Weight: 28 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD	Sheathed or 8-1-9 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS

(size)	1=8-1-9, 3=8-1-9, 4=8-1-9
Max Horiz	1=-51 (LC 12)
Max Uplift	1=-13 (LC 30), 3=-13 (LC 29), 4=-57 (LC 14)
Max Grav	1=68 (LC 29), 3=68 (LC 30), 4=577 (LC 1)

FORCES

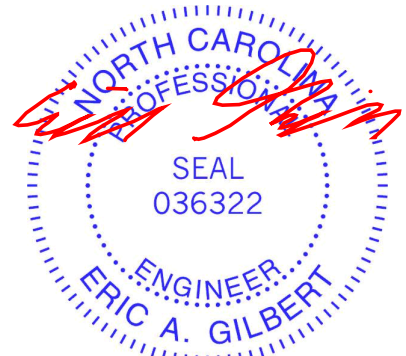
(lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-97/256, 2-3=-97/256
BOT CHORD	1-4=-203/150, 3-4=-203/150
WEBS	2-4=-417/193

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; B=45ft; L=25ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-6 to 3-0-6, Interior (1) 3-0-6 to 4-1-2, Exterior(2R) 4-1-2 to 7-2-12, Interior (1) 7-2-12 to 8-1-15 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=1.25 Plate DOL=1.25); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Gable requires continuous bottom chord bearing.
 - Gable studs spaced at 4-0-0 oc.
 - This truss has been designed for a 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 SP No.2.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 13 lb uplift at joint 1, 13 lb uplift at joint 3 and 57 lb uplift at joint 4.
- LOAD CASE(S)** Standard



October 3, 2025

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

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

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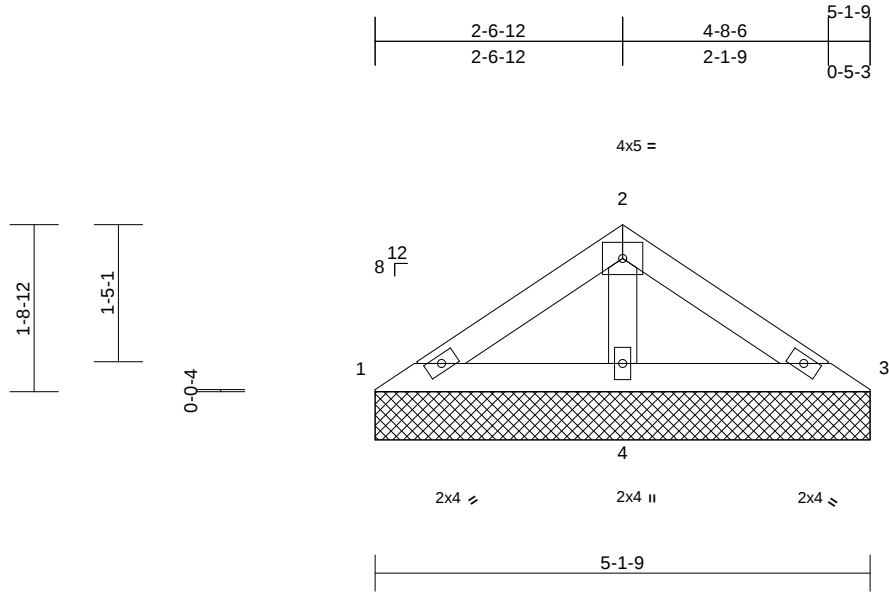
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	1 Cross Creek-Hanover D2	I76803172
25090184-B	V13	Valley	1	1	Job Reference (optional)	

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

Run: 8.73 S Aug 13 2025 Print: 8.730 S Aug 13 2025 MiTek Industries, Inc. Thu Oct 02 14:35:11
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Page: 1



Scale = 1:23.9

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.07	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.25	BC	0.08	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horiz(TL)	0.00	3	n/a	n/a	
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MP							
BCDL	10.0									Weight: 17 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Sheathed or 5-1-9 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS

(size) 1=5-1-9, 3=5-1-9, 4=5-1-9
Max Horiz 1=-31 (LC 12)
Max Uplift 1=-2 (LC 14), 3=-2 (LC 14), 4=-22 (LC 14)
Max Grav 1=64 (LC 29), 3=64 (LC 30), 4=307 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-61/104, 2-3=-61/104
BOT CHORD 1-4=-90/82, 3-4=-90/82
WEBS 2-4=-191/98

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; B=45ft; L=25ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.25 Plate DOL=1.25); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10

- Gable requires continuous bottom chord bearing.
 - Gable studs spaced at 4-0-0 oc.
 - This truss has been designed for a 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 SP No.2 .
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 2 lb uplift at joint 1, 2 lb uplift at joint 3 and 22 lb uplift at joint 4.
- LOAD CASE(S)** Standard



October 3, 2025

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

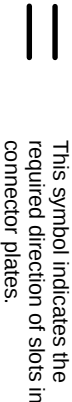
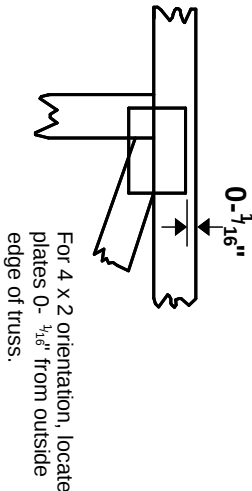
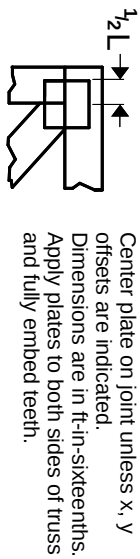
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

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Symbols

PLATE LOCATION AND ORIENTATION



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

PLATE SIZE

4 X 4

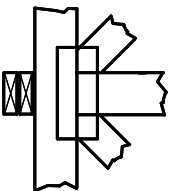
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

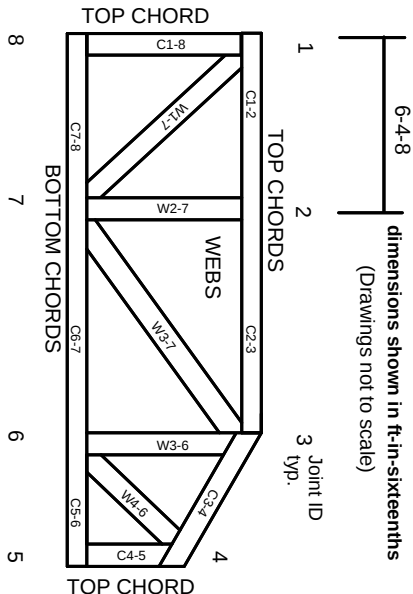


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI.1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-22: Design Standard for Bracing.
BCSI: 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/TPI 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/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 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/TPI 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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