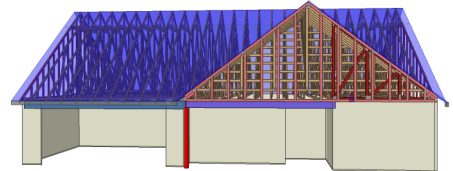




Carter Sanford Component Plant
298 Harvey Faulk Rd
Sanford, NC 27332

Phone #:919-775-1450



Builder: Lamco Custom Builders LLC

Model: Rosemont A LH - 76
Blackberry Manor

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: _____

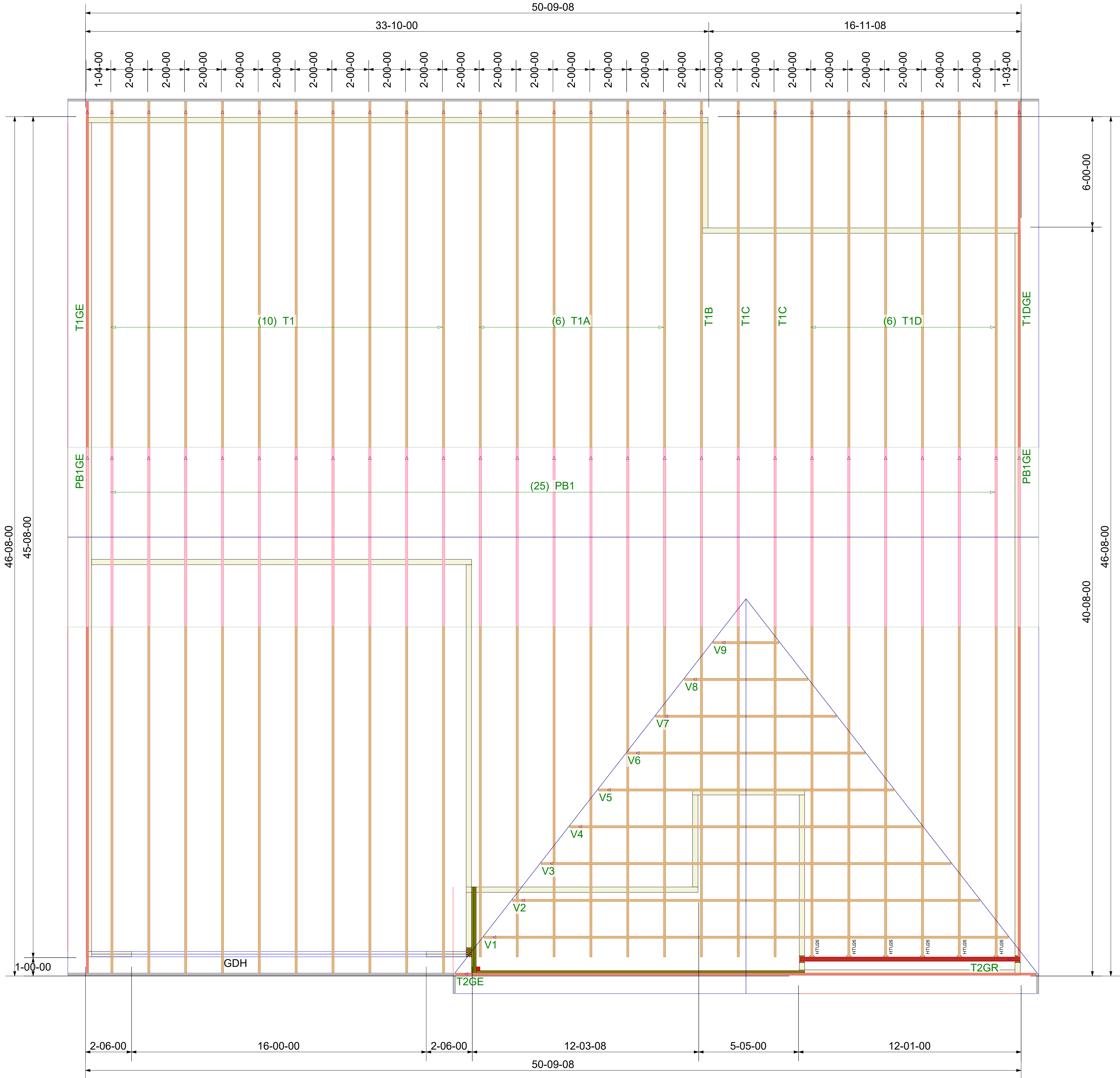
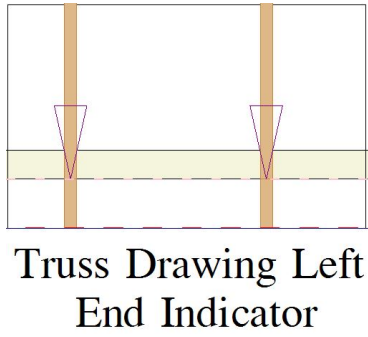
Date: _____

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.



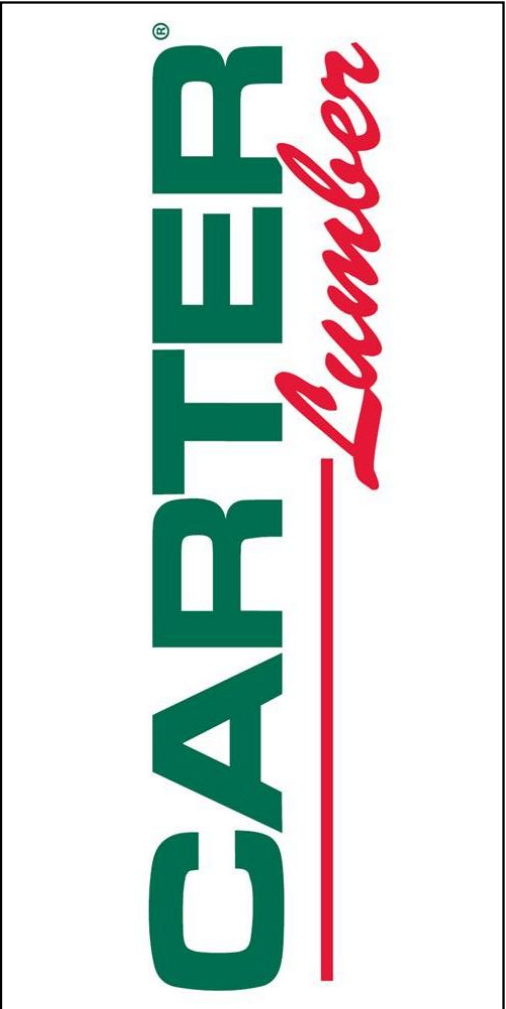
Products					
PlotID	Length	Product	Plies	Net Qty	Fab Type
GDH	22-00-00	2.1 RigidLam SP LVL 1-3/4 x 11-7/8	2	2	FF

Connector Summary		
Qty	Manuf	Product
1	Simpson	HTU26
1	Simpson	HTU26
1	Simpson	HTU26
1	Simpson	HTU26
1	Simpson	HTU26
1	Simpson	HTU26
35	Simpson	H10A
2	Simpson	LGT2
10	Simpson	H10A

Note: Place LGT2 at each end of T2GR

** GIRDERS MUST BE FULLY CONNECTED TOGETHER PRIOR TO ADDING ANY LOADS. ** DIMENSIONS ARE READ AS: FOOT-INCH-SIXTEENTH. ** 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 tuss 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 Truss" available from the Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53179.

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



Lamco Custom Builders LLC	76 Blackberry Manor-Roof-Rosemont A LH	ROOF PLACEMENT PLAN
---------------------------	--	---------------------

Scale:	NTS
Date:	10/8/2025
Designer:	Mike Finch
Project Number:	25090183-01
Sheet Number:	

1/1

** 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.



Customer:
Street 1:
City:
Customer Ph...

Job Name: **01**
Level: **1st FLOOR**
Label: **GDH - i25**
Type: **Beam**

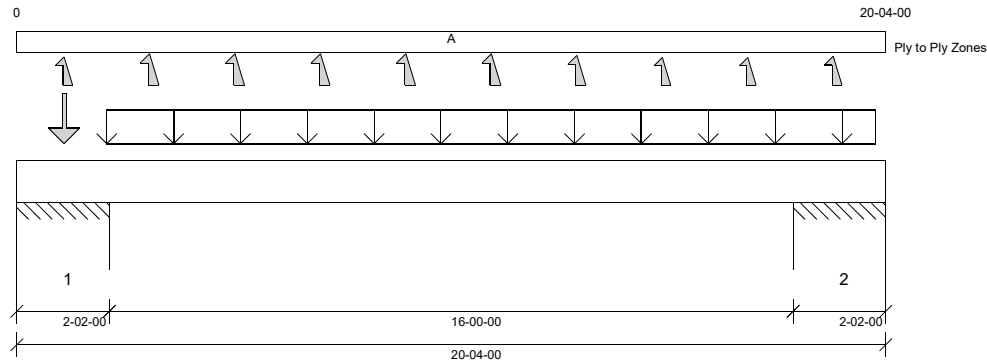
2 Ply Member
2.1 RigidLam SP LVL 1-3/4
x 11-7/8

Status:
Design
Passed

Illustration Not to Scale. Pitch: 0/12

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

Report Version: 2023.09.18 10/08/2025 14:04



DESIGN INFORMATION a

Building Code: IRC 2018
Design Methodology: ASD
Risk Category: II (General Construction)
Residential
Service Condition: Dry
System Spacing: -
LL Deflection Limit: L/360, 0.75" (absolute)
TL Deflection Limit: L/240, 1.00" (absolute)

Lateral Restraint Requirements:

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

Top: 1'- 10 1/2" Bottom: 20'- 4"

Bearing Stress of Support Material:

- 1323 psi Wall @ 0'- 1 1/2"
- 1323 psi Wall @ 2'- 1/2"
- 725 psi Wall @ 18'- 3 1/2"
- 725 psi Wall @ 20'- 2 1/2"

ANALYSIS RESULTS

Design Criteria	Location	Load Combination	LDF	Design	Limit	Result
Max Pos. Moment:	11'- 1 1/4"	D + Lr	1.15	4478 lb ft	24315 lb ft	Passed - 18%
Max Neg. Moment:	18'- 3 1/2"	D + Lr	1.15	7390 lb ft	17708 lb ft	Passed - 42%
Max Shear:	3'- 1 7/8"	D + Lr	1.15	2842 lb	9241 lb	Passed - 31%
Live Load (LL) Pos. Defl.:	10'- 2"	0.75(L + Lr + 0.6W)		0.092"	L/360	Passed - L/999
Total Load (TL) Pos. Defl.:	10'- 2"	D + 0.75(L + Lr + 0.6W)		0.155"	L/240	Passed - L/999

SUPPORT AND REACTION INFORMATION

ID	Input Bearing Length	Controlling Load Combination	LDF	Downward Reaction	Uplift Reaction	Resistance of Member	Resistance of Support	Result
1	9-00	0.6D + 0.6W	1.60	541 lb		32870 lb	41675 lb	Passed - 2%
1	9-00	D + Lr	1.15		-3703 lb	-	-	
1	1-05-00	D + Lr	1.15	7058 lb		44625 lb	78719 lb	Passed - 16%
1	1-05-00	0.6D + 0.6W	1.60		-1073 lb	-	-	
2	1-05-00	D + Lr	1.15	7123 lb		44625 lb	43138 lb	Passed - 17%
2	1-05-00	0.6D + 0.6W	1.60		-737 lb	-	-	
2	9-00	0.6D + 0.6W	1.60	449 lb		32870 lb	22838 lb	Passed - 2%
2	9-00	D + Lr	1.15		-3705 lb	-	-	

LOADING

Type	Start Loc	End Loc	Source	Face	Dead (D)	Live (L)	Snow (S)	Roof Live (Lr)	Wind (W)
Self Weight	0'	20'- 4"	Self Weight	Top	11 lb/ft	-	-	-	-
Uniform	2'- 1 1/4"	20'- 1 1/4"	Smoothed Load	Top	149 lb/ft	-	113 lb/ft	199 lb/ft	73 lb/ft
Point	1'- 1 1/4"	1'- 1 1/4"	T1(c05)	Top	270 lb	-	187 lb	331/-30 lb	121/-352 lb
Point	3'- 1 1/4"	3'- 1 1/4"	T1(c01)	Top	-	-	-	-36 lb	-422 lb
Point	5'- 1 1/4"	5'- 1 1/4"	T1(c02)	Top	-	-	-	-36 lb	-422 lb
Point	7'- 1 1/4"	7'- 1 1/4"	T1(c06)	Top	-	-	-	-36 lb	-422 lb
Point	9'- 1 1/4"	9'- 1 1/4"	T1(c04)	Top	-	-	-	-33 lb	-425 lb
Point	11'- 1 1/4"	11'- 1 1/4"	T1(c09)	Top	-	-	-	-33 lb	-425 lb
Point	13'- 1 1/4"	13'- 1 1/4"	T1(c07)	Top	-	-	-	-36 lb	-382 lb
Point	15'- 1 1/4"	15'- 1 1/4"	T1(c10)	Top	-	-	-	-36 lb	-331 lb
Point	17'- 1 1/4"	17'- 1 1/4"	T1(c08)	Top	-	-	-	-36 lb	-331 lb
Point	19'- 1 1/4"	19'- 1 1/4"	T1(c03)	Top	-	-	-	-35 lb	-364 lb

UNFACTORED REACTIONS

ID	Start Loc	End Loc	Source	Dead (D)	Live (L)	Snow (S)	Roof Live (Lr)	Wind (W)
1	0'	2'- 2"	E13(i15)	1580 lb	-	1094 lb	2125/-515 lb	1151 lb/-2466 lb
==>	0'- 1 1/2"	0'- 1 1/2"	E13(i15)	-	-	-	173/-170 lb	-
==>	2'- 1/2"	2'- 1/2"	E13(i15)	1580 lb	-	1094 lb	1952/-345 lb	-
2	18'- 2"	20'- 4"	E12(i9)	1593 lb	-	1127 lb	2179/-521 lb	1151 lb/-2466 lb
==>	18'- 3 1/2"	18'- 3 1/2"	E12(i9)	1593 lb	-	1127 lb	2006/-348 lb	-
==>	20'- 2 1/2"	20'- 2 1/2"	E12(i9)	-	-	-	173/-173 lb	-

DESIGN NOTES

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



Customer:
Street 1:
City:
Customer Ph...

Job Name: **01**
Level: **1st FLOOR**
Label: **GDH - i25**
Type: **Beam**

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

Status:
Design
Passed

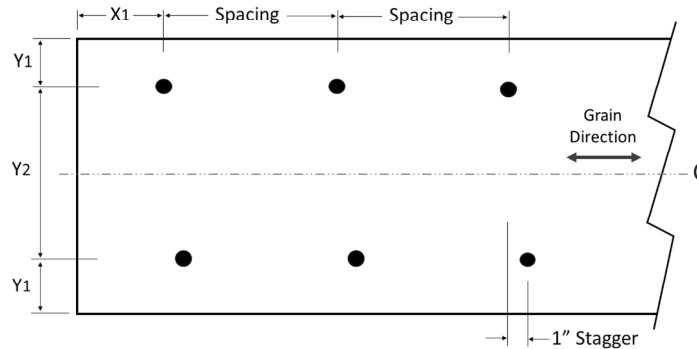
DESIGN NOTES

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

PLY TO PLY CONNECTION

- Zone A: Factored load = 0 plf. Use 12d (0.148"x3.25") nails. LDF = 1.00. Qty = 42. Row = 2, Spacing = 12"
12d (0.148"x3.25") nails properties: D = 0.148" , L = 3.25". Fastener capacity = 128 lbs. X1 = 2.25" , Y1 = 0.75" , Y2 = 1.5"
Install fasteners from one face.
X1 = Minimum end distance, X2 = Minimum edge distance, Y2 = Minimum row spacing.

FASTENER INSTALLATION – 2 ROWS (FROM ONE FACE)



Job	Truss	Truss Type	Qty	Ply	76 Blackberry Manor-Roof-Rosemont A LH	176925326
25090183-01	PB1	Piggyback	25	1	Job Reference (optional)	

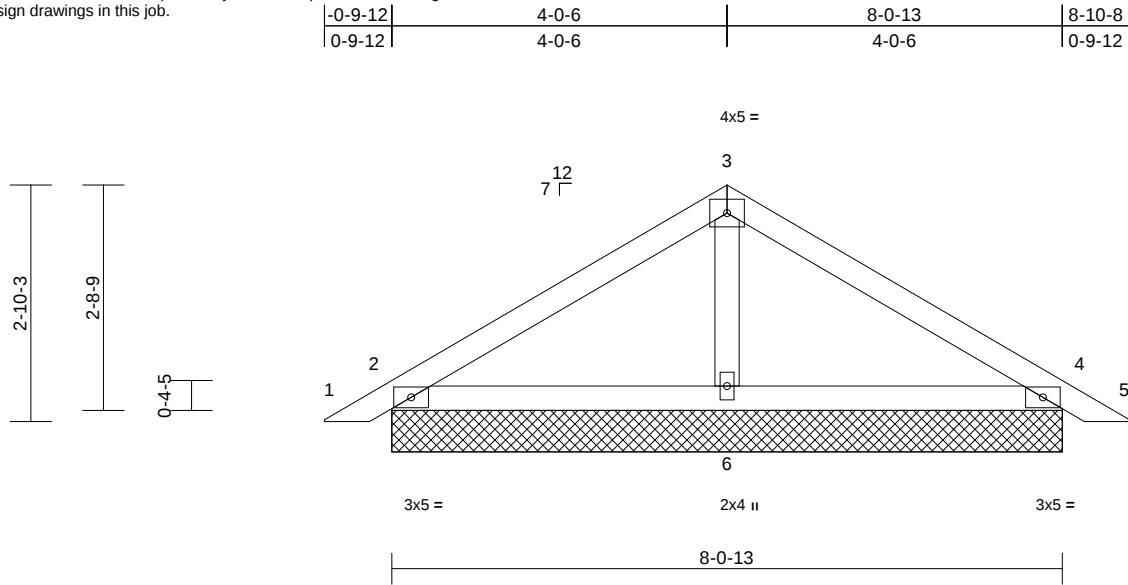
Carter Components (Sanford, NC), Sanford, NC - 27332,

Run: 8.73 S Aug 13 2025 Print: 8.730 S Aug 13 2025 MiTek Industries, Inc. Wed Oct 08 13:02:44

Page: 1

These truss designs are based upon the building code shown. This code has been specified by the project engineer/architect, or building designer. The applicability of this code in any particular jurisdiction should be confirmed with the building official prior to truss fabrication. This determination is not the responsibility of the component/truss designer. This applies to all truss design drawings in this job.

ID:zKYPPF_b6MoOBSfh60pUuuZoFRf-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f



Scale = 1:27.7

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.33	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.33	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	2	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP							
BCDL	10.0										
										Weight: 32 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS

(size)	2=8-0-13, 4=8-0-13, 6=8-0-13
Max Horiz	2=-63 (LC 12)
Max Uplift	2=-42 (LC 14), 4=-50 (LC 15)
Max Grav	2=312 (LC 21), 4=312 (LC 22), 6=296 (LC 21)

FORCES

(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=0/26, 2-3=-173/88, 3-4=-173/88, 4-5=0/26
BOT CHORD	2-6=-21/79, 4-6=-9/79
WEBS	3-6=-131/30

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-3-11 to 3-3-11, Exterior(2R) 3-3-11 to 6-5-7, Exterior(2E) 6-5-7 to 9-5-7 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 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.
- N/A

- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard



October 9,2025

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

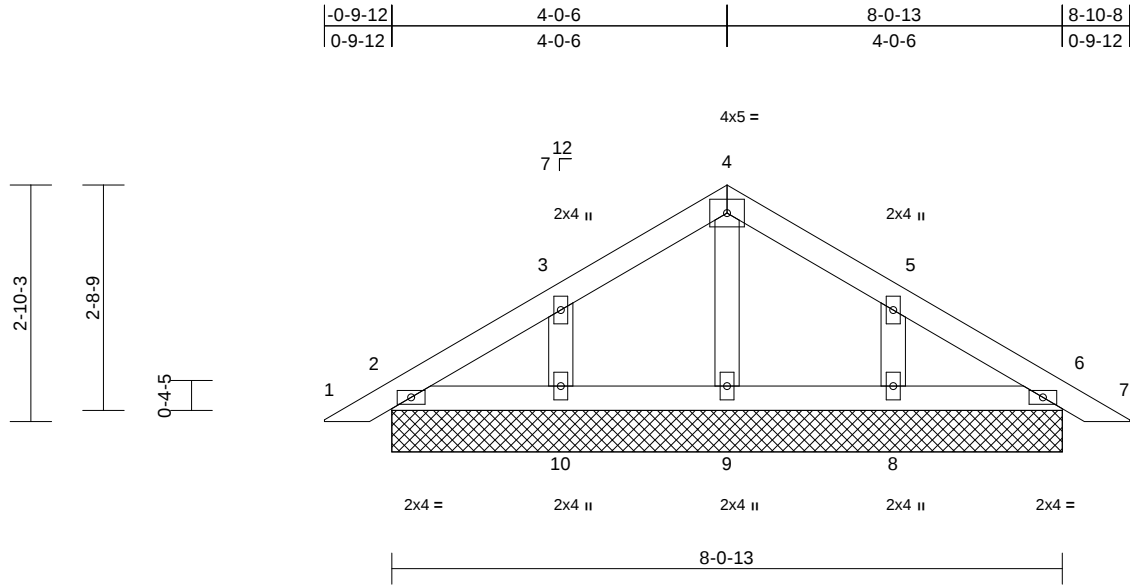
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	76 Blackberry Manor-Roof-Rosemont A LH	176925327
25090183-01	PB1GE	Piggyback	2	1	Job Reference (optional)	

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

Run: 8.73 S Aug 13 2025 Print: 8.730 S Aug 13 2025 MiTek Industries, Inc. Wed Oct 08 13:02:45
ID:zKYPPF_b6MoOBSfh60pUuuZoFRf-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrdOif7J4zJC?f

Page: 1



Loading	(psf)	Spacing	2'-0"-0"	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	6	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 35 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS

(size)	2=8'-0"-13, 6=8'-0"-13, 8=8'-0"-13, 9=8'-0"-13, 10=8'-0"-13
Max Horiz	2=-63 (LC 12)
Max Uplift	2=-8 (LC 15), 6=-12 (LC 15), 8=-64 (LC 15), 10=-65 (LC 14)
Max Grav	2=161 (LC 21), 6=161 (LC 22), 8=279 (LC 22), 9=117 (LC 21), 10=279 (LC 21)

FORCES

(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=0/26, 2-3=-48/43, 3-4=-77/74, 4-5=-77/74, 5-6=-34/35, 6-7=0/26
BOT CHORD	2-10=-16/51, 9-10=-16/51, 8-9=-16/51, 6-8=-16/51
WEBS	4-9=-83/0, 3-10=-222/115, 5-8=-222/115

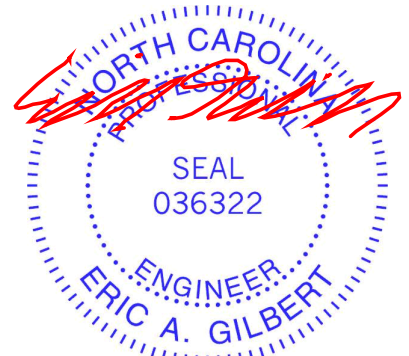
NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-3-11 to 3-3-11, Exterior(2R) 3-3-11 to 6-5-7, Exterior(2E) 6-5-7 to 9-5-7 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2'-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'-0"-0" tall by 2'-0"-0" wide will fit between the bottom chord and any other members.
- N/A

- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard



October 9,2025

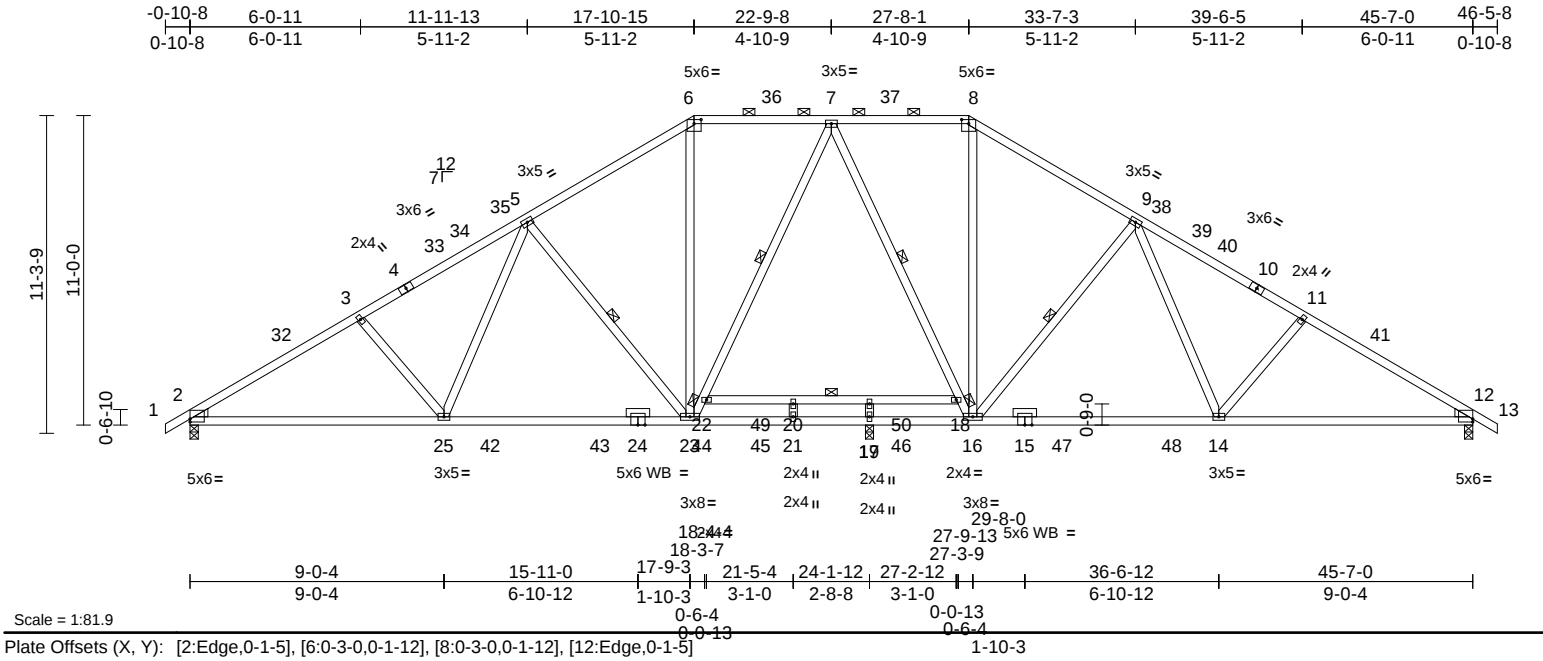
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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	76 Blackberry Manor-Roof-Rosemont A LH
25090183-01	T1	Piggyback Base	10	1	176925328
Job Reference (optional)					

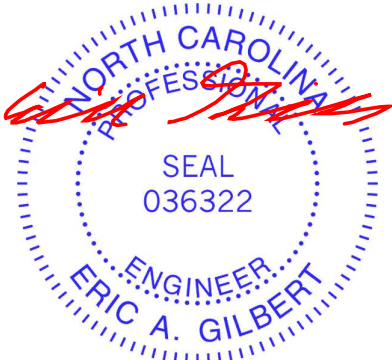


Scale = 1:81.9		Plate Offsets (X, Y): [2:Edge,0-1-5], [6:0-3-0,0-1-12], [8:0-3-0,0-1-12], [12:Edge,0-1-5]	
Loading	(psf)	Spacing	2-0-0
TCLL (roof)	20.0	Plate Grip DOL	1.15
Snow (Pf)	20.0	Lumber DOL	1.15
TCDL	10.0	Rep Stress Incr	YES
BCLL	0.0*	Code	IRC2018/TPI2014
BCDL	10.0		
		CSI	
		TC	0.79
		BC	0.96
		WB	0.34
		Matrix-MSH	
		DEFL	
		Vert(LL)	-0.42 14-16 >615 240
		Vert(CT)	-0.72 14-16 >359 180
		Horz(CT)	0.15 12 n/a n/a
		PLATES	MT20
		GRIP	244/190
		Weight: 294 lb FT = 20%	

LUMBER	
TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.1 *Except* 24-15:2x4 SP 2400F 2.0E
WEBS	2x4 SP No.2
OTHERS	2x4 SP No.3
WEDGE	Left: 2x4 SP No.3 Right: 2x4 SP No.3
BRACING	
TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins, except 2-0-0 oc purlins (3-10-10 max.): 6-8.
BOT CHORD	Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS	1 Row at midpt 5-23, 9-16, 7-22, 7-18
REACTIONS	
(size)	2=0-3-8, 12=0-3-8, 17=0-3-8
Max Horiz	2=-258 (LC 12)
Max Uplift	2=-150 (LC 14), 12=-167 (LC 15)
Max Grav	2=2024 (LC 51), 12=1973 (LC 53), 17=937 (LC 47)
FORCES	
(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=0/26, 2-3=-3651/241, 3-5=-3460/247, 5-6=-2687/223, 6-7=-2214/234, 7-8=-2105/260, 8-9=-2560/253, 9-11=-3358/278, 11-12=-3549/272, 12-13=0/26
BOT CHORD	2-25=-313/3056, 23-25=-148/2655, 21-23=0/2067, 17-21=0/2067, 16-17=0/2067, 14-16=-25/2556, 12-14=-164/2967, 20-22=-8/31, 19-20=-8/31, 18-19=-8/31
WEBS	3-25=-286/188, 5-25=-47/614, 5-23=-857/240, 6-23=-25/974, 8-16=-37/909, 9-16=-874/235, 9-14=-40/638, 11-14=-287/188, 22-23=-269/218, 7-22=-258/245, 7-18=-419/169, 16-18=-363/171, 17-19=-432/0, 20-21=-20/24

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 3-8-3, Interior (1) 3-8-3 to 11-5-9, Exterior(2R) 11-5-9 to 34-1-7, Interior (1) 34-1-7 to 41-10-13, Exterior(2E) 41-10-13 to 46-5-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - 200.0lb AC unit load placed on the bottom chord, 22-9-8 from left end, supported at two points, 5-0-0 apart.
 - Provide adequate drainage to prevent water ponding.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - 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.
 - H10A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 12. This connection is for uplift only and does not consider lateral forces.

- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- LOAD CASE(S)** Standard



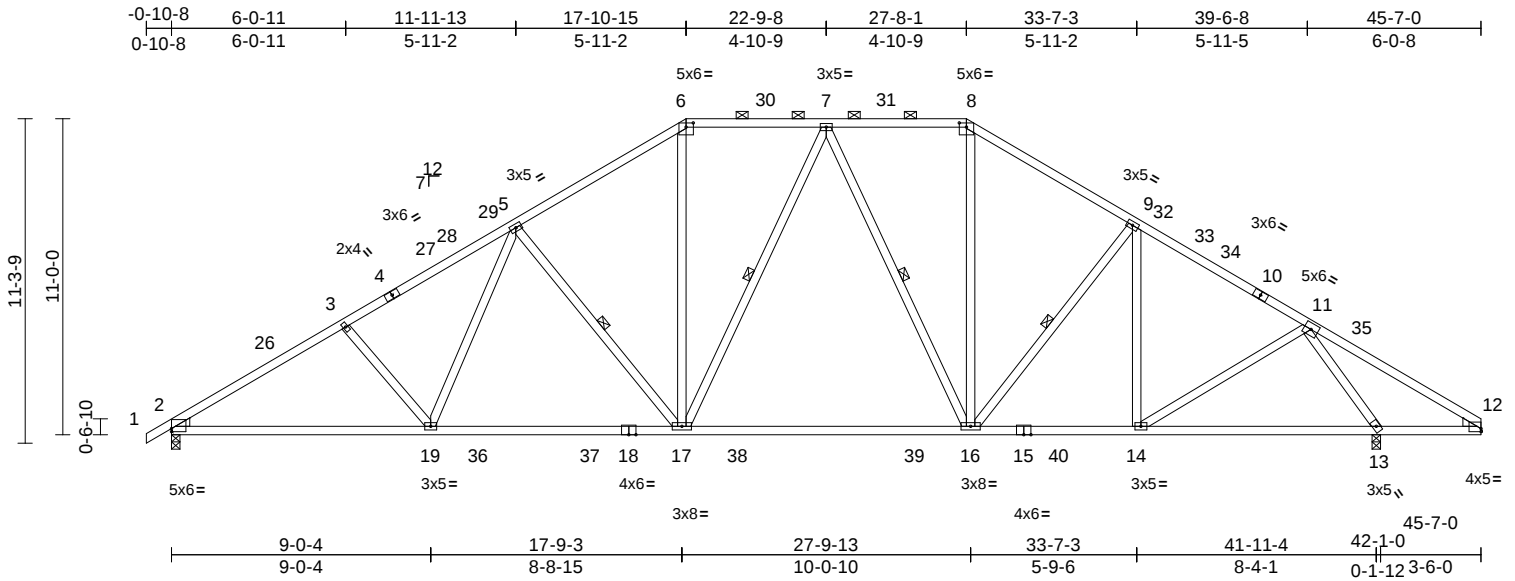
October 9,2025

Job 25090183-01	Truss T1A	Truss Type Piggyback Base	Qty 6	Ply 1	76 Blackberry Manor-Roof-Rosemont A LH Job Reference (optional)	176925329
--------------------	--------------	------------------------------	----------	----------	--	-----------

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

Run: 8.73 S Aug 13 2025 Print: 8.730 S Aug 13 2025 MiTek Industries, Inc. Wed Oct 08 13:02:45
ID:cdGywM87H2HdIZ?pX1IOQzoFRT-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrcDoi7J4zJC?f

Page: 1



Scale = 1:80.2

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.74	Vert(LL)	-0.40	16-17	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.97	Vert(CT)	-0.68	16-17	>745	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.85	Horz(CT)	0.12	13	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 284 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.1
WEBS 2x4 SP No.2
WEDGE Left: 2x4 SP No.3
Right: 2x4 SP No.3

BRACING

TOP CHORD Structural wood sheathing directly applied or
2-2-0 oc purlins, except
2-0-0 oc purlins (3-10-11 max.): 6-8.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc
bracing.

WEBS 1 Row at midpt 5-17, 7-17, 7-16, 9-16

REACTIONS (size) 2=0-3-8, 13=0-3-8
Max Horiz 2=254 (LC 11)
Max Uplift 2=-193 (LC 14), 13=-194 (LC 15)
Max Grav 2=1999 (LC 51), 13=2284 (LC 47)

FORCES

(lb) - Maximum Compression/Maximum
Tension
TOP CHORD 1-2=0/26, 2-3=-3586/320, 3-5=-3394/327,
5-6=-2657/295, 6-7=-2189/297,
7-8=-1993/281, 8-9=-2426/277,
9-11=-2506/223, 11-12=-186/406
BOT CHORD 2-19=-361/2998, 17-19=-227/2610,
16-17=-53/2020, 14-16=-26/2046,
13-14=-49/1243, 12-13=-191/240
WEBS 3-19=-292/186, 5-19=-42/577,
5-17=-831/237, 6-17=-53/958,
7-17=-176/290, 7-16=-481/179,
8-16=-63/837, 9-16=-311/167,
9-14=-288/105, 11-14=-35/943,
11-13=-2588/297

NOTES

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

- Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat.
II; Exp B; Enclosed; MWFRS (envelope) exterior zone
and C-C Exterior(2E) -0-10-8 to 3-8-3, Interior (1) 3-8-3
to 11-5-9, Exterior(2R) 11-5-9 to 34-1-7, Interior (1)
34-1-7 to 41-0-5, Exterior(2E) 41-0-5 to 45-7-0 zone;
cantilever left and right exposed ; end vertical left and
right exposed;C-C for members and forces & MWFRS
for reactions shown; Lumber DOL=1.60 plate grip
DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15
Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate
DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9;
Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this
design.
- This truss has been designed for greater of min roof live
load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on
overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom
chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf
on the bottom chord in all areas where a rectangle
3-06-00 tall by 2-00-00 wide will fit between the bottom
chord and any other members, with BCDL = 10.0psf.
- H10A Simpson Strong-Tie connectors recommended to
connect truss to bearing walls due to UPLIFT at jt(s) 2
and 13. This connection is for uplift only and does not
consider lateral forces.
- This truss is designed in accordance with the 2018
International Residential Code sections R502.11.1 and
R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size
or the orientation of the purlin along the top and/or
bottom chord.

LOAD CASE(S) Standard



October 9,2025

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

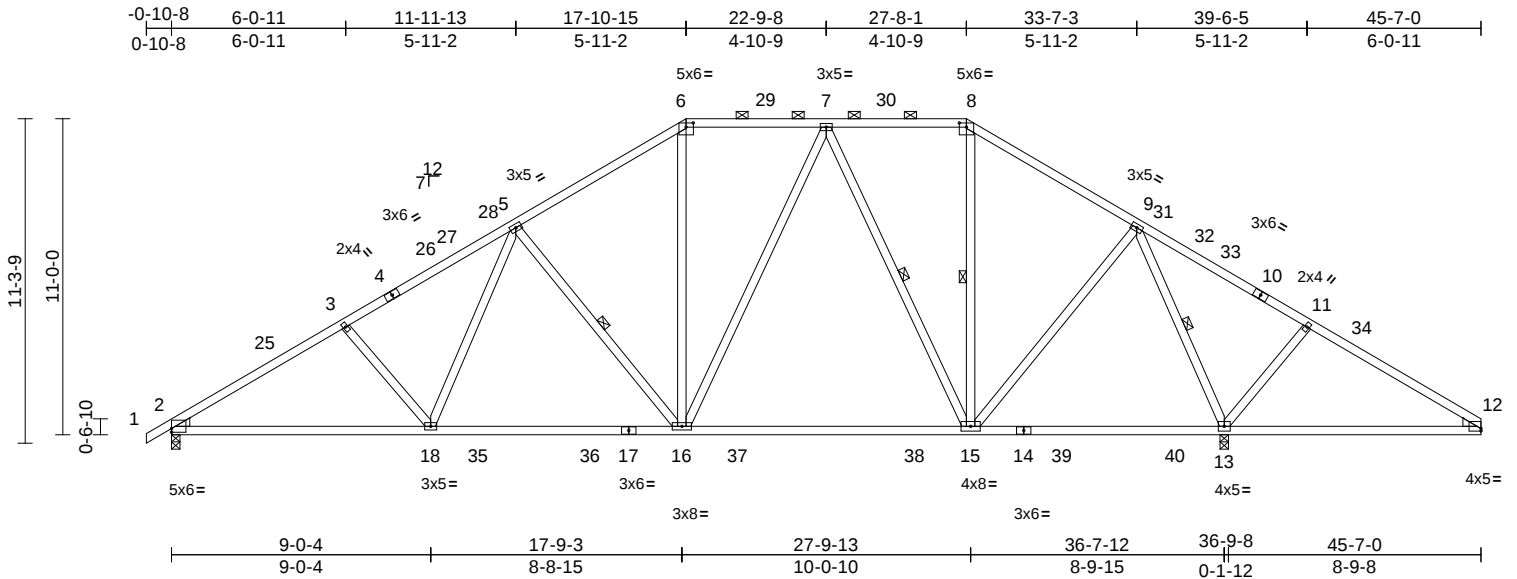
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	76 Blackberry Manor-Roof-Rosemont A LH	
25090183-01	T1B	Piggyback Base	1	1	Job Reference (optional)	I76925330

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

Run: 8.73 S Aug 13 2025 Print: 8.730 S Aug 13 2025 MiTek Industries, Inc. Wed Oct 08 13:02:46
ID:Z00iL19NpgZPscjNwy3mTrzoFRR-RfC?Psb70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:80.2

Plate Offsets (X, Y): [2:Edge,0-1-9], [6:0-3-0,0-1-12], [8:0-3-0,0-1-12], [12:Edge,0-1-1]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.78	Vert(LL)	-0.33	15-16	>999	240	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.86	Vert(CT)	-0.54	15-16	>810	180	
TCDL	10.0	Rep Stress Incr	YES	WB	0.79	Horz(CT)	0.07	13	n/a	n/a	
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH							
BCDL	10.0										
Weight: 275 lb FT = 20%											

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.1
WEBS 2x4 SP No.3 *Except*
16-6,16-7,15-7,15-8;2x4 SP No.2
WEDGE Left: 2x4 SP No.3
Right: 2x4 SP No.3

BRACING

TOP CHORD Structural wood sheathing directly applied or
3-1-6 oc purlins, except
2-0-0 oc purlins (4-6-7 max.): 6-8.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc
bracing, Except:
6-0-0 oc bracing: 12-13.
WEBS 1 Row at midpt 5-16, 7-15, 8-15, 9-13

REACTIONS

(size) 2=0-3-8, 13=0-3-8
Max Horiz 2=254 (LC 11)
Max Uplift 2=-187 (LC 14), 13=-222 (LC 15)
Max Grav 2=1687 (LC 51), 13=2638 (LC 47)

FORCES

(lb) - Maximum Compression/Maximum
Tension
TOP CHORD 1-2=0/26, 2-3=-2908/309, 3-5=-2713/315,
5-6=-1949/284, 6-7=-1583/287,
7-8=-1074/190, 8-9=-1326/201,
9-11=-184/786, 11-12=-230/533
BOT CHORD 2-18=-351/2420, 16-18=-217/2007,
15-16=-99/1296, 13-15=-26/351,
12-13=-372/198
WEBS 3-18=-308/186, 5-18=-42/604,
5-16=-844/237, 6-16=-25/607, 7-16=-68/625,
7-15=-784/159, 8-15=-53/335,
9-15=-46/1038, 9-13=-2389/305,
11-13=-387/196

NOTES

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

- Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat.
II; Exp B; Enclosed; MWFRS (envelope) exterior zone
and C-C Exterior(2E) -0-10-8 to 3-8-3, Interior (1) 3-8-3
to 11-5-9, Exterior(2R) 11-5-9 to 34-1-7, Interior (1)
34-1-7 to 41-0-5, Exterior(2E) 41-0-5 to 45-7-0 zone;
cantilever left and right exposed ; end vertical left and
right exposed;C-C for members and forces & MWFRS
for reactions shown; Lumber DOL=1.60 plate grip
DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15
Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate
DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9;
Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this
design.
- This truss has been designed for greater of min roof live
load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on
overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom
chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf
on the bottom chord in all areas where a rectangle
3-06-00 tall by 2-00-00 wide will fit between the bottom
chord and any other members, with BCDL = 10.0psf.
- H10A Simpson Strong-Tie connectors recommended to
connect truss to bearing walls due to UPLIFT at jt(s) 2
and 13. This connection is for uplift only and does not
consider lateral forces.
- This truss is designed in accordance with the 2018
International Residential Code sections R502.11.1 and
R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size
or the orientation of the purlin along the top and/or
bottom chord.

LOAD CASE(S) Standard



October 9,2025

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

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

ENGINEERING BY
TRENCO
A MiTek Affiliate

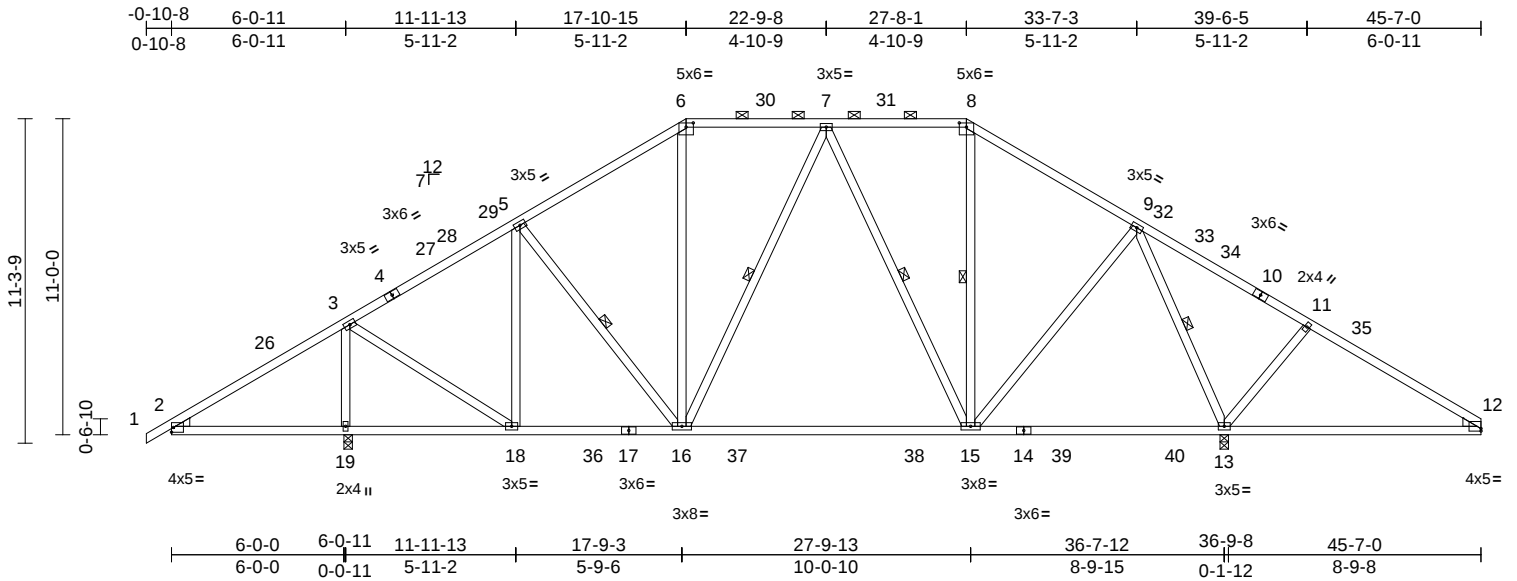
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	76 Blackberry Manor-Roof-Rosemont A LH	176925331
25090183-01	T1C	Piggyback Base	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. Wed Oct 08 13:02:46
ID:VPVSmjBeLHp66wtm2N5EYGzoFRP-RFC?PsB70Hq3NSgPqnL8w3uTXbGKwRcDoi7J4zJC?f

Page: 1



Scale = 1:80.2

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.78	Vert(LL)	-0.34	15-16	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.79	Vert(CT)	-0.53	15-16	>688	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.66	Horz(CT)	0.02	13	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 282 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except* 17-14:2x4 SP No.1
WEBS 2x4 SP No.3 *Except*
16-6,16-7,15-7,15-8:2x4 SP No.2
WEDGE Left: 2x4 SP No.3
Right: 2x4 SP No.3

BRACING

TOP CHORD Structural wood sheathing directly applied or
4-6-13 oc purlins, except
2-0-0 oc purlins (5-7-15 max.): 6-8.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc
bracing.
WEBS 1 Row at midpt 5-16, 7-16, 7-15, 8-15,
9-13

REACTIONS

(size) 13=0-3-8, 19=0-3-8
Max Horiz 19=254 (LC 11)
Max Uplift 13=223 (LC 15), 19=224 (LC 14)
Max Grav 13=2308 (LC 47), 19=1959 (LC 47)

FORCES

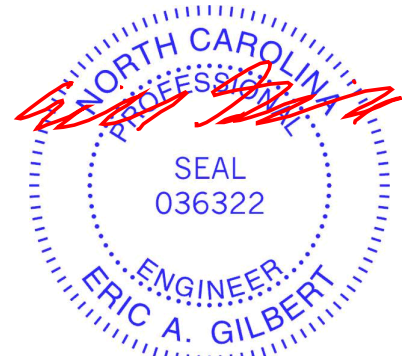
(lb) - Maximum Compression/Maximum
Tension
TOP CHORD 1-2=0/26, 2-3=-226/553, 3-5=-1071/145,
5-6=-1201/208, 6-7=-985/223, 7-8=-825/189,
8-9=-986/169, 9-11=-184/787,
11-12=-256/534
BOT CHORD 2-19=-398/250, 18-19=-517/231,
16-18=-157/831, 15-16=-112/902,
13-15=-42/250, 12-13=-371/196
WEBS 3-19=-1854/282, 3-18=-131/1398,
5-18=-582/152, 5-16=-100/278,
6-16=-26/282, 7-16=-136/253,
7-15=-441/161, 8-15=-93/188, 9-15=-24/816,
9-13=-2004/267, 11-13=-391/197

NOTES

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

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat.
II; Exp B; Enclosed; MWFRS (envelope) exterior zone
and C-C Exterior(2E) -0-10-8 to 3-8-3, Interior (1) 3-8-3
to 11-5-9, Exterior(2R) 11-5-9 to 34-1-7, Interior (1)
34-1-7 to 41-0-5, Exterior(2E) 41-0-5 to 45-7-0 zone;
cantilever left and right exposed ; end vertical left and
right exposed;C-C for members and forces & MWFRS
for reactions shown; Lumber DOL=1.60 plate grip
DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15
Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate
DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9;
Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this
design.
- 5) This truss has been designed for greater of min roof live
load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on
overhangs non-concurrent with other live loads.
- 6) Provide adequate drainage to prevent water ponding.
- 7) This truss has been designed for a 10.0 psf bottom
chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 20.0psf
on the bottom chord in all areas where a rectangle
3-06-00 tall by 2-00-00 wide will fit between the bottom
chord and any other members, with BCDL = 10.0psf.
- 9) H10A Simpson Strong-Tie connectors recommended to
connect truss to bearing walls due to UPLIFT at jt(s) 19
and 13. This connection is for uplift only and does not
consider lateral forces.
- 10) This truss is designed in accordance with the 2018
International Residential Code sections R502.11.1 and
R802.10.2 and referenced standard ANSI/TPI 1.
- 11) Graphical purlin representation does not depict the size
or the orientation of the purlin along the top and/or
bottom chord.

LOAD CASE(S) Standard



October 9,2025

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

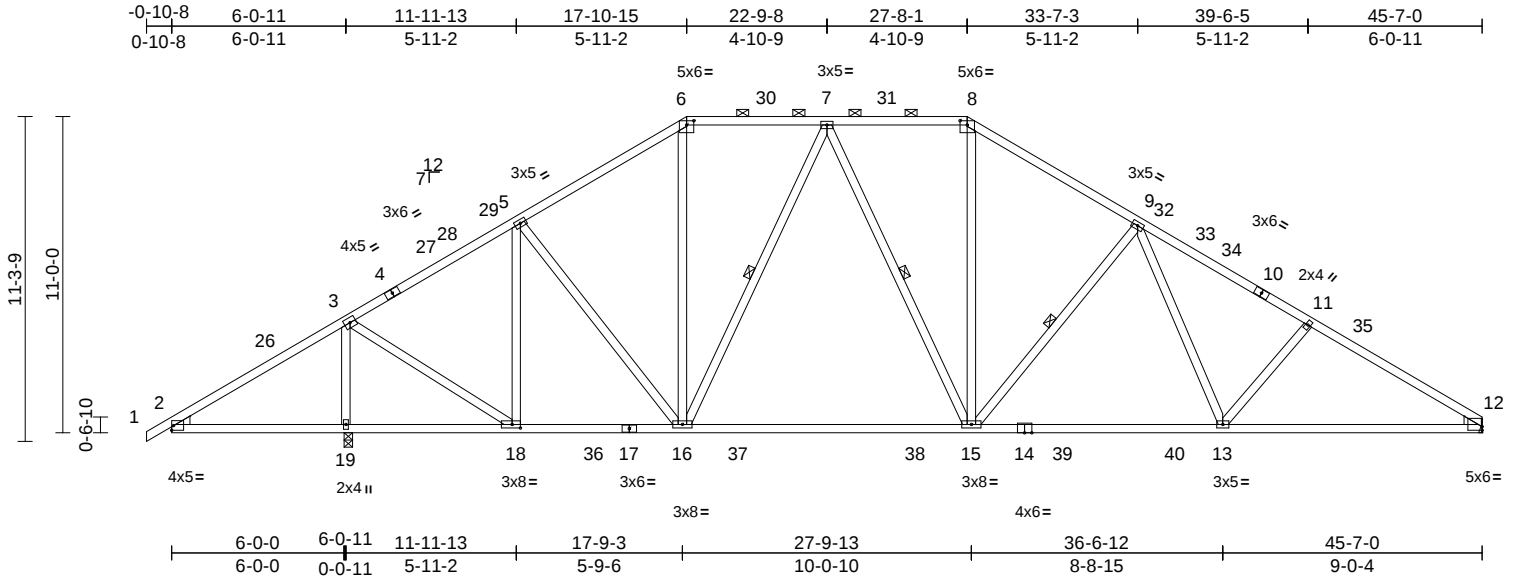
Job	Truss	Truss Type	Qty	Ply	76 Blackberry Manor-Roof-Rosemont A LH	176925332
25090183-01	T1D	Piggyback Base	6	1	Job Reference (optional)	

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

Run: 8.73 S Aug 13 2025 Print: 8.730 S Aug 13 2025 MiTek Industries, Inc. Wed Oct 08 13:02:46

Page: 1

ID:GgT3te4_SWgOWXh10_R7hNzoFRY-RFC?PsB70Hq3NSgPqnL8w3uITXhGKWCDoi7J4zJC?f



Scale = 1:80.1

Plate Offsets (X, Y): [6:0-3-0,0-1-12], [8:0-3-0,0-1-12], [12:Edge,0-1-9], [18:0-3-8,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.71	Vert(LL)	-0.38	15-16	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.92	Vert(CT)	-0.62	15-16	>762	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.88	Horz(CT)	0.09	12	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 283 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.1
 WEBS 2x4 SP No.3 *Except*
 16-6,16-7,15-7,15-8:2x4 SP No.2
 WEDGE Left: 2x4 SP No.3
 Right: 2x4 SP No.3

BRACING

TOP CHORD Structural wood sheathing directly applied or
 2-9-10 oc purlins, except
 2-0-0 oc purlins (4-1-12 max.): 6-8.
 BOT CHORD Rigid ceiling directly applied or 2-2-0 oc
 bracing.

WEBS 1 Row at midpt 7-16, 7-15, 9-15
REACTIONS (size) 12= Mechanical, 19=0-3-8
 Max Horiz 19=254 (LC 11)
 Max Uplift 12=-173 (LC 15), 19=-226 (LC 14)
 Max Grav 12=1808 (LC 53), 19=2481 (LC 47)

FORCES

(lb) - Maximum Compression/Maximum
 Tension
 TOP CHORD 1-2=-0/26, 2-3=-226/550, 3-5=-1610/147,
 5-6=-1928/211, 6-7=-1568/226,
 7-8=-1916/292, 8-9=-2338/290,
 9-11=-3090/323, 11-12=-3283/316
 BOT CHORD 2-19=-396/250, 18-19=-514/231,
 16-18=-108/1269, 15-16=-17/1672,
 13-15=-56/2339, 12-13=-192/2741
 WEBS 3-19=-2417/306, 3-18=-188/1947,
 5-18=-880/180, 5-16=-90/451, 6-16=-58/593,
 7-16=-601/162, 7-15=-64/443, 8-15=-38/797,
 9-15=-838/238, 9-13=-44/593,
 11-13=-302/187

NOTES

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

- Wind: ASCE 7-16; Vult=130mph (3-second gust)
 Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat.
 II; Exp B; Enclosed; MWFRS (envelope) exterior zone
 and C-C Exterior(2E) -0-10-8 to 3-8-3, Interior (1) 3-8-3
 to 11-5-9, Exterior(2R) 11-5-9 to 34-1-7, Interior (1)
 34-1-7 to 41-0-5, Exterior(2E) 41-0-5 to 45-7-0 zone;
 cantilever left and right exposed ; end vertical left and
 right exposed;C-C for members and forces & MWFRS
 for reactions shown; Lumber DOL=1.60 plate grip
 DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15
 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate
 DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9;
 Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this
 design.
- This truss has been designed for greater of min roof live
 load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on
 overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom
 chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf
 on the bottom chord in all areas where a rectangle
 3-06-00 tall by 2-00-00 wide will fit between the bottom
 chord and any other members, with BCDL = 10.0psf.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to
 bearing plate capable of withstanding 173 lb uplift at joint
 12.
- H10A Simpson Strong-Tie connectors recommended to
 connect truss to bearing walls due to UPLIFT at jt(s) 19.
 This connection is for uplift only and does not consider
 lateral forces.
- This truss is designed in accordance with the 2018
 International Residential Code sections R502.11.1 and
 R802.10.2 and referenced standard ANSI/TPI 1.

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

LOAD CASE(S) Standard



October 9,2025

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

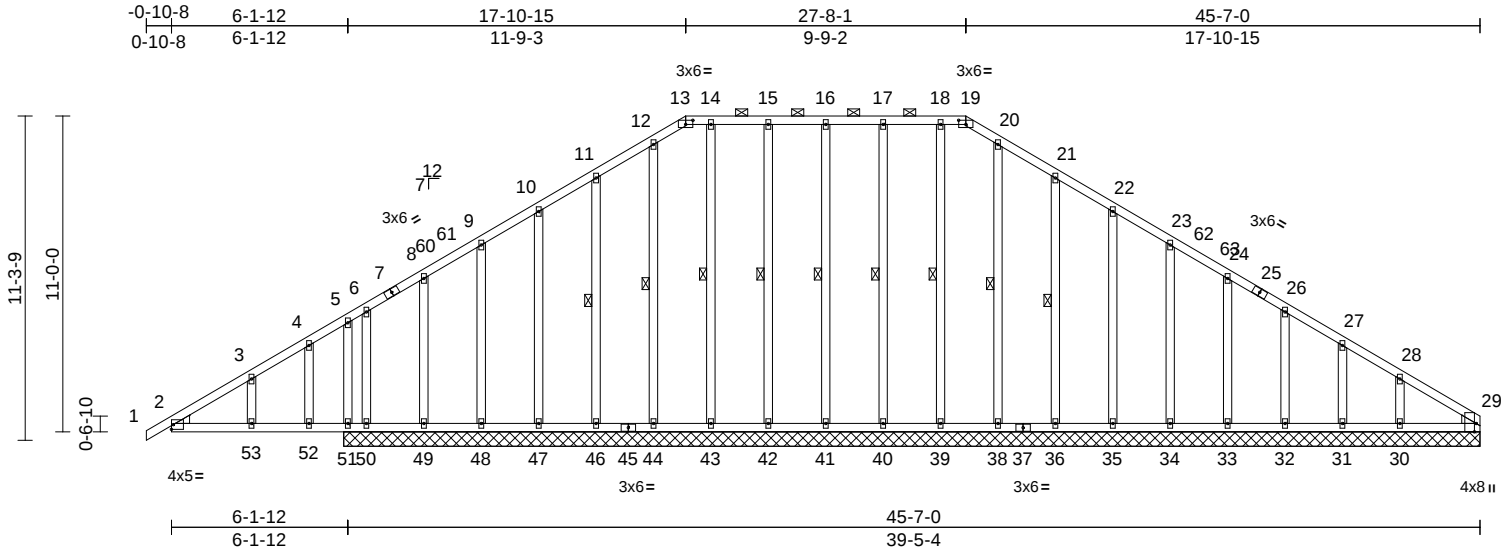
Job	Truss	Truss Type	Qty	Ply	76 Blackberry Manor-Roof-Rosemont A LH
25090183-01	T1DGE	Piggyback Base Supported Gable	1	1	176925333
Job Reference (optional)					

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

Run: 8.73 S Aug 13 2025 Print: 8.730 S Aug 13 2025 MiTek Industries, Inc. Wed Oct 08 13:02:46

Page: 1

ID:v_BbOIDWeCBhZnCLjVfxAvzoFRM-RFC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:80.3

Plate Offsets (X, Y): [13:0-3-0,0-1-12], [19:0-3-0,0-1-12], [29:0-3-8,Edge]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.49	Vert(LL)	n/a	-	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.59	Vert(CT)	n/a	-	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.22	Horz(CT)	-0.03	29	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH							
BCDL	10.0										
Weight: 366 lb FT = 20%											

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
OTHERS 2x4 SP No.3 *Except*
41-16,42-15,43-14,40-17,39-18:2x4 SP No.2
WEDGE Left: 2x4 SP No.3
Right: 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or
10-0-0 oc purlins, except
2-0-0 oc purlins (10-0-0 max.): 13-19.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc
bracing.
WEBS 1 Row at midpt 16-41, 15-42, 14-43,
12-44, 11-46, 17-40,
18-39, 20-38, 21-36

REACTIONS (size)
29=39-7-0, 30=39-7-0, 31=39-7-0,
32=39-7-0, 33=39-7-0, 34=39-7-0,
35=39-7-0, 36=39-7-0, 38=39-7-0,
39=39-7-0, 40=39-7-0, 41=39-7-0,
42=39-7-0, 43=39-7-0, 44=39-7-0,
46=39-7-0, 47=39-7-0, 48=39-7-0,
49=39-7-0, 50=39-7-0, 51=39-7-0
Max Horiz 51=254 (LC 11)
Max Uplift 29=212 (LC 26), 30=-100 (LC 15),
31=-34 (LC 15), 32=-54 (LC 15),
33=-49 (LC 15), 34=-51 (LC 15),
35=-48 (LC 15), 36=-65 (LC 15),
38=-4 (LC 10), 39=-17 (LC 10),
40=-42 (LC 11), 41=-25 (LC 10),
42=-40 (LC 11), 43=-7 (LC 10),
46=-68 (LC 14), 47=-48 (LC 14),
48=-50 (LC 14), 49=-56 (LC 14),
50=-625 (LC 43), 51=-260 (LC 14)

FORCES (lb) - Maximum Compression/Maximum
Tension
TOP CHORD 1-2=0/26, 2-3=-249/446, 3-4=-224/491,
4-5=-192/494, 5-6=-67/314, 6-8=-108/455,
8-9=-63/475, 9-10=-19/473, 10-11=-41/472,
11-12=-65/483, 12-13=-77/409,
13-14=-70/390, 14-15=-70/390,
15-16=-70/390, 16-17=-70/390,
17-18=-70/390, 18-19=-70/390,
19-20=-77/411, 20-21=-65/488,
21-22=-45/470, 22-23=-73/473,
23-24=-101/482, 24-26=-129/487,
26-27=-158/503, 27-28=-199/506,
28-29=-260/552
2-53=-368/274, 52-53=-368/274,
51-52=-368/274, 50-51=-444/247,
49-50=-444/247, 48-49=-444/247,
47-48=-444/247, 46-47=-444/247,
44-46=-444/247, 43-44=-444/247,
42-43=-444/247, 41-42=-444/247,
40-41=-444/247, 39-40=-444/247,
38-39=-444/247, 36-38=-444/247,
35-36=-444/247, 34-35=-444/247,
33-34=-444/247, 32-33=-444/247,
31-32=-444/247, 30-31=-444/247,
29-30=-444/247
BOT CHORD

WEBS
16-41=-184/49, 15-42=-173/64,
14-43=-275/31, 12-44=-285/33,
11-46=-178/92, 10-47=-190/72,
9-48=-191/75, 8-49=-137/74, 6-50=-88/159,
4-52=-92/50, 3-53=-83/60, 17-40=-173/66,
18-39=-313/41, 20-38=-279/33,
21-36=-177/89, 22-35=-190/72,
23-34=-191/75, 24-33=-143/74,
26-32=-144/76, 27-31=-121/66,
28-30=-199/99, 5-51=-395/232

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



October 9,2025

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)

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	76 Blackberry Manor-Roof-Rosemont A LH
25090183-01	T1DGE	Piggyback Base Supported Gable	1	1	I76925333
Job Reference (optional)					

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat.
II; Exp B; Enclosed; MWFRS (envelope) exterior zone
and C-C Corner(3E) -0-10-8 to 3-8-3, Exterior(2N) 3-8-3
to 13-4-4, Corner(3R) 13-4-4 to 22-5-10, Exterior(2N)
22-5-10 to 23-1-6, Corner(3R) 23-1-6 to 32-2-12,
Exterior(2N) 32-2-12 to 40-9-8, Corner(3E) 40-9-8 to
45-7-0 zone; cantilever left and right exposed ; end
vertical left and right exposed;C-C for members and
forces & MWFRS for reactions shown; Lumber
DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss
only. For studs exposed to wind (normal to the face),
see Standard Industry Gable End Details as applicable,
or consult qualified building designer as per ANSI/TPI 1.
- 4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15
Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate
DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9;
Cs=1.00; Ct=1.10
- 5) Unbalanced snow loads have been considered for this
design.
- 6) This truss has been designed for greater of min roof live
load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on
overhangs non-concurrent with other live loads.
- 7) Provide adequate drainage to prevent water ponding.
- 8) All plates are 2x4 MT20 unless otherwise indicated.
- 9) Gable studs spaced at 2-0-0 oc.
- 10) This truss has been designed for a 10.0 psf bottom
chord live load nonconcurrent with any other live loads.
- 11) * 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.
- 12) Provide mechanical connection (by others) of truss to
bearing plate capable of withstanding 260 lb uplift at joint
51.
- 13) N/A
- 14) N/A
- 15) N/A
- 16) This truss is designed in accordance with the 2018
International Residential Code sections R502.11.1 and
R802.10.2 and referenced standard ANSI/TPI 1.
- 17) Graphical purlin representation does not depict the size
or the orientation of the purlin along the top and/or
bottom chord.

LOAD CASE(S) Standard

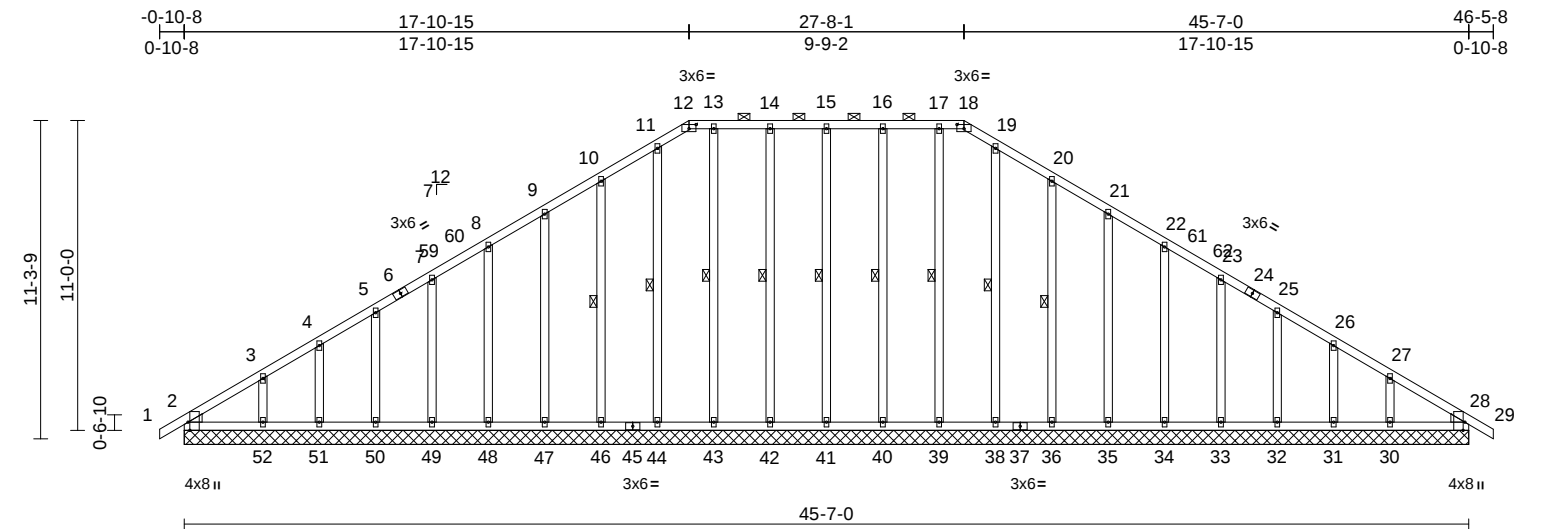
Job	Truss	Truss Type	Qty	Ply	76 Blackberry Manor-Roof-Rosemont A LH
25090183-01	T1GE	Piggyback Base Supported Gable	1	1	Job Reference (optional)
					I76925334

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

Run: 8.73 S Aug 13 2025 Print: 8.730 S Aug 13 2025 MiTek Industries, Inc. Wed Oct 08 13:02:47

Page: 1

ID:rMJLpRFm9pRPChljqwhPFKzoFRK-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:81.8															
Plate Offsets (X, Y): [2:0-3-8,Edge], [12:0-3-0,0-1-12], [18:0-3-0,0-1-12], [28:0-3-8,Edge]															
Loading		(psf)	Spacing		2-0-0	CSI		DEFL			in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0		Plate Grip DOL	1.15		TC	0.09	Vert(LL)	n/a	-	n/a	999	MT20	244/190	
Snow (Pf)	20.0		Lumber DOL	1.15		BC	0.08	Vert(CT)	n/a	-	n/a	999			
TCDL	10.0		Rep Stress Incr	YES		WB	0.21	Horz(CT)	0.01	28	n/a	n/a			
BCLL	0.0*		Code	IRC2018/TPI2014		Matrix-MSH									
BCDL	10.0													Weight: 362 lb	FT = 20%

LUMBER		Max Grav		2=204 (LC 53), 28=172 (LC 41), 30=234 (LC 26), 31=144 (LC 53), 32=172 (LC 26), 33=183 (LC 45), 34=231 (LC 45), 35=227 (LC 45), 36=232 (LC 45), 38=212 (LC 45), 39=197 (LC 40), 40=226 (LC 40), 41=220 (LC 40), 42=226 (LC 40), 43=197 (LC 40), 44=212 (LC 43), 46=232 (LC 43), 47=227 (LC 43), 48=231 (LC 43), 49=183 (LC 43), 50=173 (LC 25), 51=143 (LC 43), 52=243 (LC 25)	WEBS		15-41=-180/49, 14-42=-186/61, 13-43=-157/41, 11-44=-172/29, 10-46=-195/85, 9-47=-188/73, 8-48=-191/75, 7-49=-144/74, 5-50=-143/76, 4-51=-128/66, 3-52=-177/100, 16-40=-186/61, 17-39=-157/31, 19-38=-172/9, 20-36=-195/89, 21-35=-188/72, 22-34=-191/75, 23-33=-144/74, 25-32=-143/76, 26-31=-128/67, 27-30=-177/96			
TOP CHORD	2x4 SP No.2									
BOT CHORD	2x4 SP No.2									
OTHERS	2x4 SP No.3 *Except*									
	41-15,42-14,43-13,40-16,39-17:2x4 SP No.2									
WEDGE	Left: 2x4 SP No.3									
	Right: 2x4 SP No.3									
BRACING										
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 12-18.									
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.							NOTES 1) Unbalanced roof live loads have been considered for this design.		
WEBS	1 Row at midpt	15-41, 14-42, 13-43, 11-44, 10-46, 16-40, 17-39, 19-38, 20-36								
REACTIONS (size)	2=45-7-0, 28=45-7-0, 30=45-7-0, 31=45-7-0, 32=45-7-0, 33=45-7-0, 34=45-7-0, 35=45-7-0, 36=45-7-0, 38=45-7-0, 39=45-7-0, 40=45-7-0, 41=45-7-0, 42=45-7-0, 43=45-7-0, 44=45-7-0, 46=45-7-0, 47=45-7-0, 48=45-7-0, 49=45-7-0, 50=45-7-0, 51=45-7-0, 52=45-7-0									
	Max Horiz	2=-258 (LC 12)								
	Max Uplift	2=-54 (LC 10), 30=-93 (LC 15), 31=-36 (LC 15), 32=-54 (LC 15), 33=-49 (LC 15), 34=-51 (LC 15), 35=-48 (LC 15), 36=-65 (LC 15), 39=-7 (LC 11), 40=-33 (LC 10), 41=-25 (LC 11), 42=-36 (LC 10), 43=-17 (LC 11), 44=-5 (LC 11), 46=-61 (LC 14), 47=-49 (LC 14), 48=-51 (LC 14), 49=-49 (LC 14), 50=-55 (LC 14), 51=-33 (LC 14), 52=-102 (LC 14)								
				FORCES		(lb) - Maximum Compression/Maximum Tension				
				TOP CHORD		1-2=0/26, 2-3=-241/199, 3-4=-185/165, 4-5=-162/153, 5-7=-148/139, 7-8=-135/136, 8-9=-135/162, 9-10=-128/189, 10-11=-153/223, 11-12=-152/227, 12-13=-135/222, 13-14=-135/222, 14-15=-135/222, 15-16=-135/222, 16-17=-135/222, 17-18=-135/222, 18-19=-152/227, 19-20=-153/219, 20-21=-128/165, 21-22=-107/120, 22-23=-77/73, 23-25=-69/42, 25-26=-82/52, 26-27=-112/65, 27-28=-172/96, 28-29=0/26				
				BOT CHORD		2-52=-109/191, 51-52=-84/191, 50-51=-84/191, 49-50=-84/191, 48-49=-84/191, 47-48=-84/191, 46-47=-84/191, 44-46=-84/191, 43-44=-84/191, 42-43=-84/191, 41-42=-84/191, 40-41=-84/191, 39-40=-84/191, 38-39=-84/191, 36-38=-84/191, 35-36=-84/191, 34-35=-84/191, 33-34=-84/191, 32-33=-84/191, 31-32=-84/191, 30-31=-84/191, 28-30=-84/191				



Job	Truss	Truss Type	Qty	Ply	76 Blackberry Manor-Roof-Rosemont A LH
25090183-01	T1GE	Piggyback Base Supported Gable	1	1	I76925334
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. Wed Oct 08 13:02:47
ID:rMJLpRFm9pRPChljqwhPFKzoFRK-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWwCDoi7J4zJC?f

Page: 2

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat.
II; Exp B; Enclosed; MWFRS (envelope) exterior zone
and C-C Corner(3E) -0-10-8 to 3-8-3, Exterior(2N) 3-8-3
to 13-4-4, Corner(3R) 13-4-4 to 22-5-10, Exterior(2N)
22-5-10 to 23-1-6, Corner(3R) 23-1-6 to 32-2-12,
Exterior(2N) 32-2-12 to 41-10-13, Corner(3E) 41-10-13
to 46-5-8 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) Truss designed for wind loads in the plane of the truss
only. For studs exposed to wind (normal to the face),
see Standard Industry Gable End Details as applicable,
or consult qualified building designer as per ANSI/TPI 1.
- 4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15
Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate
DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9;
Cs=1.00; Ct=1.10
- 5) Unbalanced snow loads have been considered for this
design.
- 6) This truss has been designed for greater of min roof live
load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on
overhangs non-concurrent with other live loads.
- 7) Provide adequate drainage to prevent water ponding.
- 8) All plates are 2x4 MT20 unless otherwise indicated.
- 9) Gable requires continuous bottom chord bearing.
- 10) Gable studs spaced at 2-0-0 oc.
- 11) This truss has been designed for a 10.0 psf bottom
chord live load nonconcurrent with any other live loads.
- 12) * This truss has been designed for a live load of 20.0psf
on the bottom chord in all areas where a rectangle
3-06-00 tall by 2-00-00 wide will fit between the bottom
chord and any other members.
- 13) Provide mechanical connection (by others) of truss to
bearing plate capable of withstanding 54 lb uplift at joint
2 and 54 lb uplift at joint 2.
- 14) N/A

- 15) Beveled plate or shim required to provide full bearing
surface with truss chord at joint(s) 28, 56.
- 16) This truss is designed in accordance with the 2018
International Residential Code sections R502.11.1 and
R802.10.2 and referenced standard ANSI/TPI 1.
- 17) Graphical purlin representation does not depict the size
or the orientation of the purlin along the top and/or
bottom chord.

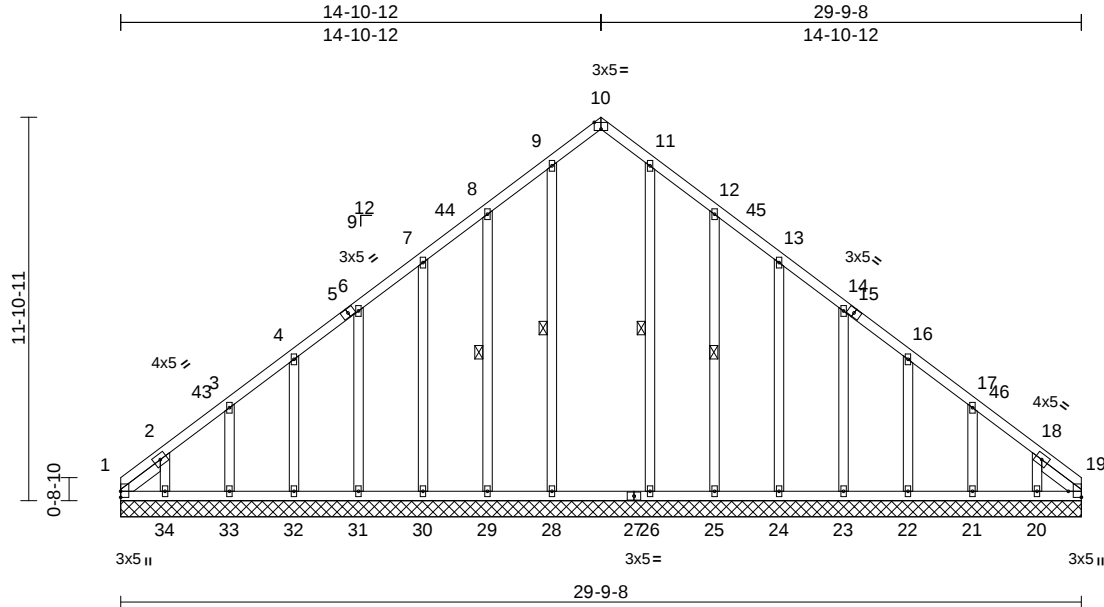
LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	76 Blackberry Manor-Roof-Rosemont A LH	176925335
25090183-01	T2GE	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. Wed Oct 08 13:02:47
ID:gg0whrZWtqJYO8KD9hsaVKzoF6-RfC?PsB70Hq3NSgPqnL8w3uITxbGKwRCDoi7J4zJC?r

Page: 1



Scale = 1:71.4

Plate Offsets (X, Y): [10:0-2-8,Edge], [19:Edge,0-4-13]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	n/a	-	n/a	999	MT20
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.08	Vert(TL)	n/a	-	n/a	999	244/190
TCDL	10.0	Rep Stress Incr	YES	WB	0.15	Horiz(TL)	0.02	19	n/a	n/a	
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH							
BCDL	10.0										
Weight: 224 lb FT = 20%											

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
OTHERS	2x4 SP No.3 *Except* 28-9,26-11:2x4 SP No.2
SLIDER	Left 2x4 SP No.3 -- 1-6-14, Right 2x4 SP No.3 -- 1-6-14

BRACING

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 9-28, 11-26, 8-29, 12-25

REACTIONS

(size)	1=29-9-8, 19=29-9-8, 20=29-9-8, 21=29-9-8, 22=29-9-8, 23=29-9-8, 24=29-9-8, 25=29-9-8, 26=29-9-8, 28=29-9-8, 29=29-9-8, 30=29-9-8, 31=29-9-8, 32=29-9-8, 33=29-9-8, 34=29-9-8
Max Horiz	1=-262 (LC 10)
Max Uplift	1=-120 (LC 12), 19=-91 (LC 13), 20=-158 (LC 15), 21=-63 (LC 15), 22=-67 (LC 15), 23=-67 (LC 15), 24=-61 (LC 15), 25=-96 (LC 15), 29=-90 (LC 14), 30=-63 (LC 14), 31=-67 (LC 14), 32=-67 (LC 14), 33=-63 (LC 14), 34=-164 (LC 14)
Max Grav	1=329 (LC 14), 19=309 (LC 15), 20=206 (LC 25), 21=204 (LC 25), 22=200 (LC 25), 23=200 (LC 25), 24=205 (LC 25), 25=229 (LC 21), 26=289 (LC 6), 28=289 (LC 5), 29=229 (LC 20), 30=206 (LC 24), 31=200 (LC 24), 32=201 (LC 24), 33=204 (LC 24), 34=213 (LC 24)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD

1-2=-167/77, 2-3=-337/162, 3-4=-268/136, 4-6=-199/112, 6-7=-143/87, 7-8=-123/64, 8-9=-118/96, 9-10=-118/88, 10-11=-118/88, 11-12=-118/76, 12-13=-97/29, 13-14=-125/52, 14-16=-176/77, 16-17=-244/106, 17-18=-313/145, 18-19=-157/72

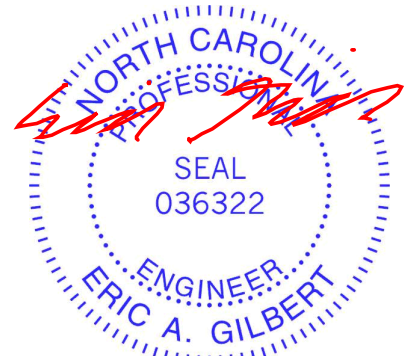
BOT CHORD

1-34=-141/310, 33-34=-141/310, 32-33=-141/310, 31-32=-141/310, 30-31=-141/310, 29-30=-141/310, 28-29=-141/310, 26-28=-141/310, 25-26=-141/310, 24-25=-141/310, 23-24=-141/310, 22-23=-141/310, 21-22=-141/310, 20-21=-141/310, 19-20=-141/310, 9-28=-208/31, 11-26=-208/9, 8-29=-194/111, 7-30=-145/87, 6-31=-147/91, 4-32=-146/90, 3-33=-150/91, 2-34=-153/162, 12-25=-194/117, 13-24=-145/86, 14-23=-147/91, 16-22=-146/90, 17-21=-150/91, 18-20=-153/157

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) 0-0-0 to 3-0-0, Exterior(2N) 3-0-0 to 11-10-12, Corner(3R) 11-10-12 to 17-10-12, Exterior(2N) 17-10-12 to 26-9-8, Corner(3E) 26-9-8 to 29-9-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 120 lb uplift at joint 1, 91 lb uplift at joint 19, 120 lb uplift at joint 1 and 91 lb uplift at joint 19.



October 9,2025

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)

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	76 Blackberry Manor-Roof-Rosemont A LH
25090183-01	T2GE	Common Supported Gable	1	1	I76925335
Job Reference (optional)					

12) N/A

13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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.sbcacomponents.com)



818 Soundside Road
Edenton, NC 27932

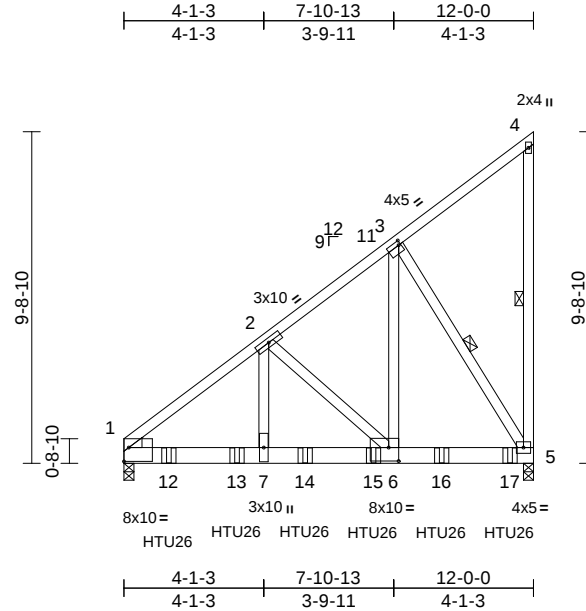
Job	Truss	Truss Type	Qty	Ply	76 Blackberry Manor-Roof-Rosemont A LH
25090183-01	T2GR	Monopitch Girder	1	2	176925336
					Job Reference (optional)

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

Run: 8.73 S Aug 13 2025 Print: 8.730 S Aug 13 2025 MiTek Industries, Inc. Wed Oct 08 13:02:47

Page: 1

ID:Gx_URSHfSkp_38UIW2E6tyzoFRH-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f



Scale = 1:67.5

Plate Offsets (X, Y): [1:Edge,0-4-14], [3:0-0-12,0-1-8], [6:0-3-8,0-4-12]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.37	Vert(LL)	-0.06	6-7	>999	240	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.40	Vert(CT)	-0.10	6-7	>999	180	
TCDL	10.0	Rep Stress Incr	NO	WB	0.71	Horz(CT)	0.02	5	n/a	n/a	
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH							
BCDL	10.0										
Weight: 190 lb FT = 20%											

LUMBER

TOP CHORD 2x4 SP No.2
 BOT CHORD 2x6 SP 2400F 2.0E
 WEBS 2x4 SP No.3 *Except* 3-6:2x4 SP No.2
 WEDGE Left: 2x4 SP No.3

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-11-8 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

WEBS 1 Row at midpt 4-5, 3-5

REACTIONS (size) 1=0-3-8, 5=0-3-8
 Max Horiz 1=326 (LC 11)
 Max Uplift 1=-526 (LC 12), 5=-729 (LC 12)
 Max Grav 1=5481 (LC 22), 5=6251 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-6111/590, 2-3=-3435/361, 3-4=-186/108, 4-5=-172/68

BOT CHORD 1-7=-593/4904, 6-7=-593/4904, 5-6=-346/2703

WEBS 2-7=-332/3382, 2-6=-2944/400, 3-6=-635/5890, 3-5=-4966/648

NOTES

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
 Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-5-0 oc.
 Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.

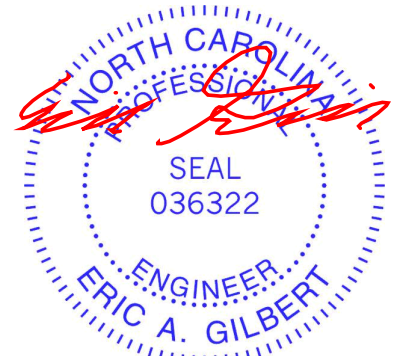
- Wind: ASCE 7-16; Vult=130mph (3-second gust)
 Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

Vert: 12=-1604 (F), 13=-1604 (F), 14=-1604 (F), 15=-1604 (F), 16=-1604 (F), 17=-1608 (F)

- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for 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.
- LGT2 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 5 and 1. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Use Simpson Strong-Tie HTU26 (10-16d Girder, 14-10dx1 1/2 Truss) or equivalent spaced at 2-0-0 oc max. starting at 1-3-12 from the left end to 11-3-12 to connect truss(es) to front face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.
- LGT2 Hurricane ties must have two studs in line below the truss.

LOAD CASE(S) Standard

- Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (lb/ft)
 Vert: 1-4=-60, 5-8=-20
 Concentrated Loads (lb)



October 9,2025

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

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

ENGINEERING BY
TRENCO
 A MiTek Affiliate

818 Soundside Road
 Edenton, NC 27932

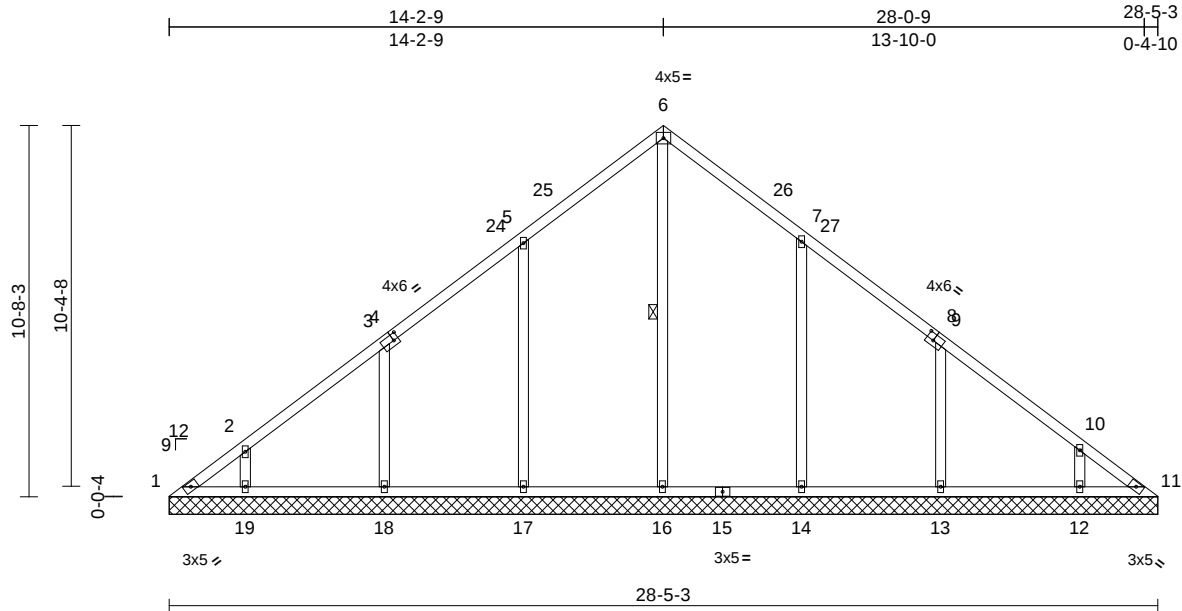
Job	Truss	Truss Type	Qty	Ply	76 Blackberry Manor-Roof-Rosemont A LH
25090183-01	V1	Valley	1	1	Job Reference (optional)

I76925337

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

Run: 8.73 S Aug 13 2025 Print: 8.730 S Aug 13 2025 MiTek Industries, Inc. Wed Oct 08 13:02:47
ID:4kjc5RK53TsB4?x7NyKbAlzoFSW-RfC?PsB70Hq3NSgPqnL8w3uITxbGKWrcD0i7J4zJC?f

Page: 1



Scale = 1:66.3

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.17	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.39	Horiz(TL)	0.01	11	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 145 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x4 SP No.3 *Except* 16-6:2x4 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 6-16

REACTIONS (size) 1=28-5-3, 11=28-5-3, 12=28-5-3, 13=28-5-3, 14=28-5-3, 16=28-5-3, 17=28-5-3, 18=28-5-3, 19=28-5-3
Max Horiz 1=-247 (LC 10)
Max Uplift 1=-73 (LC 12), 11=-13 (LC 13), 12=-85 (LC 15), 13=-139 (LC 15), 14=-143 (LC 15), 17=-145 (LC 14), 18=-137 (LC 14), 19=-90 (LC 14)
Max Grav 1=133 (LC 11), 11=104 (LC 27), 12=337 (LC 25), 13=440 (LC 25), 14=506 (LC 6), 16=421 (LC 27), 17=507 (LC 5), 18=439 (LC 24), 19=342 (LC 24)

FORCES (lb) - Maximum Compression/Maximum Tension

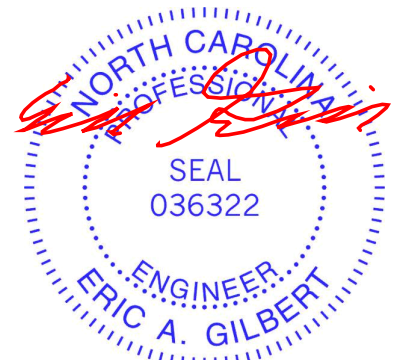
TOP CHORD 1-2=-263/204, 2-3=-203/168, 3-5=-175/151, 5-6=-193/228, 6-7=-192/205, 7-9=-128/95, 9-10=-144/83, 10-11=-204/117
BOT CHORD 1-19=-92/182, 18-19=-86/182, 17-18=-86/182, 16-17=-86/182, 14-16=-86/183, 13-14=-86/183, 12-13=-86/183, 11-12=-86/183
WEBS 6-16=-223/30, 5-17=-378/193, 3-18=-298/185, 2-19=-254/147, 7-14=-376/191, 9-13=-299/186, 10-12=-254/145

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-5 to 3-0-5, Interior (1) 3-0-5 to 11-2-15, Exterior(2R) 11-2-15 to 17-2-15, Interior (1) 17-2-15 to 25-5-8, Exterior(2E) 25-5-8 to 28-5-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 73 lb uplift at joint 1 and 13 lb uplift at joint 11.
- N/A

- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



October 9, 2025

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

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

ENGINEERING BY
TRENCO
A MiTek Affiliate

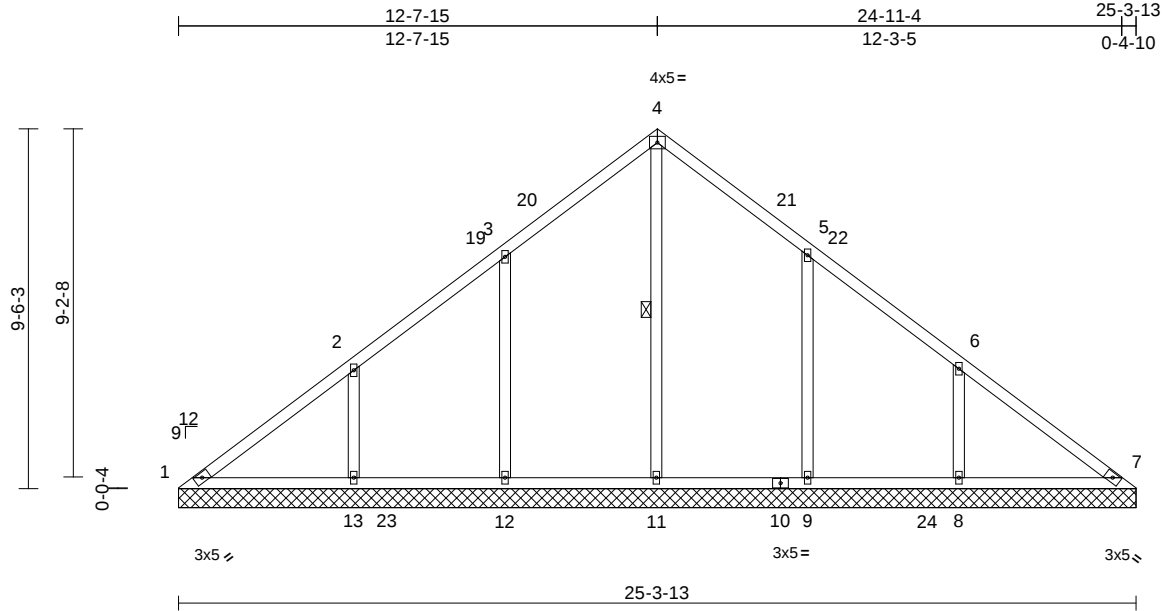
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	76 Blackberry Manor-Roof-Rosemont A LH	176925338
25090183-01	V2	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. Wed Oct 08 13:02:47
ID:JIHSJKPxS8VC?x6vQohDnzoFS6-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?i

Page: 1



Scale = 1:60.9

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.33	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.21	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.28	Horiz(TL)	-0.01	7	n/a	n/a	
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH							
BCDL	10.0										
										Weight: 123 lb	FT = 20%

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

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

WEBS 1 Row at midpt 4-11
REACTIONS (size) 1=25-3-13, 7=25-3-13, 8=25-3-13, 9=25-3-13, 11=25-3-13, 12=25-3-13, 13=25-3-13
Max Horiz 1=219 (LC 11)
Max Uplift 1=-84 (LC 10), 8=-147 (LC 15), 9=-143 (LC 15), 12=-140 (LC 14), 13=-152 (LC 14)
Max Grav 1=107 (LC 13), 7=0 (LC 25), 8=497 (LC 25), 9=481 (LC 6), 11=736 (LC 27), 12=489 (LC 5), 13=485 (LC 24)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-158/441, 2-3=-83/390, 3-4=-34/398, 4-5=-34/378, 5-6=0/308, 6-7=-148/334
BOT CHORD 1-13=-233/91, 12-13=-233/81, 11-12=-233/81, 9-11=-232/82, 8-9=-232/82, 7-8=-232/82
WEBS 4-11=-532/0, 3-12=-373/193, 2-13=-321/186, 5-9=-368/192, 6-8=-327/185

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

2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-5 to 3-0-5, Interior (1) 3-0-5 to 9-8-4, Exterior(2R) 9-8-4 to 15-8-4, Interior (1) 15-8-4 to 22-4-3, Exterior(2E) 22-4-3 to 25-4-3 zone; cantilever left and right exposed ; end vertical left and right exposed;C- C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 84 lb uplift at joint 1.
- N/A

13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



October 9,2025

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

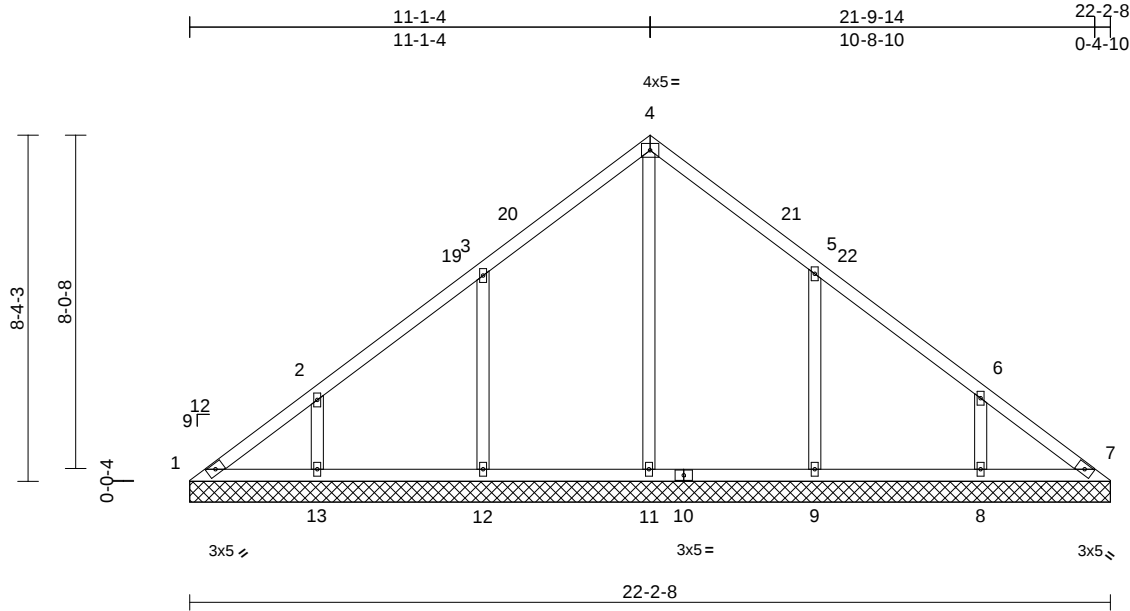
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	76 Blackberry Manor-Roof-Rosemont A LH	176925339
25090183-01	V3	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. Wed Oct 08 13:02:48
ID:NvDY1H1UPHAY2wNGn8MBWXzoFRc-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.33	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.17	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.49	Horiz(TL)	0.00	7	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
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 Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size)
1=22-2-8, 7=22-2-8, 8=22-2-8,
9=22-2-8, 11=22-2-8, 12=22-2-8,
13=22-2-8
Max Horiz 1=191 (LC 11)
Max Uplift 1=-83 (LC 10), 8=-105 (LC 15),
9=-156 (LC 15), 12=-151 (LC 14),
13=-115 (LC 14)
Max Grav 1=110 (LC 13), 8=378 (LC 25),
9=470 (LC 6), 11=610 (LC 27),
12=481 (LC 5), 13=361 (LC 24)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-171/301, 2-3=-120/283, 3-4=-85/290,
4-5=-85/271, 5-6=-8/204, 6-7=-63/186
BOT CHORD 1-13=-119/67, 12-13=-119/55, 11-12=-119/55,
9-11=-118/56, 8-9=-118/56, 7-8=-118/56
WEBS 4-11=-401/0, 3-12=-386/201, 2-13=-260/153,
5-9=-380/201, 6-8=-268/150

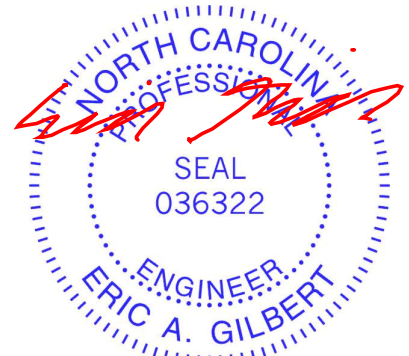
NOTES

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

- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-5 to 3-1-4, Interior (1) 3-1-4 to 8-1-9, Exterior(2R) 8-1-9 to 14-1-9, Interior (1) 14-1-9 to 19-1-4, Exterior(2E) 19-1-4 to 22-2-13 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 83 lb uplift at joint 1.
- N/A

13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



October 9,2025

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

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

ENGINEERING BY
TRENCO
A MiTek Affiliate

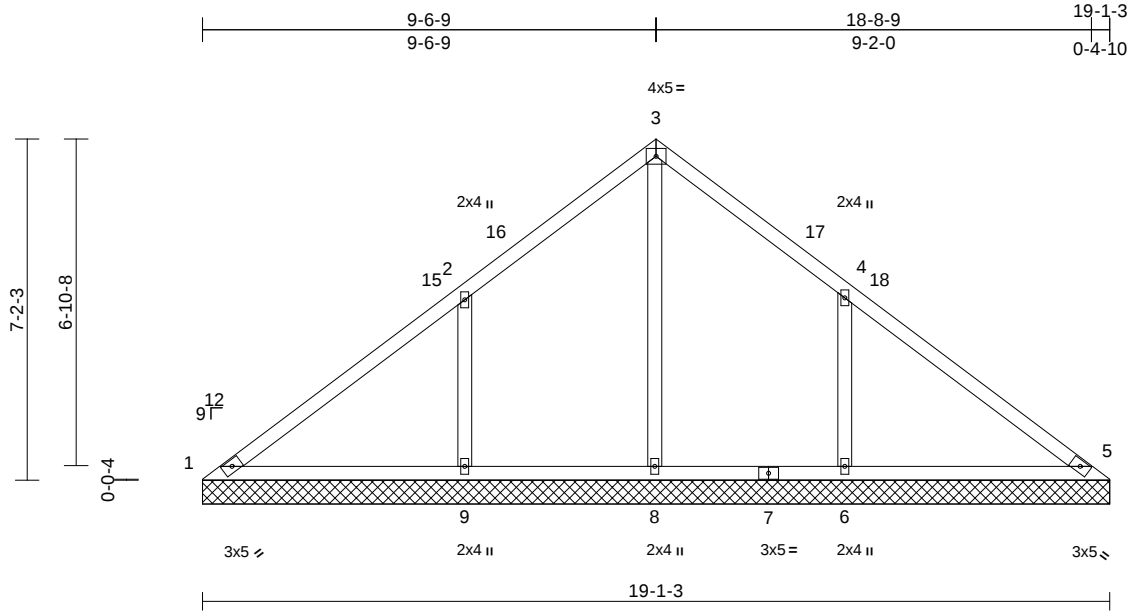
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	76 Blackberry Manor-Roof-Rosemont A LH	176925340
25090183-01	V4	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. Wed Oct 08 13:02:48
ID:r5nwEc16AbIp4ySLruQ3kzoFRb-RfC?PsB70Hq3NSgPqnL8w3uTXbGKWrCDoi7J4zJC?i

Page: 1



Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.47	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.26	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.49	Horiz(TL)	-0.01	5	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 83 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS

(size)	1=19-1-3, 5=19-1-3, 6=19-1-3, 8=19-1-3, 9=19-1-3
Max Horiz	1=164 (LC 11)
Max Uplift	1=-62 (LC 36), 6=-187 (LC 15), 9=-194 (LC 14)
Max Grav	1=100 (LC 35), 5=1 (LC 25), 6=594 (LC 25), 8=686 (LC 24), 9=599 (LC 24)

FORCES

(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=-97/459, 2-3=0/367, 3-4=0/366, 4-5=-203/417
BOT CHORD	1-9=-294/97, 8-9=-294/94, 6-8=-292/95, 5-6=-292/95
WEBS	3-8=-544/0, 2-9=-439/227, 4-6=-437/225

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-5 to 3-0-5, Interior (1) 3-0-5 to 6-6-15, Exterior(2R) 6-6-15 to 12-6-15, Interior (1) 12-6-15 to 16-1-8, Exterior(2E) 16-1-8 to 19-1-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 62 lb uplift at joint 1.
- N/A

- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



October 9,2025

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

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

ENGINEERING BY
TRENCO
A MiTek Affiliate

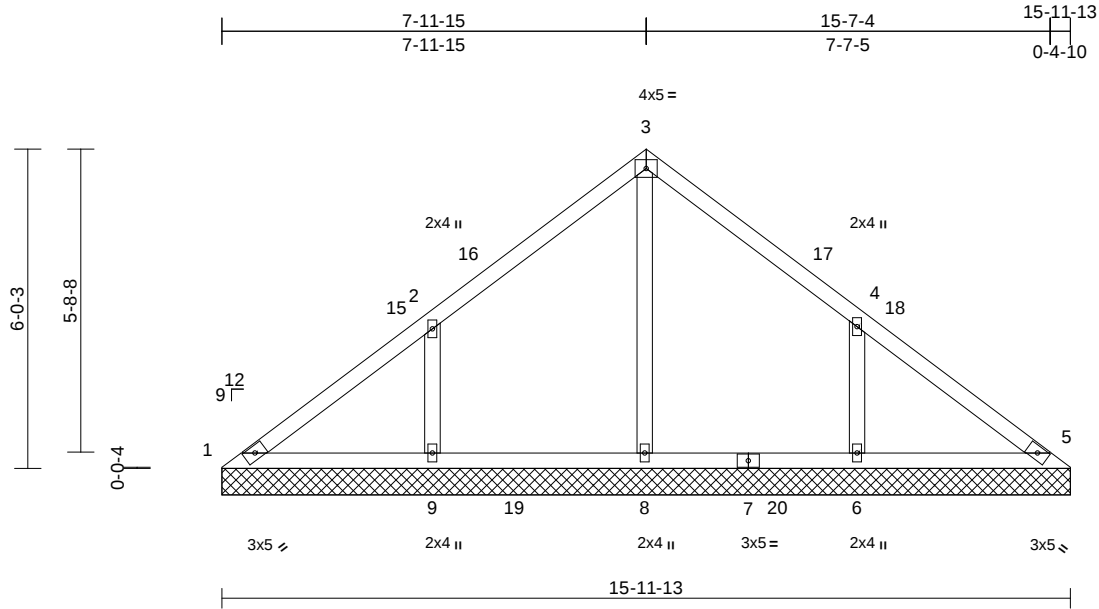
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	76 Blackberry Manor-Roof-Rosemont A LH	I76925341
25090183-01	V5	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. Wed Oct 08 13:02:48
ID:r5nwEc16AbIp4ySLruQ3kzoFRb-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?i

Page: 1



Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.36	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.15	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.27	Horiz(TL)	0.00	5	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 67 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS

(size)	1=15-11-13, 5=15-11-13, 6=15-11-13, 8=15-11-13, 9=15-11-13
Max Horiz	1=137 (LC 11)
Max Uplift	1=-41 (LC 10), 6=-151 (LC 15), 9=-156 (LC 14)
Max Grav	1=74 (LC 35), 5=0 (LC 30), 6=488 (LC 21), 8=613 (LC 24), 9=486 (LC 20)

FORCES

(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=-87/327, 2-3=-20/286, 3-4=0/264, 4-5=-93/273
BOT CHORD	1-9=-186/66, 8-9=-186/61, 6-8=-184/62, 5-6=-184/62
WEBS	3-8=-434/0, 2-9=-391/190, 4-6=-391/188

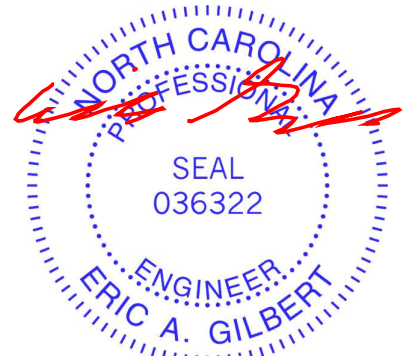
NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-5 to 3-0-5, Interior (1) 3-0-5 to 5-0-4, Exterior(2R) 5-0-4 to 11-0-4, Interior (1) 11-0-4 to 13-0-3, Exterior(2E) 13-0-3 to 16-0-3 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 41 lb uplift at joint 1.
- N/A

- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



October 9, 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

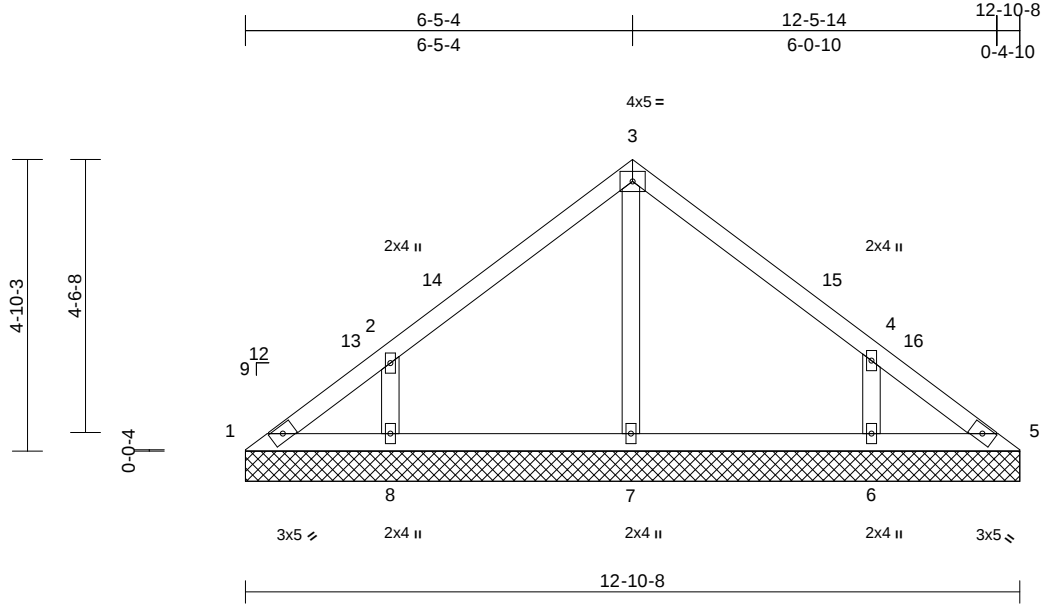
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	76 Blackberry Manor-Roof-Rosemont A LH	176925342
25090183-01	V6	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. Wed Oct 08 13:02:48
ID:r5nwEc16AbIp4ySLruQ3kzoFRb-RfC?PsB70Hq3NSgPqnL8w3uTXbGKWrCDoi7J4zJC?

Page: 1



Scale = 1:38.3

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.31	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.12	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.08	Horiz(TL)	0.00	5	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH							
BCDL	10.0									Weight: 52 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS

(size)	1=12-10-8, 5=12-10-8, 6=12-10-8, 7=12-10-8, 8=12-10-8
Max Horiz	1=-110 (LC 10)
Max Uplift	1=-22 (LC 10), 6=-124 (LC 15), 8=-128 (LC 14)
Max Grav	1=93 (LC 25), 5=77 (LC 24), 6=443 (LC 21), 7=281 (LC 20), 8=444 (LC 20)

FORCES

(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=-120/98, 2-3=-188/105, 3-4=-186/105, 4-5=-98/58
BOT CHORD	1-8=-34/89, 7-8=-34/68, 6-7=-33/68, 5-6=-33/76
WEBS	3-7=-195/1, 2-8=-393/181, 4-6=-387/178

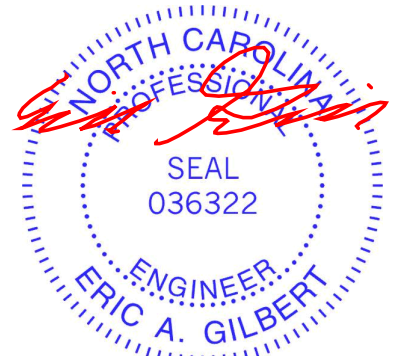
NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-5 to 3-0-5, Interior (1) 3-0-5 to 3-5-9, Exterior(2R) 3-5-9 to 9-5-9, Interior (1) 9-5-9 to 9-10-13, Exterior(2E) 9-10-13 to 12-10-13 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 22 lb uplift at joint 1.
- N/A

- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



October 9,2025

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

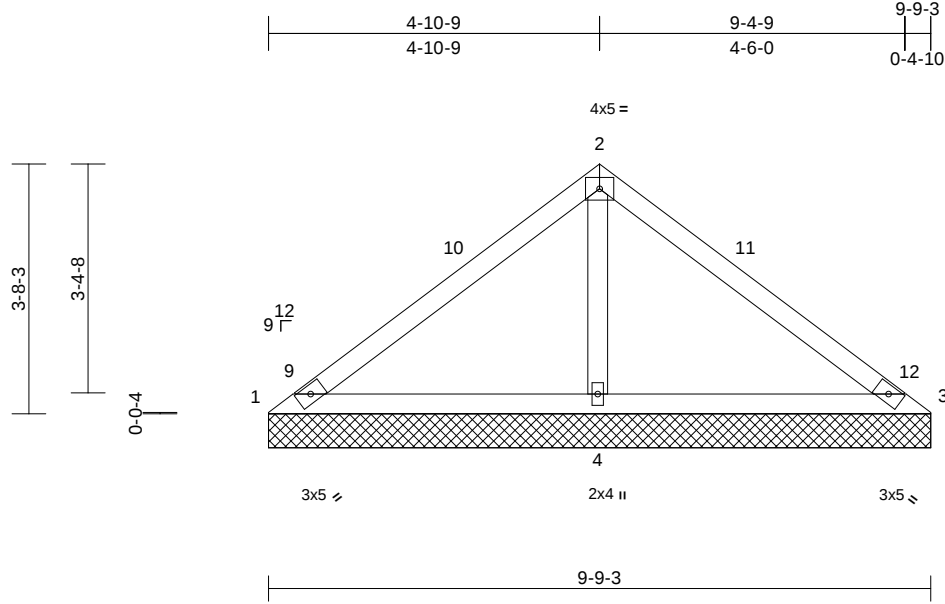
Job	Truss	Truss Type	Qty	Ply	76 Blackberry Manor-Roof-Rosemont A LH
25090183-01	V7	Valley	1	1	176925343
Job Reference (optional)					

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

Run: 8.73 S Aug 13 2025 Print: 8.730 S Aug 13 2025 MiTek Industries, Inc. Wed Oct 08 13:02:48

Page: 1

ID:JHLISy2kxvQgHDXfuZPbyzoFRa-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWwCDoi7J4zJC?f



Scale = 1:34

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.45	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.43	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.17	Horiz(TL)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 36 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS

(size)	1=9-9-3, 3=9-9-3, 4=9-9-3
Max Horiz	1=-82 (LC 10)
Max Uplift	1=-54 (LC 21), 3=-50 (LC 20), 4=-95 (LC 14)
Max Grav	1=97 (LC 20), 3=102 (LC 21), 4=786 (LC 20)

FORCES

(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=-109/393, 2-3=-106/386
BOT CHORD	1-4=-267/162, 3-4=-262/160
WEBS	2-4=-643/247

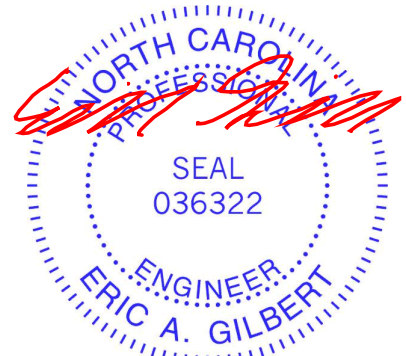
NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-5 to 3-0-5, Exterior(2R) 3-0-5 to 6-9-8, Exterior(2E) 6-9-8 to 9-9-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 54 lb uplift at joint 1 and 50 lb uplift at joint 3.
- N/A

- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



October 9,2025

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

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

ENGINEERING BY
TRENCO
A MiTek Affiliate

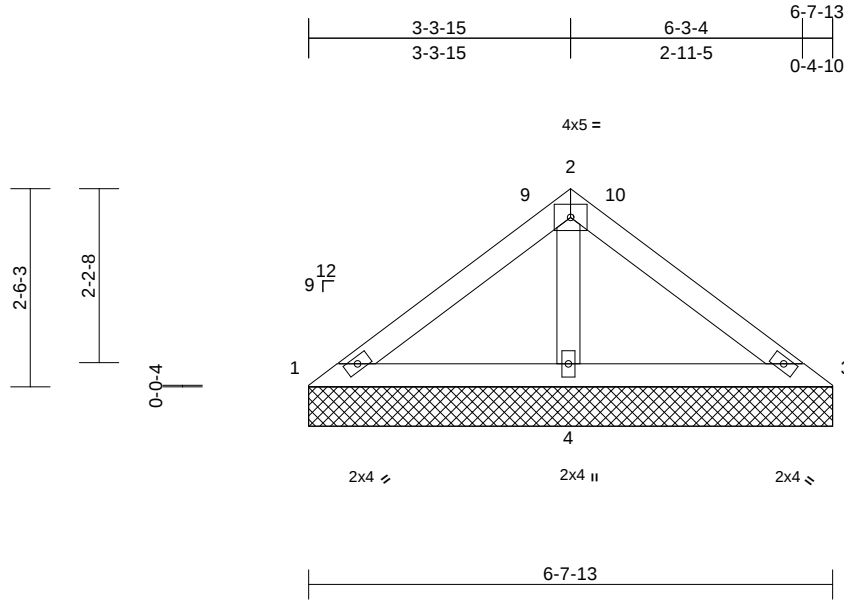
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	76 Blackberry Manor-Roof-Rosemont A LH
25090183-01	V8	Valley	1	1	176925344
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. Wed Oct 08 13:02:48
ID:JHLISy2kxvQgHDXfuZPbyzoFRa-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:29.2

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.20	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.21	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.07	Horiz(TL)	0.00	4	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP							
BCDL	10.0									Weight: 24 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD	Structural wood sheathing directly applied or 6-7-13 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS

(size)	1=6-7-13, 3=6-7-13, 4=6-7-13
Max Horiz	1=55 (LC 13)
Max Uplift	1=-6 (LC 21), 3=-6 (LC 15), 4=-53 (LC 14)
Max Grav	1=99 (LC 20), 3=103 (LC 21), 4=462 (LC 20)

FORCES

(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=-88/198, 2-3=-95/193
BOT CHORD	1-4=-162/128, 3-4=-158/126
WEBS	2-4=-359/161

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-5 to 3-0-5, Exterior(2R) 3-0-5 to 3-8-3, Exterior(2E) 3-8-3 to 6-8-3 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 6 lb uplift at joint 1 and 6 lb uplift at joint 3.
- N/A

- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S)

Standard



October 9,2025

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

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

ENGINEERING BY
TRENCO
A MiTek Affiliate

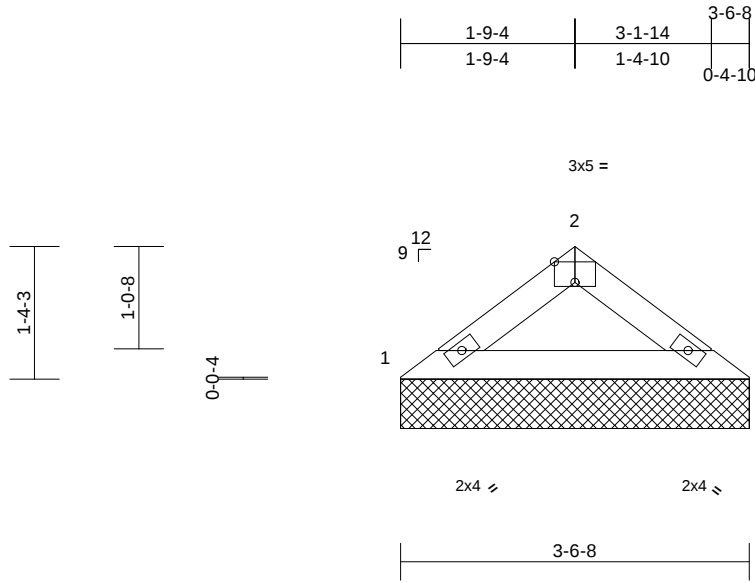
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	76 Blackberry Manor-Roof-Rosemont A LH
25090183-01	V9	Valley	1	1	176925345
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. Wed Oct 08 13:02:48
ID:JHLISy2kxvQgHDXfuZPfbzofRA-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWwCDoi7J4zJC?f

Page: 1



Scale = 1:23.4												
Plate Offsets (X, Y): [2:0-2-8,Edge]												
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.09	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 10 lb	FT = 20%

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

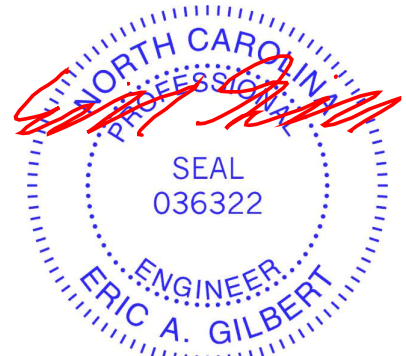
BRACING
TOP CHORD Structural wood sheathing directly applied or 3-6-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=3-6-8, 3=3-6-8
Max Horiz 1=27 (LC 13)
Max Uplift 1=-12 (LC 14), 3=-12 (LC 15)
Max Grav 1=164 (LC 20), 3=164 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-226/81, 2-3=-226/81
BOT CHORD 1-3=-51/171

- Gable studs spaced at 4-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 12 lb uplift at joint 1 and 12 lb uplift at joint 3.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- LOAD CASE(S)** Standard

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



October 9,2025

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

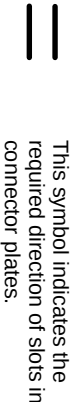
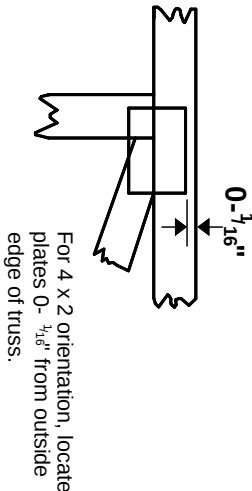
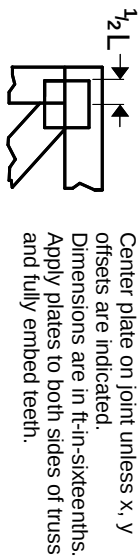
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Symbols

PLATE LOCATION AND ORIENTATION



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

PLATE SIZE

4 X 4

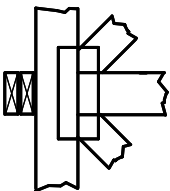
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

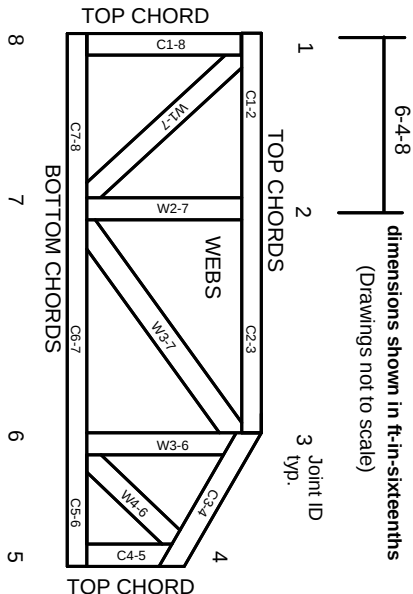
BEARING



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

Industry Standards:
ANSI/TP1.1: 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/TP1 1 section 6.3. These truss designs rely on lumber values established by others.

© 2023 MITek® All Rights Reserved

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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

MITek®

ENGINEERING BY
TRENCO
A MITek Affiliate

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