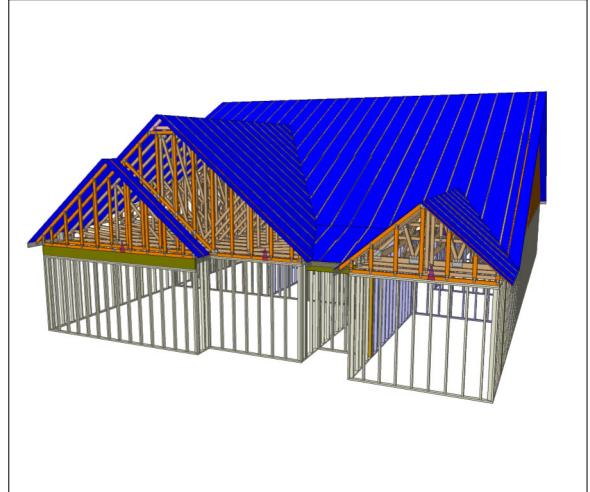




Carter Sanford Component Plant
298 Harvey Faulk Rd
Sanford, NC 27332

Phone #:919-775-1450

Builder: DR Horton Inc
Model: 22 Eagle Creek -
Kathryn - A



THE PLACEMENT PLAN NOTES:

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

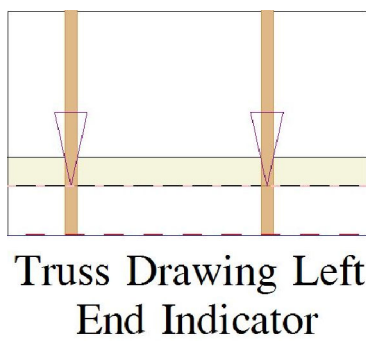
Approved By: _____

Date: _____

REFER TO FINAL TRUSS ENGINEERING SHEETS FOR PLY TO PLY CONNECTIONS

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

ALL BEARING POINTS MUST BE INSTALLED PRIOR TO SETTING ANY COMPONENTS



**** All uplift connectors shown within these documents are recommendations only. Per ANSI/TPI 1, all uplift connectors are the responsibility of the bldg designer and or contractor.**

Truss Connector Total List		
Manuf	Product	Qty
Simpson	HTU26	6
Simpson	One H2.5A	85

Scale:	<i>MTS</i>
Date:	10/22/2025
Designer:	Nate Donaldson
Project Number:	TM250067-A
Sheet Number:	1/1

DR Horton Inc
22 Eagle Creek - Kathryn - A
ROOF PLACEMENT PLAN



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 design of the connections of the trusses to the building's columns, 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

RE: 25100127
22 Eagle Creek - Kathryn A - Roof

Trenco
818 Soundside Rd
Edenton, NC 27932

Site Information:

Customer: DR Horton Inc Project Name: 25100127
Lot/Block: 22 Model: Kathryn A
Address: Subdivision: Eagle Creek
City: State:

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

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

This package includes 34 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I74344903	A1	6/23/2025	21	I74344923	PB4	6/23/2025
2	I74344904	A2	6/23/2025	22	I74344924	V1	6/23/2025
3	I74344905	A3	6/23/2025	23	I74344925	V2	6/23/2025
4	I74344906	A4	6/23/2025	24	I74344926	V3	6/23/2025
5	I74344907	A6	6/23/2025	25	I74344927	V4	6/23/2025
6	I74344908	A7	6/23/2025	26	I74344928	V5	6/23/2025
7	I74344909	A8	6/23/2025	27	I74344929	V6	6/23/2025
8	I74344910	A9	6/23/2025	28	I74344930	V7	6/23/2025
9	I74344911	B1	6/23/2025	29	I74344931	V8	6/23/2025
10	I74344912	B2	6/23/2025	30	I74344932	V9	6/23/2025
11	I74344913	B3	6/23/2025	31	I74344933	V10	6/23/2025
12	I74344914	C1	6/23/2025	32	I74344934	V11	6/23/2025
13	I74344915	D1	6/23/2025	33	I74344935	V12	6/23/2025
14	I74344916	D2	6/23/2025	34	I74344936	V13	6/23/2025
15	I74344917	D3	6/23/2025				
16	I74344918	D4	6/23/2025				
17	I74344919	E1	6/23/2025				
18	I74344920	PB1	6/23/2025				
19	I74344921	PB2	6/23/2025				
20	I74344922	PB3	6/23/2025				

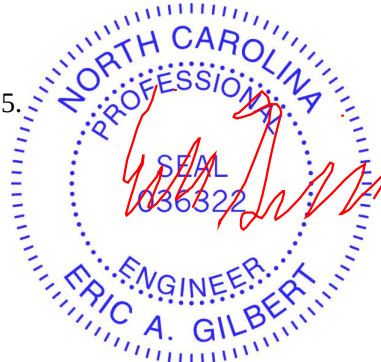
The truss drawing(s) referenced above have been prepared by
Truss Engineering Co. under my direct supervision
based on the parameters provided by Carter Components (Sanford, NC)).

Truss Design Engineer's Name: Gilbert, Eric

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

North Carolina COA: C-0844

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



June 23, 2025

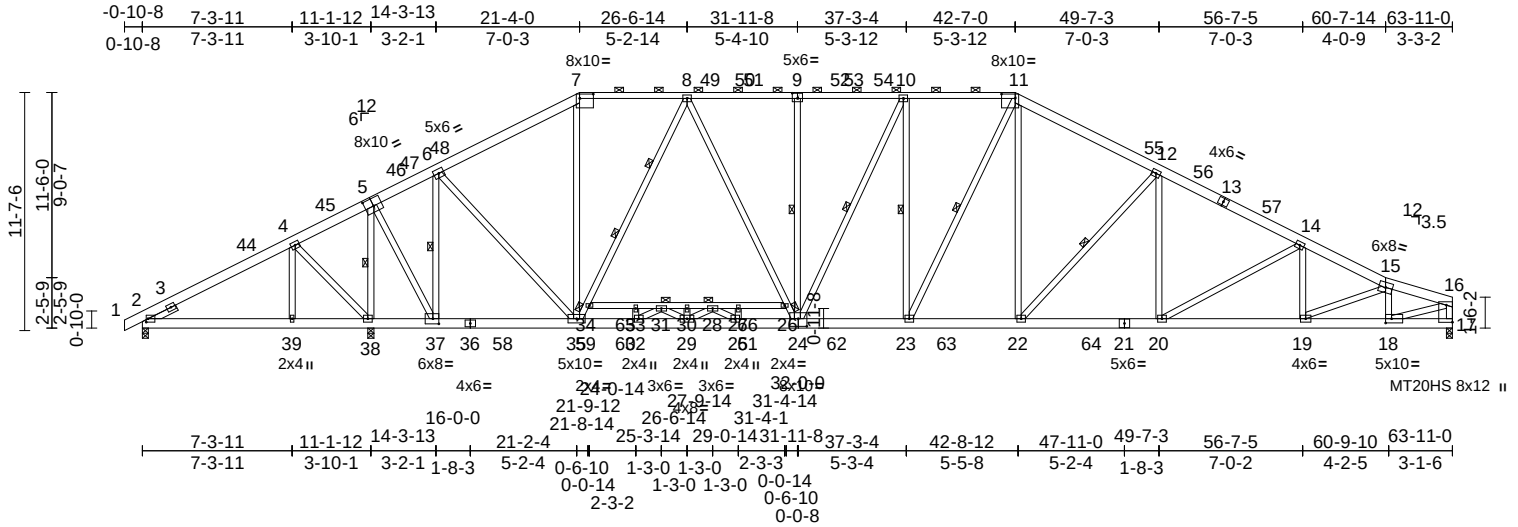
Job	Truss	Truss Type	Qty	Ply	22 Eagle Creek - Kathryn A - Roof	174344903
25100127	A1	Piggyback Base	1	1	Job Reference (optional)	

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu Jun 19 14:12:22

Page: 1

ID:gzvdENKJOGx2Ss?L5D9RDzAzEz27-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKwRCdoi7J4zJC?f



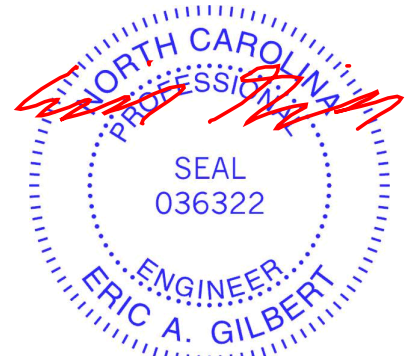
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Plate Offsets (X, Y): [2:0-1-1,0-2-0], [5:0-5-0,0-4-8], [7:0-8-0,0-2-8], [9:0-3-0,0-3-0], [11:0-8-0,0-2-8], [17:Edge,0-3-8], [18:0-3-8,0-2-8], [24:0-5-0,0-4-8], [37:0-3-8,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.63	Vert(LL)	-0.24	25-29	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.44	Vert(CT)	-0.47	25-29	>999	180	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	YES	WB	0.92	Horz(CT)	0.10	17	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 566 lb	FT = 20%

LUMBER		BOT CHORD		2-39=-435/157, 38-39=-435/157, 37-38=-665/165, 35-37=0/736, 32-35=0/2983, 29-32=0/3694, 25-29=0/3652, 23-25=-55/3474, 22-23=-78/3251, 20-22=-249/3929, 19-20=-357/4341, 18-19=-371/3913, 17-18=-16/254, 33-34=-82/0, 31-33=-82/0, 30-31=-1478/0, 28-30=-1478/0, 27-28=-19/64, 26-27=-19/64, 7-35=0/790, 11-22=-99/1112, 32-33=0/65, 29-30=-3/47, 28-29=0/683, 25-27=0/102, 25-28=-1161/0, 34-35=-1900/158, 8-34=-1789/196, 12-20=0/517, 14-19=-46/137, 12-22=-1101/251, 8-26=-18/1301, 24-26=-60/1245, 9-24=-349/128, 10-24=-320/234, 31-32=-1071/0, 29-31=0/647, 14-20=-485/159, 10-23=-448/120, 11-23=-102/602, 15-19=0/502, 4-38=-592/186, 4-39=0/206, 5-38=-3415/214, 5-37=-182/2902, 6-37=-2589/180, 6-35=0/2166, 15-18=-1349/184, 16-18=-371/3792		WEBS		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	
TOP CHORD 2x6 SP 2400F 2.0E *Except* 9-11,9-7:2x4 SP No.2		BOT CHORD 2x6 SP 2400F 2.0E *Except* 34-26:2x4 SP No.2		4) Unbalanced snow loads have been considered for this design.					
WEBS 2x4 SP No.3 *Except* 35-7,22-11,8-35,24-8,24-9,24-10,10-23,23-11, 5-37,18-16:2x4 SP No.2		SLIDER Left 2x4 SP No.2 -- 1-6-0		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.					
BRACING		TOP CHORD Structural wood sheathing directly applied or 4-8-11 oc purlins, except end verticals, and 2-0-0 oc purlins (2-9-9 max.): 7-11.		6) 200.0lb AC unit load placed on the bottom chord, 26-6-14 from left end, supported at two points, 5-0-0 apart.					
BOT CHORD Rigid ceiling directly applied or 4-8-15 oc bracing.		WEBS 1 Row at midpt 12-22, 9-24, 10-24, 10-23, 11-23, 5-38, 6-37							
WEBS 2 Rows at 1/3 pts 8-34		JOINTS 1 Brace at Jt(s): 28, 31, 34, 26							
REACTIONS (size) 2=0-3-8, 17=0-3-8, 38=0-3-8		Max Horiz 2=185 (LC 18)							
Max Uplift 2=-85 (LC 14), 17=-80 (LC 15)		Max Grav 2=330 (LC 46), 17=2485 (LC 6), 38=3758 (LC 3)							
FORCES (lb) - Maximum Compression/Maximum Tension		TOP CHORD 1-2=0/27, 2-4=-126/498, 4-6=-880/749, 6-7=-2517/267, 7-8=-2208/293, 8-10=-3540/386, 10-11=-3558/483, 11-12=-3838/511, 12-14=-4493/528, 14-15=-4854/533, 15-16=-3997/442, 16-17=-2575/308							
		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 5-6-3, Interior (1) 5-6-3 to 14-11-5, Exterior(2R) 14-11-5 to 27-8-11, Interior (1) 27-8-11 to 36-2-5, Exterior(2R) 36-2-5 to 48-11-11, Interior (1) 48-11-11 to 60-7-14, Exterior(2E) 60-7-14 to 63-9-4 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60							





June 23,2025

Continued on page 2

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

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

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	22 Eagle Creek - Kathryn A - Roof
25100127	A1	Piggyback Base	1	1	174344903
Job Reference (optional)					

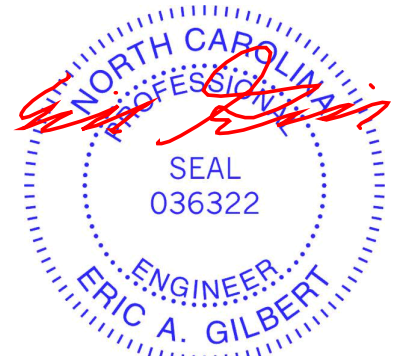
Carter Components (Sanford, NC), Sanford, NC - 27332,

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ID:gzvdENKJOgX2Ss?L5D9RdAzEz27-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 2

- 7) WARNING: This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.
- 8) Provide adequate drainage to prevent water ponding.
- 9) All plates are MT20 plates unless otherwise indicated.
- 10) All plates are 4x5 MT20 unless otherwise indicated.
- 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, with BCDL = 10.0psf.
- 13) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 17 and 2. This connection is for uplift only and does not consider lateral forces.
- 14) 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



June 23, 2025

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

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ENGINEERING BY
TRENCO
A MiTek Affiliate

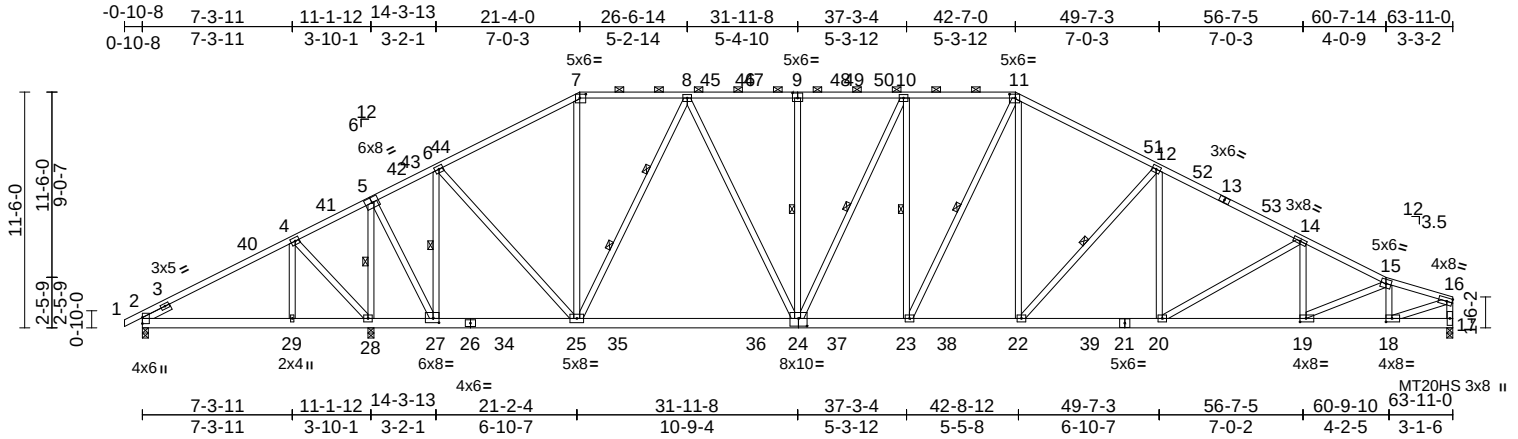
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	22 Eagle Creek - Kathryn A - Roof	174344904
25100127	A2	Piggyback Base	1	1	Job Reference (optional)	

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu Jun 19 14:12:23
ID:PTHEBNAUAgVuptrm7qWt6ZjzEwiZ-RfC?PsB70Hq3NSgPqnL8w3uITxBGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:112.4

Plate Offsets (X, Y): [7:0-3-8,0-2-4], [9:0-3-0,0-3-0], [11:0-3-8,0-2-4], [18:0-3-8,0-2-0], [19:0-3-8,0-2-0], [24:0-5-0,0-4-8], [27:0-3-8,0-2-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.53	Vert(LL)	-0.22	24-25	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	-0.38	24-25	>999	180	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	YES	WB	0.93	Horz(CT)	0.08	17	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 504 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP 2400F 2.0E
BOT CHORD 2x6 SP 2400F 2.0E
WEBS 2x4 SP No.3 *Except*
25-7,22-11,24-8,24-9,24-10,10-23,23-11,8-25,
18-16:2x4 SP No.2
SLIDER Left 2x4 SP No.3 -- 1-6-0

BRACING
TOP CHORD Structural wood sheathing directly applied or
3-10-1 oc purlins, except end verticals, and
2-0-0 oc purlins (4-6-6 max.): 7-11.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc
bracing, Except:
6-0-0 oc bracing: 2-29,28-29,27-28.
WEBS 1 Row at midpt 12-22, 9-24, 10-24,
10-23, 11-23, 5-28, 6-27
WEBS 2 Rows at 1/3 pts 8-25

REACTIONS (size) 2=0-3-8, 17=0-3-8, 28=0-3-8
Max Horiz 2=182 (LC 18)
Max Uplift 2=-74 (LC 14), 17=-168 (LC 15),
28=-132 (LC 14)
Max Grav 2=408 (LC 46), 17=2328 (LC 6),
28=3176 (LC 3)

FORCES (lb) - Maximum Compression/Maximum
Tension

TOP CHORD 15-16=-3623/567, 18-17=-2481/398,
2-29=-263/206, 28-29=-263/206,
27-28=-466/175, 25-27=-58/733,
23-25=-274/3112, 22-23=-259/2960,
20-22=-415/3399, 19-20=-510/3982,
18-19=-491/3563, 17-18=-25/127
BOT CHORD

WEBS 7-25=-34/616, 11-22=-96/1060,
14-19=-58/137, 12-22=-1052/236,
8-24=-93/1120, 9-24=-346/127,
10-24=-468/100, 14-20=-462/148,
10-23=-304/273, 11-23=-218/447,
15-19=-21/491, 8-25=-1605/262,
12-20=0/513, 4-29=0/261, 5-28=-2876/416,
4-28=-618/187, 6-27=-2140/384,
5-27=-361/2486, 6-25=-114/1709,
15-18=-1336/245, 16-18=-499/3547

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 5-6-3, Interior (1) 5-6-3 to 14-11-5, Exterior(2R) 14-11-5 to 27-8-11, Interior (1) 27-8-11 to 36-2-5, Exterior(2R) 36-2-5 to 48-11-11, Interior (1) 48-11-11 to 60-7-14, Exterior(2E) 60-7-14 to 63-9-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 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.

- WARNING: This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- All plates are 4x5 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.

June 23,2025

Continued on page 2

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

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

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	22 Eagle Creek - Kathryn A - Roof
25100127	A2	Piggyback Base	1	1	174344904
Job Reference (optional)					

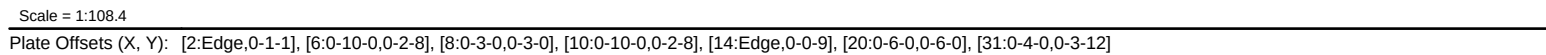
- 12) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 17, 2, and 28. This connection is for uplift only and does not consider lateral forces.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- LOAD CASE(S)
Standard

win this



June 23,2025

Carter Components (Sanford, NC), Sanford, NC - 27332, Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu Jun 19 14:12:23 Page: 1
ID:E7rVnEkJT57qN7il?w1GXqzEymp-RfC?PsB70Hg3NSgPqnL8w3uITxbGKWCDoi7J4zJC?!

[illegible]

LUMBER		BOT CHORD		NOTES	
TOP CHORD	2x6 SP 2400F 2.0E *Except* 6-8,8-10:2x4 SP 2400F 2.0E	BOT CHORD	2-3=-185/5879, 33-34=-185/5879, 31-33=-38/5534, 28-31=0/5234, 25-28=0/5740, 21-25=0/5755, 19-21=0/5228, 18-19=0/4622, 16-18=-86/5308, 15-16=-185/5648, 14-15=-185/5648, 29-30=-9/13, 27-29=-9/13, 26-27=-1170/0, 24-26=-1170/0, 23-24=-11/21, 22-23=-11/21	1) Unbalanced roof live loads have been considered for this design. 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BC DL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2E) -0-10-8 to 5-6-3, Interior (1) 5-6-3 to 12-3-8, Exterior (2R) 12-3-8 to 30-4-8, Interior (1) 30-4-8 to 33-6-8, Exterior (2R) 33-6-8 to 51-7-8, Interior (1) 51-7-8 to 57-6-5, Exterior (2E) 57-6-5 to 63-11-0 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) T CLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10 4) Unbalanced snow loads have been considered for this design.	5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads. 6) 200.0lb AC unit load placed on the bottom chord, 26-6-14 from left end, supported at two points, 5-0-0 apart. 7) WARNING: This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing. 8) Provide adequate drainage to prevent water ponding. 9) All plates are MT20 plates unless otherwise indicated. 10) All plates are 4x5 MT20 unless otherwise indicated.
WEBS	2x4 SP No.3 *Except* 31-6-7-31,20-7,18-10,20-8,20-9,9-19,19-10:2 x4 SP No.2	WEBS	3-34=-29/127, 6-31=0/2234, 30-31=-1026/162, 7-30=-984/186, 7-22=-87/564, 20-22=-113/519, 10-18=-92/1093, 11-18=-1146/244, 11-16=0/488, 13-16=-390/175, 28-29=-85/10, 25-26=-77/28, 24-25=0/584, 21-24=-812/0, 21-23=-58/9, 8-20=-352/128, 9-20=0/804, 27-28=-793/0, 25-27=0/596, 5-31=-1075/280, 5-33=-40/416, 3-33=-395/169, 13-15=-37/142, 9-19=-1105/38, 10-19=-43/1346		
WEDGE	Left: 2x4 SP No.3				
BRACING					
TOP CHORD	Structural wood sheathing directly applied or 3-10-15 oc purlins, except 2-0-0 oc purlins (3-5-0 max.): 6-10.				
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 29-30,27-29 5-4-10 oc bracing: 26-27 5-4-11 oc bracing: 24-26				
WEBS	1 Row at midpt 7-30, 11-18, 8-20, 5-31, 9-19				
JOINTS	1 Brace at Jt(s): 24, 27, 30, 22				
REACTIONS					
	(size) 2=0-3-8, 14= Mechanical Max Horiz 2=185 (LC 18) Max Uplift 2=-94 (LC 14), 14=-131 (LC 15) Max Grav 2=3265 (LC 3), 14=3093 (LC 3)				
FORCES					
	(lb) - Maximum Compression/Maximum Tension				
TOP CHORD	1-2=0/23, 2-3=-6702/177, 3-5=-6300/195, 5-6=-5718/171, 6-7=-4991/192, 7-9=-5563/213, 9-10=-5256/294, 10-11=-5414/310, 11-13=-6046/308, 13-14=-6441/300				

June 23, 2025

Continued on page 2

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

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

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	22 Eagle Creek - Kathryn A - Roof
25100127	A3	Piggyback Base	6	1	174344905
					Job Reference (optional)

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu Jun 19 14:12:23
ID:E7rVnEkJT57qN7il?w1GXqzEymp-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrcDoi7J4zJC?f

Page: 2

- 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, with BCDL = 10.0psf.
- 13) Refer to girder(s) for truss to truss connections.
- 14) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 131 lb uplift at joint 14.
- 15) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
- 16) 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



June 23, 2025

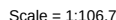
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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

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Carter Components (Sanford, NC), Sanford, NC - 27332, Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu Jun 19 14:12:24 Page: 1
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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/TPI Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinet.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbccomponents.com).



818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	22 Eagle Creek - Kathryn A - Roof
25100127	A4	Piggyback Base Supported Gable	1	1	174344906
Job Reference (optional)					

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu Jun 19 14:12:24

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ID:Bi1XYEK8GMweADNDFv4mFzEwfn-RfC?PsB70Hq3NSgPqnL8w3uITXbGKwRCDoi7J4zJC?f

BOT CHORD 71-72=-38/160, 70-71=-38/160, 69-70=-38/160, 68-69=-38/160, 67-68=-38/160, 66-67=-38/160, 65-66=-38/160, 63-65=-38/160, 62-63=-37/160, 61-62=-37/160, 60-61=-37/160, 59-60=-37/160, 58-59=-37/160, 57-58=-37/160, 55-57=-37/160, 54-55=-37/160, 53-54=-37/160, 52-53=-37/160, 51-52=-37/160, 50-51=-37/160, 49-50=-37/160, 47-49=-37/160, 46-47=-37/160, 45-46=-37/160, 44-45=-37/160, 43-44=-37/160, 42-43=-37/160, 41-42=-37/160, 40-41=-37/160

WEBS 20-56=-121/57, 19-57=-148/57, 18-58=-179/57, 17-59=-176/56, 16-60=-182/75, 15-61=-155/2, 13-62=-196/33, 12-63=-201/93, 11-64=-200/75, 10-65=-199/78, 8-66=-203/77, 7-67=-181/78, 6-68=-127/75, 5-69=-126/91, 4-70=-126/118, 3-71=-128/144, 21-55=-148/57, 22-54=-179/57, 24-53=-176/56, 25-52=-182/75, 26-51=-147/0, 28-50=-196/25, 29-49=-202/92, 30-48=-200/75, 32-47=-200/77, 33-46=-203/77, 34-45=-187/77, 35-44=-127/76, 36-43=-127/113, 37-42=-124/115, 38-41=-137/160

- 13) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 14) * 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.
- 15) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 39 lb uplift at joint 72, 25 lb uplift at joint 56, 26 lb uplift at joint 57, 25 lb uplift at joint 58, 25 lb uplift at joint 59, 36 lb uplift at joint 60, 9 lb uplift at joint 62, 52 lb uplift at joint 63, 42 lb uplift at joint 64, 45 lb uplift at joint 65, 43 lb uplift at joint 66, 44 lb uplift at joint 67, 42 lb uplift at joint 68, 49 lb uplift at joint 69, 22 lb uplift at joint 70, 138 lb uplift at joint 71, 25 lb uplift at joint 55, 25 lb uplift at joint 54, 25 lb uplift at joint 53, 34 lb uplift at joint 52, 1 lb uplift at joint 50, 55 lb uplift at joint 49, 42 lb uplift at joint 48, 43 lb uplift at joint 47, 44 lb uplift at joint 46, 44 lb uplift at joint 45, 43 lb uplift at joint 44, 48 lb uplift at joint 43, 27 lb uplift at joint 42 and 117 lb uplift at joint 41.
- 16) 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

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 Corner(3E) -0-10-8 to 5-6-3, Exterior(2N) 5-6-3 to 14-11-5, Corner(3R) 14-11-5 to 27-11-8, Exterior(2N) 27-11-8 to 35-11-8, Corner(3R) 35-11-8 to 48-11-11, Exterior(2N) 48-11-11 to 57-4-9, Corner(3E) 57-4-9 to 63-9-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) 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) WARNING: This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.
- 8) Provide adequate drainage to prevent water ponding.
- 9) All plates are 2x4 MT20 unless otherwise indicated.
- 10) Gable requires continuous bottom chord bearing.
- 11) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 12) Gable studs spaced at 2-0-0 oc.



June 23,2025

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

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818 Soundside Road
Edenton, NC 27932

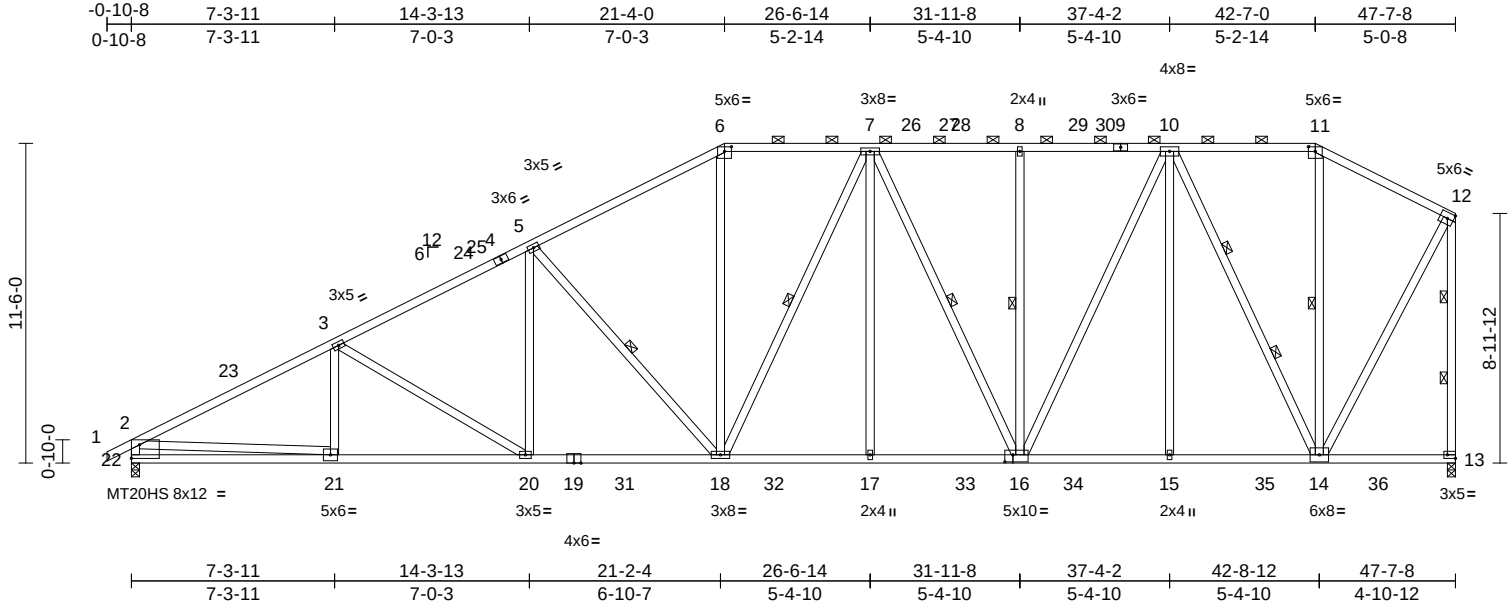
Job	Truss	Truss Type	Qty	Ply	22 Eagle Creek - Kathryn A - Roof	174344907
25100127	A6	Piggyback Base	2	1	Job Reference (optional)	

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu Jun 19 14:12:24

Page: 1

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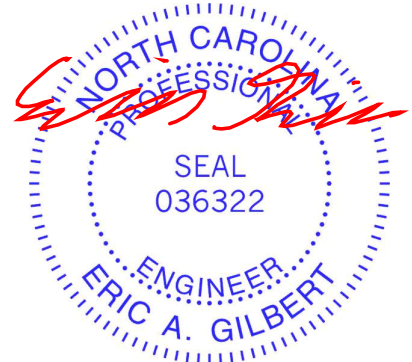


Scale = 1:82.9									
Plate Offsets (X, Y): [6:0-3-0,0-2-0], [11:0-3-0,0-2-0], [13:Edge,0-1-8], [16:0-3-8,0-3-0], [22:Edge,0-5-13]									
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in (loc)	l/defl	L/d
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.98	Vert(LL)	-0.20 18-20	>999	240
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.41	Vert(CT)	-0.36 18-20	>999	180
TCDL	10.0	Rep Stress Incr	YES	WB	0.92	Horz(CT)	0.10 13	n/a	n/a
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH					
BCDL	10.0								
Weight: 382 lb FT = 20%									

LUMBER	
TOP CHORD	2x4 SP 2400F 2.0E
BOT CHORD	2x4 SP 2400F 2.0E
WEBS	2x4 SP No.2 *Except* 3-21,20-3,5-20,18-5,14-12:2x4 SP No.3, 13-12,18-7,16-7,16-10,14-10:2x4 SP No.1
BRACING	
TOP CHORD	Structural wood sheathing directly applied or 3-11-6 oc purlins, except end verticals, and 2-0-0 oc purlins (5-1-3 max.): 6-11.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 5-18, 11-14, 7-18, 7-16, 8-16
WEBS	2 Rows at 1/3 pts 12-13, 10-14
REACTIONS	
(size)	13=0-3-8, 22=0-3-8
Max Horiz	22=363 (LC 11)
Max Uplift	13=150 (LC 15), 22=-257 (LC 14)
Max Grav	13=2252 (LC 46), 22=2187 (LC 5)
FORCES	
(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=0/27, 2-3=-4002/414, 3-5=-3592/420, 5-6=-2956/402, 6-7=-2568/401, 7-8=-2371/372, 8-10=-2371/372, 10-11=-961/276, 11-12=-1078/284, 2-22=-2255/294, 12-13=-2412/258
BOT CHORD	21-22=-374/1033, 20-21=-470/3731, 18-20=-346/3341, 17-18=-319/2764, 15-17=-319/2764, 14-15=-244/1977, 13-14=-110/154
WEBS	3-21=-54/148, 3-20=-455/145, 5-20=0/523, 5-18=-1046/229, 6-18=-39/955, 11-14=-69/275, 12-14=-180/2119, 2-21=-136/2711, 7-17=0/297, 7-18=-268/284, 7-16=-678/153, 8-16=-352/128, 10-16=-179/1247, 10-15=0/310, 10-14=-2029/213

- 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 3-10-10, Interior (1) 3-10-10 to 14-3-13, Exterior(2R) 14-3-13 to 28-0-13, Interior (1) 28-0-13 to 35-10-3, Exterior(2R) 35-10-3 to 42-7-0, Exterior(2E) 42-7-0 to 47-5-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 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.
 - All plates are MT20 plates 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.
 - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 22 and 13. This connection is for uplift only and does not consider lateral forces.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



June 23,2025

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

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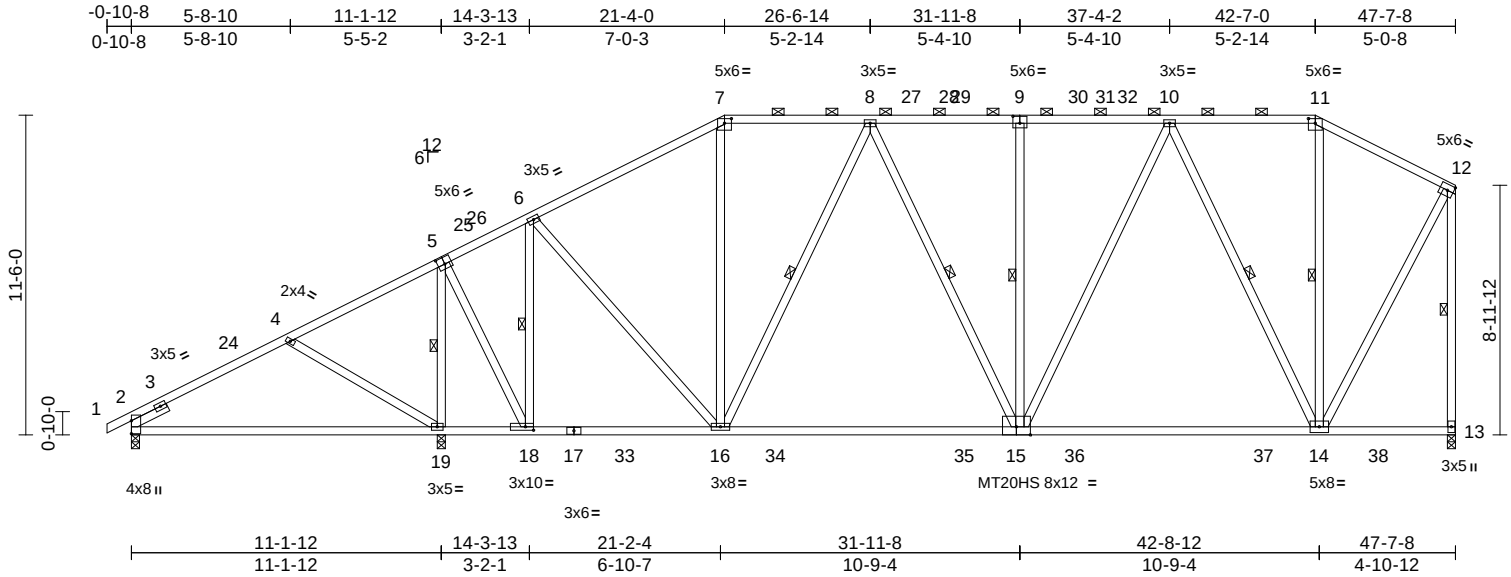
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	22 Eagle Creek - Kathryn A - Roof	174344908
25100127	A7	Piggyback Base	7	1	Job Reference (optional)	

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu Jun 19 14:12:25
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Page: 1



Scale = 1:82.9

Plate Offsets (X, Y): [5:0-3-0,0-3-0], [7:0-3-0,0-2-0], [9:0-3-0,0-3-0], [11:0-3-0,0-2-0], [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	0.88	Vert(LL)	-0.33	14-15	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.66	Vert(CT)	-0.53	14-15	>822	180	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	YES	WB	0.93	Horz(CT)	0.05	13	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 351 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP 2400F 2.0E
BOT CHORD 2x4 SP 2400F 2.0E
WEBS 2x4 SP No.2 *Except*
4-19,5-19,5-18,6-18,16-6,14-12:2x4 SP No.3,
13-12:2x4 SP No.1
SLIDER Left 2x4 SP No.3 -- 1-6-0

BRACING

TOP CHORD Structural wood sheathing directly applied or
6-0-0 oc purlins, except end verticals, and
2-0-0 oc purlins (6-0-0 max.): 7-11.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc
bracing.
WEBS 1 Row at midpt 5-19, 6-18, 8-16, 8-15,
9-15, 11-14, 12-13, 10-14

REACTIONS

(size) 2=0-3-8, 13=0-3-8, 19=0-3-8
Max Horiz 2=357 (LC 13)
Max Uplift 2=-15 (LC 14), 13=-135 (LC 15),
19=-313 (LC 14)
Max Grav 2=606 (LC 37), 13=1810 (LC 46),
19=2083 (LC 5)

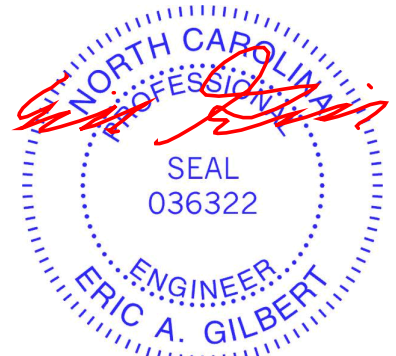
FORCES

(lb) - Maximum Compression/Maximum
Tension
1-2=0/23, 2-4=-950/56, 4-6=-905/144,
6-7=-1574/255, 7-8=-1378/269,
8-10=-1710/290, 10-11=-768/247,
11-12=-860/252, 12-13=-1962/189
BOT CHORD 2-19=-379/753, 18-19=-94/376,
16-18=-163/987, 14-16=-251/1789,
13-14=-111/153
WEBS 4-19=-459/204, 5-19=-1745/315,
5-18=-175/1367, 6-18=-1155/180,
6-16=-73/829, 7-16=0/363, 8-16=-634/179,
8-15=-31/206, 9-15=-350/129,
11-14=-125/203, 12-14=-132/1719,
10-14=-1335/197, 10-15=-59/826

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 3-10-10, Interior (1) 3-10-10 to 14-3-13, Exterior(2R) 14-3-13 to 28-0-13, Interior (1) 28-0-13 to 35-10-3, Exterior(2R) 35-10-3 to 42-7-0, Exterior(2E) 42-7-0 to 47-5-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- All plates are MT20 plates 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.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 19, and 13. This connection is for uplift only and does not consider lateral forces.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



June 23,2025

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
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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	22 Eagle Creek - Kathryn A - Roof	174344909
25100127	A8	Piggyback Base	5	1	Job Reference (optional)	

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

Run: 8.73 E Dec 5 2024 Print: 8.730 E Dec 5 2024 MiTek Industries, Inc. Mon Jun 23 11:15:31

Page: 1

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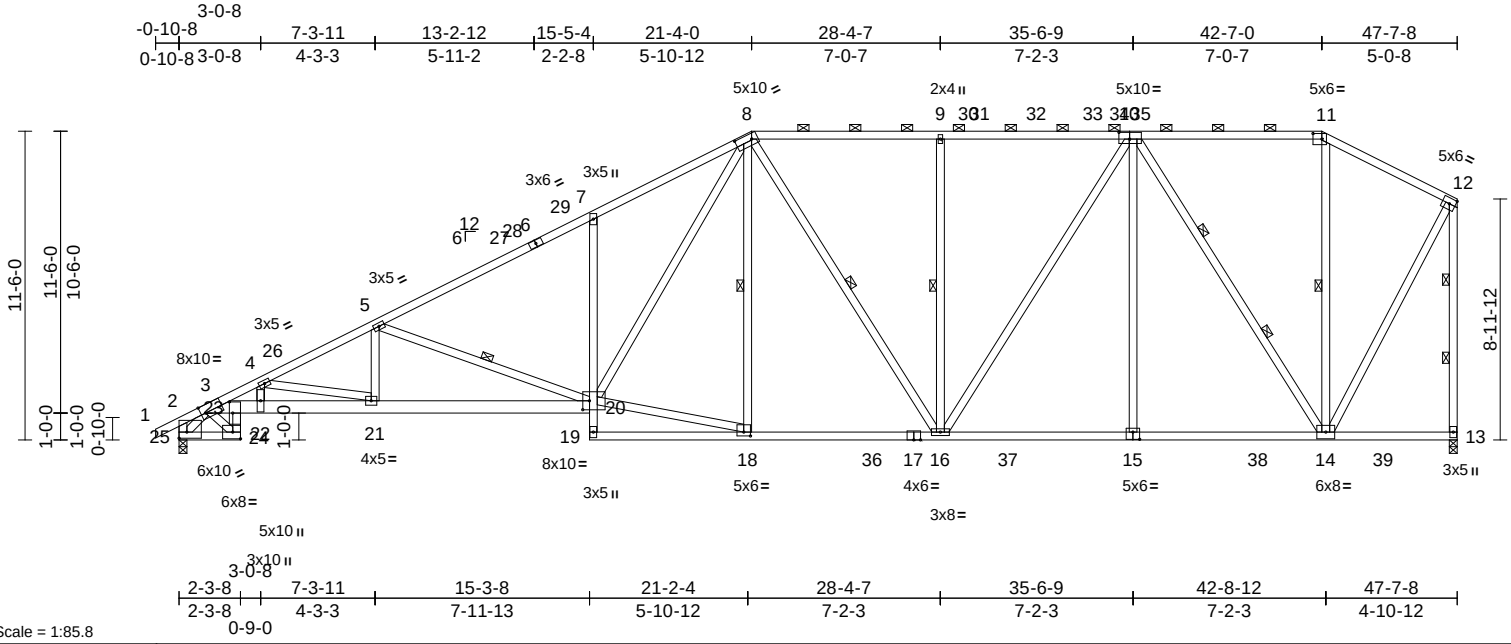


Plate Offsets (X, Y): [2:Edge,0-2-12], [3:0-2-0,Edge], [8:0-7-4,0-2-8], [10:0-4-12,0-3-0], [11:0-4-0,0-2-8], [15:0-3-0,0-3-4], [18:0-3-0,0-1-12], [20:0-3-0,0-4-0], [23:0-5-0,0-1-8]

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	0.92	Vert(LL)	-0.27	20-21	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.49	20-21	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.95	Horz(CT)	0.25	13	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 376 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP 2400F 2.0E
BOT CHORD 2x4 SP 2400F 2.0E *Except* 25-24:2x4 SP No.2, 24-23:2x4 SP No.1, 3-20:2x6 SP 2400F 2.0E, 7-19:2x4 SP No.3
WEBS 2x4 SP No.3 *Except*
20-8,18-8,9-16,10-15,14-11,25-2,13-12:2x4 SP No.2, 16-8,16-10,14-10:2x4 SP No.1

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-11-9 oc purlins, except end verticals, and 2-0-0 oc purlins (4-9-4 max.): 8-11.
BOT CHORD Rigid ceiling directly applied or 9-10-8 oc bracing.
WEBS 1 Row at midpt 5-20, 8-18, 8-16, 9-16, 11-14
WEBS 2 Rows at 1/3 pts 10-14, 12-13

REACTIONS (lb/size) 13=1893/0-3-8, 25=1955/0-3-8
Max Horiz 25=363 (LC 11)
Max Uplift 13=-150 (LC 15), 25=-257 (LC 14)
Max Grav 13=2235 (LC 44), 25=2167 (LC 5)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/27, 2-3=-558/84, 3-4=-6067/866, 4-26=-4799/587, 5-26=-4723/605, 5-27=-3595/446, 27-28=-3482/452, 6-28=-3471/455, 6-29=-3432/464, 7-29=-3414/468, 7-8=-3563/610, 8-9=-2306/391, 9-30=-2306/391, 30-31=-2306/391, 31-32=-2306/391, 32-33=-2306/391, 33-34=-2306/391, 10-34=-2306/391, 10-35=-897/276, 11-35=-897/276, 11-12=-1029/282, 2-25=-687/129, 12-13=-2150/254

BOT CHORD 24-25=-360/1777, 23-24=-483/2435, 3-23=-907/5380, 22-23=-917/5429, 21-22=-917/5429, 20-21=-635/4288, 19-20=0/98, 7-20=-641/256, 18-19=-36/155, 18-36=-305/2296, 17-36=-305/2296, 16-17=-305/2296, 16-37=-270/1883, 15-37=-270/1883, 15-38=-269/1887, 14-38=-269/1887, 14-39=-110/154, 13-39=-110/154
WEBS 5-21=0/636, 5-20=-1232/277, 18-20=-273/2181, 8-20=-360/1769, 8-18=-222/134, 8-16=-326/194, 9-16=-589/185, 10-16=-189/841, 10-15=0/425, 10-14=-1810/213, 11-14=-93/219, 12-14=-181/1876, 3-24=-2835/581, 3-25=-2065/205, 4-21=-1170/289, 4-22=-140/706

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 3-10-10, Interior (1) 3-10-10 to 14-7-3, Exterior(2R) 14-7-3 to 28-4-7, Interior (1) 28-4-7 to 35-10-3, Exterior(2R) 35-10-3 to 42-7-0, Exterior(2E) 42-7-0 to 47-5-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 150 lb uplift at joint 13 and 257 lb uplift at joint 25.
- 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



June 23,2025

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

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

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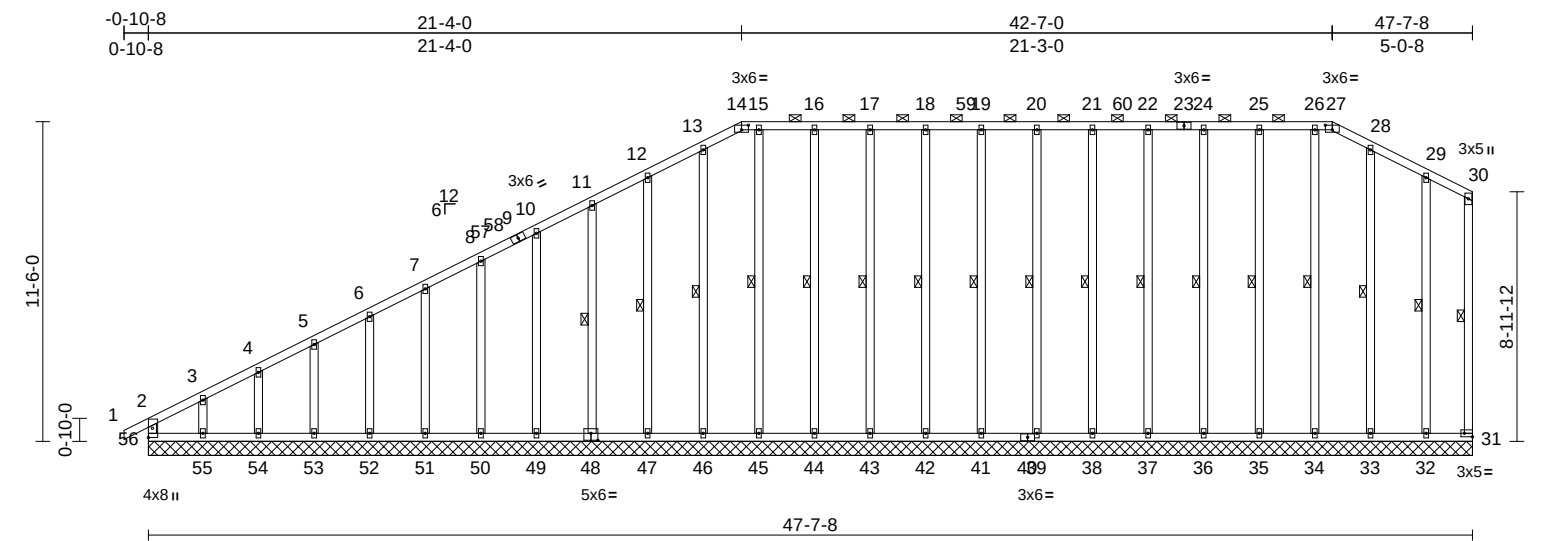
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	22 Eagle Creek - Kathryn A - Roof	174344910
25100127	A9	Piggyback Base Supported Gable	1	1	Job Reference (optional)	

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu Jun 19 14:12:25
ID:ITEzaUUfmX1fludiheVr6nzEwlK-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?#

Page: 1



Scale = 1:82.9												
Plate Offsets (X, Y): [14:0-3-0,0-2-0], [27:0-3-0,0-2-0], [31:Edge,0-1-8], [48:0-3-0,0-3-0]												
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.62	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.20	Horz(CT)	0.01	31	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MR								
BCDL	10.0											
											Weight: 455 lb	FT = 20%

LUMBER		Max Uplift	31=-35 (LC 10), 32=-31 (LC 15), 33=-44 (LC 15), 34=-28 (LC 11), 35=-33 (LC 10), 36=-25 (LC 11), 37=-25 (LC 11), 38=-25 (LC 10), 39=-25 (LC 11), 41=-25 (LC 10), 42=-25 (LC 11), 43=-25 (LC 11), 44=-35 (LC 10), 45=-38 (LC 11), 46=-20 (LC 14), 47=-50 (LC 14), 48=-43 (LC 14), 49=-45 (LC 14), 50=-43 (LC 14), 51=-44 (LC 14), 52=-42 (LC 14), 53=-51 (LC 14), 54=-14 (LC 14), 55=-172 (LC 14), 56=-29 (LC 10)	TOP CHORD	2-56=-207/144, 1-2=0/27, 2-3=-332/311, 3-4=-273/262, 4-5=-254/254, 5-6=-228/236, 6-7=-214/221, 7-8=-201/205, 8-10=-188/189, 10-11=-174/225, 11-12=-161/270, 12-13=-150/320, 13-14=-128/338, 14-15=-110/326, 15-16=-110/326, 16-17=-110/326, 17-18=-110/326, 18-19=-110/326, 19-20=-110/326, 20-21=-110/326, 21-22=-110/326, 22-24=-110/326, 24-25=-110/326, 25-26=-110/326, 26-27=-110/326, 27-28=-124/335, 28-29=-130/291, 29-30=-159/278, 30-31=-134/238							
TOP CHORD	2x4 SP No.2											
BOT CHORD	2x4 SP No.2											
WEBS	2x4 SP No.3 *Except* 30-31:2x4 SP No.2											
OTHERS	2x4 SP No.2 *Except* 47-12,48-11,49-10,50-8,51-7,52-6,53-5,54-4, 55-3,32-29:2x4 SP No.3											
BRACING												
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 14-27.											
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.											
WEBS	1 Row at midpt 30-31, 20-39, 19-41, 18-42, 17-43, 16-44, 15-45, 13-46, 12-47, 11-48, 21-38, 22-37, 24-36, 25-35, 26-34, 28-33, 29-32											
REACTIONS (size)												
31=47-7-8, 32=47-7-8, 33=47-7-8, 34=47-7-8, 35=47-7-8, 36=47-7-8, 37=47-7-8, 38=47-7-8, 39=47-7-8, 41=47-7-8, 42=47-7-8, 43=47-7-8, 44=47-7-8, 45=47-7-8, 46=47-7-8, 47=47-7-8, 48=47-7-8, 49=47-7-8, 50=47-7-8, 51=47-7-8, 52=47-7-8, 53=47-7-8, 54=47-7-8, 55=47-7-8, 56=47-7-8												
Max Horiz	56=363 (LC 11)											
		FORCES	(lb) - Maximum Compression/Maximum Tension									



The seal is circular with a blue border. Inside the border, the words "NORTH CAROLINA" are written in a semi-circle at the top, and "PROFESSIONAL ENGINEER" is written in a semi-circle at the bottom. In the center, there is a red signature and the word "SEAL" in blue capital letters.



June 23,2025

Job	Truss	Truss Type	Qty	Ply	22 Eagle Creek - Kathryn A - Roof
25100127	A9	Piggyback Base Supported Gable	1	1	174344910
Job Reference (optional)					

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu Jun 19 14:12:25

Page: 2

ID:ITEzaUUfmX1fludiheVr6nzEwlK-RfC?PsB70Hq3NSgPqnL8w3uITxbGKWrcDoi7J4zJC?f

BOT CHORD 55-56=-113/185, 54-55=-113/185,
53-54=-113/185, 52-53=-113/185,
51-52=-113/185, 50-51=-113/185,
49-50=-113/185, 47-49=-113/185,
46-47=-113/185, 45-46=-113/185,
44-45=-113/185, 43-44=-113/185,
42-43=-113/185, 41-42=-113/185,
39-41=-113/185, 38-39=-113/185,
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31-32=-113/185

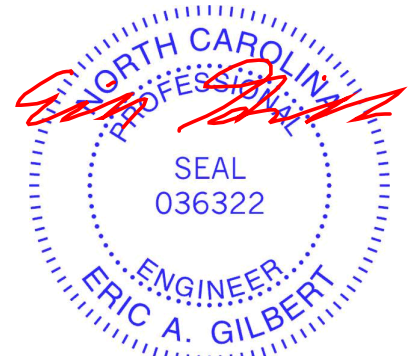
WEBS 20-39=-121/57, 19-41=-148/57,
18-42=-179/57, 17-43=-176/56,
16-44=-181/74, 15-45=-178/62,
13-46=-180/44, 12-47=-181/92,
11-48=-180/75, 10-49=-181/78,
8-50=-140/77, 7-51=-127/77, 6-52=-126/77,
5-53=-129/76, 4-54=-123/93, 3-55=-173/151,
21-38=-148/57, 22-37=-179/57,
24-36=-176/56, 25-35=-181/71,
26-34=-178/55, 28-33=-202/77,
29-32=-223/102

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 Corner(3E) -0-10-8 to 3-11-8, Exterior(2N) 3-11-8 to 16-6-14, Corner(3R) 16-6-14 to 25-11-8, Exterior(2N) 25-11-8 to 37-9-14, Corner(3R) 37-9-14 to 42-7-0, Corner(3E) 42-7-0 to 47-5-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 11) Gable studs spaced at 2-0-0 oc.
- 12) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 13) * 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.
- 14) N/A

- 15) 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



June 23,2025

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818 Soundside Road
Edenton, NC 27932

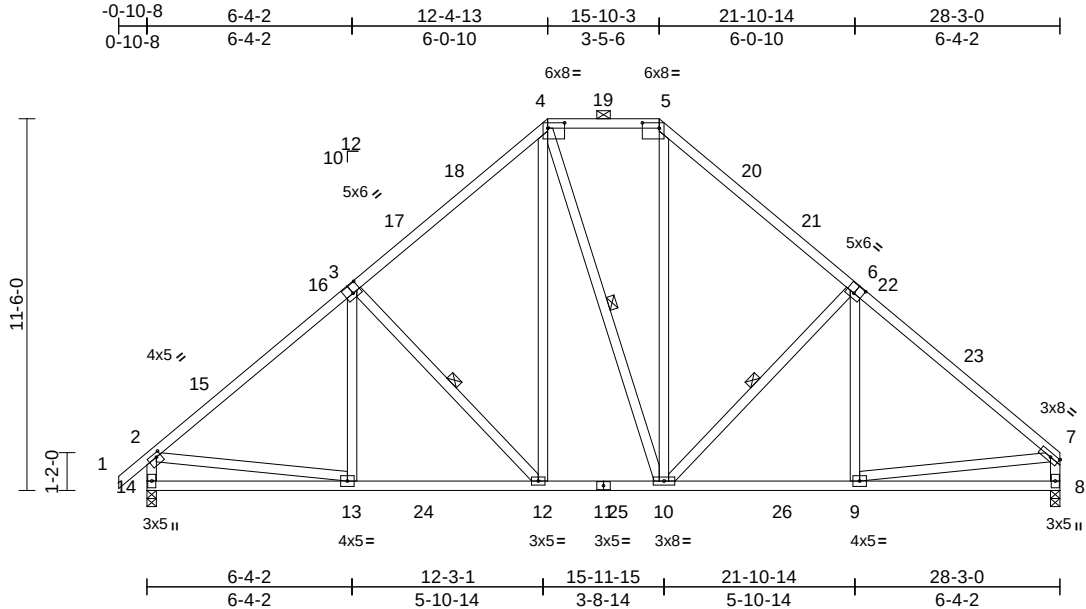
Job	Truss	Truss Type	Qty	Ply	22 Eagle Creek - Kathryn A - Roof	174344911
25100127	B1	Piggyback Base	1	1	Job Reference (optional)	

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu Jun 19 14:12:26

Page: 1

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Scale = 1:71.3

Plate Offsets (X, Y): [2:0-1-12,0-1-8], [3:0-3-0,0-3-4], [4:0-6-4,0-2-0], [5:0-6-4,0-2-0], [6:0-3-0,0-3-4]

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	0.79	Vert(LL)	-0.08	12-13	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.54	Vert(CT)	-0.13	12-13	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.44	Horz(CT)	0.03	8	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 208 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except* 12-4,10-4,10-5:2x4 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (5-6-12 max.): 4-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 3-12, 4-10, 6-10

REACTIONS

(size) 8=0-3-8, 14=0-3-8
Max Horiz 14=287 (LC 11)
Max Uplift 8=-87 (LC 15), 14=-107 (LC 14)
Max Grav 8=1383 (LC 53), 14=1444 (LC 51)

FORCES

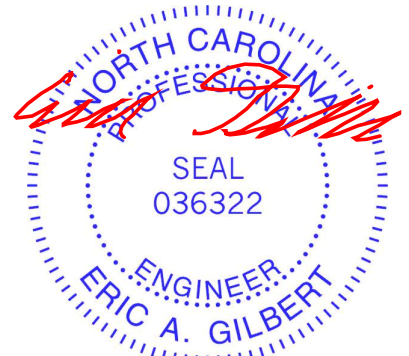
(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/39, 2-4=-1810/223, 4-5=-1040/232, 5-7=-1803/225, 2-14=-1478/142, 7-8=-1431/119
BOT CHORD 13-14=-295/412, 12-13=-138/1343, 10-12=-35/966, 9-10=-7/1321, 8-9=-59/188
WEBS 3-13=-23/205, 3-12=-526/215, 4-12=-98/563, 4-10=-169/174, 5-10=-86/554, 6-10=-532/217, 6-9=-29/201, 2-13=0/1093, 7-9=0/1157

NOTES

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

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 8-1-14, Exterior(2R) 8-1-14 to 20-1-2, Interior (1) 20-1-2 to 25-1-4, Exterior(2E) 25-1-4 to 28-1-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 6) Provide adequate drainage to prevent water ponding.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 9) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 14 and 8. This connection is for uplift only and does not consider lateral forces.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



June 23,2025

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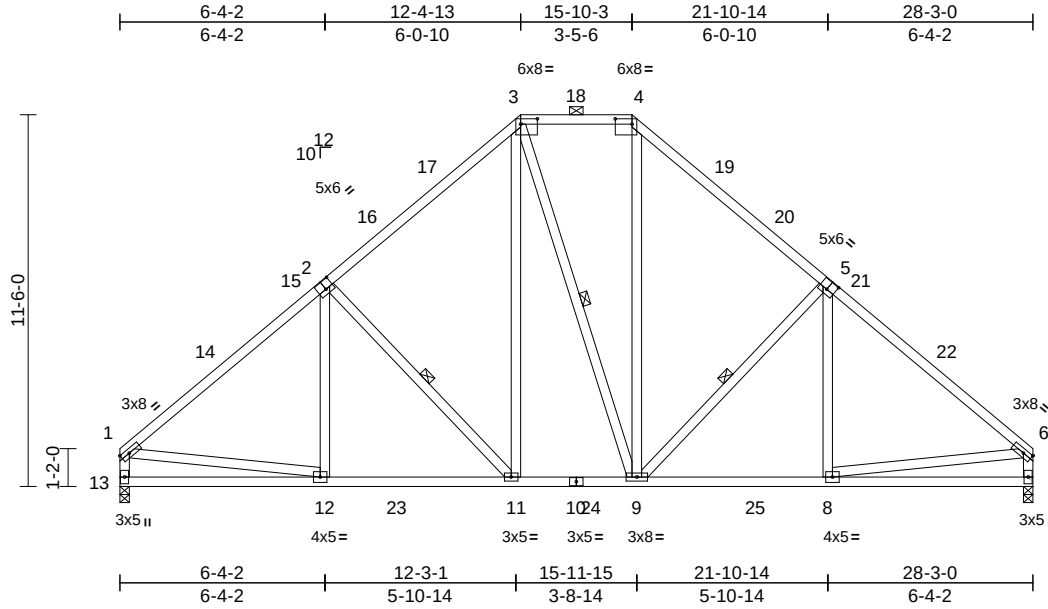
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	22 Eagle Creek - Kathryn A - Roof	174344912
25100127	B2	Piggyback Base	9	1	Job Reference (optional)	

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu Jun 19 14:12:26
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Page: 1



Scale = 1:71.3

Plate Offsets (X, Y): [2:0-3-0,0-3-4], [3:0-6-4,0-2-0], [4:0-6-4,0-2-0], [5:0-3-0,0-3-4]

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	0.75	Vert(LL)	-0.08	11-12	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.54	Vert(CT)	-0.13	11-12	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.44	Horz(CT)	0.03	7	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 207 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except* 11-3,9-3,9-4:2x4 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-2-10 oc purlins, except end verticals, and 2-0-0 oc purlins (5-6-12 max.): 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 2-11, 3-9, 5-9

REACTIONS

(size) 7=0-3-8, 13=0-3-8
Max Horiz 13=273 (LC 10)
Max Uplift 7=87 (LC 15), 13=87 (LC 14)
Max Grav 7=1384 (LC 52), 13=1386 (LC 50)

FORCES

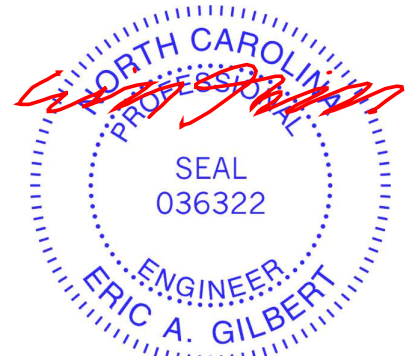
(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-3=-1810/226, 3-4=-1041/233, 4-6=-1804/226, 1-13=-1433/120, 6-7=-1432/119
BOT CHORD 12-13=-270/363, 11-12=-140/1349, 9-11=-35/967, 8-9=-6/1322, 7-8=-59/188
WEBS 2-12=-28/202, 2-11=-534/217, 3-11=-100/568, 3-9=-169/174, 4-9=-85/553, 5-9=-532/217, 5-8=-30/201, 1-12=-9/1142, 6-8=0/1158

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) 0-1-12 to 3-1-12, Interior (1) 3-1-12 to 8-1-14, Exterior(2R) 8-1-14 to 20-1-2, Interior (1) 20-1-2 to 25-1-4, Exterior(2E) 25-1-4 to 28-1-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 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.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 13 and 7. This connection is for uplift only and does not consider lateral forces.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



June 23,2025

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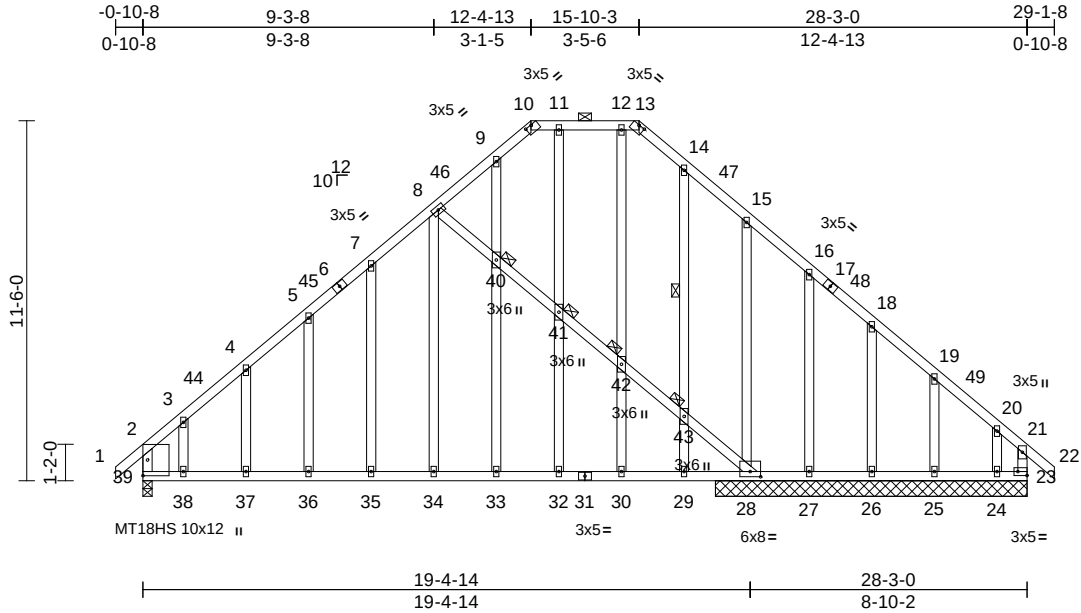
Job	Truss	Truss Type	Qty	Ply	22 Eagle Creek - Kathryn A - Roof	174344913
25100127	B3	Piggyback Base Supported Gable	1	1	Job Reference (optional)	

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu Jun 19 14:12:26

Page: 1

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Scale = 1:73.6

Plate Offsets (X, Y): [10:0-2-8,0-0-3], [13:0-2-8,0-0-3], [23:Edge,0-1-8], [28:0-4-0,0-2-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.70	Vert(LL)	0.26	36-37	>868	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.36	Vert(CT)	-0.23	36-37	>999	180	MT18HS	244/190
TCDL	10.0	Rep Stress Incr	YES	WB	0.36	Horz(CT)	0.02	23	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 255 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 10-13.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 14-43
JOINTS 1 Brace at Jt(s): 40, 41, 42, 43

REACTIONS (size) 23=9-11-8, 24=9-11-8, 25=9-11-8, 26=9-11-8, 27=9-11-8, 28=9-11-8, 39=0-3-8
Max Horiz 39=-293 (LC 12)
Max Uplift 23=-90 (LC 13), 24=-506 (LC 15), 25=-53 (LC 15), 26=-72 (LC 15), 27=-117 (LC 15), 28=-123 (LC 14), 39=-17 (LC 14)
Max Grav 23=781 (LC 56), 24=186 (LC 13), 25=183 (LC 22), 26=208 (LC 53), 27=104 (LC 53), 28=941 (LC 41), 39=1005 (LC 41)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-39=-851/25, 1-2=0/39, 2-3=-1003/0, 3-4=-942/0, 4-5=-892/21, 5-7=-859/79, 7-8=-817/129, 8-9=-454/68, 9-10=-353/74, 10-11=-289/71, 11-12=-289/71, 12-13=-289/71, 13-14=-397/66, 14-15=-463/39, 15-16=-381/29, 16-18=-420/20, 18-19=-415/33, 19-20=-441/62, 20-21=-612/99, 21-22=0/39, 21-23=-533/76

BOT CHORD 38-39=-116/693, 37-38=-116/693, 36-37=-116/693, 35-36=-116/693, 34-35=-116/693, 33-34=-116/693, 32-33=-116/693, 30-32=-116/693, 29-30=-116/693, 28-29=-116/693, 27-28=-88/377, 26-27=-88/377, 25-26=-88/377, 24-25=-88/377, 23-24=-88/377
WEBS 3-38=-16/65, 4-37=-73/67, 5-36=-85/71, 7-35=-72/56, 8-34=-133/374, 9-40=-15/74, 11-41=-38/50, 12-42=0/61, 14-43=-110/71, 15-28=-295/89, 16-27=-166/119, 18-26=-164/98, 19-25=-158/96, 20-24=-101/284, 8-40=-713/297, 40-41=-671/270, 41-42=-690/279, 42-43=-695/274, 28-43=-743/303, 33-40=-70/72, 32-41=-1/62, 30-42=0/69, 29-43=-53/42

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 9-3-8, Corner(3R) 9-3-8 to 18-10-3, Exterior(2N) 18-10-3 to 26-1-8, Corner(3E) 26-1-8 to 29-1-8 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.
- 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.
- All plates are MT20 plates unless otherwise indicated.
- All plates are 2x4 MT20 unless otherwise indicated.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.



June 23,2025

Continued on page 2

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	22 Eagle Creek - Kathryn A - Roof
25100127	B3	Piggyback Base Supported Gable	1	1	Job Reference (optional)

I74344913

14) N/A

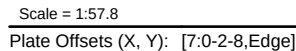
15) Graphical purlin representation does not depict the size
or the orientation of the purlin along the top and/or
bottom chord.

LOAD CASE(S) Standard



June 23,2025

Carter Components (Sanford, NC), Sanford, NC - 27332, Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu Jun 19 14:12:26 Page: 1
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LUMBER			WEBS	6-20=260/44, 5-21=151/155, 4-22=154/99, 3-23=138/195, 8-18=260/40, 9-17=151/155, 10-16=156/97, 11-15=121/212	2) * 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.
TOP CHORD	2x4 SP No.2				
BOT CHORD	2x4 SP No.2				
WEBS	2x4 SP No.3				
OTHERS	2x4 SP No.3				
BRACING			NOTES		
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.		1) Unbalanced roof live loads have been considered for this design.		13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 101 lb uplift at joint 24, 89 lb uplift at joint 14, 1 lb uplift at joint 20, 116 lb uplift at joint 21, 45 lb uplift at joint 22, 275 lb uplift at joint 23, 118 lb uplift at joint 17, 45 lb uplift at joint 16 and 272 lb uplift at joint 15.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.		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 2-1-8, Exterior(2N) 2-1-8 to 6-3-8, Corner(3R) 6-3-8 to 12-3-8, Exterior(2N) 12-3-8 to 16-5-8, Corner(3E) 16-5-8 to 19-5-8 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		LOAD CASE(S) Standard
REACTIONS	(size)	14=18-7-0, 15=18-7-0, 16=18-7-0, 17=18-7-0, 18=18-7-0, 20=18-7-0, 21=18-7-0, 22=18-7-0, 23=18-7-0, 24=18-7-0	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.		
	Max Horiz	24=232 (LC 13)	4) TCELL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10		
	Max Uplift	14=-89 (LC 13), 15=-272 (LC 15), 16=-45 (LC 15), 17=-118 (LC 15), 20=-1 (LC 14), 21=-116 (LC 14), 22=-45 (LC 14), 23=-275 (LC 14), 24=-101 (LC 12)	5) Unbalanced snow loads have been considered for this design.		
	Max Grav	14=317 (LC 28), 15=193 (LC 13), 16=218 (LC 26), 17=176 (LC 22), 18=370 (LC 6), 20=370 (LC 5), 21=176 (LC 21), 22=218 (LC 25), 23=199 (LC 12), 24=321 (LC 27)	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.		
FORCES	(lb) - Maximum Compression/Maximum Tension		7) All plates are 2x4 MT20 unless otherwise indicated.		
TOP CHORD	2-24=-234/77, 1-2=0/39, 2-3=-295/136, 3-4=-167/89, 4-5=-135/61, 5-6=-127/75, 6-7=-158/104, 7-8=-158/104, 8-9=-127/75, 9-10=-130/53, 10-11=-163/81, 11-12=-291/126, 12-13=0/39, 12-14=-231/70		8) Gable requires continuous bottom chord bearing.		
BOT CHORD	23-24=-108/281, 22-23=-108/281, 21-22=-108/281, 20-21=-108/281, 18-20=-108/281, 17-18=-108/281, 16-17=-108/281, 15-16=-108/281, 14-15=-108/281		9) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).		
			10) Gable studs spaced at 2-0-0 oc.		
			11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.		

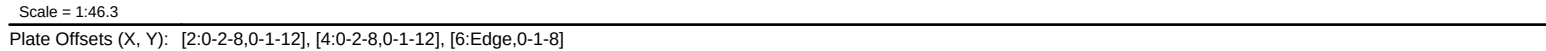


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Carter Components (Sanford, NC), Sanford, NC - 27332, Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu Jun 19 14:12:26 Page: 1
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NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 2-9-8, Exterior(2R) 2-9-8 to 8-9-8, Interior (1) 8-9-8 to 9-5-8, Exterior(2E) 9-5-8 to 12-5-8 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) 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



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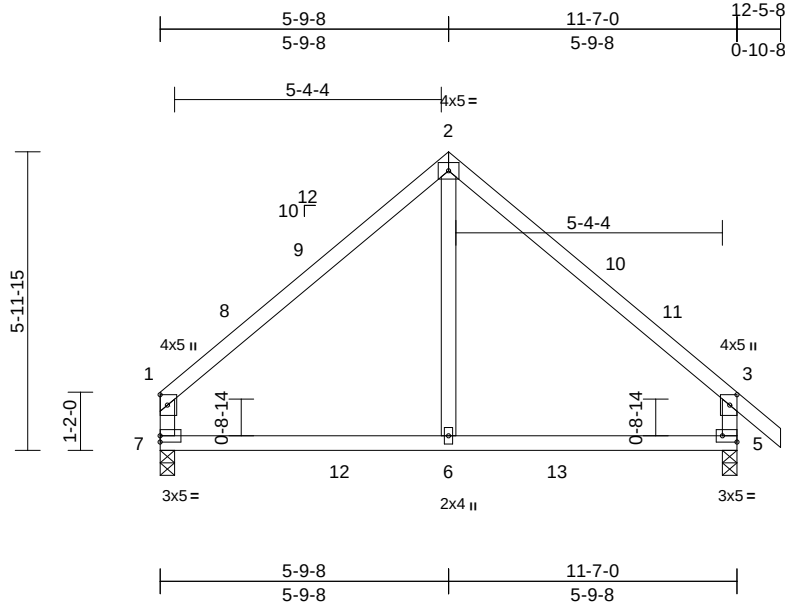
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	22 Eagle Creek - Kathryn A - Roof	174344916
25100127	D2	Common	1	1	Job Reference (optional)	

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu Jun 19 14:12:27
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Page: 1



Scale = 1:46.3

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.76	Vert(LL)	-0.05	5-6	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.42	Vert(CT)	-0.08	5-6	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.01	5	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MR								
BCDL	10.0											
											Weight: 52 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 5-7-1 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 5=0-3-8, 7=0-3-8
Max Horiz 7=-156 (LC 10)
Max Uplift 5=-48 (LC 15), 7=-29 (LC 14)
Max Grav 5=633 (LC 6), 7=579 (LC 5)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-565/136, 2-3=-573/136, 3-4=0/39,
1-7=-502/146, 3-5=-552/194
BOT CHORD 6-7=-2/348, 5-6=-2/348
WEBS 2-6=0/295

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Exterior(2R) 3-1-12 to 8-9-8, Interior (1) 8-9-8 to 9-5-8, Exterior(2E) 9-5-8 to 12-5-8 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.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 7 and 5. This connection is for uplift only and does not consider lateral forces.

LOAD CASE(S) Standard



June 23,2025

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

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

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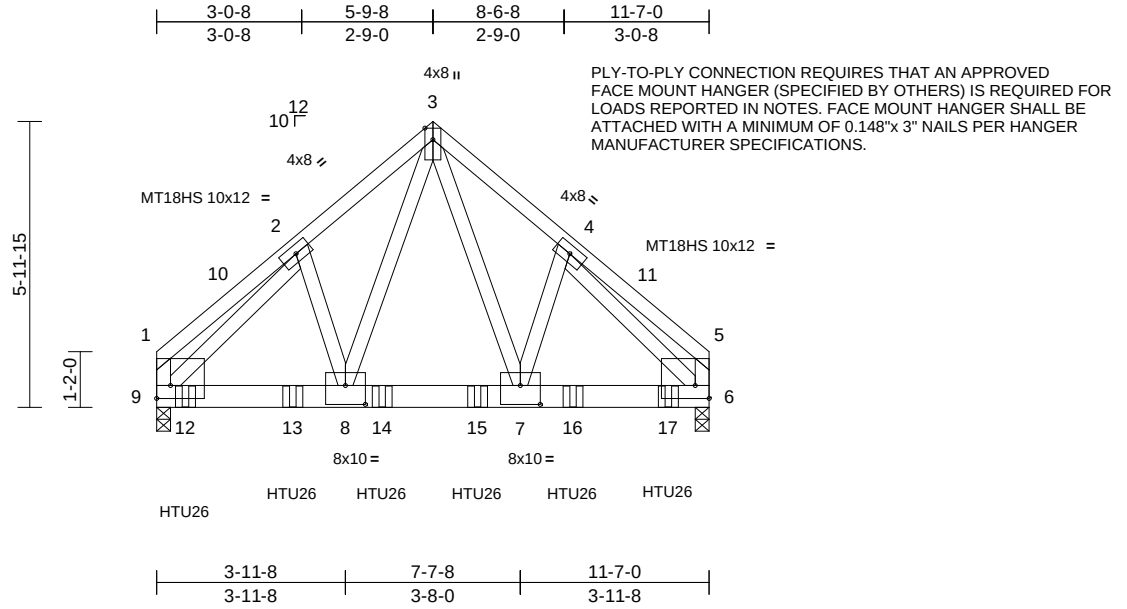
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	22 Eagle Creek - Kathryn A - Roof	174344917
25100127	D3	Common Girder	1	3	Job Reference (optional)	

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu Jun 19 14:12:27
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Page: 1



Scale = 1:48.3

Plate Offsets (X, Y): [1:Edge,0-3-4], [5:Edge,0-3-4], [7:0-5-0,0-4-12], [8:0-5-0,0-4-12]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.73	Vert(LL)	-0.04	7-8	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.40	Vert(CT)	-0.07	7-8	>999	180	MT18HS	244/190
TCDL	10.0	Rep Stress Incr	NO	WB	0.73	Horz(CT)	0.01	6	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 266 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP 2400F 2.0E
BOT CHORD 2x6 SP 2400F 2.0E
WEBS 2x4 SP No.3 *Except* 9-1,6-5:2x4 SP No.2

BRACING

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

REACTIONS

(size) 6=0-3-8, 9=0-3-8
Max Horiz 9=-140 (LC 8)
Max Uplift 6=-450 (LC 13), 9=-458 (LC 12)
Max Grav 6=9583 (LC 6), 9=9790 (LC 5)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-1843/136, 2-3=-7921/463,
3-4=-7979/465, 4-5=-1966/142,
1-9=-1328/112, 5-6=-1408/116

BOT CHORD 8-9=-300/5692, 7-8=-207/4488,
6-7=-254/5740

WEBS 3-7=-316/5256, 4-7=-100/1321,
3-8=-309/5112, 2-8=-100/1331,
2-9=-6711/308, 4-6=-6642/304

NOTES

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

- 3) 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.
- 4) Unbalanced roof live loads have been considered for this design.
- 5) 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
- 6) 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
- 7) Unbalanced snow loads have been considered for this design.
- 8) All plates are MT20 plates unless otherwise indicated.
- 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 11) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 9 and 6. This connection is for uplift only and does not consider lateral forces.
- 12) Use Simpson Strong-Tie HTU26 (20-10d Girder, 20-10dx1 1/2 Truss) or equivalent spaced at 2-3-0 oc max. starting at 0-7-4 from the left end to 10-8-12 to connect truss(es) to back face of bottom chord.
- 13) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

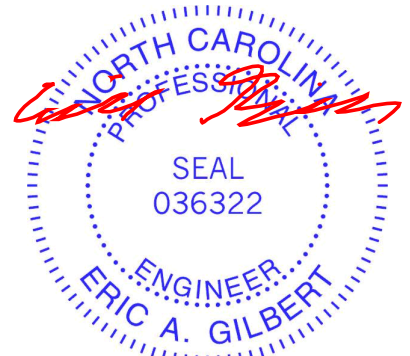
- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (lb/ft)

Vert: 1-3=-60, 3-5=-60, 6-9=-20

Concentrated Loads (lb)

Vert: 12=-2708 (B), 13=-2702 (B), 14=-2702 (B), 15=-2702 (B), 16=-2702 (B), 17=-2705 (B)



June 23,2025

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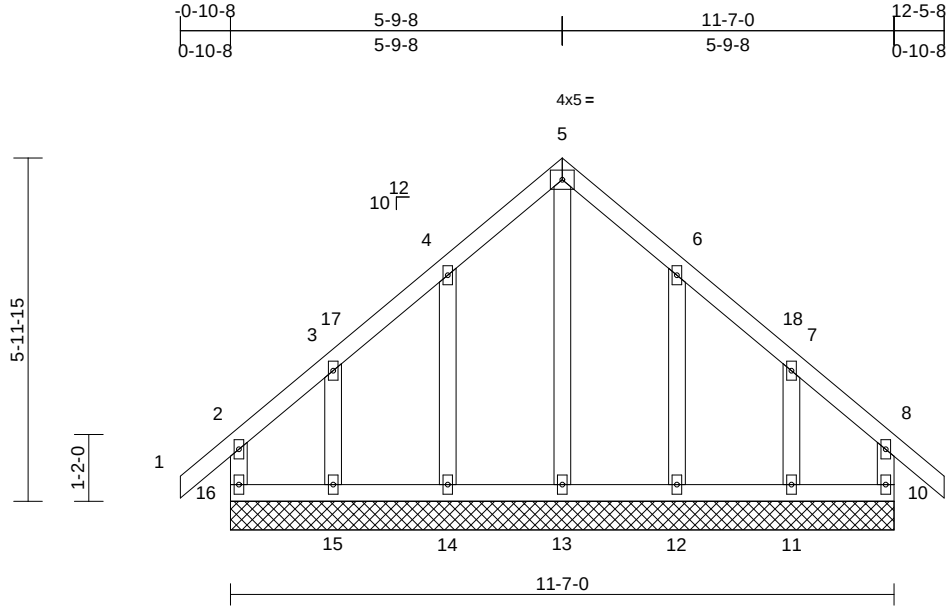
Job	Truss	Truss Type	Qty	Ply	22 Eagle Creek - Kathryn A - Roof	174344918
25100127	D4	Common Supported Gable	1	1	Job Reference (optional)	

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

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Scale = 1:40.2

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.17	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.07	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.00	10	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MR							
BCDL	10.0										
										Weight: 71 lb	FT = 20%

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

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

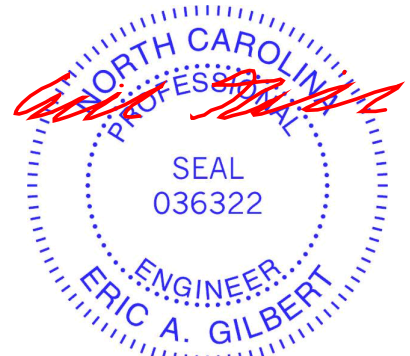
REACTIONS (size)
10=11-7-0, 11=11-7-0, 12=11-7-0, 13=11-7-0, 14=11-7-0, 15=11-7-0, 16=11-7-0
Max Horiz 16=163 (LC 13)
Max Uplift 10=-61 (LC 11), 11=-110 (LC 15), 12=-71 (LC 15), 14=-70 (LC 14), 15=-112 (LC 14), 16=-74 (LC 10)
Max Grav 10=153 (LC 25), 11=191 (LC 26), 12=279 (LC 22), 13=191 (LC 28), 14=279 (LC 21), 15=197 (LC 25), 16=163 (LC 26)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-16=-130/151, 1-2=0/39, 2-3=-98/99, 3-4=-65/181, 4-5=-116/287, 5-6=-116/287, 6-7=-64/183, 7-8=-85/87, 8-9=0/39, 8-10=-122/140
BOT CHORD 15-16=-80/102, 14-15=-80/102, 13-14=-80/102, 12-13=-80/102, 11-12=-80/102, 10-11=-80/102
WEBS 5-13=-282/47, 4-14=-238/142, 3-15=-156/145, 6-12=-238/140, 7-11=-146/159

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 Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 2-9-8, Corner(3R) 2-9-8 to 8-9-8, Exterior(2N) 8-9-8 to 9-5-8, Corner(3E) 9-5-8 to 12-5-8 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.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 74 lb uplift at joint 16, 61 lb uplift at joint 10, 70 lb uplift at joint 14, 112 lb uplift at joint 15, 71 lb uplift at joint 12 and 110 lb uplift at joint 11.

LOAD CASE(S) Standard



June 23, 2025

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	22 Eagle Creek - Kathryn A - Roof
25100127	E1	Monopitch	2	1	Job Reference (optional)

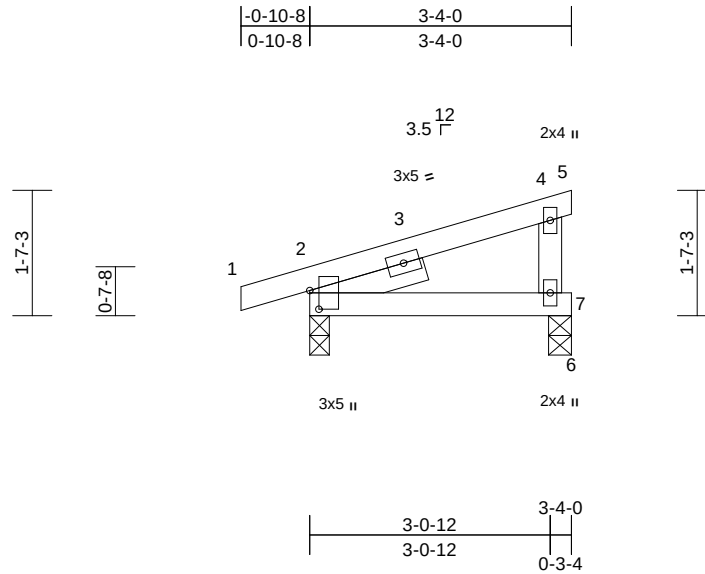
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Carter Components (Sanford, NC), Sanford, NC - 27332,

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu Jun 19 14:12:27

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Scale = 1:29.3

Plate Offsets (X, Y): [2:0-2-14,0-1-6]

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	0.14	Vert(LL)	0.01	7-10	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	-0.01	7-10	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MP								
BCDL	10.0											
Weight: 15 lb											FT = 20%	

LUMBER

TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2
 WEBS 2x4 SP No.3
 SLIDER Left 2x4 SP No.3 -- 1-6-0

BRACING

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

REACTIONS

(size) 2=0-3-0, 7=0-3-8
 Max Horiz 2=50 (LC 13)
 Max Uplift 2=-51 (LC 10), 7=-25 (LC 14)
 Max Grav 2=245 (LC 21), 7=180 (LC 21)

FORCES

(lb) - Maximum Compression/Maximum
 Tension
 TOP CHORD 1-2=0/21, 2-4=-93/36, 4-5=-6/0, 4-7=-127/75
 BOT CHORD 2-7=-62/102, 6-7=0/0

NOTES

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust)
 Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat.
 II; Exp B; Enclosed; MWFRS (envelope) 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
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15
 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate
 DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9;
 Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this
 design.
- 4) This truss has been designed for greater of min roof live
 load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on
 overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom
 chord live load nonconcurrent with any other live loads.

- 6) * This truss has been designed for a live load of 20.0psf
 on the bottom chord in all areas where a rectangle
 3-06-00 tall by 2-00-00 wide will fit between the bottom
 chord and any other members.
- 7) One H2.5A Simpson Strong-Tie connectors
 recommended to connect truss to bearing walls due to
 UPLIFT at jt(s) 7 and 2. This connection is for uplift only
 and does not consider lateral forces.

LOAD CASE(S) Standard

June 23, 2025

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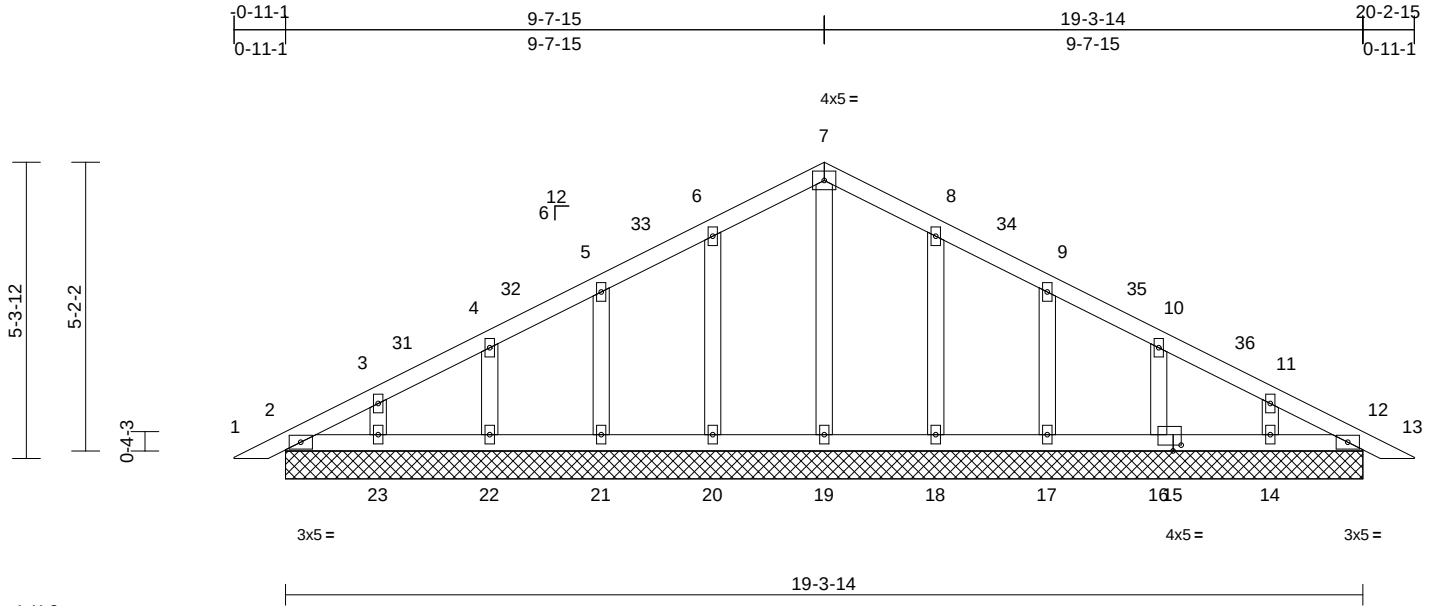
818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	22 Eagle Creek - Kathryn A - Roof	174344920
25100127	PB1	Piggyback	2	1	Job Reference (optional)	

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu Jun 19 14:12:27
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Page: 1



Scale = 1:41.3

Plate Offsets (X, Y): [15:0-1-12,0-1-4]

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	0.08	Vert(LL)	n/a	-	n/a	999	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999	
TCDL	10.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	12	n/a	n/a	
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH							
BCDL	10.0										
										Weight: 96 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=19-3-14, 12=19-3-14, 14=19-3-14, 16=19-3-14, 17=19-3-14, 18=19-3-14, 19=19-3-14, 20=19-3-14, 21=19-3-14, 22=19-3-14, 23=19-3-14
Max Horiz 2=81 (LC 18)
Max Uplift 2=-9 (LC 15), 14=-42 (LC 15), 16=-44 (LC 15), 17=-44 (LC 15), 18=-45 (LC 15), 20=-46 (LC 14), 21=-44 (LC 14), 22=-44 (LC 14), 23=-43 (LC 14)
Max Grav 2=103 (LC 21), 12=103 (LC 22), 14=152 (LC 37), 16=177 (LC 22), 17=228 (LC 22), 18=246 (LC 22), 19=146 (LC 28), 20=246 (LC 21), 21=228 (LC 21), 22=177 (LC 21), 23=152 (LC 36)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/17, 2-3=-93/40, 3-4=-70/51, 4-5=-50/70, 5-6=-56/94, 6-7=-68/132, 7-8=-68/132, 8-9=-56/84, 9-10=-47/43, 10-11=-45/21, 11-12=-59/26, 12-13=0/17
BOT CHORD 2-23=-20/77, 22-23=-20/77, 21-22=-20/77, 20-21=-20/77, 19-20=-20/77, 18-19=-20/77, 17-18=-20/77, 16-17=-20/77, 14-16=-20/77, 12-14=-20/77

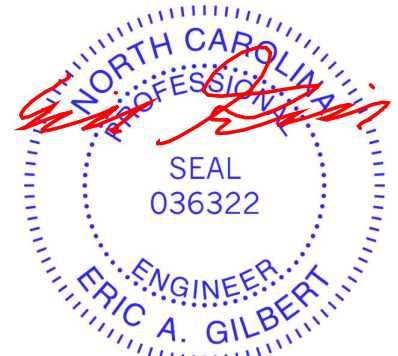
WEBS 7-19=-106/0, 6-20=-206/83, 5-21=-187/67, 4-22=-137/69, 3-23=-117/61, 8-18=-206/83, 9-17=-187/68, 10-16=-137/69, 11-14=-117/61

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) 0-4-3 to 3-4-3, Interior (1) 3-4-3 to 7-7-8, Exterior(2R) 7-7-8 to 13-7-8, Interior (1) 13-7-8 to 17-10-13, Exterior(2E) 17-10-13 to 20-10-13 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.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- 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.

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

LOAD CASE(S) Standard



June 23,2025

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

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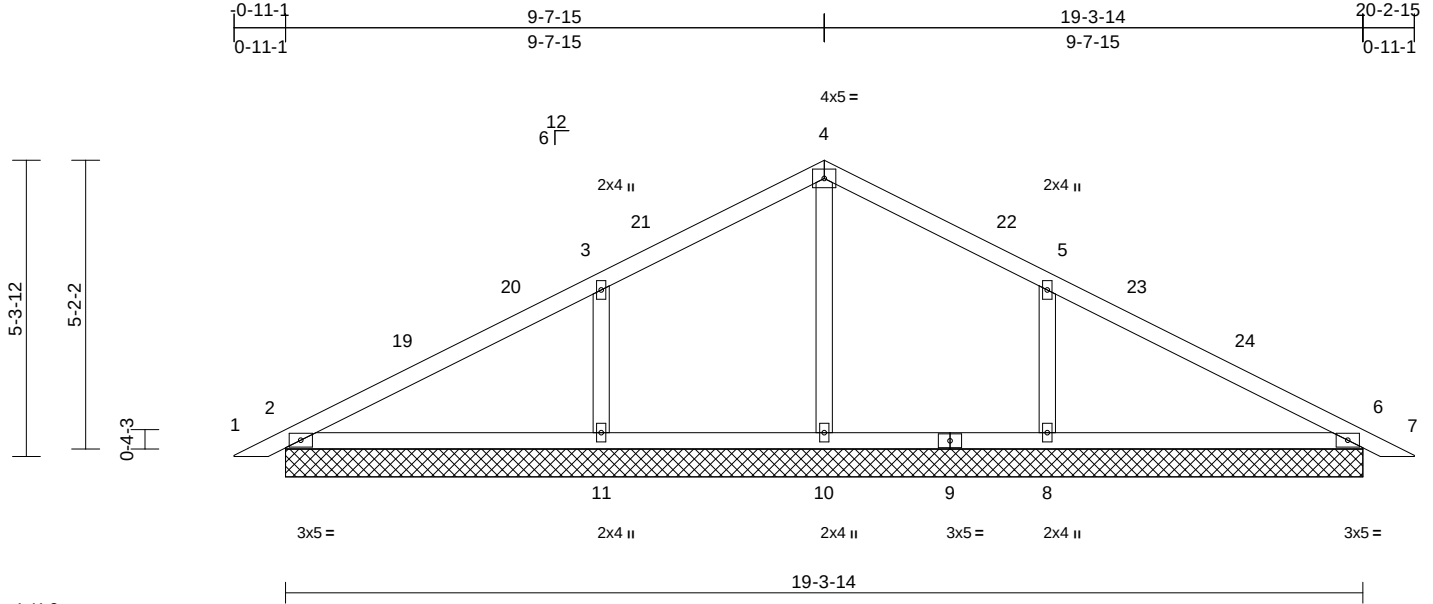
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	22 Eagle Creek - Kathryn A - Roof	174344921
25100127	PB2	Piggyback	22	1	Job Reference (optional)	

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

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Page: 1



Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.43	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.28	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.00	6	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 79 lb	FT = 20%

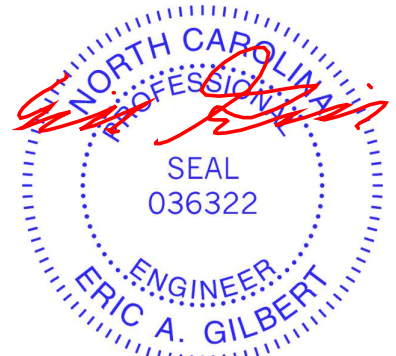
LUMBER		
TOP CHORD	2x4 SP No.2	
BOT CHORD	2x4 SP No.2	
OTHERS	2x4 SP No.3	
BRACING		
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.	
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.	
REACTIONS	(size)	2=19-3-14, 6=19-3-14, 8=19-3-14, 10=19-3-14, 11=19-3-14
	Max Horiz	2=81 (LC 18)
	Max Uplift	2=-17 (LC 14), 6=-32 (LC 15), 8=-135 (LC 15), 11=-136 (LC 14)
	Max Grav	2=250 (LC 1), 6=250 (LC 1), 8=610 (LC 22), 10=191 (LC 22), 11=610 (LC 21)
FORCES	(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=0/17, 2-3=-112/69, 3-4=-161/135, 4-5=-161/135, 5-6=-103/47, 6-7=0/17	
BOT CHORD	2-11=-21/81, 10-11=0/81, 8-10=0/81, 6-8=0/81	
WEBS	4-10=-149/0, 3-11=-465/180, 5-8=-465/180	

- 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) 0-4-3 to 3-4-3, Interior (1) 3-4-3 to 7-7-8, Exterior(2R) 7-7-8 to 13-7-8, Interior (1) 13-7-8 to 17-10-13, Exterior(2E) 17-10-13 to 20-10-13 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.
- 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

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

LOAD CASE(S) Standard



June 23,2025

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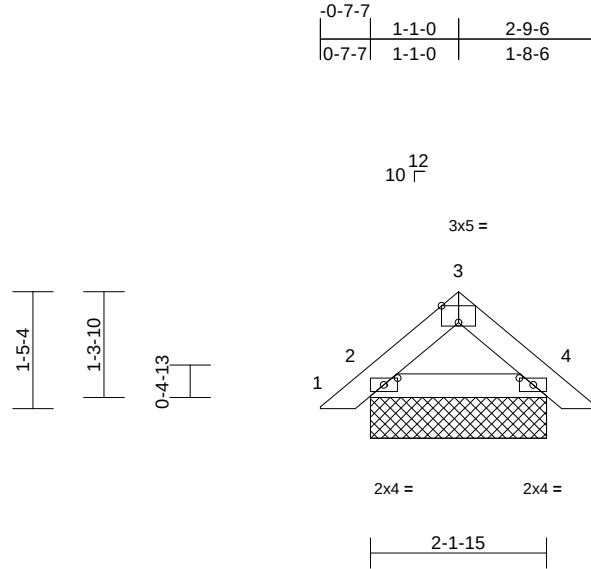
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	22 Eagle Creek - Kathryn A - Roof	174344922
25100127	PB3	Piggyback	1	1	Job Reference (optional)	

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

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Page: 1



Scale = 1:28.3

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.02	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	9	n/a	n/a		
BCLL	0.0*	Code	IRC2021/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 3-5-6 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size) 2=2-1-15, 4=2-1-15
Max Horiz 2=29 (LC 13)
Max Uplift 2=-7 (LC 14), 4=-14 (LC 15)
Max Grav 2=148 (LC 21), 4=137 (LC 22)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/22, 2-3=-67/36, 3-4=-67/38, 4-5=0/22
BOT CHORD 2-4=-46/46

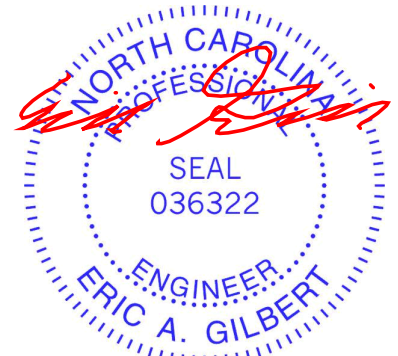
NOTES

- 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.

- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- N/A

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

LOAD CASE(S) Standard



June 23,2025

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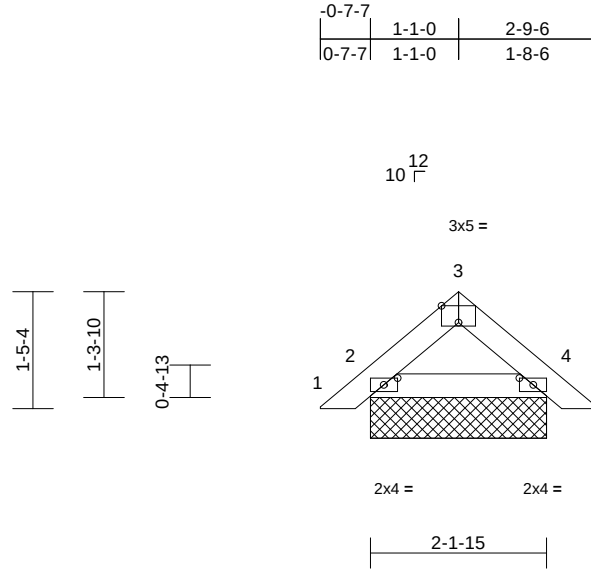
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	22 Eagle Creek - Kathryn A - Roof	174344923
25100127	PB4	Piggyback	10	1	Job Reference (optional)	

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu Jun 19 14:12:27
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Page: 1



Scale = 1:28.3

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.02	Vert(LL)	n/a	-	n/a	999	MT20
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999	244/190
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	10	n/a	n/a	
BCLL	0.0*	Code	IRC2021/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 3-5-6 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(size) 2=2-1-15, 4=2-1-15
Max Horiz 2=29 (LC 13)
Max Uplift 2=-14 (LC 14), 4=-11 (LC 15)
Max Grav 2=136 (LC 21), 4=142 (LC 22)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/22, 2-3=-66/38, 3-4=-67/36, 4-5=0/22
BOT CHORD 2-4=-3/46

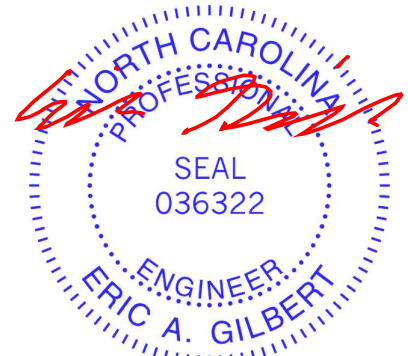
NOTES

- 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.

- 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

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

LOAD CASE(S) Standard



June 23,2025

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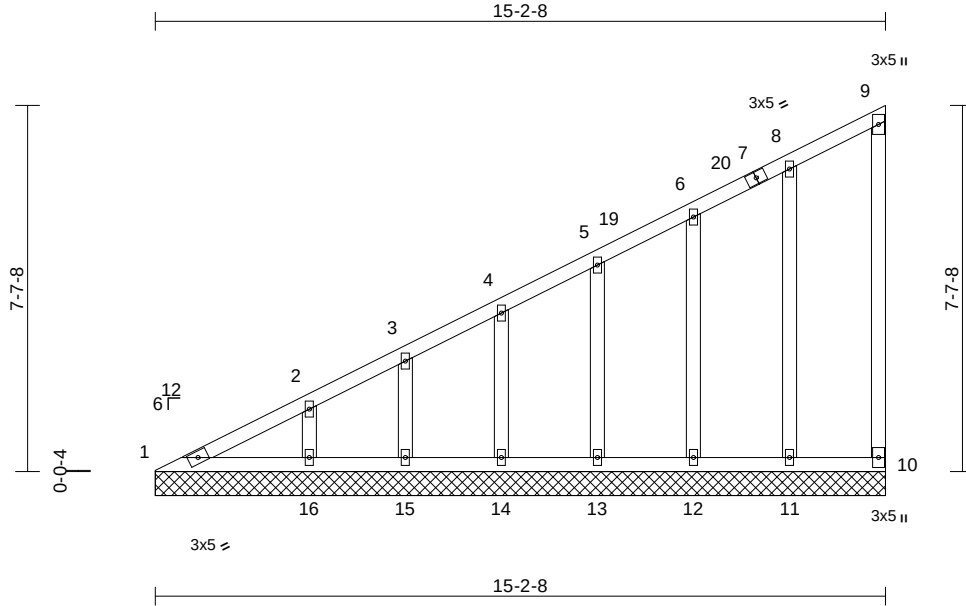
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	22 Eagle Creek - Kathryn A - Roof	174344924
25100127	V1	Valley	1	1	Job Reference (optional)	

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

Run: 8.73 E Dec 5 2024 Print: 8.730 E Dec 5 2024 MiTek Industries, Inc. Mon Jun 23 11:19:06
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Page: 1



Scale = 1:48

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	0.70	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.20	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.16	Horiz(TL)	0.00	10	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH							
BCDL	10.0									Weight: 89 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS	(lb/size)	1=106/15-2-8, 10=61/15-2-8, 11=168/15-2-8, 12=160/15-2-8, 13=158/15-2-8, 14=169/15-2-8, 15=124/15-2-8, 16=260/15-2-8
	Max Horiz	1=274 (LC 11)
	Max Uplift	10=-33 (LC 11), 11=-48 (LC 14), 12=-42 (LC 14), 13=-45 (LC 14), 14=-43 (LC 14), 15=-43 (LC 14), 16=-48 (LC 14)
	Max Grav	1=142 (LC 24), 10=88 (LC 20), 11=242 (LC 20), 12=232 (LC 20), 13=177 (LC 20), 14=169 (LC 1), 15=125 (LC 20), 16=260 (LC 1)

FORCES

	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=-246/263, 2-3=-202/232, 3-4=-177/220, 4-5=-158/202, 5-19=-144/167, 6-19=-127/184, 6-20=-135/156, 7-20=-123/166, 7-8=-118/172, 8-9=-100/125, 9-10=-73/38
BOT CHORD	1-16=-93/236, 15-16=-93/159, 14-15=-93/159, 13-14=-93/159, 12-13=-93/159, 11-12=-93/159, 10-11=-93/159
WEBS	8-11=-200/62, 6-12=-192/120, 5-13=-138/97, 4-14=-124/103, 3-15=-104/95, 2-16=-167/124

NOTES

- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) 0-0-8 to 3-3-0, Exterior(2N) 3-3-0 to 12-1-4, Corner(3E) 12-1-4 to 15-1-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 33 lb uplift at joint 10, 48 lb uplift at joint 11, 42 lb uplift at joint 12, 45 lb uplift at joint 13, 43 lb uplift at joint 14, 43 lb uplift at joint 15 and 48 lb uplift at joint 16.

LOAD CASE(S) Standard



June 23,2025

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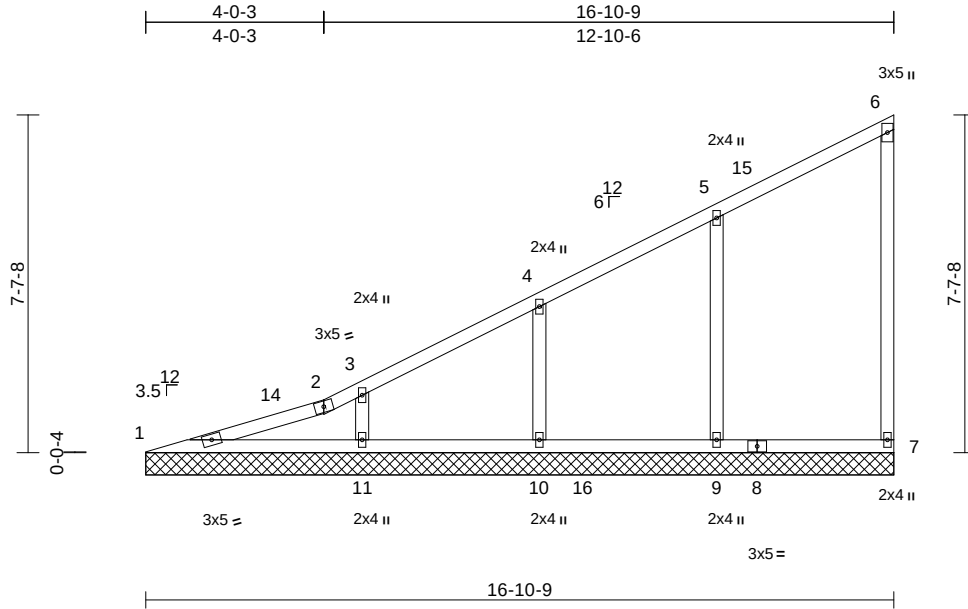
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	22 Eagle Creek - Kathryn A - Roof	174344925
25100127	V2	Valley	1	1	Job Reference (optional)	

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu Jun 19 14:12:28
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Page: 1



Scale = 1:52

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	0.61	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	0.16	Horiz(TL)	0.00	7	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH							
BCDL	10.0									Weight: 76 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS	(size)	1=16-10-9, 7=16-10-9, 9=16-10-9, 10=16-10-9, 11=16-10-9
	Max Horiz	1=276 (LC 11)
	Max Uplift	1=-25 (LC 10), 7=-35 (LC 11), 9=-93 (LC 14), 10=-92 (LC 14), 11=-49 (LC 14)
	Max Grav	1=216 (LC 20), 7=168 (LC 24), 9=445 (LC 5), 10=334 (LC 24), 11=479 (LC 20)

FORCES

(lb) - Maximum Compression/Maximum Tension

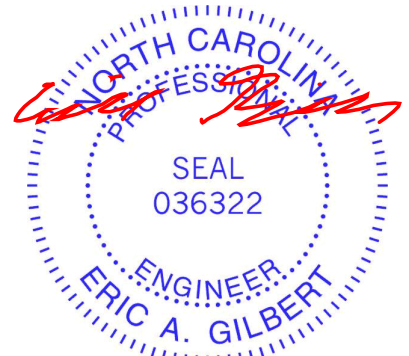
TOP CHORD	1-2=-471/208, 2-3=-210/224, 3-4=-194/197, 4-5=-161/169, 5-6=-133/117, 6-7=-121/52
BOT CHORD	1-11=-92/442, 10-11=-92/130, 9-10=-92/130, 7-9=-92/130
WEBS	5-9=-292/146, 4-10=-237/144, 3-11=-317/108

NOTES

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-14 to 3-0-14, Interior (1) 3-0-14 to 13-9-11, Exterior(2E) 13-9-11 to 16-9-11 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 4-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 20.0psf 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 25 lb uplift at joint 1, 35 lb uplift at joint 7, 93 lb uplift at joint 9, 92 lb uplift at joint 10 and 49 lb uplift at joint 11.

LOAD CASE(S) Standard



June 23,2025

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

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

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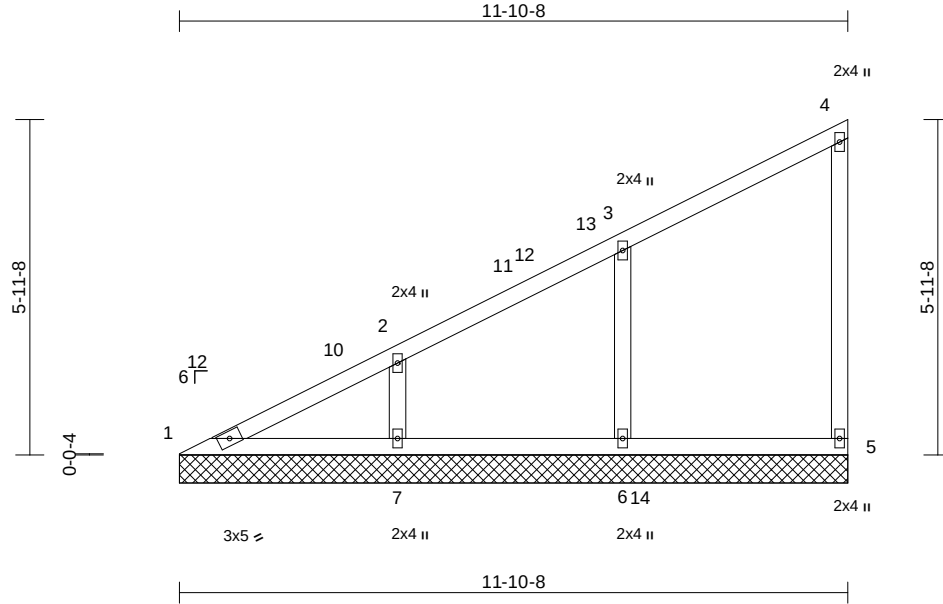
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	22 Eagle Creek - Kathryn A - Roof	174344926
25100127	V3	Valley	2	1	Job Reference (optional)	

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu Jun 19 14:12:28
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Page: 1



Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.36	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.16	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.12	Horiz(TL)	0.00	5	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH							Weight: 52 lb	FT = 20%
BCDL	10.0											

LUMBER

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

BRACING

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

REACTIONS	(size)	1=11-10-8, 5=11-10-8, 6=11-10-8, 7=11-10-8
	Max Horiz	1=212 (LC 11)
	Max Uplift	5=-28 (LC 11), 6=-39 (LC 14), 7=-83 (LC 14)
	Max Grav	1=153 (LC 25), 5=207 (LC 5), 6=486 (LC 5), 7=362 (LC 3)

FORCES

	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=-267/196, 2-3=-140/158, 3-4=-120/102, 4-5=-153/42
BOT CHORD	1-7=-70/264, 6-7=-70/102, 5-6=-70/102
WEBS	3-6=-388/166, 2-7=-267/126

NOTES

- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-8 to 3-0-8, Interior (1) 3-0-8 to 7-6-5, Exterior(2R) 7-6-5 to 11-9-4 zone; cantilever left and right exposed; end vertical left and right exposed; C- C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 28 lb uplift at joint 5, 39 lb uplift at joint 6 and 83 lb uplift at joint 7.

LOAD CASE(S) Standard



June 23, 2025

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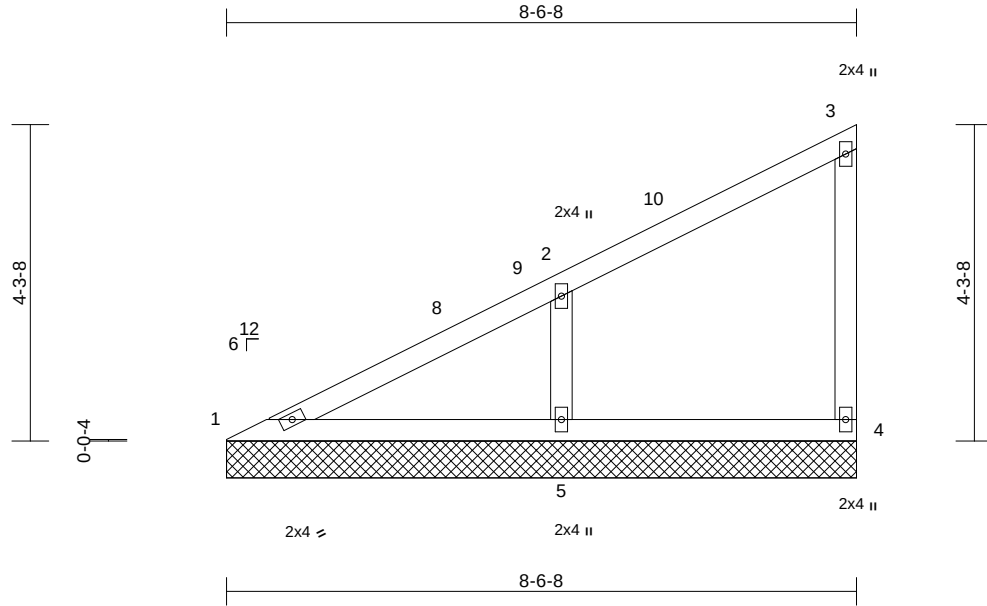
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	22 Eagle Creek - Kathryn A - Roof	174344927
25100127	V4	Valley	2	1	Job Reference (optional)	

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu Jun 19 14:12:28
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Scale = 1:31.2

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	0.36	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.19	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.09	Horiz(TL)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MP								
BCDL	10.0											
											Weight: 34 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS

(size)	1=8-6-8, 4=8-6-8, 5=8-6-8
Max Horiz	1=150 (LC 11)
Max Uplift	4=-21 (LC 11), 5=-94 (LC 14)
Max Grav	1=143 (LC 1), 4=165 (LC 20), 5=555 (LC 20)

FORCES

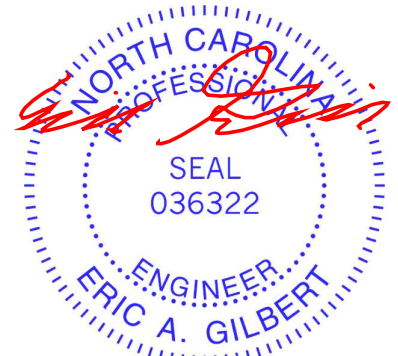
(lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-242/156, 2-3=-104/85, 3-4=-142/50
BOT CHORD	1-5=-50/268, 4-5=-50/73
WEBS	2-5=-428/241

NOTES

- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-8 to 3-0-8, Interior (1) 3-0-8 to 4-2-5, Exterior(2R) 4-2-5 to 8-5-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 21 lb uplift at joint 4 and 94 lb uplift at joint 5.
- LOAD CASE(S)** Standard



June 23, 2025

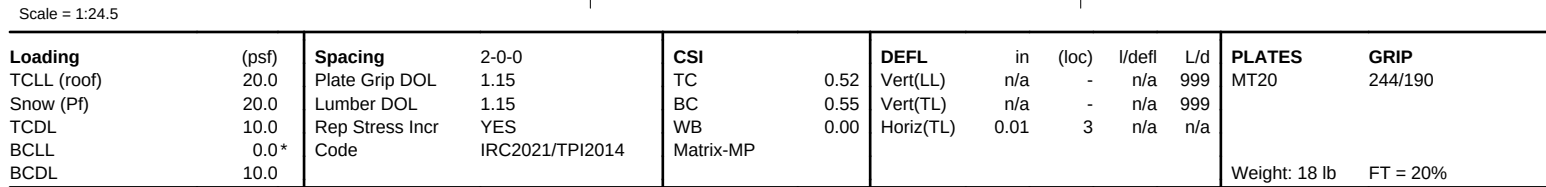
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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818 Soundside Road
Edenton, NC 27932

Carter Components (Sanford, NC), Sanford, NC - 27332, Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu Jun 19 14:12:28 Page: 1
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- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 43 lb uplift at joint 3 and 21 lb uplift at joint 1.

LOAD CASE(S) Standard

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

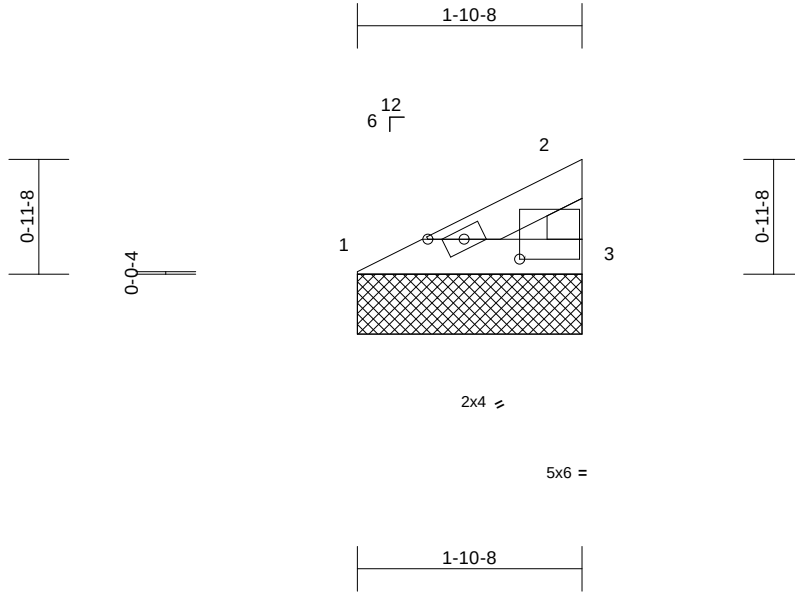


Job	Truss	Truss Type	Qty	Ply	22 Eagle Creek - Kathryn A - Roof
25100127	V6	Valley	2	1	174344929
Job Reference (optional)					

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

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Page: 1



Scale = 1:19.2

Plate Offsets (X, Y): [3:0-9-3,0-2-0]

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

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 1-10-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=1-10-8, 3=1-10-8
Max Horiz 1=25 (LC 11)
Max Uplift 1=-8 (LC 14), 3=-14 (LC 14)
Max Grav 1=87 (LC 20), 3=87 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension

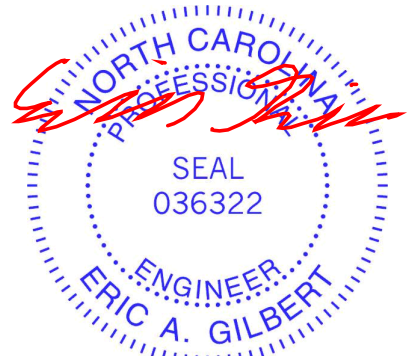
TOP CHORD 1-2=-98/28, 2-3=-44/20
BOT CHORD 1-3=-36/81

NOTES

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

- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 14 lb uplift at joint 3 and 8 lb uplift at joint 1.

LOAD CASE(S) Standard



June 23,2025

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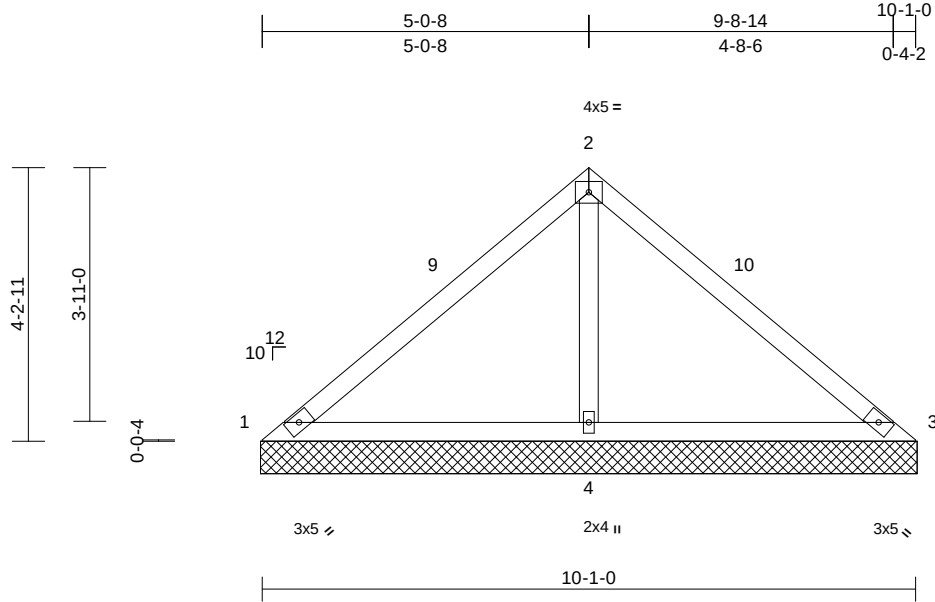
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	22 Eagle Creek - Kathryn A - Roof	174344930
25100127	V7	Valley	1	1	Job Reference (optional)	

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu Jun 19 14:12:28
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Scale = 1:35.6

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.50	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.46	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.22	Horiz(TL)	0.01	4	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH							
BCDL	10.0									Weight: 38 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS

(size)	1=10-1-10, 3=10-1-10, 4=10-1-10
Max Horiz	1=95 (LC 13)
Max Uplift	1=-67 (LC 21), 3=-67 (LC 20), 4=-121 (LC 14)
Max Grav	1=86 (LC 20), 3=86 (LC 21), 4=846 (LC 20)

FORCES

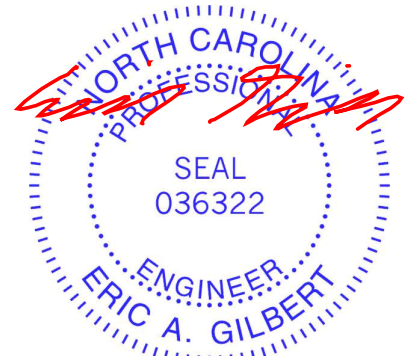
(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=-131/421, 2-3=-131/421
BOT CHORD	1-4=-278/187, 3-4=-278/187
WEBS	2-4=-705/295

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) 0-0-0 to 3-0-0, Exterior(2R) 3-0-0 to 7-1-10, Exterior(2E) 7-1-10 to 10-1-10 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 67 lb uplift at joint 1, 67 lb uplift at joint 3 and 121 lb uplift at joint 4.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 3.

LOAD CASE(S) Standard



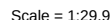
June 23,2025

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

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

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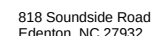
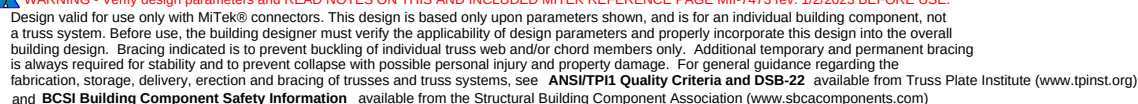
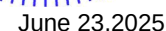
818 Soundside Road
Edenton, NC 27932

Page: 1

- 4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 5) Unbalanced snow loads have been considered for this design.
- 6) Gable requires continuous bottom chord bearing.
- 7) Gable studs spaced at 4-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 31 lb uplift at joint 1, 31 lb uplift at joint 3 and 85 lb uplift at joint 4.
- 11) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 3.

LOAD CASE(S) Standard

- 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) 0-0-0 to 3-0-0, Exterior(2R) 3-0-0 to 4-8-13, Exterior(2E) 4-8-13 to 7-8-13 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
- 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

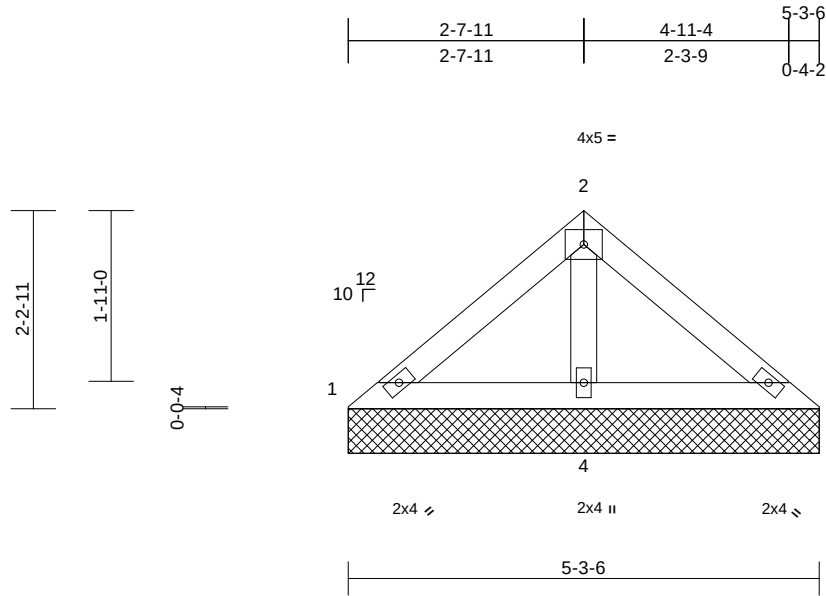


Job	Truss	Truss Type	Qty	Ply	22 Eagle Creek - Kathryn A - Roof	174344932
25100127	V9	Valley	1	1	Job Reference (optional)	

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu Jun 19 14:12:28
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Page: 1



Scale = 1:25.8

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	0.11	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.13	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horiz(TL)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 19 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 5-3-6 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS

(size)	1=5-3-6, 3=5-3-6, 4=5-3-6
Max Horiz	1=-48 (LC 10)
Max Uplift	3=-6 (LC 15), 4=-39 (LC 14)
Max Grav	1=93 (LC 20), 3=93 (LC 21), 4=333 (LC 20)

FORCES

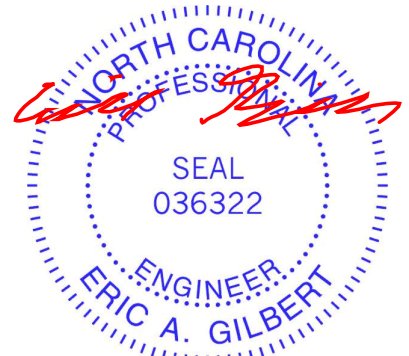
(lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-84/122, 2-3=-84/122
BOT CHORD	1-4=-99/100, 3-4=-99/100
WEBS	2-4=-245/116

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.
 - 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 3 and 39 lb uplift at joint 4.
- LOAD CASE(S)** Standard



June 23, 2025

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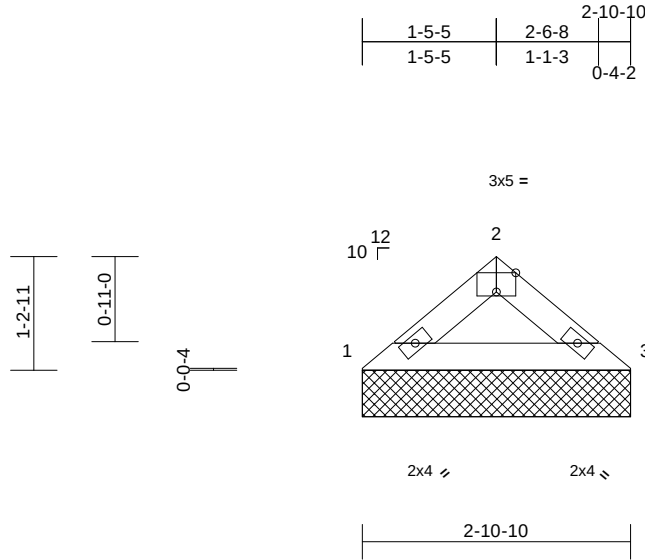
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	22 Eagle Creek - Kathryn A - Roof
25100127	V10	Valley	1	1	174344933
					Job Reference (optional)

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu Jun 19 14:12:28
ID:s?bJz7nrbi73jWb3U9IAZ1zEw52-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:24.8

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	0.06	Vert(LL)	n/a	-	n/a	999	MT20
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.06	Vert(TL)	n/a	-	n/a	999	244/190
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a	
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MP							
BCDL	10.0										
										Weight: 9 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS (size) 1=2-10-10, 3=2-10-10
Max Horiz 1=24 (LC 13)
Max Uplift 1=-10 (LC 14), 3=-10 (LC 15)
Max Grav 1=132 (LC 20), 3=132 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension

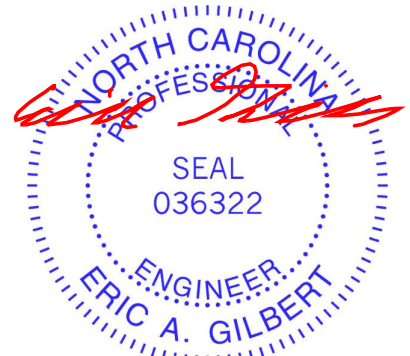
TOP CHORD 1-2=-169/70, 2-3=-169/70
BOT CHORD 1-3=-39/121

NOTES

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

- 7) Gable studs spaced at 4-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 10 lb uplift at joint 1 and 10 lb uplift at joint 3.

LOAD CASE(S) Standard



June 23,2025

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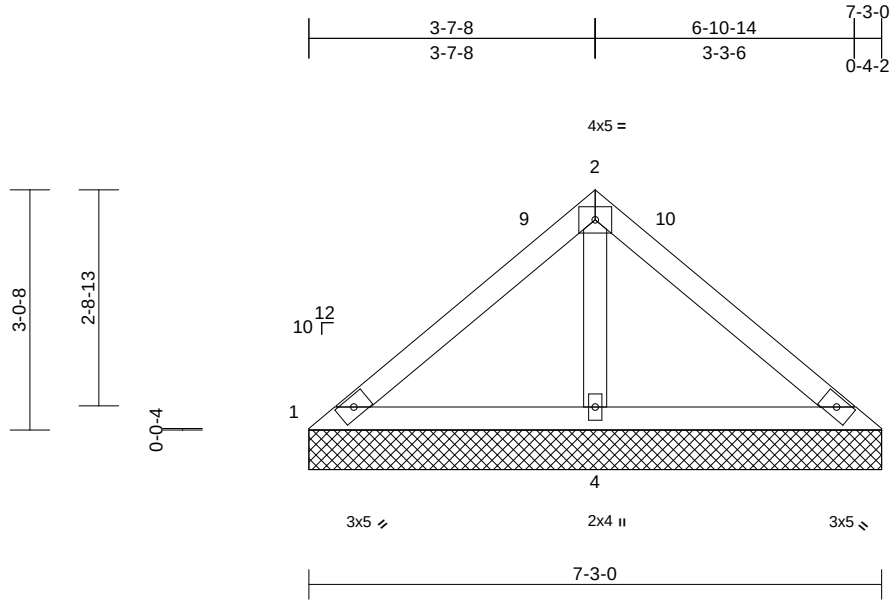
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	22 Eagle Creek - Kathryn A - Roof	174344934
25100127	V11	Valley	1	1	Job Reference (optional)	

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu Jun 19 14:12:28
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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	0.26	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.27	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.09	Horiz(TL)	0.00	4	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MP							
BCDL	10.0									Weight: 27 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD	Structural wood sheathing directly applied or 7-3-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS

(size)	1=7-3-0, 3=7-3-0, 4=7-3-0
Max Horiz	1=-67 (LC 10)
Max Uplift	1=-17 (LC 21), 3=-17 (LC 20), 4=-74 (LC 14)
Max Grav	1=105 (LC 20), 3=105 (LC 21), 4=534 (LC 21)

FORCES

	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=-89/230, 2-3=-89/230
BOT CHORD	1-4=-180/152, 3-4=-180/152
WEBS	2-4=-422/200

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 4-3-5, Exterior(2E) 4-3-5 to 7-3-5 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 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 17 lb uplift at joint 1, 17 lb uplift at joint 3 and 74 lb uplift at joint 4.

LOAD CASE(S) Standard



June 23,2025

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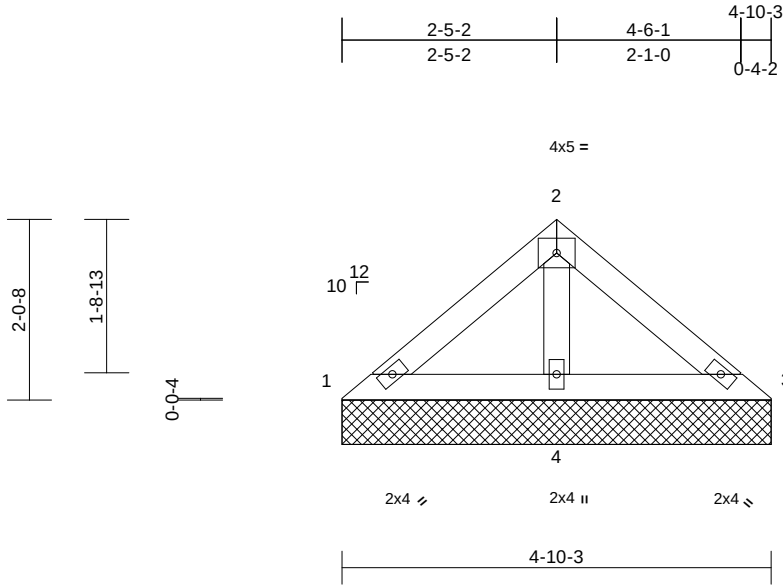
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	22 Eagle Creek - Kathryn A - Roof	174344935
25100127	V12	Valley	1	1	Job Reference (optional)	

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

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Page: 1



Scale = 1:26

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	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.11	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horiz(TL)	0.00	4	n/a	n/a	
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MP							
BCDL	10.0									Weight: 17 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-10-3 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS

(size) 1=4-10-3, 3=4-10-3, 4=4-10-3
Max Horiz 1=-43 (LC 10)
Max Uplift 3=-7 (LC 15), 4=-33 (LC 14)
Max Grav 1=88 (LC 20), 3=88 (LC 21), 4=295 (LC 21)

FORCES

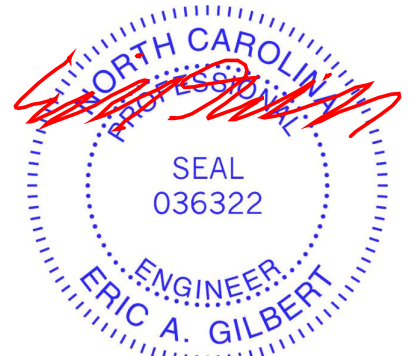
(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-81/103, 2-3=-81/103
BOT CHORD 1-4=-84/88, 3-4=-84/88
WEBS 2-4=-210/97

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.
 - 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 7 lb uplift at joint 3 and 33 lb uplift at joint 4.
- LOAD CASE(S)** Standard



June 23,2025

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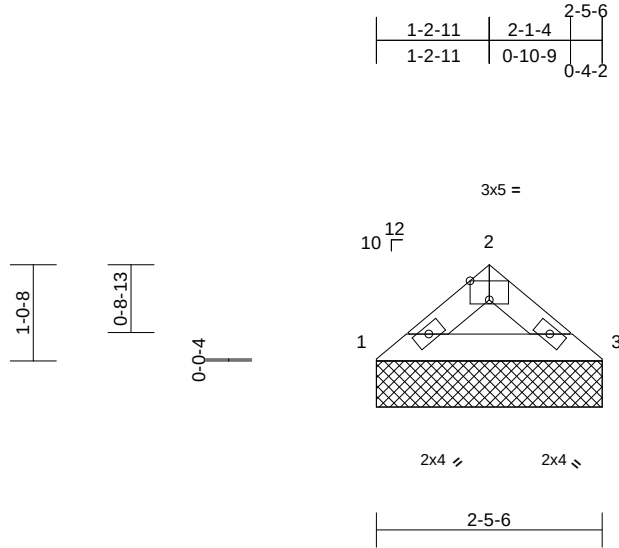
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	22 Eagle Creek - Kathryn A - Roof
25100127	V13	Valley	1	1	174344936
					Job Reference (optional)

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu Jun 19 14:12:29
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Page: 1



Scale = 1:25

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	0.04	Vert(LL)	n/a	-	n/a	999	MT20
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.05	Vert(TL)	n/a	-	n/a	999	244/190
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a	
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MP							
BCDL	10.0										
										Weight: 7 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-5-6 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=2-5-6, 3=2-5-6
Max Horiz 1=-20 (LC 10)
Max Uplift 1=-8 (LC 14), 3=-8 (LC 15)
Max Grav 1=110 (LC 20), 3=110 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension

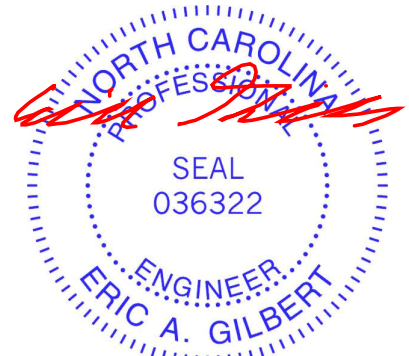
TOP CHORD 1-2=-139/60, 2-3=-139/60
BOT CHORD 1-3=-32/99

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.

- 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 8 lb uplift at joint 1 and 8 lb uplift at joint 3.

LOAD CASE(S) Standard



June 23,2025

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

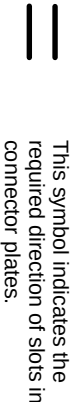
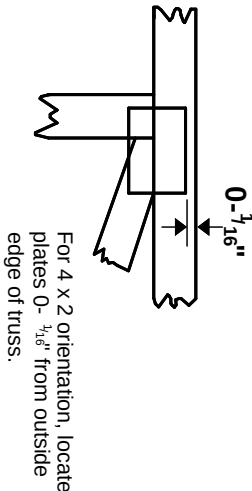
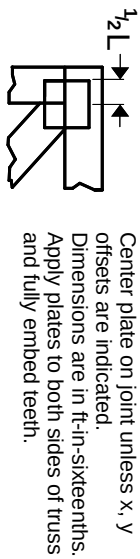
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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

Symbols

PLATE LOCATION AND ORIENTATION



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

PLATE SIZE

4 X 4

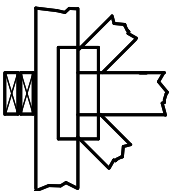
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

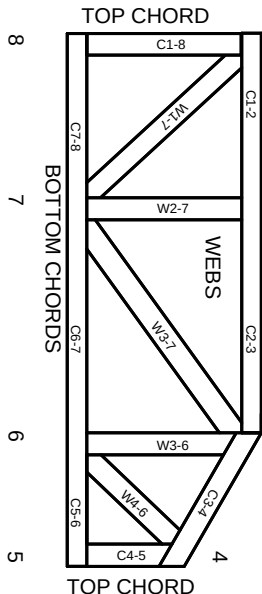
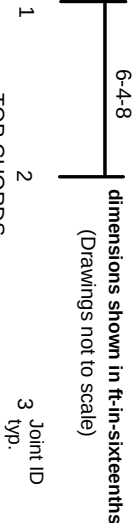


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

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.

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General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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

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