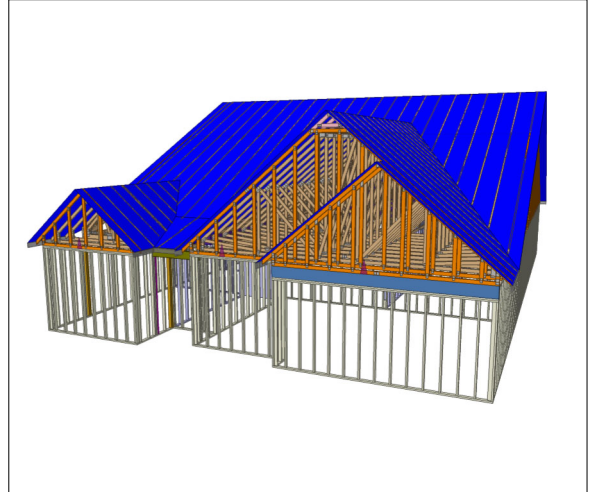




Carter Sanford Component Plant
298 Harvey Faulk Rd
Sanford, NC 27332

Phone #:919-775-1450

Builder: DR Horton Inc
Model: 16 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: _____

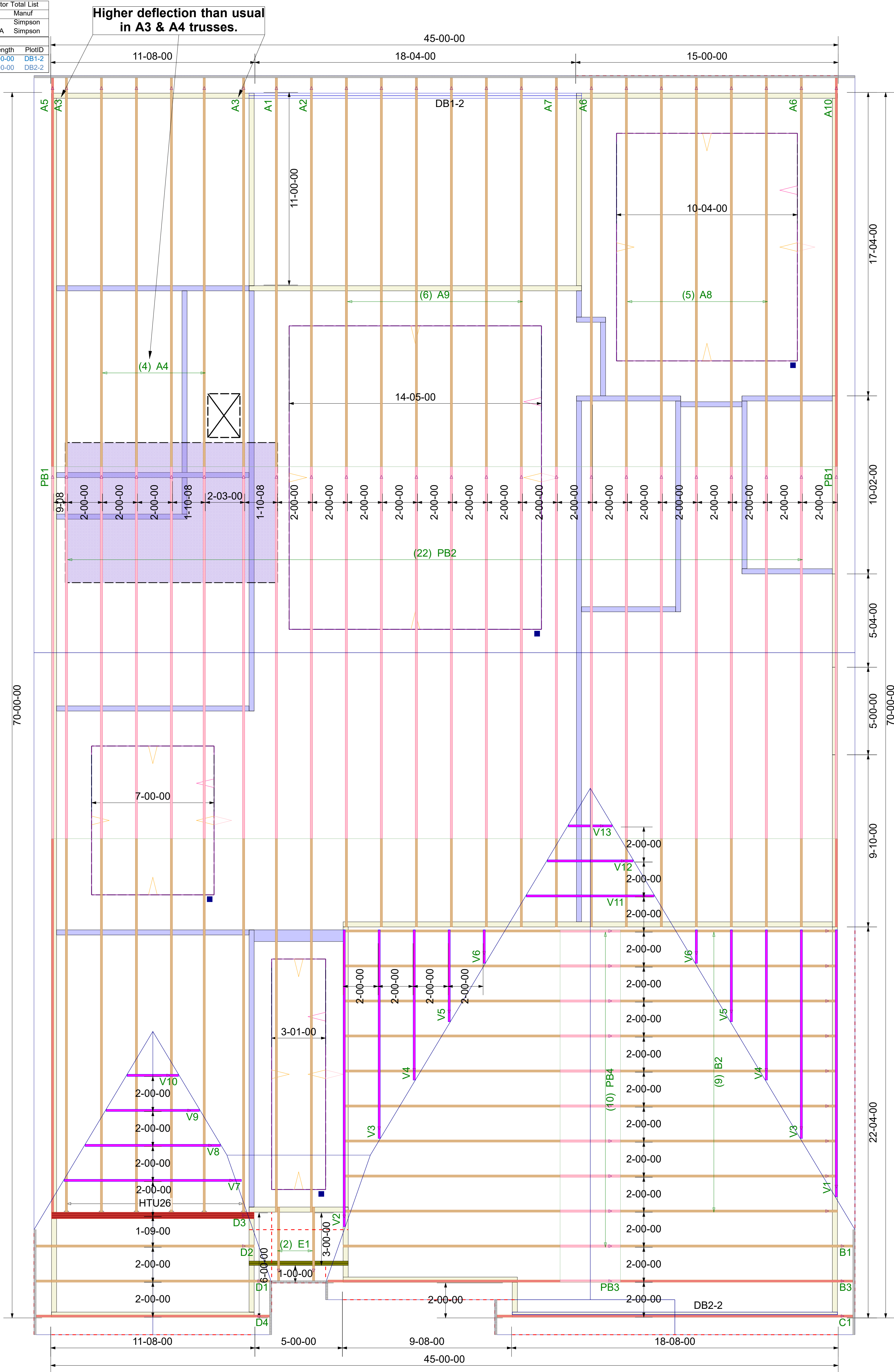
Date: _____

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

Products						
Fab Type	Net Qty	Plies	Product	Length	PlotID	
FF	2	2	2.1 RigidLam SP LVL 1-3/4 x 9-1/4	20-00-00	DB1-2	
FF	2	2	2.1 RigidLam SP LVL 1-3/4 x 11-7/8	20-00-00	DB2-2	



**** 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.**

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

RE: 16 Eagle Creek
16 Eagle Creek - Kathryn A - Roof

Trenco
818 Soundside Rd
Edenton, NC 27932

Site Information:

Customer: DR Horton Inc Project Name: 16 Eagle Creek
Lot/Block: 16 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 36 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I73603967	A1	5/21/2025	21	I73603987	PB2	5/21/2025
2	I73603968	A2	5/21/2025	22	I73603988	PB3	5/21/2025
3	I73603969	A3	5/21/2025	23	I73603989	PB4	5/21/2025
4	I73603970	A4	5/21/2025	24	I73603990	V1	5/21/2025
5	I73603971	A5	5/21/2025	25	I73603991	V2	5/21/2025
6	I73603972	A6	5/21/2025	26	I73603992	V3	5/21/2025
7	I73603973	A7	5/21/2025	27	I73603993	V4	5/21/2025
8	I73603974	A8	5/21/2025	28	I73603994	V5	5/21/2025
9	I73603975	A9	5/21/2025	29	I73603995	V6	5/21/2025
10	I73603976	A10	5/21/2025	30	I73603996	V7	5/21/2025
11	I73603977	B1	5/21/2025	31	I73603997	V8	5/21/2025
12	I73603978	B2	5/21/2025	32	I73603998	V9	5/21/2025
13	I73603979	B3	5/21/2025	33	I73603999	V10	5/21/2025
14	I73603980	C1	5/21/2025	34	I73604000	V11	5/21/2025
15	I73603981	D1	5/21/2025	35	I73604001	V12	5/21/2025
16	I73603982	D2	5/21/2025	36	I73604002	V13	5/21/2025
17	I73603983	D3	5/21/2025				
18	I73603984	D4	5/21/2025				
19	I73603985	E1	5/21/2025				
20	I73603986	PB1	5/21/2025				

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.



May 21, 2025

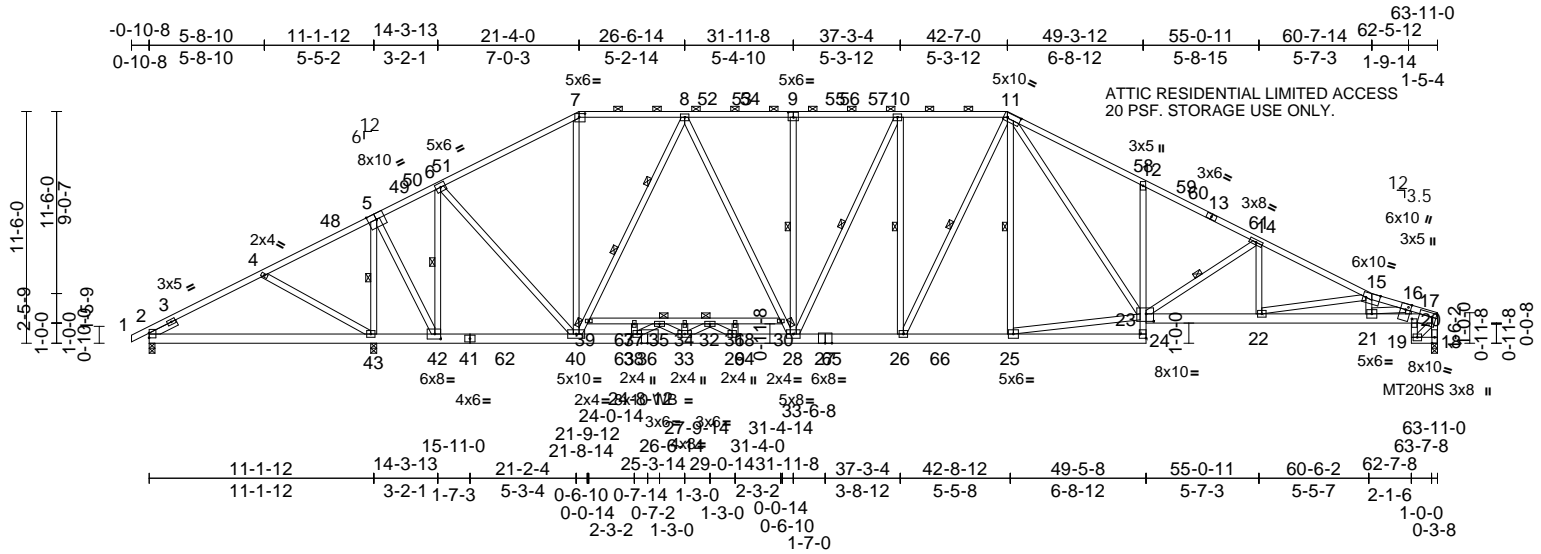
Job	Truss	Truss Type	Qty	Ply	16 Eagle Creek - Kathryn A - Roof	I73603967
16 Eagle Creek	A1	Piggyback Base	1	1	Job Reference (optional)	

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Mon May 19 14:45:51

Page: 1

ID:gzvdENKJOGx2Ss?L5D9RdAzEz27-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKwRCdoi7J4zJC?f



Scale = 1:114.3

[7:0-3-8,0-2-4], [9:0-3-0,0-3-0], [11:0-7-12,0-2-12], [15:0-8-4,0-3-0], [16:0-5-9,0-3-12], [16:0-1-12,Edge], [17:0-2-10,0-2-8], [23:0-4-8,0-4-8], [24:Edge,0-3-8],

Plate Offsets (X, Y): [36:0-3-10,Edge], [42:0-3-8,0-3-0]

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	0.73	Vert(LL)	-0.29	12-23	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.93	Vert(CT)	-0.54	29-33	>999	180	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	YES	WB	0.96	Horz(CT)	0.25	18	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 536 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP 2400F 2.0E
BOT CHORD 2x6 SP 2400F 2.0E *Except* 24-12,20-19:2x4
SP No.3, 19-18,39-30:2x4 SP No.2

WEBS
2x4 SP No.3 *Except*
40-7-8,40-8-28,9-28,25-11,25-23,23-11,10-26,
10-28,11-26,5-42:2x4 SP No.2

OTHERS
SLIDER 2x4 SP No.3
Left 2x4 SP No.2 -- 1-6-0

BRACING
TOP CHORD Structural wood sheathing directly applied or
2-2-0 oc purlins, except end verticals, and
2-0-0 oc purlins (4-4-5 max.): 7-11.

BOT CHORD
Rigid ceiling directly applied or 4-8-15 oc
bracing.

WEBS
1 Row at midpt 6-42, 9-28, 11-25, 14-23,
10-26, 10-28, 11-26, 5-43

WEBS
2 Rows at 1/3 pts 8-39
JOINTS
1 Brace at Jt(s): 39,
30, 35, 32

REACTIONS
(size) 2=0-3-8, 18=0-3-8, 43=0-3-8
Max Horiz 2=182 (LC 18)
Max Uplift 2=200 (LC 63), 18=65 (LC 15)
Max Grav 2=204 (LC 46), 18=2420 (LC 6),
43=3926 (LC 3)

FORCES
(lb) - Maximum Compression/Maximum
Tension
TOP CHORD 1-2=0/23, 2-4=-284/756, 4-6=-651/1079,
6-7=-2363/220, 7-8=-2080/253,
8-10=-3424/354, 10-11=-3450/456,
11-12=-4865/696, 12-14=-4816/545,
14-15=-5805/591, 15-16=-7123/730,
16-17=-5254/544, 17-18=-2674/304

BOT CHORD
2-43=-628/176, 42-43=-892/264,
40-42=0/562, 38-40=0/2869, 33-38=0/3583,
29-33=0/3555, 28-29=0/2770,
26-28=-25/3372, 25-26=-57/3148,
24-25=-16/425, 23-24=0/123,
12-23=-694/252, 22-23=-382/5167,
21-22=-612/6793, 20-21=-489/5286,
17-20=-474/5132, 19-20=-30/536,
18-19=-29/441, 37-39=-84/0, 35-37=-84/0,
34-35=-1477/0, 32-34=-1477/0,
31-32=-16/20, 30-31=-16/20
4-43=-481/233, 6-42=-2773/204,
6-40=0/2299, 7-40=0/706, 39-40=-1916/164,
8-39=-1804/201, 8-30=-32/1326,
28-30=-72/1250, 9-28=-346/127,
11-25=-186/97, 23-25=-40/2753,
11-23=-341/2043, 14-23=-1135/168,
14-22=0/712, 15-22=-1656/233,
15-21=-516/118, 16-21=-144/1637,
17-19=-584/41, 33-34=-2/45, 37-38=0/65,
29-31=0/90, 16-20=-955/110,
10-26=-453/165, 10-28=-347/239,
11-26=-170/605, 5-42=-236/2943,
5-43=-3527/353, 35-38=-1070/0,
33-35=0/646, 32-33=0/669, 29-32=-1130/0

NOTES

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

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat.
II; Exp B; Enclosed; MWFRS (envelope) exterior zone
and C-C Exterior(2E) 0-10-8 to 5-6-12, Interior (1)
5-6-12 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 63-6-10 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
- 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.



May 21,2025

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	16 Eagle Creek - Kathryn A - Roof
16 Eagle Creek	A1	Piggyback Base	1	1	Job Reference (optional)

I73603967

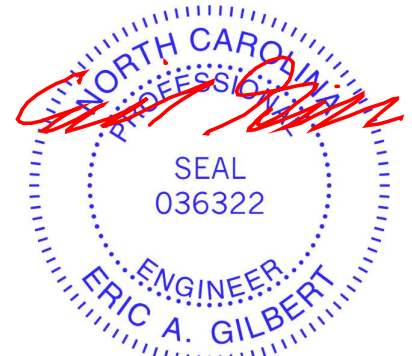
Carter Components (Sanford, NC), Sanford, NC - 27332,

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Mon May 19 14:45:51
ID:gzvdENKJOgX2Ss?L5D9RdAzEz27-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 2

- 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.
- 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'-0"-0" tall by 2'-0"-0" 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) 2 and 18. 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



May 21, 2025

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

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

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

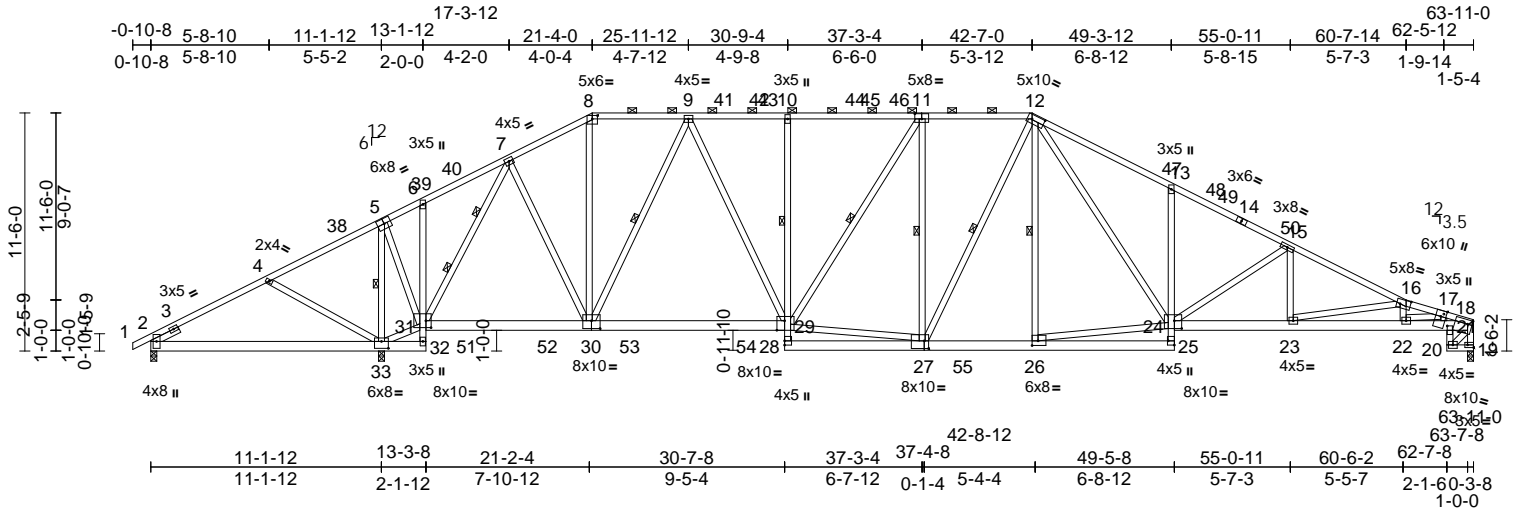
Job	Truss	Truss Type	Qty	Ply	16 Eagle Creek - Kathryn A - Roof	173603968
16 Eagle Creek	A2	Piggyback Base	1	1	Job Reference (optional)	

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Mon May 19 14:45:54

Page: 1

ID:PTHEBNAUAgVuptrm?Wt6ZjzEwiZ-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrcD0i7J4zJC?f



Scale = 1:111.3

[2:0-4-9,0-1-5], [8:0-3-0,0-2-0], [11:0-4-0,0-3-0], [12:0-7-4,0-2-8], [16:0-6-0,0-2-12], [17:0-5-9,0-3-12], [17:0-1-12,Edge], [18:0-2-10,0-2-8], [19:Edge,0-1-8],	
Plate Offsets (X, Y): [24:0-4-4,0-4-8], [25:Edge,0-3-8], [26:0-3-8,0-2-12], [27:0-2-8,0-4-8], [29:0-4-8,Edge], [30:0-5-0,0-4-8], [31:0-3-0,0-4-0], [33:0-4-0,0-4-0]	

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.66	Vert(LL)	-0.26	23-24	>999	240
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.85	Vert(CT)	-0.48	23-24	>999	180
TCDL	10.0	Rep Stress Incr	YES	WB	0.98	Horz(CT)	0.25	19	n/a	n/a
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH						
BCDL	10.0									
Weight: 528 lb FT = 20%										

LUMBER		BOT CHORD		2-33=-890/230, 32-33=-125/0, 31-32=-372/0, 6-31=-258/78, 29-31=-103/2264, 28-29=0/134, 10-29=-394/141, 26-28=-208/2678, 25-26=-34/411, 24-25=0/128, 13-24=-694/252, 23-24=-559/4606, 22-23=-820/6131, 21-22=-648/4780, 18-21=-628/4642, 20-21=-45/488, 19-20=-42/401 31-33=-1250/449, 7-31=-2893/466, 7-30=-108/1555, 8-30=-59/568, 9-30=-1650/306, 9-29=-148/1230, 27-29=-165/2609, 11-29=-332/118, 11-27=-521/218, 12-27=-296/381, 12-26=-154/98, 24-26=-174/2291, 12-24=-368/1935, 15-24=-1097/181, 15-23=0/678, 16-23=-1553/265, 16-22=-451/139, 17-21=-856/141, 17-22=-198/1466, 4-33=-497/233, 5-33=-2570/440, 5-31=-279/2089, 18-20=-530/58		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	2x4 SP 2400F 2.0E	SLIDER		Left 2x4 SP No.3 -- 1-6-0		4) Unbalanced snow loads have been considered for this design.			
BOT CHORD	2x6 SP 2400F 2.0E "Except" 32-6,25-13,21-20:2x4 SP No.3, 10-28,20-19:2x4 SP No.2	BRACING		TOP CHORD Structural wood sheathing directly applied or 3-2-1 oc purlins, except end verticals, and 2-0-0 oc purlins (4-9-6 max.): 8-12.		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.			
WEBS	2x4 SP No.3 "Except" 30-9,29-9,11-29,27-11,27-12,26-12,24-12:2x4 SP No.2	RECTIONS		(size) 2=0-3-8, 19=0-3-8, 33=0-3-8 Max Horiz 2=182 (LC 18) Max Uplift 2=-326 (LC 63), 19=-154 (LC 15), 33=-194 (LC 14) Max Grav 2=89 (LC 10), 19=2179 (LC 6), 33=3643 (LC 3)		NOTES			
SLIDER	Left 2x4 SP No.3 -- 1-6-0	FORCES		(lb) - Maximum Compression/Maximum Tension		1) Unbalanced roof live loads have been considered for this design.			
BRACING		TOP CHORD		1-2=0/23, 2-4=-360/1089, 4-6=-251/1448, 6-7=-17/546, 7-8=-1859/419, 8-9=-1648/405, 9-10=-2862/597, 10-12=-2880/637, 12-13=-4274/881, 13-15=-4223/731, 15-16=-5178/789, 16-17=-6424/949, 17-18=-4752/702, 18-19=-2422/383		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 5-6-12, Interior (1) 5-6-12 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 63-6-10 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			
TOP CHORD		WEBS		1 Row at midpt 10-29 1 Row at midpt 9-30, 11-29, 11-27, 12-27, 12-26, 5-33 2 Rows at 1/3 pts 7-31		SEAL			
WEBS		RECTIONS		(size) 2=0-3-8, 19=0-3-8, 33=0-3-8 Max Horiz 2=182 (LC 18) Max Uplift 2=-326 (LC 63), 19=-154 (LC 15), 33=-194 (LC 14) Max Grav 2=89 (LC 10), 19=2179 (LC 6), 33=3643 (LC 3)		ENGINEER			
RECTIONS		TOP CHORD		1-2=0/23, 2-4=-360/1089, 4-6=-251/1448, 6-7=-17/546, 7-8=-1859/419, 8-9=-1648/405, 9-10=-2862/597, 10-12=-2880/637, 12-13=-4274/881, 13-15=-4223/731, 15-16=-5178/789, 16-17=-6424/949, 17-18=-4752/702, 18-19=-2422/383		Eric A. Gilbert			
FORCES		WEBS		1 Row at midpt 10-29 1 Row at midpt 9-30, 11-29, 11-27, 12-27, 12-26, 5-33 2 Rows at 1/3 pts 7-31		036322			
TOP CHORD		RECTIONS		(size) 2=0-3-8, 19=0-3-8, 33=0-3-8 Max Horiz 2=182 (LC 18) Max Uplift 2=-326 (LC 63), 19=-154 (LC 15), 33=-194 (LC 14) Max Grav 2=89 (LC 10), 19=2179 (LC 6), 33=3643 (LC 3)		May 21,2025			
WEBS		TOP CHORD		1-2=0/23, 2-4=-360/1089, 4-6=-251/1448, 6-7=-17/546, 7-8=-1859/419, 8-9=-1648/405, 9-10=-2862/597, 10-12=-2880/637, 12-13=-4274/881, 13-15=-4223/731, 15-16=-5178/789, 16-17=-6424/949, 17-18=-4752/702, 18-19=-2422/383					
RECTIONS		WEBS		1 Row at midpt 10-29 1 Row at midpt 9-30, 11-29, 11-27, 12-27, 12-26, 5-33 2 Rows at 1/3 pts 7-31					
FORCES		RECTIONS		(size) 2=0-3-8, 19=0-3-8, 33=0-3-8 Max Horiz 2=182 (LC 18) Max Uplift 2=-326 (LC 63), 19=-154 (LC 15), 33=-194 (LC 14) Max Grav 2=89 (LC 10), 19=2179 (LC 6), 33=3643 (LC 3)					
TOP CHORD		TOP CHORD		1-2=0/23, 2-4=-360/1089, 4-6=-251/1448, 6-7=-17/546, 7-8=-1859/419, 8-9=-1648/405, 9-10=-2862/597, 10-12=-2880/637, 12-13=-4274/881, 13-15=-4223/731, 15-16=-5178/789, 16-17=-6424/949, 17-18=-4752/702, 18-19=-2422/383					
WEBS		WEBS		1 Row at midpt 10-29 1 Row at midpt 9-30, 11-29, 11-27, 12-27, 12-26, 5-33 2 Rows at 1/3 pts 7-31					
RECTIONS		RECTIONS		(size) 2=0-3-8, 19=0-3-8, 33=0-3-8 Max Horiz 2=182 (LC 18) Max Uplift 2=-326 (LC 63), 19=-154 (LC 15), 33=-194 (LC 14) Max Grav 2=89 (LC 10), 19=2179 (LC 6), 33=3643 (LC 3)					
FORCES		TOP CHORD		1-2=0/23, 2-4=-360/1089, 4-6=-251/1448, 6-7=-17/546, 7-8=-1859/419, 8-9=-1648/405, 9-10=-2862/597, 10-12=-2880/637, 12-13=-4274/881, 13-15=-4223/731, 15-16=-5178/789, 16-17=-6424/949, 17-18=-4752/702, 18-19=-2422/383					
TOP CHORD		WEBS		1 Row at midpt 10-29 1 Row at midpt 9-30, 11-29, 11-27, 12-27, 12-26, 5-33 2 Rows at 1/3 pts 7-31					
WEBS		RECTIONS		(size) 2=0-3-8, 19=0-3-8, 33=0-3-8 Max Horiz 2=182 (LC 18) Max Uplift 2=-326 (LC 63), 19=-154 (LC 15), 33=-194 (LC 14) Max Grav 2=89 (LC 10), 19=2179 (LC 6), 33=3643 (LC 3)					
RECTIONS		TOP CHORD		1-2=0/23, 2-4=-360/1089, 4-6=-251/1448, 6-7=-17/546, 7-8=-1859/419, 8-9=-1648/405, 9-10=-2862/597, 10-12=-2880/637, 12-13=-4274/881, 13-15=-4223/731, 15-16=-5178/789, 16-17=-6424/949, 17-18=-4752/702, 18-19=-2422/383					
FORCES		WEBS		1 Row at midpt 10-29 1 Row at midpt 9-30, 11-29, 11-27, 12-27, 12-26, 5-33 2 Rows at 1/3 pts 7-31					
TOP CHORD		RECTIONS		(size) 2=0-3-8, 19=0-3-8, 33=0-3-8 Max Horiz 2=182 (LC 18) Max Uplift 2=-326 (LC 63), 19=-154 (LC 15), 33=-194 (LC 14) Max Grav 2=89 (LC 10), 19=2179 (LC 6), 33=3643 (LC 3)					
WEBS		TOP CHORD		1-2=0/23, 2-4=-360/1089, 4-6=-251/1448, 6-7=-17/546, 7-8=-1859/419, 8-9=-1648/405, 9-10=-2862/597, 10-12=-2880/637, 12-13=-4274/881, 13-15=-4223/731, 15-16=-5178/789, 16-17=-6424/949, 17-18=-4752/702, 18-19=-2422/383					
RECTIONS		WEBS		1 Row at midpt 10-29 1 Row at midpt 9-30, 11-29, 11-27, 12-27, 12-26, 5-33 2 Rows at 1/3 pts 7-31					
FORCES		RECTIONS		(size) 2=0-3-8, 19=0-3-8, 33=0-3-8 Max Horiz 2=182 (LC 18) Max Uplift 2=-326 (LC 63), 19=-154 (LC 15), 33=-194 (LC 14) Max Grav 2=89 (LC 10), 19=2179 (LC 6), 33=3643 (LC 3)					
TOP CHORD		TOP CHORD		1-2=0/23, 2-4=-360/1089, 4-6=-251/1448, 6-7=-17/546, 7-8=-1859/419, 8-9=-1648/405, 9-10=-2862/597, 10-12=-2880/637, 12-13=-4274/881, 13-15=-4223/731, 15-16=-5178/789, 16-17=-6424/949, 17-18=-4752/702, 18-19=-2422/383					
WEBS		WEBS		1 Row at midpt 10-29 1 Row at midpt 9-30, 11-29, 11-27, 12-27, 12-26, 5-33 2 Rows at 1/3 pts 7-31					
RECTIONS		RECTIONS		(size) 2=0-3-8, 19=0-3-8, 33=0-3-8 Max Horiz 2=182 (LC 18) Max Uplift 2=-326 (LC 63), 19=-154 (LC 15), 33=-194 (LC 14) Max Grav 2=89 (LC 10), 19=2179 (LC 6), 33=3643 (LC 3)					
FORCES		TOP CHORD		1-2=0/23, 2-4=-360/1089, 4-6=-251/1448, 6-7=-17/546, 7-8=-1859/419, 8-9=-1648/405, 9-10=-2862/597, 10-12=-2880/637, 12-13=-4274/881, 13-15=-4223/731, 15-16=-5178/789, 16-17=-6424/949, 17-18=-4752/702, 18-19=-2422/383					
TOP CHORD		WEBS		1 Row at midpt 10-29 1 Row at midpt 9-30, 11-29, 11-27, 12-27, 12-26, 5-33 2 Rows at 1/3 pts 7-31					
WEBS		RECTIONS		(size) 2=0-3-8, 19=0-3-8, 33=0-3-8 Max Horiz 2=182 (LC 18) Max Uplift 2=-326 (LC 63), 19=-154 (LC 15), 33=-194 (LC 14) Max Grav 2=89 (LC 10), 19=2179 (LC 6), 33=3643 (LC 3)					
RECTIONS		TOP CHORD		1-2=0/23, 2-4=-360/1089, 4-6=-251/1448, 6-7=-17/546, 7-8=-1859/419, 8-9=-1648/405, 9-10=-2862/597, 10-12=-2880/637, 12-13=-4274/881, 13-15=-4223/731, 15-16=-5178/789, 16-17=-6424/949, 17-18=-4752/702, 18-19=-2422/383					
FORCES		WEBS		1 Row at midpt 10-29 1 Row at midpt 9-30, 11-29, 11-27, 12-27, 12-26, 5-33 2 Rows at 1/3 pts 7-31					
TOP CHORD		RECTIONS		(size) 2=0-3-8, 19=0-3-8, 33=0-3-8 Max Horiz 2=182 (LC 18) Max Uplift 2=-326 (LC 63), 19=-154 (LC 15), 33=-194 (LC 14) Max Grav 2=89 (LC 10), 19=2179 (LC 6), 33=3643 (LC 3)					
WEBS		TOP CHORD		1-2=0/23, 2-4=-360/1089, 4-6=-251/1448, 6-7=-17/546, 7-8=-1859/419, 8-9=-1648/405, 9-10=-2862/597, 10-12=-2880/637, 12-13=-4274/881, 13-15=-4223/731, 15-16=-5178/789, 16-17=-6424/949, 17-18=-4752/702, 18-19=-2422/383					
RECTIONS		WEBS		1 Row at midpt 10-29 1 Row at midpt 9-30, 11-29, 11-27, 12-27, 12-26, 5-33 2 Rows at 1/3 pts 7-31					
FORCES		RECTIONS		(size) 2=0-3-8, 19=0-3-8, 33=0-3-8 Max Horiz 2=182 (LC 18) Max Uplift 2=-326 (LC 63), 19=-154 (LC 15), 33=-194 (LC 14) Max Grav 2=89 (LC 10), 19=2179 (LC 6), 33=3643 (LC 3)					
TOP CHORD		TOP CHORD		1-2=0/23, 2-4=-360/1089, 4-6=-251/1448, 6-7=-17/546, 7-8=-1859/419, 8-9=-1648/405, 9-10=-2862/597, 10-12=-2880/637, 12-13=-4274/881, 13-15=-4223/731, 15-16=-5178/789, 16-17=-6424/949, 17-18=-4752/702, 18-19=-2422/383					
WEBS		WEBS		1 Row at midpt 10-29 1 Row at midpt 9-30, 11-29, 11-27, 12-27, 12-26, 5-33 2 Rows at 1/3 pts 7-31					
RECTIONS		RECTIONS		(size) 2=0-3-8, 19=0-3-8, 33=0-3-8 Max Horiz 2=182 (LC 18) Max Uplift 2=-326 (LC 63), 19=-154 (LC 15), 33=-194 (LC 14) Max Grav 2=89 (LC 10), 19=2179 (LC 6), 33=3643 (LC 3)					
FORCES		TOP CHORD		1-2=0/23, 2-4=-360/1089, 4-6=-251/1448, 6-7=-17/546, 7-8=-1859/419, 8-9=-1648/405, 9-10=-2862/597, 10-12=-2880/637, 12-13=-4274/881, 13-15=-4223/731, 15-16=-5178/789, 16-17=-6424/949, 17-18=-4752/702, 18-19=-2422/383					
TOP CHORD		WEBS		1 Row at midpt 10-29 1 Row at midpt 9-30, 11-29, 11-27, 12-27, 12-26, 5-33 2 Rows at 1/3 pts 7-31					
WEBS		RECTIONS		(size) 2=0-3-8, 19=0-3-8, 33=0-3-8 Max Horiz 2=182 (LC 18) Max Uplift 2=-326 (LC 63), 19=-154 (LC 15), 33=-194 (LC 14) Max Grav 2=89 (LC 10), 19=2179 (LC 6), 33=3643 (LC 3)					
RECTIONS		TOP CHORD		1-2=0/23, 2-4=-36					

Job	Truss	Truss Type	Qty	Ply	16 Eagle Creek - Kathryn A - Roof
16 Eagle Creek	A2	Piggyback Base	1	1	173603968
					Job Reference (optional)

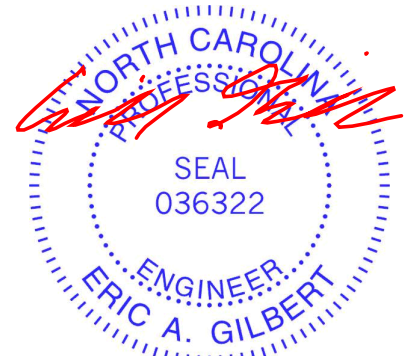
Carter Components (Sanford, NC), Sanford, NC - 27332,

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Mon May 19 14:45:54
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Page: 2

- 6) **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.
- 7) Provide adequate drainage to prevent water ponding.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 10) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 19, and 33. This connection is for uplift only and does not consider lateral forces.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



May 21, 2025

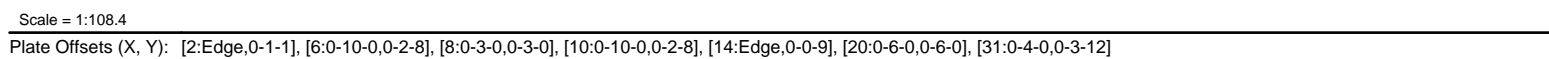
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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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Carter Components (Sanford, NC), Sanford, NC - 27332, Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Mon May 19 14:45:55 Page: 1
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LUMBER		BOT CHORD	2-34=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 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	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,
TOP CHORD	2x6 SP 2400F 2.0E *Except* 6-8,8-10:2x4 SP 2400F 2.0E			
BOT CHORD	2x8 SP 2400F 2.0E *Except* 30-22:2x4 SP No.2			
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 Left: 2x4 SP No.3	WEBS		
WEDGE				
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			

SEAL
036322
ENGINEER
ERIC A. GILBERT

May 21, 2025

Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 12/2023 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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Job	Truss	Truss Type	Qty	Ply	16 Eagle Creek - Kathryn A - Roof
16 Eagle Creek	A3	Piggyback Base	2	1	Job Reference (optional)

I73603969

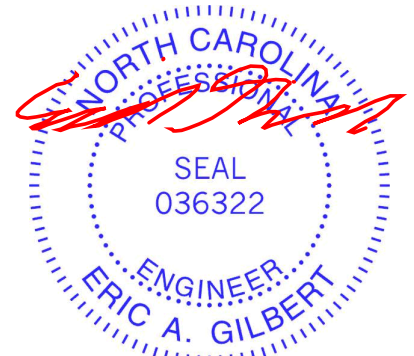
Carter Components (Sanford, NC), Sanford, NC - 27332,

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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



May 21, 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/TP1 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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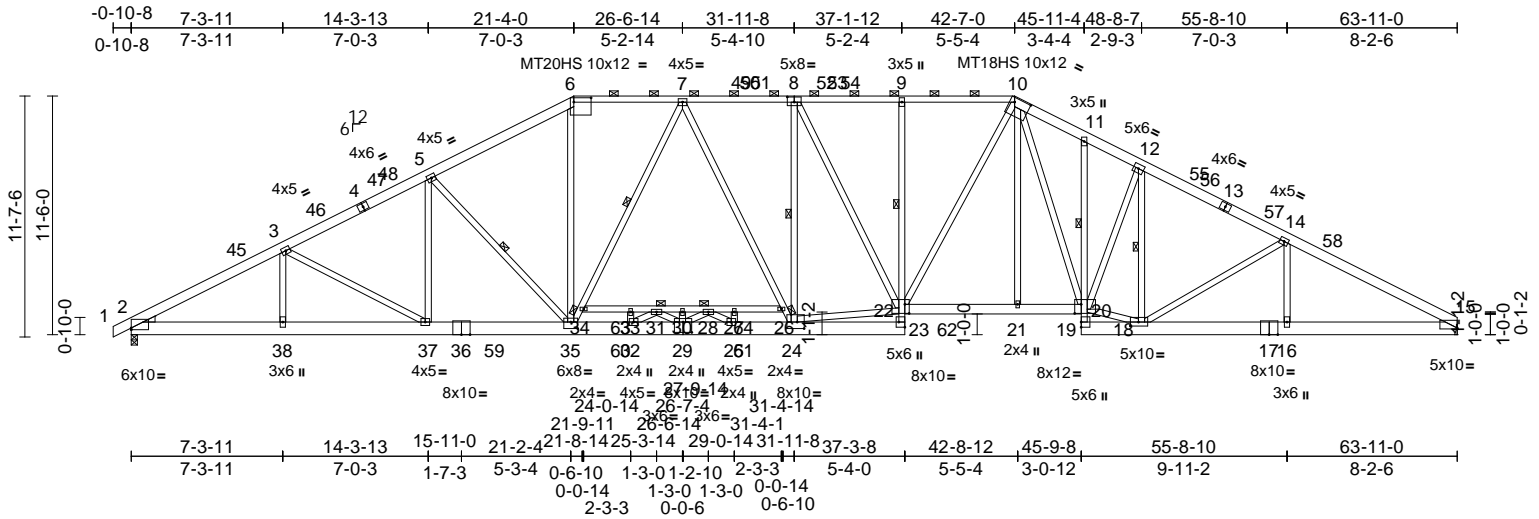
Job	Truss	Truss Type	Qty	Ply	16 Eagle Creek - Kathryn A - Roof	173603970
16 Eagle Creek	A4	Piggyback Base	4	1	Job Reference (optional)	

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Mon May 19 14:45:55

Page: 1

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Scale = 1:111.1

[2:Edge,0-1-1], [6:0-10-0,0-2-8], [8:0-4-0,0-3-0], [10:0-9-4,0-2-8], [15:Edge,0-0-9], [18:0-4-12,0-2-4], [20:0-3-12,0-5-4], [22:0-2-8,0-5-4], [23:Edge,0-3-8],

Plate Offsets (X, Y): [24:0-4-0,0-3-12], [29:0-5-0,0-6-0], [35:0-4-0,0-3-12]

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	0.39	Vert(LL)	-0.36	25-29	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.62	Vert(CT)	-0.70	25-29	>999	180	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	YES	WB	0.74	Horz(CT)	0.23	15	n/a	n/a	MT18HS	244/190
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 610 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP 2400F 2.0E *Except* 6-8,8-10:2x4 SP 2400F 2.0E
BOT CHORD 2x8 SP 2400F 2.0E *Except* 23-9,34-26:2x4 SP No.2, 22-20:2x6 SP 2400F 2.0E, 18-12:2x4 SP No.3, 19-11:2x4 SP 2400F 2.0E
WEBS 2x4 SP No.3 *Except* 35-6,8-24,8-22,22-10,7-24,7-35:2x4 SP No.2, 24-22,18-20:2x4 SP No.1
WEDGE Left: 2x4 SP No.3
BRACING
TOP CHORD Structural wood sheathing directly applied or 3-11-3 oc purlins, except 2-0-0 oc purlins (3-4-0 max.): 6-10.
BOT CHORD Rigid ceiling directly applied or 5-6-10 oc bracing. Except:
1 Row at midpt 9-22, 11-20
5-7-0 oc bracing: 12-18
WEBS 1 Row at midpt 5-35, 8-24, 7-34
JOINTS 1 Brace at Jt(s): 34, 26, 31, 28

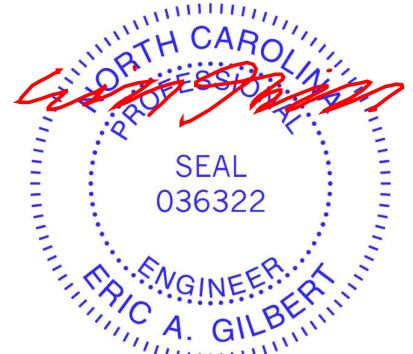
BOT CHORD 2-38=-187/5829, 37-38=-187/5829, 35-37=-39/5482, 32-35=0/5181, 25-32=0/5696, 24-25=0/5216, 23-24=-28/613, 22-23=-16/41, 9-22=-480/143, 21-22=0/4991, 20-21=0/4998, 18-19=-25/719, 16-18=-179/5580, 15-16=-179/5580, 12-18=-1023/22, 33-34=-12/5, 31-33=-12/5, 30-31=-1110/0, 28-30=-1109/0, 27-28=-47/1, 26-27=-47/1, 19-20=-5/53, 11-20=-216/68
WEBS 3-38=-30/146, 3-37=-397/169, 5-37=-38/425, 5-35=-1080/279, 6-35=0/2205, 8-24=-654/303, 22-24=0/4841, 8-22=-245/494, 10-22=-36/1248, 10-21=0/506, 10-20=-239/1288, 12-20=-13/647, 14-18=-501/200, 7-26=-83/542, 24-26=-104/469, 34-35=-1014/159, 7-34=-965/184, 32-33=-66/14, 29-30=-68/25, 25-27=-56/10, 31-32=-781/0, 29-31=0/586, 28-29=0/562, 25-28=-780/0, 14-16=-24/163, 18-20=-44/4704

- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 200.0lb AC unit load placed on the bottom chord, 26-6-14 from left end, supported at two points, 5-0-0 apart.

REACTIONS (size) 2=0-3-8, 15= Mechanical
Max Horiz 2=185 (LC 14)
Max Uplift 2=-95 (LC 14), 15=-131 (LC 15)
Max Grav 2=3237 (LC 3), 15=3061 (LC 3)
FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/23, 2-3=-6645/179, 3-5=-6242/197, 5-6=-5654/174, 6-7=-4935/195, 7-9=-5619/285, 9-10=-5625/285, 10-11=-6184/393, 11-12=-6182/341, 12-14=-5933/308, 14-15=-6371/304

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 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



May 21,2025

Continued on page 2

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

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

ENGINEERING BY
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A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	16 Eagle Creek - Kathryn A - Roof
16 Eagle Creek	A4	Piggyback Base	4	1	Job Reference (optional)

I73603970

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Mon May 19 14:45:55

Page: 2

ID:keoq3EyPU0CWuA6V1RWfuzEyO?-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcD0i7J4zJC?f

- 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 11) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 12) Refer to girder(s) for truss to truss connections.
- 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 131 lb uplift at joint 15.
- 14) 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.
- 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



May 21, 2025

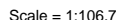
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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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Carter Components (Sanford, NC), Sanford, NC - 27332, Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Mon May 19 14:45:56 Page: 1
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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.

WARNING – Verify design parameters and READ NOTES ON THIS AND INCLUDED MITTEL REFERENCE PAGE MIT-TR-17-0169, 1/12/2023 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/TP1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Components Association (www.sbcacomponents.com)

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	16 Eagle Creek - Kathryn A - Roof
16 Eagle Creek	A5	Piggyback Base Supported Gable	1	1	Job Reference (optional)

I73603971

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Mon May 19 14:45:56

Page: 2

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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**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BC DL=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
- 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); 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 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.



May 21, 2025

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

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 Edenton, NC 27932

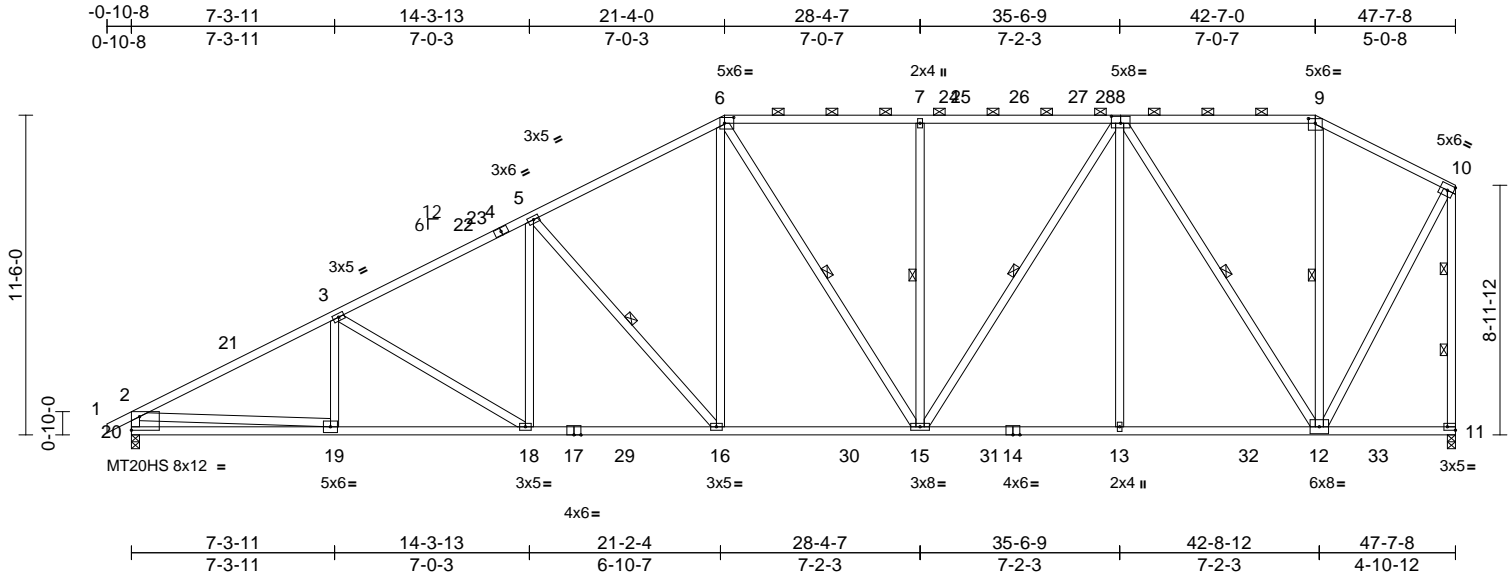
Job	Truss	Truss Type	Qty	Ply	16 Eagle Creek - Kathryn A - Roof	173603972
16 Eagle Creek	A6	Piggyback Base	2	1	Job Reference (optional)	

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Mon May 19 14:45:56

Page: 1

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Scale = 1:82.9									
Plate Offsets (X, Y): [6:0-4-0,0-2-8], [8:0-4-0,0-3-0], [9:0-3-0,0-2-0], [11:Edge,0-1-8], [20: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	0.99	Vert(LL)	-0.20 15-16	>999	240
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.41	Vert(CT)	-0.35 16-18	>999	180
TCDL	10.0	Rep Stress Incr	YES	WB	0.82	Horz(CT)	0.10 11	n/a	n/a
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH					
BCDL	10.0								
						PLATES		GRIP	
						MT20		244/190	
						MT20HS		187/143	
						Weight: 352 lb FT = 20%			

LUMBER
TOP CHORD 2x4 SP 2400F 2.0E
BOT CHORD 2x4 SP 2400F 2.0E
WEBS 2x4 SP No.2 *Except*
3-19,18-3,5-18,16-5,12-10:2x4 SP No.3,
15-6,15-8,12-8:2x4 SP 2400F 2.0E,
11-10:2x4 SP No.1

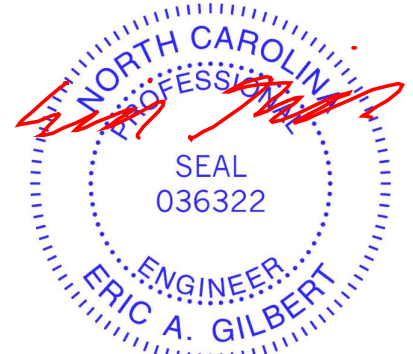
BRACING
TOP CHORD Structural wood sheathing directly applied or
3-11-6 oc purlins, except end verticals, and
2-0-0 oc purlins (4-8-9 max.): 6-9.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc
bracing.
WEBS 1 Row at midpt 5-16, 6-15, 7-15, 8-15,
8-12, 9-12
WEBS 2 Rows at 1/3 pts 10-11

REACTIONS
(size) 11=0-3-8, 20=0-3-8
Max Horiz 20=363 (LC 11)
Max Uplift 11=150 (LC 15), 20=257 (LC 14)
Max Grav 11=2252 (LC 46), 20=2190 (LC 5)

FORCES
(lb) - Maximum Compression/Maximum
Tension
TOP CHORD 1-2=0/27, 2-3=-4009/414, 3-5=-3596/420,
5-6=-2966/401, 6-7=-2594/393,
7-9=-2594/393, 9-10=-1082/283,
2-20=-2258/294, 10-11=-2423/255
BOT CHORD 19-20=-374/1032, 18-19=-470/3737,
16-18=-346/3344, 15-16=-305/2715,
13-15=-267/2212, 12-13=-268/2211,
11-12=-110/154
WEBS 3-19=-54/150, 3-18=-458/145, 5-18=0/516,
5-16=-1037/229, 6-16=-86/1083,
6-15=-352/174, 7-15=-598/188,
8-15=-191/995, 8-13=0/427, 8-12=-2053/214,
9-12=-88/226, 10-12=-181/2140,
2-19=-137/2718

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 3-10-10, Interior (1) 3-10-10 to 14-3-13, Exterior(2R) 14-3-13 to 28-4-7, Interior (1) 28-4-7 to 35-7-0, Exterior(2R) 35-7-0 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
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 6) Provide adequate drainage to prevent water ponding.
- 7) All plates are MT20 plates unless otherwise indicated.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 10) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 20 and 11. This connection is for uplift only and does not consider lateral forces.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



May 21,2025

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/TPH 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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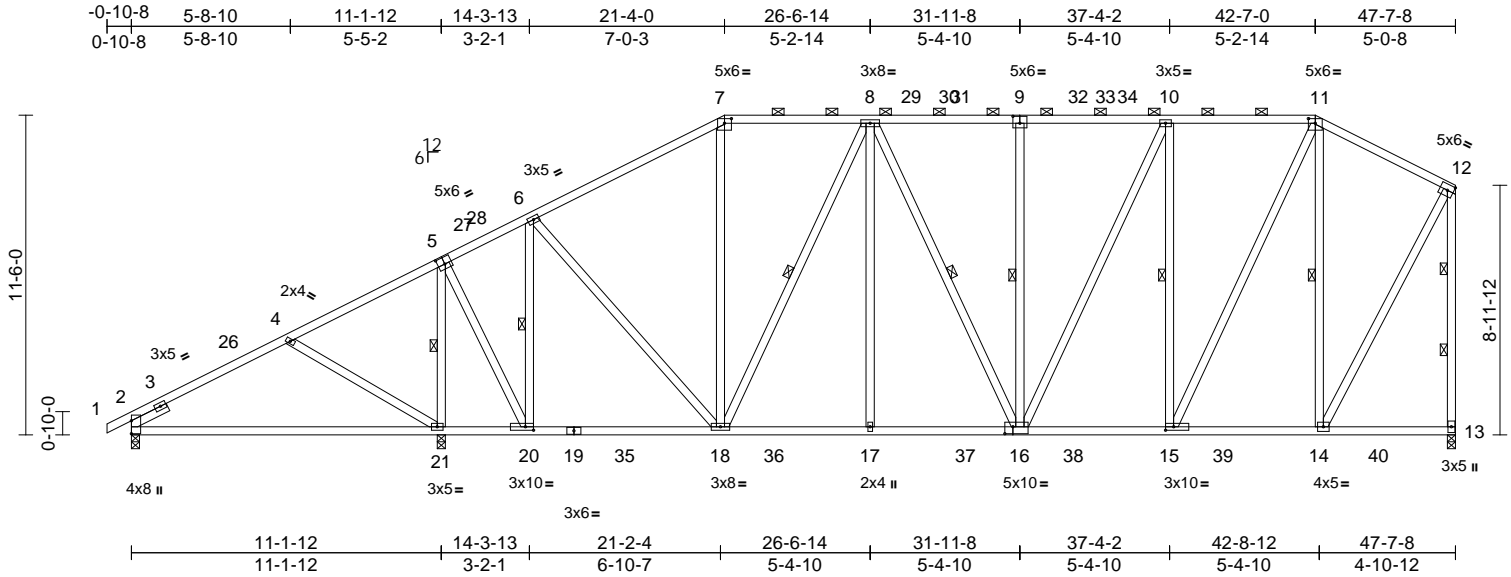
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	16 Eagle Creek - Kathryn A - Roof	I73603973
16 Eagle Creek	A7	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. Mon May 19 14:45:57
ID:Dejw6dNGfghSQi1j3VoEUzEwVO-RfC?PsB70Hq3NSgPqnL8w3uITxbGKWrCDoi7J4zJC?f

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], [15:0-3-8,0-1-8], [16:0-3-8,0-3-0], [20:0-3-8,0-1-8]

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	0.96	Vert(LL)	-0.19	21-24	>689	240	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.39	Vert(CT)	-0.39	21-24	>347	180	
TCDL	10.0	Rep Stress Incr	YES	WB	0.70	Horz(CT)	0.04	13	n/a	n/a	
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH							
BCDL	10.0										
Weight: 383 lb FT = 20%											

LUMBER
TOP CHORD 2x4 SP 2400F 2.0E
BOT CHORD 2x4 SP 2400F 2.0E
WEBS 2x4 SP No.2 *Except*
4-21,5-21,5-20,6-20,18-6,14-12:2x4 SP No.3
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 5-21, 6-20, 8-18, 8-16, 9-16, 11-14, 10-15
WEBS 2 Rows at 1/3 pts 12-13

REACTIONS (size) 2=0-3-8, 13=0-3-8, 21=0-3-8
Max Horiz 2=357 (LC 13)
Max Uplift 2=-11 (LC 14), 13=-134 (LC 15), 21=-319 (LC 14)
Max Grav 2=584 (LC 37), 13=1804 (LC 46), 21=2121 (LC 5)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/23, 2-4=-961/47, 4-6=-870/135, 6-7=-1524/255, 7-8=-1334/269, 8-10=-1649/296, 10-11=-1365/287, 11-12=-833/258, 12-13=-1902/204
BOT CHORD 2-21=-381/707, 20-21=-81/324, 18-20=-152/957, 17-18=-239/1796, 15-17=-239/1796, 14-15=-136/898, 13-14=-110/154

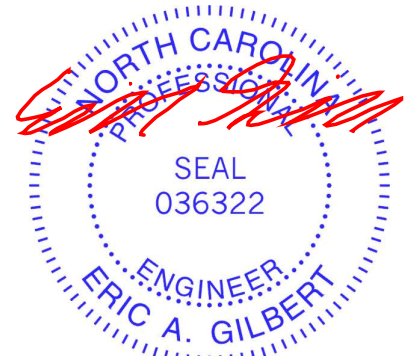
WEBS 4-21=-466/205, 5-21=-1803/315, 5-20=-174/1420, 6-20=-1149/193, 6-18=-86/827, 7-18=0/344, 8-18=-750/156, 8-17=0/291, 8-16=-110/85, 9-16=-353/129, 11-14=-1239/208, 12-14=-142/1664, 11-15=-163/1426, 10-15=-1049/208, 10-16=-98/657

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.
- 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, 21, 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



May 21, 2025

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

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TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

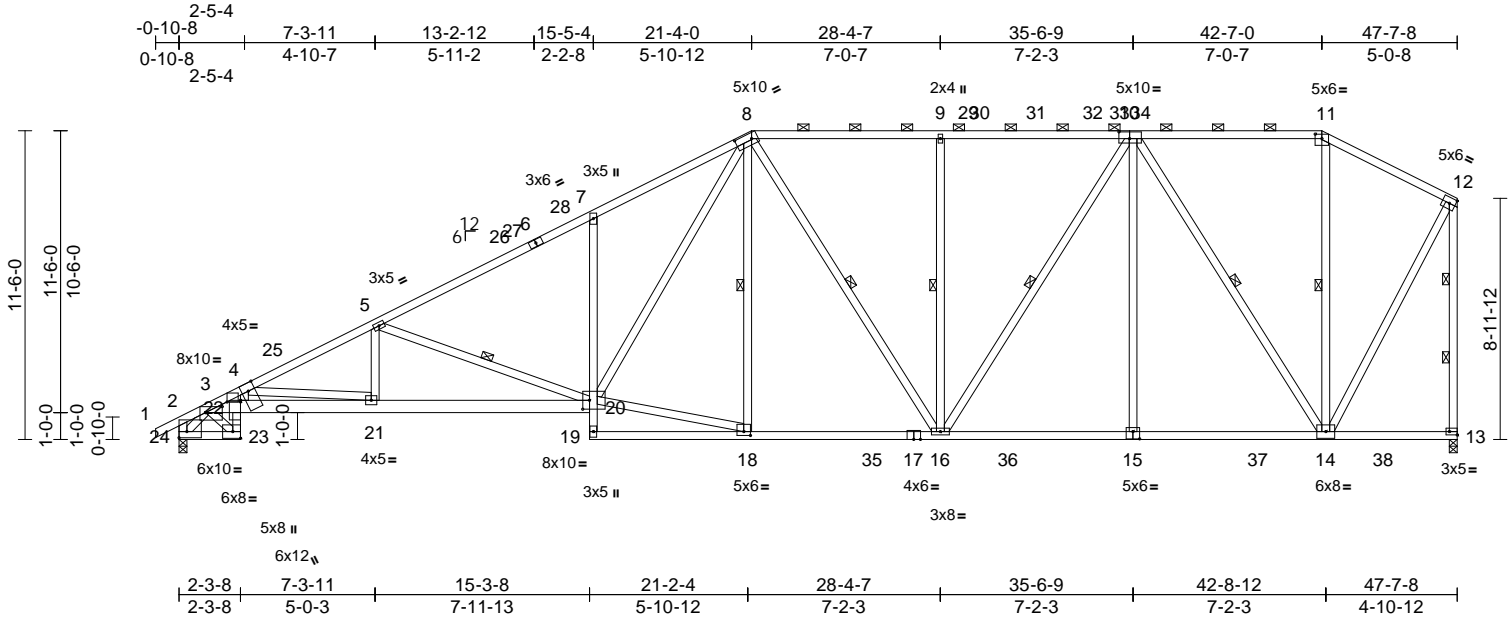
Job	Truss	Truss Type	Qty	Ply	16 Eagle Creek - Kathryn A - Roof	173603974
16 Eagle Creek	A8	Piggyback Base	5	1	Job Reference (optional)	

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

Run: 8.73 E Nov 16 2023 Print: 8.730 E Nov 16 2023 MiTek Industries, Inc. Tue May 20 17:36:02

Page: 1

ID:3ffugpgWeyhj5JwXCqCAfzEwLz-4nwI8bY8uuBmG5144LpGHRm70PXg?bzmSITiVzEIfJ



Scale = 1:85.8

[2:Edge,0-2-12], [3:0-7-8,0-2-11], [3:0-9-10,0-4-12], [8:0-7-4,0-2-8], [10:0-4-12,0-3-0], [11:0-3-0,0-2-0], [13:Edge,0-1-8], [15:0-3-0,0-3-4], [18:0-3-0,0-1-12],

Plate Offsets (X, Y): [20:0-3-0,0-4-0], [22:0-0-12,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	0.97	Vert(LL)	-0.26	20-21	>999	240	MT20
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.89	Vert(CT)	-0.47	20-21	>999	180	244/190
TCDL	10.0	Rep Stress Incr	YES	WB	0.90	Horz(CT)	0.26	13	n/a	n/a	
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH							
BCDL	10.0										
Weight: 377 lb FT = 20%											

LUMBER
TOP CHORD 2x4 SP 2400F 2.0E
BOT CHORD 2x4 SP 2400F 2.0E *Except* 24-23,23-22:2x4
SP No.2, 3-20:2x6 SP 2400F 2.0E, 7-19:2x4
SP No.3
WEBS 2x4 SP No.3 *Except*
20-8,18-8,9-16,10-15,14-11,24-2:2x4 SP
No.2, 16-8,16-10,14-10:2x4 SP 2400F 2.0E,
13-12:2x4 SP No.1

BRACING
TOP CHORD Structural wood sheathing directly applied or
2-10-9 oc purlins, except end verticals, and
2-0-0 oc purlins (4-8-8 max.): 8-11.
BOT CHORD Rigid ceiling directly applied or 9-9-0 oc
bracing.

WEBS 1 Row at midpt 5-20, 8-18, 8-16, 9-16,
10-16, 10-14, 11-14
WEBS 2 Rows at 1/3 pts 12-13

REACTIONS (size) 13=0-3-8, 24=0-3-8
Max Horiz 24=363 (LC 11)
Max Uplift 13=150 (LC 15), 24=258 (LC 14)
Max Grav 13=2235 (LC 46), 24=2164 (LC 5)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250
(lb) or less except when shown.

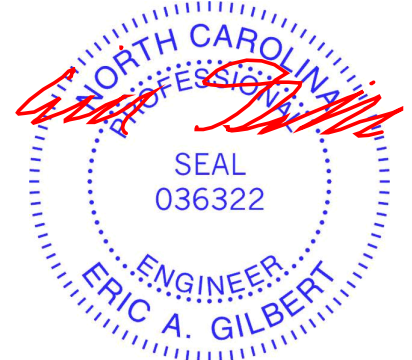
TOP CHORD 2-3=-597/79, 3-4=-7260/924,
4-25=-5401/594, 5-25=-5379/612,
5-26=-3958/446, 26-27=-3846/452,
6-27=-3835/454, 6-28=-3796/464,
7-28=-3778/468, 7-8=-3967/610,
8-9=-2564/391, 9-29=-2564/391,
29-30=-2564/391, 30-31=-2564/391,
31-32=-2564/391, 32-33=-2564/391,
10-33=-2564/391, 10-34=-964/276,
11-34=-964/276, 11-12=-1074/282,
2-24=-705/120, 12-13=-2406/253

BOT CHORD 23-24=-370/2234, 22-23=-437/2697,
3-22=-911/6288, 21-22=-949/6511,
20-21=-644/5054, 7-20=-638/255,
18-35=-305/2672, 17-35=-305/2672,
16-17=-305/2672, 16-36=-270/2210,
15-36=-270/2210, 15-37=-269/2214,
14-37=-269/2214
WEBS 4-21=-1470/308, 5-21=0/732,
5-20=-1503/287, 18-20=-270/2514,
8-20=-359/2032, 8-16=-325/195,
9-16=-589/185, 10-16=-189/961,
10-15=0/426, 10-14=-2037/213,
12-14=-181/2126, 3-23=-3083/517,
3-24=-2314/220, 4-22=-163/973

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 258 lb uplift at joint 24.
- Graphical purlin representation does not depict the size
or the orientation of the purlin along the top and/or
bottom chord.



May 21,2025

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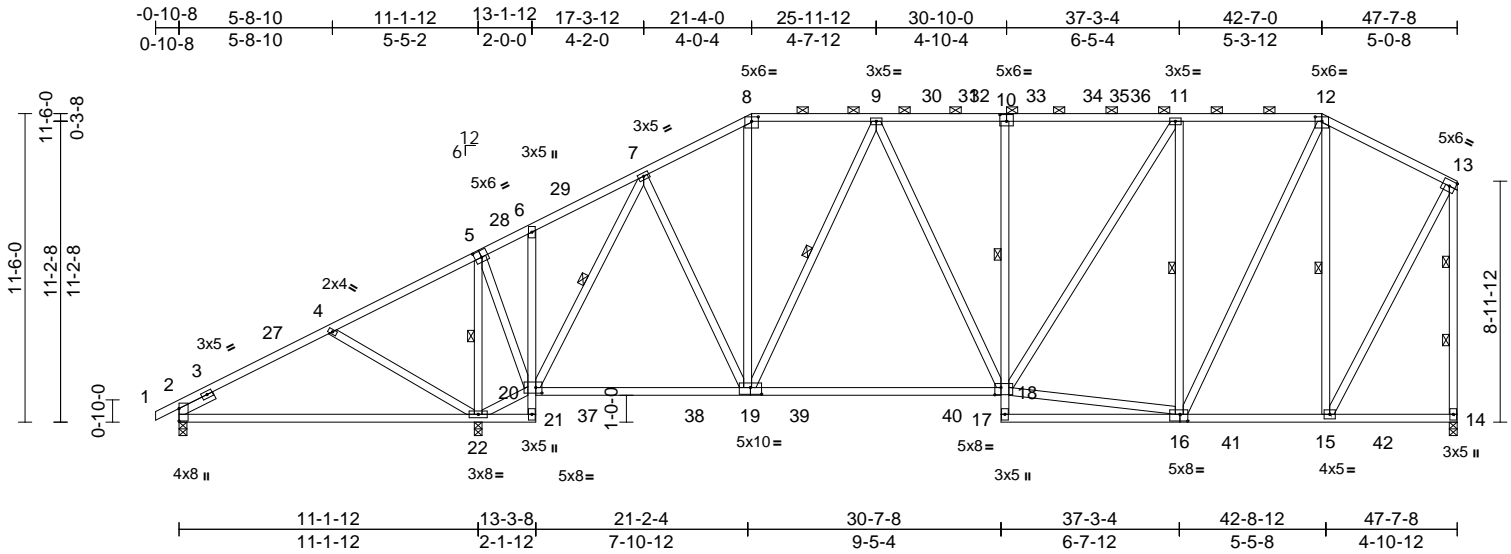
Job	Truss	Truss Type	Qty	Ply	16 Eagle Creek - Kathryn A - Roof	173603975
16 Eagle Creek	A9	Piggyback Base	6	1	Job Reference (optional)	

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Mon May 19 14:45:57

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Scale = 1:85.8

Plate Offsets (X, Y): [5:0-3-0,0-3-0], [8:0-3-0,0-2-0], [10:0-3-0,0-3-0], [12:0-3-0,0-2-0], [16:0-3-8,0-3-0], [18:0-2-12,0-3-4], [19:0-5-0,0-3-0], [20:0-2-12,0-2-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.90	Vert(LL)	-0.27	18-19	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.54	Vert(CT)	-0.46	18-19	>952	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.68	Horz(CT)	0.07	14	n/a	n/a		
BCLL	0.0 *	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 383 lb	FT = 20%

LUMBER			WEBS		
TOP CHORD	2x4 SP 2400F 2.0E		5-22=-1902/302, 20-22=-154/289,		
BOT CHORD	2x4 SP 2400F 2.0E *Except* 21-6:2x4 SP No.3, 10-17:2x4 SP No.2		5-20=-191/1489, 7-20=-1436/156,		
WEBS	2x4 SP No.3 *Except*		7-19=-64/697, 8-19=-17/428, 9-19=-691/188,		
	19-9,18-9,11-18,16-11,16-12,15-12,14-13:2x4 SP No.2		9-18=-54/259, 16-18=-174/1471,		
SLIDER	Left 2x4 SP No.2 -- 1-6-0		11-18=-102/818, 11-16=-1195/245,		
BRACING			12-16=-157/1340, 12-15=-1171/200,		
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.): 8-12.		13-15=-138/1582, 4-22=-487/204		
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 21-22,16-17.				
1 Row at midpt	10-18				
WEBS	1 Row at midpt	5-22, 7-20, 9-19, 11-16, 12-15			
WEBS	2 Rows at 1/3 pts	13-14			
REACTIONS	(size) 2=0-3-8, 14=0-3-8, 22=0-3-8				
	Max Horiz 2=357 (LC 13)				
	Max Uplift 14=-132 (LC 15), 22=-340 (LC 14)				
	Max Grav 2=468 (LC 53), 14=1722 (LC 46), 22=2288 (LC 5)				
FORCES	(lb) - Maximum Compression/Maximum Tension				
TOP CHORD	1-2=-92/23, 2-4=-920/26, 4-6=-474/286, 6-7=-514/109, 7-8=-1537/244, 8-9=-1359/240, 9-11=-1738/283, 11-12=-1293/283, 12-13=-790/257, 13-14=-1811/202				
BOT CHORD	2-22=-416/444, 21-22=-135/0, 20-21=-198/0, 6-20=-226/69, 18-20=-257/1776, 17-18=0/121, 10-18=-396/141, 15-17=-134/858, 14-15=-110/154				

5-22=-1902/302, 20-22=-154/289, 5-20=-191/1489, 7-20=-1436/156, 7-19=-64/697, 8-19=-17/428, 9-19=-691/188, 9-18=-54/259, 16-18=-174/1471, 11-18=-102/818, 11-16=-1195/245, 12-16=-157/1340, 12-15=-1171/200, 13-15=-138/1582, 4-22=-487/204

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 28-0-13, 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 3x5 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.

- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 22 and 14. 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



May 21,2025

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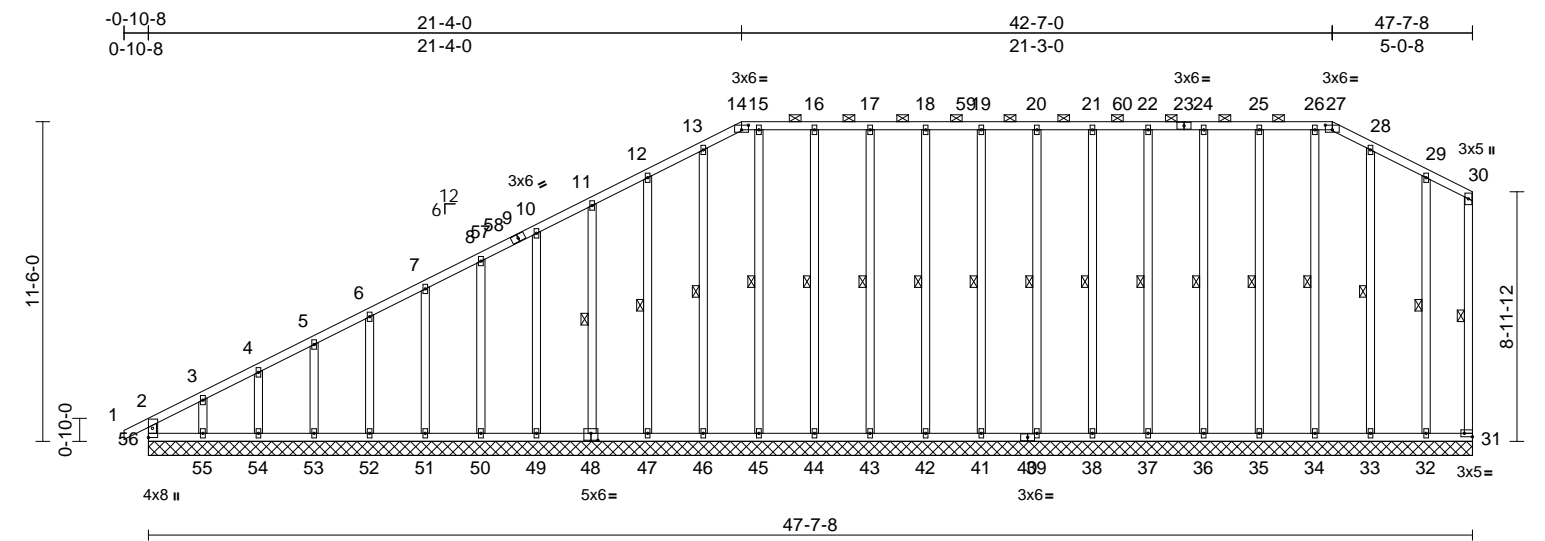
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	16 Eagle Creek - Kathryn A - Roof	I73603976
16 Eagle Creek	A10	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. Mon May 19 14:45:58
ID:ITEzaUufmX1fluIdiVr6nzEwIK-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWRCDoi7J4zJC?i

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
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	n/a	-	n/a	999	244/190
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 containing the text "NORTH CAROLINA" at the top and "PROFESSIONAL ENGINEER" at the bottom. In the center, there is a red signature and the word "SEAL" in blue capital letters.



May 21,2025

Job	Truss	Truss Type	Qty	Ply	16 Eagle Creek - Kathryn A - Roof
16 Eagle Creek	A10	Piggyback Base Supported Gable	1	1	Job Reference (optional)

I73603976

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Mon May 19 14:45:58

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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,
37-38=-113/185, 36-37=-113/185,
35-36=-113/185, 34-35=-113/185,
33-34=-113/185, 32-33=-113/185,
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



May 21, 2025

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ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

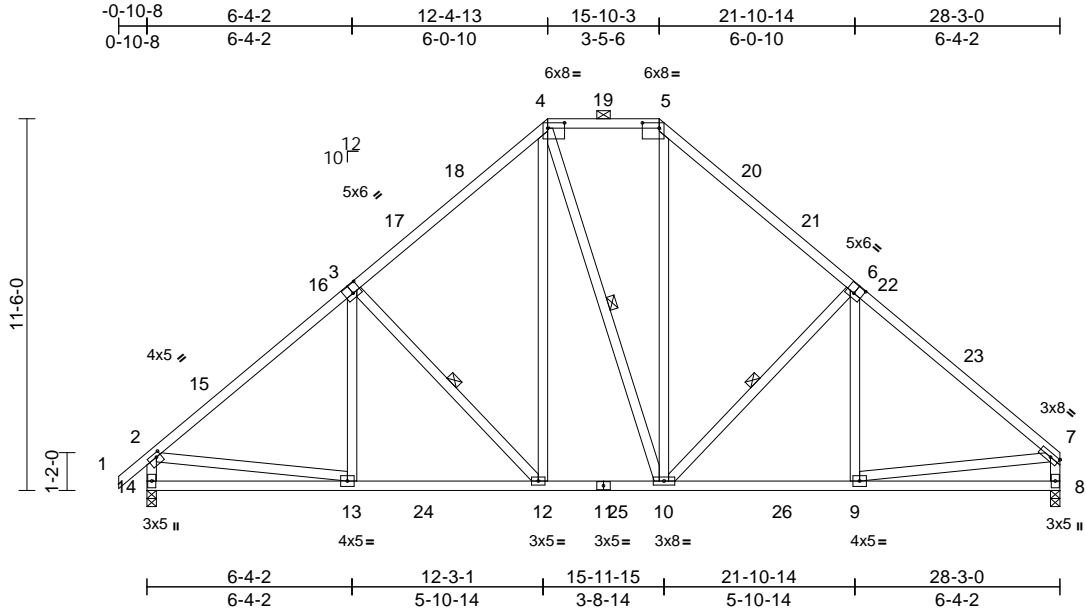
Job	Truss	Truss Type	Qty	Ply	16 Eagle Creek - Kathryn A - Roof	173603977
16 Eagle Creek	B1	Piggyback Base	1	1	Job Reference (optional)	

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Mon May 19 14:45:58

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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

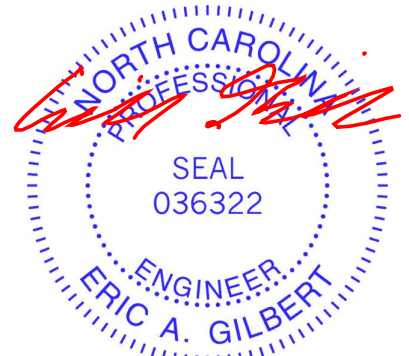
(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/39, 2-4=-1810/223, 4-5=-1040/232, 5-7=-1803/225, 2-14=-1478/142, 7-8=-1431/119
BOT CHORD 13-14=-295/412, 12-13=-138/1343, 10-12=-35/966, 9-10=-7/1321, 8-9=-59/188
WEBS 3-13=-23/205, 3-12=-526/215, 4-12=-98/563, 4-10=-169/174, 5-10=-86/554, 6-10=-532/217,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

NOTES

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

- 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
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 14 and 8. 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



May 21, 2025

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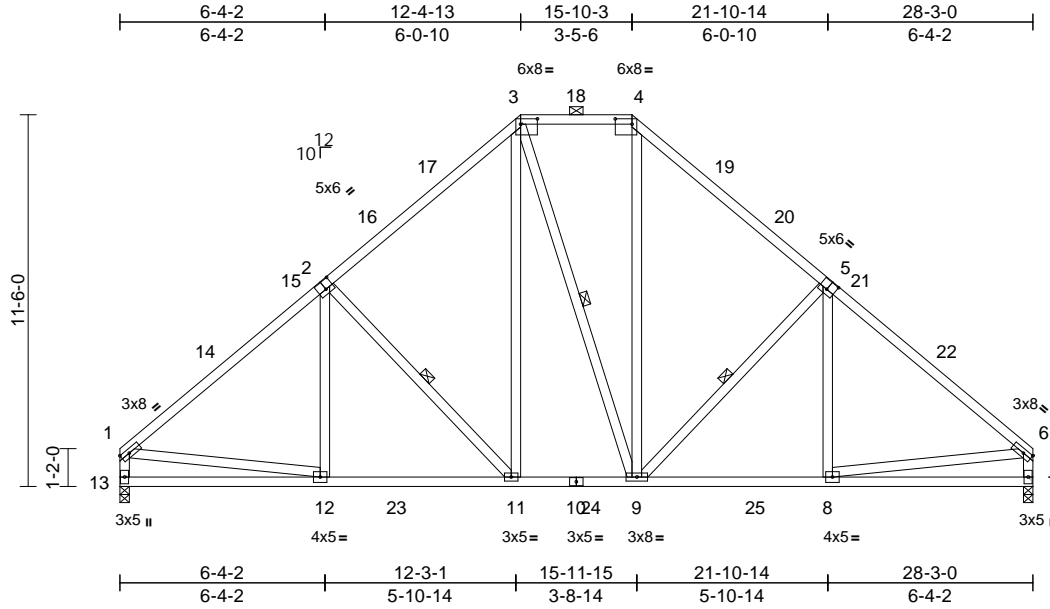
Job	Truss	Truss Type	Qty	Ply	16 Eagle Creek - Kathryn A - Roof	173603978
16 Eagle Creek	B2	Piggyback Base	9	1	Job Reference (optional)	

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Mon May 19 14:45:58

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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

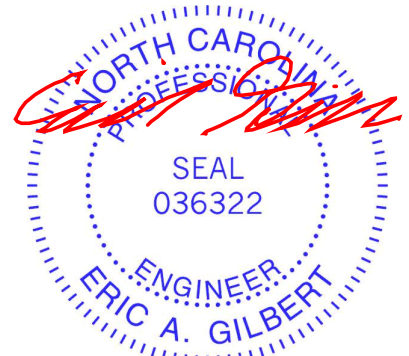
TOP CHORD 1-3=-1810/226, 3-4=-1041/233,
4-6=-1804/226, 1-13=-1433/120,
6-7=-1432/119
BOT CHORD 12-13=-270/363, 11-12=-140/1349,
9-11=-35/967, 8-9=-6/1322, 7-8=-59/188
WEBS 2-12=-28/202, 2-11=-534/217, 3-11=-100/568,
3-9=-169/174, 4-9=-85/553, 5-9=-532/217,
5-8=-30/201, 1-12=-9/1142, 6-8=0/1158

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



May 21, 2025

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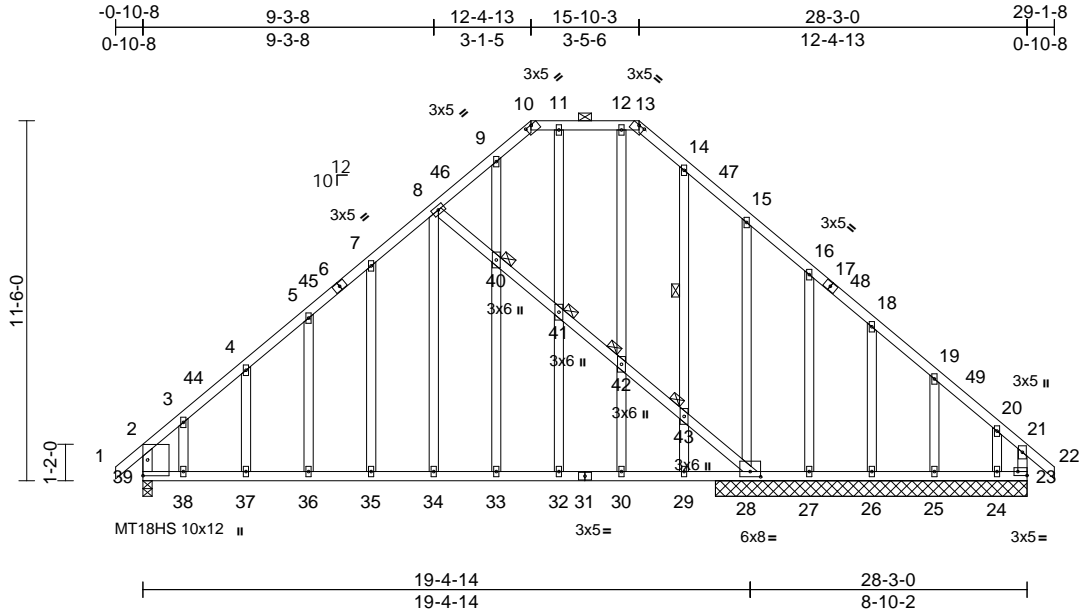
Job	Truss	Truss Type	Qty	Ply	16 Eagle Creek - Kathryn A - Roof	173603979
16 Eagle Creek	B3	Piggyback Base Supported Gable	1	1	Job Reference (optional)	

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Mon May 19 14:45:58

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

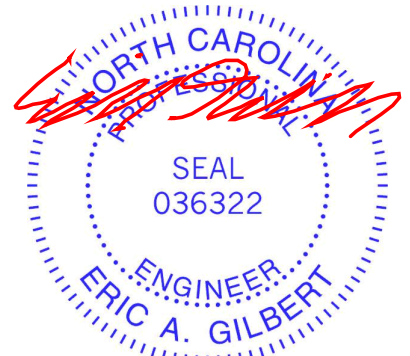
(lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-39=-851/25, 1-2=0/39, 2-3=-1003/0, 3-4=-942/0, 4-5=-892/21, 5-7=-859/79, 7-8=-817/129, 8-9=-454/68, 9-10=-353/74, 10-11=-289/71, 11-12=-289/71, 12-13=-289/71, 13-14=-397/66, 14-15=-463/39, 15-16=-381/29, 16-18=-420/20, 18-19=-415/33, 19-20=-441/62,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



May 21, 2025

Continued on page 2

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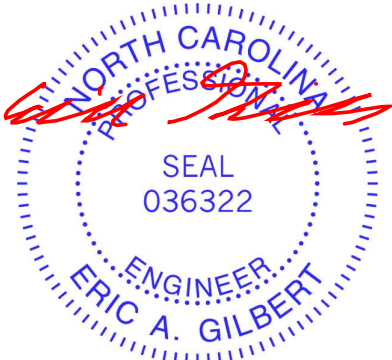
Job	Truss	Truss Type	Qty	Ply	16 Eagle Creek - Kathryn A - Roof
16 Eagle Creek	B3	Piggyback Base Supported Gable	1	1	Job Reference (optional)

I73603979

14) N/A

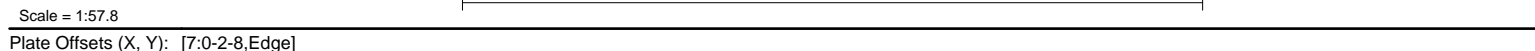
15) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



May 21,2025

Carter Components (Sanford, NC), Sanford, NC - 27332, Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Mon May 19 14:45:59 Page: 1
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LUMBER		WEBS	6-20=260/44, 5-21=151/155, 4-22=154/99,	12) * This truss has been designed for a live load of 20.0psf
TOP CHORD	2x4 SP No.2		3-23=138/195, 8-18=260/40,	on the bottom chord in all areas where a rectangle
BOT CHORD	2x4 SP No.2		9-17=151/155, 10-16=156/97,	3-06-00 tall by 2-00-00 wide will fit between the bottom
WEBS	2x4 SP No.3		11-15=121/212	chord and any other members, with BCDL = 10.0psf.
OTHERS	2x4 SP No.3	NOTES		13) Provide mechanical connection (by others) of truss to

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
Max Horiz		24=232 (LC 13)
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)
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)

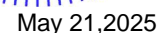
WEBS 6-20=-260/44, 5-21=-151/155, 4-22=-154/99,
3-23=-138/195, 8-18=-260/40,
9-17=-151/155, 10-16=-156/97,
11-15=-121/212

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 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
- 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) All plates are 2x4 MT20 unless otherwise indicated.
- 8) Gable requires continuous bottom chord bearing.
- 9) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 10) Gable studs spaced at 2'-0" oc.
- 11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- 12) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 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.

LOAD CASE(S) Standard

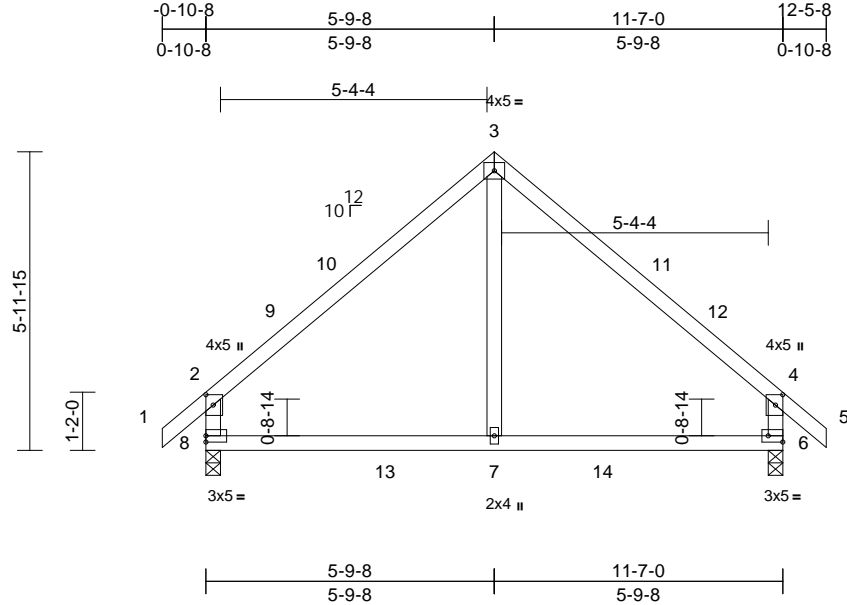


Job	Truss	Truss Type	Qty	Ply	16 Eagle Creek - Kathryn A - Roof	I73603981
16 Eagle Creek	D1	Common	1	1	Job Reference (optional)	

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Mon May 19 14:45:59
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Page: 1



Scale = 1:46.3

Plate Offsets (X, Y): [2:0-2-8,0-1-12], [4:0-2-8,0-1-12], [6: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	0.64	Vert(LL)	-0.04	7-8	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.36	Vert(CT)	-0.07	7-8	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.01	6	n/a	n/a		
BCLL	0.0 *	Code	IRC2021/TPI2014	Matrix-MR								
BCDL	10.0											
											Weight: 54 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2 *Except* 7-3:2x4 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) 6=0-3-8, 8=0-3-8
Max Horiz 8=163 (LC 13)
Max Uplift 6=49 (LC 15), 8=49 (LC 14)
Max Grav 6=632 (LC 6), 8=632 (LC 5)

FORCES

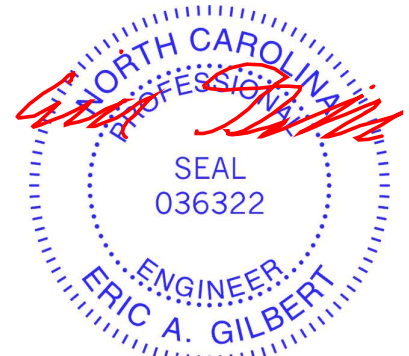
(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/39, 2-3=-572/141, 3-4=-573/140,
4-5=0/39, 2-8=-551/199, 4-6=-553/196
BOT CHORD 7-8=-2/347, 6-7=-2/347
WEBS 3-7=0/302

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-10-8 to 2-1-8, Interior (1) 2-1-8 to 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
- 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) 8 and 6. This connection is for uplift only and does not consider lateral forces.

LOAD CASE(S) Standard



May 21, 2025

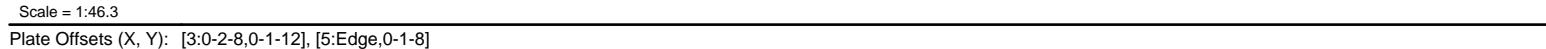
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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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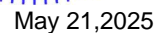
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Carter Components (Sanford, NC), Sanford, NC - 27332, Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Mon May 19 14:45:59 Page: 1
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LUMBER		5) This truss has been designed 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.
TOP CHORD	2x4 SP No.2	
BOT CHORD	2x4 SP No.2	
WEBS	2x4 SP No.2 *Except* 6-2:2x4 SP No.3	6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
BRACING		7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
TOP CHORD	Structural wood sheathing directly applied or 5-7-1 oc purlins, except end verticals.	8) 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.
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		LOAD CASE(S) Standard
	(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
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust)
 Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-1-12 to 3-1-12, 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
 - 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.

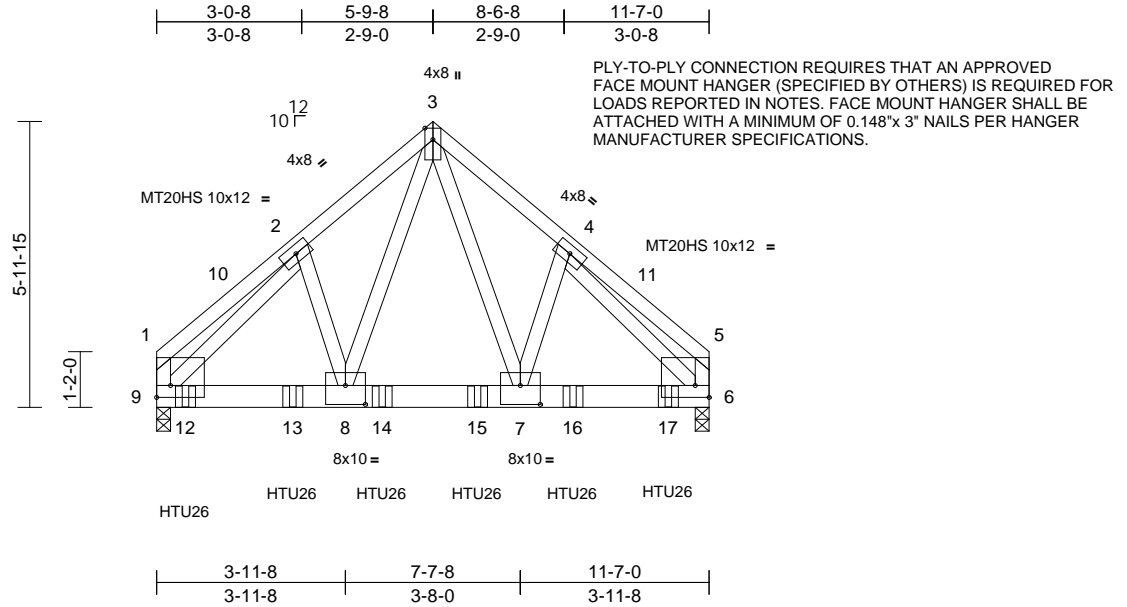


Job	Truss	Truss Type	Qty	Ply	16 Eagle Creek - Kathryn A - Roof	173603983
16 Eagle Creek	D3	Common Girder	1	3	Job Reference (optional)	

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Mon May 19 14:45:59
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Scale = 1:48.3

Plate Offsets (X, Y): [1:Edge,0-3-0], [5:Edge,0-3-0], [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	0.39	Vert(CT)	-0.07	7-8	>999	180	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	NO	WB	0.72	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 35)
Max Uplift 6=-452 (LC 13), 9=-460 (LC 12)
Max Grav 6=9519 (LC 6), 9=9725 (LC 5)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-1830/136, 2-3=-7848/464,
3-4=-7907/467, 4-5=-1953/142,
1-9=-1318/112, 5-6=-1398/116

BOT CHORD 8-9=-301/5640, 7-8=-208/4447,
6-7=-255/5689

WEBS 3-7=-317/5209, 4-7=-100/1308,
3-8=-310/5063, 2-8=-101/1318,
2-9=-6647/309, 4-6=-6578/305

NOTES

- N/A
- 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.

- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- 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.
- 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.
- 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.
- Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

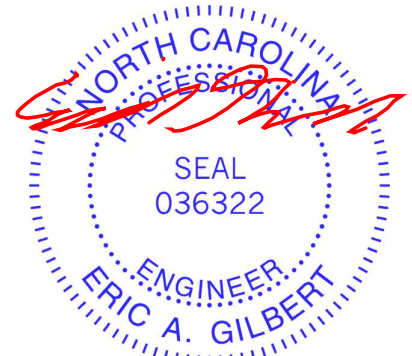
- Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (lb/ft)

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

Concentrated Loads (lb)

Vert: 12=-2708 (B), 13=-2701 (B), 14=-2701 (B), 15=-2701 (B), 16=-2701 (B), 17=-2705 (B)



May 21, 2025

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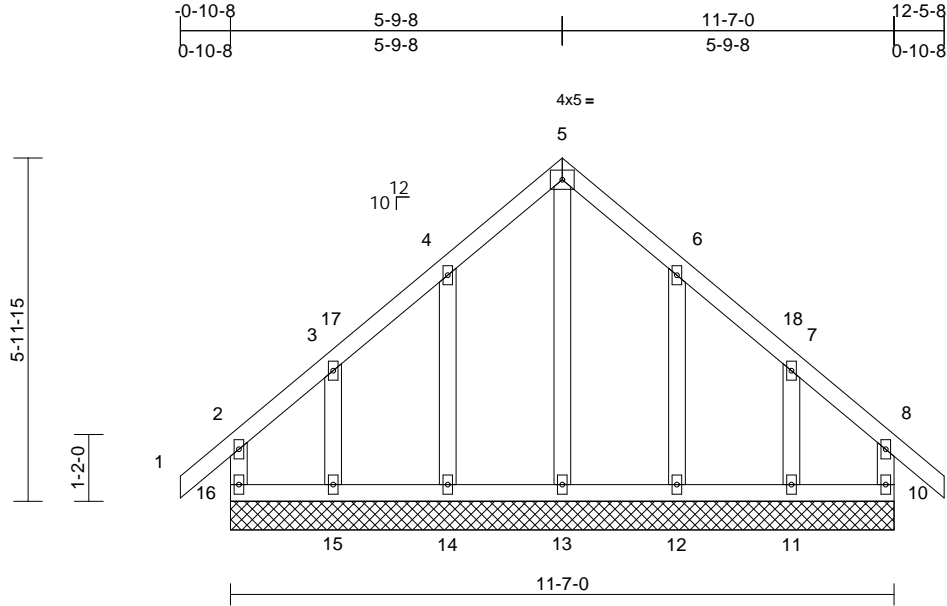
Job	Truss	Truss Type	Qty	Ply	16 Eagle Creek - Kathryn A - Roof	173603984
16 Eagle Creek	D4	Common Supported Gable	1	1	Job Reference (optional)	

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Mon May 19 14:46:00

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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.

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 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



May 21, 2025

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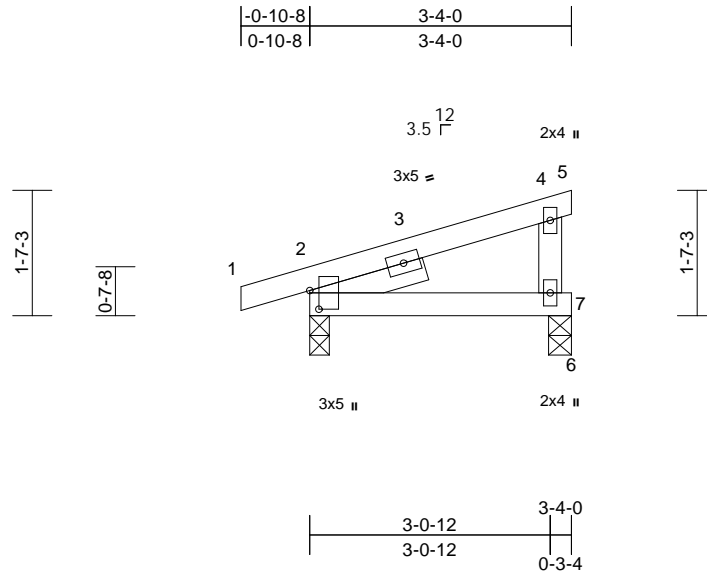
Job	Truss	Truss Type	Qty	Ply	16 Eagle Creek - Kathryn A - Roof
16 Eagle Creek	E1	Monopitch	2	1	Job Reference (optional)
					I73603985

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Mon May 19 14:46:00

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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

- Wind: ASCE 7-16; Vult=130mph (3-second gust)
 Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 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



May 21, 2025

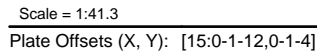
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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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. Mon May 19 14:46:00 Page: 1
ID:n7MOvDHFzRY3JmееamW89dzEwfq-RfC?PsB70Hg3NSgPqnL8w3ulTXbGKWRCdoi7J4zJC?f



LUMBER		WEBS	7-19=106/10, 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	12) N/A
TOP CHORD	2x4 SP No.2			
BOT CHORD	2x4 SP No.2			
OTHERS	2x4 SP No.3			
BRACING		NOTES		
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.	1) Unbalanced roof live loads have been considered for this design.		
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.	2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-4-3 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		
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		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.		
TOP CHORD	(lb) - Maximum Compression/Maximum Tension	4) TC LL: 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		
	1-2=50/17, 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, 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	5) Unbalanced snow loads have been considered for this design.		
BOT CHORD		6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.		
		7) All plates are 2x4 MT20 unless otherwise indicated.		
		8) Gable requires continuous bottom chord bearing.		
		9) Gable studs spaced at 2-0-0 oc.		
		10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.		
		11) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom		
		13) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.		
		LOAD CASE(S) Standard		

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

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Edenton, NC 27932

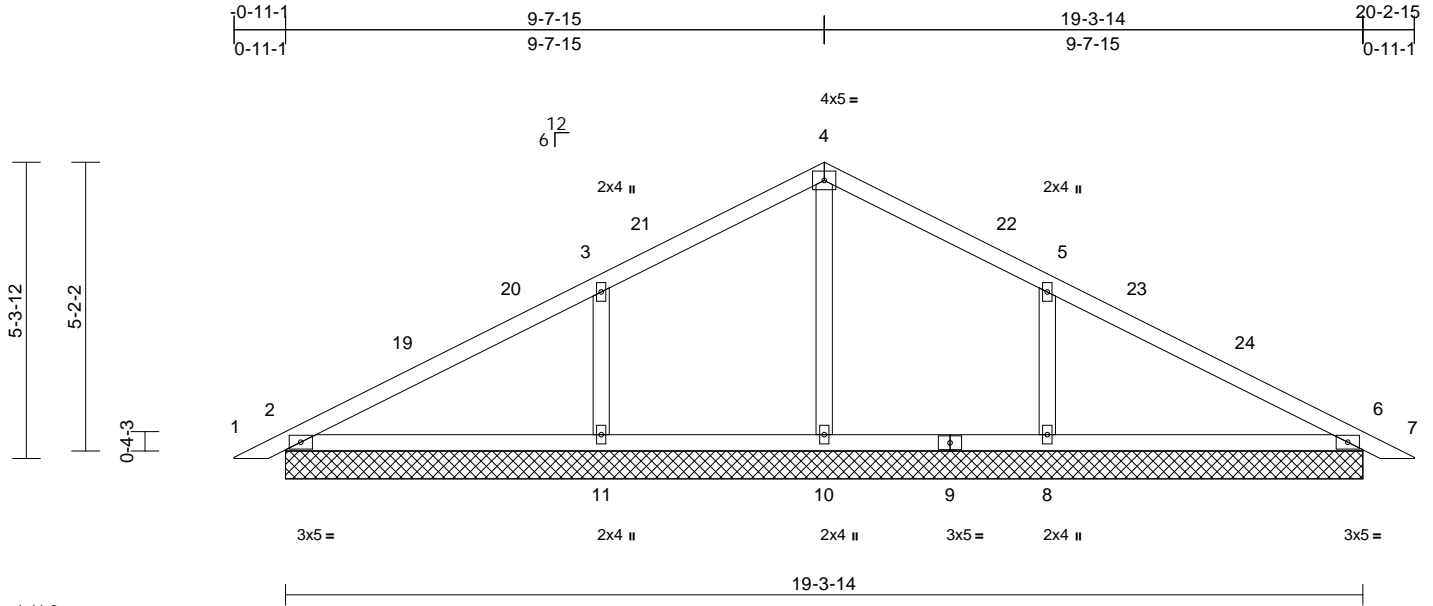
Job	Truss	Truss Type	Qty	Ply	16 Eagle Creek - Kathryn A - Roof	173603987
16 Eagle Creek	PB2	Piggyback	22	1	Job Reference (optional)	

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Mon May 19 14:46:00

Page: 1

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Scale = 1:41.3												
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.43	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

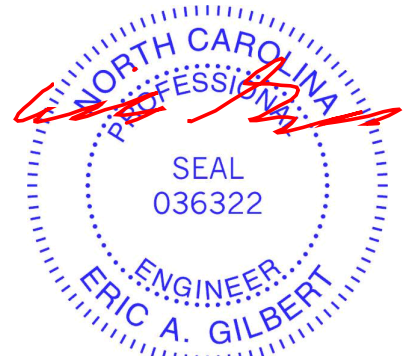
NOTES

- 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



May 21, 2025

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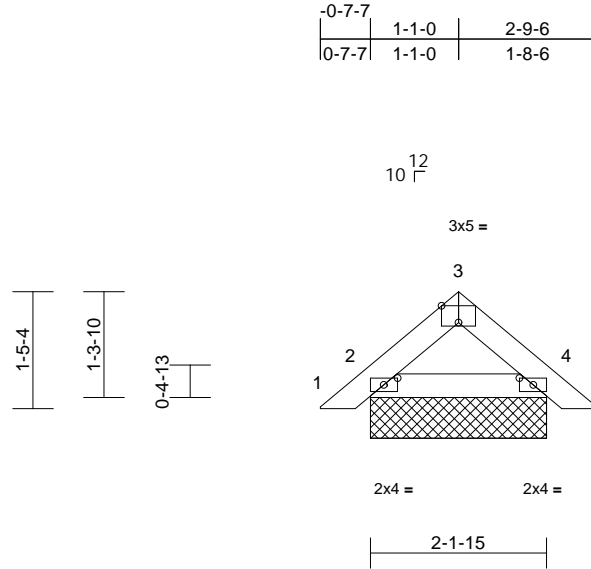
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	16 Eagle Creek - Kathryn A - Roof	I73603988
16 Eagle Creek	PB3	Piggyback	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. Mon May 19 14:46:00
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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	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

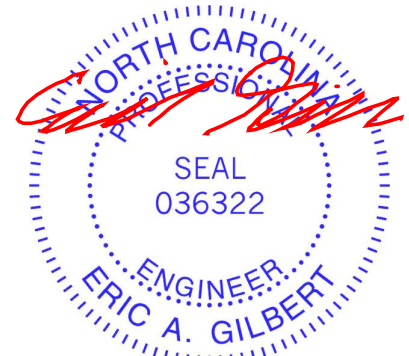
NOTES

- 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



May 21, 2025

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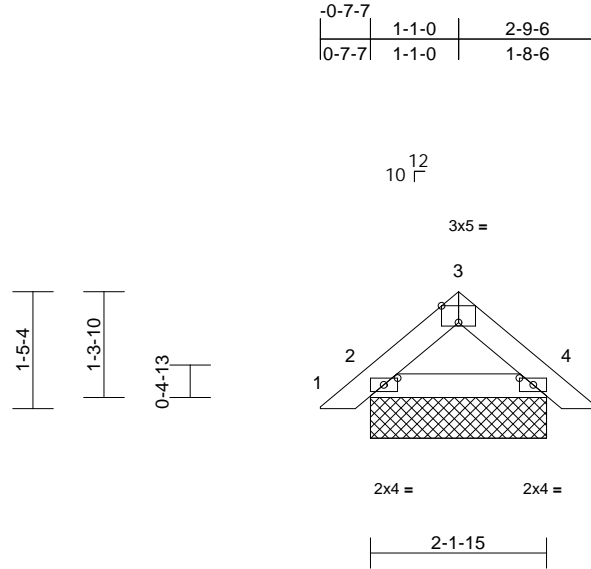
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	16 Eagle Creek - Kathryn A - Roof	173603989
16 Eagle Creek	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. Mon May 19 14:46:00
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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

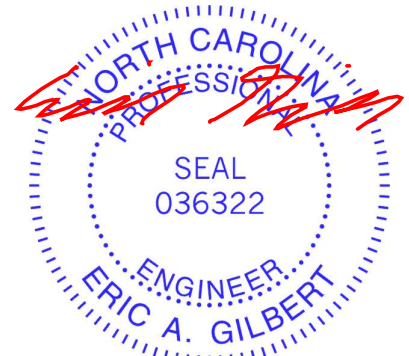
NOTES

- 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



May 21,2025

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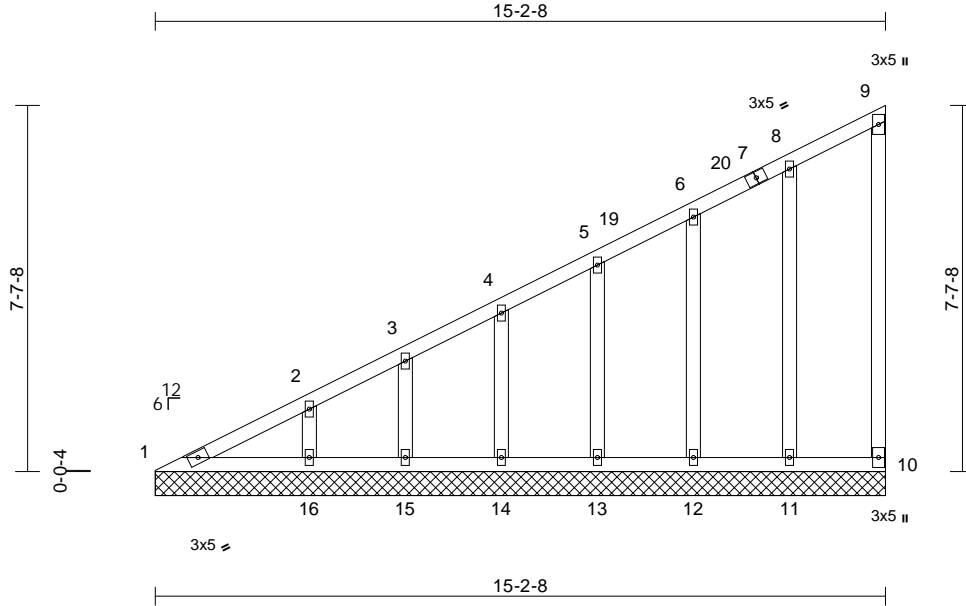
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	16 Eagle Creek - Kathryn A - Roof	173603990
16 Eagle Creek	V1	Valley	1	1	Job Reference (optional)	

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

Run: 8.73 E Nov 16 2023 Print: 8.730 E Nov 16 2023 MiTek Industries, Inc. Tue May 20 17:37:10
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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	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.20	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.16	Horiz(TL)	0.00	10	n/a	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

All bearings	15-2-8.
(lb) - Max Horiz	1=274 (LC 11)
Max Uplift	All uplift 100 (lb) or less at joint(s) 10, 11, 12, 13, 14, 15, 16
Max Grav	All reactions 250 (lb) or less at joint (s) 1, 10, 11, 12, 13, 14, 15 except 16=260 (LC 1)

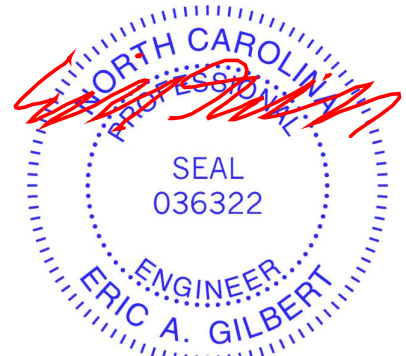
FORCES

(lb) - Max. Comp./Max. Ten.	- All forces 250 (lb) or less except when shown.
TOP CHORD	1-2=-246/263

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 100 lb uplift at joint (s) 10, 11, 12, 13, 14, 15, 16.



May 21, 2025

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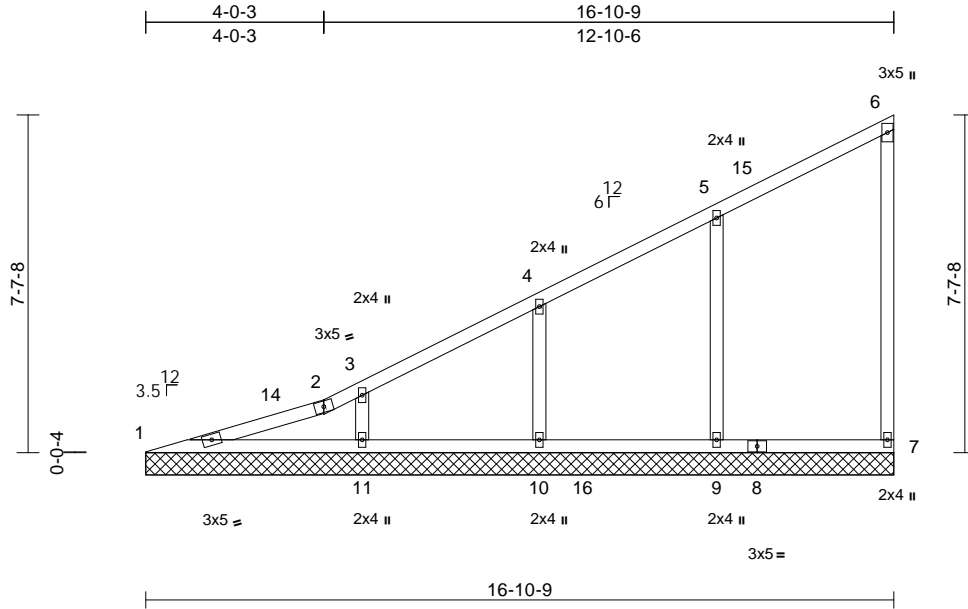
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	16 Eagle Creek - Kathryn A - Roof	173603991
16 Eagle Creek	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. Mon May 19 14:46:00
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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

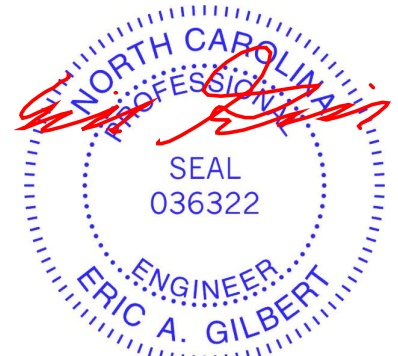
TOP CHORD	1-2=-471/208, 2-3=-210/224, 3-4=-194/197, 4-5=-161/169, 5-6=-133/117, 6-7=-121/52
BOT CHORD	1-11=-92/442, 10-11=-92/130, 9-10=-92/130, 7-9=-92/130
WEBS	5-9=-292/146, 4-10=-237/144, 3-11=-317/108

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



May 21,2025

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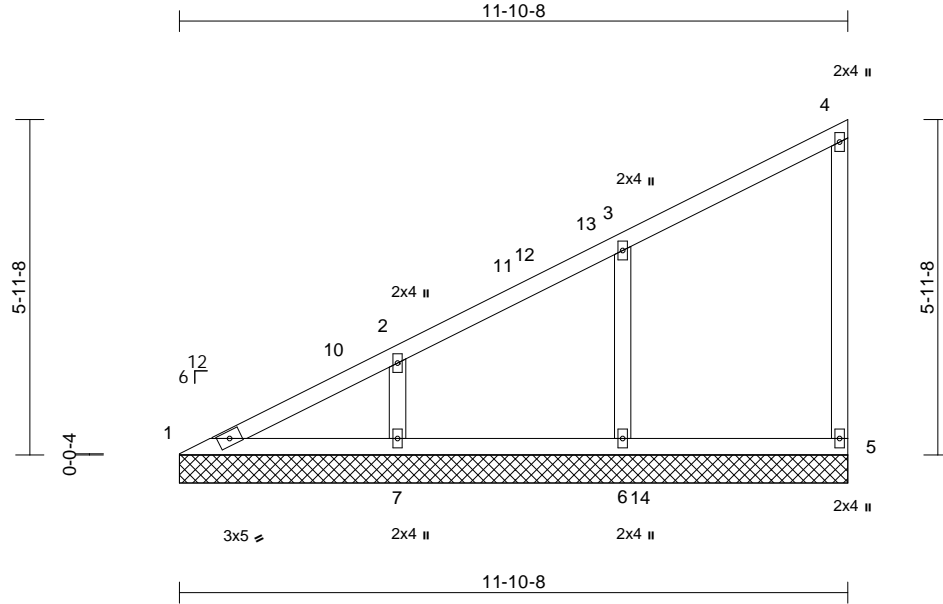
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	16 Eagle Creek - Kathryn A - Roof	173603992
16 Eagle Creek	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. Mon May 19 14:46:01
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Scale = 1:40.9

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

LUMBER

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

BRACING

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

REACTIONS	(size)	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

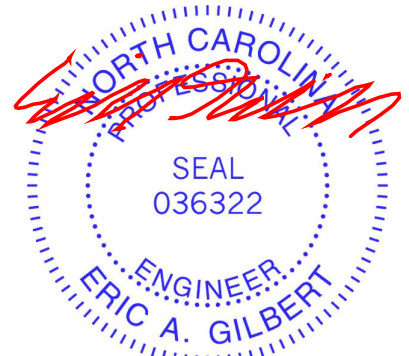
	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=-267/196, 2-3=-140/158, 3-4=-120/102, 4-5=-153/42
BOT CHORD	1-7=-70/264, 6-7=-70/102, 5-6=-70/102
WEBS	3-6=-388/166, 2-7=-267/126

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



May 21, 2025

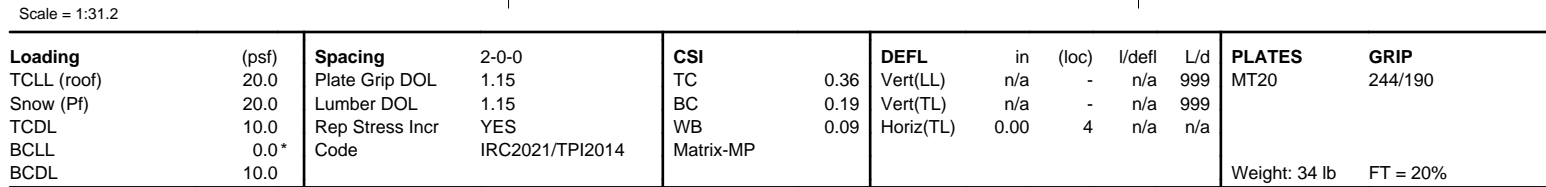
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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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Carter Components (Sanford, NC), Sanford, NC - 27332, Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Mon May 19 14:46:01 Page: 1
ID:RmdJFglpll77zrcld_xeBhzEw?D-RfC?PsB70Hg3NSgPqnL8w3uiTXbGKWrCDoi7J4zJC?i



- 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 21 lb uplift at joint 4 and 94 lb uplift at joint 5.

LOAD CASE(S) Standard

-

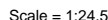
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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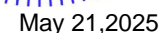


LUMBER	
TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.3
BRACING	
TOP CHORD	Structural wood sheathing directly applied or 5-2-8 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
REACTIONS	
(size)	1=5-2-8, 3=5-2-8
Max Horiz	1=87 (LC 11)
Max Uplift	1=-21 (LC 14), 3=-43 (LC 14)
Max Grav	1=292 (LC 20), 3=292 (LC 20)
FORCES	
	(lb) 9-28 Compression/Maximum Tension
TOP CHORD	1-2=-504/134, 2-3=-199/104
BOT CHORD	1-3=-175/441

- 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; TC_{DL}=6.0psf; BC_{DL}=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) T_{CLL}: ASCE 7-16; P_r=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); P_f=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); I_s=1.0; Rough Cat B; Fully Exp.; C_e=0.9; C_s=1.00; C_t=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.



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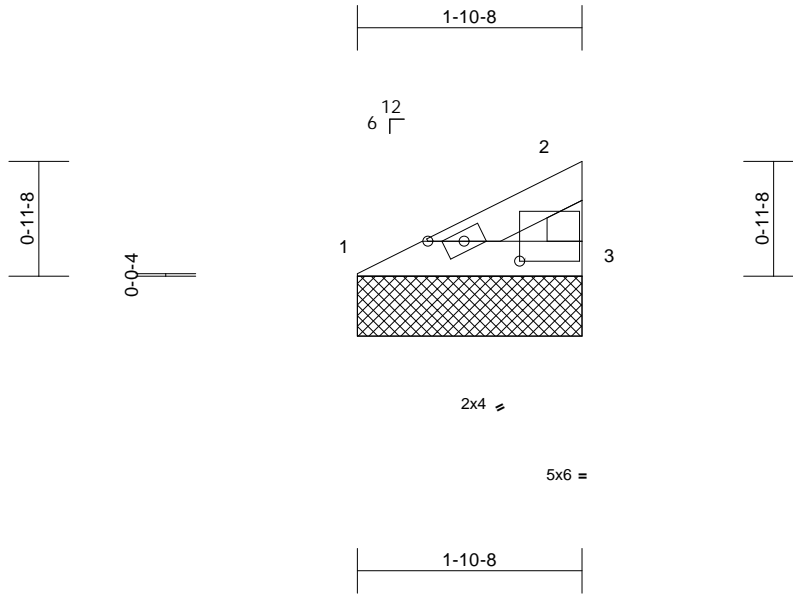
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	16 Eagle Creek - Kathryn A - Roof
16 Eagle Creek	V6	Valley	2	1	Job Reference (optional)
					I73603995

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Mon May 19 14:46:01
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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

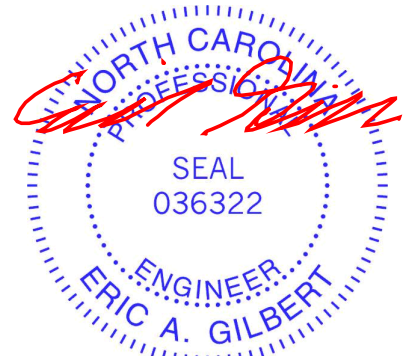
TOP CHORD 1-2=-98/28, 2-3=-44/20
BOT CHORD 1-3=-36/81

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



May 21, 2025

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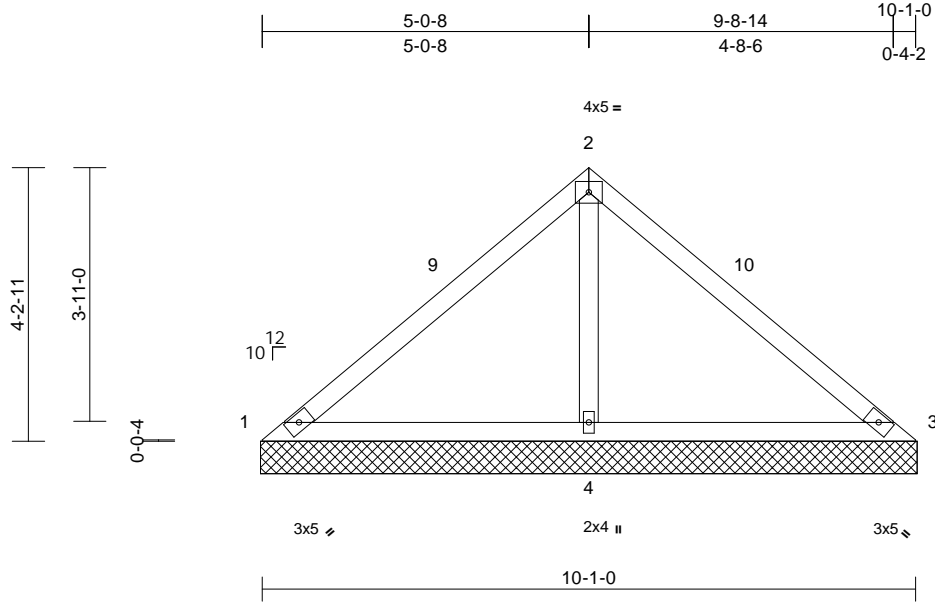
Job	Truss	Truss Type	Qty	Ply	16 Eagle Creek - Kathryn A - Roof	173603996
16 Eagle Creek	V7	Valley	1	1	Job Reference (optional)	

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Mon May 19 14:46:01

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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

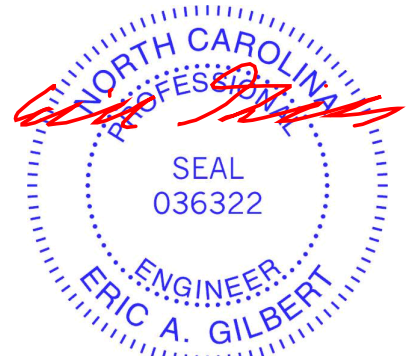
(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=-131/421, 2-3=-131/421
BOT CHORD	1-4=-278/187, 3-4=-278/187
WEBS	2-4=-705/295

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



May 21,2025

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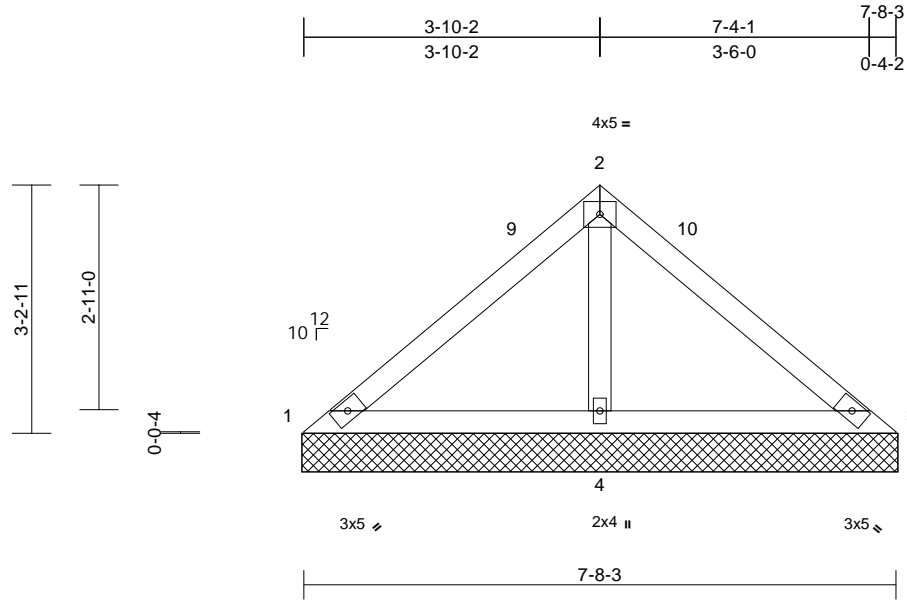
Job	Truss	Truss Type	Qty	Ply	16 Eagle Creek - Kathryn A - Roof	173603997
16 Eagle Creek	V8	Valley	1	1	Job Reference (optional)	

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

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Scale = 1:29.9

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.30	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.30	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.11	Horiz(TL)	0.00	4	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MP							
BCDL	10.0									Weight: 29 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 7-8-3 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS

(size)	1=7-8-13, 3=7-8-13, 4=7-8-13
Max Horiz	1=-71 (LC 10)
Max Uplift	1=-31 (LC 21), 3=-31 (LC 20), 4=-85 (LC 14)
Max Grav	1=102 (LC 20), 3=102 (LC 21), 4=597 (LC 20)

FORCES

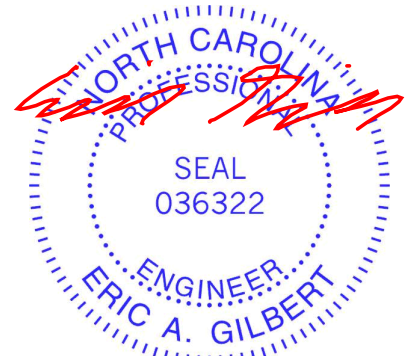
(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=-106/268, 2-3=-106/268
BOT CHORD	1-4=-209/167, 3-4=-209/167
WEBS	2-4=-480/225

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 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
- 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 31 lb uplift at joint 1, 31 lb uplift at joint 3 and 85 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



May 21, 2025

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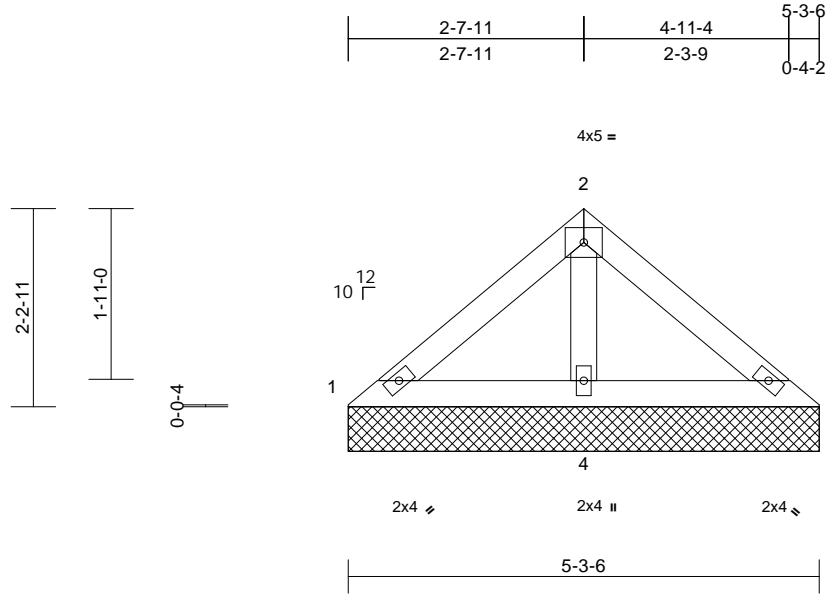
Job	Truss	Truss Type	Qty	Ply	16 Eagle Creek - Kathryn A - Roof	173603998
16 Eagle Creek	V9	Valley	1	1	Job Reference (optional)	

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

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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



May 21, 2025

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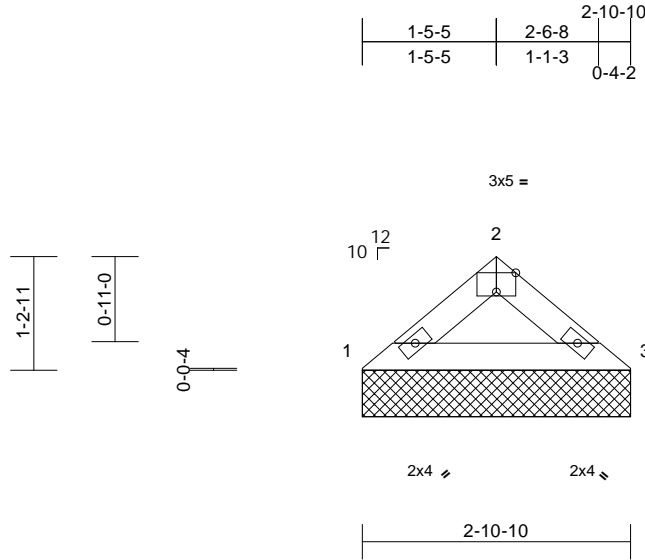
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	16 Eagle Creek - Kathryn A - Roof
16 Eagle Creek	V10	Valley	1	1	Job Reference (optional)
					I73603999

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

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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

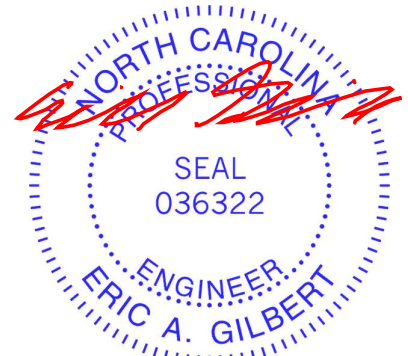
TOP CHORD 1-2=-169/70, 2-3=-169/70
BOT CHORD 1-3=-39/121

NOTES

- 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 10 lb uplift at joint 1 and 10 lb uplift at joint 3.

LOAD CASE(S) Standard



May 21, 2025

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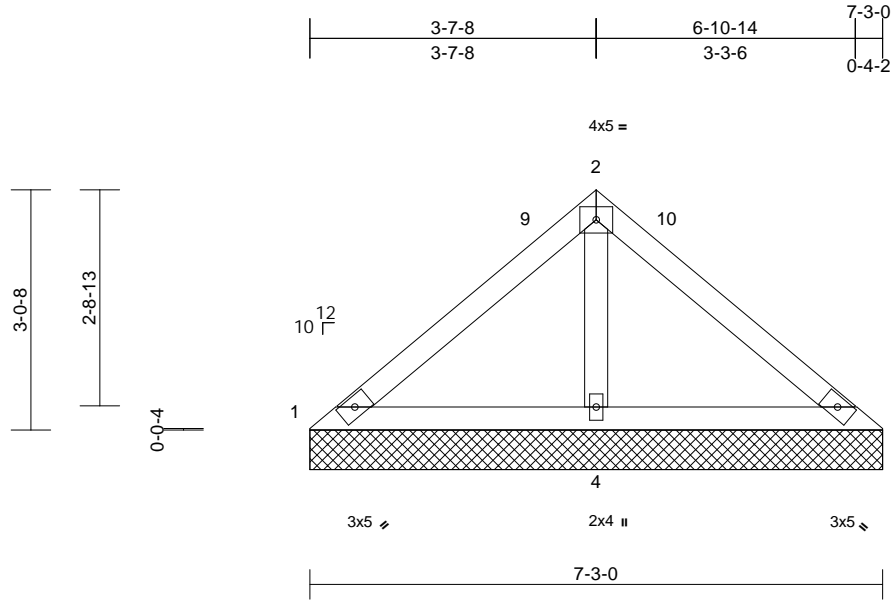
Job	Truss	Truss Type	Qty	Ply	16 Eagle Creek - Kathryn A - Roof	173604000
16 Eagle Creek	V11	Valley	1	1	Job Reference (optional)	

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

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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	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.27	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: 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

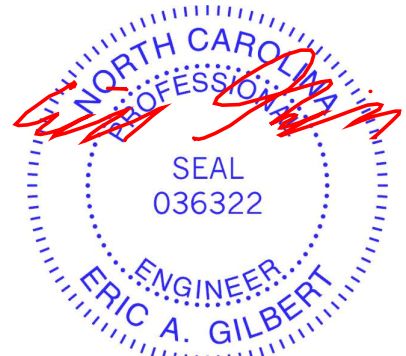
(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=-89/230, 2-3=-89/230
BOT CHORD	1-4=-180/152, 3-4=-180/152
WEBS	2-4=-422/200

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



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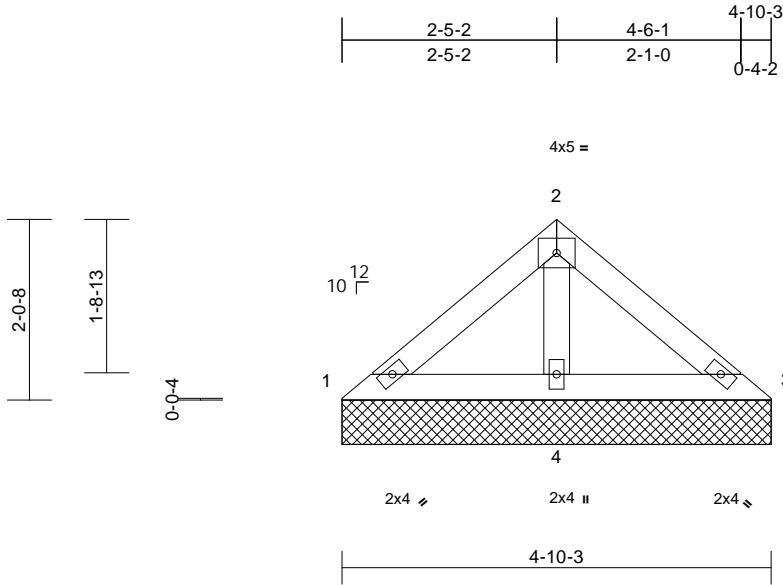
Job	Truss	Truss Type	Qty	Ply	16 Eagle Creek - Kathryn A - Roof	173604001
16 Eagle Creek	V12	Valley	1	1	Job Reference (optional)	

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

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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	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.11	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: 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

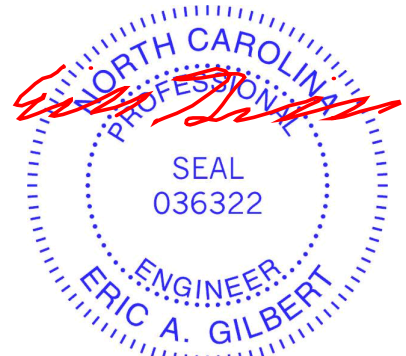
(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=-81/103, 2-3=-81/103
BOT CHORD	1-4=-84/88, 3-4=-84/88
WEBS	2-4=-210/97

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



May 21, 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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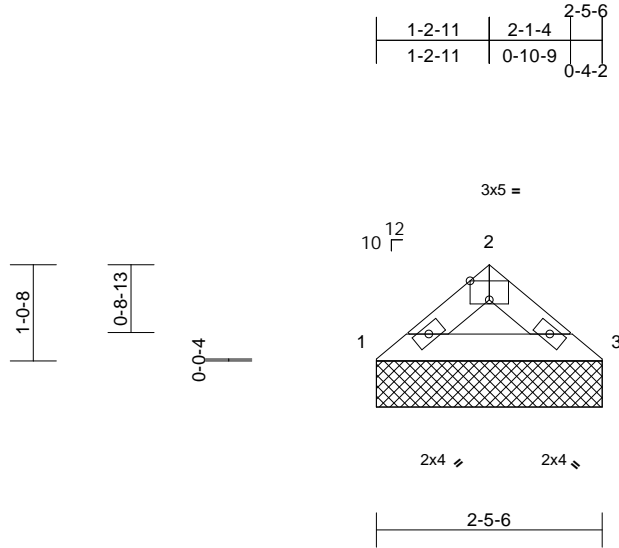
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	16 Eagle Creek - Kathryn A - Roof	I73604002
16 Eagle Creek	V13	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. Mon May 19 14:46:01
ID:kFsOL3Y2YfoY1Yo9F8kPmDzEvuR-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrcD0i7J4zJC?f

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	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.05	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: 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

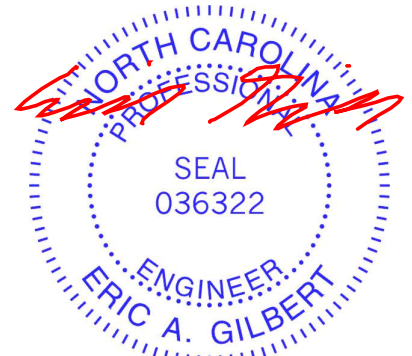
TOP CHORD 1-2=-139/60, 2-3=-139/60
BOT CHORD 1-3=-32/99

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



May 21, 2025

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

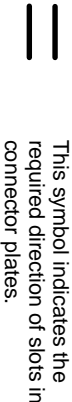
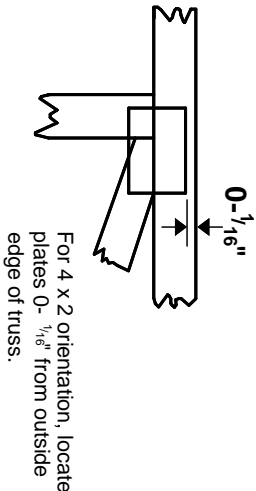
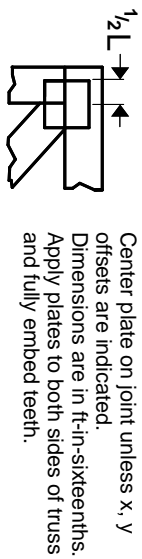
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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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Edenton, NC 27932

Symbols

PLATE LOCATION AND ORIENTATION



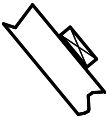
* Plate location details available in MITek software or upon request.

PLATE SIZE

4 X 4

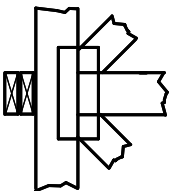
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING



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

Industry Standards:

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

Numbering System

