

CARTER[®]

Lumber

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

Phone #:919-775-1450

Builder: HH Hunt Homes Raleigh
Durham

Model: 17 Magnolia Acres
Greyson FA



THE PLACEMENT PLAN NOTES:

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

Approved By: _____

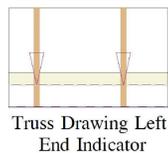
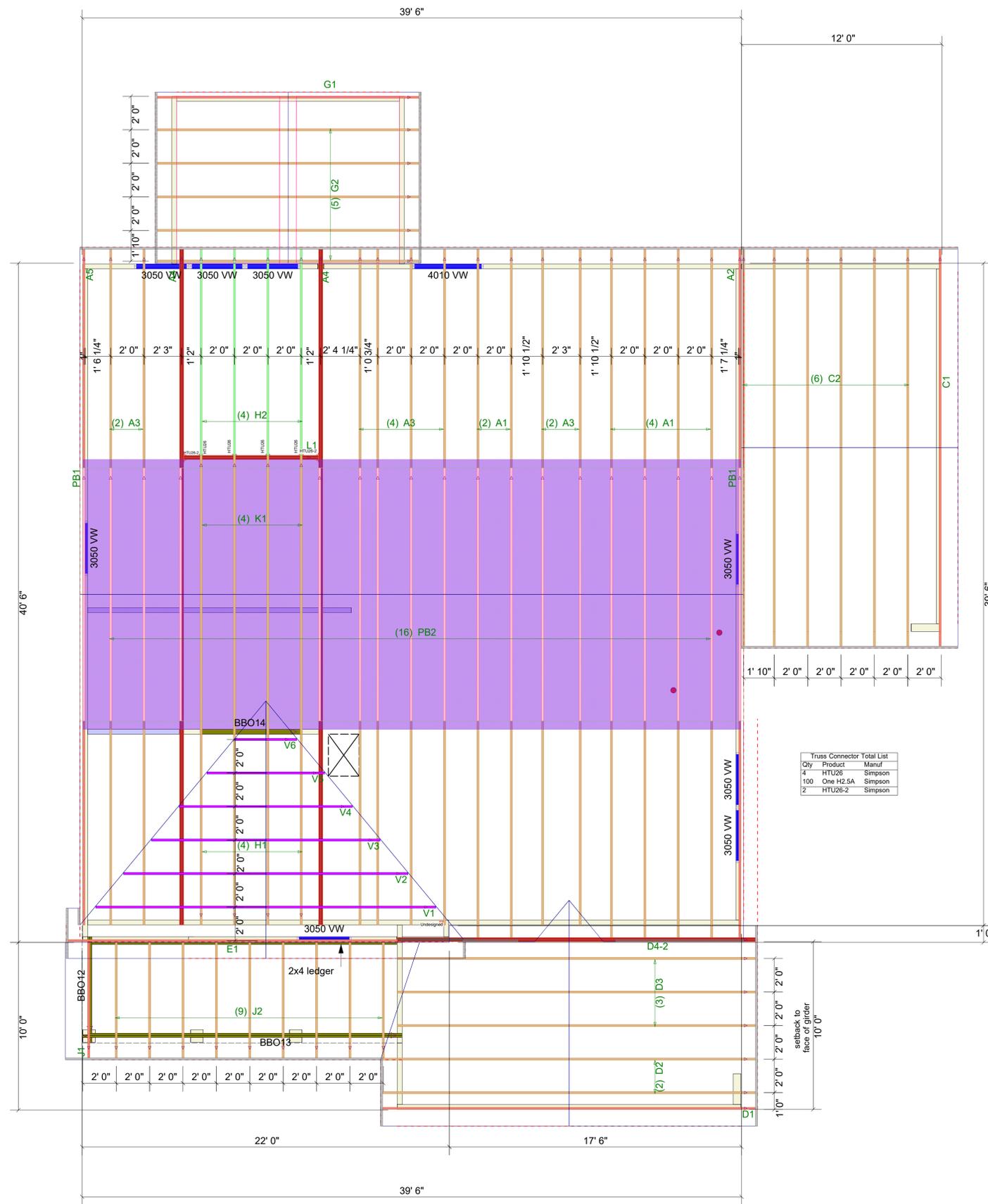
Date: _____

General Notes:

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

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

** DAMAGED COMPONENTS SHOULD NOT BE INSTALLED UNLESS TOLD TO BY THE COMPONENT PLANT. ** TRUSS TO TRUSS CONNECTIONS ARE TOE-NAILED, UNLESS NOTED OTHERWISE.



ROOF PLACEMENT PLAN

Revisions

Date	Name
00/00/00	Name

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



HH Hunt Homes Raleigh Durham
17 Magnolia Acres
 Greyson FA
Roof Truss Layout

Scale: **NTS**
 Date: **5/5/2025**
 Designer: **Nate Donaldson**
 Project Number: **25040195-01**
 Sheet Number:

1/1

** GIRDERS MUST BE FULLY CONNECTED TOGETHER PRIOR TO ADDING ANY LOADS. ** DIMENSIONS ARE READ AS: FOOT-INCH-SIXTEENTH. ** ALL UPLIFT CONNECTORS SHOWN WITHIN THESE DOCUMENTS ARE RECOMMENDATIONS ONLY. PER ANSII/TPI 1, ALL UPLIFT CONNECTORS ARE THE RESPONSIBILITY OF THE BLDG DESIGNER AND/OR CONTRACTOR.

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

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

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

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: 25040195-01
Install 17 Magnolia Acres-Roof-Greyson FA 3FL SP 3CG SL GRH

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

Pages or sheets covered by this seal: I73186513 thru I73186540

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

North Carolina COA: C-0844



May 5, 2025

Gilbert, Eric

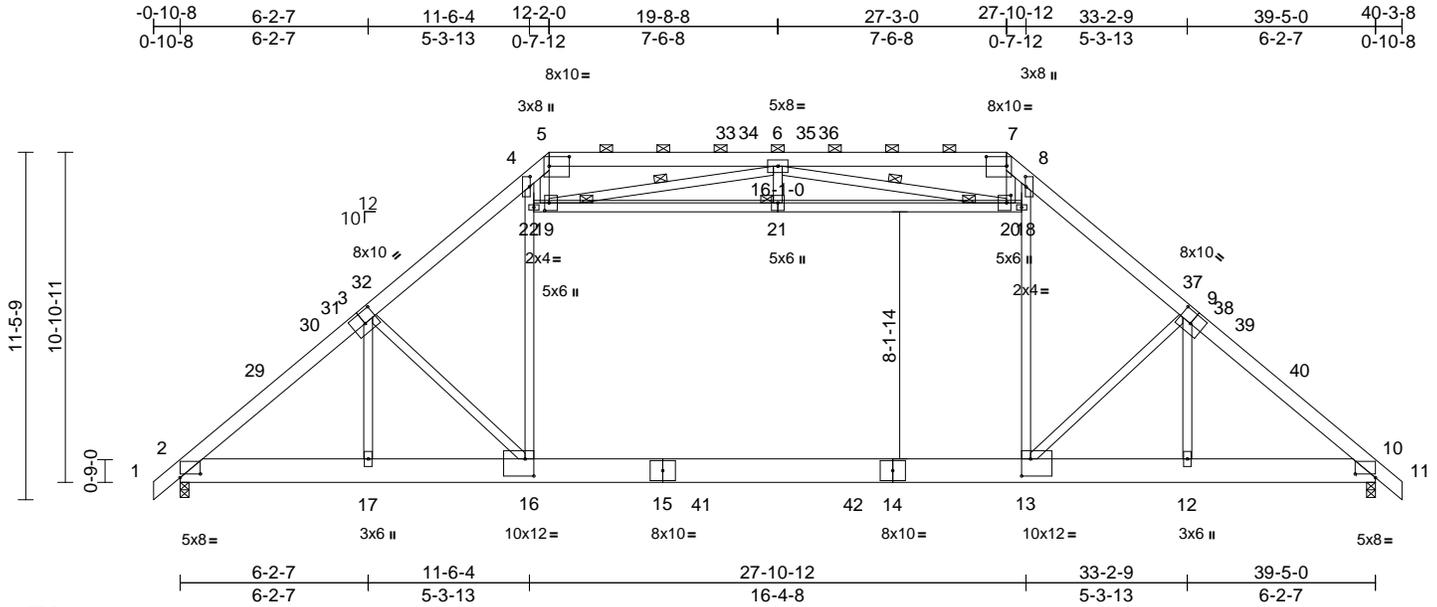
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which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

Job 25040195-01	Truss A1	Truss Type Attic	Qty 6	Ply 1	Install 17 Magnolia Acres-Roof-Greyson FA 3FL SP 3CG 173186513 Job Reference (optional)
--------------------	-------------	---------------------	----------	----------	---

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu May 01 16:22:19
ID:akxuQ4r2_j7cCheHxtTaezQAyc-RfC?PsB70Hq3NSgPqnL8w3uTXbGKwRcDoi7J4zJC?F

Page: 1



Scale = 1:75.6

[2:0-8-0,0-1-7], [3:0-5-0,0-4-8], [4:0-4-0,0-0-4], [5:0-8-0,0-3-12], [7:0-8-0,0-3-12], [8:0-4-0,0-0-4], [9:0-5-0,0-4-8], [10:0-8-0,0-1-7], [13:0-3-8,0-6-12], [16:0-3-8,0-6-12],
Plate Offsets (X, Y): [19:0-3-0,0-1-12], [20:0-3-0,0-1-12]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.29	Vert(LL)	-0.30	13-16	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.49	Vert(CT)	-0.51	13-16	>932	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.69	Horz(CT)	0.04	10	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH		Attic	-0.23	13-16	>839	360		
BCDL	10.0										Weight: 384 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP 2400F 2.0E
BOT CHORD 2x10 SP 2400F 2.0E
WEBS 2x4 SP No.3 *Except*
4-16,8-13,21-18,21-22:2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-5-4 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 5-7.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midjt 6-19, 6-20
JOINTS 1 Brace at Jt(s): 19, 20, 21

REACTIONS (size) 2=0-3-8, 10=0-3-8
Max Horiz 2=-257 (LC 12)
Max Grav 2=2288 (LC 48), 10=2288 (LC 48)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/34, 2-4=-3480/0, 4-5=-2640/0, 5-6=-2488/0, 6-7=-2488/0, 7-8=-2640/0, 8-10=-3480/0, 10-11=0/34
BOT CHORD 2-17=0/2558, 16-17=0/2536, 13-16=0/2529, 12-13=0/2536, 10-12=0/2558
WEBS 16-22=0/1541, 4-22=0/1157, 13-18=0/1541, 8-18=0/1157, 19-22=-114/39, 19-20=-442/1419, 18-20=-114/39, 5-19=-9/737, 7-20=-9/737, 6-21=-27/62, 6-19=-1563/479, 6-20=-1563/479, 3-17=-583/39, 9-12=-583/39, 3-16=-539/412, 9-13=-539/414

- 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 3-0-13, Interior (1) 3-0-13 to 6-7-2, Exterior(2R) 6-7-2 to 17-8-14, Interior (1) 17-8-14 to 21-8-2, Exterior(2R) 21-8-2 to 32-9-14, Interior (1) 32-9-14 to 36-4-3, Exterior(2E) 36-4-3 to 40-3-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 200.0lb AC unit load placed on the bottom chord, 19-8-8 from left end, supported at two points, 5-0-0 apart.
- 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.
- Ceiling dead load (5.0 psf) on member(s). 19-22, 19-21, 20-21, 18-20; Wall dead load (5.0psf) on member (s).16-22, 13-18
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 13-16
- All bearings are assumed to be SP 2400F 2.0E .

- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - Attic room checked for L/360 deflection.
- LOAD CASE(S)** Standard



May 5, 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.sbccomponents.com)



818 Soundside Road
Edenton, NC 27932

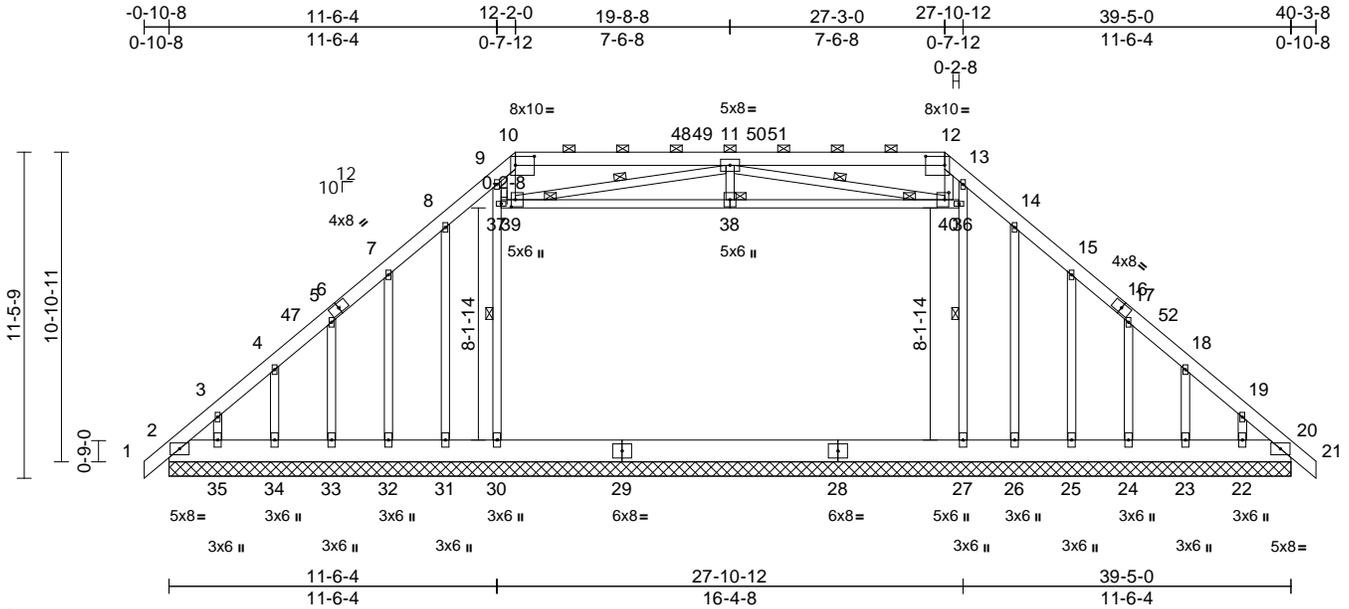
Job 25040195-01	Truss A2	Truss Type Attic Supported Gable	Qty 1	Ply 1	Install 17 Magnolia Acres-Roof-Greyson FA 3FL SP 3CG 173186514
					Job Reference (optional)

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu May 01 16:22:20

Page: 1

ID: _Jd136txHeVB38Msc?1HGUzQAYZ-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWCRDcoi7J4zJC?f



Scale = 1:80.5

Plate Offsets (X, Y): [10:0-8-0-0-3-12], [12:0-8-0-0-3-12], [39:0-3-0-0-1-12], [40:0-3-0-0-1-12]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.17	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.56	Horz(CT)	0.01	20	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 413 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP 2400F 2.0E
BOT CHORD 2x10 SP 2400F 2.0E
WEBS 2x4 SP No.3 *Except* 38-36,38-37:2x4 SP No.2
OTHERS 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 10-12.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 30-37, 27-36, 11-39, 11-40
JOINTS 1 Brace at Jt(s): 38, 39, 40

REACTIONS (size)
2=39-5-0, 20=39-5-0, 22=39-5-0, 23=39-5-0, 24=39-5-0, 25=39-5-0, 26=39-5-0, 27=39-5-0, 30=39-5-0, 31=39-5-0, 32=39-5-0, 33=39-5-0, 34=39-5-0, 35=39-5-0
Max Horiz 2=-257 (LC 12)
Max Uplift 2=-190 (LC 10), 20=-161 (LC 11), 22=-79 (LC 15), 23=-72 (LC 15), 24=-91 (LC 15), 25=-30 (LC 15), 26=-995 (LC 21), 31=-995 (LC 21), 32=-29 (LC 14), 33=-91 (LC 14), 34=-71 (LC 14), 35=-80 (LC 14)
Max Grav 2=625 (LC 41), 20=625 (LC 41), 22=188 (LC 54), 23=220 (LC 27), 24=207 (LC 46), 25=477 (LC 54), 26=-108 (LC 11), 27=1507 (LC 37), 30=1508 (LC 57), 31=-111 (LC 10), 32=475 (LC 52), 33=207 (LC 44), 34=220 (LC 26), 35=190 (LC 52)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/34, 2-3=-831/315, 3-4=-842/312, 4-5=-843/306, 5-7=-849/301, 7-8=-832/293, 8-9=-729/284, 9-10=-973/330, 10-11=-614/258, 11-12=-614/258, 12-13=-973/330, 13-14=-729/284, 14-15=-832/250, 15-17=-849/259, 17-18=-843/263, 18-19=-842/269, 19-20=-831/272, 20-21=0/34
BOT CHORD 2-35=-200/632, 34-35=-200/632, 33-34=-200/632, 32-33=-200/632, 31-32=-200/632, 30-31=-200/632, 27-30=-200/634, 26-27=-200/632, 25-26=-200/632, 24-25=-200/632, 23-24=-200/632, 22-23=-200/632, 20-22=-200/632
WEBS 30-37=-426/126, 9-37=-455/138, 27-36=-426/94, 13-36=-455/110, 37-39=-17/8, 39-40=-418/1513, 36-40=-17/8, 8-31=-163/150, 7-32=-203/104, 5-33=-190/100, 4-34=-154/103, 3-35=-122/81, 14-26=-166/152, 15-25=-203/106, 17-24=-190/100, 18-23=-154/103, 19-22=-122/81, 11-38=-19/8, 10-39=-109/369, 12-40=-108/369, 11-39=-1595/441, 11-40=-1595/441

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

- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 3-0-13, Exterior(2N) 3-0-13 to 8-2-11, Corner(3R) 8-2-11 to 16-1-5, Exterior(2N) 16-1-5 to 23-3-11, Corner(3R) 23-3-11 to 31-2-5, Exterior(2N) 31-2-5 to 36-4-3, Corner(3E) 36-4-3 to 40-3-8 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.



May 5, 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/TPI Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)



818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Install 17 Magnolia Acres-Roof-Greyson FA 3FL SP 3CG I73186514
25040195-01	A2	Attic Supported Gable	1	1	Job Reference (optional)

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu May 01 16:22:20
ID: _Jd136txHeVB38Msc?1HGUzQAyZ-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 2

- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 7) Provide adequate drainage to prevent water ponding.
- 8) All plates are 2x4 MT20 unless otherwise indicated.
- 9) Gable requires continuous bottom chord bearing.
- 10) Gable studs spaced at 2-0-0 oc.
- 11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 12) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 13) Ceiling dead load (5.0 psf) on member(s). 37-39, 38-39, 38-40, 36-40; Wall dead load (5.0psf) on member (s).30-37, 27-36
- 14) All bearings are assumed to be SP 2400F 2.0E .
- 15) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 161 lb uplift at joint 20, 190 lb uplift at joint 2, 995 lb uplift at joint 31, 29 lb uplift at joint 32, 91 lb uplift at joint 33, 71 lb uplift at joint 34, 80 lb uplift at joint 35, 995 lb uplift at joint 26, 30 lb uplift at joint 25, 91 lb uplift at joint 24, 72 lb uplift at joint 23 and 79 lb uplift at joint 22.
- 16) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 17) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/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)



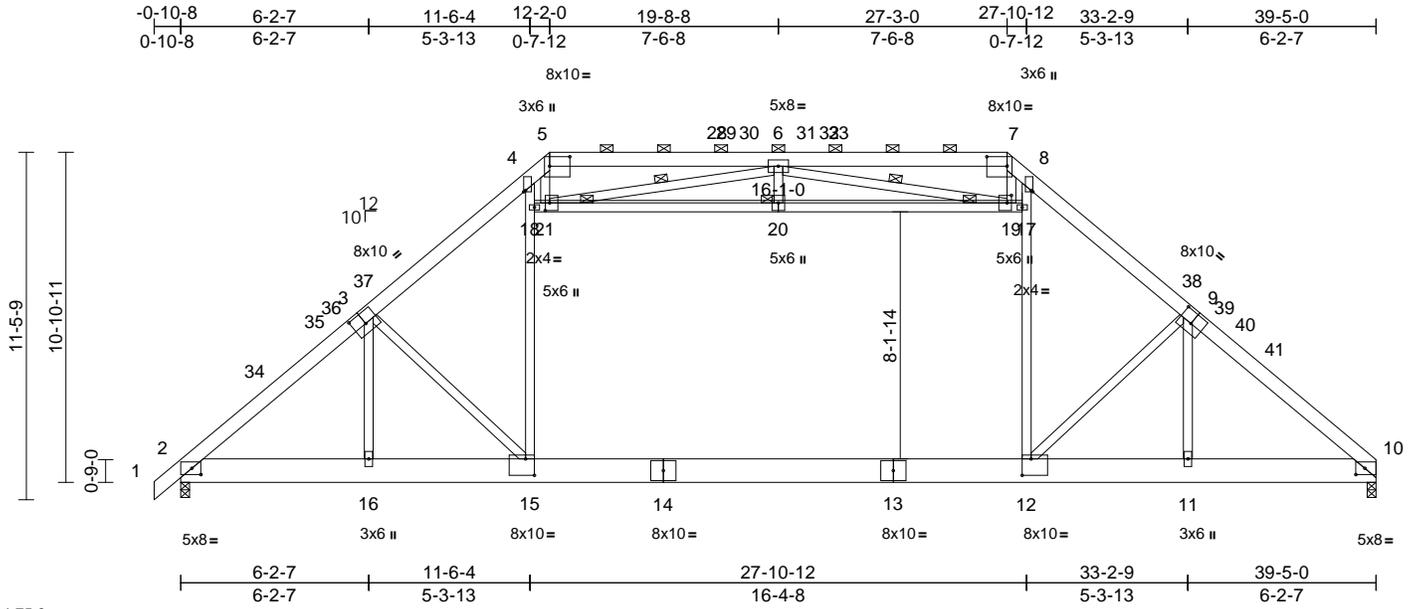
818 Soundside Road
Edenton, NC 27932

Job 25040195-01	Truss A3	Truss Type Attic	Qty 8	Ply 1	Install 17 Magnolia Acres-Roof-Greyson FA 3FL SP 3CG I73186515 Job Reference (optional)
--------------------	-------------	---------------------	----------	----------	---

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu May 01 16:22:20
ID:99Gmo3oAiol2LDvIFlw0DzQAYf-RfC?Psb70Hq3NSgPqnL8w3u1TXbGKWrCdoi7J4zJC?f

Page: 1



Scale = 1:75.6

[2:0-3-9,0-2-8], [3:0-5-0,0-4-8], [4:0-0-9,0-0-12], [5:0-8-0,0-3-12], [7:0-8-0,0-3-12], [8:0-0-9,0-0-12], [9:0-5-0,0-4-8], [10:0-3-9,0-2-8], [12:0-3-8,0-6-8], [15:0-3-8,0-6-8],

Plate Offsets (X, Y): [19:0-3-0,0-1-12], [21:0-3-0,0-1-12]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP		
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	-0.30	12-15	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.43	Vert(CT)	-0.45	12-15	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.64	Horz(CT)	0.04	10	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH		Attic	-0.23	12-15	>839	360		
BCDL	10.0											

Weight: 381 lb FT = 20%

LUMBER
TOP CHORD 2x6 SP 2400F 2.0E
BOT CHORD 2x10 SP 2400F 2.0E
WEBS 2x4 SP No.3 *Except*
20-17,20-18,4-15,8-12:2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-7-9 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 5-7.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 6-19, 6-21
JOINTS 1 Brace at Jt(s): 19, 20, 21

REACTIONS (size) 2=0-3-8, 10=0-3-8
Max Horiz 2=251 (LC 11)
Max Grav 2=2188 (LC 48), 10=2144 (LC 48)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 5-6=-2349/52, 6-7=-2349/53, 1-2=0/34, 2-4=-3284/0, 4-5=-2523/86, 7-8=-2523/86, 8-10=-3285/0
BOT CHORD 2-16=-38/2446, 15-16=-45/2428, 12-15=0/2379, 11-12=0/2431, 10-11=0/2449
WEBS 18-21=-110/44, 19-21=-408/1453, 17-19=-109/43, 15-18=0/1409, 4-18=0/1047, 12-17=0/1410, 8-17=0/1047, 7-19=-26/719, 6-20=-23/66, 5-21=-27/719, 6-19=-1591/451, 6-21=-1591/451, 3-16=-500/119, 9-11=-494/128, 3-15=-585/356, 9-12=-600/361

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

- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 3-0-7, Interior (1) 3-0-7 to 6-7-10, Exterior(2R) 6-7-10 to 17-8-6, Interior (1) 17-8-6 to 21-8-10, Exterior(2R) 21-8-10 to 32-9-6, Interior (1) 32-9-6 to 35-6-1, Exterior(2E) 35-6-1 to 39-5-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- All plates are 8x10 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.
- Ceiling dead load (5.0 psf) on member(s). 18-21, 20-21, 19-20, 17-19; Wall dead load (5.0psf) on member (s).15-18, 12-17
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 12-15
- All bearings are assumed to be SP 2400F 2.0E .
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

14) Attic room checked for L/360 deflection.
LOAD CASE(S) Standard



May 5, 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/TPI 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

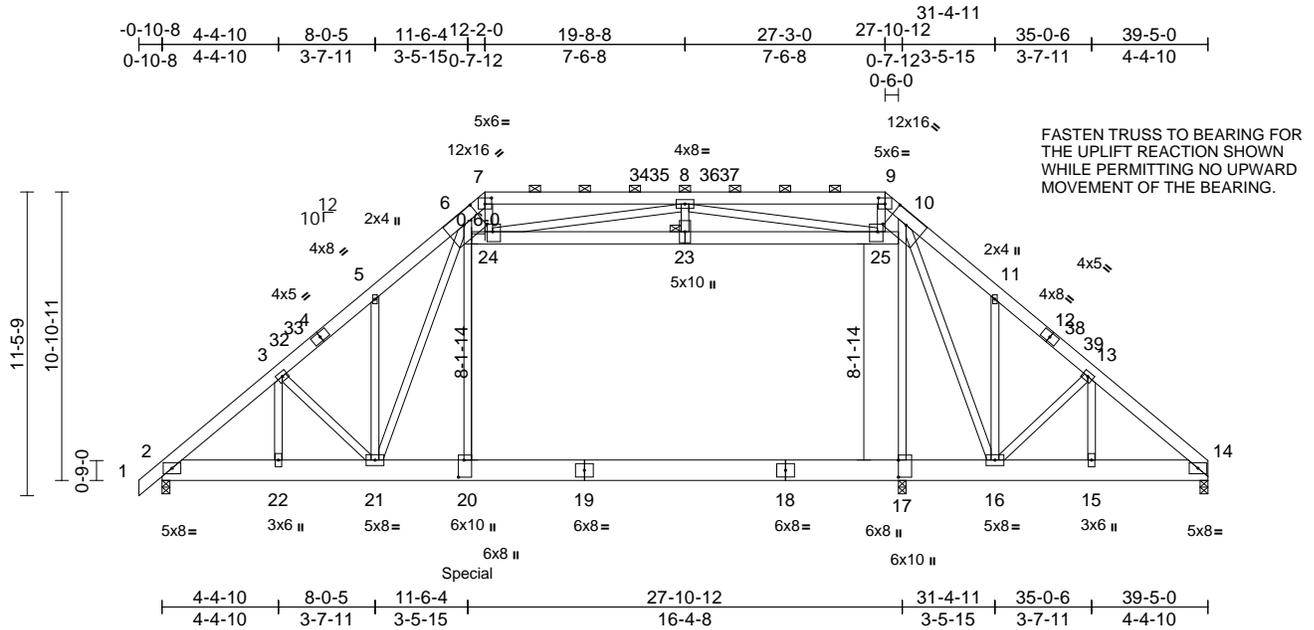
818 Soundside Road
Edenton, NC 27932

Job 25040195-01	Truss A4	Truss Type Attic Girder	Qty 2	Ply 2	Install 17 Magnolia Acres-Roof-Greyson FA 3FL SP 3CG 173186516 Job Reference (optional)
--------------------	-------------	----------------------------	----------	----------	---

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu May 01 16:22:21
ID:99Gmo3oAiol2LDvIFwt0DzQAYf-RfC?PsB70Hq3NSgPqnl8w3uITxBGKWRCDoi7J4zJC?f

Page: 1



Scale = 1:86.4

Plate Offsets (X, Y): [6:0-8:0,0-5-4], [7:0-3:0,0-2-12], [9:0-3:0,0-2-12], [10:0-8:0,0-5-4], [17:0-7:12,Edge], [20:0-7:12,0-2-8], [24:0-3:8,0-2-8], [25:0-3:8,0-2-8]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	-0.17	17-20	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.31	Vert(CT)	-0.29	17-20	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.76	Horz(CT)	0.04	14	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH		Attic	-0.11	17-20	>999	360		
BCDL	10.0											
											Weight: 857 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP 2400F 2.0E
BOT CHORD 2x10 SP 2400F 2.0E
WEBS 2x4 SP No.3 *Except* 6-23,23-10:2x6 SP 2400F 2.0E

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 7-9.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
JOINTS 1 Brace at Jt(s): 23

REACTIONS (size) 2=0-3-8, 14=0-3-8, 17=0-3-8
Max Horiz 2=251 (LC 58)
Max Uplift 2=574 (LC 12), 14=504 (LC 12), 17=2469 (LC 40)
Max Grav 2=4664 (LC 46), 14=4272 (LC 46), 17=755 (LC 9)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/34, 2-3=-6667/823, 3-5=-6741/890, 5-6=-6935/1016, 6-7=-3522/500, 7-8=-3111/433, 8-9=-2579/357, 9-10=-3456/454, 10-11=-6132/922, 11-13=-6279/876, 13-14=-6208/785
BOT CHORD 2-22=-709/5227, 21-22=-709/5227, 20-21=-596/5089, 17-20=-601/5180, 16-17=-589/5075, 15-16=-549/4735, 14-15=-549/4735

WEBS 3-22=-348/103, 3-21=-131/340, 5-21=-534/161, 6-21=-364/1068, 6-20=-232/3412, 10-17=-474/3906, 10-16=-879/72, 11-16=-118/231, 13-16=-155/322, 13-15=-331/135, 6-24=-2980/378, 24-25=-2157/258, 10-25=-3793/543, 8-23=-18/126, 7-24=-199/1670, 9-25=-324/2277, 8-25=-2014/351, 8-24=-1471/335

- NOTES**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-9-0 oc.
Web connected as follows: 2x4 - 1 row at 0-8-0 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.

- 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.
- Ceiling dead load (5.0 psf) on member(s). 6-24, 23-24, 23-25, 10-25; Wall dead load (5.0psf) on member (s). 6-20, 10-17
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 17-20
- All bearings are assumed to be SP 2400F 2.0E .
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 574 lb uplift at joint 2, 2469 lb uplift at joint 17 and 504 lb uplift at joint 14.



May 5, 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/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)



818 Soundside Road
Edenton, NC 27932

Job 25040195-01	Truss A4	Truss Type Attic Girder	Qty 2	Ply 2	Install 17 Magnolia Acres-Roof-Greyson FA 3FL SP 3CG I73186516 Job Reference (optional)
--------------------	-------------	----------------------------	----------	-----------------	---

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu May 01 16:22:21
ID:99Gmo3oAiol2LDviFlwt0DzQAyf-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 2

- 15) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 16) This truss has large uplift reaction(s) from gravity load case(s). Proper connection is required to secure truss against upward movement at the bearings. Building designer must provide for uplift reactions indicated.
- 17) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 2759 lb down and 557 lb up at 11-6-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 18) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-7=-60, 7-9=-60, 9-14=-60, 20-26=-20,
17-20=-30, 17-29=-20, 6-24=-10, 23-24=-10,
23-25=-10, 10-25=-10
Drag: 6-20=-10, 10-17=-10
Concentrated Loads (lb)
Vert: 20=-2759 (F)

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)



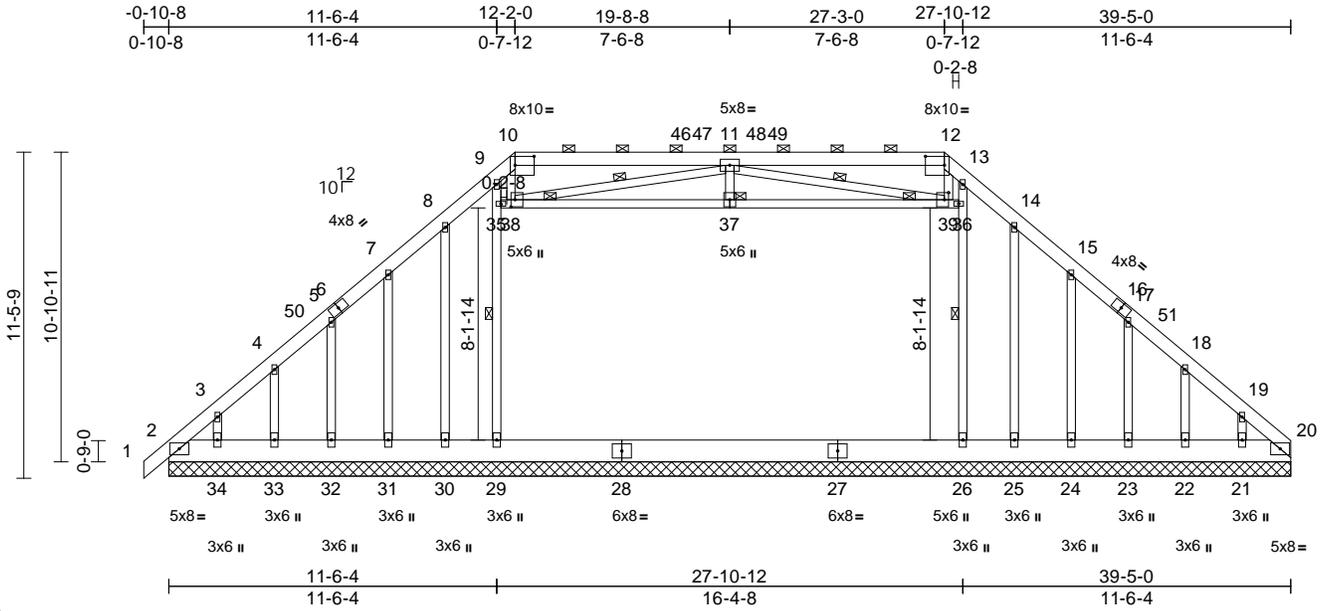
818 Soundside Road
Edenton, NC 27932

Job 25040195-01	Truss A5	Truss Type Attic Supported Gable	Qty 1	Ply 1	Install 17 Magnolia Acres-Roof-Greyson FA 3FL SP 3CG I73186517
					Job Reference (optional)

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu May 01 16:22:21
ID:6YOWDkqQE?maxX34N9yL5ezQAydRfC?PsB70Hq3NSgPqnL8w3tXtBqKWRCDoi7J4zJC7f

Page: 1



Scale = 1:80.5

Plate Offsets (X, Y): [10:0-8-0,0-3-12], [12:0-8-0,0-3-12], [38:0-3-0,0-1-12], [39:0-3-0,0-1-12]

Loading	(psf)	Spacing	1-11-4	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.54	Horz(CT)	0.01	20	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 410 lb	FT = 20%

LUMBER	TOP CHORD	10-11=-595/246, 11-12=-595/246, 1-2=0/33, 2-3=-805/303, 3-4=-816/300, 4-5=-817/294, 5-7=-823/290, 7-8=-806/282, 8-9=-708/268, 9-10=-943/316, 12-13=-943/316, 13-14=-708/268, 14-15=-806/241, 15-17=-823/250, 17-18=-817/254, 18-19=-816/260, 19-20=-804/263	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	2x6 SP 2400F 2.0E		
BOT CHORD	2x10 SP 2400F 2.0E		
WEBS	2x4 SP No.3 *Except* 35-37,37-36:2x4 SP No.2		
OTHERS	2x4 SP No.3		
BRACING			
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 10-12.		
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.		
WEBS	1 Row at midpt 29-35, 26-36, 11-38, 11-39		
JOINTS	1 Brace at Jt(s): 37, 38, 39		
REACTIONS	(size)	2=39-5-0, 20=39-5-0, 21=39-5-0, 22=39-5-0, 23=39-5-0, 24=39-5-0, 25=39-5-0, 26=39-5-0, 29=39-5-0, 30=39-5-0, 31=39-5-0, 32=39-5-0, 33=39-5-0, 34=39-5-0	
Max Horiz	2=243 (LC 11)		
Max Uplift	2=-183 (LC 10), 20=-157 (LC 11), 21=-88 (LC 15), 22=-67 (LC 15), 23=-89 (LC 15), 24=-29 (LC 15), 25=-964 (LC 21), 30=-964 (LC 21), 31=-28 (LC 14), 32=-88 (LC 14), 33=-69 (LC 14), 34=-78 (LC 14)		
Max Grav	2=605 (LC 41), 20=570 (LC 41), 21=201 (LC 54), 22=210 (LC 32), 23=202 (LC 46), 24=462 (LC 54), 25=-104 (LC 11), 26=1460 (LC 37), 29=1460 (LC 39), 30=-108 (LC 10), 31=460 (LC 52), 32=196 (LC 44), 33=213 (LC 26), 34=184 (LC 52)		
FORCES	(lb) - Maximum Compression/Maximum Tension		
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 3-0-7, Exterior(2N) 3-0-7 to 8-3-1, Corner(3R) 8-3-1 to 16-0-15, Exterior(2N) 16-0-15 to 23-4-1, Corner(3R) 23-4-1 to 31-1-15, Exterior(2N) 31-1-15 to 35-6-1, Corner(3E) 35-6-1 to 39-5-0 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 5, 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/TPI Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)



818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Install 17 Magnolia Acres-Roof-Greyson FA 3FL SP 3CG I73186517
25040195-01	A5	Attic Supported Gable	1	1	Job Reference (optional)

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu May 01 16:22:21
ID:6YOWDkQEQ?maX34N9yL5ezQAyd-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 2

- 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) Ceiling dead load (5.0 psf) on member(s). 35-38, 37-38, 37-39, 36-39; Wall dead load (5.0psf) on member (s).29-35, 26-36
- 14) All bearings are assumed to be SP 2400F 2.0E .
- 15) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 157 lb uplift at joint 20, 183 lb uplift at joint 2, 88 lb uplift at joint 32, 69 lb uplift at joint 33, 78 lb uplift at joint 34, 964 lb uplift at joint 25, 29 lb uplift at joint 24, 89 lb uplift at joint 23, 67 lb uplift at joint 22, 88 lb uplift at joint 21, 964 lb uplift at joint 30 and 28 lb uplift at joint 31.
- 16) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 17) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/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)



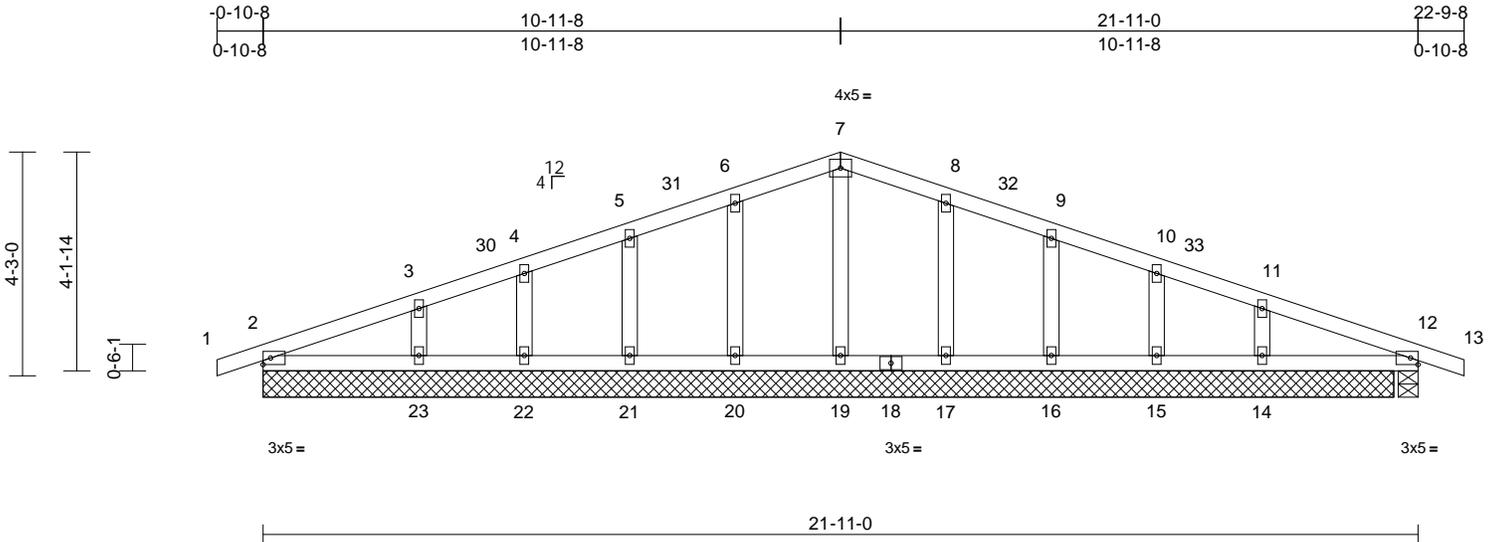
818 Soundside Road
Edenton, NC 27932

Job 25040195-01	Truss C1	Truss Type Common Supported Gable	Qty 1	Ply 1	Install 17 Magnolia Acres-Roof-Greyson FA 3FL SP 3CG I73186518 Job Reference (optional)
--------------------	-------------	--------------------------------------	----------	----------	---

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu May 01 16:22:21
ID:pT_JjyitUGLn3q?yG8hVlzQAYT-RfC?PsB70Hq3NSgPqnL8w3uTXbGKwRCDoi7J4zJC?f

Page: 1



Scale = 1:43.5

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	0.00	23-26	>999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	0.00	23-26	>999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	12	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH							
BCDL	10.0									Weight: 98 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=21-5-8, 12=0-4-8, 14=21-5-8, 15=21-5-8, 16=21-5-8, 17=21-5-8, 19=21-5-8, 20=21-5-8, 21=21-5-8, 22=21-5-8, 23=21-5-8
Max Horiz	2=-63 (LC 15)
Max Uplift	2=-35 (LC 10), 12=-44 (LC 11), 14=-52 (LC 15), 15=-29 (LC 11), 16=-35 (LC 15), 17=-36 (LC 15), 20=-36 (LC 14), 21=-35 (LC 14), 22=-28 (LC 10), 23=-55 (LC 14)
Max Grav	2=171 (LC 1), 12=171 (LC 1), 14=227 (LC 37), 15=181 (LC 22), 16=224 (LC 22), 17=229 (LC 22), 19=135 (LC 22), 20=229 (LC 21), 21=224 (LC 21), 22=181 (LC 21), 23=227 (LC 36)
FORCES (lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=0/17, 2-3=-74/37, 3-4=-56/53, 4-5=-57/67, 5-6=-65/92, 6-7=-74/133, 7-8=-74/133, 8-9=-65/92, 9-10=-57/61, 10-11=-54/33, 11-12=-54/33, 12-13=0/17
BOT CHORD	2-23=-31/50, 22-23=0/50, 21-22=0/50, 20-21=0/50, 19-20=0/50, 17-19=0/50, 16-17=0/50, 15-16=0/50, 14-15=0/50, 12-14=-17/50
WEBS	7-19=-94/5, 6-20=-190/106, 5-21=-181/75, 4-22=-151/65, 3-23=-167/89, 8-17=-190/106, 9-16=-181/75, 10-15=-151/65, 11-14=-167/89

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 7-11-8, Corner(3R) 7-11-8 to 13-11-8, Exterior(2N) 13-11-8 to 19-9-8, Corner(3E) 19-9-8 to 22-9-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2 .

LOAD CASE(S) Standard



May 5, 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)

ENGINEERING BY
TRENCO
A MiTek Affiliate

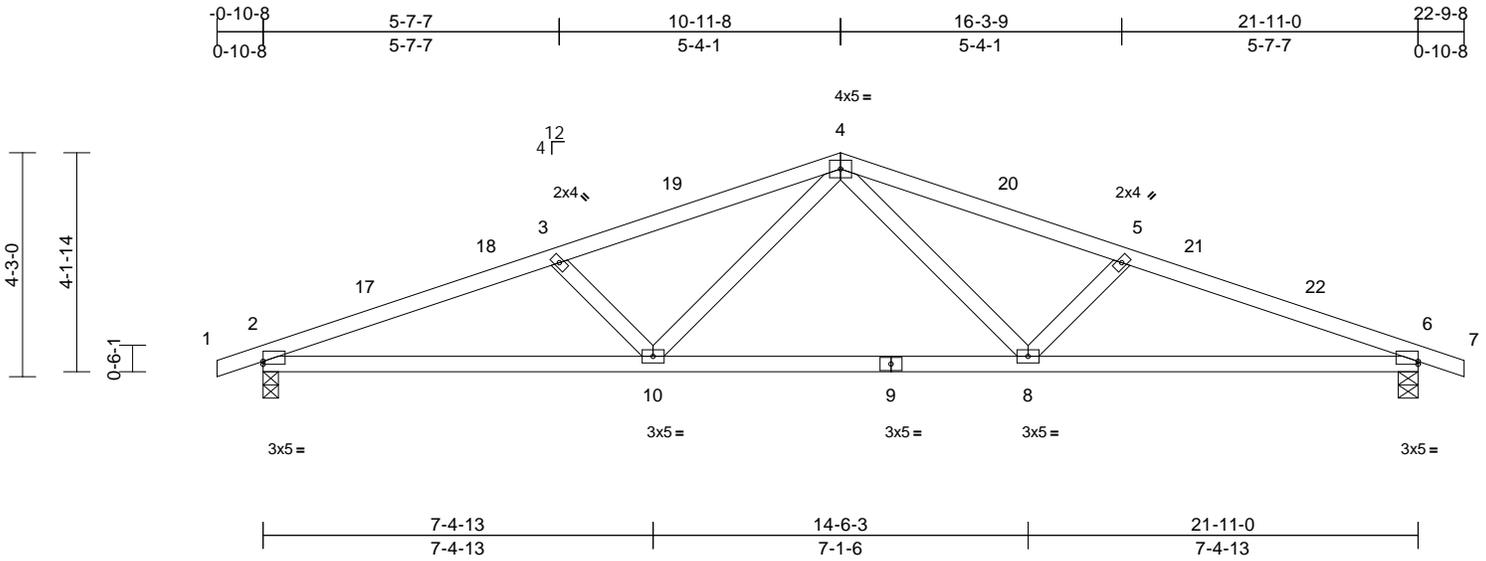
818 Soundside Road
Edenton, NC 27932

Job 25040195-01	Truss C2	Truss Type Common	Qty 6	Ply 1	Install 17 Magnolia Acres-Roof-Greyson FA 3FL SP 3CG I73186519 Job Reference (optional)
--------------------	-------------	----------------------	----------	----------	---

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu May 01 16:22:22
ID:pT_JJ9itUGLn3q?yG8hVlzQAYT-RfC?PsB70Hq3NSgPqnL8w3uTXbGKwRCDoi7J4zJC?f

Page: 1



Scale = 1:43.5

Plate Offsets (X, Y): [2:Edge,0-0-11], [6:Edge,0-0-11]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.71	Vert(LL)	-0.12	8-10	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.75	Vert(CT)	-0.25	8-10	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.26	Horz(CT)	0.05	6	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 93 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 2-11-6 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(size) 2=0-3-8, 6=0-4-8
Max Horiz 2=-63 (LC 15)
Max Uplift 2=-136 (LC 10), 6=-136 (LC 11)
Max Grav 2=976 (LC 21), 6=976 (LC 22)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/17, 2-3=-2105/407, 3-4=-1809/361, 4-5=-1809/361, 5-6=-2105/407, 6-7=0/17
BOT CHORD 2-10=-312/1947, 8-10=-178/1246, 6-8=-312/1947
WEBS 4-8=-50/621, 5-8=-451/169, 4-10=-50/621, 3-10=-451/169

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 7-11-8, Exterior(2R) 7-11-8 to 13-11-8, Interior (1) 13-11-8 to 19-9-8, Exterior(2E) 19-9-8 to 22-9-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 8) All bearings are assumed to be SP No.2.
- 9) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 6. This connection is for uplift only and does not consider lateral forces.

LOAD CASE(S) Standard



May 5, 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)



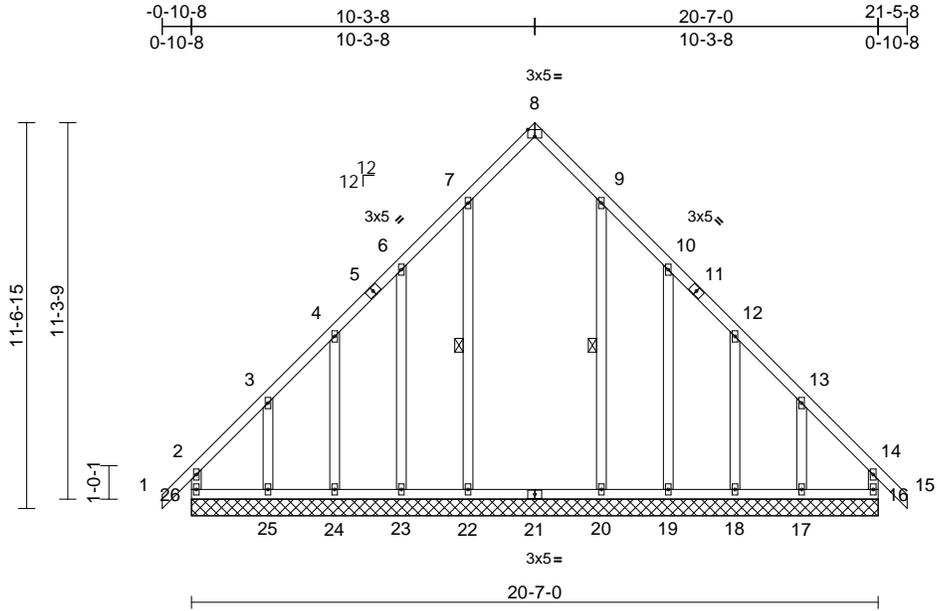
818 Soundside Road
Edenton, NC 27932

Job 25040195-01	Truss D1	Truss Type Common Supported Gable	Qty 1	Ply 1	Install 17 Magnolia Acres-Roof-Greyson FA 3FL SP 3CG I73186520 Job Reference (optional)
--------------------	-------------	--------------------------------------	----------	----------	---

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu May 01 16:22:22
ID:INDNI7sxfmKHKbpFYUuj1uzQBP_-RfC?Psb70Hq3NSgPqnL8w3uITxbGKWrCdoi7J4zJC?f

Page: 1



Scale = 1:68.7

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

Loading	(psf)	Spacing	0-11-4	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	16	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MR								
BCDL	10.0											
											Weight: 148 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.
WEBS 1 Row at midpt 7-22, 9-20

REACTIONS (size)
16=20-7-0, 17=20-7-0, 18=20-7-0,
19=20-7-0, 20=20-7-0, 22=20-7-0,
23=20-7-0, 24=20-7-0, 25=20-7-0,
26=20-7-0
Max Horiz 26=136 (LC 12)
Max Uplift 16=35 (LC 13), 17=133 (LC 15),
18=19 (LC 15), 19=72 (LC 15),
20=2 (LC 15), 22=4 (LC 14),
23=71 (LC 14), 24=19 (LC 14),
25=133 (LC 14), 26=39 (LC 12)
Max Grav 16=165 (LC 28), 17=124 (LC 26),
18=96 (LC 26), 19=88 (LC 22),
20=172 (LC 6), 22=172 (LC 5),
23=88 (LC 21), 24=96 (LC 30),
25=125 (LC 25), 26=167 (LC 27)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-26=-130/42, 1-2=0/20, 2-3=-190/86,
3-4=-107/53, 4-6=-78/39, 6-7=-68/35,
7-8=-80/43, 8-9=-80/43, 9-10=-68/32,
10-12=-76/35, 12-13=-105/49,
13-14=-187/83, 14-15=0/20, 14-16=-129/41

BOT CHORD 25-26=-65/174, 24-25=-65/174,
23-24=-65/174, 22-23=-65/174,
20-22=-65/174, 19-20=-65/174,
18-19=-65/174, 17-18=-65/174,
16-17=-65/174
WEBS 7-22=-121/25, 6-23=-80/85, 4-24=-70/44,
3-25=-92/110, 9-20=-121/22, 10-19=-80/85,
12-18=-70/43, 13-17=-89/114

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 2-3-8, Exterior(2N) 2-3-8 to 7-3-8, Corner(3R) 7-3-8 to 13-3-8, Exterior(2N) 13-3-8 to 18-3-8, Corner(3E) 18-3-8 to 21-5-8 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); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).

- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- All bearings are assumed to be SP No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 39 lb uplift at joint 26, 35 lb uplift at joint 16, 4 lb uplift at joint 22, 71 lb uplift at joint 23, 19 lb uplift at joint 24, 133 lb uplift at joint 25, 2 lb uplift at joint 20, 72 lb uplift at joint 19, 19 lb uplift at joint 18 and 133 lb uplift at joint 17.

LOAD CASE(S) Standard



May 5, 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/TPI 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.sbccomponents.com)

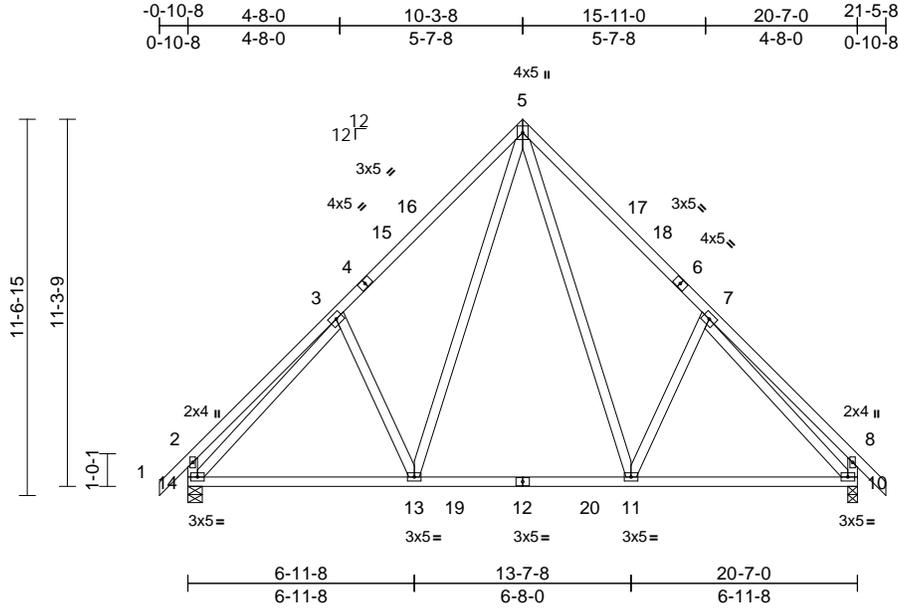


Job 25040195-01	Truss D2	Truss Type Common	Qty 2	Ply 1	Install 17 Magnolia Acres-Roof-Greyson FA 3FL SP 3CG I73186521 Job Reference (optional)
--------------------	-------------	----------------------	----------	----------	---

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu May 01 16:22:22
ID:a0TK?u2j_yGCKlRYQxHaqRzQAyL-RFC?PsB70Hq3NSgPqnL8w3uITXbGKwRCDoi7J4zJC?f

Page: 1



Scale = 1:70.5

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.82	Vert(LL)	-0.08	11-13	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.50	Vert(CT)	-0.11	11-13	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.70	Horz(CT)	0.02	10	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 149 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except* 11-5,13-5:2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 10=0-3-8, 14=0-5-4
Max Horiz 14=290 (LC 13)
Max Uplift 10=-62 (LC 15), 14=-62 (LC 14)
Max Grav 10=976 (LC 6), 14=976 (LC 5)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/43, 2-3=-377/131, 3-5=-1091/242, 5-7=-1090/244, 7-8=-356/131, 8-9=0/43, 2-14=-381/137, 8-10=-366/137
BOT CHORD 13-14=-114/783, 11-13=-11/529, 10-11=-4/723
WEBS 5-11=-170/538, 7-11=-260/274, 5-13=-170/541, 3-13=-262/274, 3-14=-798/32, 7-10=-804/31

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 7-3-8, Exterior(2R) 7-3-8 to 13-3-8, Interior (1) 13-3-8 to 18-5-8, Exterior(2E) 18-5-8 to 21-5-8 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.
- All bearings are assumed to be SP No.2.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 14 and 10. This connection is for uplift only and does not consider lateral forces.

LOAD CASE(S) Standard



May 5, 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/TPI 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

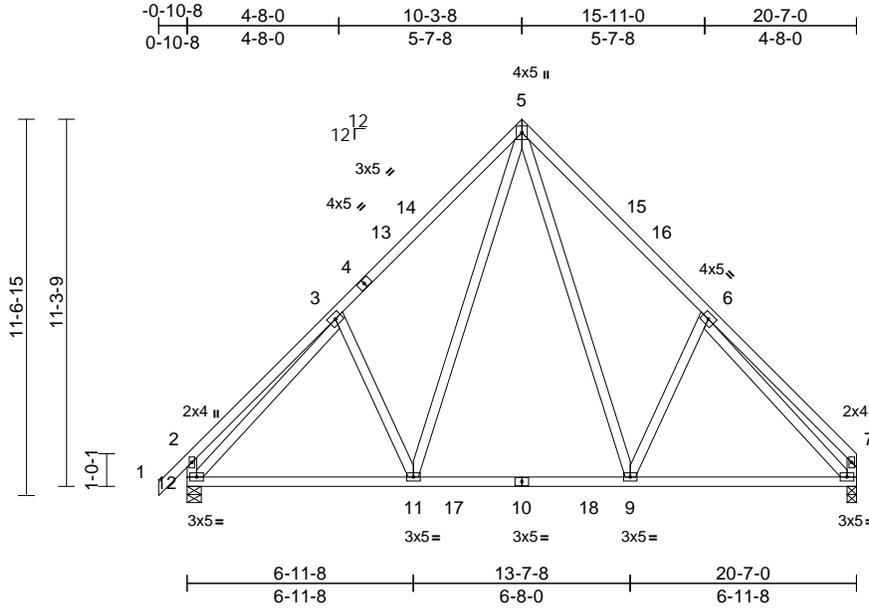
818 Soundside Road
Edenton, NC 27932

Job 25040195-01	Truss D3	Truss Type Common	Qty 3	Ply 1	Install 17 Magnolia Acres-Roof-Greyson FA 3FL SP 3CG 173186522 Job Reference (optional)
--------------------	-------------	----------------------	----------	----------	---

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu May 01 16:22:22
ID:2C1tCE3LIFO3MS0k_fopMezQAYk-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1



Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.82	Vert(LL)	-0.08	9-11	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.50	Vert(CT)	-0.11	9-11	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.72	Horz(CT)	0.02	8	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 147 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except* 9-5,11-5:2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 8=0-3-8, 12=0-5-4
Max Horiz 12=282 (LC 11)
Max Uplift 8=-54 (LC 14), 12=-62 (LC 14)
Max Grav 8=924 (LC 6), 12=977 (LC 5)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/43, 2-3=-377/131, 3-5=-1092/242, 5-6=-1094/245, 6-7=-323/98, 2-12=-381/137, 7-8=-297/92
BOT CHORD 11-12=-130/772, 9-11=-21/518, 8-9=-20/717
WEBS 5-9=-171/544, 6-9=-266/276, 5-11=-170/541, 3-11=-262/274, 3-12=-799/32, 6-8=-840/54

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 7-3-8, Exterior(2R) 7-3-8 to 13-3-8, Interior (1) 13-3-8 to 17-5-4, Exterior(2E) 17-5-4 to 20-5-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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

- 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.
 - All bearings are assumed to be SP No.2 .
 - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 12 and 8. This connection is for uplift only and does not consider lateral forces.
- LOAD CASE(S)** Standard



May 5, 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)



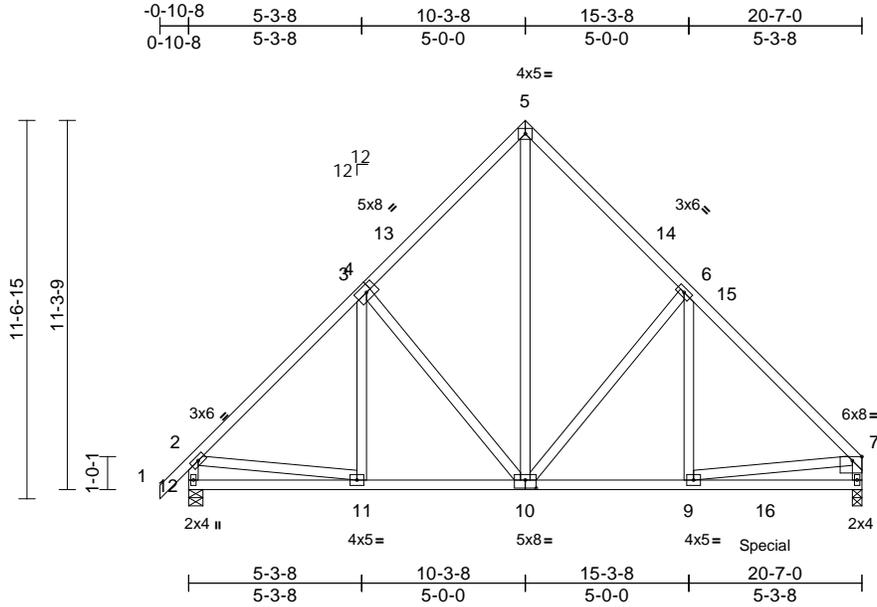
818 Soundside Road
Edenton, NC 27932

Job 25040195-01	Truss D4-2	Truss Type Common Girder	Qty 1	Ply 2	Install 17 Magnolia Acres-Roof-Greyson FA 3FL SP 3CG I73186523 Job Reference (optional)
--------------------	---------------	-----------------------------	----------	----------	---

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu May 01 16:22:22
ID:W0b4Qa3zWZww_bbwYMJ2vszQAYJ-RfC?PsB70Hq3NSgPqnL8w3uITxbGKwRCDoi7J4zJC7f

Page: 1



Scale = 1:70.1

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.86	Vert(LL)	-0.01	9-10	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.17	Vert(CT)	-0.03	9-10	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.20	Horz(CT)	0.01	8	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 296 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2 *Except* 5-7:2x4 SP No.1
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except* 10-5:2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-9-13 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 8=0-3-8, 12=0-5-4
Max Horiz 12=282 (LC 9)
Max Uplift 8=-213 (LC 12), 12=-82 (LC 12)
Max Grav 8=1987 (LC 20), 12=1058 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/43, 2-3=-1113/142, 3-5=-917/234, 5-6=-969/241, 6-7=-2041/225, 2-12=-1008/110, 7-8=-1933/240
BOT CHORD 11-12=-288/363, 9-11=-112/1026, 8-9=-127/564
WEBS 5-10=-213/812, 6-10=-786/283, 6-9=0/165, 3-10=-315/214, 3-11=0/152, 2-11=0/617, 7-9=0/468

- 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.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 213 lb uplift at joint 8 and 82 lb uplift at joint 12.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 27 lb down at 17-7-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

Concentrated Loads (lb)
Vert: 16=-3 (B)

- NOTES**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 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.

LOAD CASE(S) Standard

- Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-2=-60, 2-5=-60, 5-15=-60, 7-15=-310, 8-12=-20



May 5, 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)



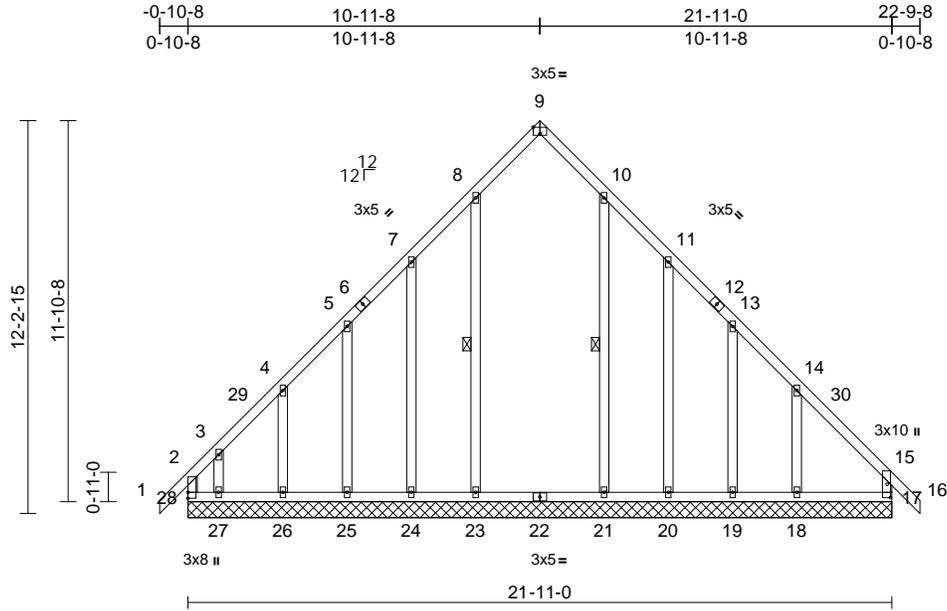
818 Soundside Road
Edenton, NC 27932

Job 25040195-01	Truss E1	Truss Type Common Supported Gable	Qty 1	Ply 1	Install 17 Magnolia Acres-Roof-Greyson FA 3FL SP 3CG I73186524
					Job Reference (optional)

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu May 01 16:22:22
ID:h1s2Hd5sBbj6Wmv9zkBJvzQBOh-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWRCoI7J4zJC?f

Page: 1



Scale = 1:71.4

Plate Offsets (X, Y): [9:0-2-8,Edge], [15:0-5-0,0-1-4]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.37	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	0.19	Horz(CT)	0.01	17	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MR								
BCDL	10.0											
											Weight: 162 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.
WEBS 1 Row at midpt 8-23, 10-21

REACTIONS (size)
17=21-11-0, 18=21-11-0,
19=21-11-0, 20=21-11-0,
21=21-11-0, 23=21-11-0,
24=21-11-0, 25=21-11-0,
26=21-11-0, 27=21-11-0,
28=21-11-0

Max Horiz 28=302 (LC 12)
Max Uplift 17=41 (LC 13), 18=281 (LC 15),
19=27 (LC 15), 20=154 (LC 15),
21=7 (LC 15), 23=27 (LC 14),
24=131 (LC 14), 25=96 (LC 14),
26=81 (LC 14), 27=402 (LC 14),
28=215 (LC 12)
Max Grav 17=356 (LC 28), 18=314 (LC 26),
19=183 (LC 26), 20=193 (LC 22),
21=361 (LC 6), 23=363 (LC 5),
24=191 (LC 21), 25=220 (LC 25),
26=210 (LC 25), 27=238 (LC 12),
28=593 (LC 14)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 2-28=-426/190, 1-2=0/43, 2-3=-539/245,
3-4=-358/164, 4-5=-256/127, 5-7=-174/89,
7-8=-150/72, 8-9=-173/83, 9-10=-174/83,
10-11=-151/49, 11-13=-166/67,
13-14=-219/90, 14-15=-409/192, 15-16=0/43,
15-17=-281/82
BOT CHORD 27-28=-138/387, 26-27=-138/387,
25-26=-138/387, 24-25=-138/387,
23-24=-138/387, 21-23=-138/387,
20-21=-138/387, 19-20=-138/387,
18-19=-138/387, 17-18=-138/387
WEBS 8-23=-254/68, 7-24=-170/164,
5-25=-157/118, 4-26=-164/127,
3-27=-170/245, 10-21=-252/50,
11-20=-174/172, 13-19=-136/78,
14-18=-230/247

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 7-11-8, Corner(3R) 7-11-8 to 13-11-8, Exterior(2N) 13-11-8 to 19-9-8, Corner(3E) 19-9-8 to 22-9-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- All bearings are assumed to be SP No.2 .



May 5, 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/TPI Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)



818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Install 17 Magnolia Acres-Roof-Greyson FA 3FL SP 3CG I73186524
25040195-01	E1	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. Thu May 01 16:22:22
ID:h1sZHd5sBbjb6Wmv9zkBJvzQBOh-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWRcDoi7J4zJC?f

Page: 2

- 14) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 215 lb uplift at joint 28, 41 lb uplift at joint 17, 27 lb uplift at joint 23, 131 lb uplift at joint 24, 96 lb uplift at joint 25, 81 lb uplift at joint 26, 402 lb uplift at joint 27, 7 lb uplift at joint 21, 154 lb uplift at joint 20, 27 lb uplift at joint 19 and 281 lb uplift at joint 18.

LOAD CASE(S) Standard

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/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.sbccomponents.com)



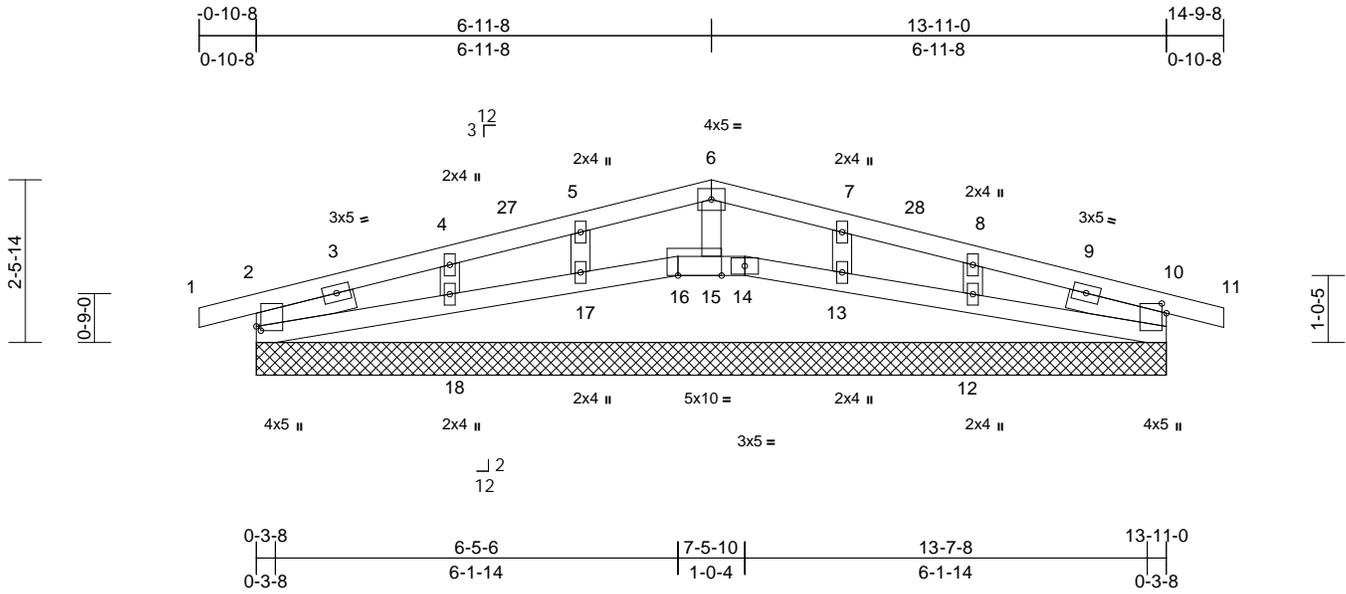
818 Soundside Road
Edenton, NC 27932

Job 25040195-01	Truss G1	Truss Type Roof Special Supported Gable	Qty 1	Ply 1	Install 17 Magnolia Acres-Roof-Greyson FA 3FL SP 3CG I73186525 Job Reference (optional)
--------------------	-------------	--	----------	----------	---

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu May 01 16:22:22
ID:wjtwWel8MGIIBfNc3vE1XzQCNF-RfC?PsB70Hq3NSgPqnLw3uITXbGKWrCDoi7J4zJC7f

Page: 1



Scale = 1:35.1

Plate Offsets (X, Y): [2:0-0-13,0-0-13], [10:0-1-13,0-0-13]

Loading	(psf)	Spacing	1-11-4	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	0.07	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 55 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2
 OTHERS 2x4 SP No.3
 SLIDER Left 2x4 SP No.2 -- 1-6-13, Right 2x4 SP No.3 -- 1-6-13

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=13-11-0, 10=13-11-0, 12=13-11-0, 13=13-11-0, 14=13-11-0, 15=13-11-0, 16=13-11-0, 17=13-11-0, 18=13-11-0
 Max Horiz 2=30 (LC 14)
 Max Uplift 2=-44 (LC 10), 10=-52 (LC 11), 12=-43 (LC 15), 13=-30 (LC 11), 15=-10 (LC 10), 17=-29 (LC 10), 18=-46 (LC 14)
 Max Grav 2=223 (LC 21), 10=223 (LC 22), 12=275 (LC 22), 13=187 (LC 22), 14=47 (LC 7), 15=87 (LC 1), 16=47 (LC 7), 17=187 (LC 21), 18=275 (LC 21)

FORCES

(lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=0/17, 2-4=-86/38, 4-5=-74/70, 5-6=-79/104, 6-7=-79/104, 7-8=-74/70, 8-10=-86/38, 10-11=0/17
 BOT CHORD 2-18=-4/56, 17-18=-3/51, 16-17=-4/52, 15-16=-2/49, 14-15=-2/49, 13-14=-3/52, 12-13=-4/51, 10-12=-3/56
 WEBS 6-15=-86/52, 5-17=-166/118, 4-18=-198/111, 7-13=-166/118, 8-12=-198/111

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 3-11-8, Corner(3R) 3-11-8 to 9-11-8, Exterior(2N) 9-11-8 to 11-9-8, Corner(3E) 11-9-8 to 14-9-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2.

- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 44 lb uplift at joint 2, 52 lb uplift at joint 10, 10 lb uplift at joint 15, 29 lb uplift at joint 17, 46 lb uplift at joint 18, 30 lb uplift at joint 13, 43 lb uplift at joint 12, 44 lb uplift at joint 2 and 52 lb uplift at joint 10.
 - Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 16, 14, 15, 17, 18, 13, 12.
- LOAD CASE(S)** Standard



May 5, 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/TPI Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)



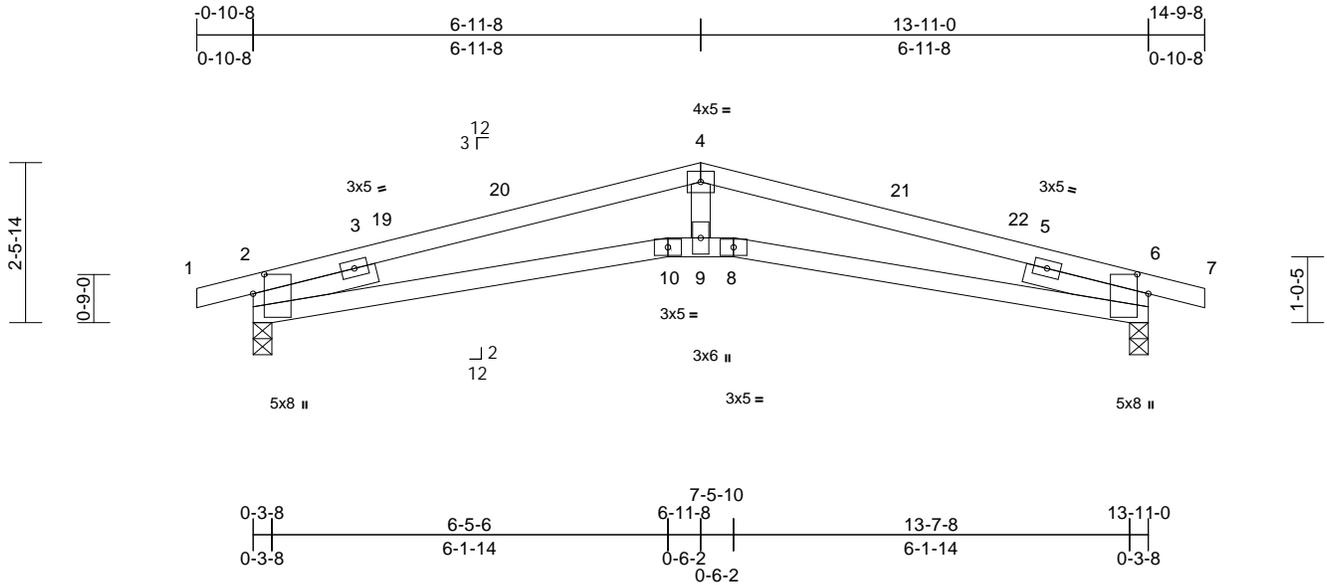
818 Soundside Road
 Edenton, NC 27932

Job 25040195-01	Truss G2	Truss Type Roof Special	Qty 5	Ply 1	Install 17 Magnolia Acres-Roof-Greyson FA 3FL SP 3CG I73186526 Job Reference (optional)
--------------------	-------------	----------------------------	----------	----------	---

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu May 01 16:22:22
ID:koBRvJpKJJSVJfwSz1ohWTzQCOD-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC7f

Page: 1



Scale = 1:35.6

Plate Offsets (X, Y): [2:0-3-10,0-2-1], [6:0-3-10,0-2-1]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.75	Vert(LL)	-0.14	10-13	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.74	Vert(CT)	-0.26	8-17	>634	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.26	Horz(CT)	0.12	6	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 53 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.1 *Except* 10-8:2x4 SP No.2
 WEBS 2x4 SP No.3
 SLIDER Left 2x4 SP No.3 -- 2-0-0, Right 2x4 SP No.3 -- 2-0-0

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-8-10 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 7-9-15 oc bracing.

REACTIONS

(size) 2=0-3-8, 6=0-3-8
 Max Horiz 2=31 (LC 14)
 Max Uplift 2=-96 (LC 10), 6=-96 (LC 11)
 Max Grav 2=715 (LC 21), 6=715 (LC 22)

FORCES

(lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=0/18, 2-4=-1879/670, 4-6=-1879/670, 6-7=0/18
 BOT CHORD 2-10=-578/1797, 9-10=-565/1772, 8-9=-565/1772, 6-8=-578/1797
 WEBS 4-9=-109/637

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-10-8 to 2-1-8, Interior (1) 2-1-8 to 3-11-8, Exterior(2R) 3-11-8 to 9-11-8, Interior (1) 9-11-8 to 11-9-8, Exterior(2E) 11-9-8 to 14-9-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 8) All bearings are assumed to be SP No.1 .
- 9) Bearing at joint(s) 2, 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 10) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 6. This connection is for uplift only and does not consider lateral forces.

LOAD CASE(S) Standard



May 5, 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)



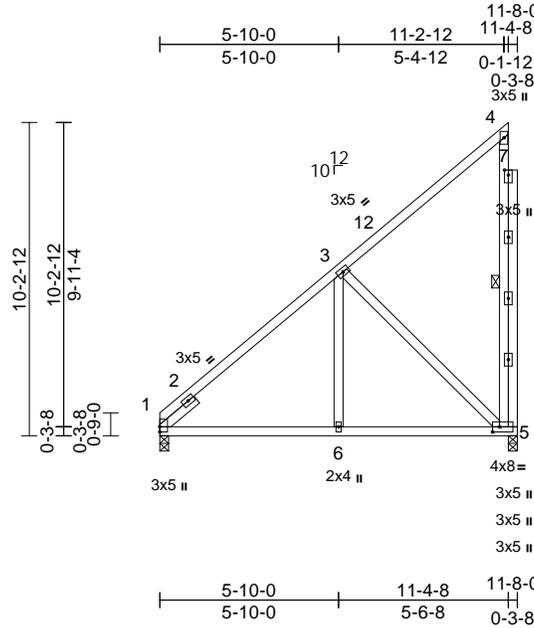
818 Soundside Road
 Edenton, NC 27932

Job 25040195-01	Truss H1	Truss Type Monopitch	Qty 4	Ply 1	Install 17 Magnolia Acres-Roof-Greyson FA 3FL SP 3CG I73186527 Job Reference (optional)
--------------------	-------------	-------------------------	----------	----------	---

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu May 01 16:22:23
ID:ZHIL71hiKmUf9UsX4SW6vIzKqP8-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC7f

Page: 1



Scale = 1:74.8

Plate Offsets (X, Y): [5:0-2-12,0-2-0], [7:0-2-0,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	Vert(LL)	0.04	6-10	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	Vert(CT)	-0.05	6-10	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	Horz(CT)	0.02	1	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH							
BCDL	10.0									Weight: 87 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 6-0-0 oc purlins, except end verticals.
- BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
- WEBS 1 Row at midpt 4-5

REACTIONS

- (size) 1=0-3-8, 5=0-3-8
- Max Horiz 1=346 (LC 13)
- Max Uplift 5=-150 (LC 14)
- Max Grav 1=492 (LC 20), 5=599 (LC 20)

FORCES

- (lb) - Maximum Compression/Maximum Tension
- TOP CHORD 1-3=-378/105, 3-4=-242/214, 4-5=-235/103
- BOT CHORD 1-6=-276/483, 5-6=-132/478
- WEBS 3-6=0/255, 3-5=-521/230

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) 0-0-0 to 3-0-0, Interior (1) 3-0-0 to 8-2-12, Exterior(2E) 8-2-12 to 11-2-12 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.
- 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.
- All bearings are assumed to be SP No.2 .
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 5. This connection is for uplift only and does not consider lateral forces.

LOAD CASE(S) Standard



May 5, 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)



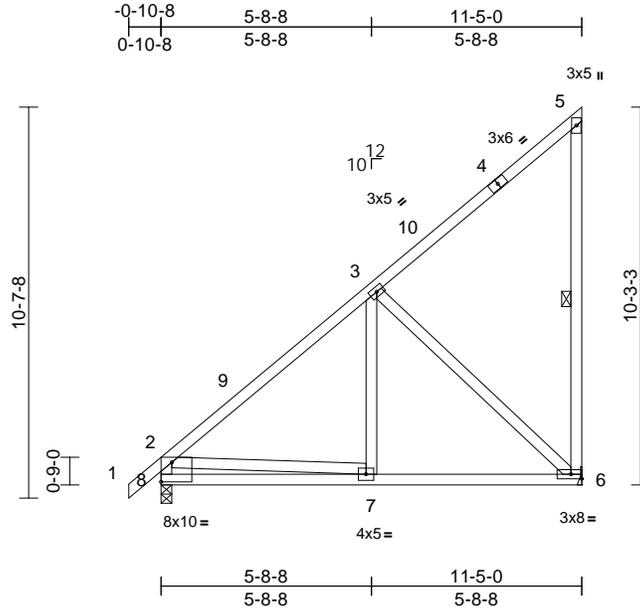
818 Soundside Road
Edenton, NC 27932

Job 25040195-01	Truss H2	Truss Type Jack-Closed	Qty 4	Ply 1	Install 17 Magnolia Acres-Roof-Greyson FA 3FL SP 3CG I73186528 Job Reference (optional)
--------------------	-------------	---------------------------	----------	----------	---

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu May 01 16:22:23
ID:43D5zr6SLviiwC83?b1pUTmzKqQ3-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:62.2

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

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	0.67	Vert(LL)	-0.04	6-7	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.31	Vert(CT)	-0.06	6-7	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.50	Horz(CT)	0.01	6	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 82 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2
 WEBS 2x4 SP No.3 *Except* 5-6:2x4 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 9-11-3 oc bracing.
 WEBS 1 Row at midpt 5-6

REACTIONS

(size) 6= Mechanical, 8=0-3-8
 Max Horiz 8=364 (LC 11)
 Max Uplift 6=-137 (LC 11), 8=-12 (LC 14)
 Max Grav 6=596 (LC 21), 8=544 (LC 21)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 2-8=-495/130, 1-2=0/39, 2-3=-533/78,
 3-5=-239/202, 5-6=-243/100
 BOT CHORD 7-8=-346/558, 6-7=-129/434
 WEBS 2-7=-169/241, 3-7=0/252, 3-6=-461/212

NOTES

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust)
 Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 7-0-5, Exterior(2R) 7-0-5 to 11-3-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.

- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 7) Bearings are assumed to be: Joint 8 SP No.2 .
- 8) Refer to girder(s) for truss to truss connections.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 137 lb uplift at joint 6.
- 10) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 8. This connection is for uplift only and does not consider lateral forces.

LOAD CASE(S) Standard



May 5, 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)



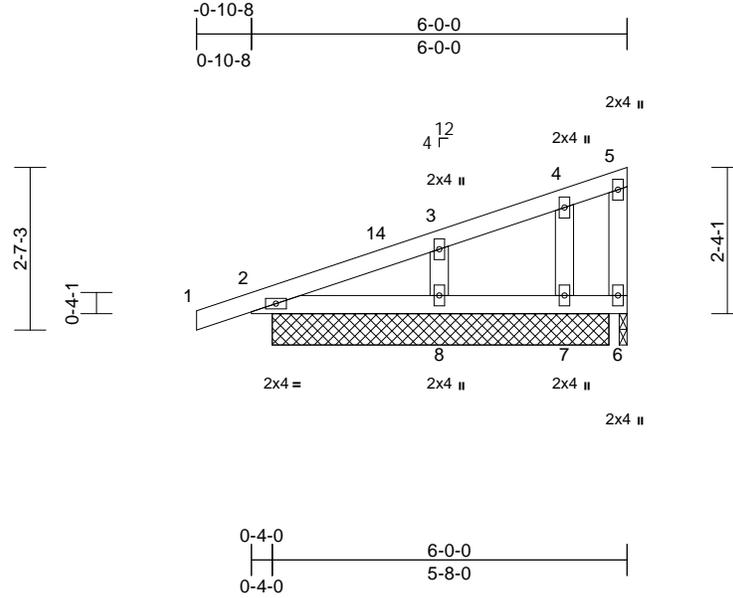
818 Soundside Road
 Edenton, NC 27932

Job 25040195-01	Truss J1	Truss Type Monopitch	Qty 1	Ply 1	Install 17 Magnolia Acres-Roof-Greyson FA 3FL SP 3CG I73186529 Job Reference (optional)
--------------------	-------------	-------------------------	----------	----------	---

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu May 01 16:22:23
ID:2C1iCE3LIFO3MS0k_fopMezQAYk-RfC?PsB70Hq3NSgPqnL8w3uTXbGKWrCDoi7J4zJC?i

Page: 1



Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	0.00	8-13	>999	240	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	0.00	8-13	>999	180	
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	6	n/a	n/a	
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MP							
BCDL	10.0									Weight: 26 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=5-4-8, 6=5-4-8, 7=5-4-8, 8=5-4-8
Max Horiz 2=85 (LC 13)
Max Uplift 2=-48 (LC 10), 6=-7 (LC 11), 7=-27 (LC 10), 8=-44 (LC 14)
Max Grav 2=263 (LC 21), 6=23 (LC 21), 7=161 (LC 21), 8=268 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/25, 2-3=-108/131, 3-4=-45/47, 4-5=-32/35, 5-6=-23/8
BOT CHORD 2-8=-133/145, 7-8=-25/37, 6-7=-25/37
WEBS 3-8=-210/161, 4-7=-135/120

NOTES
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-10-8 to 2-1-8, Interior (1) 2-1-8 to 2-10-4, Exterior(2E) 2-10-4 to 5-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) 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 studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2 .

LOAD CASE(S) Standard



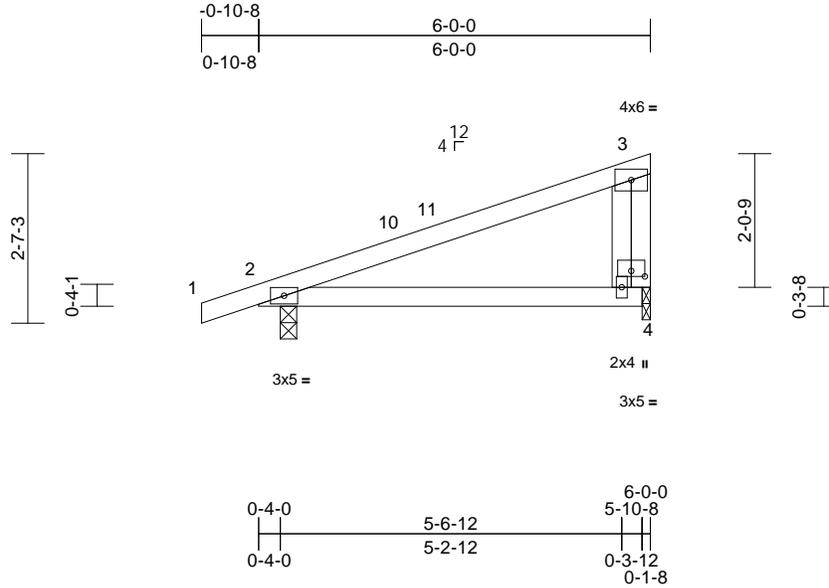
May 5, 2025

Job 25040195-01	Truss J2	Truss Type Monopitch	Qty 9	Ply 1	Install 17 Magnolia Acres-Roof-Greyson FA 3FL SP 3CG I73186530 Job Reference (optional)
--------------------	-------------	-------------------------	----------	----------	---

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu May 01 16:22:23
ID:2C1iCE3LIFO3MS0k_fopMezQAYk-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:35.1

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.61	Vert(LL)	-0.05	4-9	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.40	Vert(CT)	-0.10	4-9	>676	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: 25 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS

(size) 2=0-3-0, 4=0-1-8
 Max Horiz 2=83 (LC 13)
 Max Uplift 2=-70 (LC 10), 4=-38 (LC 14)
 Max Grav 2=419 (LC 21), 4=281 (LC 21)

FORCES

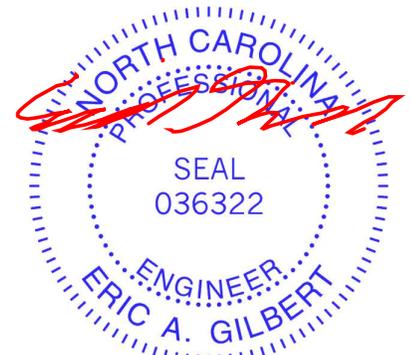
(lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=0/25, 2-3=-120/127, 3-4=-204/149
 BOT CHORD 2-4=-129/143

NOTES

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust)
 Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-10-8 to 2-1-8, Interior (1) 2-1-8 to 2-8-8, Exterior(2E) 2-8-8 to 5-8-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.

- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 7) Bearings are assumed to be: Joint 2 SP No.2, Joint 4 SP No.3.
- 8) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 9) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- 10) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 4. This connection is for uplift only and does not consider lateral forces.

LOAD CASE(S) Standard



May 5, 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/TPI 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.sbccomponents.com)



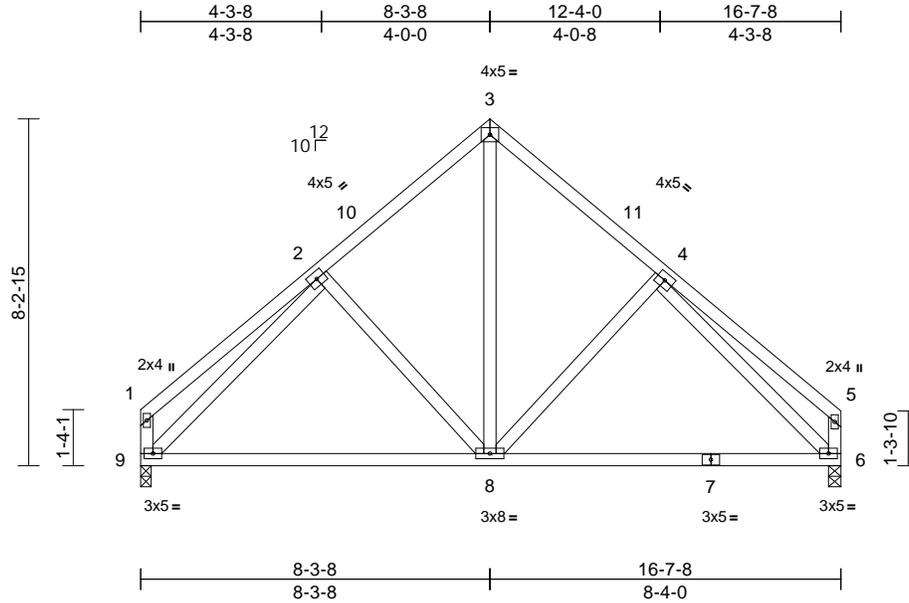
818 Soundside Road
 Edenton, NC 27932

Job 25040195-01	Truss K1	Truss Type Common	Qty 4	Ply 1	Install 17 Magnolia Acres-Roof-Greyson FA 3FL SP 3CG I73186531 Job Reference (optional)
--------------------	-------------	----------------------	----------	----------	---

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu May 01 16:22:23
ID:RfEQrNujqlVKHVjqkK8CV0zKqix-RfC?PsB70Hq3NSgPqnL8w3uTXbGKWrCDoi7J4zJC7f

Page: 1



Scale = 1:54.4

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	0.35	Vert(LL)	-0.09	6-8	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.63	Vert(CT)	-0.18	6-8	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.46	Horz(CT)	0.01	6	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 105 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS (size) 6=0-3-8, 9=0-3-0

Max Horiz 9=-198 (LC 10)
Max Uplift 6=-43 (LC 15), 9=-43 (LC 14)
Max Grav 6=717 (LC 21), 9=715 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-227/70, 2-3=-643/153, 3-4=-645/152, 4-5=-204/84, 1-9=-224/74, 5-6=-207/74
BOT CHORD 8-9=-85/515, 6-8=-13/520
WEBS 2-8=-204/180, 3-8=-88/453, 4-8=-208/181, 2-9=-651/86, 4-6=-652/55

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior (1) 3-1-12 to 5-3-8, Exterior(2R) 5-3-8 to 11-3-8, Interior (1) 11-3-8 to 13-5-12, Exterior(2E) 13-5-12 to 16-5-12 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 a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2.
- Provide mechanical connection (by others) of truss to bearing plate at joint(s) 9.
- 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.

LOAD CASE(S) Standard



May 5, 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)



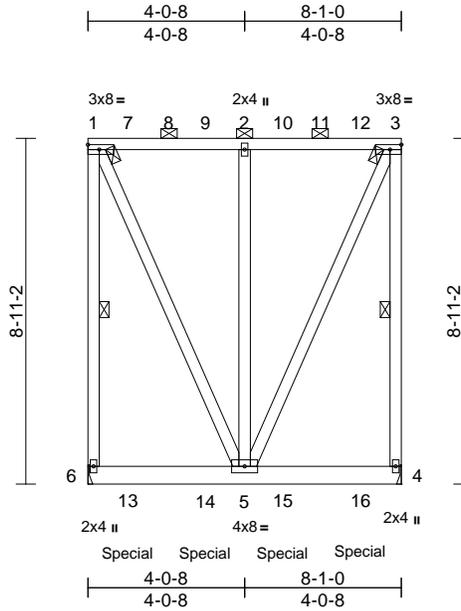
818 Soundside Road
Edenton, NC 27932

Job 25040195-01	Truss L1	Truss Type Flat Girder	Qty 1	Ply 2	Install 17 Magnolia Acres-Roof-Greyson FA 3FL SP 3CG I73186532 Job Reference (optional)
--------------------	-------------	---------------------------	----------	----------	---

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu May 01 16:22:23
ID:yqTpc9zP8CmhmNmqttdbzKqQ?rFic?PsB70Hq3NSgPqnL8w3uTXbGKwRCDoi7J4zJC7f

Page: 1



Scale = 1:59.1

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.81	Vert(LL)	-0.02	5-6	>999	240	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	-0.04	5-6	>999	180	
TCDL	10.0	Rep Stress Incr	NO	WB	0.58	Horz(CT)	0.00	4	n/a	n/a	
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MP							
BCDL	10.0										
										Weight: 188 lb	FT = 20%

LUMBER	
TOP CHORD	2x4 SP No.1
BOT CHORD	2x6 SP 2400F 2.0E
WEBS	2x4 SP No.3
BRACING	
TOP CHORD	2-0-0 oc purlins (6-0-0 max.): 1-3, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 1-6, 3-4
REACTIONS	(size) 4= Mechanical, 6= Mechanical
Max Horiz	6=-294 (LC 8)
Max Uplift	4=-545 (LC 9), 6=-544 (LC 8)
Max Grav	4=2779 (LC 1), 6=2779 (LC 1)
FORCES	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-6=-2233/439, 1-2=-745/113, 2-3=-745/113, 3-4=-2233/440
BOT CHORD	5-6=-256/230, 4-5=-109/83
WEBS	1-5=-426/1823, 2-5=-1899/161, 3-5=-426/1823

- 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.
- 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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 544 lb uplift at joint 6 and 545 lb uplift at joint 4.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 696 lb down and 29 lb up at 1-0-8, 695 lb down and 29 lb up at 3-0-8, and 695 lb down and 29 lb up at 5-0-8, and 696 lb down and 30 lb up at 7-0-8 on top chord, and 611 lb down and 148 lb up at 1-0-8, 610 lb down and 149 lb up at 3-0-8, and 610 lb down and 149 lb up at 5-0-8, and 611 lb down and 148 lb up at 7-0-8 on bottom chord. The design/selection of such connection device (s) is the responsibility of others.

Uniform Loads (lb/ft)
Vert: 1-3=-60, 4-6=-20
Concentrated Loads (lb)
Vert: 7=-658, 9=-655, 10=-655, 12=-658, 13=-577 (B), 14=-576 (B), 15=-576 (B), 16=-577 (B)

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

- LOAD CASE(S)** Standard
- Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15



May 5, 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)

ENGINEERING BY
TRENCO
A MiTek Affiliate

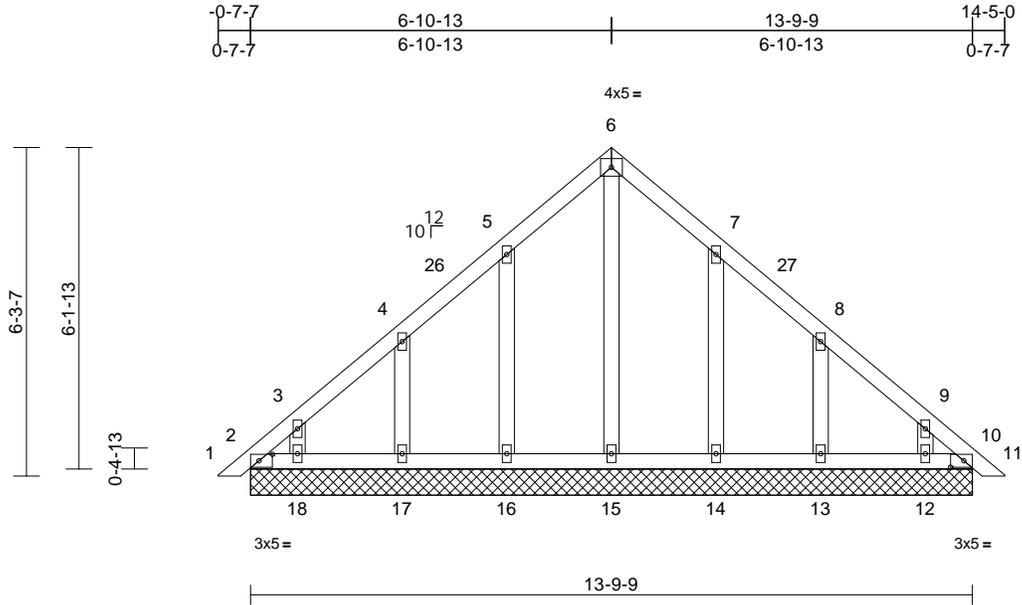
818 Soundside Road
Edenton, NC 27932

Job 25040195-01	Truss PB1	Truss Type Piggyback	Qty 2	Ply 1	Install 17 Magnolia Acres-Roof-Greyson FA 3FL SP 3CG I73186533 Job Reference (optional)
--------------------	--------------	-------------------------	----------	----------	---

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu May 01 16:22:23
ID:L0vVY?kP6y?udlSYvUpTmyzQAyl-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCdoi7J4zJC7f

Page: 1



Scale = 1:43.8
Plate Offsets (X, Y): [2:0-3-1,0-1-8], [10:0-3-1,0-1-8]

Loading	(psf)	Spacing	1-11-4	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	Horz(CT)	0.00	10	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH							
BCDL	10.0									Weight: 78 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP 2400F 2.0E
BOT CHORD 2x4 SP 2400F 2.0E
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=13-9-9, 10=13-9-9, 12=13-9-9, 13=13-9-9, 14=13-9-9, 15=13-9-9, 16=13-9-9, 17=13-9-9, 18=13-9-9
Max Horiz 2=-138 (LC 12)
Max Uplift 2=-45 (LC 12), 10=-19 (LC 13), 12=-68 (LC 15), 13=-77 (LC 15), 14=-74 (LC 15), 16=-75 (LC 14), 17=-77 (LC 14), 18=-69 (LC 14)
Max Grav 2=103 (LC 27), 10=90 (LC 28), 12=138 (LC 26), 13=204 (LC 22), 14=261 (LC 22), 15=133 (LC 28), 16=261 (LC 21), 17=204 (LC 21), 18=140 (LC 30)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/15, 2-3=-162/104, 3-4=-114/85, 4-5=-99/65, 5-6=-109/114, 6-7=-109/114, 7-8=-98/39, 8-9=-95/49, 9-10=-137/69, 10-11=0/15
BOT CHORD 2-18=-50/122, 17-18=-50/122, 16-17=-50/122, 15-16=-50/122, 14-15=-50/122, 13-14=-50/122, 12-13=-50/122, 10-12=-50/122
WEBS 6-15=-94/15, 5-16=-222/105, 4-17=-164/101, 3-18=-124/82, 7-14=-222/105, 8-13=-164/102, 9-12=-124/81

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) 0-2-14 to 3-2-14, Interior (1) 3-2-14 to 4-6-8, Exterior(2R) 4-6-8 to 10-6-8, Interior (1) 10-6-8 to 11-10-2, Exterior(2E) 11-10-2 to 14-10-2 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP 2400F 2.0E .

- 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 5, 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/TPI Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)



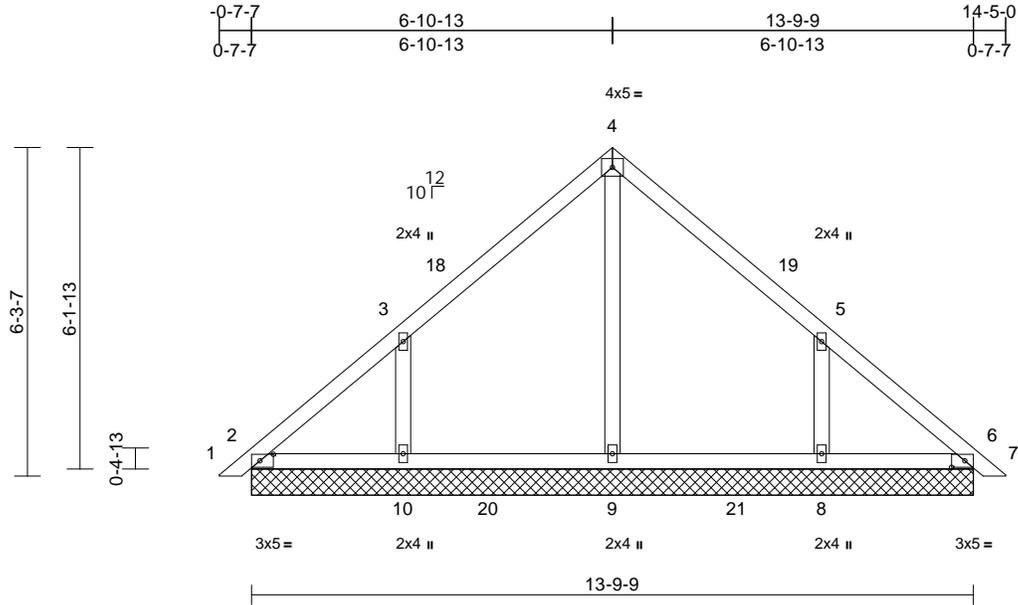
818 Soundside Road
Edenton, NC 27932

Job 25040195-01	Truss PB2	Truss Type Piggyback	Qty 16	Ply 1	Install 17 Magnolia Acres-Roof-Greyson FA 3FL SP 3CG I73186534 Job Reference (optional)
--------------------	--------------	-------------------------	-----------	----------	---

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu May 01 16:22:23
ID:L0vVY?kP6y?udlSYvUpTmyzQAyl-RfC?PsB70Hq3NSgPqnL8w3uITxbGKWrCdoi7J4zJC7f

Page: 1



Scale = 1:43.8

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

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	0.14	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.00	6	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0											
										Weight: 65 lb	FT = 20%	

LUMBER

TOP CHORD 2x4 SP 2400F 2.0E
BOT CHORD 2x4 SP 2400F 2.0E
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=13-9-9, 6=13-9-9, 8=13-9-9, 9=13-9-9, 10=13-9-9
Max Horiz 2=-143 (LC 12)
Max Uplift 2=-18 (LC 10), 8=-164 (LC 15), 10=-165 (LC 14)
Max Grav 2=178 (LC 26), 6=160 (LC 25), 8=435 (LC 22), 9=332 (LC 5), 10=435 (LC 21)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/15, 2-3=-143/96, 3-4=-227/117, 4-5=-227/117, 5-6=-118/59, 6-7=0/15
BOT CHORD 2-10=-40/110, 9-10=-40/110, 8-9=-40/110, 6-8=-40/110
WEBS 4-9=-161/0, 3-10=-365/200, 5-8=-365/199

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) 0-2-14 to 3-2-14, Interior (1) 3-2-14 to 4-6-8, Exterior(2R) 4-6-8 to 10-6-8, Interior (1) 10-6-8 to 11-10-2, Exterior(2E) 11-10-2 to 14-10-2 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, with BCDL = 10.0psf.
- All bearings are assumed to be SP 2400F 2.0E .
- 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 5, 2025

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

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

ENGINEERING BY
TRENCO
A MiTek Affiliate

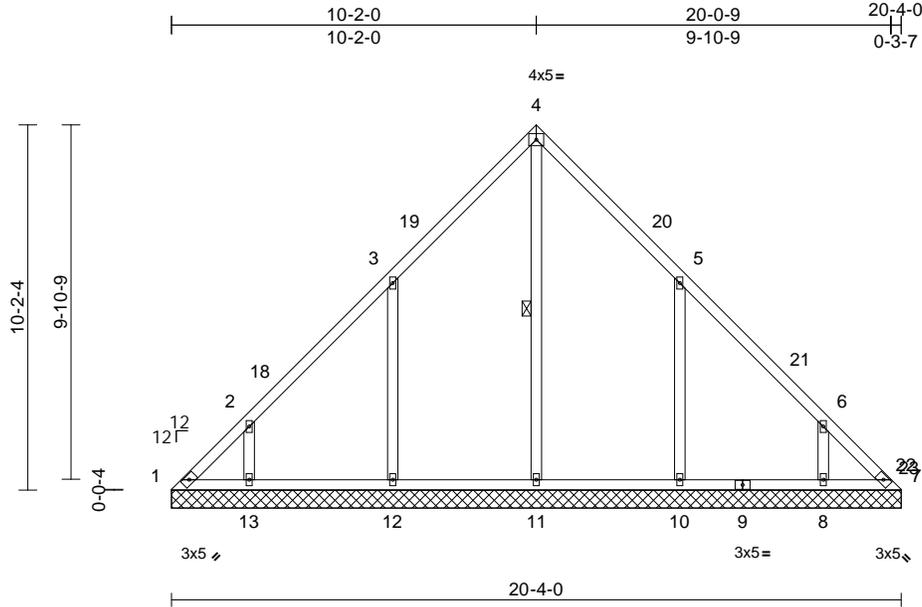
818 Soundside Road
Edenton, NC 27932

Job 25040195-01	Truss V1	Truss Type Valley	Qty 1	Ply 1	Install 17 Magnolia Acres-Roof-Greyson FA 3FL SP 3CG I73186535 Job Reference (optional)
--------------------	-------------	----------------------	----------	----------	---

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu May 01 16:22:23
ID:L0vVY?kP6y?udlSYvUpTmyzQAyl-RfC?PsB70Hq3NSgPqnL8w3uITxBGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:63.9

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.33	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.17	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.26	Horiz(TL)	0.01	7	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 107 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.

WEBS 1 Row at midpt 4-11
REACTIONS (size) 1=20-4-0, 7=20-4-0, 8=20-4-0, 10=20-4-0, 11=20-4-0, 12=20-4-0, 13=20-4-0
Max Horiz 1=234 (LC 11)
Max Uplift 1=88 (LC 12), 7=45 (LC 13), 8=126 (LC 15), 10=225 (LC 15), 12=225 (LC 14), 13=135 (LC 14)
Max Grav 1=177 (LC 14), 7=148 (LC 15), 8=340 (LC 25), 10=486 (LC 6), 11=397 (LC 27), 12=486 (LC 5), 13=350 (LC 24)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-292/197, 2-3=-207/148, 3-4=-235/192, 4-5=-235/164, 5-6=-163/89, 6-7=-250/135
BOT CHORD 1-13=-95/193, 12-13=-88/193, 11-12=-88/193, 10-11=-88/193, 8-10=-88/193, 7-8=-88/193
WEBS 4-11=-190/33, 3-12=-388/272, 2-13=-267/192, 5-10=-388/272, 6-8=-266/189

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

- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-4 to 3-0-4, Interior (1) 3-0-4 to 7-2-4, Exterior(2R) 7-2-4 to 13-2-4, Interior (1) 13-2-4 to 17-0-4, Exterior(2E) 17-0-4 to 20-0-4 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 4'-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3'-06-00 tall by 2'-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- All bearings are assumed to be SP No.2 .
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 88 lb uplift at joint 1, 45 lb uplift at joint 7, 225 lb uplift at joint 12, 135 lb uplift at joint 13, 225 lb uplift at joint 10 and 126 lb uplift at joint 8.

LOAD CASE(S) Standard



May 5, 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/TPI 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

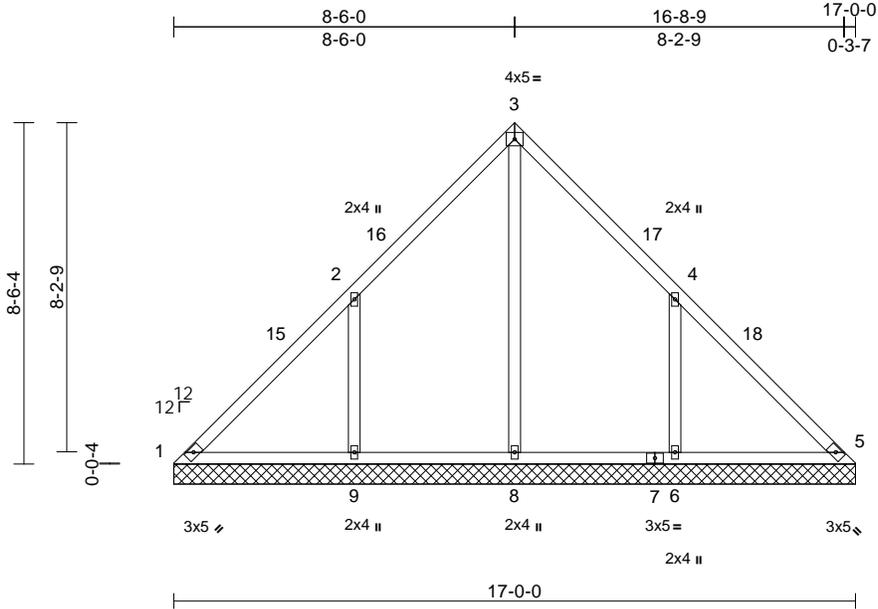
818 Soundside Road
Edenton, NC 27932

Job 25040195-01	Truss V2	Truss Type Valley	Qty 1	Ply 1	Install 17 Magnolia Acres-Roof-Greyson FA 3FL SP 3CG I73186536 Job Reference (optional)
--------------------	-------------	----------------------	----------	----------	---

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu May 01 16:22:24
ID:pCTiLL1tG7IES0kTBKiJazQAyk-RfC?PsB70Hq3NSgPqnL8w3uTXbGKwRCDoi7J4zJC7f

Page: 1



Scale = 1:57.2

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	0.40	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.19	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.66	Horiz(TL)	0.00	5	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 83 lb	FT = 20%

LUMBER	
TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
OTHERS	2x4 SP No.3
BRACING	
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
REACTIONS (size)	
	1=17-0-0, 5=17-0-0, 6=17-0-0, 8=17-0-0, 9=17-0-0
Max Horiz	1=195 (LC 11)
Max Uplift	1=-103 (LC 10), 5=-1 (LC 15), 6=-237 (LC 15), 9=-245 (LC 14)
Max Grav	1=122 (LC 13), 5=1 (LC 25), 6=540 (LC 25), 8=710 (LC 27), 9=542 (LC 24)
FORCES (lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=-158/409, 2-3=-55/341, 3-4=-35/328, 4-5=-201/302
BOT CHORD	1-9=-181/84, 8-9=-181/84, 6-8=-181/84, 5-6=-181/84
WEBS	3-8=-518/0, 2-9=-405/274, 4-6=-406/271

- 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.
- All bearings are assumed to be SP No.2 .
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 103 lb uplift at joint 1, 1 lb uplift at joint 5, 245 lb uplift at joint 9, 237 lb uplift at joint 6 and 1 lb uplift at joint 5.

LOAD CASE(S) Standard

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-4 to 3-0-4, Interior (1) 3-0-4 to 5-6-4, Exterior(2R) 5-6-4 to 11-6-4, Interior (1) 11-6-4 to 14-0-4, Exterior(2E) 14-0-4 to 17-0-4 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



May 5, 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/TPI Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)



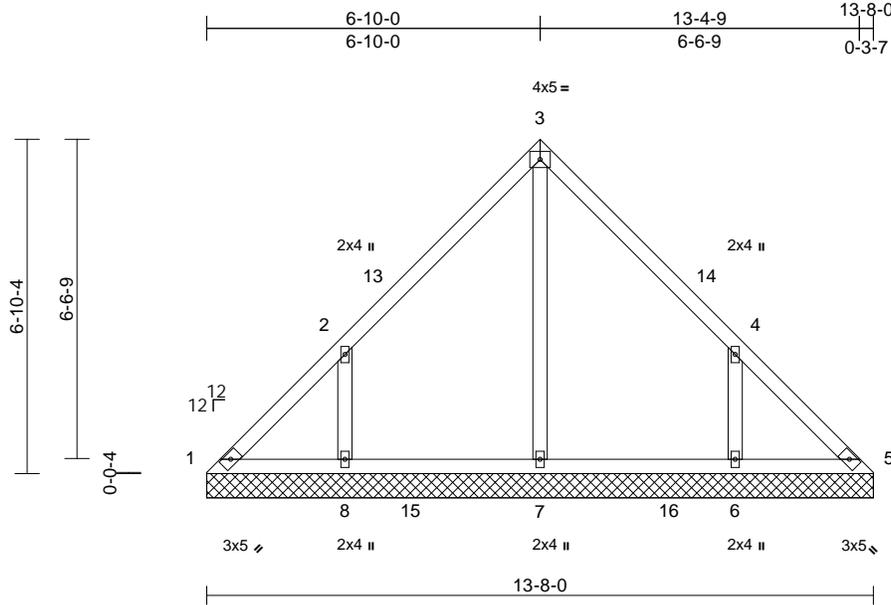
818 Soundside Road
Edenton, NC 27932

Job 25040195-01	Truss V3	Truss Type Valley	Qty 1	Ply 1	Install 17 Magnolia Acres-Roof-Greyson FA 3FL SP 3CG I73186537 Job Reference (optional)
--------------------	-------------	----------------------	----------	----------	---

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu May 01 16:22:24
ID:pCTiLL1tG7IES0kTBkIJaZQAyk-RfC?PsB70Hq3NSgPqnL8w3uTXbGKwRcDoi7J4zJC7f

Page: 1



Scale = 1:47

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	0.35	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.17	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.15	Horiz(TL)	0.00	5	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 64 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS

(size) 1=13-8-0, 5=13-8-0, 6=13-8-0, 7=13-8-0, 8=13-8-0
Max Horiz 1=-156 (LC 12)
Max Uplift 1=-41 (LC 10), 5=-5 (LC 11), 6=-187 (LC 15), 8=-191 (LC 14)
Max Grav 1=140 (LC 25), 5=113 (LC 24), 6=455 (LC 21), 7=374 (LC 24), 8=455 (LC 20)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-161/142, 2-3=-227/132, 3-4=-227/132, 4-5=-139/96
BOT CHORD 1-8=-62/123, 7-8=-62/121, 6-7=-62/121, 5-6=-62/121
WEBS 3-7=-189/0, 2-8=-386/239, 4-6=-386/239

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-4 to 2-10-4, Interior (1) 2-10-4 to 3-10-4, Exterior(2R) 3-10-4 to 9-10-4, Interior (1) 9-10-4 to 10-8-4, Exterior(2E) 10-8-4 to 13-8-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 5) Unbalanced snow loads have been considered for this design.
- 6) Gable requires continuous bottom chord bearing.
- 7) Gable studs spaced at 4-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 10) All bearings are assumed to be SP No.2 .
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 41 lb uplift at joint 1, 5 lb uplift at joint 5, 191 lb uplift at joint 8 and 187 lb uplift at joint 6.

LOAD CASE(S) Standard



May 5, 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)



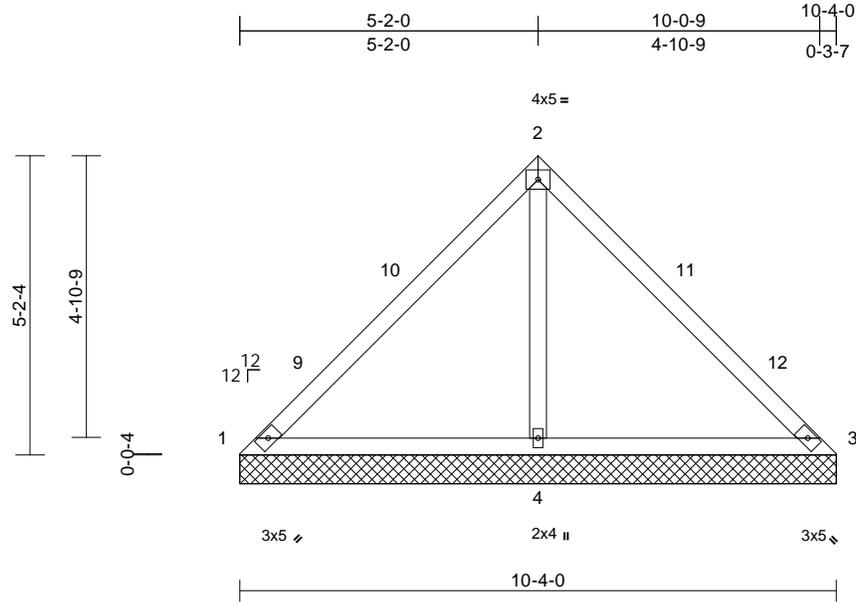
818 Soundside Road
Edenton, NC 27932

Job 25040195-01	Truss V4	Truss Type Valley	Qty 1	Ply 1	Install 17 Magnolia Acres-Roof-Greyson FA 3FL SP 3CG I73186538 Job Reference (optional)
--------------------	-------------	----------------------	----------	----------	---

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu May 01 16:22:24
ID:pCTlLL1tG7IES0kTBKiJazQAyk-RfC?PsB70Hq3NSgPqnL8w3uTXbGKWrCDoi7J4zJC7f

Page: 1



Scale = 1:39.7

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.54	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.49	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.32	Horiz(TL)	0.01	4	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MSH								
BCDL	10.0											
										Weight: 43 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=10-4-0, 3=10-4-0, 4=10-4-0
Max Horiz 1=-117 (LC 10)
Max Uplift 1=-55 (LC 21), 3=-55 (LC 20), 4=-165 (LC 14)
Max Grav 1=86 (LC 20), 3=86 (LC 21), 4=841 (LC 20)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-173/399, 2-3=-173/399
BOT CHORD 1-4=-249/218, 3-4=-249/218
WEBS 2-4=-719/359

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) 0-0-4 to 3-0-4, Exterior(2R) 3-0-4 to 7-4-4, Exterior(2E) 7-4-4 to 10-4-4 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.
- All bearings are assumed to be SP No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 55 lb uplift at joint 1, 55 lb uplift at joint 3 and 165 lb uplift at joint 4.

LOAD CASE(S) Standard



May 5, 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)



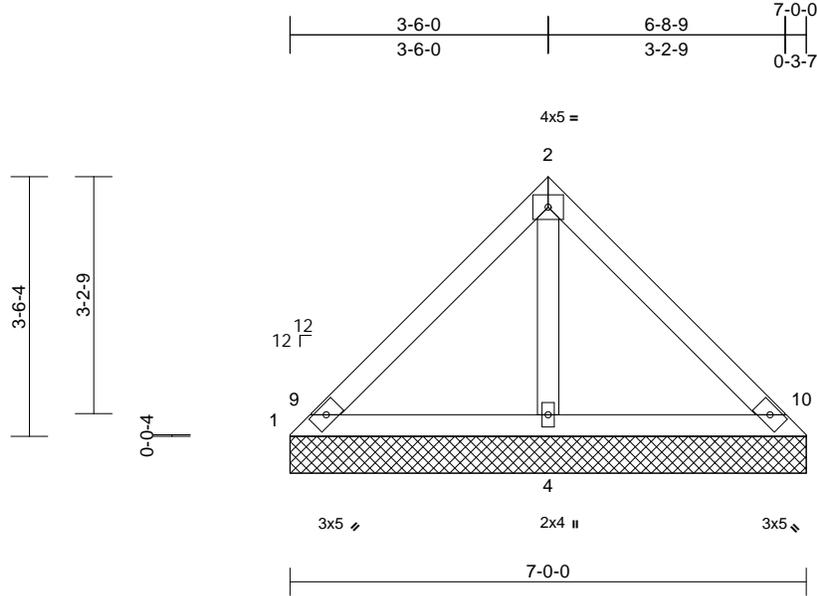
818 Soundside Road
Edenton, NC 27932

Job 25040195-01	Truss V5	Truss Type Valley	Qty 1	Ply 1	Install 17 Magnolia Acres-Roof-Greyson FA 3FL SP 3CG I73186539 Job Reference (optional)
--------------------	-------------	----------------------	----------	----------	---

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu May 01 16:22:24
ID:pCTiLL1tG7IES0kTBKiJazQAyk-RfC?PsB70Hq3NSgPqnL8w3uTXbGKwCDoi7J4zJC7f

Page: 1



Scale = 1:31.1

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.25	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.26	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.09	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 28 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS

(size) 1=7-0-0, 3=7-0-0, 4=7-0-0
Max Horiz 1=-78 (LC 12)
Max Uplift 1=-12 (LC 21), 3=-12 (LC 20),
4=-92 (LC 14)
Max Grav 1=98 (LC 20), 3=98 (LC 21), 4=510 (LC 20)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-73/205, 2-3=-73/205
BOT CHORD 1-4=-168/109, 3-4=-168/109
WEBS 2-4=-422/123

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-4 to 3-0-4, Exterior(2R) 3-0-4 to 4-0-4, Exterior(2E) 4-0-4 to 7-0-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

- 4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 5) Unbalanced snow loads have been considered for this design.
- 6) Gable requires continuous bottom chord bearing.
- 7) Gable studs spaced at 4-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 10) All bearings are assumed to be SP No.2.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 12 lb uplift at joint 1, 12 lb uplift at joint 3 and 92 lb uplift at joint 4.

LOAD CASE(S) Standard



May 5, 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)



818 Soundside Road
Edenton, NC 27932

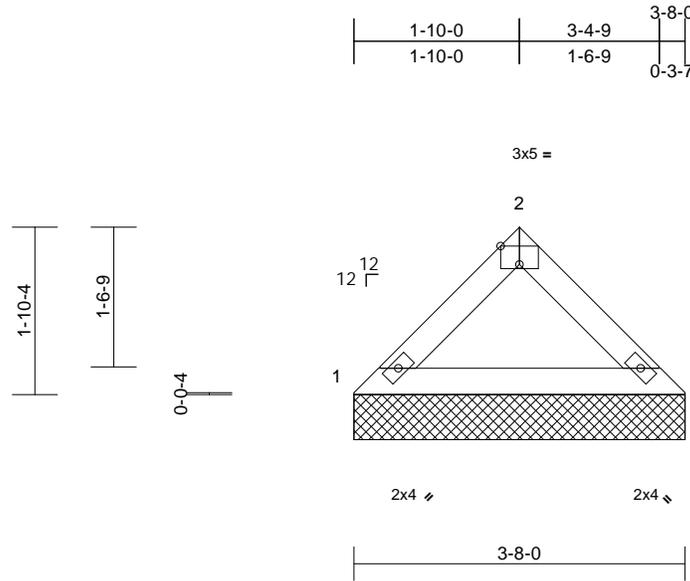
Job	Truss	Truss Type	Qty	Ply	Install 17 Magnolia Acres-Roof-Greyson FA 3FL SP 3CG I73186540
25040195-01	V6	Valley	1	1	Job Reference (optional)

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

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu May 01 16:22:24

Page: 1

ID:HO0FyhlfefaFcsbxb0vrxsNzQAYj-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC7f



Scale = 1:25.4

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.09	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MP								
BCDL	10.0											
											Weight: 12 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 3-8-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(size) 1=3-8-0, 3=3-8-0
Max Horiz 1=-39 (LC 12)
Max Uplift 1=-10 (LC 14), 3=-10 (LC 15)
Max Grav 1=176 (LC 20), 3=176 (LC 21)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-211/28, 2-3=-211/28
BOT CHORD 1-3=-23/141

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.
- All bearings are assumed to be SP No.2.
- 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 5, 2025

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

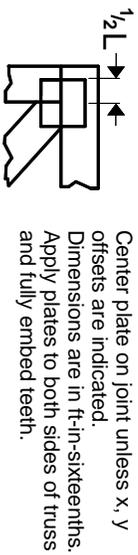
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

ENGINEERING BY
TRENCO
A MiTek Affiliate

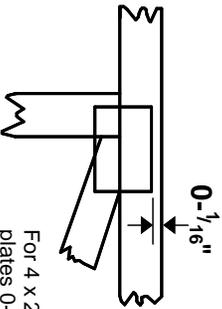
818 Soundside Road
Edenton, NC 27932

Symbols

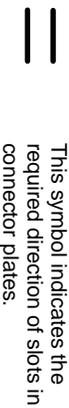
PLATE LOCATION AND ORIENTATION



Center plate on joint unless x, y offsets are indicated. Dimensions are in ft-in-sixteenths. Apply plates to both sides of truss and fully embed teeth.



For 4 x 2 orientation, locate plates 0- 1/16" from outside edge of truss.



This symbol indicates the required direction of slots in connector plates.

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

PLATE SIZE

4 X 4

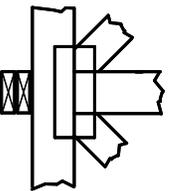
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

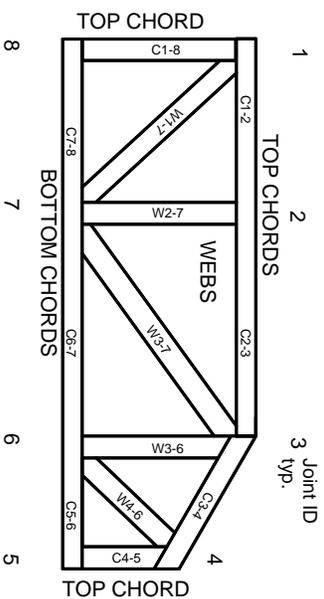


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

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

Numbering System



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

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

Product Code Approvals

ICC-ES Reports:

ESR-1988, ESR-2362, ESR-2685, ESR-3282
ESR-4722, ESL-1388

Design General Notes

Trusses are designed for wind loads in the plane of the truss unless otherwise shown.

Lumber design values are in accordance with ANSI/TP1 section 6.3. These truss designs rely on Lumber values established by others.

© 2023 MITek® All Rights Reserved

MITek

ENGINEERING BY
TRENGO
A MITek Affiliate

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

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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