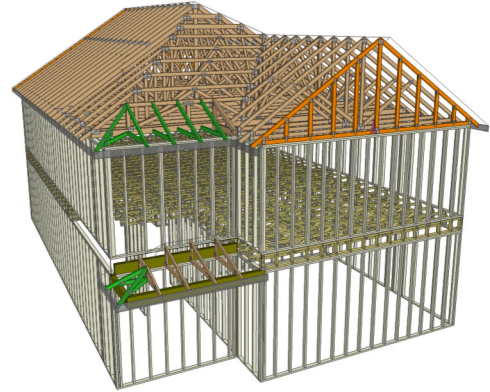




Carter Sanford Component Plant
298 Harvey Faulk Rd
Sanford, NC 27332

Phone #:919-775-1450



Builder: DRB HOMES
Model: MILLHAVEN 2
76 FARM AT NEILLS CREEK

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.

Approved by: _____

Date: _____

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: 24070012-A
76 Farm at Neills Creek-Roof-Millhaven 2 BR5 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: I66899230 thru I66899259

My license renewal date for the state of North Carolina is December 31, 2024.

North Carolina COA: C-0844



July 18, 2024

Gilbert, Eric

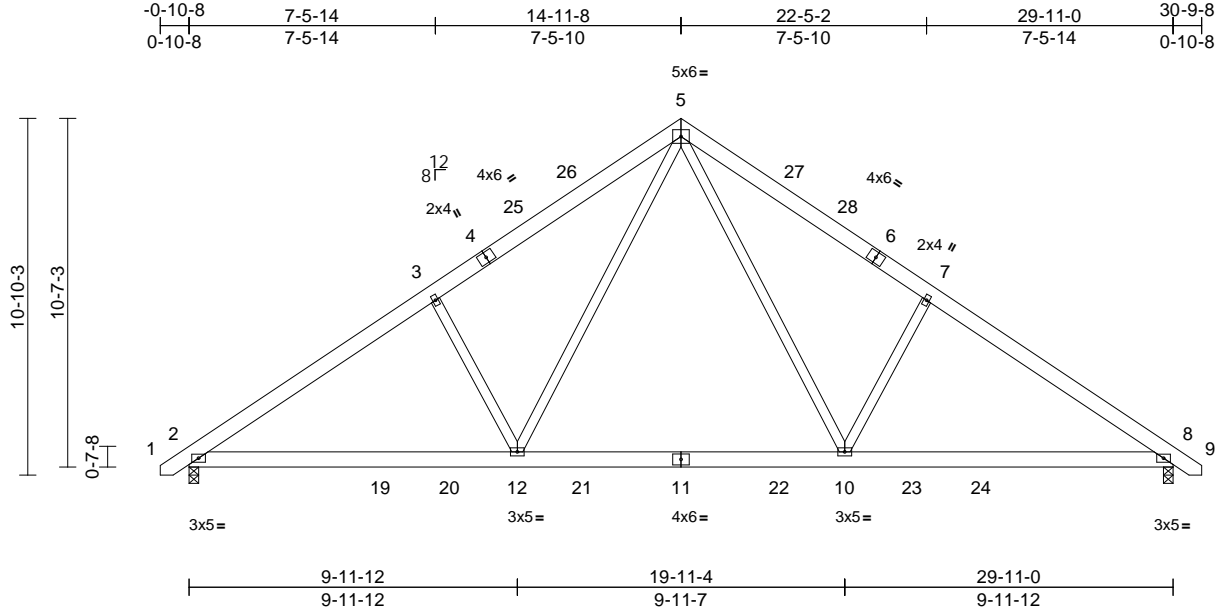
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which 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 24070012-A	Truss A01	Truss Type Common	Qty 5	Ply 1	76 Farm at Neills Creek-Roof-Millhaven 2 BR5 GRH I66899230 Job Reference (optional)
-------------------	--------------	----------------------	----------	----------	---

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

Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Tue Jul 16 12:36:45
ID:3zGhtly1P8zleGJJXcJ57uz5Pui-RfC?PsB70Hq3NSgPqnl8w3ulTXbGKwRCDoi7J4zJC?f

Page: 1



Scale = 1:70.1

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	0.44	Vert(LL)	-0.11	10-12	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.61	Vert(CT)	-0.18	10-12	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.33	Horz(CT)	0.04	8	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 207 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-8-9 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-3-8, 8=0-3-8
Max Horiz 2=-245 (LC 12)
Max Uplift 2=-117 (LC 14), 8=-117 (LC 15)
Max Grav 2=1438 (LC 25), 8=1438 (LC 26)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/23, 2-3=-2232/188, 3-5=-2118/261, 5-7=-2118/261, 7-8=-2232/188, 8-9=0/23
BOT CHORD 2-12=-191/1786, 10-12=0/1118, 8-10=-45/1786

WEBS
5-10=-152/990, 7-10=-501/279, 5-12=-151/990, 3-12=-501/279

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) -0-8-3 to 2-3-13, Interior (1) 2-3-13 to 11-11-8, Exterior(2R) 11-11-8 to 17-11-8, Interior (1) 17-11-8 to 27-7-3, Exterior(2E) 27-7-3 to 30-7-3 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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, with BCDL = 10.0psf.
- 8) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 8. This connection is for uplift only and does not consider lateral forces.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



July 18, 2024

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 24070012-A	Truss A02	Truss Type Common	Qty 7	Ply 1	76 Farm at Neills Creek-Roof-Millhaven 2 BR5 GRH 166899231 Job Reference (optional)
-------------------	--------------	----------------------	----------	----------	---

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

Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Tue Jul 16 12:36:46

Page: 1

ID:R5L_TWfUCTk3xbPHjLALdz5PsV-RfC?PsB70Hq3NSgPqnL8w3uITxBGKWrCdoi7J4zJC?f

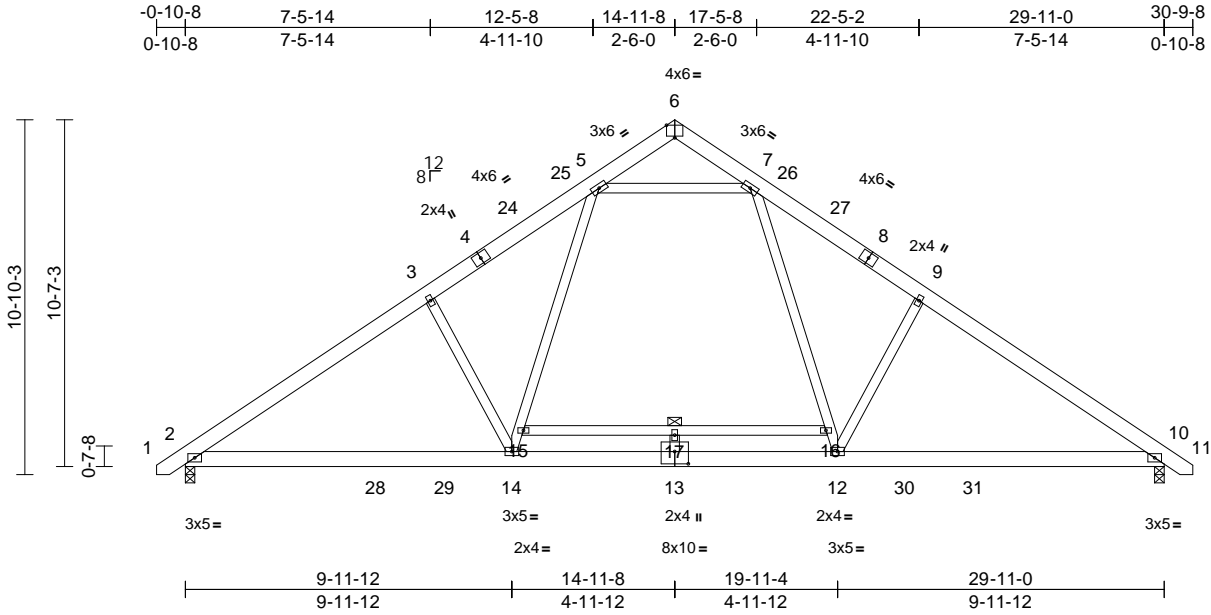


Plate Offsets (X, Y): [6:0-3-0,Edge], [13:0-5-0,0-4-8]

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	0.35	Vert(LL)	-0.15	14-20	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.62	Vert(CT)	-0.22	14-20	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.60	Horz(CT)	0.04	10	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 222 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-8-4 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 15-16

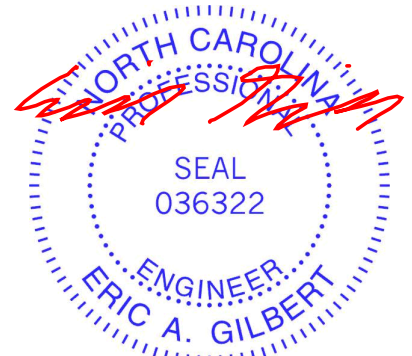
REACTIONS
(size) 2=0-3-8, 10=0-3-8
Max Horiz 2=-245 (LC 12)
Max Uplift 2=-117 (LC 14), 10=-117 (LC 15)
Max Grav 2=1394 (LC 25), 10=1394 (LC 26)

FORCES
(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/23, 2-3=-2128/181, 3-5=-2007/233, 5-6=-213/70, 6-7=-213/70, 7-9=-2007/233, 9-10=-2128/181, 10-11=0/23
BOT CHORD 2-14=-179/1694, 12-14=-23/1302, 10-12=-35/1694
WEBS 7-16=-118/818, 12-16=-119/802, 9-12=-447/270, 14-15=-119/802, 5-15=-117/818, 3-14=-447/270, 5-7=-1279/223, 15-17=-51/3, 16-17=-51/3, 13-17=0/10

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) -0-8-3 to 2-3-13, Interior (1) 2-3-13 to 11-11-8, Exterior(2R) 11-11-8 to 17-11-8, Interior (1) 17-11-8 to 27-7-3, Exterior(2E) 27-7-3 to 30-7-3 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 10. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



July 18, 2024

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

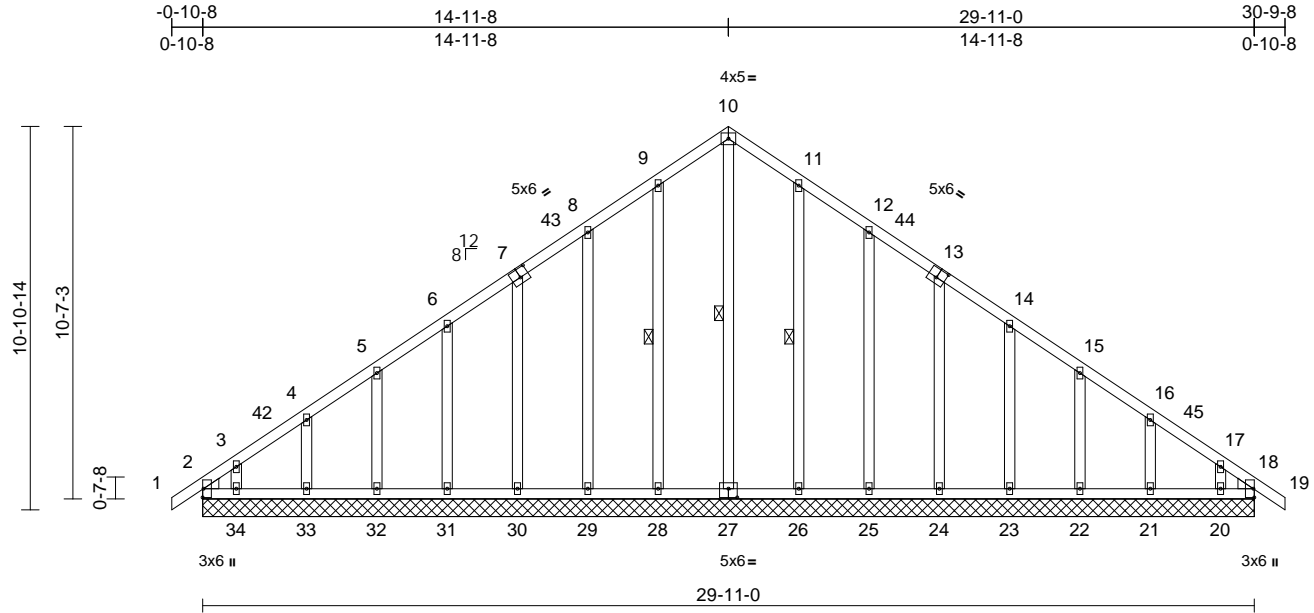
Job 24070012-A	Truss A03	Truss Type Common	Qty 1	Ply 1	76 Farm at Neills Creek-Roof-Millhaven 2 BR5 GRH 166899232 Job Reference (optional)
-------------------	--------------	----------------------	----------	----------	---

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

Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Tue Jul 16 12:36:46

Page: 1

ID:g5pwpZn04AwaPpBoGO6z5Ps5-RfC?PsB70Hq3NSgPqnL8w3uTXbGKWRCDoi7J4zJC?f



Scale = 1:65.5

Plate Offsets (X, Y): [7:0-3-0,0-3-0], [13:0-3-0,0-3-0], [27:0-3-0,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.20	Horz(CT)	0.01	18	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 216 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
 WEBS 1 Row at midpt 10-27, 9-28, 11-26

REACTIONS (size)

2=29-11-0, 18=29-11-0,
 20=29-11-0, 21=29-11-0,
 22=29-11-0, 23=29-11-0,
 24=29-11-0, 25=29-11-0,
 26=29-11-0, 27=29-11-0,
 28=29-11-0, 29=29-11-0,
 30=29-11-0, 31=29-11-0,
 32=29-11-0, 33=29-11-0,
 34=29-11-0, 35=29-11-0,
 39=29-11-0
 Max Horiz 2=-248 (LC 12), 35=-248 (LC 12)
 Max Uplift 2=-108 (LC 12), 18=-36 (LC 11),
 20=-102 (LC 15), 21=-57 (LC 15),
 22=-58 (LC 15), 23=-58 (LC 15),
 24=-57 (LC 15), 25=-63 (LC 15),
 26=-50 (LC 15), 28=-53 (LC 14),
 29=-61 (LC 14), 30=-57 (LC 14),
 31=-58 (LC 14), 32=-59 (LC 14),
 33=-55 (LC 14), 34=-120 (LC 14),
 35=-108 (LC 12), 39=-36 (LC 11)

FORCES

(lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=0/29, 2-3=-268/200, 3-4=-212/177,
 4-5=-168/155, 5-6=-145/134, 6-8=-128/159,
 8-9=-113/194, 9-10=-141/230,
 10-11=-141/230, 11-12=-113/180,
 12-14=-88/122, 14-15=-73/48, 15-16=-94/68,
 16-17=-153/90, 17-18=-205/106, 18-19=0/29
 BOT CHORD 2-34=-137/188, 33-34=-87/188,
 32-33=-87/188, 31-32=-87/188,
 30-31=-87/188, 29-30=-87/188,
 28-29=-87/188, 26-28=-87/188,
 25-26=-87/188, 24-25=-87/188,
 23-24=-87/188, 22-23=-87/188,
 21-22=-87/188, 20-21=-87/188,
 18-20=-87/188
 WEBS 10-27=-194/62, 9-28=-218/77, 8-29=-182/86,
 7-30=-143/81, 6-31=-144/82, 5-32=-142/82,
 4-33=-148/83, 3-34=-117/95, 11-26=-218/74,
 12-25=-182/87, 13-24=-143/81,
 14-23=-144/82, 15-22=-142/82,
 16-21=-148/84, 17-20=-117/88

NOTES

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

- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 11-11-8, Corner(3R) 11-11-8 to 17-11-8, Exterior(2N) 17-11-8 to 27-9-8, Corner(3E) 27-9-8 to 30-9-8 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.



July 18, 2024

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)

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

Job	Truss	Truss Type	Qty	Ply	76 Farm at Neills Creek-Roof-Millhaven 2 BR5 GRH I66899232
24070012-A	A03	Common	1	1	Job Reference (optional)

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

Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Tue Jul 16 12:36:46

Page: 2

ID:g5spwPzn4S02AwaPpBoGO6z5Ps5-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 7) All plates are 2x4 MT20 unless otherwise indicated.
- 8) Gable requires continuous bottom chord bearing.
- 9) Gable studs spaced at 2-0-0 oc.
- 10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 11) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 108 lb uplift at joint 2, 36 lb uplift at joint 18, 53 lb uplift at joint 28, 61 lb uplift at joint 29, 57 lb uplift at joint 30, 58 lb uplift at joint 31, 59 lb uplift at joint 32, 55 lb uplift at joint 33, 120 lb uplift at joint 34, 50 lb uplift at joint 26, 63 lb uplift at joint 25, 57 lb uplift at joint 24, 58 lb uplift at joint 23, 58 lb uplift at joint 22, 57 lb uplift at joint 21, 102 lb uplift at joint 20, 108 lb uplift at joint 2 and 36 lb uplift at joint 18.
- 13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

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

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



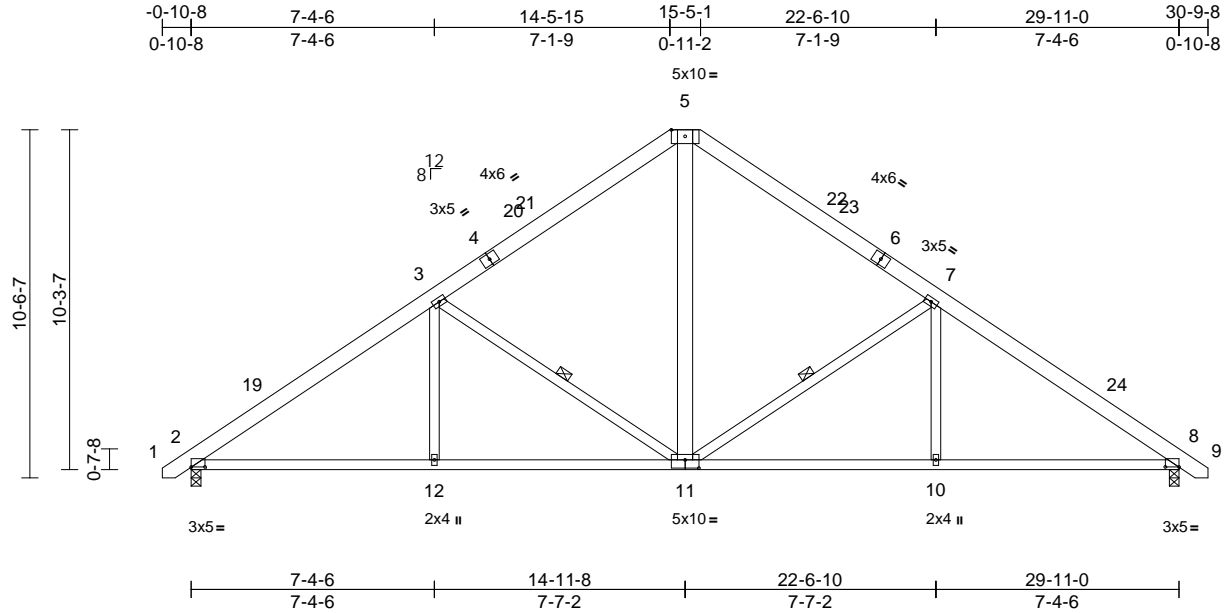
818 Soundside Road
Edenton, NC 27932

Job 24070012-A	Truss A04	Truss Type Hip	Qty 1	Ply 1	76 Farm at Neills Creek-Roof-Millhaven 2 BR5 GRH I66899233 Job Reference (optional)
-------------------	--------------	-------------------	----------	----------	---

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

Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Tue Jul 16 12:36:47
ID:SoZF8ej6AI9cS3b4FQO1EUz5Ppr-RfC?PsB70Hq3NSgPqnL8w3uITxbGKWrCDoi7J4zJC7f

Page: 1



Scale = 1:69.8

Plate Offsets (X, Y): [2:0-5-0,0-0-1], [8:0-5-0,0-0-1], [11:0-5-0,0-3-0]

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	0.48	Vert(LL)	-0.07	11-12	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.61	Vert(CT)	-0.16	11-12	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.28	Horz(CT)	0.06	8	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 196 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP No.2
 BOT CHORD 2x4 SP No.2
 WEBS 2x4 SP No.3 *Except* 5-11:2x6 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 5-5-3 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
 WEBS 1 Row at midpt 3-11, 7-11

REACTIONS

(size) 2=0-3-8, 8=0-3-8
 Max Horiz 2=243 (LC 13)
 Max Uplift 2=-116 (LC 14), 8=-118 (LC 15)
 Max Grav 2=1241 (LC 21), 8=1243 (LC 22)

FORCES

(lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=0/23, 2-3=-1770/158, 3-5=-1245/203, 5-7=-1249/201, 7-8=-1773/162, 8-9=0/23
 BOT CHORD 2-12=-188/1393, 10-12=-180/1393, 8-10=-75/1393
 WEBS 3-12=0/295, 3-11=-628/236, 7-11=-616/237, 7-10=0/295, 5-11=-64/820

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) -0-8-3 to 2-3-13, Interior (1) 2-3-13 to 10-7-5, Exterior(2R) 10-7-5 to 19-1-2, Interior (1) 19-1-2 to 27-7-3, Exterior(2E) 27-7-3 to 30-7-3 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 6) Provide adequate drainage to prevent water ponding.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 9) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 8. This connection is for uplift only and does not consider lateral forces.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



July 18, 2024

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)



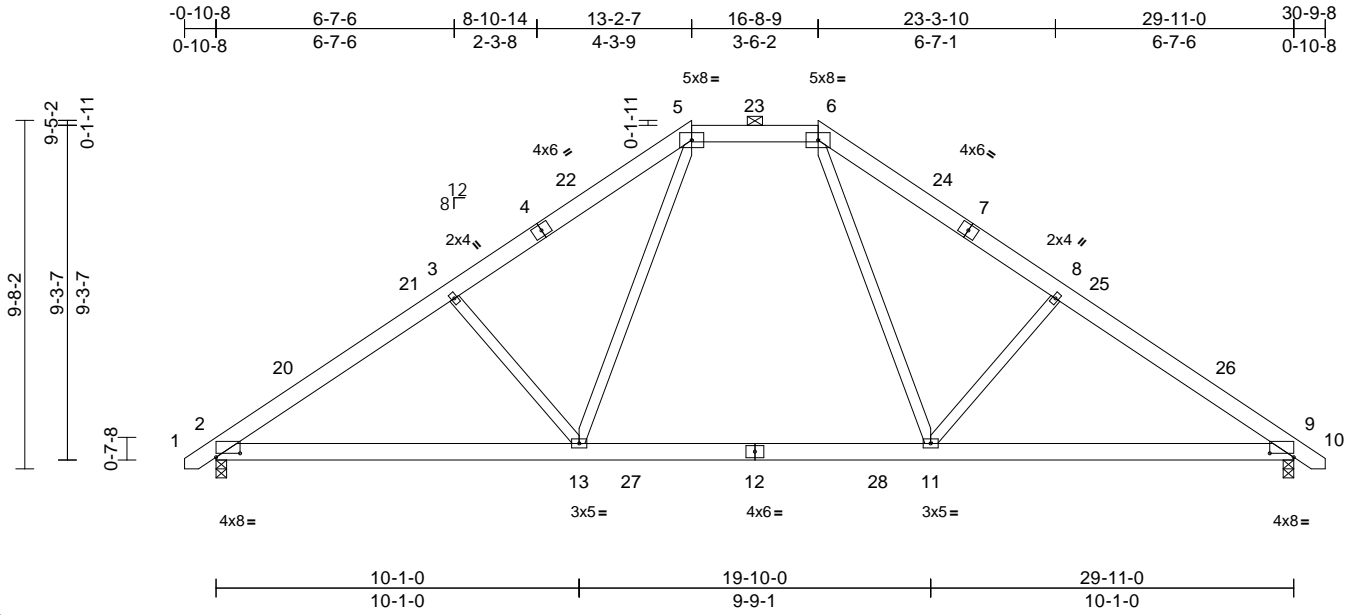
818 Soundside Road
 Edenton, NC 27932

Job 24070012-A	Truss A05	Truss Type Hip	Qty 1	Ply 1	76 Farm at Neills Creek-Roof-Millhaven 2 BR5 GRH I66899234 Job Reference (optional)
-------------------	--------------	-------------------	----------	----------	---

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

Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Tue Jul 16 12:36:47
ID:7kSL3d5dKjWR7aI_wMRmsWz5Po3-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f

Page: 1



Scale = 1:64

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP		
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.48	Vert(LL)	-0.14	13-16	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.65	Vert(CT)	-0.20	13-16	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.32	Horz(CT)	0.05	9	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 200 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-8-1 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 5-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(size) 2=0-3-8, 9=0-3-8
Max Horiz 2=-216 (LC 12)
Max Uplift 2=-123 (LC 14), 9=-123 (LC 15)
Max Grav 2=1527 (LC 51), 9=1527 (LC 53)

FORCES

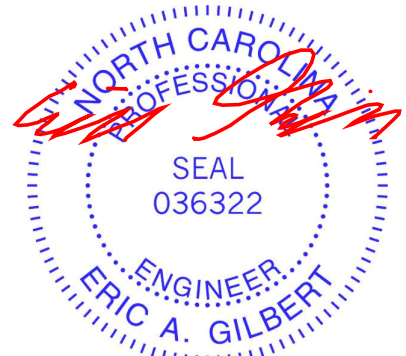
(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/23, 2-3=-2394/192, 3-5=-2192/206, 5-6=-1448/208, 6-8=-2192/206, 8-9=-2394/193, 9-10=0/23
BOT CHORD 2-13=-201/1942, 11-13=-5/1359, 9-11=-55/1942
WEBS 5-13=-76/840, 3-13=-516/269, 6-11=-77/840, 8-11=-516/269

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) -0-8-3 to 2-3-13, Interior (1) 2-3-13 to 8-11-8, Exterior(2R) 8-11-8 to 20-11-8, Interior (1) 20-11-8 to 27-7-3, Exterior(2E) 27-7-3 to 30-7-3 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 6) Provide adequate drainage to prevent water ponding.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 9) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 9. This connection is for uplift only and does not consider lateral forces.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



July 18, 2024

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)



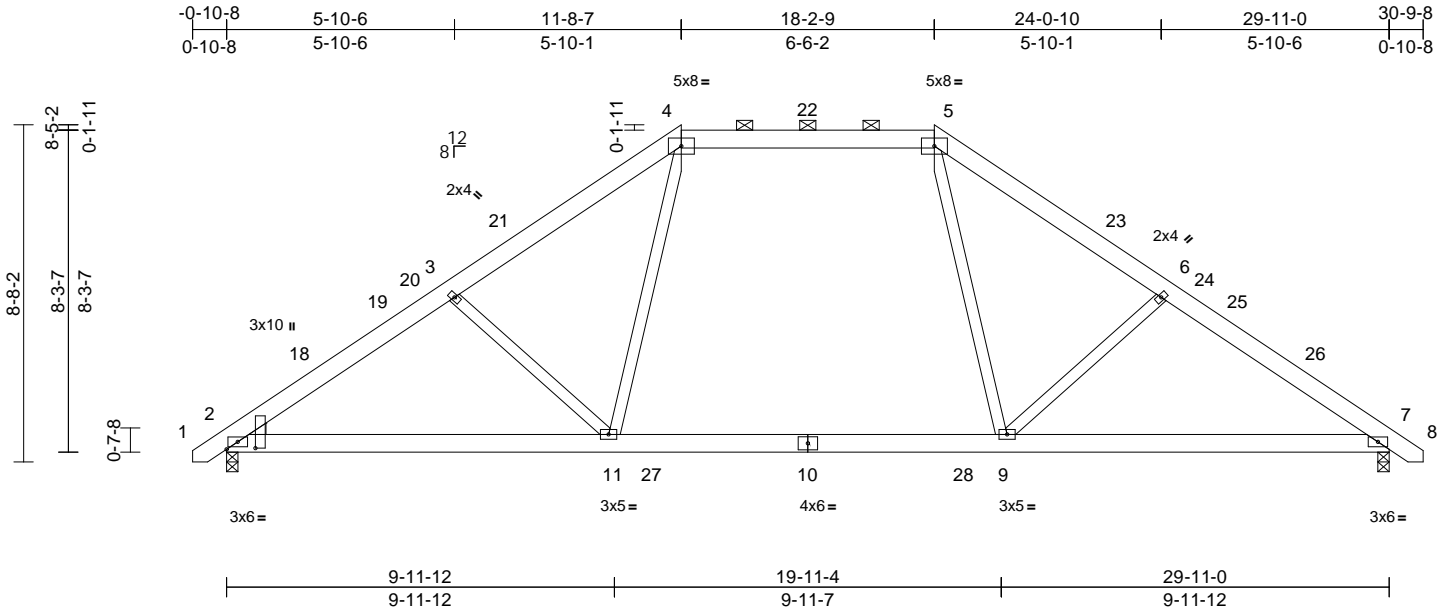
818 Soundside Road
Edenton, NC 27932

Job 24070012-A	Truss A06	Truss Type Hip	Qty 1	Ply 1	76 Farm at Neills Creek-Roof-Millhaven 2 BR5 GRH I66899235 Job Reference (optional)
-------------------	--------------	-------------------	----------	----------	---

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

Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Tue Jul 16 12:36:47
ID:4w9OBlksr0Cw_jsAX?uBVhz5PnE-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:59.3
Plate Offsets (X, Y): [2:0-6-7,0-0-13], [2:0-0-6,0-8-15]

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	0.44	Vert(LL)	-0.25	9-17	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.75	Vert(CT)	-0.29	9-17	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.31	Horz(CT)	0.05	7	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 196 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3
WEDGE Left: 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-8-11 oc purlins, except 2-0-0 oc purlins (5-9-0 max.): 4-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-3-8, 7=0-3-8
Max Horiz 2=192 (LC 13)
Max Uplift 2=-127 (LC 14), 7=-127 (LC 15)
Max Grav 2=1478 (LC 47), 7=1478 (LC 47)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/23, 2-3=-2373/196, 3-4=-2131/194, 4-5=-1525/220, 5-6=-2131/194, 6-7=-2384/196, 7-8=0/23
BOT CHORD 2-11=-200/1941, 9-11=-13/1447, 7-9=-72/1939
WEBS 4-11=-9/749, 3-11=-505/252, 5-9=-9/749, 6-9=-500/253

- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15) Plate DOL=1.15; Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 7. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

- 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) -0-8-3 to 2-3-13, Interior (1) 2-3-13 to 7-5-8, Exterior(2R) 7-5-8 to 22-5-8, Interior (1) 22-5-8 to 27-7-3, Exterior(2E) 27-7-3 to 30-7-3 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60



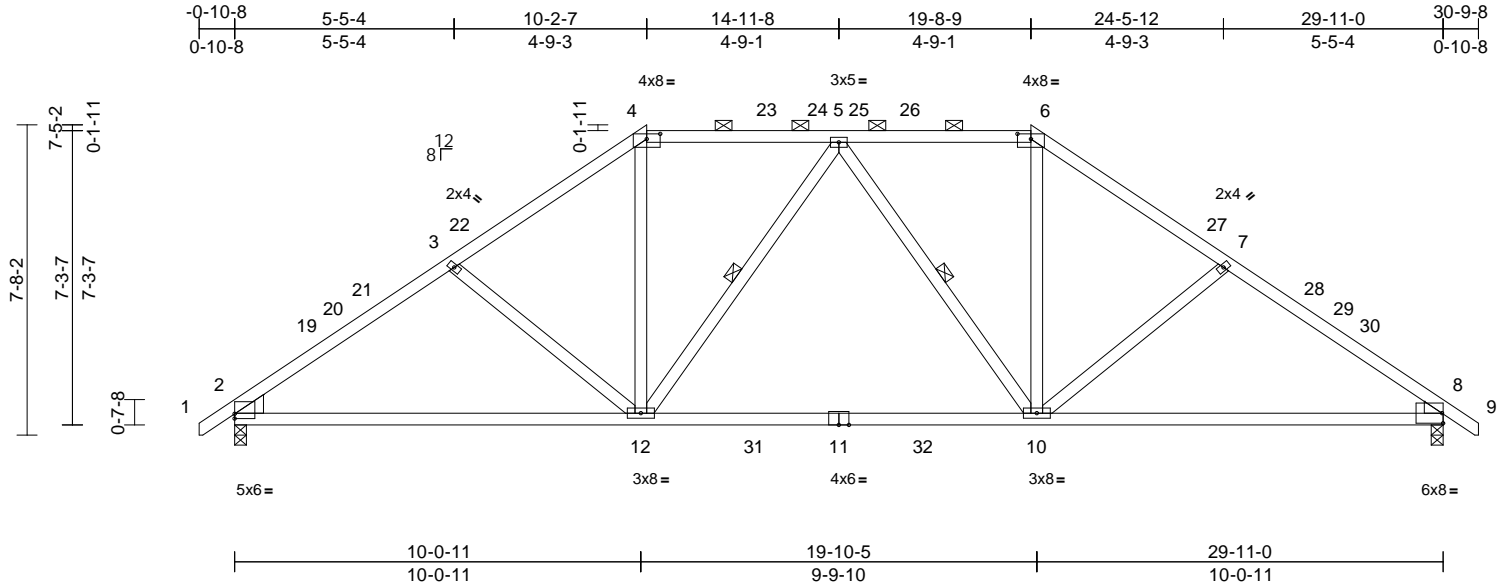
July 18, 2024

Job 24070012-A	Truss A07	Truss Type Hip	Qty 1	Ply 1	76 Farm at Neills Creek-Roof-Millhaven 2 BR5 GRH I66899236 Job Reference (optional)
-------------------	--------------	-------------------	----------	----------	---

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

Run: 8.73 E Nov 16 2023 Print: 8.730 E Nov 16 2023 MiTek Industries, Inc. Thu Jul 18 14:41:10
ID:NYcSEy1wBODW5Phox1JqTiz5Pms-6sHQPQuWS43shpHJv65Z5RpyfvPDfTKto4PpB7ywwBf

Page: 1



Scale = 1:57

Plate Offsets (X, Y): [2:Edge,0-1-6], [4:0-4-0,0-1-9], [6:0-4-0,0-1-9]

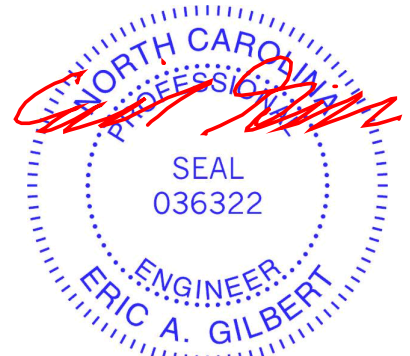
Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.55	Vert(LL)	-0.29	10-12	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.78	Vert(CT)	-0.44	10-12	>819	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.28	Horz(CT)	0.06	8	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 163 lb	FT = 20%

- LUMBER**
- TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.1
 WEBS 2x4 SP No.3
 WEDGE Left: 2x6 SP No.2
 Right: 2x4 SP No.3
- BRACING**
- TOP CHORD Structural wood sheathing directly applied or
 3-8-4 oc purlins, except
 2-0-0 oc purlins (4-6-13 max.): 4-6.
- BOT CHORD Rigid ceiling directly applied or 10-0-0 oc
 bracing.
- WEBS 1 Row at midpt 5-12, 5-10
- REACTIONS** (lb/size) 2=1247/0-3-8, 8=1247/0-3-8
 Max Horiz 2=171 (LC 13)
 Max Uplift 2=-134 (LC 14), 8=-134 (LC 15)
 Max Grav 2=1426 (LC 47), 8=1426 (LC 47)
- FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250
 (lb) or less except when shown.
- TOP CHORD 2-19=-2214/179, 19-20=-2136/193,
 20-21=-2129/194, 3-21=-2055/210,
 3-22=-1921/169, 4-22=-1813/198,
 4-23=-1519/205, 23-24=-1519/205,
 5-24=-1520/205, 5-25=-1519/206,
 25-26=-1519/206, 6-26=-1519/206,
 6-27=-1813/199, 7-27=-1922/170,
 7-28=-2054/210, 28-29=-2131/194,
 29-30=-2137/193, 8-30=-2203/180
- BOT CHORD 2-12=-346/1754, 12-31=-57/1609,
 11-31=-57/1609, 11-32=-57/1609,
 10-32=-57/1609, 8-10=-73/1756
- WEBS 4-12=-22/721, 5-12=-321/161,
 5-10=-321/160, 6-10=-21/722,
 3-12=-386/184, 7-10=-389/179

- 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) -0-10-0 to 2-2-0, Interior (1) 2-2-0
 to 5-11-8, Exterior(2R) 5-11-8 to 14-5-6, Interior (1)
 14-5-6 to 15-5-10, Exterior(2R) 15-5-10 to 23-11-8,
 Interior (1) 23-11-8 to 27-9-0, Exterior(2E) 27-9-0 to
 30-9-0 zone; cantilever left and right exposed ; end
 vertical left and right exposed;C-C for members and
 forces & MWFRS for reactions shown; Lumber
 DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15
 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate
 DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9;
 Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this
 design.
- This truss has been designed for greater of min roof live
 load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on
 overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom
 chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf
 on the bottom chord in all areas where a rectangle
 3-06-00 tall by 2-00-00 wide will fit between the bottom
 chord and any other members, with BCDL = 10.0psf.
- One RT4 MiTek connectors recommended to connect
 truss to bearing walls due to UPLIFT at jt(s) 2 and 8.
 This connection is for uplift only and does not consider
 lateral forces.
- This truss is designed in accordance with the 2018
 International Residential Code sections R502.11.1 and
 R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size
 or the orientation of the purlin along the top and/or
 bottom chord.

LOAD CASE(S) Standard

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



July 18, 2024

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

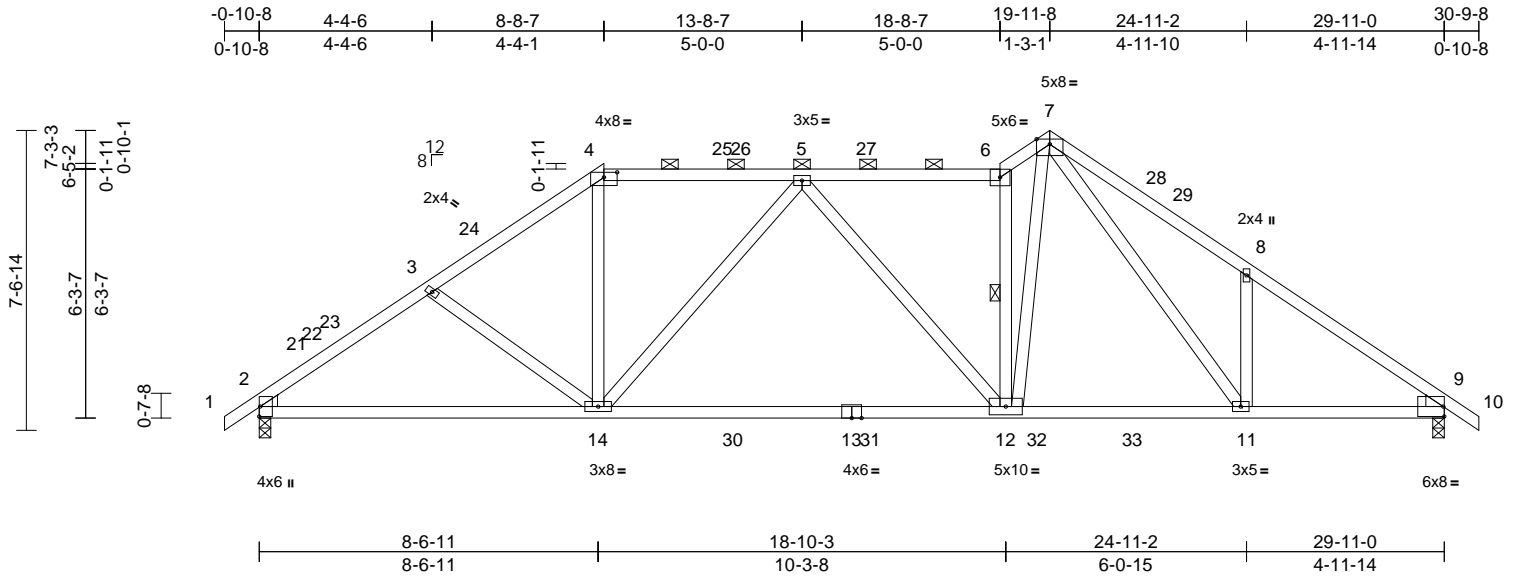
Job 24070012-A	Truss A08	Truss Type Roof Special	Qty 1	Ply 1	76 Farm at Neills Creek-Roof-Millhaven 2 BR5 GRH I66899237 Job Reference (optional)
-------------------	--------------	----------------------------	----------	----------	---

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

Run: 8.73 E Nov 16 2023 Print: 8.730 E Nov 16 2023 MiTek Industries, Inc. Thu Jul 18 14:41:40

Page: 1

ID:NAm0eqGvAj4265UoV58kcGz5PIG-A0DW7NHbvw5KWkjTnqf3OB8PjPjG9q?a929WJGywbB9



Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.63	Vert(LL)	-0.35	12-14	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.87	Vert(CT)	-0.62	12-14	>582	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.74	Horz(CT)	0.07	9	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 175 lb	FT = 20%

LUMBER	TOP CHORD	BOT CHORD	WEBS	WEDGE
TOP CHORD	2x4 SP No.2	2x4 SP No.1	2x4 SP No.3	Left: 2x4 SP No.3 Right: 2x4 SP No.3
BRACING	TOP CHORD	BOT CHORD	WEBS	REACTIONS
TOP CHORD	Structural wood sheathing directly applied or 3-4-7 oc purlins, except 2-0-0 oc purlins (3-10-8 max.): 4-6.	Rigid ceiling directly applied or 10-0-0 oc bracing.	1 Row at midpt 6-12	(lb/size) 2=1249/0-3-8, 9=1249/0-3-8 Max Horiz 2=-170 (LC 12) Max Uplift 2=-168 (LC 14), 9=-89 (LC 15) Max Grav 2=1378 (LC 5), 9=1404 (LC 39)
FORCES	TOP CHORD	BOT CHORD	WEBS	NOTES
TOP CHORD	2-21=-2239/238, 21-22=-2215/241, 22-23=-2199/246, 3-23=-2136/260, 3-24=-2059/217, 4-24=-2036/236, 4-25=-1710/236, 25-26=-1711/235, 5-26=-1712/235, 5-27=-1930/203, 6-27=-1928/204, 6-7=-2310/257, 7-28=-2215/300, 28-29=-2221/285, 8-29=-2288/280, 8-9=-2241/179	2-14=-244/1777, 14-30=-164/1980, 13-30=-164/1980, 13-31=-164/1980, 12-31=-164/1980, 12-32=-46/1490, 32-33=-46/1490, 11-33=-46/1490, 9-11=-71/1780	3-14=-312/150, 4-14=-16/823, 5-14=-535/154, 5-12=-260/125, 6-12=-1490/209, 7-12=-199/2064, 7-11=-216/516, 8-11=-388/219	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 5-8-7, Exterior(2R) 5-8-7 to 11-8-7, Interior (1) 11-8-7 to 18-8-7, Exterior(2R) 18-8-7 to 22-11-8, Interior (1) 22-11-8 to 27-9-8, Exterior(2E) 27-9-8 to 30-9-8 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) Provide adequate drainage to prevent water ponding. 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads. 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf. 9) One RT4 MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 9. This connection is for uplift only and does not consider lateral forces. 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1. 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



July 18, 2024

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

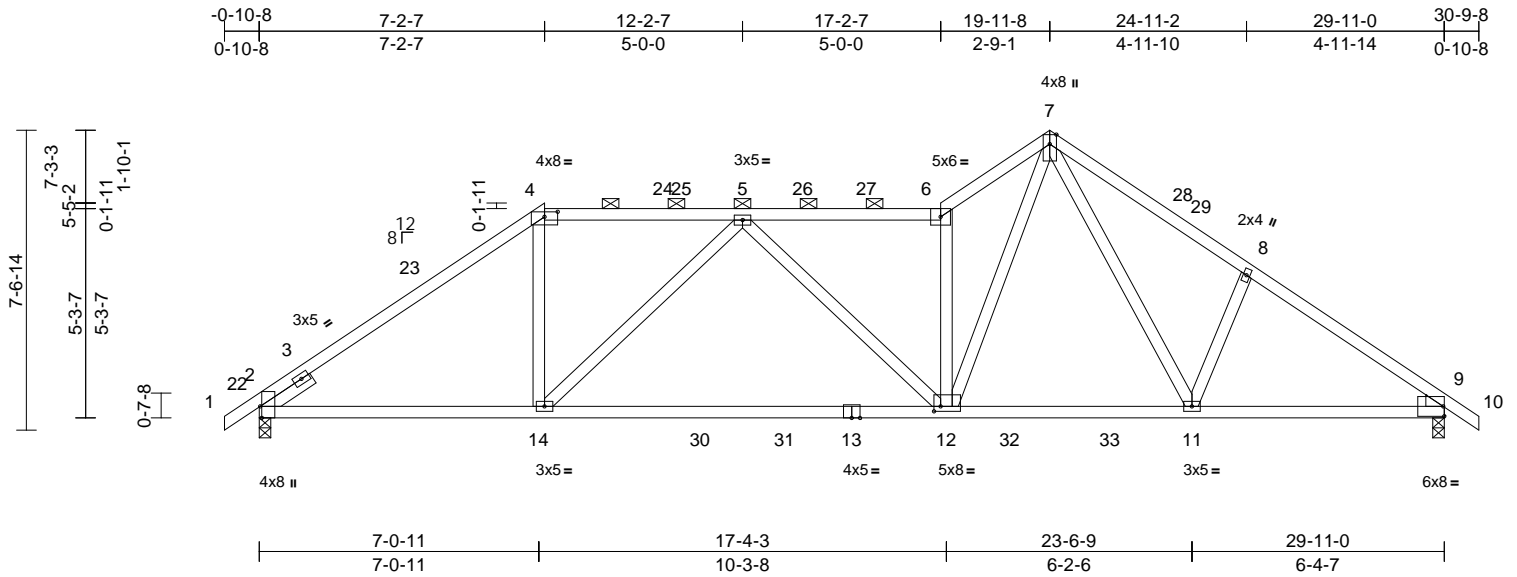
818 Soundside Road
Edenton, NC 27932

Job 24070012-A	Truss A09	Truss Type Roof Special	Qty 1	Ply 1	76 Farm at Neills Creek-Roof-Millhaven 2 BR5 GRH I66899238 Job Reference (optional)
-------------------	--------------	----------------------------	----------	----------	---

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

Run: 8.73 E Nov 16 2023 Print: 8.730 E Nov 16 2023 MiTek Industries, Inc. Thu Jul 18 14:42:08
ID:o0zaqgVSSbtCV90E4fVRQUz5PKy-LPw5?yd9KVdMt1srQiAdW5I8y5rQjS2ibPx_leywzAj

Page: 1



Scale = 1:58.2												
Plate Offsets (X, Y): [2:0-3-8,Edge], [4:0-4-0,0-1-9], [12:0-2-0,0-1-8]												
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	0.77	Vert(LL)	-0.36	12-14	>990	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.90	Vert(CT)	-0.66	12-14	>541	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.93	Horz(CT)	0.07	9	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0											
										Weight: 164 lb	FT = 20%	

LUMBER
TOP CHORD 2x4 SP No.2 *Except* 1-4:2x4 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x4 SP No.3
WEDGE Right: 2x4 SP No.3
SLIDER Left 2x4 SP No.3 -- 1-6-0

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except 2-0-0 oc purlins (3-6-2 max.): 4-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 2=1252/0-3-8, 9=1243/0-3-8
Max Horiz 2=170 (LC 13)
Max Uplift 2=170 (LC 14), 9=89 (LC 15)
Max Grav 2=1375 (LC 51), 9=1401 (LC 39)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-862/47, 3-23=-2161/193, 4-23=-2101/214, 4-24=-1754/238, 24-25=-1755/238, 5-25=-1756/238, 5-26=-2337/219, 26-27=-2335/219, 6-27=-2335/219, 6-7=-2807/305, 7-28=-2071/257, 28-29=-2086/237, 8-29=-2142/234, 8-9=-2209/196
BOT CHORD 2-14=-160/1715, 14-30=-217/2271, 30-31=-217/2271, 13-31=-217/2271, 12-13=-217/2271, 12-32=-49/1440, 32-33=-49/1440, 11-33=-49/1440, 9-11=-79/1757
WEBS 4-14=0/879, 5-14=-810/147, 6-12=-1793/255, 7-12=-232/2314, 7-11=-131/469, 8-11=-340/186

- 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 4-2-7, Exterior(2R) 4-2-7 to 10-2-7, Interior (1) 10-2-7 to 17-2-7, Exterior(2R) 17-2-7 to 22-11-8, Interior (1) 22-11-8 to 27-9-8, Exterior(2E) 27-9-8 to 30-9-8 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
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- One RT4 MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 9. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



July 18, 2024

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)



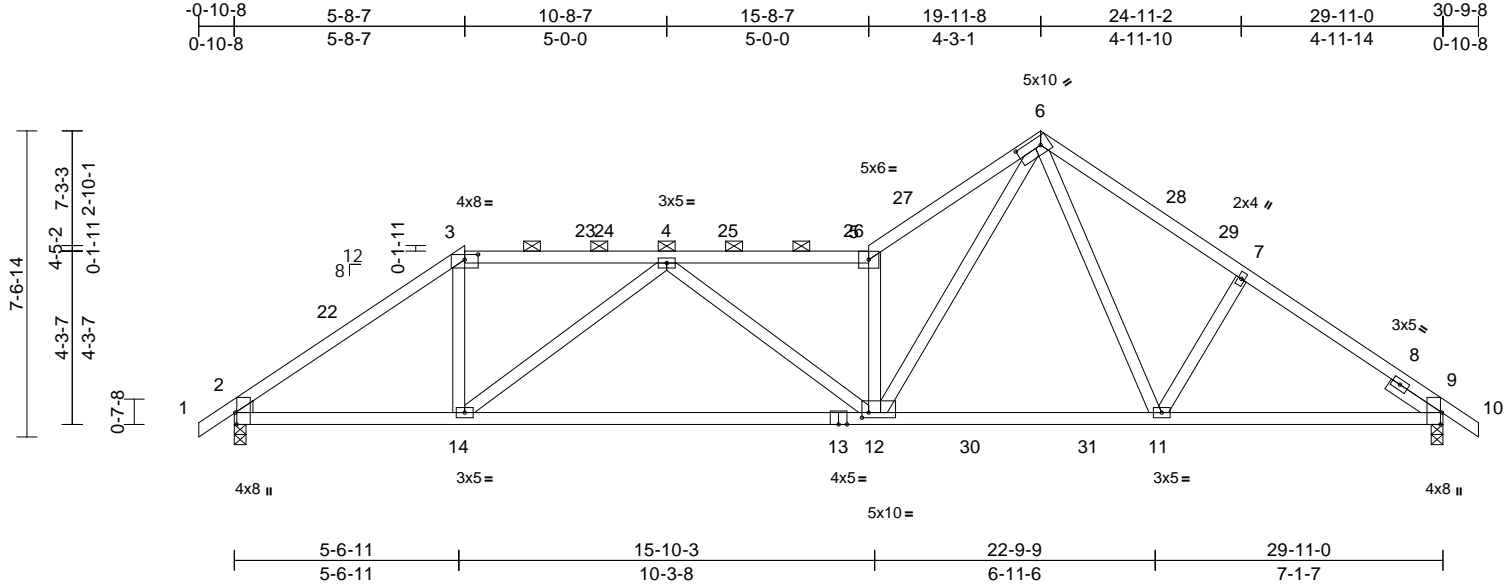
818 Soundside Road
Edenton, NC 27932

Job 24070012-A	Truss A10	Truss Type Roof Special	Qty 1	Ply 1	76 Farm at Neills Creek-Roof-Millhaven 2 BR5 GRH 166899239 Job Reference (optional)
-------------------	--------------	----------------------------	----------	----------	---

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

Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Tue Jul 16 12:36:48
ID:dRsHfXnt2xUxmHfX_QqrKz5Pkb-RfC?PsB70Hq3NSgPqnL8w3uITXbGKwRCDoi7J4zJC?f

Page: 1



Scale = 1:57
Plate Offsets (X, Y): [2:0-3-8,Edge], [3:0-4-0,0-1-9], [6:0-7-4,0-2-8], [9:0-3-8,Edge], [12:0-2-0,0-1-8]

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	0.72	Vert(LL)	-0.32	12-14	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.88	Vert(CT)	-0.66	12-14	>541	180		
TCDL	10.0	Rep Stress Incr	YES	WB	1.00	Horz(CT)	0.08	9	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 160 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-6-9 oc purlins, except 2-0-0 oc purlins (3-1-6 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-3-8, 9=0-3-8
Max Horiz 2=-170 (LC 12)
Max Uplift 2=-168 (LC 14), 9=-90 (LC 15)
Max Grav 2=1348 (LC 5), 9=1415 (LC 39)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/45, 2-3=-2265/214, 3-4=-1835/226, 4-5=-2896/254, 5-6=-3487/373, 6-7=-2041/234, 7-9=-2137/194, 9-10=0/34
BOT CHORD 2-14=-186/1821, 12-14=-286/2682, 11-12=-54/1409, 9-11=-78/1695
WEBS 3-14=0/962, 4-14=-1133/129, 4-12=0/446, 5-12=-2177/310, 6-12=-291/2795, 6-11=-90/442, 7-11=-302/178

- 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 2-8-7, Exterior(2R) 2-8-7 to 8-8-7, Interior (1) 8-8-7 to 16-11-8, Exterior(2R) 16-11-8 to 22-11-8, Interior (1) 22-11-8 to 27-9-8, Exterior(2E) 27-9-8 to 30-9-8 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
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 9 and 2. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



July 18, 2024

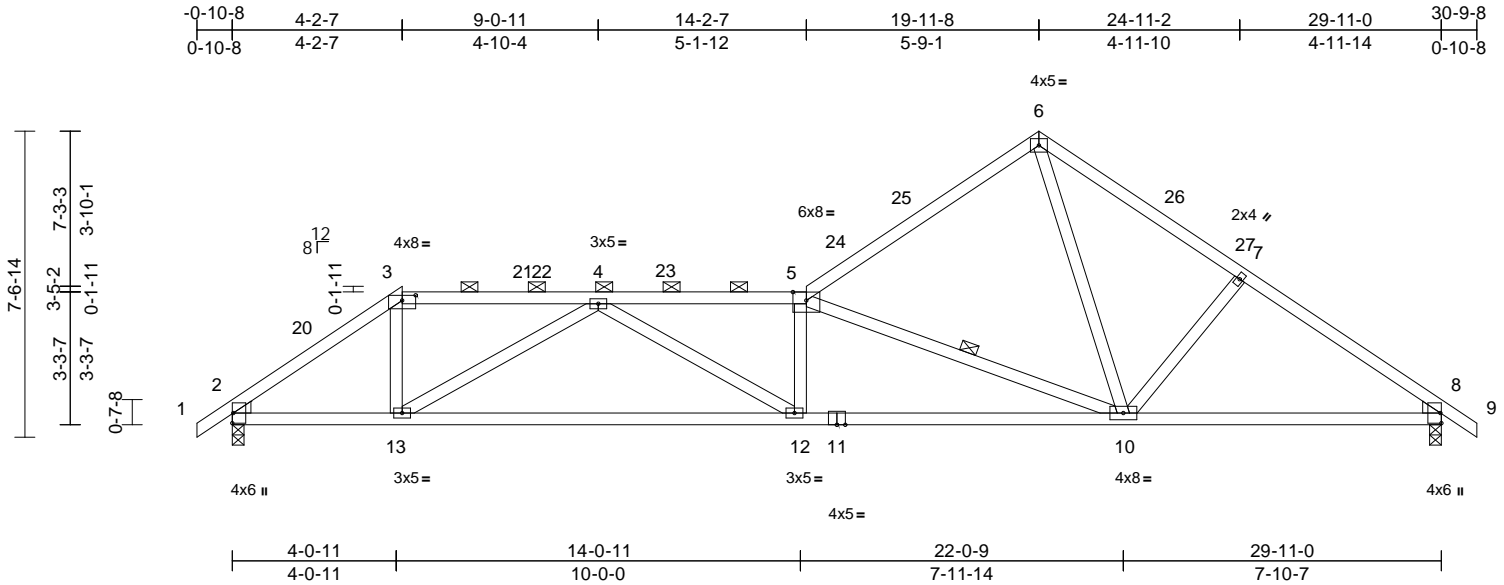
Job 24070012-A	Truss A11	Truss Type Roof Special	Qty 1	Ply 1	76 Farm at Neills Creek-Roof-Millhaven 2 BR5 GRH I66899240 Job Reference (optional)
-------------------	--------------	----------------------------	----------	----------	---

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

Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Tue Jul 16 12:36:48

Page: 1

ID: _gBbH22gshGpP4yuDcp_kzz5PkF-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?F



Scale = 1:57

Plate Offsets (X, Y): [3:0-4-0,0-1-9]

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	0.96	Vert(LL)	-0.26	12-13	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.75	Vert(CT)	-0.60	12-13	>598	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.96	Horz(CT)	0.10	8	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 154 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied, except
 2-0-0 oc purlins (2-8-1 max.): 3-5.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

WEBS 1 Row at midpt 5-10

REACTIONS (size) 2=0-3-8, 8=0-3-8
 Max Horiz 2=-170 (LC 12)
 Max Uplift 2=-168 (LC 14), 8=-89 (LC 15)
 Max Grav 2=1281 (LC 21), 8=1342 (LC 47)

FORCES

(lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=0/46, 2-3=-1980/206, 3-4=-1594/207,
 4-5=-3204/323, 5-6=-1264/179,
 6-7=-1736/218, 7-8=-1914/196, 8-9=0/29
 BOT CHORD 2-13=-203/1599, 12-13=-370/2808,
 10-12=-323/3174, 8-10=-81/1527
 WEBS 3-13=-4/850, 4-13=-1456/195, 4-12=0/693,
 5-12=-164/111, 5-10=-2485/323,
 6-10=-87/1264, 7-10=-324/179

NOTES

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

- Wind: ASCE 7-16; Vult=130mph (3-second gust)
 Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Exterior(2R) 2-1-8 to 7-2-7, Interior (1) 7-2-7 to 16-11-8, Exterior(2R) 16-11-8 to 22-11-8, Interior (1) 22-11-8 to 27-9-8, Exterior(2E) 27-9-8 to 30-9-8 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
- 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.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 8. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



July 18, 2024

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

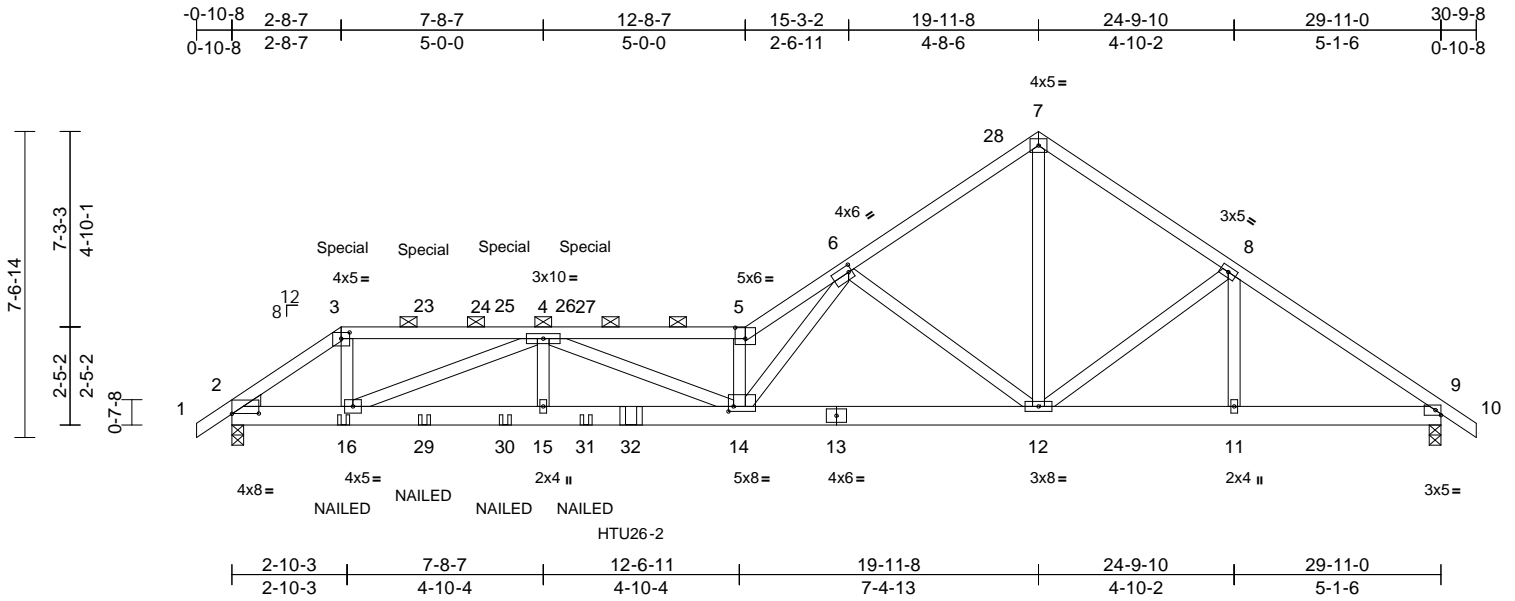
Job 24070012-A	Truss A12	Truss Type Roof Special Girder	Qty 1	Ply 2	76 Farm at Neills Creek-Roof-Millhaven 2 BR5 GRH 166899241 Job Reference (optional)
-------------------	--------------	-----------------------------------	----------	----------	---

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

Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Tue Jul 16 12:36:48

Page: 1

ID:9KFcjRbvGWwRI_uXMZ7X3Tz5PjY-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKwRcD0i7J4zJC7f



Scale = 1:57

Plate Offsets (X, Y): [2:0-8-0,0-0-2], [3:0-2-8,0-1-13], [5:0-3-0,0-3-4], [6:0-1-0,0-2-0], [14:0-1-8,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.71	Vert(LL)	-0.30	14-15	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.43	Vert(CT)	-0.52	14-15	>691	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.81	Horz(CT)	0.04	9	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 369 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP 2400F 2.0E
WEBS 2x4 SP No.3 *Except* 14-6:2x4 SP No.2
WEDGE Left: 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-5-4 oc purlins, except 2-0-0 oc purlins (3-11-4 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-3-8, 9=0-3-8
Max Horiz 2=-170 (LC 10)
Max Uplift 2=-326 (LC 12), 9=-153 (LC 13)
Max Grav 2=2532 (LC 19), 9=1702 (LC 43)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/47, 2-3=-3790/463, 3-4=-3218/416, 4-5=-7610/863, 5-6=-9519/1117, 6-7=-2334/279, 7-8=-2294/303, 8-9=-2511/242, 9-10=0/29
BOT CHORD 2-16=-440/3103, 15-16=-949/7307, 14-15=-949/7307, 12-14=-484/4099, 11-12=-141/2027, 9-11=-141/2027
WEBS 3-16=-76/1622, 4-16=-4440/547, 4-15=0/814, 4-14=-231/451, 5-14=-5296/668, 6-14=-776/6619, 6-12=-2912/458, 7-12=-233/2131, 8-12=-312/183, 8-11=-79/74

NOTES
1) 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.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat II; Exp B; Enclosed; MWFRS (envelope) exterior zone; 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.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 9. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Use Simpson Strong-Tie HTU26-2 (20-10d Girder, 14-10d Truss) or equivalent at 9-10-8 from the left end to connect truss(es) to front face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.
- "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 203 lb down and 77 lb up at 2-8-7, 203 lb down and 77 lb up at 4-9-3, and 203 lb down and 77 lb up at 6-9-3, and 203 lb down and 77 lb up at 8-9-3 on top chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-60, 3-5=-60, 5-7=-60, 7-10=-60, 17-20=-20



July 18, 2024

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)

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job 24070012-A	Truss A12	Truss Type Roof Special Girder	Qty 1	Ply 2	76 Farm at Neills Creek-Roof-Millhaven 2 BR5 GRH I66899241 Job Reference (optional)
-------------------	--------------	-----------------------------------	----------	-----------------	---

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

Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Tue Jul 16 12:36:48

Page: 2

ID:9KPcjRbvGWwRL_uXMZ7X3Tz5PjY-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Concentrated Loads (lb)

Vert: 3=-175 (F), 16=-82 (F), 23=-175 (F), 25=-175 (F), 27=-175 (F), 29=-82 (F), 30=-82 (F), 31=-82 (F), 32=-625 (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/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)



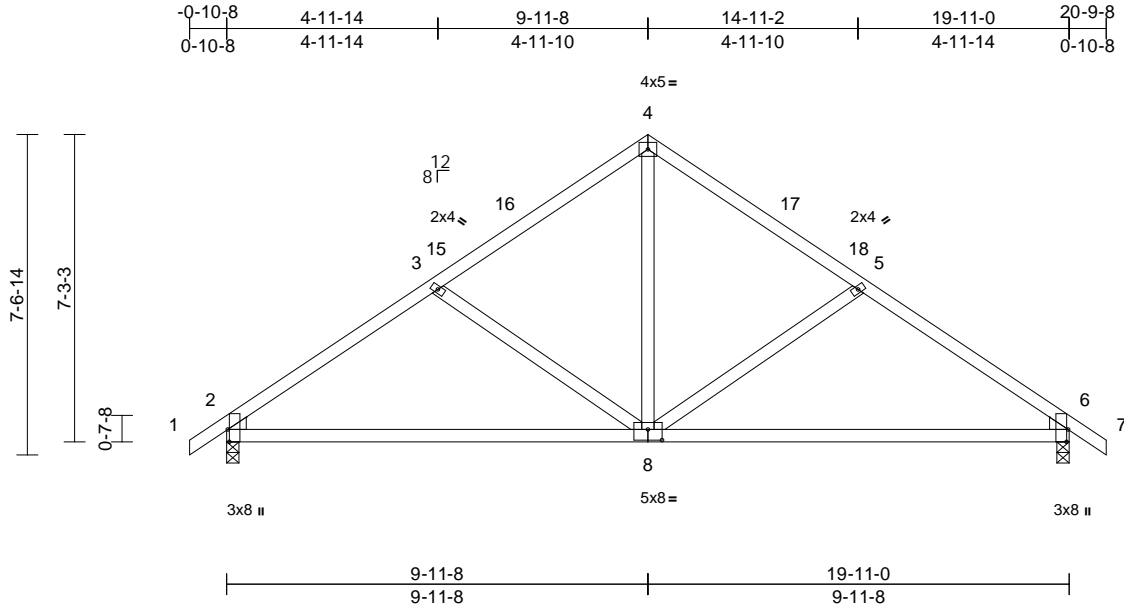
818 Soundside Road
Edenton, NC 27932

Job 24070012-A	Truss B01	Truss Type Common	Qty 1	Ply 1	76 Farm at Neills Creek-Roof-Millhaven 2 BR5 GRH I66899242 Job Reference (optional)
-------------------	--------------	----------------------	----------	----------	---

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

Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Tue Jul 16 12:36:49
ID:hgv4fj_bVf5lm3wtn_CHvQz5Pj1-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:54.5
Plate Offsets (X, Y): [2:0-3-8,Edge], [6:0-3-8,Edge], [8:0-4-0,0-3-0]

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	0.54	Vert(LL)	-0.14	8-11	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.84	Vert(CT)	-0.28	8-11	>857	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.28	Horz(CT)	0.02	6	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 98 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-0-1 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-3-8, 6=0-3-8
Max Horiz 2=-170 (LC 12)
Max Uplift 2=-85 (LC 14), 6=-85 (LC 15)
Max Grav 2=897 (LC 21), 6=897 (LC 22)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/29, 2-3=-1158/148, 3-4=-880/135,
4-5=-880/135, 5-6=-1158/148, 6-7=0/29
BOT CHORD 2-6=-129/917
WEBS 4-8=-23/587, 5-8=-378/186, 3-8=-378/185

- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 6. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 6-11-8, Exterior(2R) 6-11-8 to 12-11-8, Interior (1) 12-11-8 to 17-9-8, Exterior(2E) 17-9-8 to 20-9-8 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



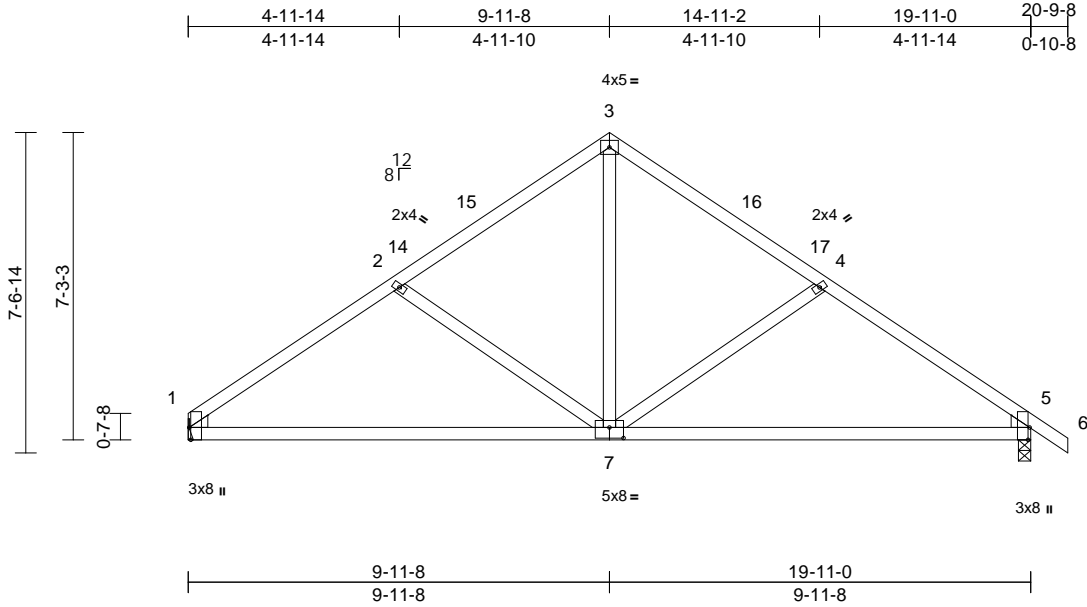
July 18, 2024

Job 24070012-A	Truss B02	Truss Type Common	Qty 2	Ply 1	76 Farm at Neills Creek-Roof-Millhaven 2 BR5 GRH I66899243 Job Reference (optional)
-------------------	--------------	----------------------	----------	----------	---

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

Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Tue Jul 16 12:36:49
ID:LA2KTOW8ggAHa3RN?I07qCz5Pje-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCdoi7J4zJC7f

Page: 1



Scale = 1:54.5

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

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	0.54	Vert(LL)	-0.14	7-10	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.84	Vert(CT)	-0.28	7-10	>850	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.28	Horz(CT)	0.02	5	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 96 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-11-12 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(size) 1= Mechanical, 5=0-3-8
 Max Horiz 1=-165 (LC 12)
 Max Uplift 1=-68 (LC 14), 5=-85 (LC 15)
 Max Grav 1=843 (LC 21), 5=897 (LC 22)

FORCES

(lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=-1163/151, 2-3=-882/137, 3-4=-882/137, 4-5=-1160/150, 5-6=0/29
 BOT CHORD 1-5=-130/923
 WEBS 3-7=-25/590, 4-7=-378/186, 2-7=-382/187

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) 0-0-0 to 3-0-0, Interior (1) 3-0-0 to 6-11-8, Exterior(2R) 6-11-8 to 12-11-8, Interior (1) 12-11-8 to 17-9-8, Exterior(2E) 17-9-8 to 20-9-8 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) Refer to girder(s) for truss to truss connections.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 68 lb uplift at joint 1.
- 10) 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.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



July 18, 2024

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)



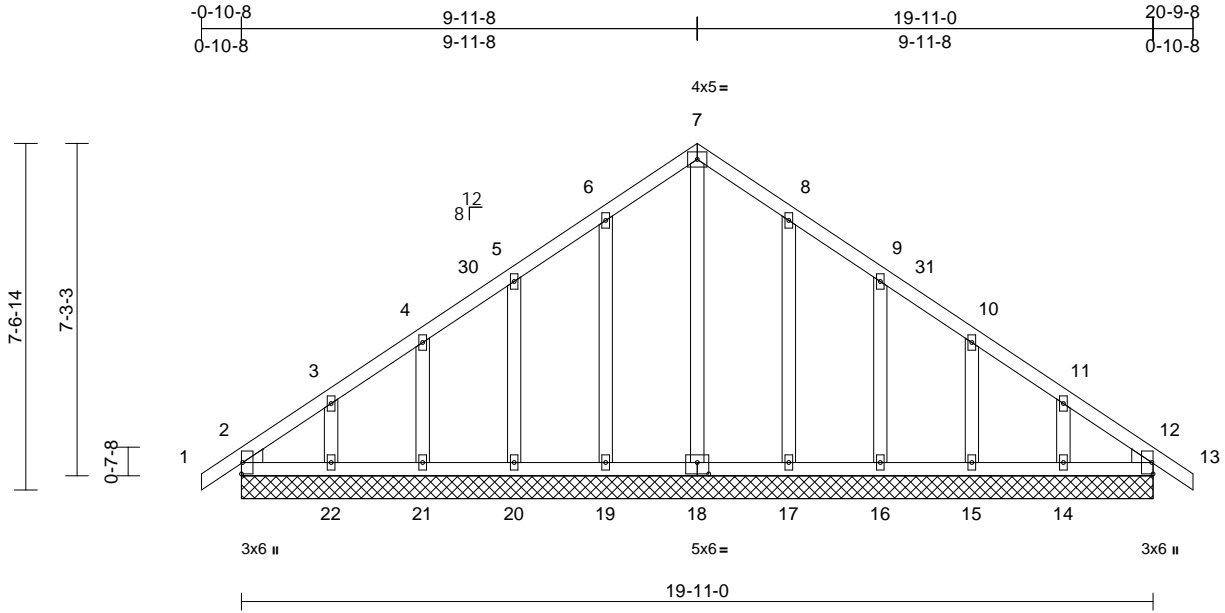
818 Soundside Road
 Edenton, NC 27932

Job 24070012-A	Truss B03	Truss Type Common Supported Gable	Qty 1	Ply 1	76 Farm at Neills Creek-Roof-Millhaven 2 BR5 GRH 166899244 Job Reference (optional)
-------------------	--------------	--------------------------------------	----------	----------	---

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

Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Tue Jul 16 12:36:49
ID:HNINbW9OCzrmRD_ZcxTZTNz5Pip-RfC?PsB70Hq3NSgPqnL8w3uITXbGKwRCDoi7J4zJC?f

Page: 1



Scale = 1:50.3
Plate Offsets (X, Y): [18:0-3-0-0-3-0]

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	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.00	12	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 120 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x4 SP No.3
WEDGE Left: 2x4 SP No.3
Right: 2x4 SP No.3

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

REACTIONS (size)
2=19-11-0, 12=19-11-0,
14=19-11-0, 15=19-11-0,
16=19-11-0, 17=19-11-0,
18=19-11-0, 19=19-11-0,
20=19-11-0, 21=19-11-0,
22=19-11-0, 23=19-11-0,
27=19-11-0
Max Horiz 2=-164 (LC 12), 23=-164 (LC 12)
Max Uplift 2=-39 (LC 10), 12=-2 (LC 11),
14=-81 (LC 15), 15=-50 (LC 15),
16=-60 (LC 15), 17=-55 (LC 15),
19=-56 (LC 14), 20=-59 (LC 14),
21=-48 (LC 14), 22=-88 (LC 14),
23=-39 (LC 10), 27=-2 (LC 11)
Max Grav 2=160 (LC 26), 12=141 (LC 22),
14=172 (LC 26), 15=161 (LC 26),
16=215 (LC 22), 17=251 (LC 22),
18=161 (LC 28), 19=251 (LC 21),
20=215 (LC 21), 21=159 (LC 25),
22=180 (LC 30), 23=160 (LC 26),
27=141 (LC 22)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/28, 2-3=-139/119, 3-4=-112/93,
4-5=-101/85, 5-6=-89/119, 6-7=-110/176,
7-8=-110/176, 8-9=-84/118, 9-10=-61/56,
10-11=-71/39, 11-12=-101/62, 12-13=0/28
BOT CHORD 2-22=91/126, 21-22=-54/126,
20-21=-54/126, 19-20=-54/126,
17-19=-54/126, 16-17=-54/126,
15-16=-54/126, 14-15=-54/126,
12-14=-54/126
WEBS 7-18=-134/27, 6-19=-212/81, 5-20=-176/88,
4-21=-139/83, 3-22=-138/94, 8-17=-212/81,
9-16=-176/88, 10-15=-139/83, 11-14=-138/94

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 1-11-8, Exterior(2N) 1-11-8 to 6-11-8, Corner(3R) 6-11-8 to 12-11-8, Exterior (2N) 12-11-8 to 17-9-8, Corner(3E) 17-9-8 to 20-9-8 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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.

7) All plates are 2x4 MT20 unless otherwise indicated.
8) Gable requires continuous bottom chord bearing.
9) Gable studs spaced at 2-0-0 oc.
10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
11) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 39 lb uplift at joint 2, 2 lb uplift at joint 12, 56 lb uplift at joint 19, 59 lb uplift at joint 20, 48 lb uplift at joint 21, 88 lb uplift at joint 22, 55 lb uplift at joint 17, 60 lb uplift at joint 16, 50 lb uplift at joint 15, 81 lb uplift at joint 14, 39 lb uplift at joint 2 and 2 lb uplift at joint 12.
13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
LOAD CASE(S) Standard

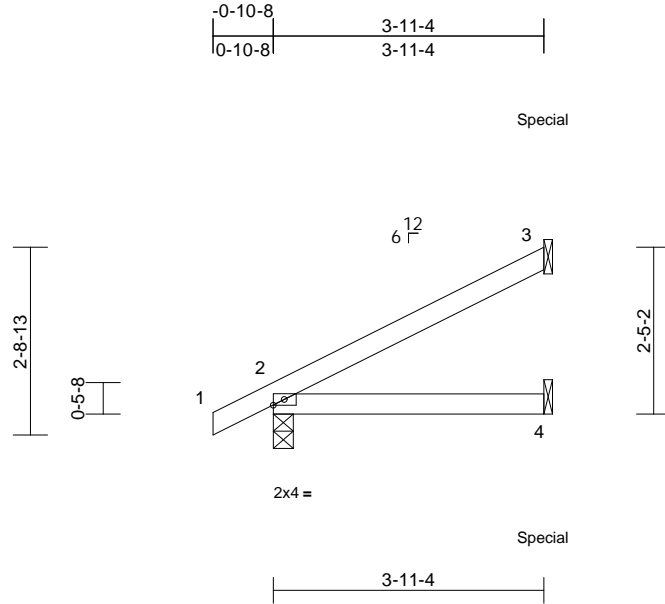


Job 24070012-A	Truss J01	Truss Type Jack-Open	Qty 4	Ply 1	76 Farm at Neills Creek-Roof-Millhaven 2 BR5 GRH I66899245 Job Reference (optional)
-------------------	--------------	-------------------------	----------	----------	---

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

Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Tue Jul 16 12:36:50
ID:DxtrlZekvgj3hl9E843_2z5Pja-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:33.5

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	0.32	Vert(LL)	-0.02	4-7	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.21	Vert(CT)	-0.03	4-7	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 14 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 3-11-4 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(size) 2=0-3-8, 3= Mechanical, 4= Mechanical
Max Horiz 2=85 (LC 14)
Max Uplift 2=-23 (LC 14), 3=-81 (LC 14)
Max Grav 2=315 (LC 21), 3=235 (LC 21), 4=115 (LC 7)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/37, 2-3=-111/63
BOT CHORD 2-4=-71/66

NOTES

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

- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 7) Bearings are assumed to be: , Joint 2 User Defined .
- 8) Refer to girder(s) for truss to truss connections.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 81 lb uplift at joint 3.
- 10) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 130 lb down and 60 lb up at 3-10-8 on top chord, and 44 lb down at 3-10-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 13) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-60, 4-5=-20
Concentrated Loads (lb)
Vert: 3=-108 (B), 4=-44 (B)



July 18, 2024

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)



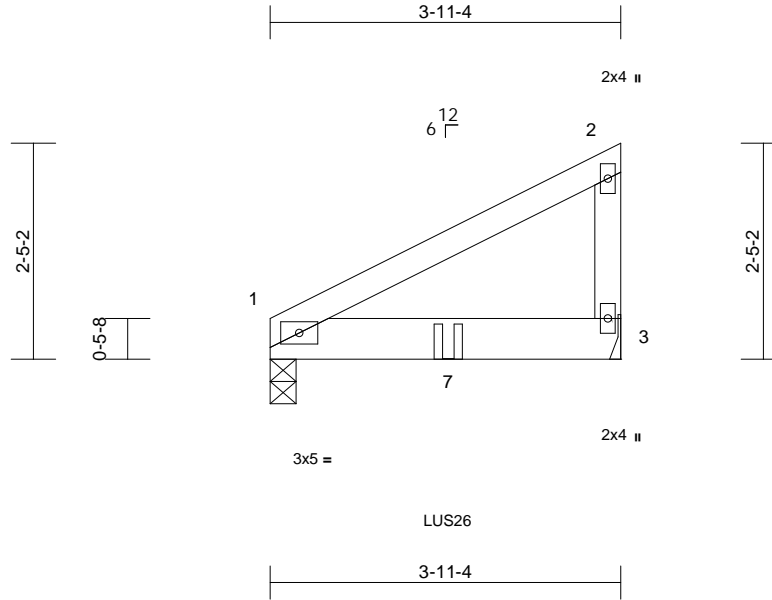
818 Soundside Road
Edenton, NC 27932

Job 24070012-A	Truss J02	Truss Type Jack-Closed Girder	Qty 1	Ply 2	76 Farm at Neills Creek-Roof-Millhaven 2 BR5 GRH I66899246 Job Reference (optional)
-------------------	--------------	----------------------------------	----------	----------	---

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

Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Tue Jul 16 12:36:51
ID:DxtrlIzEkgvj3hI9E843_2z5Pja-RfC?PsB70Hq3NSgPqnL8w3uTXbGKwRCDoi7J4zJC?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	0.22	Vert(LL)	-0.02	3-6	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.47	Vert(CT)	-0.03	3-6	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	1	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 37 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3

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

REACTIONS (size) 1=0-3-8, 3= Mechanical
Max Horiz 1=73 (LC 11)
Max Uplift 1=-52 (LC 12), 3=-76 (LC 12)
Max Grav 1=600 (LC 18), 3=645 (LC 18)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-212/62, 2-3=-168/40
BOT CHORD 1-3=-35/189

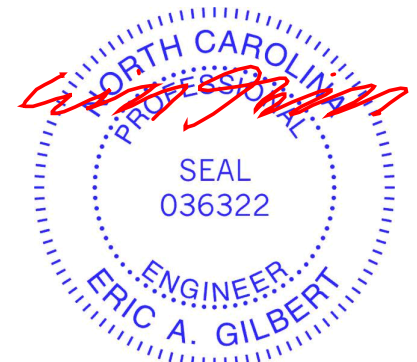
NOTES

- 2-ply truss to be connected together as follows:
Top chords connected with 10d (0.131"x3") nails as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected with 10d (0.131"x3") nails as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 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 User Defined .
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 76 lb uplift at joint 3.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Use Simpson Strong-Tie LUS26 (4-10d Girder, 3-10d Truss, Single Ply Girder) or equivalent at 2-0-0 from the left end to connect truss(es) to front face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

- Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-2=-60, 3-4=-20
Concentrated Loads (lb)
Vert: 7=-823 (F)



July 18, 2024

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)



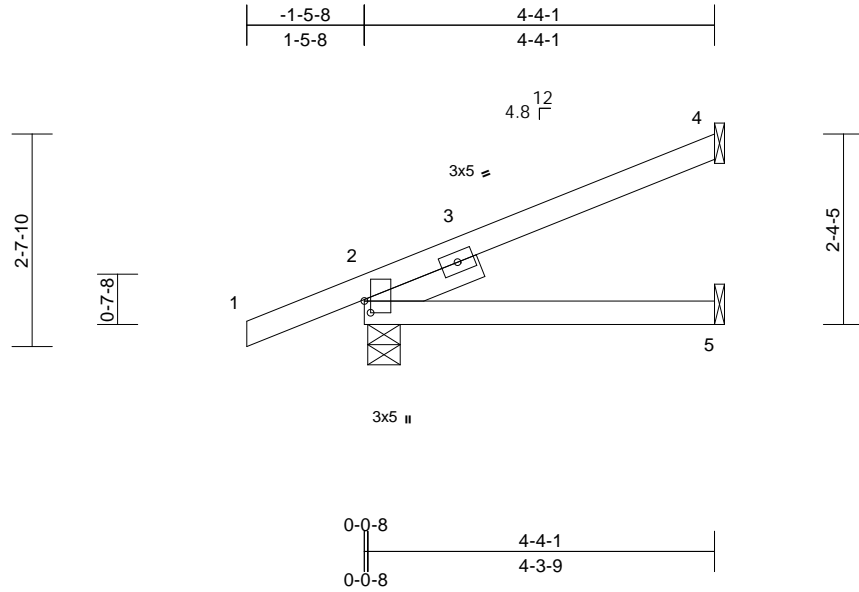
818 Soundside Road
Edenton, NC 27932

Job 24070012-A	Truss J03	Truss Type Jack-Open	Qty 1	Ply 1	76 Farm at Neills Creek-Roof-Millhaven 2 BR5 GRH I66899247 Job Reference (optional)
-------------------	--------------	-------------------------	----------	----------	---

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

Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Tue Jul 16 12:36:51
ID:LA2KTOW8ggAHa3RN?I07qCz5Pje-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCdoi7J4zJC?f

Page: 1



Scale = 1:28.6

Plate Offsets (X, Y): [2:0-1-12,0-0-15]

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)	-0.02	5-8	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.23	Vert(CT)	-0.04	5-8	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	4	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0											
											Weight: 18 lb	FT = 20%

LUMBER

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

BRACING

- TOP CHORD Structural wood sheathing directly applied or 4-4-1 oc purlins.
- BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

- (size) 2=0-4-13, 4= Mechanical, 5= Mechanical
- Max Horiz 2=81 (LC 14)
- Max Uplift 2=-49 (LC 10), 4=-48 (LC 14)
- Max Grav 2=396 (LC 21), 4=156 (LC 21), 5=75 (LC 7)

FORCES

- (lb) - Maximum Compression/Maximum Tension
- TOP CHORD 1-2=0/50, 2-4=-193/55
- BOT CHORD 2-5=-84/125

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 Corner (3) -1-5-8 to 2-9-7, Exterior(2R) 2-9-7 to 4-3-5 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 User Defined .
- 8) Refer to girder(s) for truss to truss connections.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 48 lb uplift at joint 4.
- 10) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



July 18, 2024

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)



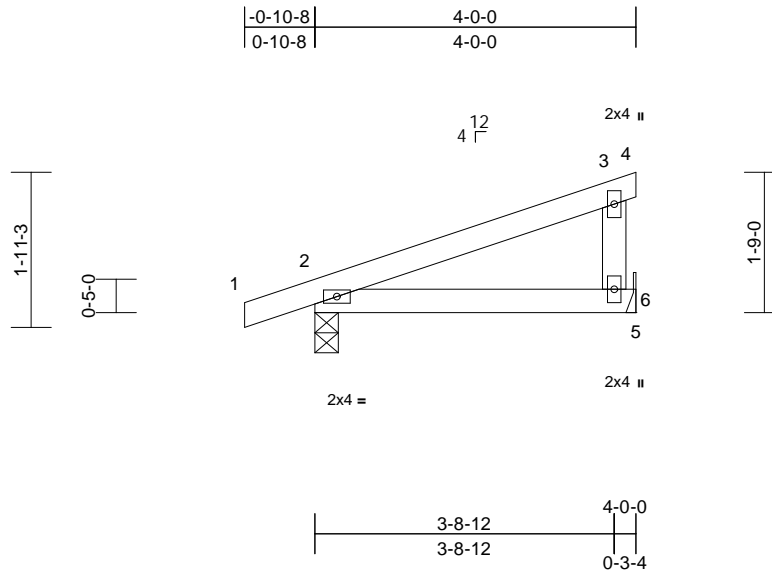
818 Soundside Road
Edenton, NC 27932

Job 24070012-A	Truss M01	Truss Type Monopitch	Qty 3	Ply 1	76 Farm at Neills Creek-Roof-Millhaven 2 BR5 GRH I66899248 Job Reference (optional)
-------------------	--------------	-------------------------	----------	----------	---

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

Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Tue Jul 16 12:36:51
ID:kpwbRAvCQvnm0i6yCKV0VXz5Pe_-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	-0.01	6-9	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.19	Vert(CT)	-0.02	6-9	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0											
											Weight: 15 lb	FT = 20%

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

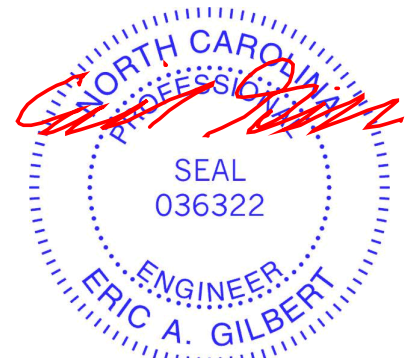
BRACING
TOP CHORD Structural wood sheathing directly applied or 4-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-3-8, 6= Mechanical
Max Horiz 2=60 (LC 13)
Max Uplift 2=-54 (LC 10), 6=-29 (LC 14)
Max Grav 2=289 (LC 21), 6=224 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/25, 2-3=-44/46, 3-4=-8/0, 3-6=-163/102
BOT CHORD 2-6=-17/77, 5-6=0/0

- * 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 29 lb uplift at joint 6.
 - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- LOAD CASE(S)** Standard

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



July 18, 2024

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)



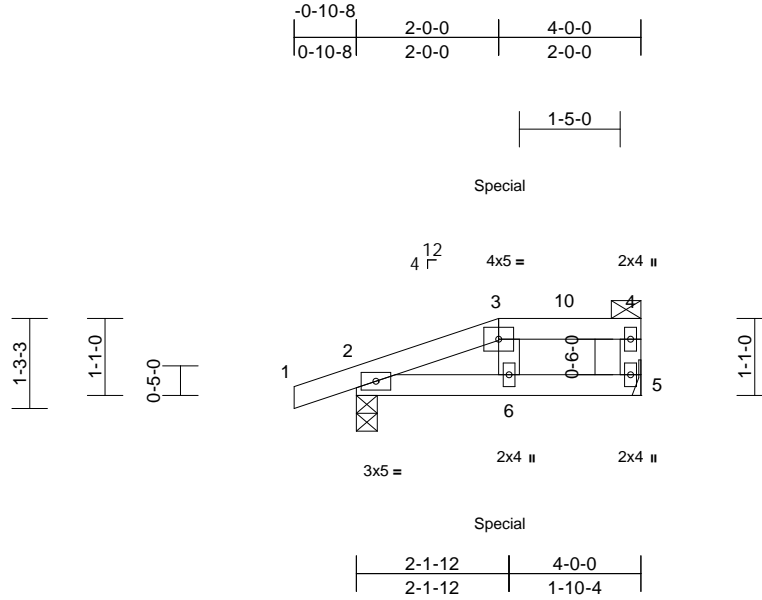
818 Soundside Road
Edenton, NC 27932

Job 24070012-A	Truss M02	Truss Type Half Hip Girder	Qty 1	Ply 1	76 Farm at Neills Creek-Roof-Millhaven 2 BR5 GRH 166899249 Job Reference (optional)
-------------------	--------------	-------------------------------	----------	----------	---

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

Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Tue Jul 16 12:36:51
ID:dbAiHXyJUHMUJQjRAayfNz5Pdw-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?F

Page: 1



Scale = 1:32.4

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	0.15	Vert(LL)	-0.02	6	>999	240	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.40	Vert(CT)	-0.04	6	>999	180	
TCDL	10.0	Rep Stress Incr	NO	WB	0.03	Horz(CT)	0.00	2	n/a	n/a	
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP							
BCDL	10.0									Weight: 15 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

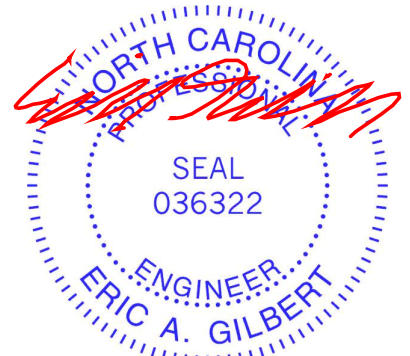
REACTIONS (size) 2=0-3-8, 5= Mechanical
Max Horiz 2=36 (LC 11)
Max Uplift 2=-59 (LC 8), 5=-22 (LC 8)
Max Grav 2=268 (LC 34), 5=181 (LC 33)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/23, 2-3=-67/10, 3-4=-10/8, 4-5=-77/23
BOT CHORD 2-6=-13/38, 5-6=-10/8
WEBS 3-6=-153/39

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; cantilever left and right exposed; end vertical left and right exposed; 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) Provide adequate drainage to prevent water ponding.
- 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) Refer to girder(s) for truss to truss connections.
 - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 22 lb uplift at joint 5.
 - 10) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
 - 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - 13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 47 lb down and 57 lb up at 2-0-0 on top chord, and 17 lb down and 10 lb up at 2-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
 - 14) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
- LOAD CASE(S)** Standard
- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-60, 3-4=-60, 5-7=-20
Concentrated Loads (lb)
Vert: 3=-2 (B), 6=-17 (B)



July 18, 2024

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

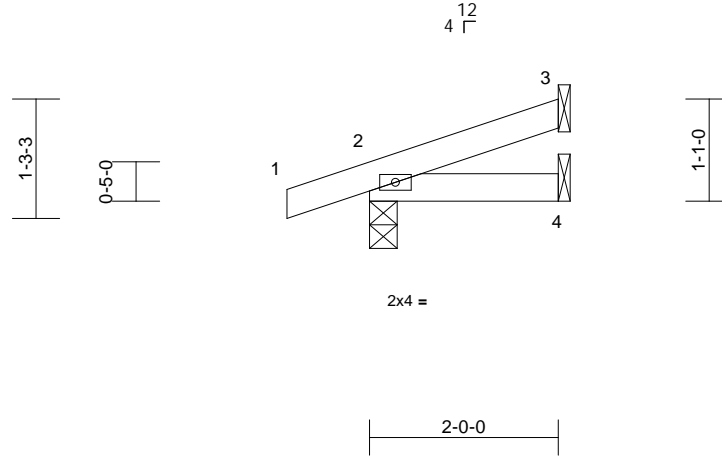
Job 24070012-A	Truss M03	Truss Type Jack-Open	Qty 1	Ply 1	76 Farm at Neills Creek-Roof-Millhaven 2 BR5 GRH I66899250 Job Reference (optional)
-------------------	--------------	-------------------------	----------	----------	---

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

Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Tue Jul 16 12:36:51
ID:dbAiHXyjU7HMUJQjRAayfNz5Pdw-RfC?PsB70Hq3NSgPqnL8w3uITxbGKWrCDoi7J4zJC?F

Page: 1

-0-10-8	2-0-0
0-10-8	2-0-0



Scale = 1:24.4

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	0.07	Vert(LL)	0.00	4-7	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	0.00	4-7	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP							Weight: 8 lb	FT = 20%
BCDL	10.0											

LUMBER

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

BRACING

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

REACTIONS (size) 2=0-3-8, 3= Mechanical, 4= Mechanical
Max Horiz 2=39 (LC 10)
Max Uplift 2=-47 (LC 10), 3=-18 (LC 14)
Max Grav 2=189 (LC 21), 3=60 (LC 21), 4=34 (LC 7)

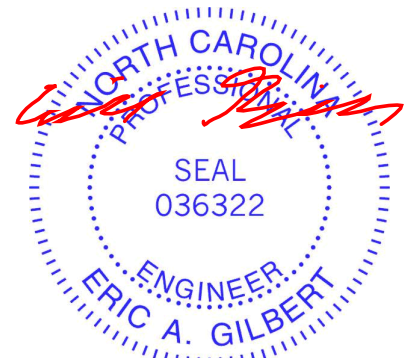
FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/23, 2-3=-39/21
BOT CHORD 2-4=-19/30

NOTES

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

- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
 - 7) Bearings are assumed to be: , Joint 2 User Defined .
 - 8) Refer to girder(s) for truss to truss connections.
 - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 18 lb uplift at joint 3.
 - 10) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
 - 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- LOAD CASE(S)** Standard



July 18, 2024

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

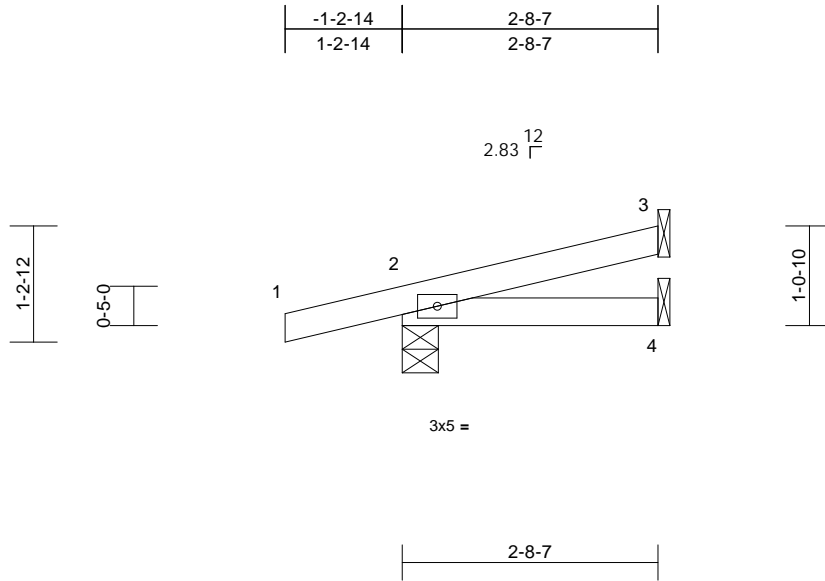
818 Soundside Road
Edenton, NC 27932

Job 24070012-A	Truss M04	Truss Type Jack-Open	Qty 1	Ply 1	76 Farm at Neills Creek-Roof-Millhaven 2 BR5 GRH I66899251 Job Reference (optional)
-------------------	--------------	-------------------------	----------	----------	---

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

Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Tue Jul 16 12:36:51
ID:dbAiHXyjU7HMUJQjRAayfNz5Pdw-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?F

Page: 1



Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	0.00	4-7	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	0.00	4-7	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 10 lb	FT = 20%

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

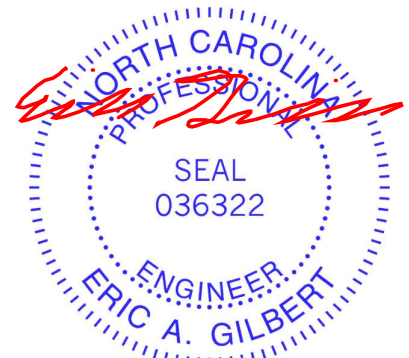
BRACING
TOP CHORD Structural wood sheathing directly applied or 2-8-7 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-4-9, 3= Mechanical, 4= Mechanical
Max Horiz 2=37 (LC 10)
Max Uplift 2=-69 (LC 10), 3=-22 (LC 14)
Max Grav 2=259 (LC 21), 3=78 (LC 21), 4=44 (LC 7)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/23, 2-3=-87/44
BOT CHORD 2-4=-44/58

- 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 User Defined .
- 8) Refer to girder(s) for truss to truss connections.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 22 lb uplift at joint 3.
- 10) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- LOAD CASE(S)** Standard

- NOTES**
- 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 Corner (3) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 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.



July 18, 2024

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

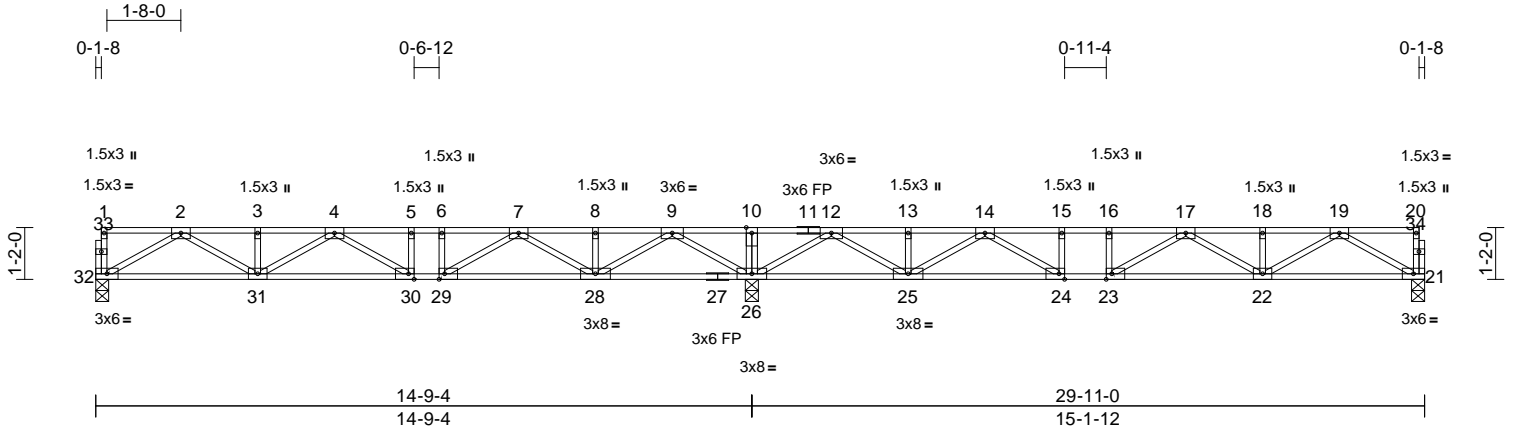
818 Soundside Road
Edenton, NC 27932

Job 24070012-A	Truss F01	Truss Type Floor	Qty 7	Ply 1	76 Farm at Neills Creek-Roof-Millhaven 2 BR5 GRH I66899252 Job Reference (optional)
-------------------	--------------	---------------------	----------	----------	---

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

Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Tue Jul 16 12:36:49
ID:fCrjlltGkkqTDVYz8TZVYyUA4Hc-RfC?PsB70Hq3NSgPqnL8w3uITxBGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:51.9

Plate Offsets (X, Y): [23:0-1-8,Edge], [24:0-1-8,Edge], [29:0-1-8,Edge], [30:0-1-8,Edge]

Loading	(psf)	Spacing	1-7-3	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.71	Vert(LL)	-0.12	22-23	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.58	Vert(CT)	-0.16	22-23	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.53	Horz(CT)	0.03	21	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MSH							Weight: 152 lb	FT = 20%F, 11%E

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

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

REACTIONS (size) 21=0-3-8, 26=0-3-8, 32=0-3-8
Max Grav 21=561 (LC 4), 26=1599 (LC 1), 32=546 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-32=-56/0, 20-21=-56/0, 1-2=-3/0, 2-3=-1360/0, 3-4=-1360/0, 4-5=-1614/58, 5-6=-1614/58, 6-7=-1614/58, 7-8=-680/573, 8-9=-680/573, 9-10=0/2040, 10-12=0/2040, 12-13=-683/522, 13-14=-683/522, 14-15=-1696/0, 15-16=-1696/0, 16-17=-1696/0, 17-18=-1411/0, 18-19=-1411/0, 19-20=-3/0
BOT CHORD 31-32=0/827, 30-31=0/1624, 29-30=-58/1614, 28-29=-308/1253, 26-28=-990/0, 25-26=-925/0, 24-25=-260/1286, 23-24=0/1696, 22-23=0/1698, 21-22=0/853

WEBS 10-26=-165/0, 9-26=-1374/0, 2-32=-952/0, 9-28=0/1089, 2-31=0/623, 8-28=-145/0, 3-31=-126/0, 7-28=-777/0, 4-31=-308/67, 7-29=0/639, 4-30=-324/57, 5-30=-19/81, 6-29=-213/0, 12-26=-1398/0, 19-21=-983/0, 12-25=0/1114, 19-22=0/651, 13-25=-149/0, 18-22=-124/0, 14-25=-802/0, 17-22=-335/47, 14-24=0/697, 17-23=-315/81, 15-24=-242/0, 16-23=-33/78

NOTES

- Unbalanced floor live loads have been considered for this design.
- All plates are 3x5 MT20 unless otherwise indicated.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



July 18, 2024

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)



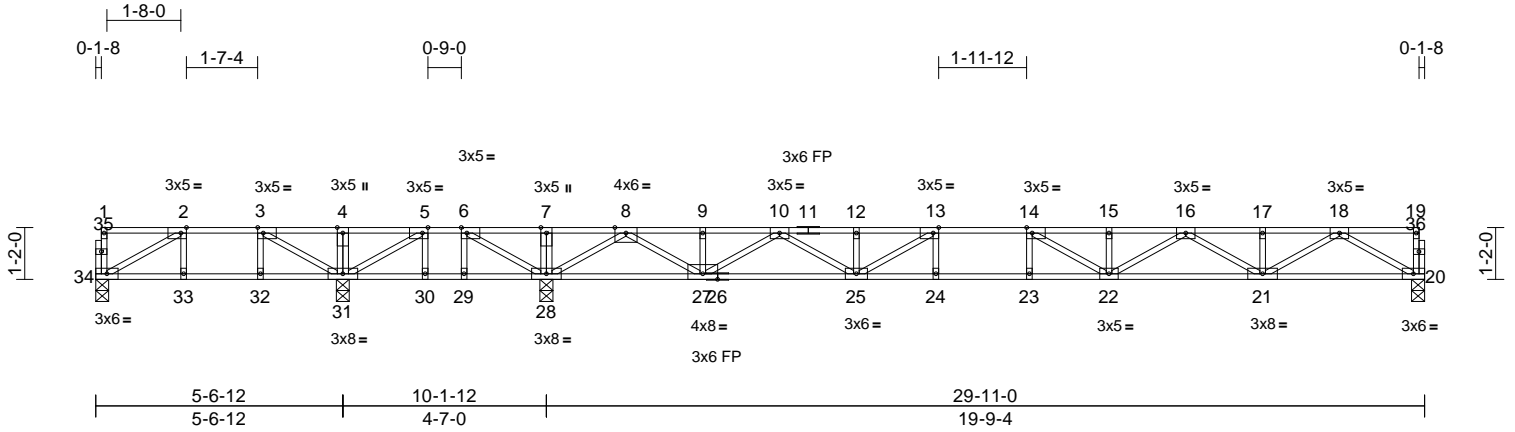
818 Soundside Road
Edenton, NC 27932

Job 24070012-A	Truss F03	Truss Type Floor	Qty 2	Ply 1	76 Farm at Neills Creek-Roof-Millhaven 2 BR5 GRH I66899254 Job Reference (optional)
-------------------	--------------	---------------------	----------	----------	---

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

Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Tue Jul 16 12:36:49
ID: BqtdnPUDz57NDBmAAzTDaRyA4Gq-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCdoi7J4zJC?f

Page: 1



Scale = 1:51.9

Plate Offsets (X, Y): [2:0-1-8,Edge], [3:0-1-8,Edge], [5:0-1-8,Edge], [6:0-1-8,Edge], [13:0-1-8,Edge], [14:0-1-8,Edge], [27:Edge,0-1-8]

Loading	(psf)	Spacing	1-7-3	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.84	Vert(LL)	-0.31	22-23	>754	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.93	Vert(CT)	-0.43	22-23	>549	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.69	Horz(CT)	0.04	20	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MSH							Weight: 152 lb	FT = 20%F, 11%E

LUMBER
TOP CHORD 2x4 SP No.1 (flat) *Except* 11-19:2x4 SP No.2 (flat)
BOT CHORD 2x4 SP No.2 (flat) *Except* 26-20:2x4 SP No.1 (flat)
WEBS 2x4 SP No.3 (flat)
OTHERS 2x4 SP No.3 (flat)

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-7-10 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.

REACTIONS (size) 20=0-3-8, 28=0-3-8, 31=0-3-8, 34=0-3-8
Max Uplift 31=66 (LC 4), 34=-7 (LC 4)
Max Grav 20=747 (LC 13), 28=1594 (LC 11), 31=359 (LC 3), 34=207 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-34=-81/0, 19-20=-57/0, 1-2=-5/0, 2-3=-231/106, 3-4=0/419, 4-5=0/419, 5-6=0/1190, 6-7=0/2166, 7-8=0/2166, 8-9=-690/0, 9-10=-690/0, 10-12=-2357/0, 12-13=-2357/0, 13-14=-2985/0, 14-15=-3013/0, 15-16=-3013/0, 16-17=-2032/0, 17-18=-2032/0, 18-19=-3/0
BOT CHORD 33-34=-106/231, 32-33=-106/231, 31-32=-106/231, 30-31=-1190/0, 29-30=-1190/0, 28-29=-1190/0, 27-28=-617/0, 25-27=0/1653, 24-25=0/2985, 23-24=0/2985, 22-23=0/2985, 21-22=0/2630, 20-21=0/1168

WEBS
4-31=-207/0, 7-28=-100/0, 3-31=-515/0, 2-34=-260/124, 2-33=-47/0, 3-32=0/68, 5-31=0/980, 6-28=-1299/0, 5-30=-240/0, 6-29=0/256, 8-28=-1805/0, 18-20=-1347/0, 8-27=0/1454, 18-21=0/1010, 9-27=-134/0, 17-21=-137/0, 10-27=-1130/0, 16-21=-698/0, 10-25=0/829, 16-22=0/446, 12-25=-147/72, 15-22=-217/1, 13-25=-892/0, 14-22=-349/298, 13-24=-16/185, 14-23=-158/44

- NOTES**
- 1) Unbalanced floor live loads have been considered for this design.
 - 2) All plates are 1.5x3 MT20 unless otherwise indicated.
 - 3) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 34 and 31. This connection is for uplift only and does not consider lateral forces.
 - 4) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
 - 6) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



July 18, 2024

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)



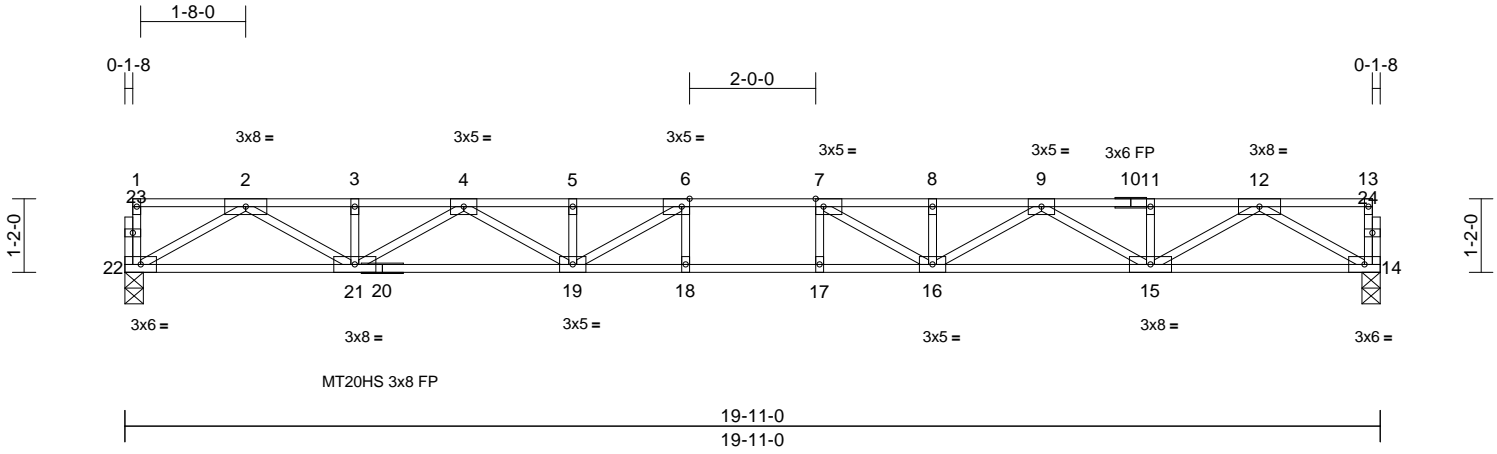
818 Soundside Road
Edenton, NC 27932

Job 24070012-A	Truss F05	Truss Type Floor	Qty 8	Ply 1	76 Farm at Neills Creek-Roof-Millhaven 2 BR5 GRH I66899256 Job Reference (optional)
-------------------	--------------	---------------------	----------	----------	---

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

Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Tue Jul 16 12:36:50
ID:YsnD6MMQmXJ0TPsCroGL2qyA4Fh-RfC?PsB70Hg3NSgPqnL8w3ulTXbGKwRCDoi7J4zJC?f

Page: 1



Scale = 1:36.6

Plate Offsets (X, Y): [6:0-1-8,Edge], [7:0-1-8,Edge]

Loading	(psf)	Spacing	1-7-3	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.60	Vert(LL)	-0.38	17-18	>623	480	MT20HS	187/143
TCDL	10.0	Lumber DOL	1.00	BC	0.88	Vert(CT)	-0.52	17-18	>452	360	MT20	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.58	Horz(CT)	0.08	14	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MSH								
											Weight: 100 lb	FT = 20%F, 11%E

LUMBER

TOP CHORD 2x4 SP No.2(flat)
 BOT CHORD 2x4 SP No.2(flat) *Except* 20-14:2x4 SP No.1(flat)
 WEBS 2x4 SP No.3(flat)
 OTHERS 2x4 SP No.3(flat)

5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard

BRACING

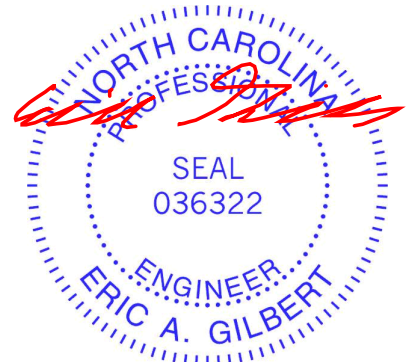
TOP CHORD Structural wood sheathing directly applied or 5-7-14 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 14=0-3-8, 22=0-3-8
 Max Grav 14=860 (LC 1), 22=860 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-22=-57/0, 13-14=-57/0, 1-2=-3/0, 2-3=-2414/0, 3-4=-2414/0, 4-5=-3739/0, 5-6=-3739/0, 6-7=-4042/0, 7-8=-3739/0, 8-9=-3739/0, 9-11=-2413/0, 11-12=-2413/0, 12-13=-3/0
 BOT CHORD 21-22=0/1362, 19-21=0/3195, 18-19=0/4042, 17-18=0/4042, 16-17=0/4042, 15-16=0/3196, 14-15=0/1362
 WEBS 12-14=-1572/0, 2-22=-1571/0, 12-15=0/1227, 2-21=0/1228, 11-15=-134/0, 3-21=-135/0, 9-15=-913/0, 4-21=-913/0, 9-16=0/635, 4-19=0/635, 8-16=-188/45, 5-19=-188/45, 7-16=-680/80, 6-19=-680/80, 6-18=-101/129, 7-17=-102/129

NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) All plates are 1.5x3 MT20 unless otherwise indicated.
- 4) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



July 18, 2024

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)



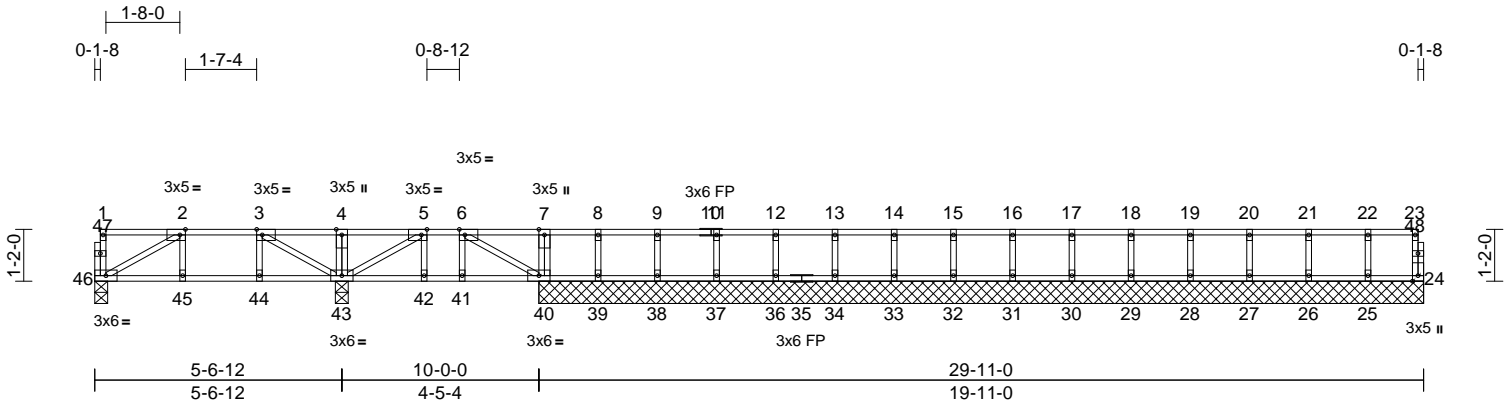
818 Soundside Road
 Edenton, NC 27932

Job 24070012-A	Truss F07	Truss Type Floor	Qty 1	Ply 1	76 Farm at Neills Creek-Roof-Millhaven 2 BR5 GRH I66899257 Job Reference (optional)
-------------------	--------------	---------------------	----------	----------	---

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

Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Tue Jul 16 12:36:50
ID:wSlgZyfXaPorPrXmchnRtPyA4E0-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWRcDoi7J4zJC?f

Page: 1



Scale = 1:51.9
Plate Offsets (X, Y): [2:0-1-8,Edge], [3:0-1-8,Edge], [5:0-1-8,Edge], [6:0-1-8,Edge]

Loading	(psf)	Spacing	1-7-3	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.52	Vert(LL)	-0.03	45-46	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.41	Vert(CT)	-0.03	45-46	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.23	Horz(CT)	0.01	24	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MSH							Weight: 135 lb	FT = 20%F, 11%E

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

BOT CHORD 45-46=0/799, 44-45=0/799, 43-44=0/799,
 42-43=0/648, 41-42=0/648, 40-41=0/648,
 39-40=0/5, 38-39=0/5, 37-38=0/5, 36-37=0/5,
 34-36=0/5, 33-34=0/5, 32-33=0/5, 31-32=0/5,
 30-31=0/5, 29-30=0/5, 28-29=0/5, 27-28=0/5,
 26-27=0/5, 25-26=0/5, 24-25=0/5
WEBS 4-43=-457/0, 7-40=-419/0, 3-43=-938/0,
 2-46=-904/0, 2-45=-34/18, 3-44=0/60,
 5-43=-756/0, 6-40=-737/0, 5-42=-41/83,
 6-41=-75/57, 8-39=-302/0, 9-38=-323/0,
 11-37=-306/0, 12-36=-308/0, 13-34=-307/0,
 14-33=-307/0, 15-32=-307/0, 16-31=-307/0,
 17-30=-307/0, 18-29=-307/0, 19-28=-307/0,
 20-27=-306/0, 21-26=-308/0, 22-25=-306/0

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.

REACTIONS (size) 24=19-11-0, 25=19-11-0,
 26=19-11-0, 27=19-11-0,
 28=19-11-0, 29=19-11-0,
 30=19-11-0, 31=19-11-0,
 32=19-11-0, 33=19-11-0,
 34=19-11-0, 36=19-11-0,
 37=19-11-0, 38=19-11-0,
 39=19-11-0, 40=19-11-0, 43=0-3-8,
 46=0-3-8
 Max Grav 24=95 (LC 13), 25=317 (LC 14),
 26=319 (LC 13), 27=317 (LC 14),
 28=317 (LC 13), 29=317 (LC 14),
 30=317 (LC 13), 31=317 (LC 14),
 32=317 (LC 13), 33=317 (LC 14),
 34=317 (LC 13), 36=319 (LC 14),
 37=317 (LC 13), 38=339 (LC 14),
 39=316 (LC 13), 40=758 (LC 11),
 43=1260 (LC 12), 46=625 (LC 14)

NOTES
 1) Unbalanced floor live loads have been considered for this design.
 2) All plates are 1.5x3 MT20 unless otherwise indicated.
 3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
 4) Gable studs spaced at 1-4-0 oc.
 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 6) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
 7) CAUTION: Do not erect truss backwards.

FORCES (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-46=-178/0, 23-24=-91/0, 1-2=-11/0,
 2-3=-799/0, 3-4=-165/257, 4-5=-165/257,
 5-6=-648/0, 6-7=-5/0, 7-8=-5/0, 8-9=-5/0,
 9-11=-5/0, 11-12=-5/0, 12-13=-5/0,
 13-14=-5/0, 14-15=-5/0, 15-16=-5/0,
 16-17=-5/0, 17-18=-5/0, 18-19=-5/0,
 19-20=-5/0, 20-21=-5/0, 21-22=-5/0,
 22-23=-5/0

LOAD CASE(S) Standard
 1) Dead + Floor Live (balanced): Lumber Increase=1.00,
 Plate Increase=1.00
 Uniform Loads (lb/ft)
 Vert: 24-46=-8, 1-23=-230



July 18, 2024

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)

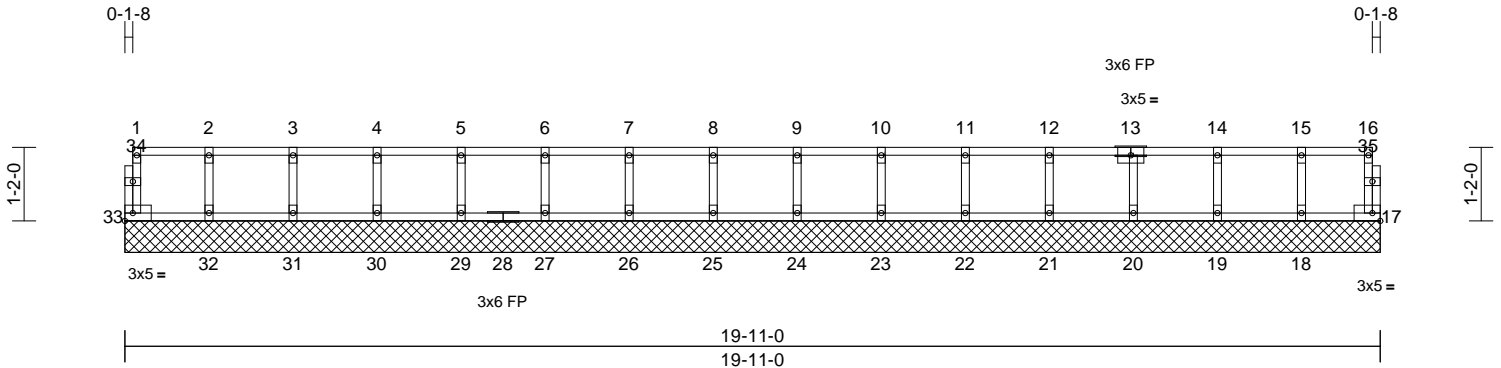
ENGINEERING BY
TRENCO
 A MiTek Affiliate
 818 Soundside Road
 Edenton, NC 27932

Job 24070012-A	Truss FW19	Truss Type Floor	Qty 1	Ply 1	76 Farm at Neills Creek-Roof-Millhaven 2 BR5 GRH I66899258 Job Reference (optional)
-------------------	---------------	---------------------	----------	----------	---

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

Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Tue Jul 16 12:36:50
ID:hXHYNJAthJ5trllr4bSHaFyA4DM-RFC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:36.6

Loading	(psf)	Spacing	1-7-3	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	17	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MR							Weight: 83 lb	FT = 20%F, 11%E

LUMBER

TOP CHORD	2x4 SP No.2(flat)
BOT CHORD	2x4 SP No.2(flat)
WEBS	2x4 SP No.3(flat)
OTHERS	2x4 SP No.3(flat)

WEBS

2-32=-103/0, 3-31=-108/0, 4-30=-106/0,
5-29=-107/0, 6-27=-107/0, 7-26=-107/0,
8-25=-107/0, 9-24=-107/0, 10-23=-106/0,
11-22=-107/0, 12-21=-104/0, 13-20=-106/0,
14-19=-111/0, 15-18=-101/0

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.

- NOTES**
- 1) All plates are 1.5x3 MT20 unless otherwise indicated.
 - 2) Gable requires continuous bottom chord bearing.
 - 3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
 - 4) Gable studs spaced at 1-4-0 oc.
 - 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 6) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

REACTIONS (size)

17=19-11-0, 18=19-11-0,
19=19-11-0, 20=19-11-0,
21=19-11-0, 22=19-11-0,
23=19-11-0, 24=19-11-0,
25=19-11-0, 26=19-11-0,
27=19-11-0, 29=19-11-0,
30=19-11-0, 31=19-11-0,
32=19-11-0, 33=19-11-0

Max Grav 17=39 (LC 1), 18=113 (LC 1),
19=121 (LC 1), 20=117 (LC 1),
21=115 (LC 1), 22=118 (LC 1),
23=117 (LC 1), 24=117 (LC 1),
25=117 (LC 1), 26=117 (LC 1),
27=117 (LC 1), 29=117 (LC 1),
30=117 (LC 1), 31=119 (LC 1),
32=113 (LC 1), 33=46 (LC 1)

LOAD CASE(S) Standard

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-33=-41/0, 16-17=-36/0, 1-2=-9/0, 2-3=-9/0, 3-4=-9/0, 4-5=-9/0, 5-6=-9/0, 6-7=-9/0, 7-8=-9/0, 8-9=-9/0, 9-10=-9/0, 10-11=-9/0, 11-12=-9/0, 12-14=-9/0, 14-15=-5/0, 15-16=-5/0
BOT CHORD	32-33=0/9, 31-32=0/9, 30-31=0/9, 29-30=0/9, 27-29=0/9, 26-27=0/9, 25-26=0/9, 24-25=0/9, 23-24=0/9, 22-23=0/9, 21-22=0/9, 20-21=0/9, 19-20=0/5, 18-19=0/5, 17-18=0/5



July 18, 2024

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

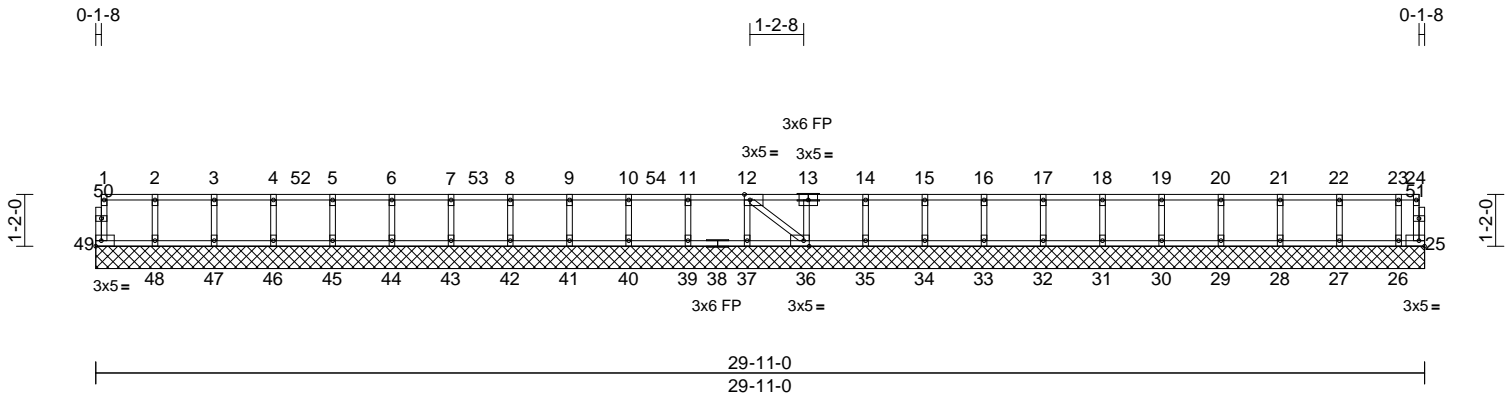
Job 24070012-A	Truss FW29	Truss Type Floor Supported Gable	Qty 1	Ply 1	76 Farm at Neills Creek-Roof-Millhaven 2 BR5 GRH 166899259 Job Reference (optional)
-------------------	---------------	-------------------------------------	----------	----------	---

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

Run: 8.73 S Jul 11 2024 Print: 8.730 S Jul 11 2024 MiTek Industries, Inc. Tue Jul 16 12:36:50

Page: 1

Id:wGkyGOHXZ4DcQhxa6_6OR9yA4DD-RfC?PsB70Hq3NSgPqnL8w3uTXbGKWrCDoi7J4zJC?f



Scale = 1:51.9

Plate Offsets (X, Y): [12:0-1-8,Edge], [36:0-1-8,Edge]

Loading	(psf)	Spacing	1-7-3	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.57	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.08	Horiz(TL)	0.00	36	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MSH							Weight: 126 lb	FT = 20%F, 11%E

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

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

REACTIONS (size)
25=29-11-0, 26=29-11-0,
27=29-11-0, 28=29-11-0,
29=29-11-0, 30=29-11-0,
31=29-11-0, 32=29-11-0,
33=29-11-0, 34=29-11-0,
35=29-11-0, 36=29-11-0,
37=29-11-0, 39=29-11-0,
40=29-11-0, 41=29-11-0,
42=29-11-0, 43=29-11-0,
44=29-11-0, 45=29-11-0,
46=29-11-0, 47=29-11-0,
48=29-11-0, 49=29-11-0
Max Uplift 25=-6 (LC 1), 37=-13 (LC 3),
47=-16 (LC 3)
Max Grav 25=-1 (LC 3), 26=97 (LC 1),
27=121 (LC 1), 28=116 (LC 1),
29=118 (LC 1), 30=117 (LC 1),
31=117 (LC 1), 32=117 (LC 1),
33=117 (LC 1), 34=118 (LC 1),
35=113 (LC 1), 36=128 (LC 1),
37=93 (LC 1), 39=279 (LC 4),
40=322 (LC 4), 41=346 (LC 4),
42=293 (LC 4), 43=318 (LC 4),
44=346 (LC 4), 45=296 (LC 4),
46=306 (LC 4), 47=93 (LC 1),
48=128 (LC 1), 49=38 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-49=-34/0, 24-25=0/6, 1-2=-2/0, 2-3=-2/0,
3-4=-2/0, 4-5=-2/0, 5-6=-2/0, 6-7=-2/0,
7-8=-2/0, 8-9=-2/0, 9-10=-2/0, 10-11=-2/0,
11-12=-2/0, 12-14=0/5, 14-15=0/0, 15-16=0/0,
16-17=0/0, 17-18=0/0, 18-19=0/0, 19-20=0/0,
20-21=0/0, 21-22=0/0, 22-23=0/0, 23-24=0/0
BOT CHORD 48-49=0/2, 47-48=0/2, 46-47=0/2, 45-46=0/2,
44-45=0/2, 43-44=0/2, 42-43=0/2, 41-42=0/2,
40-41=0/2, 39-40=0/2, 37-39=0/2, 36-37=0/2,
35-36=0/0, 34-35=0/0, 33-34=0/0, 32-33=0/0,
31-32=0/0, 30-31=0/0, 29-30=0/0, 28-29=0/0,
27-28=0/0, 26-27=0/0, 25-26=0/0
WEBS 2-48=-116/0, 3-47=-82/27, 4-46=-296/0,
5-45=-285/0, 6-44=-336/0, 7-43=-308/0,
8-42=-282/0, 9-41=-336/0, 10-40=-311/0,
11-39=-268/0, 12-37=-82/24, 13-36=-112/0,
14-35=-102/0, 15-34=-108/0, 16-33=-106/0,
17-32=-107/0, 18-31=-107/0, 19-30=-107/0,
20-29=-107/0, 21-28=-106/0, 22-27=-110/0,
23-26=-88/0, 12-36=-9/0

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 1.5x3 MT20 unless otherwise indicated.
3) Gable requires continuous bottom chord bearing.
4) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
5) Gable studs spaced at 1-4-0 oc.
6) N/A
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

8) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 383 lb down at 4-7-8, 383 lb down at 6-7-8, 383 lb down at 8-7-8, and 383 lb down at 10-7-8, and 383 lb down at 12-7-8 on top chord. The design/selection of such connection device(s) is the responsibility of others.
10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 25-49=-8, 1-24=-80
Concentrated Loads (lb)
Vert: 6=-190 (B), 9=-190 (B), 52=-190 (B), 53=-190 (B), 54=-190 (B)



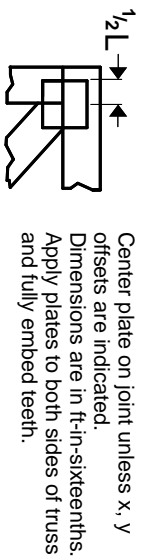
July 18, 2024

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)

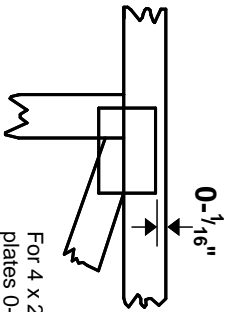
TRENCO ENGINEERING BY
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

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

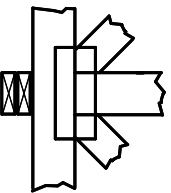
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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.

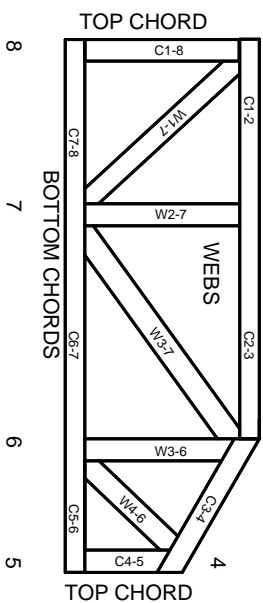
Industry Standards:

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



1 TOP CHORDS
2 Joint ID
3 typ.



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.