

RE: 2502-2109-A - The Farm at Neill's Creek Lot 00.0056 OWF

Trenco
818 Soundside Rd
Edenton, NC 27932

Site Information:

Project Customer: DRB Raleigh Project Name: The Farm at Neill's Creek Lot 00.0056

Lot/Block: Lot 00.0056

Subdivision:

Model: Drayton

Address: 567 Winding Creek Dr

City: Lillington

State: NC

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

Design Code: IRC2021/TPI2014

Wind Code: ASCE 7-16

Wind Speed: 115 mph

Roof Load: 50.0 psf

Mean Roof Height (feet): 25

Design Program: MiTek 20/20 8.8

Design Method: MWFRS (Envelope)/C-C hybrid Wind ASCE 7-16

Floor Load: N/A psf

Exposure Category: B

No.	Seal#	Truss Name	Date
1	I71527198	2F11	2/20/25
2	I71527199	2F12	2/20/25
3	I71527200	2F15	2/20/25
4	I71527201	2FGE3	2/20/25
5	I71527202	2F4	2/20/25
6	I71527203	2F3	2/20/25
7	I71527204	2F5	2/20/25
8		2F6	2/20/25
9	I71527206	2FGE2	2/20/25
10	I71527207	2F2	2/20/25
11	I71527208	2FGE1	2/20/25
12	I71527209	2F1	2/20/25
13	I71527210	2F10	2/20/25
14	I71527211	2F7	2/20/25
	I71527212	2F8	2/20/25
16	I71527213	2F14	2/20/25
17		2F13	2/20/25
18	I71527215	2F13A	2/20/25

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

Truss Design Engineer's Name: Gilbert, Eric

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

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.



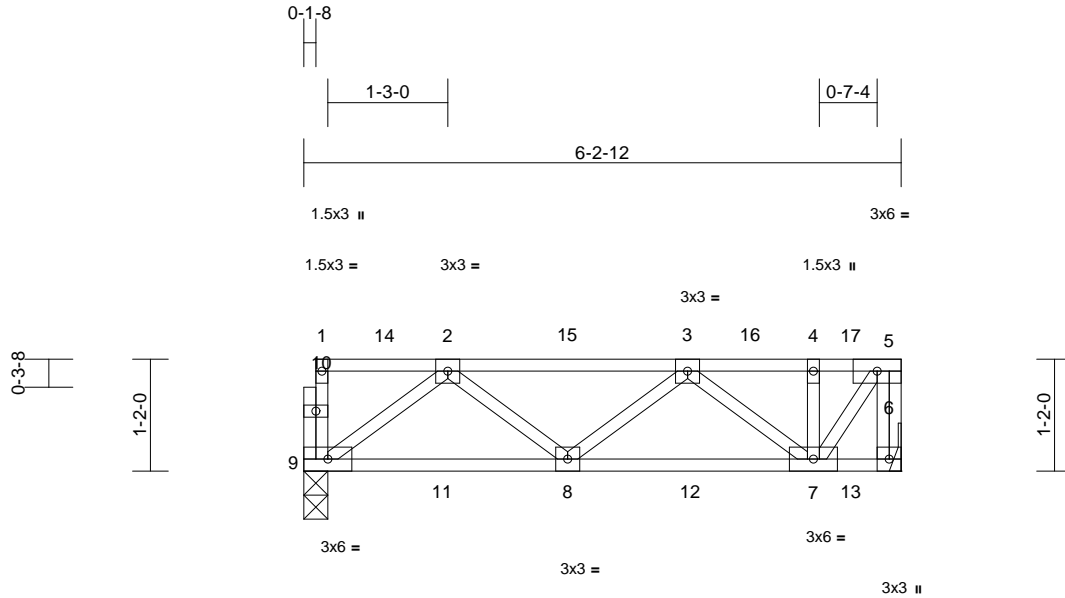
February 20, 2025

Job	Truss	Truss Type	Qty	Ply	The Farm at Neill's Creek Lot 00.0056 OWF
2502-2109-A	2F11	Floor	1	1	I71527198
					Job Reference (optional)

Structural, LLC, Thurmont, MD - 21788,

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Scale = 1:24

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	0.56	Vert(LL)	-0.08	8-9	>856	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.78	Vert(CT)	-0.09	8-9	>807	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.00	6	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-P							Weight: 36 lb	FT = 20%F, 12%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 10-0-0 oc bracing.

REACTIONS (size) 6= Mechanical, 9=0-3-0
Max Grav 6=325 (LC 8), 9=324 (LC 17)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-9=-259/38, 5-6=-333/0, 1-2=-15/2,
2-3=-456/0, 3-4=-246/0, 4-5=-246/0

BOT CHORD 8-9=0/330, 7-8=0/426, 6-7=0/0

WEBS 2-9=-414/0, 2-8=-57/254, 3-8=-133/177,
3-7=-336/0, 4-7=-259/71, 5-7=0/408

NOTES

- Bearings are assumed to be: Joint 9 SP No.2.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate at joint(s) 9.
- This truss has been designed for a moving concentrated load of 250.0lb live and 3.0lb dead located at all mid panels and at all panel points along the Top Chord and Bottom Chord, nonconcurrent with any other live loads.
- 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



February 20,2025

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

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

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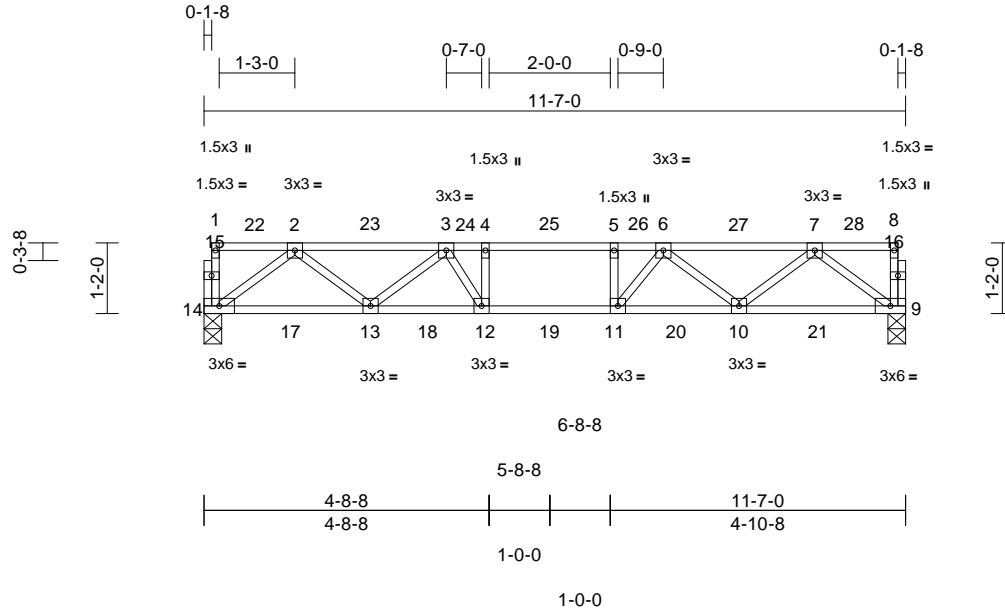
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	The Farm at Neill's Creek Lot 00.0056 OWF
2502-2109-A	2F12	Floor	4	1	I71527199
Job Reference (optional)					

Structural, LLC, Thurmont, MD - 21788,

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Page: 1



Scale = 1:38

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	0.56	Vert(LL)	-0.10	10-11	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.80	Vert(CT)	-0.12	10-11	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.21	Horz(CT)	0.02	9	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 59 lb	FT = 20%F, 12%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 10-0-0 oc bracing.

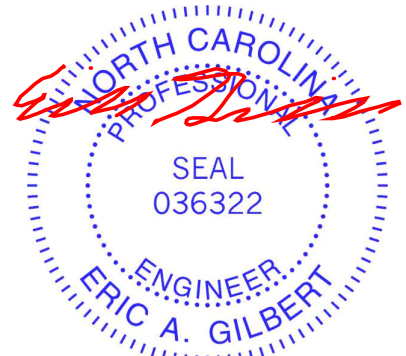
REACTIONS	(size) 9=0-3-8, 14=0-3-8
	Max Grav 9=493 (LC 1), 14=493 (LC 1)

FORCES	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-14=-259/34, 8-9=-259/34, 1-2=-16/2, 2-3=-937/0, 3-4=-1324/0, 4-5=-1324/0, 5-6=-1324/0, 6-7=-938/0, 7-8=-16/2
BOT CHORD	13-14=0/604, 12-13=0/1247, 11-12=0/1324, 10-11=0/1243, 9-10=0/605
WEBS	4-12=-246/201, 5-11=-214/164, 2-14=-756/0, 2-13=0/441, 3-13=-404/30, 3-12=-258/339, 7-9=-757/0, 7-10=0/442, 6-10=-398/23, 6-11=-231/311

NOTES

- Unbalanced floor live loads have been considered for this design.
- All bearings are assumed to be SP No.2 .
- This truss has been designed for a moving concentrated load of 250.0lb live and 3.0lb dead located at all mid panels and at all panel points along the Top Chord and Bottom Chord, nonconcurrent with any other live loads.
- 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



February 20,2025

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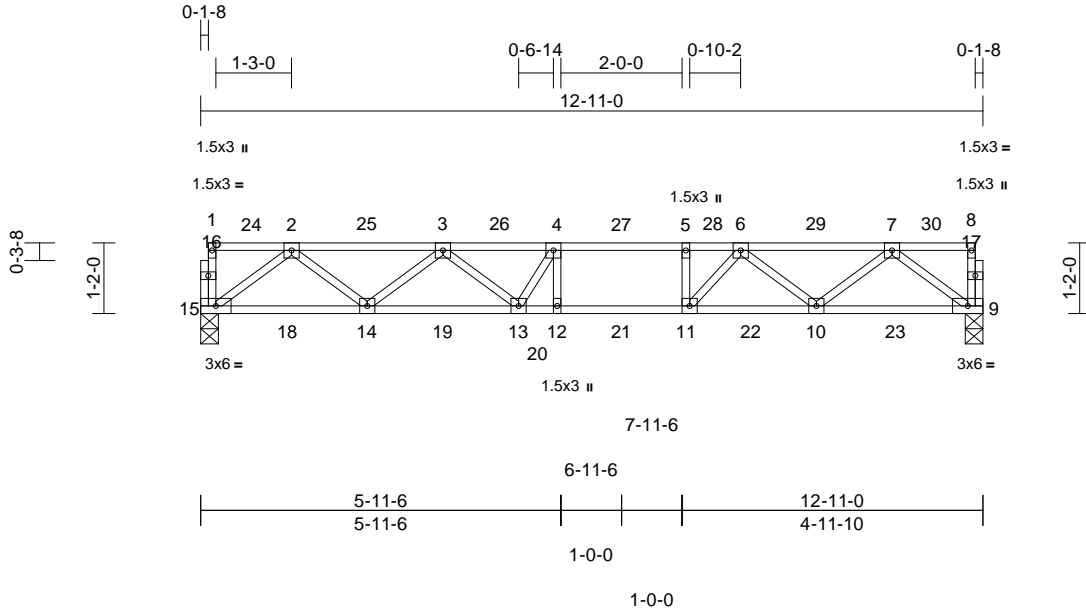
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	The Farm at Neill's Creek Lot 00.0056 OWF
2502-2109-A	2F15	Floor	2	1	I71527200
Job Reference (optional)					

Structural, LLC, Thurmont, MD - 21788,

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Scale = 1:38

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)	-0.11	10-11	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.82	Vert(CT)	-0.13	12-13	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.25	Horz(CT)	0.02	9	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 65 lb	FT = 20%F, 12%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 10'-0-0 oc bracing.

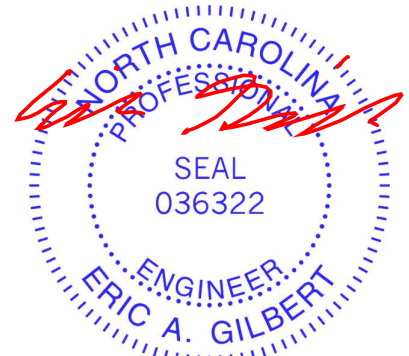
REACTIONS (size) 9=0-3-8, 15=0-3-8
Max Grav 9=552 (LC 1), 15=552 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-15=-259/38, 8-9=-259/35, 1-2=-16/2, 2-3=-1087/0, 3-4=-1614/0, 4-5=-1650/0, 5-6=-1650/0, 6-7=-1078/0, 7-8=-15/2
BOT CHORD 14-15=0/679, 13-14=0/1468, 12-13=0/1650, 11-12=0/1650, 10-11=0/1467, 9-10=0/681
WEBS 4-12=-263/203, 5-11=-243/113, 2-15=-850/0, 2-14=0/530, 3-14=-496/0, 3-13=-96/285, 4-13=-279/351, 7-9=-852/0, 7-10=0/517, 6-10=-506/0, 6-11=-162/435

NOTES

- Unbalanced floor live loads have been considered for this design.
- All plates are 3x3 (=) MT20 unless otherwise indicated.
- All bearings are assumed to be SP No.2 .
- This truss has been designed for a moving concentrated load of 250.0lb live and 3.0lb dead located at all mid panels and at all panel points along the Top Chord and Bottom Chord, nonconcurrent with any other live loads.
- 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



February 20,2025

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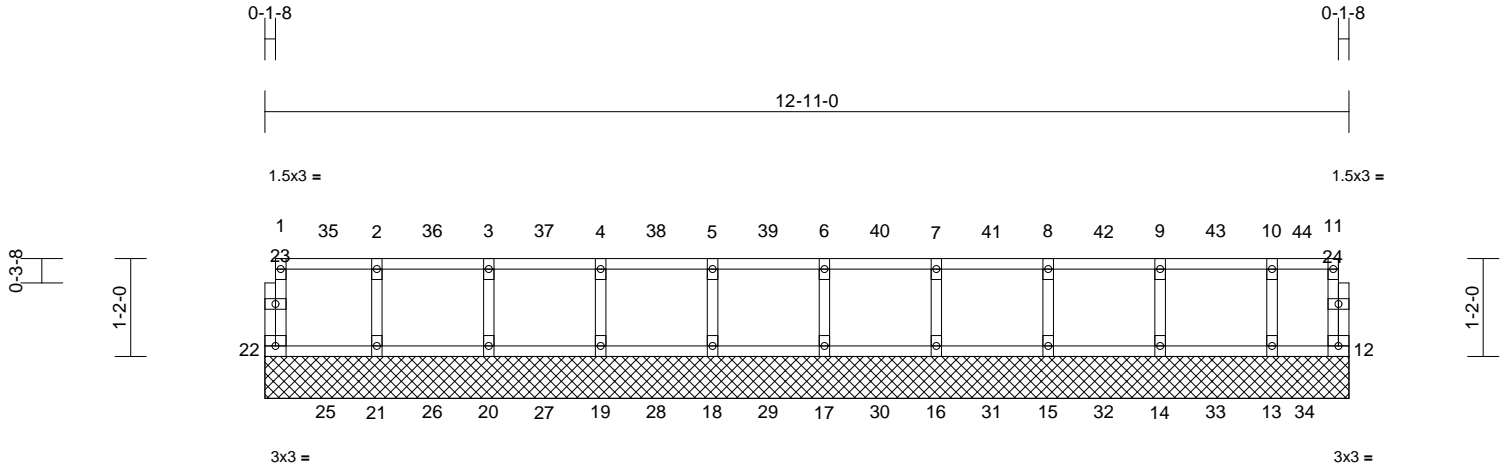
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	The Farm at Neill's Creek Lot 00.0056 OWF
2502-2109-A	2FGE3	Floor Supported Gable	1	1	I71527201
					Job Reference (optional)

Structural, LLC, Thurmont, MD - 21788,

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Page: 1



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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	0.28	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.28	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.05	Horiz(TL)	0.00	12	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R							Weight: 55 lb	FT = 20%F, 12%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)	12=12-11-0, 13=12-11-0, 14=12-11-0, 15=12-11-0, 16=12-11-0, 17=12-11-0, 18=12-11-0, 19=12-11-0, 20=12-11-0, 21=12-11-0, 22=12-11-0
Max Uplift	12=42 (LC 34), 13=15 (LC 26), 15=1 (LC 31), 21=1 (LC 28), 22=17 (LC 27)
Max Grav	12=260 (LC 46), 13=279 (LC 45), 14=286 (LC 44), 15=285 (LC 43), 16=285 (LC 42), 17=285 (LC 41), 18=285 (LC 40), 19=285 (LC 39), 20=285 (LC 38), 21=285 (LC 37), 22=265 (LC 36)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-22=-257/23, 11-12=-250/47, 1-2=-24/6, 2-3=-24/6, 3-4=-24/6, 4-5=-24/6, 5-6=-24/6, 6-7=-24/6, 7-8=-24/6, 8-9=-24/6, 9-10=-24/6, 10-11=-24/6
BOT CHORD	21-22=-6/24, 20-21=-6/24, 19-20=-6/24, 18-19=-6/24, 17-18=-6/24, 16-17=-6/24, 15-16=-6/24, 14-15=-6/24, 13-14=-6/24, 12-13=-6/24
WEBS	2-21=-272/12, 3-20=-272/10, 4-19=-272/10, 5-18=-272/10, 6-17=-272/10, 7-16=-272/10, 8-15=-272/10, 9-14=-273/10, 10-13=-265/22

NOTES

- All plates are 1.5x3 (||) MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 1-4-0 oc.
- All bearings are assumed to be SP No.2.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 22, 12, 21, 20, 19, 18, 17, 16, 15, and 13. This connection is for uplift only and does not consider lateral forces.
- This truss has been designed for a moving concentrated load of 250.0lb live and 3.0lb dead located at all mid panels and at all panel points along the Top Chord and Bottom Chord, nonconcurrent with any other live loads.
- 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



February 20,2025

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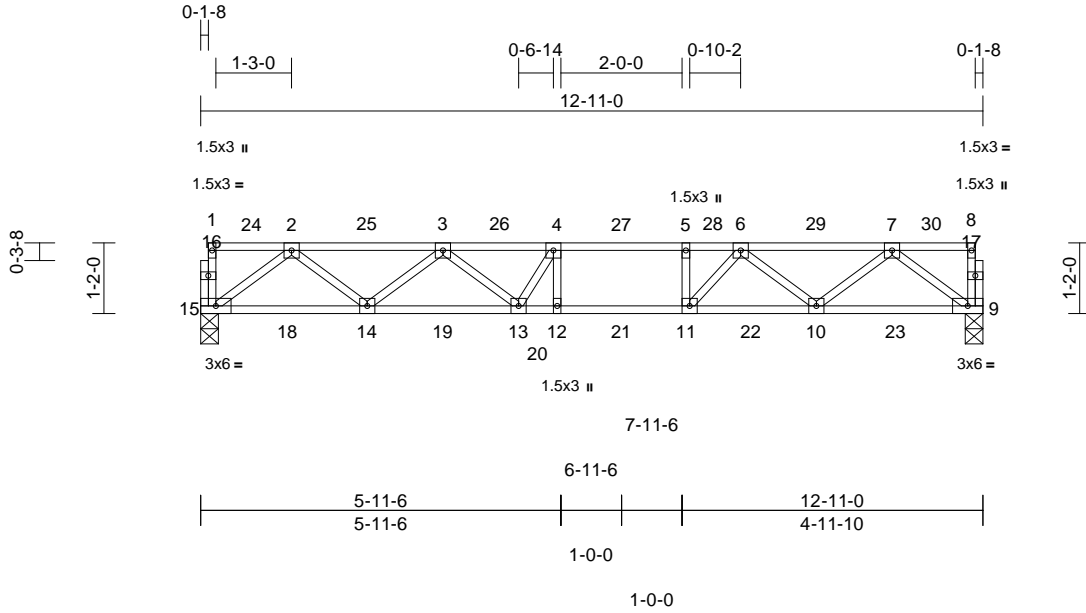
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	The Farm at Neill's Creek Lot 00.0056 OWF
2502-2109-A	2F4	Floor	1	1	Job Reference (optional)
					I71527202

Structural, LLC, Thurmont, MD - 21788,

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Page: 1



Scale = 1:38

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)	-0.11	10-11	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.82	Vert(CT)	-0.13	12-13	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.25	Horz(CT)	0.02	9	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 65 lb	FT = 20%F, 12%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 10'-0-0 oc bracing.

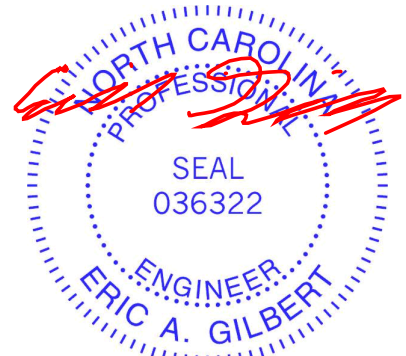
REACTIONS (size) 9=0-3-8, 15=0-3-8
Max Grav 9=552 (LC 1), 15=552 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-15=-259/38, 8-9=-259/35, 1-2=-16/2, 2-3=-1087/0, 3-4=-1614/0, 4-5=-1650/0, 5-6=-1650/0, 6-7=-1078/0, 7-8=-15/2
BOT CHORD 14-15=0/679, 13-14=0/1468, 12-13=0/1650, 11-12=0/1650, 10-11=0/1467, 9-10=0/681
WEBS 4-12=-263/203, 5-11=-243/113, 2-15=-850/0, 2-14=0/530, 3-14=-496/0, 3-13=-96/285, 4-13=-279/351, 7-9=-852/0, 7-10=0/517, 6-10=-506/0, 6-11=-162/435

NOTES

- Unbalanced floor live loads have been considered for this design.
- All plates are 3x3 (=) MT20 unless otherwise indicated.
- All bearings are assumed to be SP No.2 .
- This truss has been designed for a moving concentrated load of 250.0lb live and 3.0lb dead located at all mid panels and at all panel points along the Top Chord and Bottom Chord, nonconcurrent with any other live loads.
- 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



February 20,2025

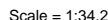
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Structural, LLC, Thurmont, MD - 21788, Run: 8.83 S Feb 1 2025 Print: 8.830 S Feb 1 2025 MiTek Industries, Inc. Wed Feb 19 15:03:27 Page: 1
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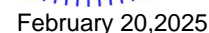
LUMBER

BRACING

WEBS 6-14=-168/183, 7-13=-258/63, 2-17=-1005/0,
2-16=0/667, 3-16=-639/0, 3-15=-58/382,
9-11=-1006/0, 9-12=0/653, 8-12=-645/0,
8-13=-58/644, 4-15=-233/83, 5-15=-262/119,
5-14=-314/284

NOTES

- LOAD CASE(S) Standard

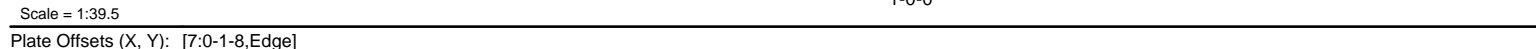


Design valid for use only with MiTeK® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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



818 Soundside Road
Edenton, NC 27932

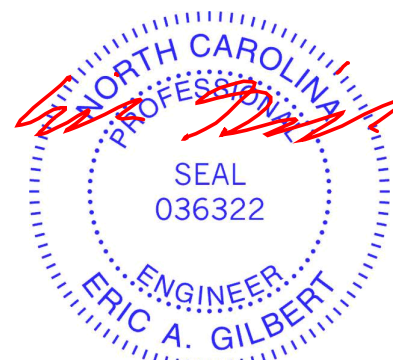
Structural, LLC, Thurmont, MD - 21788, Run: 8.83 S Feb 1 2025 Print: 8.830 S Feb 1 2025 MiTek Industries, Inc. Wed Feb 19 15:03:28 Page: 1
ID:c9xPocFMeYlJLuGMnxfuXeyFloa-RfC?PsB70Hq3NSqPanL8w3uItXBGKWRCDoI7J4ZC?f



LUMBER		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.
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)	
LOAD CASE(S)		Standard

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, Except: 2-2-0 oc bracing: 15-16.
REACTIONS	(size) 11=0-1-8, 18=0-3-8 Max Grav 11=553 (LC 1), 18=553 (LC 1)
FORCES	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-18=-258/38, 10-11=-258/39, 1-2=-15/2, 2-3=-1137/0, 3-4=-1832/0, 4-5=-1832/0, 5-6=-1976/0, 6-7=-1976/0, 7-8=-1837/0, 8-9=-1136/0, 9-10=-15/2
BOT CHORD	17-18=0/689, 16-17=0/1567, 15-16=0/1972, 14-15=0/1976, 13-14=0/1976, 12-13=0/1554, 11-12=0/694
WEBS	6-15=-166/147, 7-14=-298/365, 2-18=-863/0, 2-17=0/582, 3-17=-560/0, 3-16=-64/382, 9-11=-869/0, 9-12=0/576, 8-12=-544/0, 8-13=-45/433, 7-13=-518/331, 4-16=-240/75, 5-16=-274/121, 5-15=-290/254

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All bearings are assumed to be SP No.2 .
- 3) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 11.
- 4) This truss has been designed for a moving concentrated load of 250.0lb live and 3.0lb dead located at all mid panels and at all panel points along the Top Chord and Bottom Chord. non concurrent with any other live loads.



February 20, 2025

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

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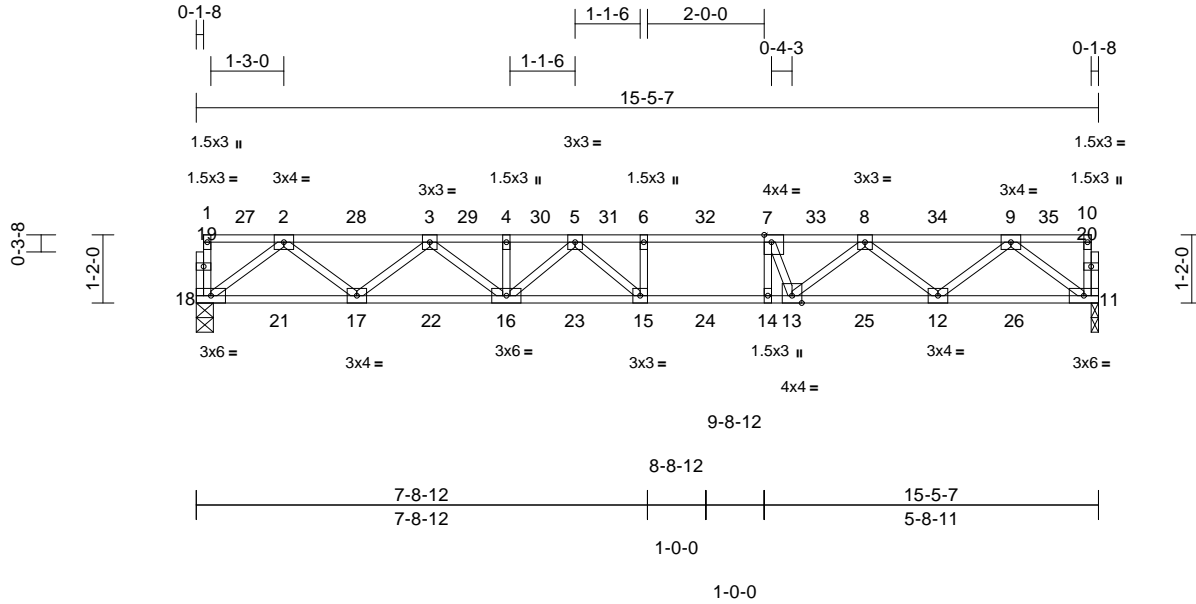
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	The Farm at Neill's Creek Lot 00.0056 OWF
2502-2109-A	2F6	Floor	7	1	I71527205
Job Reference (optional)					

Structural, LLC, Thurmont, MD - 21788,

Run: 8.83 S Feb 1 2025 Print: 8.830 S Feb 1 2025 MiTek Industries, Inc. Wed Feb 19 15:03:28
ID:4LVn7yG_PsrCw2rZLeA73syFloZ-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:39.5

Plate Offsets (X, Y): [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)	-0.17	15-16	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.47	Vert(CT)	-0.23	15-16	>801	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.33	Horz(CT)	0.03	11	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 79 lb	FT = 20%F, 12%E

LUMBER

TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP SS(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

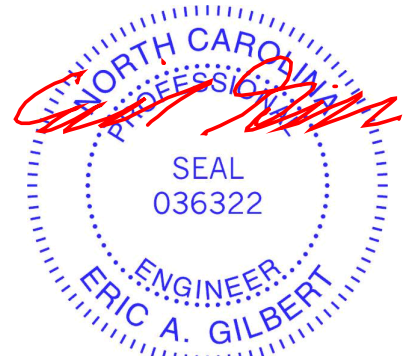
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 11=0-1-8, 18=0-3-8
Max Grav 11=664 (LC 1), 18=664 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-18=-259/37, 10-11=-258/38, 1-2=-16/2, 2-3=-1363/0, 3-4=-2197/0, 4-5=-2197/0, 5-6=-2370/0, 6-7=-2370/0, 7-8=-2199/0, 8-9=-1363/0, 9-10=-15/2
BOT CHORD 17-18=0/826, 16-17=0/1880, 15-16=0/2363, 14-15=0/2370, 13-14=0/2370, 12-13=0/1864, 11-12=0/831
WEBS 6-15=-172/126, 7-14=-293/379, 2-18=-1034/0, 2-17=0/698, 3-17=-673/0, 3-16=-45/405, 9-11=-1041/0, 9-12=0/692, 8-12=-653/0, 8-13=-23/508, 7-13=-643/314, 4-16=-241/74, 5-16=-275/117, 5-15=-283/283

NOTES

- Unbalanced floor live loads have been considered for this design.
- All bearings are assumed to be SP SS.
- Provide mechanical connection (by others) of truss to bearing plate at joint(s) 11.
- This truss has been designed for a moving concentrated load of 250.0lb live and 3.0lb dead located at all mid panels and at all panel points along the Top Chord and Bottom Chord, nonconcurrent with any other live loads.



February 20,2025

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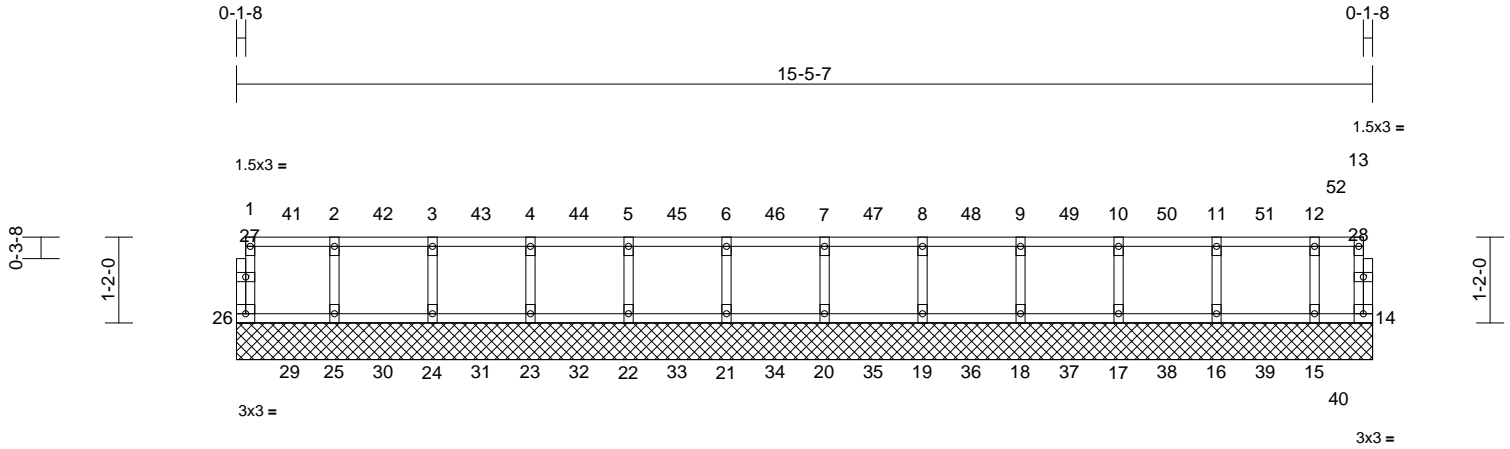
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	The Farm at Neill's Creek Lot 00.0056 OWF
2502-2109-A	2FGE2	Floor Supported Gable	1	1	I71527206
					Job Reference (optional)

Structural, LLC, Thurmont, MD - 21788,

Run: 8.83 S Feb 1 2025 Print: 8.830 S Feb 1 2025 MiTek Industries, Inc. Wed Feb 19 15:03:32
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Page: 1



Scale = 1:31.3

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	0.28	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.00	BC	0.28	Vert(TL)	n/a	-	n/a	999	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.05	Horiz(TL)	0.00	14	n/a	n/a	
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R							
										Weight: 66 lb	FT = 20%F, 12%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)	14=15-5-7, 15=15-5-7, 16=15-5-7, 17=15-5-7, 18=15-5-7, 19=15-5-7, 20=15-5-7, 21=15-5-7, 22=15-5-7, 23=15-5-7, 24=15-5-7, 25=15-5-7, 26=15-5-7
Max Uplift	14=55 (LC 40), 15=24 (LC 30), 17=1 (LC 37), 25=-1 (LC 32), 26=-18 (LC 31)
Max Grav	14=258 (LC 54), 15=277 (LC 53), 16=286 (LC 52), 17=285 (LC 51), 18=285 (LC 50), 19=285 (LC 49), 20=285 (LC 48), 21=285 (LC 47), 22=285 (LC 46), 23=285 (LC 45), 24=285 (LC 44), 25=285 (LC 43), 26=265 (LC 42)

FORCES

(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-26=-257/23, 13-14=-247/61, 1-2=-25/6, 2-3=-25/6, 3-4=-25/6, 4-5=-25/6, 5-6=-25/6, 6-7=-25/6, 7-8=-25/6, 8-9=-25/6, 9-10=-25/6, 10-11=-25/6, 11-12=-25/6, 12-13=-25/6
BOT CHORD	25-26=-6/25, 24-25=-6/25, 23-24=-6/25, 22-23=-6/25, 21-22=-6/25, 20-21=-6/25, 19-20=-6/25, 18-19=-6/25, 17-18=-6/25, 16-17=-6/25, 15-16=-6/25, 14-15=-6/25
WEBS	2-25=-272/12, 3-24=-272/10, 4-23=-272/10, 5-22=-272/10, 6-21=-272/10, 7-20=-272/10, 8-19=-272/10, 9-18=-272/10, 10-17=-272/10, 11-16=-273/10, 12-15=-263/27

NOTES

- All plates are 1.5x3 (||) MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 1-4-0 oc.
- All bearings are assumed to be SP No.2 .
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 18 lb uplift at joint 26, 55 lb uplift at joint 14, 1 lb uplift at joint 25, 1 lb uplift at joint 17 and 24 lb uplift at joint 15.
- This truss has been designed for a moving concentrated load of 250.0lb live and 3.0lb dead located at all mid panels and at all panel points along the Top Chord and Bottom Chord, nonconcurrent with any other live loads.
- 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



February 20,2025

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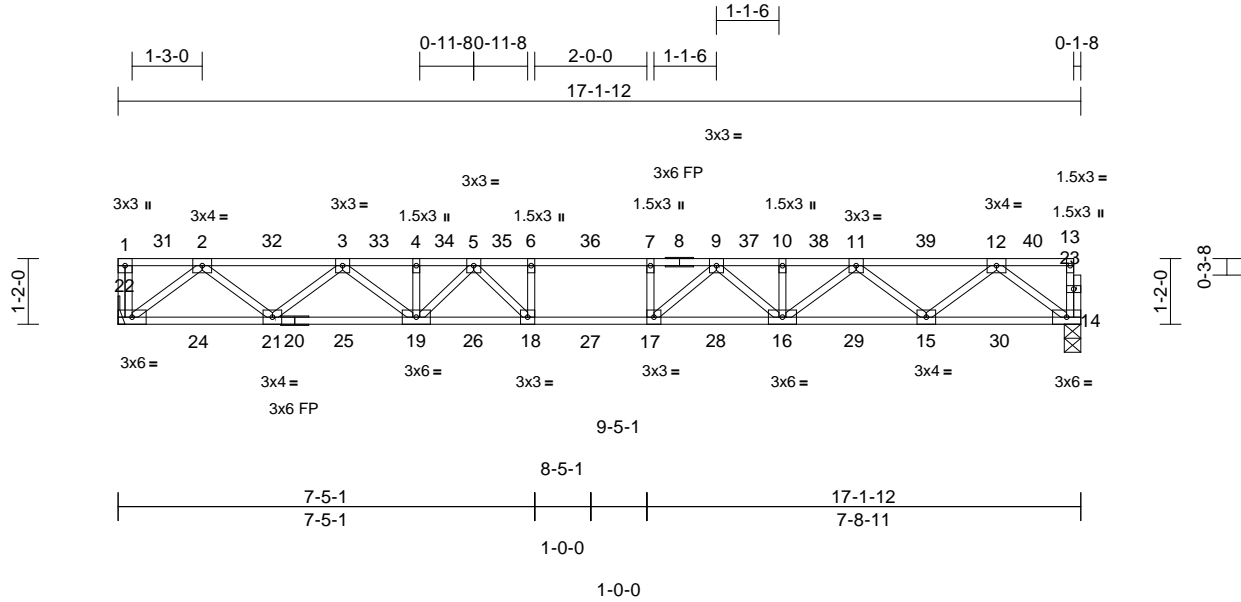
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	The Farm at Neill's Creek Lot 00.0056 OWF
2502-2109-A	2F2	Floor	1	1	I71527207
Job Reference (optional)					

Structural, LLC, Thurmont, MD - 21788,

Run: 8.83 S Feb 1 2025 Print: 8.830 S Feb 1 2025 MiTek Industries, Inc. Wed Feb 19 15:03:27
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Page: 1



Scale = 1:41

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)	-0.20	17-18	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.83	Vert(CT)	-0.27	17-18	>741	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.39	Horz(CT)	0.05	14	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 88 lb	FT = 20%F, 12%E

LUMBER

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

- 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

BRACING

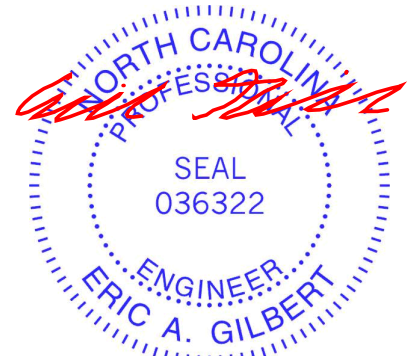
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 14=0-3-8, 22= Mechanical
Max Grav 14=738 (LC 1), 22=743 (LC 1)

FORCES	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-22=-259/33, 13-14=-259/37, 1-2=0/0, 2-3=-1553/0, 3-4=-2554/0, 4-5=-2554/0, 5-6=-2976/0, 6-7=-2976/0, 7-9=-2976/0, 9-10=-2558/0, 10-11=-2558/0, 11-12=-1552/0, 12-13=-16/2
BOT CHORD	21-22=0/926, 19-21=0/2150, 18-19=0/2792, 17-18=0/2976, 16-17=0/2821, 15-16=0/2152, 14-15=0/925
WEBS	6-18=-256/113, 7-17=-219/118, 2-22=-1162/0, 2-21=0/816, 3-21=-778/0, 3-19=-10/515, 12-14=-1159/0, 12-15=0/815, 11-15=-781/0, 11-16=-7/519, 4-19=-241/77, 10-16=-244/71, 5-19=-350/67, 5-18=-196/503, 9-16=-351/65, 9-17=-213/461

NOTES

- Unbalanced floor live loads have been considered for this design.
- Bearings are assumed to be: , Joint 14 SP SS .
- Refer to girder(s) for truss to truss connections.
- This truss has been designed for a moving concentrated load of 250.0lb live and 3.0lb dead located at all mid panels and at all panel points along the Top Chord and Bottom Chord, nonconcurrent with any other live loads.



February 20,2025

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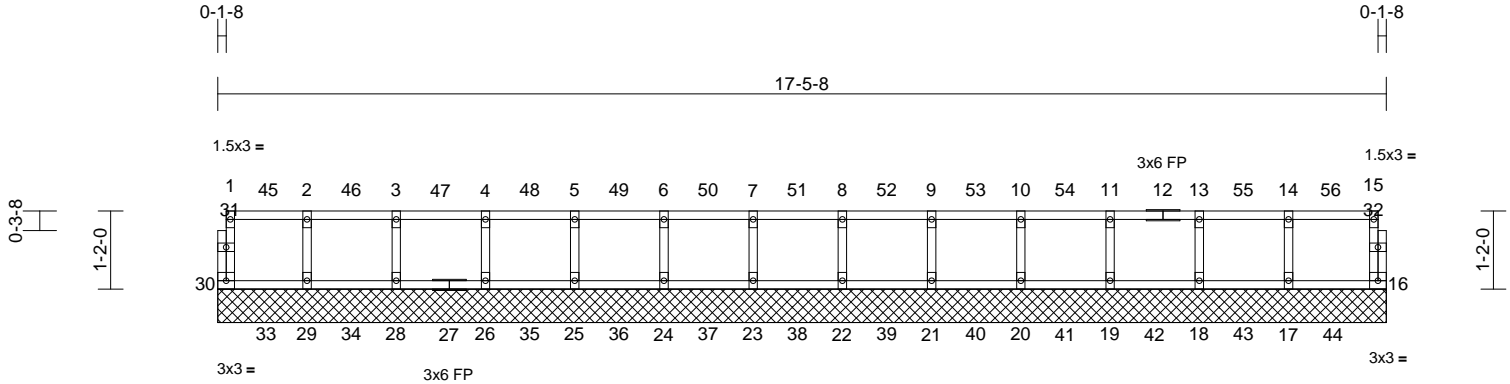
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	The Farm at Neill's Creek Lot 00.0056 OWF
2502-2109-A	2FGE1	Floor Supported Gable	1	1	I71527208
					Job Reference (optional)

Structural, LLC, Thurmont, MD - 21788,

Run: 8.83 S Feb 1 2025 Print: 8.830 S Feb 1 2025 MiTek Industries, Inc. Wed Feb 19 15:03:32
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Page: 1



Scale = 1:34.4

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	0.28	Vert(LL)	n/a	-	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.28	Vert(TL)	n/a	-	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.05	Horiz(TL)	0.00	16	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R						Weight: 73 lb	FT = 20%F, 12%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	2-29=-271/12, 3-28=-272/10, 4-26=-272/10, 5-25=-272/10, 6-24=-272/10, 7-23=-272/10, 8-22=-272/10, 9-21=-272/10, 10-20=-272/10, 11-19=-272/10, 13-18=-272/10, 14-17=-273/12
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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.

- 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) All bearings are assumed to be SP No.2 .
 - 6) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 30, 16, 29, 26, 25, 24, 23, 22, 21, 20, 19, and 18. This connection is for uplift only and does not consider lateral forces.
 - 7) This truss has been designed for a moving concentrated load of 250.0lb live and 3.0lb dead located at all mid panels and at all panel points along the Top Chord and Bottom Chord, nonconcurrent with any other live loads.
 - 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.

REACTIONS	(size)	16=17-5-8, 17=17-5-8, 18=17-5-8, 19=17-5-8, 20=17-5-8, 21=17-5-8, 22=17-5-8, 23=17-5-8, 24=17-5-8, 25=17-5-8, 26=17-5-8, 28=17-5-8, 29=17-5-8, 30=17-5-8
Max Uplift		16=-10 (LC 43), 18=-2 (LC 44), 25=-2 (LC 34), 29=-1 (LC 6), 30=-15 (LC 33)
Max Grav		16=267 (LC 58), 17=286 (LC 57), 18=285 (LC 56), 19=285 (LC 55), 20=285 (LC 54), 21=285 (LC 53), 22=285 (LC 52), 23=285 (LC 51), 24=285 (LC 50), 25=285 (LC 49), 26=285 (LC 48), 28=285 (LC 47), 29=284 (LC 46), 30=266 (LC 45)

FORCES	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-30=-257/21, 15-16=-259/17, 1-2=-25/3, 2-3=-25/3, 3-4=-25/3, 4-5=-25/3, 5-6=-25/3, 6-7=-25/3, 7-8=-25/3, 8-9=-25/3, 9-10=-25/3, 10-11=-25/3, 11-13=-25/3, 13-14=-25/3, 14-15=-25/3
BOT CHORD	29-30=-3/25, 28-29=-3/25, 26-28=-3/25, 25-26=-3/25, 24-25=-3/25, 23-24=-3/25, 22-23=-3/25, 21-22=-3/25, 20-21=-3/25, 19-20=-3/25, 18-19=-3/25, 17-18=-3/25, 16-17=-3/25

LOAD CASE(S) Standard



February 20,2025

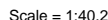
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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

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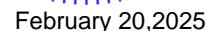
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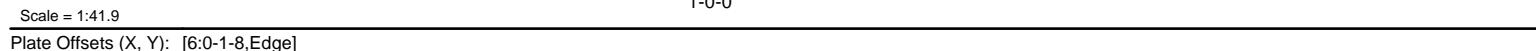
LUMBER		4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
TOP CHORD	2x4 SP No.2(flat)	
BOT CHORD	2x4 SP No.2(flat) *Except* 20-14:2x4 SP SS (flat)	
WEBS	2x4 SP No.3(flat)	
OTHERS	2x4 SP No.3(flat)	
		LOAD CASE(S) Standard

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) 14=0-3-8, 22=0-3-8 Max Grav 14=752 (LC 1), 22=752 (LC 1)
FORCES	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-22=-259/37, 13-14=-259/37, 1-2=-16/2, 2-3=-1587/0, 3-4=-2625/0, 4-5=-2625/0, 5-6=-3088/0, 6-7=-3088/0, 7-9=-3088/0, 9-10=-2625/0, 10-11=-2625/0, 11-12=-1586/0, 12-13=-16/2
BOT CHORD	21-22=0/943, 19-21=0/2202, 18-19=0/2906, 17-18=0/3088, 16-17=0/2905, 15-16=0/2202, 14-15=0/943
WEBS	6-18=-233/113, 7-17=-234/113, 2-22=-1181/0, 2-21=0/837, 3-21=-801/0, 3-19=0/540, 12-14=-1182/0, 12-15=0/837, 11-15=-801/0, 11-16=0/540, 4-19=-244/71, 10-16=-244/71, 5-19=-375/57, 5-18=-201/496, 9-16=-374/57, 9-17=-200/497

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Bearings are assumed to be: Joint 22 SP No.2 , Joint 14 SP SS .
- 3) This truss has been designed for a moving concentrated load of 250.0lb live and 3.0lb dead located at all mid panels and at all panel points along the Top Chord and Bottom Chord. nonconcurrent with any other live loads.




Structural, LLC, Thurmont, MD - 21788, Run: 8.83 S Feb 1 2025 Print: 8.830 S Feb 1 2025 MiTek Industries, Inc. Wed Feb 19 15:03:29 Page: 1
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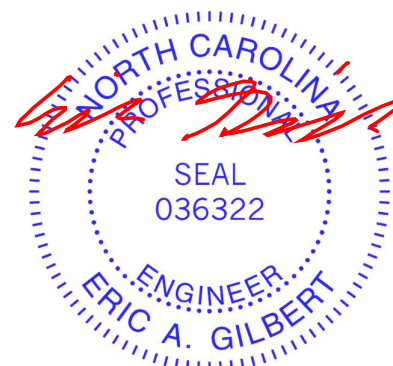


LUMBER		6) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
TOP CHORD	2x4 SP No.2(flat)	
BOT CHORD	2x4 SP SS(flat)	
WEBS	2x4 SP No.3(flat)	
OTHERS	2x4 SP No.3(flat)	
BRACING		7) CAUTION, Do not erect truss backwards.
		LOAD CASE(S) Standard

TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 2-2-0 oc bracing: 19-20.
REACTIONS	(size) 13= Mechanical, 23=0-3-8 Max Grav 13=822 (LC 1), 23=817 (LC 1)
FORCES	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-23=-258/40, 12-13=-259/34, 1-2=-15/2, 2-3=-1747/0, 3-5=-2946/0, 5-6=-3376/0, 6-7=-3600/0, 7-8=-3540/0, 8-9=-2944/0, 9-10=-2944/0, 10-11=-1749/0, 11-12=0/0
BOT CHORD	22-23=0/1036, 21-22=0/2420, 20-21=0/3376, 19-20=0/3376, 18-19=0/3376, 17-18=0/3713, 15-17=0/3352, 14-15=0/2443, 13-14=0/1029
WEBS	5-20=-105/542, 6-19=-575/66, 2-23=-1298/0, 2-22=0/926, 3-22=-875/0, 3-21=0/718, 5-21=-939/78, 11-13=-1291/0, 11-14=0/938, 10-14=-903/0, 10-15=0/640, 9-15=-260/61, 8-15=-520/5, 8-17=-55/321, 7-17=-277/124, 7-18=-284/162, 6-18=-97/667



- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) Bearings are assumed to be: Joint 23 SP SS .
- 4) Refer to girder(s) for truss to truss connections.
- 5) This truss has been designed for a moving concentrated load of 250.0lb live and 3.0lb dead located at all mid panels and at all panel points along the Top Chord and Bottom Chord. nonconcurrent with any other live loads.



February 20, 2025

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

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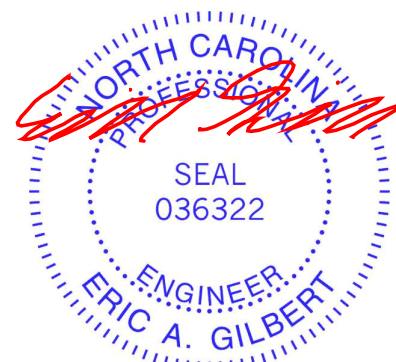
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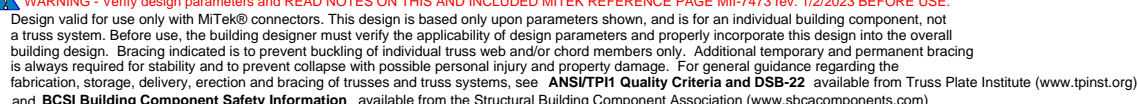
LUMBER		<p>5) This truss has been designed for a moving concentrated load of 250.0lb live and 3.0lb dead located at all mid panels and at all panel points along the Top Chord and Bottom Chord, nonconcurrent with any other live loads.</p> <p>6) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc 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.</p> <p>7) CAUTION, Do not erect truss backwards.</p>
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		<p>LOAD CASE(S) Standard</p>
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	

FORCES		(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-23=	-260/37, 12-13=-259/40, 1-2=-16/2, 2-3=-947/0, 3-4=-1328/0, 4-5=-1284/0, 5-6=-1284/0, 6-7=-538/0, 7-8=0/759, 8-9=-103/540, 9-11=-375/201, 11-12=-16/2
BOT CHORD	22-23=	0/603, 20-22=0/1267, 19-20=0/1284, 18-19=0/1284, 17-18=0/1009, 16-17=-284/236, 15-16=-759/0, 14-15=-346/315, 13-14=-83/288
WEBS	4-19=	-288/149, 5-18=-292/60, 8-16=-452/0, 2-23=-755/0, 2-22=0/452, 3-22=-417/0, 3-20=-132/224, 4-20=-147/394, 7-16=-922/0, 7-17=0/599, 6-17=-628/0, 6-18=-44/512, 11-13=-361/105, 11-14=-153/205, 9-14=-87/226, 9-15=-466/0, 8-15=0/478

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x3 (=) MT20 unless otherwise indicated.
- 3) All bearings are assumed to be SP No.2.
- 4) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at j(s) 13. This connection is for uplift only and does not consider lateral forces.



February 20, 2025



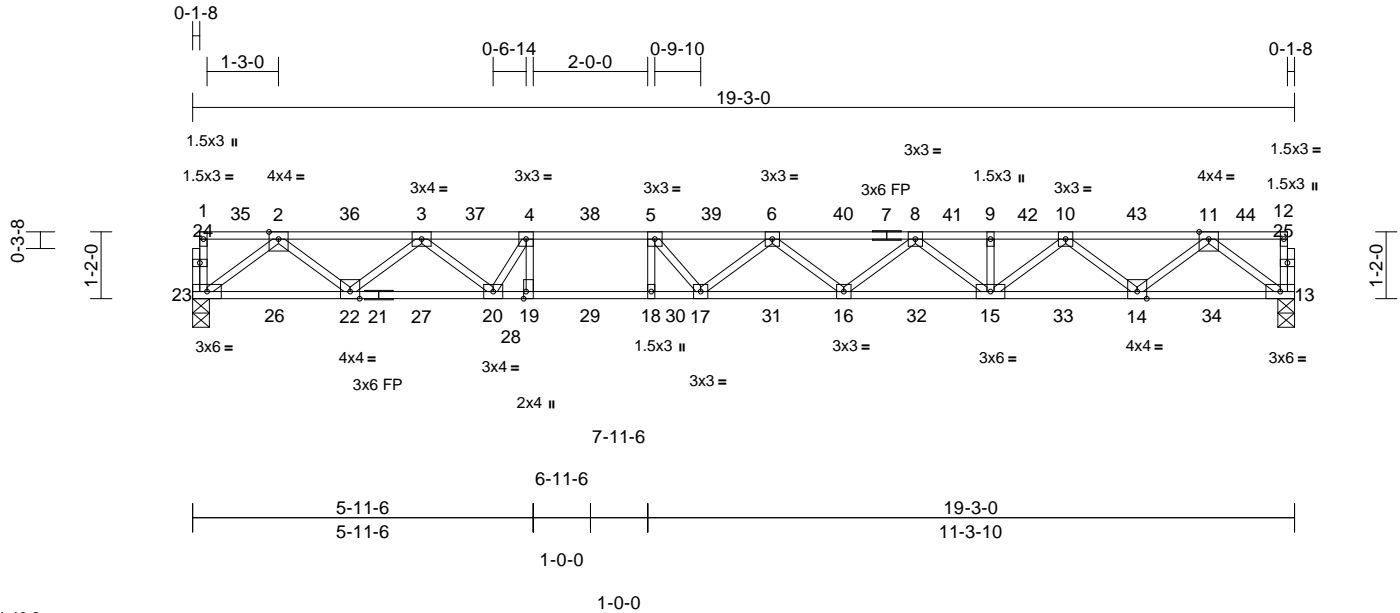
818 Soundside Road
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Job	Truss	Truss Type	Qty	Ply	The Farm at Neill's Creek Lot 00.0056 OWF
2502-2109-A	2F8	Floor	10	1	171527212
					Job Reference (optional)

Structural, LLC, Thurmont, MD - 21788,

Run: 8.83 S Feb 1 2025 Print: 8.830 S Feb 1 2025 MiTek Industries, Inc. Wed Feb 19 15:03:29
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Page: 1



Scale = 1:40.3

Plate Offsets (X, Y): [19:0-1-8,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	0.89	Vert(LL)	-0.38	17-18	>595	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.84	Vert(CT)	-0.53	17-18	>433	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.46	Horz(CT)	0.06	13	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 97 lb	FT = 20%F, 12%E

LUMBER

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

- 4) 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 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 13=0-3-8, 23=0-3-8
Max Grav 13=830 (LC 1), 23=830 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-23=-258/40, 12-13=-259/37, 1-2=-15/2, 2-3=-1782/0, 3-4=-3014/0, 4-5=-3475/0, 5-6=-3742/0, 6-8=-3642/0, 8-9=-3013/0, 9-10=-3013/0, 10-11=-1783/0, 11-12=-16/2
BOT CHORD 22-23=0/1055, 20-22=0/2469, 19-20=0/3475, 18-19=0/3475, 17-18=0/3475, 16-17=0/3840, 15-16=0/3435, 14-15=0/2494, 13-14=0/1046
WEBS 4-19=-94/588, 5-18=-462/46, 2-23=-1321/0, 2-22=0/946, 3-22=-894/0, 3-20=0/742, 4-20=-997/63, 11-13=-1311/0, 11-14=0/959, 10-14=-925/0, 10-15=0/663, 9-15=-260/62, 8-15=-538/0, 8-16=-46/331, 6-16=-298/109, 6-17=-255/159, 5-17=-91/576

NOTES

- Unbalanced floor live loads have been considered for this design.
- All bearings are assumed to be SP DSS.
- This truss has been designed for a moving concentrated load of 250.0lb live and 3.0lb dead located at all mid panels and at all panel points along the Top Chord and Bottom Chord, nonconcurrent with any other live loads.



February 20,2025

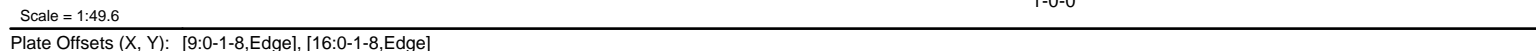
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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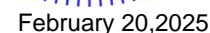
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LUMBER		4)	This truss has been designed for a moving concentrated load of 250.0lb live and 3.0lb dead located at all mid panels and at all panel points along the Top Chord and Bottom Chord, nonconcurrent with any other live loads.
TOP CHORD	2x4 SP SS(flat)		
BOT CHORD	2x4 SP DSS(flat)		
WEBS	2x4 SP No.3(flat)	5)	Recommend 2x6 strongbacks, on edge, spaced at 10'-0" 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.
OTHERS	2x4 SP No.3(flat)		
BRACING			
TOP CHORD	Structural wood sheathing directly applied or 2x2 blocking		

REACTIONS	(size) Max Grav	14=0-3-8, 25=0-3-8 14=755 (LC 1), 25=755 (LC 1)
FORCES	(lb) - Maximum Compression/Maximum Tension	
TOP CHORD		1-25=-258/38, 13-14=-256/37, 1-2=-15/2, 2-3=-1645/0, 3-4=-2822/0, 4-5=-2822/0, 5-6=-3497/0, 6-7=-3744/0, 7-9=-3489/0, 9-10=-3001/0, 10-11=-3001/0, 11-12=-1600/0, 12-13=-15/2
BOT CHORD		24-25=0/955, 23-24=0/2312, 21-23=0/3263, 20-21=0/3727, 19-20=0/3727, 18-19=0/3775, 17-18=0/3001, 16-17=0/3001, 15-16=0/2369, 14-15=0/946
WEBS		9-17=-426/21, 10-16=-571/0, 2-25=-1196/0, 2-24=0/898, 3-24=-869/0, 3-23=0/651, 4-23=-252/72, 5-23=-563/0, 5-21=-34/337, 6-21=-322/157, 6-20=-67/258, 6-19=-184/285, 7-19=-215/179, 7-18=-425/34, 9-18=0/770, 12-14=-1185/0, 12-15=0/852, 11-15=-1001/0, 11-16=0/1113

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) All bearings are assumed to be SP DSS.

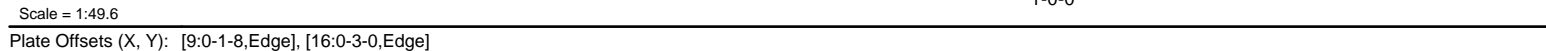


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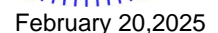
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LUMBER		<p>4) This truss has been designed for a moving concentrated load of 250.0lb live and 3.0lb dead located at all mid panels and at all panel points along the Top Chord and Bottom Chord, nonconcurrent with any other live loads.</p> <p>5) Recommend 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.</p>
TOP CHORD	2x4 SP No.2(flat)	
BOT CHORD	2x4 SP DSS(flat)	
WEBS	2x4 SP No.3(flat)	
OTHERS	2x4 SP No.3(flat)	
BRACING		
TOP CHORD	Structural wood sheathing directly applied or 2 x 4 or similar - concurrent and vertically	

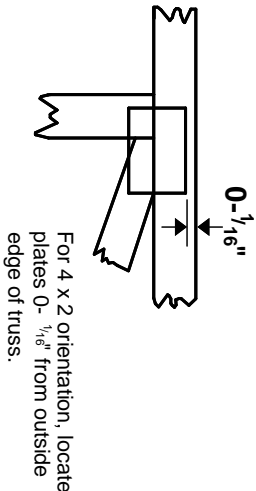
REACTIONS	(size) 14=0-3-8, 26=0-3-8 Max Grav 14=906 (LC 1), 26=906 (LC 1)
FORCES	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-26=-259/37, 13-14=-258/36, 1-2=0/0, 2-3=-2021/0, 3-4=-3509/0, 4-5=-3509/0, 5-6=-4352/0, 6-8=-4646/0, 8-9=-4420/0, 9-10=-3710/0, 10-11=-3710/0, 11-12=-1941/0, 12-13=0/0
BOT CHORD	25-26=0/1229, 24-25=0/2870, 22-24=0/4062, 21-22=0/4703, 20-21=0/4703, 18-20=0/4678, 17-18=0/3710, 16-17=0/3710, 15-16=0/3039, 14-15=0/1194
WEBS	9-17=-836/0, 10-16=-295/54, 2-26=-1464/0, 2-25=0/1009, 3-25=-1078/0, 3-24=0/797, 4-24=-250/76, 5-24=-690/0, 5-22=-22/368, 6-22=-439/97, 6-21=-12/286, 6-20=-230/216, 8-20=-213/186, 8-18=-382/71, 9-18=0/1084, 12-14=-1421/0, 12-15=0/954, 11-15=-1395/0, 11-16=0/1137

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) All bearings are assumed to be SP DSS .



Symbols

PLATE LOCATION AND ORIENTATION



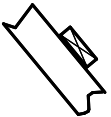
* Plate location details available in MITek software or upon request.

PLATE SIZE

4 X 4

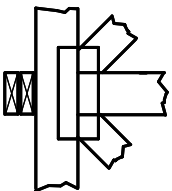
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING



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

Industry Standards:

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

Numbering System

