

RE: 2412-1229-A - The Farm at Neills Creek Lot 00.0063

Trenco

818 Soundside Rd Edenton, NC 27932

Project Customer: DRB Raleigh Project Name: The Farm at Neills Creek Lot 00.0063

Lot/Block: Subdivision:

Model:

Site Information:

Address: 449 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	170314508	2F10	12/20/24
-234567891011234 16718	170314510 170314511 170314511 170314513 170314514 170314515 170314517 170314519 170314521 170314521 170314521 170314523 170314523 170314523 170314523	2F10 2F70 FGE3 2F16 2F15 F3 F4 F1 F5 F5 FGE1 2F1 2F1 2F1 2F14 2F14 2F14 2F12	12/20/24 12/20/24 12/20/24 12/20/24 12/20/24 12/20/24 12/20/24 12/20/24 12/20/24 12/20/24 12/20/24 12/20/24 12/20/24 12/20/24 12/20/24 12/20/24
19 20	170314526	2F8 2F9	12/20/24 12/20/24

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

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

IMPORTANT NOTE: The seal on these truss component designs is a certificate that the engineer named is licensed in the jurisdiction(a) in the designs comply with ANELTED. 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.



December 20,2024

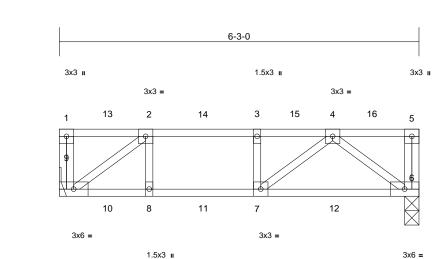
Gilbert, Eric

Job	Truss	Truss Type	Qty	Ply	The Farm at Neills Creek Lot 00.0063	
2412-1229-A	2F10	Floor	1	1	Job Reference (optional)	I70314508

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Scale = 1:20

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	0.42	Vert(LL)	-0.13	6-7	>555	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.91	Vert(CT)	-0.14	6-7	>503	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.00	6	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 34 lb	FT = 20%F, 12%E

LUMBER

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

BRACING

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

bracing.

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

Max Grav 6=325 (LC 12), 9=325 (LC 7)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-9=-256/37, 5-6=-261/19, 1-2=0/0,

2-3=-368/0, 3-4=-368/0, 4-5=0/0

BOT CHORD 8-9=0/368, 7-8=0/368, 6-7=0/322 WEBS

4-6=-404/0, 2-9=-455/0, 4-7=-119/226,

2-8=-22/230, 3-7=-144/116

NOTES

- 1) Unbalanced floor live loads have been considered for
- 2) Bearings are assumed to be: , Joint 6 SP No.2 . Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to
- bearing plate at joint(s) 6.
- 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



December 20,2024

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/TP11 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)



Job	Truss	Truss Type	Qty	Ply	The Farm at Neills Creek Lot 00.0063	
2412-1229-A	2F7	Floor	4	1	Job Reference (optional)	I70314509

Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. Thu Dec 19 05:42:17 ID:nOWBkKRunVo9R_0a3VLhr_y8JTJ-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f Page: 1

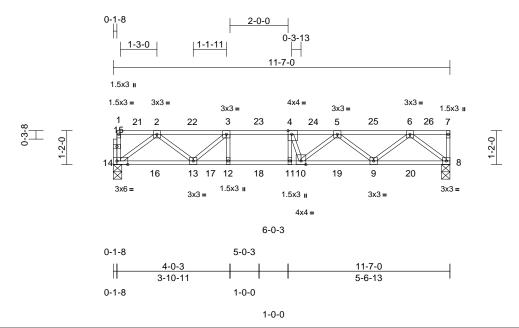


Plate Offsets (X, Y): [4:0-1-8,Edge], [14:0-4-8,Edge]

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	0.64	Vert(LL)	-0.09	9-10	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.79	Vert(CT)	-0.12	9-10	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.22	Horz(CT)	0.02	8	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 58 lb	FT = 20%F, 12%E

LUMBER

Scale = 1:34.9

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

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) 8=0-3-8, 14=0-3-8

Max Grav 8=501 (LC 1), 14=496 (LC 1) **FORCES** (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-14=-261/45, 7-8=-259/37, 1-2=-16/3,

2-3=-951/0, 3-4=-1314/0, 4-5=-1335/0,

5-6=-930/0, 6-7=0/0

BOT CHORD 13-14=0/594, 12-13=0/1314, 11-12=0/1314,

10-11=0/1314, 9-10=0/1250, 8-9=0/584 3-12=-88/222, 4-11=-474/207, 2-14=-743/0,

2-13=0/464, 3-13=-491/74, 6-8=-745/0. 6-9=0/451, 5-9=-417/0, 5-10=-142/250,

4-10=-268/553

NOTES

WEBS

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Bearings are assumed to be: Joint 14 SP No.3, Joint 8 SP No.2.
- Bearing at joint(s) 14 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 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.
- 6) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



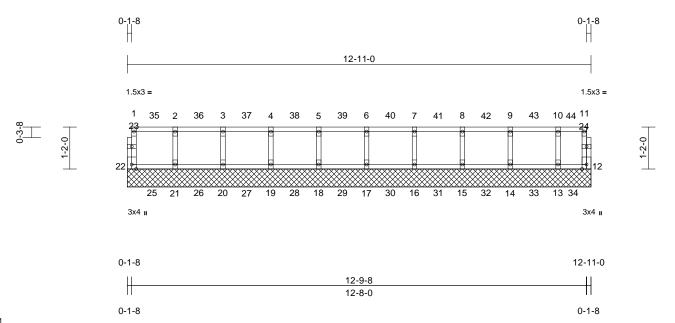
December 20,2024



Job	Truss	Truss Type	Qty	Ply	The Farm at Neills Creek Lot 00.0063	
2412-1229-A	FGE3	Floor Supported Gable	1	1	Job Reference (optional)	I70314510

Structural LLC Thurmont MD - 21788

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Scale = 1:32.1

Loading	(psf)	Spacing	1-7-3	csı		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

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

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=-37 (LC 12), 13=-18 (LC 4),

15=-1 (LC 31), 22=-15 (LC 5)

12=261 (LC 46), 13=279 (LC 45), Max Grav 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=-254/23, 11-12=-244/46, 1-2=-27/5,

2-3=-27/5, 3-4=-27/5, 4-5=-27/5, 5-6=-27/5, 6-7=-27/5, 7-8=-27/5, 8-9=-27/5, 9-10=-27/5,

10-11=-27/5

BOT CHORD 21-22=-5/27, 20-21=-5/27, 19-20=-5/27,

18-19=-5/27, 17-18=-5/27, 16-17=-5/27, 15-16=-5/27, 14-15=-5/27, 13-14=-5/27,

12-13=-5/27

WFRS 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 1) 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.3.
- Bearing at joint(s) 22, 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 15 lb uplift at joint 22 and 37 lb uplift at joint 12.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 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.
- 10) 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



December 20,2024

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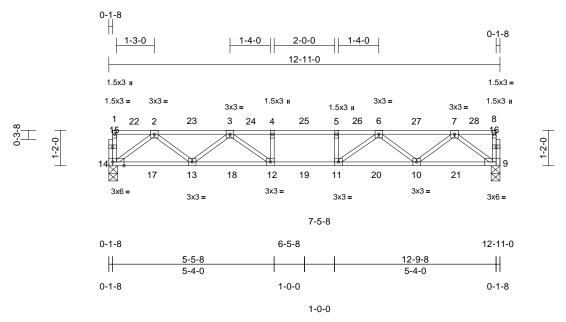
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Job	Truss	Truss Type	Qty	Ply	The Farm at Neills Creek Lot 00.0063	
2412-1229-A	2F16	Floor	2	1	Job Reference (optional)	I70314511

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Scale = 1:34.9 Plate Offsets (X, Y): [14:0-4-8,Edge]

Loading	(psf)	Spacing	1-7-3	csı		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.58	Vert(LL)	-0.16	12-13	>969		MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.94	- (/	-0.18	12-13	>829	360	20	21.7.00
BCLL	0.0	Rep Stress Incr	YES	WB		` '	0.02	9	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S		, ,					Weight: 64 lb	FT = 20%F, 12%E

LOAD CASE(S) Standard

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

BRACING

LUMBER

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.

BOT CHORD Rigid ceiling directly applied or 2-2-0 oc

bracing.

REACTIONS (size) 9=0-3-8, 14=0-3-8

Max Grav 9=552 (LC 1), 14=552 (LC 1)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-14=-259/36, 8-9=-259/36, 1-2=-16/2, 2-3=-1085/0, 3-4=-1661/0, 4-5=-1661/0,

5-6=-1661/0, 6-7=-1085/0, 7-8=-16/2

BOT CHORD 13-14=0/682, 12-13=0/1459, 11-12=0/1661,

10-11=0/1459, 9-10=0/682

WEBS 4-12=-193/101, 5-11=-193/101, 2-14=-854/0, 2-13=0/524, 3-13=-487/0, 3-12=-153/415,

7-9=-854/0, 7-10=0/524, 6-10=-487/0,

6-11=-153/415

NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- All bearings are assumed to be SP No.3.
- Bearing at joint(s) 14, 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 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.

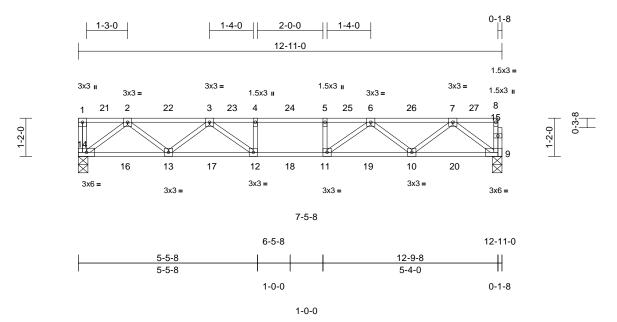


December 20,2024



Job	Truss	Truss Type	Qty	Ply	The Farm at Neills Creek Lot 00.0063	
2412-1229-A	2F15	Floor	1	1	Job Reference (optional)	I70314512

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Scale = 1:34.9

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	0.58	Vert(LL)	-0.16	12-13	>969	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.94	Vert(CT)	-0.18	12-13	>829	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

6) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

LUMBER TOP CHORD

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

2x4 SP No.3(flat) OTHERS

BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.

BOT CHORD Rigid ceiling directly applied or 2-2-0 oc

bracing.

(size) REACTIONS 9=0-3-8, 14=0-3-8

2x4 SP No.2(flat)

Max Grav 9=552 (LC 1), 14=557 (LC 1) **FORCES** (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-14=-259/33, 8-9=-259/36, 1-2=0/0,

2-3=-1085/0, 3-4=-1661/0, 4-5=-1661/0, 5-6=-1661/0, 6-7=-1085/0, 7-8=-16/2

BOT CHORD 13-14=0/683, 12-13=0/1459, 11-12=0/1661,

10-11=0/1459, 9-10=0/682

WEBS 4-12=-193/101, 5-11=-193/101, 2-14=-857/0, 2-13=0/523, 3-13=-486/0, 3-12=-154/415,

7-9=-854/0, 7-10=0/524, 6-10=-487/0,

6-11=-153/415

NOTES

- Unbalanced floor live loads have been considered for 1) this design.
- Bearings are assumed to be: Joint 14 SP No.2, Joint 9 2) SP No.3
- Bearing at joint(s) 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 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.



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

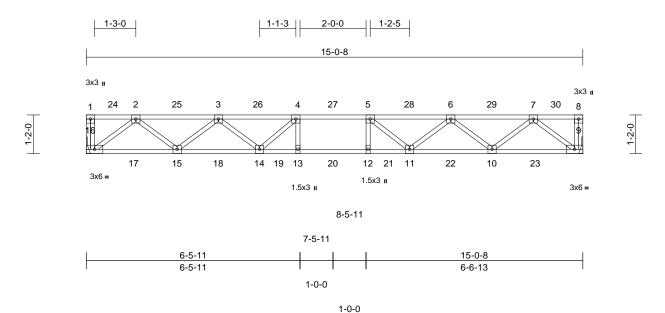
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building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property 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)



Job	Truss	Truss Type	Qty	Ply	The Farm at Neills Creek Lot 00.0063	
2412-1229-A	F3	Floor	1	1	Job Reference (optional)	I70314513

Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. Thu Dec 19 05:42:20 $ID: JBypW_QF0BgIpqROVoqSImy8JTK-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?ffrom Particle Pa$ Page: 1



Scale = 1:34.9

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.77	Vert(LL)	-0.12	11-12	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.81	Vert(CT)	-0.16	11-12	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.27	Horz(CT)	0.03	9	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 76 lb	FT = 20%F, 12%E

LUMBER

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

BRACING

TOP CHORD

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= Mechanical, 16= Mechanical Max Grav 9=542 (LC 1), 16=542 (LC 1)

FORCES (lb) - Maximum Compression/Maximum

Tension

1-16=-259/37, 8-9=-259/37, 1-2=0/0,

2-3=-1103/0, 3-4=-1721/0, 4-5=-1904/0, 5-6=-1719/0, 6-7=-1104/0, 7-8=0/0

BOT CHORD

15-16=0/669, 14-15=0/1514, 13-14=0/1904, 12-13=0/1904, 11-12=0/1904, 10-11=0/1517,

9-10=0/668

WEBS 4-13=-137/189, 5-12=-131/180, 2-16=-839/0,

2-15=0/566, 3-15=-535/0, 3-14=-39/314, 4-14=-370/215, 7-9=-838/0, 7-10=0/567 6-10=-538/0, 6-11=-40/315, 5-11=-365/213

NOTES

- Unbalanced floor live loads have been considered for 1) this design.
- All plates are 3x3 (=) MT20 unless otherwise indicated.
- 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.
- 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



December 20,2024

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

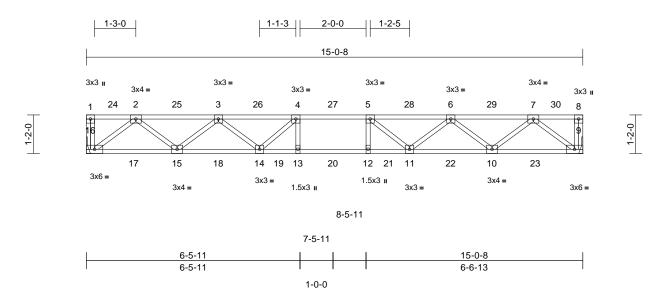
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall

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)



Job	Truss	Truss Type	Qty	Ply	The Farm at Neills Creek Lot 00.0063	
2412-1229-A	F4	Floor	2	1	Job Reference (optional)	I70314514

Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. Thu Dec 19 05:42:21 ID:JBypW_QF0BglpqROVoqSlmy8JTK-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



Scale = 1:34.9

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	0.79	Vert(LL)	-0.14	11-12	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.86	Vert(CT)	-0.18	11-12	>967	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.32	Horz(CT)	0.04	9	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 76 lb	FT = 20%F, 12%E

1-0-0

LUMBER

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

BRACING

TOP CHORD

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= Mechanical, 16= Mechanical Max Grav 9=650 (LC 1), 16=650 (LC 1)

FORCES (lb) - Maximum Compression/Maximum

Tension

1-16=-260/36, 8-9=-260/36, 1-2=0/0,

2-3=-1323/0, 3-4=-2064/0, 4-5=-2284/0,

5-6=-2061/0, 6-7=-1324/0, 7-8=0/0

BOT CHORD 15-16=0/802, 14-15=0/1816, 13-14=0/2284, 12-13=0/2284, 11-12=0/2284, 10-11=0/1819,

9-10=0/801

WEBS 4-13=-134/192, 5-12=-129/182,

2-16=-1006/0, 2-15=0/678, 3-15=-641/0, 3-14=-23/376, 4-14=-443/203, 7-9=-1005/0, 7-10=0/680, 6-10=-645/0, 6-11=-24/366,

5-11=-437/201

NOTES

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



December 20,2024

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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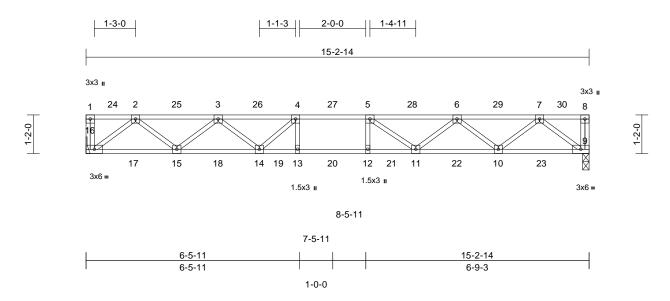
building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, 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)



Job	Truss	Truss Type	Qty	Ply	The Farm at Neills Creek Lot 00.0063	
2412-1229-A	F1	Floor	1	1	Job Reference (optional)	I70314515

Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. Thu Dec 19 05:42:20 ID:r?ORJePdFtYRBgsCx4JDmZy8JTL-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:34.9

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Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	I/defI	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.84	Vert(LL)	-0.13	11-12	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.82	Vert(CT)	-0.18	11-12	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.28	Horz(CT)	0.03	9	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S		` ´					Weight: 77 lb	FT = 20%F, 12%E

1-0-0

LUMBER

LOAD CASE(S) Standard

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

BRACING

TOP CHORD

BOT CHORD

TOP CHORD Structural wood sheathing directly applied or 5-1-1 oc purlins, except end verticals. **BOT CHORD**

Rigid ceiling directly applied or 10-0-0 oc

bracing.

REACTIONS (size) 9=0-2-6, 16= Mechanical

Max Grav 9=550 (LC 1), 16=550 (LC 1)

FORCES Tension

(lb) - Maximum Compression/Maximum

1-16=-258/37, 8-9=-259/37, 1-2=0/0, 2-3=-1121/0, 3-4=-1757/0, 4-5=-1957/0,

5-6=-1751/0, 6-7=-1123/0, 7-8=0/0

15-16=0/679, 14-15=0/1540, 13-14=0/1957,

12-13=0/1957, 11-12=0/1957, 10-11=0/1549,

9-10=0/676

WEBS 4-13=-133/195, 5-12=-127/169, 2-16=-852/0,

2-15=0/576, 3-15=-545/0, 3-14=-35/325,

4-14=-391/208, 7-9=-848/0, 7-10=0/582

6-10=-554/0, 6-11=-35/320, 5-11=-378/206

NOTES

- Unbalanced floor live loads have been considered for 1) this design.
- All plates are 3x3 (=) MT20 unless otherwise indicated.
- 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.



December 20,2024

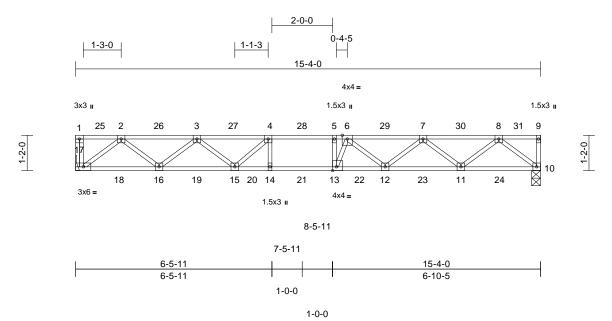


Job	Truss	Truss Type	Qty	Ply	The Farm at Neills Creek Lot 00.0063	
2412-1229-A	F2	Floor	5	1	Job Reference (optional)	I70314516

Structural LLC Thurmont MD - 21788

Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. Thu Dec 19 05:42:20 ID:r?ORJePdFtYRBgsCx4JDmZy8JTL-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:34.9

Plate Offsets	(X, Y):	[13:0-1-8,Edge]
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Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	тс	0.74	Vert(LL)	-0.13	12-13	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.82	Vert(CT)	-0.18	12-13	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.28	Horz(CT)	0.03	10	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 77 lb	FT = 20%F, 12%E

LUMBER

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

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 10=0-3-8, 17= Mechanical (size) Max Grav 10=555 (LC 1), 17=555 (LC 1)

(lb) - Maximum Compression/Maximum

FORCES Tension

TOP CHORD 1-17=-258/37, 9-10=-258/41, 1-2=0/0,

2-3=-1135/0, 3-4=-1786/0, 4-5=-1990/0, 5-6=-1990/0, 6-7=-1773/0, 7-8=-1114/0,

BOT CHORD 16-17=0/686, 15-16=0/1561, 14-15=0/1990,

13-14=0/1990, 12-13=0/1976, 11-12=0/1549,

10-11=0/658

WEBS 4-14=-121/195, 5-13=-271/378, 2-17=-861/0,

2-16=0/585, 3-16=-553/0, 3-15=-31/337, 4-15=-384/195, 8-10=-840/0, 8-11=0/594 7-11=-566/0, 7-12=-16/362, 6-12=-306/131,

6-13=-470/348

NOTES

- Unbalanced floor live loads have been considered for 1) this design.
- All plates are 3x3 (=) MT20 unless otherwise indicated.
- 3) Bearings are assumed to be: , Joint 10 SP No.2 .
- 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.

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



December 20,2024



Job	Truss	Truss Type	Qty	Ply	The Farm at Neills Creek Lot 00.0063	
2412-1229-A	F5	Floor	3	1	Job Reference (optional)	170314517

Run: 8.83 S. Dec. 4.2024 Print: 8.830 S.Dec. 4.2024 MiTek Industries. Inc. Thu Dec. 19.05:42:21 $ID: JBypW_QF0BgIpqROVoqSImy8JTK-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?ffrom Particle Pa$ Page: 1

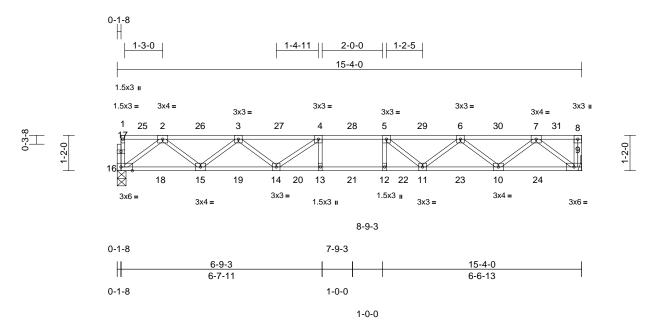


Plate Offsets (X, Y): [16:0-4-8,Edge]

Loading	(psf)	Spacing	1-7-3	csı		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.Ó	Plate Grip DOL	1.00	TC	0.86	Vert(LL)	-0.15	13-14	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.90	Vert(CT)	-0.20	13-14	>890	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.34	Horz(CT)	0.04	9	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 76 lb	FT = 20%F, 12%E

LUMBER

Scale = 1:34.9

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

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) 9= Mechanical, 16=0-3-8 Max Grav 9=663 (LC 1), 16=658 (LC 1)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-16=-260/39, 8-9=-260/36, 1-2=-16/2, 2-3=-1357/0, 3-4=-2120/0, 4-5=-2377/0,

5-6=-2124/0, 6-7=-1356/0, 7-8=0/0

BOT CHORD 15-16=0/815, 14-15=0/1872, 13-14=0/2377,

12-13=0/2377, 11-12=0/2377, 10-11=0/1864,

9-10=0/819

WEBS 4-13=-123/173. 5-12=-122/191.

2-16=-1021/0, 2-15=0/705, 3-15=-670/0, 3-14=-17/366, 4-14=-466/189, 7-9=-1027/0, 7-10=0/699, 6-10=-662/0, 6-11=-16/387,

5-11=-476/189

NOTES

- Unbalanced floor live loads have been considered for 1) this design.
- Bearings are assumed to be: Joint 16 SP No.3.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Bearing at joint(s) 16 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 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.

7) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



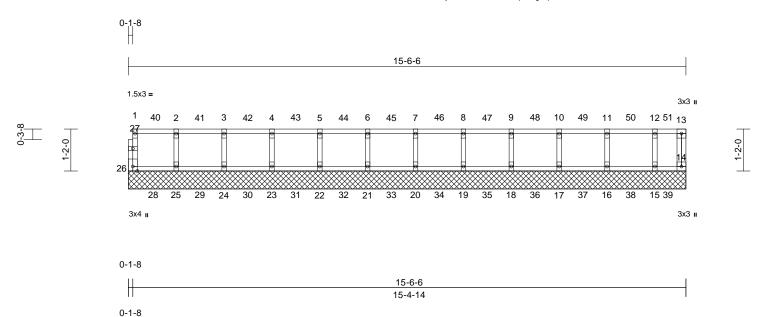
December 20,2024



Job Truss Truss Type Qty Ply The Farm at Neills Creek Lot 00 0063 170314518 2412-1229-A FGE1 Floor Supported Gable Job Reference (optional)

Structural, LLC, Thurmont, MD - 21788.

Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries. Inc. Thu Dec 19 05:42:21 ID:cXtS_NVeMLZI9vTkPmS54Fy8JTD-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:32.3

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	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	14	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R							Weight: 66 lb	FT = 20%F, 12%E

LUMBER

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

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=15-6-6, 15=15-6-6, 16=15-6-6, 17=15-6-6, 18=15-6-6, 19=15-6-6, 20=15-6-6, 21=15-6-6, 22=15-6-6, 23=15-6-6, 24=15-6-6, 25=15-6-6,

26=15-6-6

Max Uplift 14=-45 (LC 40), 15=-23 (LC 4), 17=-1 (LC 37), 26=-16 (LC 5)

Max Grav

14=261 (LC 54), 15=278 (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=286 (LC 43),

26=265 (LC 42)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-26=-254/23, 13-14=-256/50, 1-2=-27/6

2-3=-27/6, 3-4=-27/6, 4-5=-27/6, 5-6=-27/6, 6-7=-27/6, 7-8=-27/6, 8-9=-27/6, 9-10=-27/6, 10-11=-27/6, 11-12=-27/6, 12-13=-27/6 25-26=-6/27, 24-25=-6/27, 23-24=-6/27,

BOT CHORD 22-23=-6/27, 21-22=-6/27, 20-21=-6/27,

19-20=-6/27, 18-19=-6/27, 17-18=-6/27, 16-17=-6/27, 15-16=-6/27, 14-15=-6/27 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=-264/24

- 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.
- 5) All bearings are assumed to be SP No.3.
- Bearing at joint(s) 26 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 16 lb uplift at joint 26
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 14, 25, 24, 23, 22, 21, 20, 19, 18, 17, and 15. 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.
- 10) 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.
- 11) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



Page: 1

December 20,2024



WEBS

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

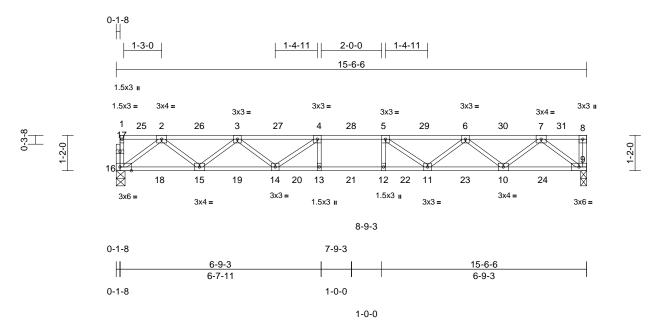
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Job	Truss	Truss Type	Qty	Ply	The Farm at Neills Creek Lot 00.0063	
2412-1229-A	2F1	Floor	6	1	Job Reference (optional)	I70314519

Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. Thu Dec 19 05:42:15 ID:zE9wTHM7Bf2?i3YQiFFHbjy8JTP-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:34.9 Plate Offsets (X, Y): [16:0-4-8,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	0.87	Vert(LL)	-0.15	11-12	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.90	Vert(CT)	-0.21	11-12	>887	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.34	Horz(CT)	0.04	9	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 77 lb	FT = 20%F, 12%E

LUMBER

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

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) 9=0-2-6, 16=0-3-8

Max Grav 9=672 (LC 1), 16=667 (LC 1)

FORCES (lb) - Maximum Compression/Maximum

Tension TOP CHORD 1-16=-260/39, 8-9=-260/36, 1-2=-16/2,

2-3=-1379/0, 3-4=-2162/0, 4-5=-2443/0, 5-6=-2162/0, 6-7=-1379/0, 7-8=0/0

15-16=0/827, 14-15=0/1903, 13-14=0/2443,

12-13=0/2443, 11-12=0/2443, 10-11=0/1903,

9-10=0/828

WEBS 4-13=-119/178. 5-12=-119/178. 2-16=-1035/0.

2-15=0/718, 3-15=-682/0, 3-14=-11/380, 4-14=-492/180, 7-9=-1039/0, 7-10=0/717 6-10=-682/0, 6-11=-11/380, 5-11=-492/180

NOTES

BOT CHORD

- Unbalanced floor live loads have been considered for 1) this design.
- Bearings are assumed to be: Joint 16 SP No.3 , Joint 9 $\,$
- 3) Bearing at joint(s) 16 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 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



December 20,2024

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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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)



Job	Truss	Truss Type	Qty	Ply	The Farm at Neills Creek Lot 00.0063	
2412-1229-A	2F6	Floor	8	1	Job Reference (optional)	I70314520

Run: 8.83 S. Dec. 4.2024 Print: 8.830 S.Dec. 4.2024 MiTek Industries. Inc. Thu Dec. 19.05:42:16 ID:nOWBkKRunVo9R_0a3VLhr_y8JTJ-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1

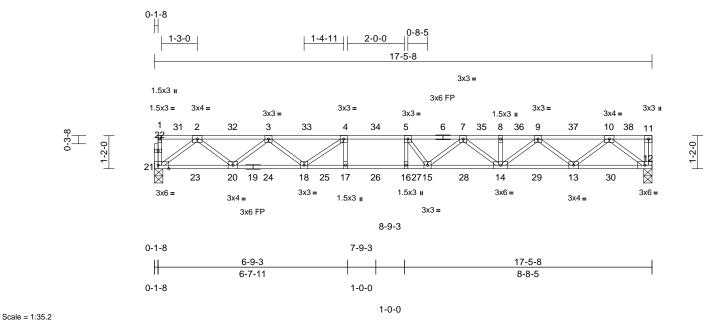


Plate Offsets (X, Y): [21:0-4-8,Edge]

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	0.84	Vert(LL)	-0.24	15-16	>865	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.83	Vert(CT)	-0.33	15-16	>629	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.40	Horz(CT)	0.05	12	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)

2x4 SP No.2(flat) *Except* 19-12:2x4 SP SS BOT CHORD

(flat)

2x4 SP No.3(flat) WFBS OTHERS 2x4 SP No.3(flat)

BRACING

TOP CHORD

TOP CHORD Structural wood sheathing directly applied or

4-10-14 oc purlins, except end verticals.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc

bracing

REACTIONS (size) 12=0-3-8, 21=0-3-8

Max Grav 12=757 (LC 1), 21=752 (LC 1)

FORCES (lb) - Maximum Compression/Maximum

1-21=-259/40, 11-12=-259/34, 1-2=-16/2, 2-3=-1591/0, 3-4=-2576/0, 4-5=-3052/0,

5-7=-3061/0, 7-8=-2620/0, 8-9=-2620/0,

9-10=-1587/0, 10-11=0/0

BOT CHORD 20-21=0/942, 18-20=0/2205, 17-18=0/3052,

16-17=0/3052, 15-16=0/3052, 14-15=0/2954,

13-14=0/2202. 12-13=0/944

WEBS 4-17=-93/219, 5-16=-302/169, 2-21=-1180/0,

2-20=0/845 3-20=-799/0 3-18=0/501 4-18=-698/93, 10-12=-1184/0, 10-13=0/837, 9-13=-800/0, 9-14=-4/534, 8-14=-244/70, 7-14=-453/18, 7-15=-135/303, 5-15=-311/417

NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- Bearings are assumed to be: Joint 21 SP No.3 , Joint 12 SP SS
- Bearing at joint(s) 21 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

- 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



December 20,2024

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

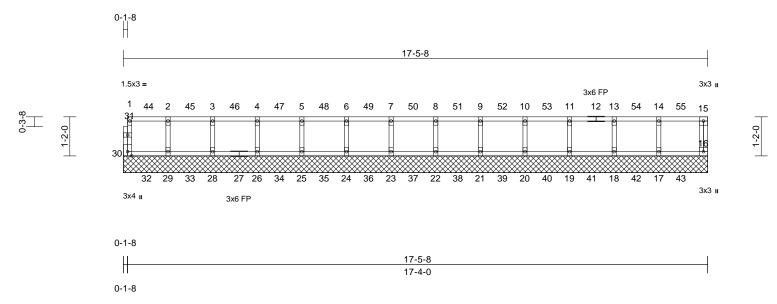
building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, 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)



Job	Truss	Truss Type	Qty	Ply	The Farm at Neills Creek Lot 00.0063	
2412-1229-A	FGE2	Floor Supported Gable	1	1	Job Reference (optional)	I70314521

Structural LLC Thurmont MD - 21788

Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. Thu Dec 19 05:42:22 ID:4kRqCjWH7eh9m22wzTzKdSy8JTC-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f Page: 1



Scale = 1:35.2

Loading	(psf)	Spacing	1-7-3	csı		DEFL	in	(loc)	I/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	16	n/a	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) 2x4 SP No.3(flat) WEBS 2x4 SP No.3(flat) OTHERS

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)

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=-9 (LC 43), 18=-2 (LC 44), 25=-2 (LC 34), 30=-13 (LC 5)

Max Grav 16=268 (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=-253/21, 15-16=-263/16, 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

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=-272/12

NOTES

- All plates are 1.5x3 (||) MT20 unless otherwise
- 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.3.
- 6) Bearing at joint(s) 30 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 13 lb uplift at joint
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 16, 29, 28, 26, 25, 24, 23, 22, 21, 20, 19, 18, and 17. 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.
- 10) 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.
- 11) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



December 20,2024

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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/TP11 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)



Job	Truss	Truss Type	Qty	Ply	The Farm at Neills Creek Lot 00.0063	
2412-1229-A	2F11	Floor	3	1	Job Reference (optional)	I70314522

Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. Thu Dec 19 05:42:18 ID:RQjlgdNlyyAsKC7dGymW8wy8JTO-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f Page: 1

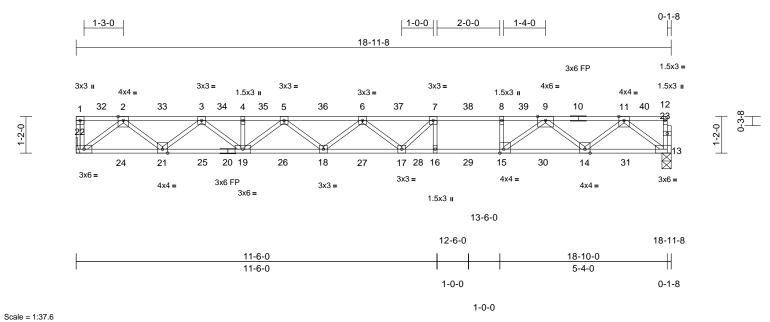


Plate Offsets (X, Y): [15:0-1-8,Edge]

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	0.59	Vert(LL)	-0.37	16-17	>603	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.90	Vert(CT)	-0.51	16-17	>439	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.52	Horz(CT)	0.06	13	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 95 lb	FT = 20%F, 12%E

LUMBER

TOP CHORD 2x4 SP SS(flat) *Except* 10-12:2x4 SP No.2

(flat)

BOT CHORD 2x4 SP No.2(flat) *Except* 20-13:2x4 SP SS

(flat) 2x4 SP No.3(flat)

WEBS 2x4 SP No.3(flat) **OTHERS**

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 13=0-3-8, 22= Mechanical (size)

Max Grav 13=818 (LC 1), 22=823 (LC 1)

FORCES (lb) - Maximum Compression/Maximum

TOP CHORD 1-22=-259/33, 12-13=-257/30, 1-2=0/0,

2-3=-1751/0, 3-4=-2954/0, 4-5=-2954/0, 5-6=-3551/0, 6-7=-3600/0, 7-8=-3263/0,

8-9=-3263/0, 9-11=-1712/0, 11-12=-15/2 BOT CHORD 21-22=0/1030, 19-21=0/2445, 18-19=0/3349, 17-18=0/3748, 16-17=0/3263, 15-16=0/3263,

14-15=0/2459. 13-14=0/1023

WEBS 7-16=-363/63, 8-15=-407/2, 2-22=-1293/0,

2-21=0/938, 3-21=-903/0, 3-19=0/650, 4-19=-265/55 5-19=-504/11 5-18=-47/330 6-18=-304/108, 6-17=-282/124,

7-17=-61/603, 11-13=-1282/0, 11-14=0/897,

9-14=-972/0, 9-15=0/1098

NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- Bearings are assumed to be: , Joint 13 SP SS .
- Refer to girder(s) for truss to truss connections.
- Bearing at joint(s) 13 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

- 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



December 20,2024



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



Job	Truss	Truss Type	Qty	Ply	The Farm at Neills Creek Lot 00.0063	
2412-1229-A	2F14	Floor	2	1	Job Reference (optional)	I70314523

Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. Thu Dec 19 05:42:19 ID:Npq25IP?UaQaaWH?NNo_DLy8JTM-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1

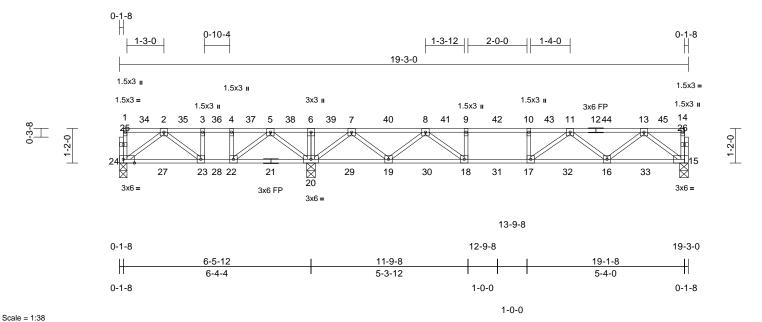


Plate Offsets (X, Y): [24:0-4-8,Edge]

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	0.58	Vert(LL)	-0.15	16-17	>996	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.94	Vert(CT)	-0.18	16-17	>827	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.29	Horz(CT)	0.02	15	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 98 lb	FT = 20%F, 12%E

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.

BOT CHORD Rigid ceiling directly applied or 2-2-0 oc

bracing.

15=0-3-8, 20=0-3-8, 24=0-3-0 REACTIONS (size)

Max Uplift 24=-43 (LC 46)

15=499 (LC 7), 20=1007 (LC 1), Max Grav

24=297 (LC 50)

FORCES (lb) - Maximum Compression/Maximum

TOP CHORD

1-24=-260/17, 14-15=-259/36, 1-2=-16/1, 2-3=-375/239, 3-4=-375/239, 4-5=-375/239,

5-6=0/738, 6-7=0/738, 7-8=-578/15, 8-9=-1342/0, 9-10=-1342/0, 10-11=-1342/0, 11-13=-960/0, 13-14=-16/2

BOT CHORD 23-24=-80/299, 22-23=-239/375,

> 20-22=-492/114, 19-20=-254/270, 18-19=0/1023, 17-18=0/1342, 16-17=0/1262,

15-16=0/614

WFRS 6-20=-275/36, 9-18=-231/39,

10-17=-156/103, 5-20=-556/0

2-24=-375/101, 5-22=0/438, 2-23=-202/193, 3-23=-144/150, 4-22=-224/57, 7-20=-927/0, 7-19=0/601, 8-19=-593/0, 8-18=-38/484, 13-15=-768/0, 13-16=0/473, 11-16=-393/5, 11-17=-194/255

NOTES

- Unbalanced floor live loads have been considered for
- All plates are 3x3 (=) MT20 unless otherwise indicated.
- Bearings are assumed to be: Joint 24 SP No.3, Joint 20 SP No.2, Joint 15 SP No.2.

- Bearing at joint(s) 24, 15 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate at joint(s) 24.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 24. 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.
- 9) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



December 20,2024

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,	Job	Truss	Truss Type	Qty	Ply	The Farm at Neills Creek Lot 00.0063	
2	2412-1229-A	2F13	Floor	5	1	Job Reference (optional)	170314524

Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. Thu Dec 19 05:42:19 ID:vcGguyONjGIjyMipqfHlg8y8JTN-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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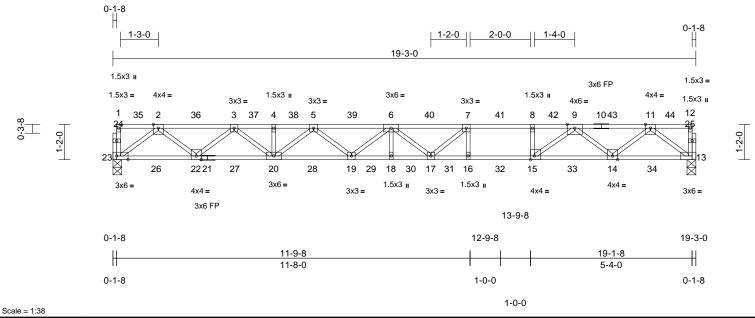


Plate Offsets (X, Y): [15:0-1-8,Edge], [23:0-4-8,Edge]

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	0.54	Vert(LL)	-0.38	16-17	>606	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.81	Vert(CT)	-0.52	16-17	>442	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.54	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 DSS(flat) 2x4 SP DSS(flat) **BOT CHORD** 2x4 SP No.3(flat) WEBS 2x4 SP No.3(flat) OTHERS

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) 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=-259/37, 12-13=-257/39, 1-2=-16/2, 2-3=-1783/0, 3-4=-3015/0, 4-5=-3015/0,

5-6=-3654/0, 6-7=-3730/0, 7-8=-3345/0, 8-9=-3345/0, 9-11=-1741/0, 11-12=-15/2

BOT CHORD 22-23=0/1047, 20-22=0/2493, 19-20=0/3431,

18-19=0/3850, 17-18=0/3850, 16-17=0/3345, 15-16=0/3345, 14-15=0/2505, 13-14=0/1041

WEBS 7-16=-362/59, 8-15=-420/0, 2-23=-1311/0,

2-22=0/959, 3-22=-923/0, 3-20=0/667, 4-20=-264/59, 5-20=-531/1, 5-19=-36/335.

6-19=-297/176, 6-18=-101/217, 6-17=-271/149, 7-17=-58/637

11-13=-1304/0, 11-14=0/912, 9-14=-994/0,

9-15=0/1141

NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- Bearings are assumed to be: Joint 23 SP No.3, Joint 13
- Bearing at joint(s) 23, 13 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

- 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



December 20,2024

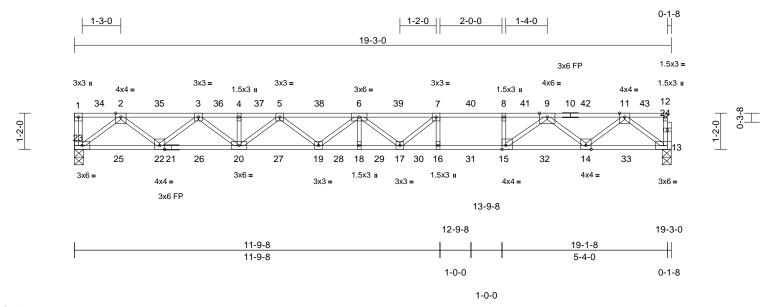
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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Job	Truss	Truss Type	Qty	Ply	The Farm at Neills Creek Lot 00.0063	
2412-1229-A	2F12	Floor	5	1	Job Reference (optional)	I70314525

Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. Thu Dec 19 05:42:18 ID:RQjlgdNlyyAsKC7dGymW8wy8JTO-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f Page: 1



Scale = 1:38.1

Plate Offsets	(X,	Y):	[15:0-	1-8,Edge	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	0.54	Vert(LL)	-0.38	16-17	>606	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.81	Vert(CT)	-0.52	16-17	>442	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.54	Horz(CT)	0.06	13	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 98 lb	FT = 20%F, 12%E

LUMBER

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

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) 13=0-3-8, 23=0-3-8

Max Grav 13=830 (LC 1), 23=835 (LC 1)

FORCES

TOP CHORD

BOT CHORD

(lb) - Maximum Compression/Maximum Tension

1-23=-259/33, 12-13=-257/39, 1-2=0/0, 2-3=-1784/0, 3-4=-3015/0, 4-5=-3015/0, 5-6=-3654/0, 6-7=-3730/0, 7-8=-3346/0,

8-9=-3346/0, 9-11=-1741/0, 11-12=-15/2

22-23=0/1047, 20-22=0/2493, 19-20=0/3431,

18-19=0/3850, 17-18=0/3850, 16-17=0/3346,

15-16=0/3346, 14-15=0/2505, 13-14=0/1041

7-16=-362/59, 8-15=-420/0, 2-23=-1314/0, 2-22=0/959, 3-22=-923/0, 3-20=0/667,

4-20=-264/59, 5-20=-531/1, 5-19=-36/335,

6-19=-297/176, 6-18=-101/217,

6-17=-271/149, 7-17=-58/637

11-13=-1304/0, 11-14=0/912, 9-14=-994/0,

9-15=0/1141

NOTES

WEBS

- 1) Unbalanced floor live loads have been considered for this design.
- All bearings are assumed to be SP DSS
- Bearing at joint(s) 13 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

- 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



December 20,2024



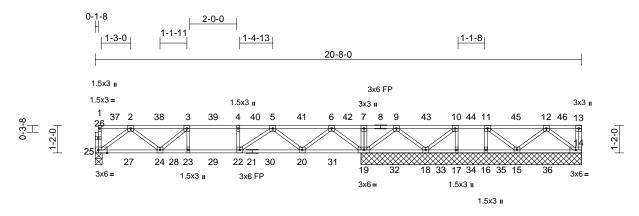
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

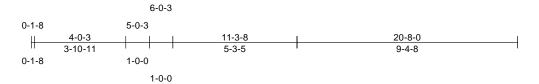
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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



Job	Truss	Truss Type	Qty	Ply	The Farm at Neills Creek Lot 00.0063	
2412-1229-A	2F8	Floor	1	1	Job Reference (optional)	170314526

Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. Thu Dec 19 05:42:17 ID:Fa4ZxgSWYow027bmcDtwNBy8JTI-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f Page: 1





Scale = 1:42.9 Plate Offsets (X, Y): [25:0-4-8,Edge]

Loading	(psf)	Spacing	1-4-0	csı		DEFL	in	(loc)	l/defl	I /d	PLATES	GRIP
Loading	(þsi)	, ,	1-4-0			DEFL	111	(IUC)	i/ueii	L/u	FLAILS	GKIF
TCLL	40.0	Plate Grip DOL	1.00	TC	0.74	Vert(LL)	-0.11	20-22	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.82	Vert(CT)	-0.12	20-22	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.21	Horz(CT)	0.01	14	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 105 lb	FT = 20%F, 12%E

LUMBER

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

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=9-4-8, 15=9-4-8, 16=9-4-8, 17=9-4-8, 18=9-4-8, 19=9-4-8,

25=0-3-8 Max Horiz 25=0 (LC 5)

Max Uplift 16=-80 (LC 63), 17=-69 (LC 59),

18=-224 (LC 57)

Max Grav 14=276 (LC 74), 15=293 (LC 73),

16=281 (LC 72), 17=270 (LC 71), 18=236 (LC 70), 19=818 (LC 14),

25=348 (LC 1)

FORCES (lb) - Maximum Compression/Maximum

Tension TOP CHORD

1-25=-258/47. 13-14=-257/37. 1-2=-15/9.

2-3=-682/0. 3-4=-810/0. 4-5=-810/0. 5-6=-409/121, 6-7=-54/920, 7-9=-54/920, 9-10=0/117, 10-11=-9/35, 11-12=-7/48,

12-13=-10/10

BOT CHORD 24-25=0/463, 23-24=0/810, 22-23=0/810,

20-22=0/593, 19-20=-468/250,

18-19=-480/52, 17-18=-35/9, 16-17=-35/9,

15-16=-35/11, 14-15=-1/156

WEBS 3-23=-111/180, 4-22=-220/47, 7-19=-264/56,

2-25=-584/0, 2-24=0/384, 3-24=-299/144, 6-19=-720/0, 6-20=0/544, 5-20=-448/0, 5-22=-66/381, 9-19=-552/11, 12-14=-195/3, 9-18=-147/481, 12-15=-258/0, 10-18=-112/2,

11-15=-51/18, 10-17=-234/52, 11-16=-248/36

- Unbalanced floor live loads have been considered for
- All plates are 3x3 (=) MT20 unless otherwise indicated.
- Bearings are assumed to be: Joint 25 SP No.3, Joint 16
- Bearing at joint(s) 25 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 224 lb uplift at joint 18
- 6) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 17 and 16. 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.
- This truss has been designed for a total drag load of 150 lb. Lumber DOL=(1.33) Plate grip DOL=(1.33) Connect truss to resist drag loads along bottom chord from 0-0-0 to 20-8-0 for 7.3 plf.
- 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.
- 10) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



December 20,2024

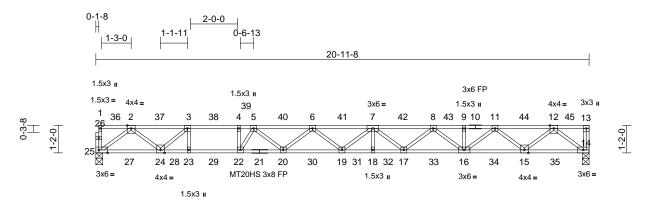
NOTES



Job	Truss	Truss Type	Qty	Ply	The Farm at Neills Creek Lot 00.0063		
2412-1229-A	2F9	Floor	6	1	Job Reference (optional)	170314527	

Run: 8.83 S Dec 4 2024 Print: 8.830 S Dec 4 2024 MiTek Industries, Inc. Thu Dec 19 05:42:17 ID:kmex80S8I62sgH9zAwO9wPy8JTH-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1





Scale = 1:42.9 Plate Offsets (X, Y): [25:0-4-8,Edge]

-	-											
Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	I/defI	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.80	Vert(LL)	-0.44	20-22	>564	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.82	Vert(CT)	-0.61	20-22	>410	360	MT20HS	187/143
BCLL	0.0	Rep Stress Incr	YES	WB	0.49	Horz(CT)	0.06	14	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 107 lb	FT = 20%F, 12%E

LUMBER

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

BRACING

TOP CHORD

TOP CHORD Structural wood sheathing directly applied or 5-6-9 oc purlins, except end verticals.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc

bracing

REACTIONS (size) 14=0-3-8, 25=0-3-8

Max Grav 14=759 (LC 1), 25=755 (LC 1) **FORCES** (lb) - Maximum Compression/Maximum

Tension

1-25=-271/33, 13-14=-258/34, 1-2=-16/2,

2-3=-1677/0, 3-4=-2673/0, 4-5=-2673/0, 5-6=-3566/0, 6-7=-3725/0, 7-8=-3500/0,

8-9=-2823/0, 9-11=-2823/0, 11-12=-1644/0,

12-13=0/0

BOT CHORD 24-25=0/881, 23-24=0/2673, 22-23=0/2673,

20-22=0/3198, 19-20=0/3740, 18-19=0/3737, 17-18=0/3737, 16-17=0/3259, 15-16=0/2311,

14-15=0/955

WEBS 3-23=0/429, 4-22=0/593, 2-25=-1100/0,

> 2-24=0/1036, 3-24=-1317/0, 12-14=-1199/0, 12-15=0/897, 11-15=-868/0, 11-16=0/654,

9-16=-255/69, 8-16=-556/0, 8-17=-30/342,

7-17=-328/152, 7-18=-66/259,

7-19=-205/266, 6-19=-189/194

6-20=-276/132, 5-20=0/522, 5-22=-1071/0

NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- All plates are MT20 plates unless otherwise indicated.
- All plates are 3x3 (=) MT20 unless otherwise indicated. 3)
- 4) Bearings are assumed to be: Joint 25 SP No.3, Joint 14

- 5) Bearing at joint(s) 25 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 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



December 20,2024

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)



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- $\frac{1}{16}$ 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 × 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



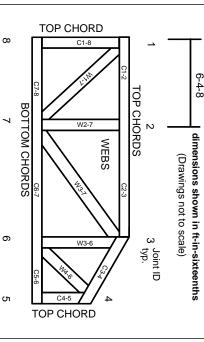
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur Min size shown is for crushing only.

Industry Standards: ANSI/TPI1: National Design Specification for Metal

DSB-22:

Plate Connected Wood Truss Construction.
Design Standard for Bracing.
Building Component Safety Information,
Guide to Good Practice for Handling,
Installing, Restraining & Bracing of Metal
Plate Connected Wood Trusses.

Numbering System



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

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

Product Code Approvals

ICC-ES Reports:

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

Design General Notes

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

Lumber design values are in accordance with ANSI/TPI 1 section 6.3 These truss designs rely on lumber values established by others.

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

▲ General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI
- 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.
- Never exceed the design loading shown and never stack materials on inadequately braced trusses.
- Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
- Cut members to bear tightly against each other.
- Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
- Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
- Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
- Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
- Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
- Top chords must be sheathed or purlins provided at spacing indicated on design.
- 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.
- Do not cut or alter truss member or plate without prior approval of an engineer.
- Install and load vertically unless indicated otherwise.
- Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
- Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
- Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
- The design does not take into account any dynamic or other loads other than those expressly stated.