

RE: 240615

Lot 124 MN

MiTek, Inc.

16023 Swingley Ridge Rd. Chesterfield, MO 63017

314.434.1200

**Site Information:** 

Customer: Avital Homes Project Name: 240615

Lot/Block: Model: Serenity - Contemporary 3rd Car

Address: Subdivision: City: State:

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

Design Code: IRC2018/TPI2014 Design Program: MiTek 20/20 8.7

Wind Code: ASCE 7 - 16[Low Rise] Wind Speed: 115 mph Roof Load: 45.0 psf Floor Load: N/A psf

This package includes 49 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	164133390	B1	3/11/2024	21	I64133410	J9	3/11/2024
2	164133391	B2	3/11/2024	22	I64133411	J11	3/11/2024
3	164133392	B3	3/11/2024	23	164133412	J12	3/11/2024
4	164133393	G1	3/11/2024	24	164133413	J13	3/11/2024
5	164133394	G1A	3/11/2024	25	164133414	J14	3/11/2024
6	164133395	G2	3/11/2024	26	164133415	J15	3/11/2024
7	164133396	G2A	3/11/2024	27	164133416	J16	3/11/2024
8	164133397	G3	3/11/2024	28	164133417	K1	3/11/2024
9	164133398	G3A	3/11/2024	29	l64133418	K2	3/11/2024
10	164133399	G4	3/11/2024	30	l64133419	K3	3/11/2024
11	164133400	G5	3/11/2024	31	164133420	K4	3/11/2024
12	164133401	G6	3/11/2024	32	164133421	K5	3/11/2024
13	164133402	H2	3/11/2024	33	164133422	K6	3/11/2024
14	164133403	J3	3/11/2024	34	164133423	K7	3/11/2024
15	164133404	J4	3/11/2024	35	164133424	K8	3/11/2024
16	164133405	J4A	3/11/2024	36	164133425	K9	3/11/2024
17	164133406	J5	3/11/2024	37	164133426	K10	3/11/2024
18	164133407	J6	3/11/2024	38	164133427	K11	3/11/2024
19	164133408	J7	3/11/2024	39	164133428	K12	3/11/2024
20	164133409	J8	3/11/2024	40	164133429	LAY2	3/11/2024

The truss drawing(s) referenced above have been prepared by

MiTek USA, Inc under my direct supervision

based on the parameters provided by Wheeler - Waverly.

Truss Design Engineer's Name: Garcia, Juan

My license renewal date for the state of Kansas is April 30, 2024.

Kansas COA: E-943

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. Any project specific information included is for MiTek customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek 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.



04/22/2024 8:28:31



RE: 240615 - Lot 124 MN

MiTek, Inc. 16023 Swingley Ridge Rd. Chesterfield, MO 63017 314.434.1200

**Site Information:** 

Project Customer: Avital Homes Project Name: 240615

Lot/Block: Subdivision:

Address:

City, County: State:

No.	Seal#	Truss Name	Date
41	164133430	LAY3	3/11/2024
42	164133431	LAY4	3/11/2024
43	164133432	LAY5	3/11/2024
44	164133433	LAY6	3/11/2024
45	164133434	V6	3/11/2024
46	164133435	V7	3/11/2024
47	164133436	V8	3/11/2024
48	164133437	V9	3/11/2024
49	164133438	V10	3/11/2024



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Lot 124 MN

MiTek, Inc.

16023 Swingley Ridge Rd. Chesterfield, MO 63017

314.434.1200

**Site Information:** 

Customer: Avital Homes Project Name: 240615

Lot/Block: Model: Serenity - Contemporary 3rd Car

Address: Subdivision: City: State:

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

Design Code: IRC2018/TPI2014 Design Program: MiTek 20/20 8.7

Wind Code: ASCE 7 - 16[Low Rise] Wind Speed: 115 mph Roof Load: 45.0 psf Floor Load: N/A psf

This package includes 49 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	164133390	B1	3/11/2024	21	I64133410	J9	3/11/2024
2	164133391	B2	3/11/2024	22	I64133411	J11	3/11/2024
3	164133392	B3	3/11/2024	23	164133412	J12	3/11/2024
4	164133393	G1	3/11/2024	24	164133413	J13	3/11/2024
5	164133394	G1A	3/11/2024	25	164133414	J14	3/11/2024
6	164133395	G2	3/11/2024	26	164133415	J15	3/11/2024
7	164133396	G2A	3/11/2024	27	164133416	J16	3/11/2024
8	164133397	G3	3/11/2024	28	164133417	K1	3/11/2024
9	164133398	G3A	3/11/2024	29	l64133418	K2	3/11/2024
10	164133399	G4	3/11/2024	30	l64133419	K3	3/11/2024
11	164133400	G5	3/11/2024	31	164133420	K4	3/11/2024
12	164133401	G6	3/11/2024	32	164133421	K5	3/11/2024
13	164133402	H2	3/11/2024	33	164133422	K6	3/11/2024
14	164133403	J3	3/11/2024	34	164133423	K7	3/11/2024
15	164133404	J4	3/11/2024	35	164133424	K8	3/11/2024
16	164133405	J4A	3/11/2024	36	164133425	K9	3/11/2024
17	164133406	J5	3/11/2024	37	164133426	K10	3/11/2024
18	164133407	J6	3/11/2024	38	164133427	K11	3/11/2024
19	164133408	J7	3/11/2024	39	164133428	K12	3/11/2024
20	164133409	J8	3/11/2024	40	164133429	LAY2	3/11/2024

The truss drawing(s) referenced above have been prepared by

MiTek USA, Inc under my direct supervision

based on the parameters provided by Wheeler - Waverly.

Truss Design Engineer's Name: Garcia, Juan

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

Missouri COA: 001193

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. Any project specific information included is for MiTek customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek 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.



04/22/2024 8:28:31



RE: 240615 - Lot 124 MN

MiTek, Inc. 16023 Swingley Ridge Rd. Chesterfield, MO 63017 314.434.1200

**Site Information:** 

Project Customer: Avital Homes Project Name: 240615

Lot/Block: Subdivision:

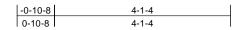
Address:

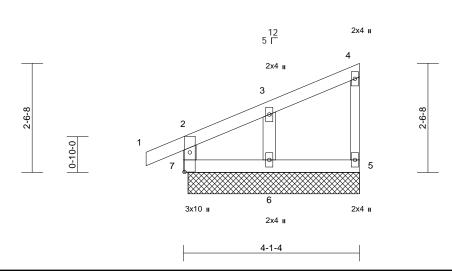
City, County: State:

No.	Seal#	Truss Name	Date
41	164133430	LAY3	3/11/2024
42	164133431	LAY4	3/11/2024
43	164133432	LAY5	3/11/2024
44	164133433	LAY6	3/11/2024
45	164133434	V6	3/11/2024
46	164133435	V7	3/11/2024
47	164133436	V8	3/11/2024
48	164133437	V9	3/11/2024
49	164133438	V10	3/11/2024

Job	Truss	Truss Type	Qty	Ply	Lot 124 MN	
240615	B1	Monopitch Supported Gable	1	1	Job Reference (optional)	164133390

Run: 8.73 S. Feb 22 2024 Print: 8.730 S. Feb 22 2024 MiTek Industries. Inc. Fri Mar 08 13:08:25 ID: 9wV7C5 iB8ZwNZTQMrrrF9XyKyAf-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?ff





Scale = 1:26.9

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 14 lb	FT = 10%

#### LUMBER

TOP CHORD 2x4 SPF No.2 **BOT CHORD** 2x4 SPF No.2

2x4 SPF No.2 \*Except\* 4-5:2x3 SPF No.2 WEBS

2x4 SPF No.2 **OTHERS** 

**BRACING** 

TOP CHORD Structural wood sheathing directly applied or 4-1-4 oc purlins, except end verticals.

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

bracing.

REACTIONS (size) 5=4-0-0, 6=4-0-0, 7=4-0-0

Max Horiz 7=102 (LC 5)

Max Uplift 5=-11 (LC 5), 6=-67 (LC 8), 7=-29

(IC 4)

Max Grav 5=76 (LC 1), 6=183 (LC 1), 7=159

(LC 1)

**FORCES** (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 2-7=-141/41, 1-2=0/27, 2-3=-67/21,

3-4=-54/18, 4-5=-59/22

BOT CHORD 6-7=-32/23, 5-6=-32/23

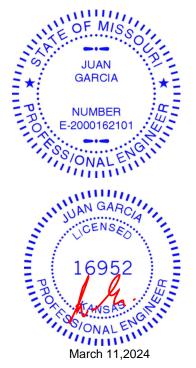
WFBS 3-6=-141/84

#### NOTES

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SPF No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 29 lb uplift at joint 7, 11 lb uplift at joint 5 and 67 lb uplift at joint 6.
- Non Standard bearing condition. Review required.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



Page: 1

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

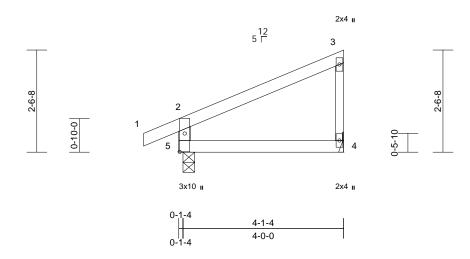
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not



Job	Truss	Truss Type	Qty	Ply	Lot 124 MN	
240615	B2	Monopitch	5	1	Job Reference (optional)	164133391

Run: 8.73 S Feb 22 2024 Print: 8.730 S Feb 22 2024 MiTek Industries, Inc. Fri Mar 08 13:08:26 ID:9wV7C5iB8ZwNZTQMrrrF9XyKyAf-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f





Scale = 1:28.7

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	-0.01	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	-0.02	4-5	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R		Wind(LL)	0.00	4-5	>999	240	Weight: 13 lb	FT = 10%

LOAD CASE(S) Standard

TOP CHORD 2x4 SPF No.2 BOT CHORD 2x4 SPF No.2

2x3 SPF No.2 \*Except\* 5-2:2x4 SPF No.2 WEBS

**BRACING** 

LUMBER

TOP CHORD Structural wood sheathing directly applied or 4-1-4 oc purlins, except end verticals. **BOT CHORD** 

Rigid ceiling directly applied or 10-0-0 oc

bracing.

REACTIONS 4= Mechanical, 5=0-3-8 (size)

Max Horiz 5=102 (LC 5)

Max Uplift 4=-41 (LC 8), 5=-47 (LC 8) Max Grav 4=164 (LC 1), 5=254 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum

Tension

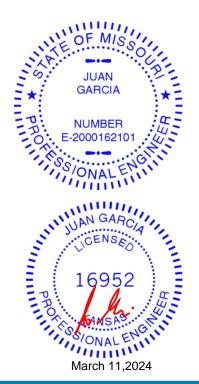
TOP CHORD 1-2=0/27, 2-3=-94/26, 3-4=-118/57,

2-5=-223/78

**BOT CHORD** 4-5=-30/22

#### NOTES

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 4) All bearings are assumed to be SPF No.2
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 41 lb uplift at joint 4 and 47 lb uplift at joint 5.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Page: 1

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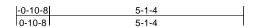
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not

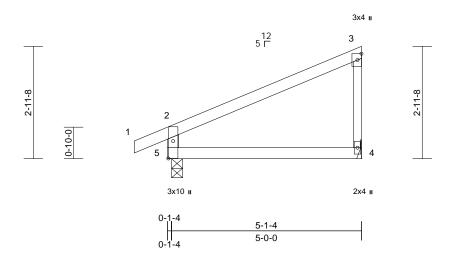
a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing 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/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.sbcscomponents.com)

LEE'S'SUMVITUS MISSOURI 04/22/2024 8:28:31

Job	Truss	Truss Type	Qty	Ply	Lot 124 MN	
240615	В3	Monopitch	2	1	Job Reference (optional)	1133392

Run: 8.73 S Feb 22 2024 Print: 8.730 S Feb 22 2024 MiTek Industries, Inc. Fri Mar 08 13:08:26 ID:9wV7C5iB8ZwNZTQMrrrF9XyKyAf-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f





Scale = 1:30.3

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

Loading	(psf)	Spacing	2-0-0	csı		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	-0.02	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.19	Vert(CT)	-0.05	4-5	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R		Wind(LL)	0.01	4-5	>999	240	Weight: 16 lb	FT = 10%

LOAD CASE(S) Standard

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

2x3 SPF No.2 \*Except\* 5-2:2x4 SPF No.2 WEBS

**BRACING** 

TOP CHORD Structural wood sheathing directly applied or 5-1-4 oc purlins, except end verticals. **BOT CHORD** 

Rigid ceiling directly applied or 10-0-0 oc

bracing.

REACTIONS 4= Mechanical, 5=0-3-8 (size)

Max Horiz 5=120 (LC 5)

Max Uplift 4=-52 (LC 8), 5=-53 (LC 8) Max Grav 4=211 (LC 1), 5=297 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum

Tension

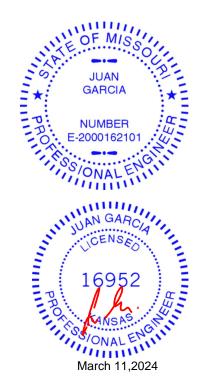
TOP CHORD 1-2=0/27, 2-3=-119/30, 3-4=-151/71,

2-5=-260/92

**BOT CHORD** 4-5=-33/31

#### NOTES

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 4) All bearings are assumed to be SPF No.2
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 52 lb uplift at joint 4 and 53 lb uplift at joint 5.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Page: 1

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

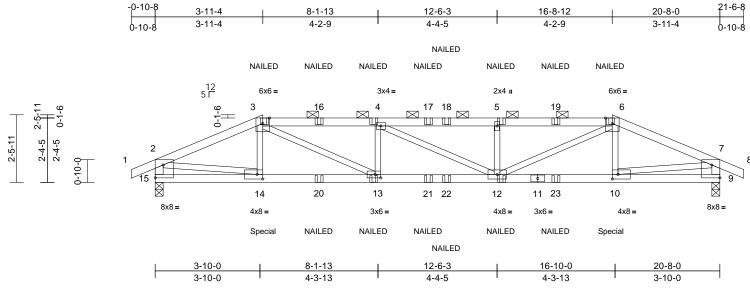
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not



Job	Truss	Truss Type	Qty	Ply	Lot 124 MN	
240615	G1	Hip Girder	2	1	Job Reference (optional)	164133393

Run: 8,73 S Feb 22 2024 Print: 8,730 S Feb 22 2024 MiTek Industries, Inc. Fri Mar 08 13:08:26 ID:MFFjF9zd6mh\_Qey?lyBj2dzdKf7-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:42.2

Plate Offsets (X, Y): [9:Edge,0-5-11], [10:0-2-8,0-2-0], [13:0-2-8,0-1-8], [14:0-2-8,0-2-0], [15:Edge,0-5-11]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.69	Vert(LL)	-0.18	12-13	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	1.00	Vert(CT)	-0.33	12-13	>732	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.64	Horz(CT)	0.06	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.16	12-13	>999	240	Weight: 74 lb	FT = 10%

#### LUMBER

TOP CHORD 2x4 SPF No.2 **BOT CHORD** 2x4 SPF No.2

2x3 SPF No.2 \*Except\* 15-2,9-7:2x4 SPF WEBS

**BRACING** 

TOP CHORD

Structural wood sheathing directly applied or 3-6-11 oc purlins, except end verticals, and

2-0-0 oc purlins (2-8-8 max.): 3-6.

BOT CHORD Rigid ceiling directly applied or 6-9-14 oc

bracing

REACTIONS (size) 9=0-3-8, 15=0-3-8

Max Horiz 15=-18 (LC 6)

Max Uplift 9=-319 (LC 5), 15=-319 (LC 4)

Max Grav 9=1451 (LC 1), 15=1451 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/27, 2-3=-2384/537, 3-4=-3397/806,

4-5=-3392/803, 5-6=-3395/804,

6-7=-2384/537, 7-8=0/27, 2-15=-1399/332,

7-9=-1399/332

BOT CHORD 14-15=-93/303, 13-14=-459/2155,

12-13=-753/3394, 10-12=-461/2155

9-10=-79/303

WEBS 3-14=-10/97, 6-10=-10/97, 2-14=-408/1875, 7-10=-409/1875, 3-13=-328/1421,

6-12=-327/1418, 4-13=-489/226,

4-12=-28/23, 5-12=-478/225

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.

- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SPF No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 319 lb uplift at joint 15 and 319 lb uplift at joint 9.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 10) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 214 lb down and 55 lb up at 3-11-4, and 214 lb down and 55 lb up at 16-8-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 12) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

### LOAD CASE(S) Standard

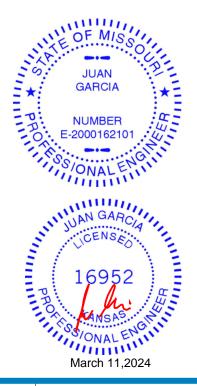
Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (lb/ft)

Vert: 1-2=-70, 2-3=-70, 3-6=-70, 6-7=-70, 7-8=-70, 9-15=-20

Concentrated Loads (lb)

Vert: 3=-45 (F), 6=-45 (F), 14=-214 (F), 10=-214 (F), 13=-23 (F), 12=-23 (F), 4=-45 (F), 5=-45 (F), 16=-45 (F), 17=-45 (F), 18=-45 (F), 19=-45 (F), 20=-23 (F), 21=-23 (F), 22=-23 (F), 23=-23 (F)



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

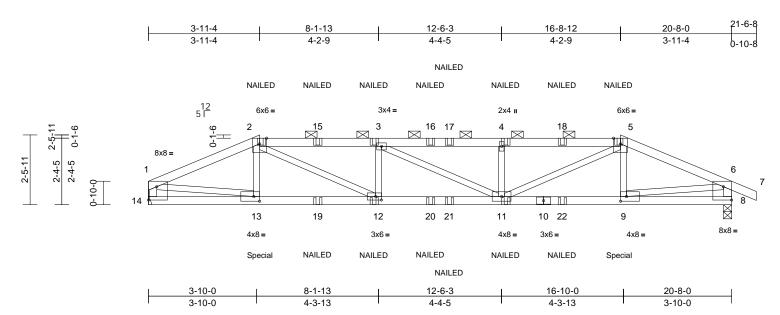
Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not



Job	Truss	Truss Type	Qty	Ply	Lot 124 MN	
240615	G1A	Hip Girder	1	1	Job Reference (optional)	164133394

Run: 8 73 S. Feb 22 2024 Print: 8 730 S. Feb 22 2024 MiTek Industries. Inc. Fri Mar 08 13:08:27 ID:cnielT?Q8sxbkJr4KHklnWzdK3e-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:40.8

Plate Offsets (X, Y): [1:Edge,0-5-11], [8:Edge,0-5-11], [9:0-2-8,0-2-0], [12:0-2-8,0-1-8], [13:0-2-8,0-2-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.69	Vert(LL)	-0.18	11-12	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	1.00	Vert(CT)	-0.33	11-12	>730	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.66	Horz(CT)	0.06	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.16	11-12	>999	240	Weight: 73 lb	FT = 10%

#### LUMBER

TOP CHORD 2x4 SPF No.2 **BOT CHORD** 2x4 SPF No.2

2x3 SPF No.2 \*Except\* 14-1,8-6:2x4 SPF WEBS

**BRACING** TOP CHORD

Structural wood sheathing directly applied or 3-6-11 oc purlins, except end verticals, and

2-0-0 oc purlins (2-8-8 max.): 2-5.

BOT CHORD Rigid ceiling directly applied or 6-9-14 oc

bracing

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

Max Horiz 14=-28 (LC 6)

Max Uplift 8=-319 (LC 5), 14=-287 (LC 4)

Max Grav 8=1453 (LC 1), 14=1378 (LC 1) (lb) - Maximum Compression/Maximum

**FORCES** Tension

TOP CHORD 1-2=-2395/540, 2-3=-3406/808,

3-4=-3399/805, 4-5=-3402/806.

5-6=-2388/538, 6-7=0/27, 1-14=-1325/299,

6-8=-1401/332

BOT CHORD 13-14=-68/263. 12-13=-461/2173.

11-12=-753/3404. 9-11=-461/2159.

8-9=-79/303

WEBS 2-13=-21/91, 5-9=-10/97, 1-13=-427/1933,

6-9=-410/1878, 2-12=-327/1417,

5-11=-328/1423, 3-12=-487/225, 3-11=-31/23,

4-11=-478/226

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.

- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SPF No.2.
- 7) Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to 8) bearing plate capable of withstanding 287 lb uplift at joint 14 and 319 lb uplift at joint 8.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord
- 11) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 214 lb down and 55 lb up at 3-11-4, and 214 lb down and 55 lb up at 16-8-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 13) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

# LOAD CASE(S) Standard

Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (lb/ft)

Vert: 1-2=-70, 2-5=-70, 5-6=-70, 6-7=-70, 8-14=-20

Concentrated Loads (lb)

Vert: 2=-45 (F), 5=-45 (F), 13=-214 (F), 9=-214 (F), 12=-23 (F), 11=-23 (F), 3=-45 (F), 4=-45 (F), 15=-45 (F), 16=-45 (F), 17=-45 (F), 18=-45 (F), 19=-23 (F),

20=-23 (F), 21=-23 (F), 22=-23 (F)



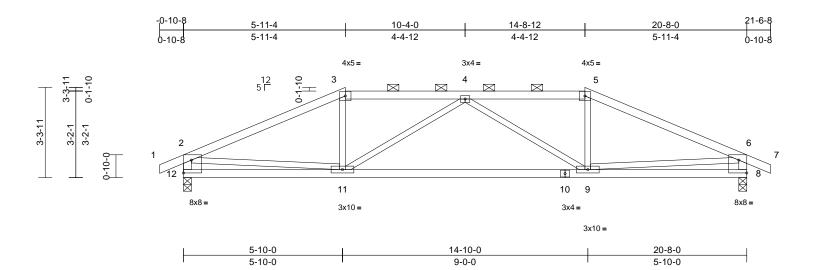
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not



Job	Truss	Truss Type	Qty	Ply	Lot 124 MN	
240615	G2	Hip	1	1	Job Reference (optional)	l64133395

Run: 8 73 S. Feb 22 2024 Print: 8 730 S. Feb 22 2024 MiTek Industries. Inc. Fri Mar 08 13:08:27 ID:IvuvEfBXec4HCZvfvR1BJdzdKeq-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:42.3

Plate Offsets (X, Y):	[8:Edge,0-5-11],	[12:Edge,0-5-11]
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Loading	(psf)	Spacing	2-0-0	csı		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.46	Vert(LL)	-0.15	9-11	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.64	Vert(CT)	-0.34	9-11	>723	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.32	Horz(CT)	0.03	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.05	9-11	>999	240	Weight: 73 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF No.2 **BOT CHORD** 2x4 SPF No.2

2x3 SPF No.2 \*Except\* 12-2,8-6:2x4 SPF WEBS

**BRACING** 

TOP CHORD Structural wood sheathing directly applied or 4-3-7 oc purlins, except end verticals, and

2-0-0 oc purlins (4-10-15 max.): 3-5. Rigid ceiling directly applied or 10-0-0 oc

bracing

BOT CHORD

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

Max Horiz 12=-29 (LC 13)

Max Uplift 8=-135 (LC 5), 12=-135 (LC 4)

Max Grav 8=988 (LC 1), 12=988 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=0/27, 2-3=-1533/188, 3-4=-1333/194,

4-5=-1333/194, 5-6=-1533/188, 6-7=0/27,

2-12=-943/157, 6-8=-943/157 **BOT CHORD** 11-12=-163/422, 9-11=-226/1613,

8-9=-136/422

**WEBS** 3-11=0/310, 4-11=-427/136, 4-9=-427/136,

5-9=0/310, 2-11=-38/932, 6-9=-38/932

#### NOTES

- 1) Unbalanced roof live loads have been considered for this design
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SPF No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 135 lb uplift at joint 12 and 135 lb uplift at joint 8.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



Page: 1

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

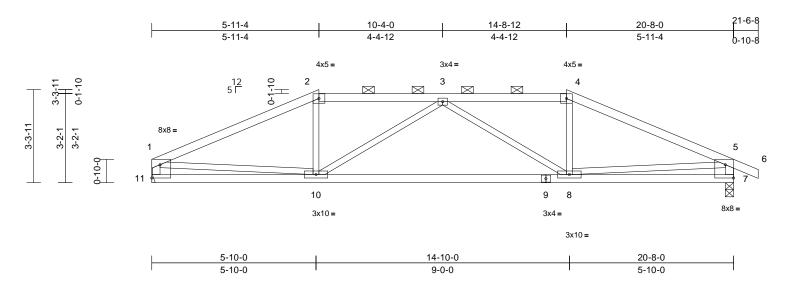
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not



Job	Truss	Truss Type	Qty	Ply	Lot 124 MN	
240615	G2A	Hip	1	1	Job Reference (optional)	I64133396

Run: 8.73 S. Feb 22 2024 Print: 8.730 S. Feb 22 2024 MiTek Industries. Inc. Fri Mar 08 13:08:27 ID: YMF7SiPhgpmYLnbfyVLpIBzdK4P-RfC? PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC? full fill for the property of th

Page: 1



Scale = 1:40.9

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	I/defI	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.52	Vert(LL)	-0.15	8-10	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.64	Vert(CT)	-0.34	8-10	>720	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.36	Horz(CT)	0.03	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.05	8-10	>999	240	Weight: 72 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF No.2 **BOT CHORD** 2x4 SPF No.2

2x3 SPF No.2 \*Except\* 11-1,7-5:2x4 SPF WEBS

**BRACING** 

Structural wood sheathing directly applied or TOP CHORD

3-9-12 oc purlins, except end verticals, and

2-0-0 oc purlins (4-10-12 max.): 2-4.

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

bracing

REACTIONS 7=0-3-8, 11= Mechanical (size) Max Horiz 11=-36 (LC 9)

Max Uplift 7=-135 (LC 5), 11=-103 (LC 4)

Max Grav 7=990 (LC 1), 11=915 (LC 1)

(lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=-1540/189, 2-3=-1347/198,

3-4=-1337/195, 4-5=-1537/188, 5-6=0/27,

1-11=-869/125, 5-7=-944/158

**BOT CHORD** 10-11=-108/321, 8-10=-226/1618,

7-8=-136/422

**WEBS** 2-10=0/302, 3-10=-423/134, 3-8=-428/136,

4-8=0/310, 1-10=-72/1037, 5-8=-39/936

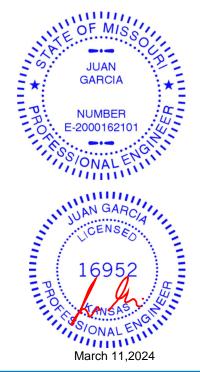
#### NOTES

**FORCES** 

- 1) Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SPF No.2.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 103 lb uplift at joint 11 and 135 lb uplift at joint 7.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



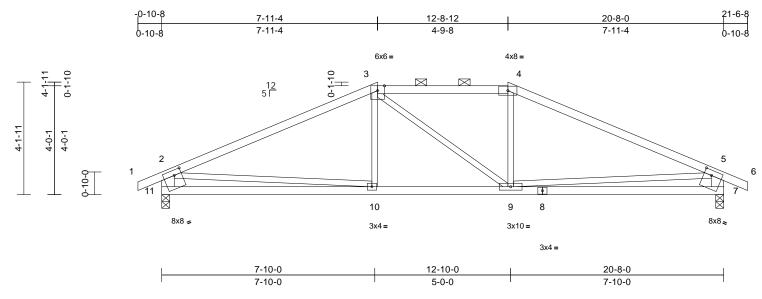
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not



Job	Truss	Truss Type	Qty	Ply	Lot 124 MN	
240615	G3	Hip	1	1	Job Reference (optional)	164133397

Run: 8 73 S. Feb 22 2024 Print: 8 730 S. Feb 22 2024 MiTek Industries. Inc. Fri Mar 08 13:08:27 ID:QPBpz6LhacjRGZO9AgmELNzdKed-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



Scale = 1:42.4

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.80	Vert(LL)	-0.10	10-11	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.42	Vert(CT)	-0.20	10-11	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.21	Horz(CT)	0.03	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.03	9-10	>999	240	Weight: 75 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF No.2 **BOT CHORD** 2x4 SPF No.2

2x3 SPF No.2 \*Except\* 11-2,7-5:2x6 SPF WEBS

**BRACING** 

TOP CHORD Structural wood sheathing directly applied or

3-4-15 oc purlins, except end verticals, and 2-0-0 oc purlins (5-2-10 max.): 3-4.

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

bracing

REACTIONS 7=0-3-8, 11=0-3-8 (size)

Max Horiz 11=42 (LC 8)

Max Uplift 7=-122 (LC 9), 11=-122 (LC 8)

Max Grav 7=987 (LC 1), 11=987 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/30, 2-3=-1404/152, 3-4=-1189/169,

4-5=-1405/152, 5-6=0/30, 2-11=-911/168,

5-7=-912/167

**BOT CHORD** 10-11=-276/731, 9-10=-62/1189, 7-9=-237/730

3-10=0/221, 3-9=-150/150, 4-9=0/221, **WEBS** 

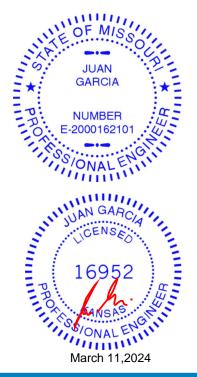
2-10=0/619, 5-9=0/620

#### NOTES

- 1) Unbalanced roof live loads have been considered for this design
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SPF No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 122 lb uplift at joint 11 and 122 lb uplift at joint 7.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



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



Job	Truss	Truss Type	Qty	Ply	Lot 124 MN	
240615	G3A	Hip	1	1	Job Reference (optional)	164133398

Run: 8.73 S Feb 22 2024 Print: 8.730 S Feb 22 2024 MiTek Industries, Inc. Fri Mar 08 13:08:27 ID:s3pumAWP04MUOweKLp?O0bzdK2z-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f Page: 1

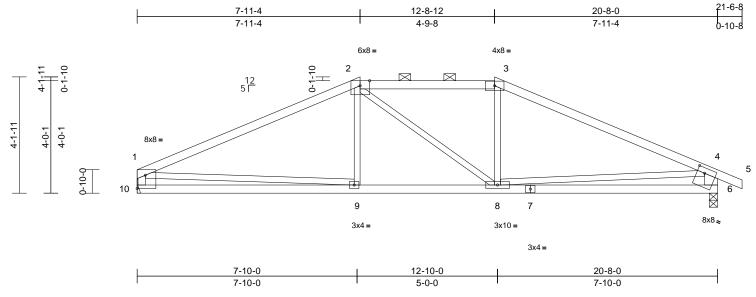


Plate Offsets (X, Y): [1:Edge,0-5-11], [2:0-4-2,Edge], [6:0-3-4,0-2-4]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.81	Vert(LL)	-0.10	9-10	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.42	Vert(CT)	-0.21	9-10	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.23	Horz(CT)	0.03	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.03	8-9	>999	240	Weight: 74 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF No.2 \*Except\* 1-2:2x4 SPF 2100F

1.8E

**BOT CHORD** 2x4 SPF No.2

2x3 SPF No.2 \*Except\* 10-1:2x4 SPF 2400F **WEBS** 

2.0E, 6-4:2x6 SPF No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or

3-4-7 oc purlins, except end verticals, and 2-0-0 oc purlins (5-1-10 max.): 2-3.

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

bracing.

REACTIONS (size) 6=0-3-8, 10= Mechanical

Max Horiz 10=-50 (LC 13)

Max Uplift 6=-122 (LC 9), 10=-97 (LC 8)

Max Grav 6=993 (LC 1), 10=911 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=-1423/153, 2-3=-1200/170,

3-4=-1417/153, 4-5=0/30, 1-10=-833/142,

4-6=-917/168

BOT CHORD 9-10=-164/550, 8-9=-66/1216, 6-8=-237/734

WEBS 2-9=0/221, 2-8=-170/140, 3-8=0/225,

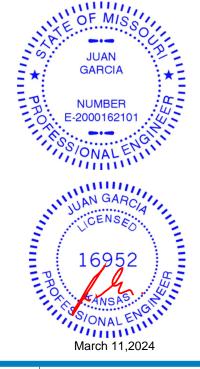
1-9=-19/681, 4-8=0/627

#### NOTES

- Unbalanced roof live loads have been considered for this design
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SPF No.2.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 97 lb uplift at joint 10 and 122 lb uplift at joint 6.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



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

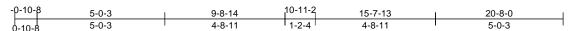
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not

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.sbcscomponents.com)

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Job	Truss	Truss Type	Qty	Ply	Lot 124 MN	
240615	G4	Hip Girder	1	2	Job Reference (optional)	164133399

Run: 8.73 E Jan 4 2024 Print: 8.730 E Jan 4 2024 MiTek Industries, Inc. Mon Mar 11 10:00:13 ID:7cJ1dLgdDu7c?iyLFrlZx3zdKeC-CHRGSmZ5m\_du\_k0CuNbYjeUm?8Wv9WLuHL\_dsNzc222 Page: 1



4x5 =

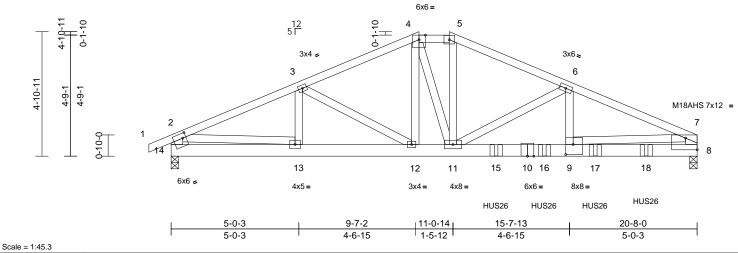


Plate Offsets (X, Y): [7:Edge,0-5-8], [9:0-3-8,0-4-12], [14:0-1-8,0-2-4]

		1	-		-							-
Loading	(psf)	Spacing	2-0-0	csı		DEFL	in	(loc)	I/defI	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.34	Vert(LL)	-0.09	9-11	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.91	Vert(CT)	-0.16	9-11	>999	240	M18AHS	142/136
BCLL	0.0*	Rep Stress Incr	NO	WB	0.46	Horz(CT)	0.03	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.06	9-11	>999	240	Weight: 210 lb	FT = 10%

#### LUMBER

WEBS

TOP CHORD 2x4 SPF No.2 **BOT CHORD** 2x6 SPF No.2

2x4 SPF No.2 \*Except\* 14-2,8-7:2x6 SP

2400F 2.0E

**BRACING** TOP CHORD

Structural wood sheathing directly applied or 4-9-15 oc purlins, except end verticals, and

2-0-0 oc purlins (6-0-0 max.): 4-5. Rigid ceiling directly applied or 10-0-0 oc

BOT CHORD

bracing

REACTIONS 8=4066/0-3-8, 14=1869/0-3-8 (lb/size)

Max Horiz 14=66 (LC 12)

Max Uplift 8=-633 (LC 9), 14=-264 (LC 8) (lb) - Maximum Compression/Maximum

**FORCES** Tension

TOP CHORD 1-2=0/30, 2-3=-3262/431, 3-4=-3228/436,

4-5=-3310/482, 5-6=-3672/496, 6-7=-6205/876, 2-14=-1747/281,

7-8=-2964/444

**BOT CHORD** 13-14=-175/709, 12-13=-405/2943,

11-12=-330/2941, 11-15=-768/5664, 10-15=-768/5664, 10-16=-768/5664, 9-16=-768/5664. 9-17=-343/1921.

17-18=-343/1921, 8-18=-343/1921 3-13=-271/101, 3-12=-129/297, 4-12=-345/108, 4-11=-230/1423

5-11=-162/1158, 6-11=-2690/496, 6-9=-247/2031, 2-13=-231/2248,

7-9=-428/3767

## NOTES

WEBS

2-ply truss to be connected together with 10d (0.131"x3") nails as follows:

Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.

Bottom chords connected as follows: 2x6 - 3 rows staggered at 0-8-0 oc.

Web connected as follows: 2x4 - 1 row at 0-9-0 oc.

- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 264 lb uplift at joint 14 and 633 lb uplift at joint 8.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 13) Use Simpson Strong-Tie HUS26 (14-10d Girder, 4-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 12-9-4 from the left end to 18-8-0 to connect truss(es) to back face of bottom chord.
- 14) Fill all nail holes where hanger is in contact with lumber.

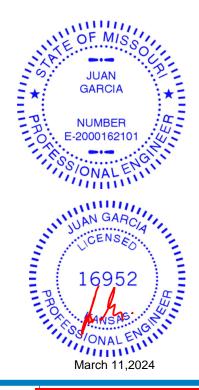
#### LOAD CASE(S) Standard

Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (lb/ft)

Vert: 1-2=-70, 2-4=-70, 4-5=-70, 5-7=-70, 8-14=-20 Concentrated Loads (lb)

Vert: 15=-895 (B), 16=-891 (B), 17=-895 (B), 18=-1358 (B)



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

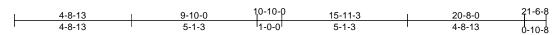
Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not

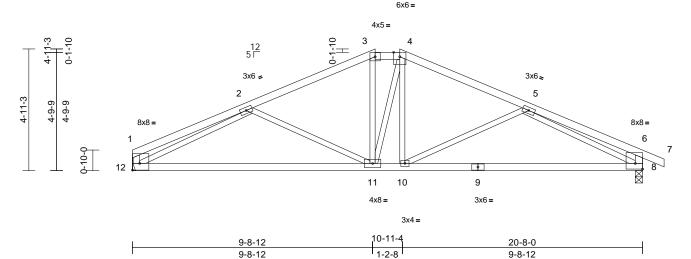


Job	Truss	Truss Type	Qty	Ply	Lot 124 MN	
240615	G5	Hip	1	1	Job Reference (optional)	164133400

Run: 8.73 S Feb 22 2024 Print: 8.730 S Feb 22 2024 MiTek Industries, Inc. Fri Mar 08 13:08:27 ID:dspL0jp47IVxum28JZyFXszdK2a-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1





Scale = 1:46.7

Plate Offsets (X, Y):	[1:Edge,0-3-4],	[6:Edge,0-2-12]
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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.37	Vert(LL)	-0.20	8-10	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.74	Vert(CT)	-0.41	8-10	>589	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.78	Horz(CT)	0.04	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.03	11	>999	240	Weight: 79 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF No.2 **BOT CHORD** 2x4 SPF No.2

2x3 SPF No.2 \*Except\* 12-1,8-6:2x4 SPF WEBS

**BRACING** 

TOP CHORD Structural wood sheathing directly applied or

4-8-3 oc purlins, except end verticals, and 2-0-0 oc purlins (5-6-0 max.): 3-4.

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

bracing

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

Max Horiz 12=-65 (LC 9)

Max Uplift 8=-137 (LC 9), 12=-113 (LC 8)

Max Grav 8=990 (LC 1), 12=915 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-377/12, 2-3=-1230/125, 3-4=-1066/147,

4-5=-1227/126, 5-6=-420/37, 6-7=0/27,

1-12=-263/53, 6-8=-365/91

**BOT CHORD** 11-12=-223/1317, 10-11=-19/1064,

8-10=-161/1303

**WEBS** 2-11=-312/208, 3-11=-33/283, 4-11=-158/171,

4-10=-14/241, 5-10=-299/204,

2-12=-1163/232, 5-8=-1107/203

# NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SPF No.2.
- 7) Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to 8) bearing plate capable of withstanding 113 lb uplift at joint 12 and 137 lb uplift at joint 8.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



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

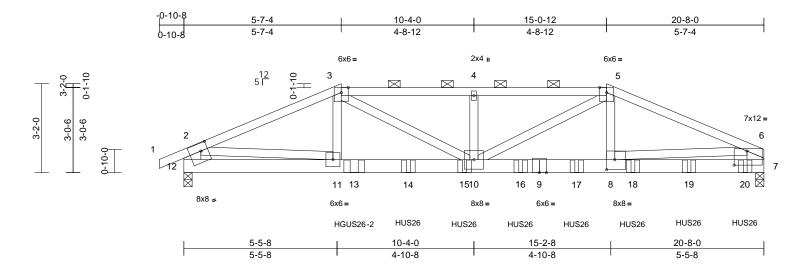
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not



Job	Truss	Truss Type	Qty	Ply	Lot 124 MN	
240615	G6	Hip Girder	1	3	Job Reference (optional)	164133401

Run: 8.73 S Feb 22 2024 Print: 8.730 S Feb 22 2024 MiTek Industries, Inc. Fri Mar 08 13:08:27 ID:oDDgjBrjJFRg?JLgYM33e2yKyAT-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1



Scale - 1:41

Plate Offsets (X, Y): [6:0-5-8,0-6-0], [8:0-3-8,0-4-4], [12:0-3-0,0-3-4]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.82	Vert(LL)	-0.18	10-11	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.99	Vert(CT)	-0.32	10-11	>747	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.68	Horz(CT)	0.04	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.13	10-11	>999	240	Weight: 307 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF No.2

BOT CHORD 2x6 SP 2400F 2.0E \*Except\* 9-7:2x6 SPF

No.2

WEBS 2x4 SPF No.2 \*Except\* 12-2,7-6:2x8 SP

2400F 2.0E

BRACING

TOP CHORD Structural wood sheathing directly applied or

5-8-3 oc purlins, except end verticals, and 2-0-0 oc purlins (5-0-8 max.): 3-5.

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

bracing.

**REACTIONS** (size) 7=0-3-8, (req. 0-4-0), 12=0-3-8

Max Horiz 12=36 (LC 8)

Max Uplift 7=-542 (LC 5), 12=-787 (LC 4) Max Grav 7=7662 (LC 1), 12=5556 (LC 1)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=0/32, 2-3=-11199/1599.

3-4=-14106/1693, 4-5=-14106/1693,

 $5\text{-}6\text{=-}11777/1016,\ 2\text{-}12\text{=-}5429/820,$ 

6-7=-5493/504

BOT CHORD 11-12=-337/2075, 10-11=-1419/10188,

8-10=-915/10715, 7-8=-217/2893

WEBS 3-11=-424/1844, 3-10=-255/4595, 4-10=-706/192, 5-10=-844/3995, 5-8=0/2511,

2-11=-1164/8270, 6-8=-709/7995

#### NOTES

 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:

Top chords connected as follows: 2x4 - 1 row at 0-6-0 oc, 2x8 - 2 rows staggered at 0-9-0 oc.

Bottom chords connected as follows: 2x6 - 3 rows staggered at 0-4-0 oc.

Web connected as follows: 2x4 - 1 row at 0-9-0 oc.

- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- WARNING: Required bearing size at joint(s) 7 greater than input bearing size.
- 9) All bearings are assumed to be SPF No.2
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 787 lb uplift at joint 12 and 542 lb uplift at joint 7.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 13) Use Simpson Strong-Tie HGUS26-2 (20-10d Girder, 8-10d Truss) or equivalent at 6-0-13 from the left end to connect truss(es) to back face of bottom chord.
- 14) Use Simpson Strong-Tie HUS26 (14-10d Girder, 6-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 8-0-0 from the left end to 20-0-0 to connect truss(es) to back face of bottom chord.
- 15) Fill all nail holes where hanger is in contact with lumber.

# LOAD CASE(S) Standard

 Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (lb/ft)

Vert: 1-2=-70, 2-3=-70, 3-5=-70, 5-6=-70, 7-12=-20 Concentrated Loads (lb)

Vert: 13=-2455 (B), 14=-1274 (B), 15=-1274 (B), 16=-1265 (B), 17=-1265 (B), 18=-1265 (B), 19=-1265 (B), 20=-1268 (B)





March 11,2024

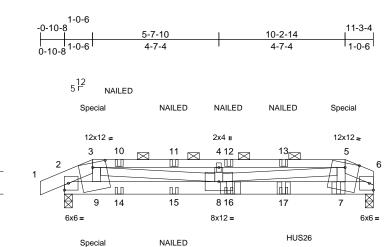
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not



Job	Truss	Truss Type	Qty	Ply	Lot 124 MN	
240615	H2	Hip Girder	1	2	Job Reference (optional)	l64133402

Run: 8 73 S. Feb 22 2024 Print: 8 730 S. Feb 22 2024 MiTek Industries. Inc. Fri Mar 08 13:08:28 ID:oDDgjBrjJFRg?JLgYM33e2yKyAT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



HGUS26-2

NAILED

Scale = 1:42

Plate Offsets (X, Y)	[3:0-6-0,0-2-0]	, [5:0-6-0,0-2-0]
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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.57	Vert(LL)	-0.17	7-8	>774	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.75	Vert(CT)	-0.30	7-8	>435	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.78	Horz(CT)	0.02	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.14	7-8	>956	240	Weight: 109 lb	FT = 10%

5-7-10

4-5-8

NAILED

1-2-2

1-2-2

#### LUMBER

TOP CHORD 2x6 SPF No.2 \*Except\* 3-5:2x4 SPF 2100F

1.8E

**BOT CHORD** 2x6 SP 2400F 2 0F 2x4 SPF No.2 WEBS

BRACING

BOT CHORD

Structural wood sheathing directly applied or TOP CHORD

5-6-9 oc purlins, except

2-0-0 oc purlins (4-7-12 max.): 3-5.

Rigid ceiling directly applied or 10-0-0 oc

bracing

REACTIONS (size) 2=0-3-8, 6=0-3-8

Max Horiz 2=16 (LC 8)

Max Uplift 2=-450 (LC 4), 6=-652 (LC 5)

Max Grav 2=2229 (LC 1), 6=3907 (LC 22)

**FORCES** (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/1, 2-3=-4556/891, 3-4=-9864/1896,

4-5=-9864/1896, 5-6=-7849/1366

BOT CHORD 2-9=-648/3349. 8-9=-693/3606.

7-8=-1093/6372, 6-7=-979/5639 WFBS

3-9=-277/1584. 3-8=-1203/6377. 4-8=-109/159, 5-8=-791/3562, 5-7=-703/4520

#### NOTES

- 1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
  - Top chords connected as follows: 2x6 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc. Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-4-0 oc
- Web connected as follows: 2x4 1 row at 0-9-0 oc. All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B),
- unless otherwise indicated. Unbalanced roof live loads have been considered for this design.

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding. This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SPF No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 652 lb uplift at joint 6 and 450 lb uplift at joint 2.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 12) Use Simpson Strong-Tie HGUS26-2 (20-10d Girder, 8-10d Truss) or equivalent at 6-0-13 from the left end to connect truss(es) to front face of bottom chord.
- 13) Use Simpson Strong-Tie HUS26 (14-10d Girder, 4-10d Truss) or equivalent spaced at 2-0-0 oc max, starting at 8-0-0 from the left end to 10-0-0 to connect truss(es) to front face of bottom chord.
- 14) Fill all nail holes where hanger is in contact with lumber.
- 15) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 16) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 107 lb down and 123 lb up at 1-0-6, and 138 lb down and 160 lb up at 10-2-14 on top chord, and 12 lb down and 17 lb up at 1-0-6 on bottom chord. The design/selection of such connection device(s) is the responsibility of

## LOAD CASE(S) Standard

HUS26

Special

111-3-4 1-2-2

NAILED

10-1-2

4-5-8

Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (lb/ft)

Vert: 1-3=-70, 3-5=-70, 5-6=-70, 2-6=-20

Concentrated Loads (lb)

Vert: 9=7 (B), 7=-1264 (F=-1278, B=14), 14=7 (B),

Page: 1





March 11,2024

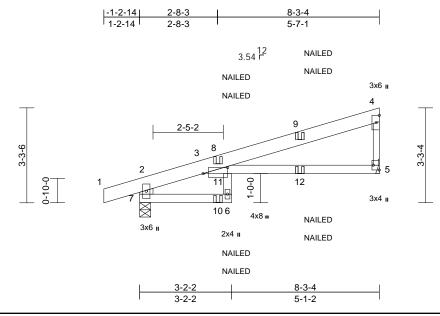
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not



Job	Truss	Truss Type	Qty	Ply	Lot 124 MN	
240615	J3	Diagonal Hip Girder	1	1	Job Reference (optional)	164133403

Run: 8.73 S Feb 22 2024 Print: 8.730 S Feb 22 2024 MiTek Industries, Inc. Fri Mar 08 13:08:28 ID:NoIcwqPn\_VH2sx6ndDyC0ozyQWS-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



Scale = 1:39.8

Plate Offsets (X, Y): [3:0-10-3,0-2-8], [5:Edge,0-2-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.67	Vert(LL)	-0.13	6	>721	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.46	Vert(CT)	-0.25	6	>375	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.02	Horz(CT)	0.10	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R		Wind(LL)	0.13	6	>728	240	Weight: 31 lb	FT = 10%

#### LUMBER

TOP CHORD 2x6 SPF No.2 **BOT CHORD** 2x4 SPF No.2

2x6 SPF No.2 \*Except\* 4-5:2x3 SPF No.2,

6-3:2x4 SPF No.2

# **BRACING**

WEBS

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

Rigid ceiling directly applied or 6-0-0 oc **BOT CHORD** 

bracing

REACTIONS (size) 5= Mechanical, 7=0-4-9

Max Horiz 7=115 (LC 5)

Max Uplift 5=-71 (LC 8), 7=-115 (LC 4) Max Grav 5=403 (LC 1), 7=505 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 2-7=-481/136, 1-2=0/29, 2-3=-137/19,

3-4=-156/19, 4-5=-291/107 6-7=-47/0, 3-5=-19/91

BOT CHORD **WEBS** 3-6=0/73

#### NOTES

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SPF No.2
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 115 lb uplift at joint 7 and 71 lb uplift at joint 5.

- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

#### LOAD CASE(S) Standard

Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

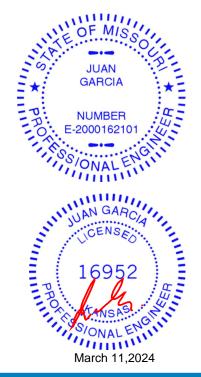
Uniform Loads (lb/ft)

Vert: 1-2=-70, 2-4=-70, 6-7=-20, 3-5=-20

Concentrated Loads (lb)

Vert: 9=-18 (F=-9, B=-9), 10=4 (F=2, B=2), 12=-59

(F=-29, B=-29)





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



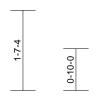
Job	Truss	Truss Type	Qty	Ply	Lot 124 MN	
240615	J4	Jack-Open	15	1	Job Reference (optional)	l64133404

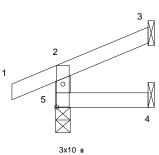
Run: 8.73 S. Feb 22 2024 Print: 8.730 S. Feb 22 2024 MiTek Industries. Inc. Fri Mar 08 13:08:28 ID: jbu4Q2qcqFnefobcSC6TCAzyQYV-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?ff

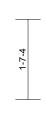
Page: 1

-0-10-8	1-10-3
0-10-8	1-10-3

12 5 Г







1-10-3

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	0.00	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	0.00	4-5	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R		Wind(LL)	0.00	4-5	>999	240	Weight: 6 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF No.2 BOT CHORD 2x4 SPF No.2 2x4 SPF No.2 WEBS

**BRACING** 

TOP CHORD Structural wood sheathing directly applied or 1-10-3 oc purlins, except end verticals. **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc

bracing.

REACTIONS (size) 3= Mechanical, 4= Mechanical, 5=0-3-8

Max Horiz 5=41 (LC 5)

Max Uplift 3=-28 (LC 8), 5=-32 (LC 4) 3=41 (LC 1), 4=30 (LC 3), 5=169 Max Grav

(LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension

TOP CHORD 2-5=-148/46, 1-2=0/27, 2-3=-31/11

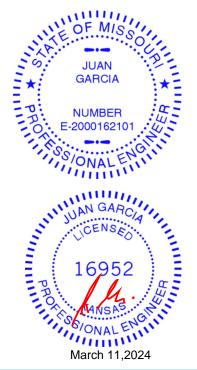
BOT CHORD 4-5=0/0

### NOTES

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SPF No.2.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 32 lb uplift at joint 5 and 28 lb uplift at joint 3.

This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard





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

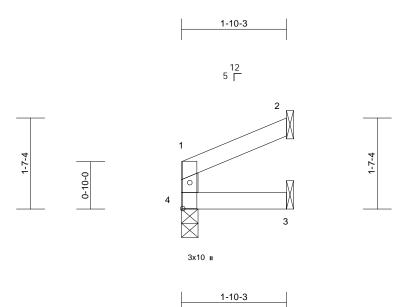
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not

besign value to use only with recks colline tools. This design is based only upon parameters shown, and is not an individual busining denipolinit, 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.sbcscomponents.com)

LEE'S'SUMNITUS MISSOURI 04/22/2024 8:28:32

Job	Truss	Truss Type	Qty	Ply	Lot 124 MN	
240615	J4A	Jack-Open	1	1	Job Reference (optional)	164133405

Run: 8.73 S. Feb 22 2024 Print: 8.730 S. Feb 22 2024 MiTek Industries. Inc. Fri Mar 08 13:08:28 ID:AEDpsViFuU?Yx6KZCOJI4SzdK6c-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:20.3

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.04	Vert(LL)	0.00	3-4	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	0.00	3-4	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R		Wind(LL)	0.00	3-4	>999	240	Weight: 5 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF No.2 BOT CHORD 2x4 SPF No.2 2x4 SPF No.2 WEBS

**BRACING** 

TOP CHORD Structural wood sheathing directly applied or 1-10-3 oc purlins, except end verticals. **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc

bracing.

REACTIONS (size) 2= Mechanical, 3= Mechanical, 4=0-3-8

Max Horiz 4=32 (LC 5) Max Uplift 2=-31 (LC 8)

Max Grav 2=55 (LC 1), 3=33 (LC 3), 4=76

(LC 1)

**FORCES** (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-4=-63/18, 1-2=-28/17

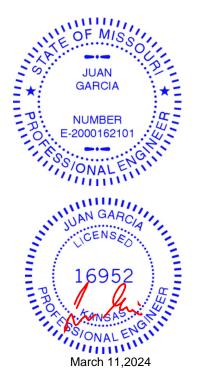
BOT CHORD 3-4=0/0

### NOTES

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SPF No.2.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 31 lb uplift at joint

This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



Page: 1

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

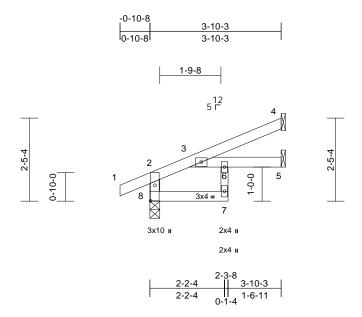
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not



Job	Truss	Truss Type	Qty	Ply	Lot 124 MN	
240615	J5	Jack-Open	2	1	Job Reference (optional)	164133406

Run: 8.73 S Feb 22 2024 Print: 8.730 S Feb 22 2024 MiTek Industries, Inc. Fri Mar 08 13:08:28 ID:mUIIZA?1IsgWy6EUqst?JLzyQYG-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:33.8

Plate Offsets	(X, Y):	[8:0-5-8,0-1-8]
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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.15	Vert(LL)	-0.01	3-6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	-0.02	3-6	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.01	Horz(CT)	0.02	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.02	3-6	>999	240	Weight: 13 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF No.2 **BOT CHORD** 2x4 SPF No.2

2x4 SPF No.2 \*Except\* 7-6:2x3 SPF No.2 WEBS

**BRACING** 

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

bracing.

REACTIONS (size) 4= Mechanical, 5= Mechanical,

8=0-3-8 Max Horiz 8=68 (LC 8)

Max Uplift 4=-48 (LC 8), 8=-26 (LC 8) Max Grav 4=105 (LC 1), 5=76 (LC 3), 8=257

(LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension

TOP CHORD 2-8=-244/51, 1-2=0/27, 2-3=-72/0, 3-4=-33/33

7-8=0/0, 3-6=0/0, 5-6=0/0 **BOT CHORD** 

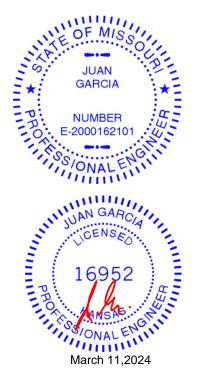
**WEBS** 6-7=0/45

#### NOTES

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SPF No.2
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 26 lb uplift at joint 8 and 48 lb uplift at joint 4.

This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



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

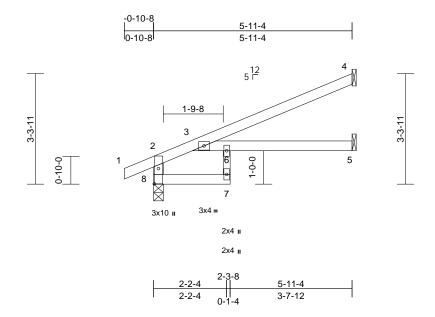
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not

a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/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.sbcscomponents.com)

LEE'S SUMMIT MISSOURI 04/22/2024 8:28:32

Job	Truss	Truss Type	Qty	Ply	Lot 124 MN	
240615	J6	Jack-Open	4	1	Job Reference (optional)	164133407

Run: 8.73 S Feb 22 2024 Print: 8.730 S Feb 22 2024 MiTek Industries, Inc. Fri Mar 08 13:08:28 ID:1hke2SliBoQp24k74gwBJMyKyAb-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:34.5

Plate Offsets	(X,	Y):	[8:0-5-8,0-1-8	3
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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.46	Vert(LL)	-0.07	5-6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.38	Vert(CT)	-0.14	5-6	>500	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.08	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.08	5-6	>854	240	Weight: 18 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF No.2 BOT CHORD 2x4 SPF No.2

WEBS 2x4 SPF No.2 \*Except\* 7-6:2x3 SPF No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 5-11-4 oc purlins, except end verticals.

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

bracing.

**REACTIONS** (size) 4= Mechanical, 5= Mechanical, 8=0-3-8

Max Horiz 8=104 (LC 8)

Max Uplift 4=-80 (LC 8), 8=-34 (LC 8) Max Grav 4=172 (LC 1), 5=111 (LC 3), 8=351

(LC 1)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 2-8=-350/68, 1-2=0/27, 2-3=-114/0,

3-4=-62/54

BOT CHORD 7-8=0/0, 3-6=0/0, 5-6=0/0

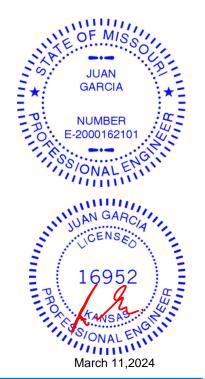
WEBS 6-7=-10/51

# NOTES

- Wind: ASCE 7-16; Vult=115mph (3-second gust)
   Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat.
   II; Exp C; Enclosed; MWFRS (envelope) exterior zone;
   cantilever left and right exposed; end vertical left and
   right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 4) All bearings are assumed to be SPF No.2.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 34 lb uplift at joint 8 and 80 lb uplift at joint 4.

 This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



Page: 1

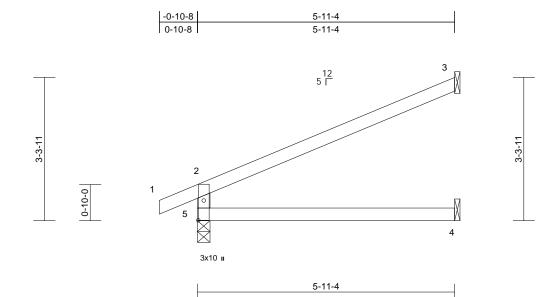
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not



Job	Truss	Truss Type	Qty	Ply	Lot 124 MN	
240615	J7	Jack-Open	18	1	Job Reference (optional)	164133408

Run: 8.73 S. Feb 22 2024 Print: 8.730 S. Feb 22 2024 MiTek Industries. Inc. Fri Mar 08 13:08:28 ID:1hke2SliBoQp24k74gwBJMyKyAb-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:26.6

Plate Offsets	(X, Y):	[5:0-5-8,0-1-8	8
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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.52	Vert(LL)	-0.05	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.31	Vert(CT)	-0.11	4-5	>613	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.04	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R		Wind(LL)	0.05	4-5	>999	240	Weight: 16 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF No.2 2x4 SPF No.2 **BOT CHORD** 2x4 SPF No.2 WEBS

**BRACING** 

TOP CHORD Structural wood sheathing directly applied or 5-11-4 oc purlins, except end verticals. **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc

bracing.

REACTIONS (size) 3= Mechanical, 4= Mechanical,

Max Horiz 5=104 (LC 8)

Max Uplift 3=-92 (LC 8), 5=-43 (LC 8) 3=180 (LC 1), 4=108 (LC 3), 5=336 Max Grav

(LC 1)

**FORCES** (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 2-5=-292/97, 1-2=0/27, 2-3=-95/54

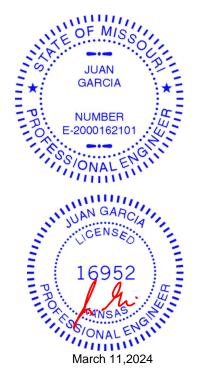
**BOT CHORD** 4-5=0/0

### NOTES

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SPF No.2.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 43 lb uplift at joint 5 and 92 lb uplift at joint 3.

7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



Page: 1

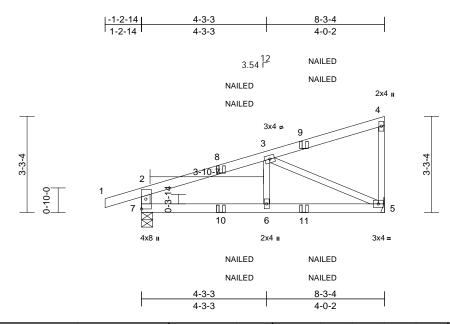
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not



Job	Truss	Truss Type	Qty	Ply	Lot 124 MN	
240615	J8	Diagonal Hip Girder	1	1	Job Reference (optional)	164133409

Run: 8.73 S. Feb 22 2024 Print: 8.730 S. Feb 22 2024 MiTek Industries. Inc. Fri Mar 08 13:08:28 ID:CPc01G3Davl1VdzP\_KSdtuzyQWu-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f Page: 1



Scale = 1:39.2

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.45	Vert(LL)	-0.03	5-6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.31	Vert(CT)	-0.05	5-6	>999	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.22	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.02	5-6	>999	240	Weight: 28 lb	FT = 10%

#### LUMBER

TOP CHORD 2x4 SPF No.2 **BOT CHORD** 2x4 SPF No.2

WEBS 2x3 SPF No.2 \*Except\* 7-2:2x4 SPF No.2

#### **BRACING**

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

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

bracing.

REACTIONS (size) 5= Mechanical, 7=0-4-9

Max Horiz 7=134 (LC 5)

Max Uplift 5=-95 (LC 8), 7=-130 (LC 4) Max Grav 5=387 (LC 1), 7=481 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 2-7=-413/145, 1-2=0/27, 2-3=-531/99, 3-4=-103/29, 4-5=-134/56

**BOT CHORD** 6-7=-127/443. 5-6=-127/443 WFBS 3-6=0/171, 3-5=-470/140

#### NOTES

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SPF No.2
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 130 lb uplift at joint 7 and 95 lb uplift at joint 5.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

- "NAILED" indicates 3-10d (0.148"x3") or 2-12d
- (0.148"x3.25") toe-nails per NDS guidlines.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

# LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15,

Plate Increase=1.15

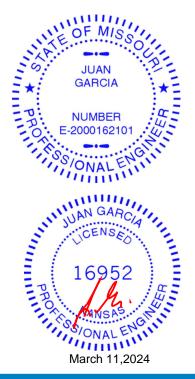
Uniform Loads (lb/ft)

Vert: 1-2=-70, 2-4=-70, 5-7=-20

Concentrated Loads (lb)

Vert: 9=-26 (F=-13, B=-13), 10=4 (F=2, B=2), 11=-28

(F=-14, B=-14)



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

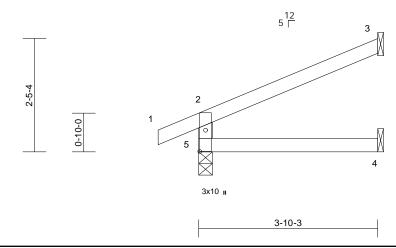


Job	Truss	Truss Type	Qty	Ply	Lot 124 MN	
240615	J9	Jack-Open	2	1	Job Reference (optional)	164133410

Run: 8.73 S Feb 22 2024 Print: 8.730 S Feb 22 2024 MiTek Industries, Inc. Fri Mar 08 13:08:28 

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Scale = 1:24.8

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	-0.01	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	-0.02	4-5	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R		Wind(LL)	0.01	4-5	>999	240	Weight: 11 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF No.2 2x4 SPF No.2 **BOT CHORD** 2x4 SPF No.2 WEBS

**BRACING** 

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

bracing.

REACTIONS (size) 3= Mechanical, 4= Mechanical, 5=0-3-8

Max Horiz 5=68 (LC 8)

Max Uplift 3=-60 (LC 8), 5=-33 (LC 8) 3=112 (LC 1), 4=68 (LC 3), 5=245 Max Grav

(LC 1)

**FORCES** (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 2-5=-215/69, 1-2=0/27, 2-3=-61/33

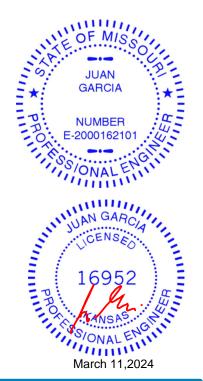
**BOT CHORD** 4-5=0/0

### NOTES

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SPF No.2
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 33 lb uplift at joint 5 and 60 lb uplift at joint 3.

This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



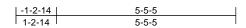
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not



Job	Truss	Truss Type	Qty	Ply	Lot 124 MN	
240615	J11	Diagonal Hip Girder	6	1	Job Reference (optional)	64133411

Run: 8.73 S. Feb 22 2024 Print: 8.730 S. Feb 22 2024 MiTek Industries. Inc. Fri Mar 08 13:08:28 ID:rzoXwxFY\_MenCOesJWofYVzdKrf-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



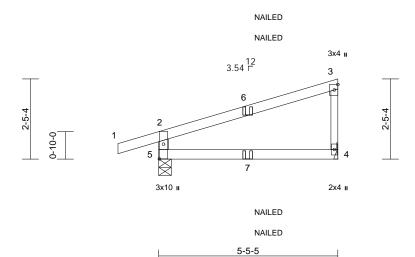


Plate Offsets (X, Y): [5:0-5-6,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.38	Vert(LL)	-0.03	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.24	Vert(CT)	-0.06	4-5	>999	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R		Wind(LL)	0.01	4-5	>999	240	Weight: 16 lb	FT = 10%

#### LUMBER

TOP CHORD 2x4 SPF No.2 **BOT CHORD** 2x4 SPF No.2

2x4 SPF No.2 \*Except\* 3-4:2x3 SPF No.2 WEBS

**BRACING** 

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

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

bracing.

REACTIONS 4= Mechanical, 5=0-4-9 (size)

Max Horiz 5=98 (LC 5)

Max Uplift 4=-48 (LC 8), 5=-102 (LC 4) Max Grav 4=219 (LC 1), 5=342 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 2-5=-302/140, 1-2=0/27, 2-3=-126/14,

3-4=-158/71

BOT CHORD 4-5=-26/49

# NOTES

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SPF No.2
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 102 lb uplift at joint 5 and 48 lb uplift at joint 4.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

- "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

#### LOAD CASE(S) Standard

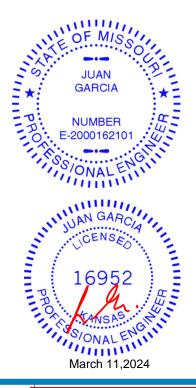
Dead + Roof Live (balanced): Lumber Increase=1.15,

Plate Increase=1.15 Uniform Loads (lb/ft)

Vert: 1-2=-70, 2-3=-70, 4-5=-20

Concentrated Loads (lb)

Vert: 7=4 (F=2, B=2)



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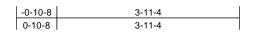
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

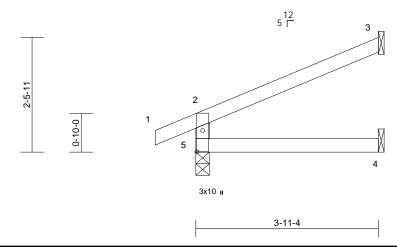
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not



Job	Truss	Truss Type	Qty	Ply	Lot 124 MN	
240615	J12	Jack-Open	24	1	Job Reference (optional)	164133412

Run: 8.73 S Feb 22 2024 Print: 8.730 S Feb 22 2024 MiTek Industries, Inc. Fri Mar 08 13:08:29 ID:Bf3?Pq61pg7UmYjZc?ar3zzdKrr-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f





Scale = 1:24.9

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	-0.01	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	-0.02	4-5	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R		Wind(LL)	0.01	4-5	>999	240	Weight: 11 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF No.2 2x4 SPF No.2 **BOT CHORD** 2x4 SPF No.2 WEBS

**BRACING** 

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

bracing.

REACTIONS (size) 3= Mechanical, 4= Mechanical, 5=0-3-8

Max Horiz 5=70 (LC 8)

Max Uplift 3=-61 (LC 8), 5=-34 (LC 8) 3=115 (LC 1), 4=70 (LC 3), 5=249 Max Grav

(LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension

TOP CHORD 2-5=-218/70, 1-2=0/27, 2-3=-63/34

**BOT CHORD** 4-5=0/0

### NOTES

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SPF No.2
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 34 lb uplift at joint 5 and 61 lb uplift at joint 3.

This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



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

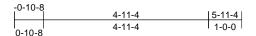
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not



Job	Truss	Truss Type	Qty	Ply	Lot 124 MN	
240615	J13	Jack-Closed	1	1	Job Reference (optional)	164133413

Run: 8.73 S Feb 22 2024 Print: 8.730 S Feb 22 2024 MiTek Industries, Inc. Fri Mar 08 13:08:29 ID:8?kjZC8XHrU1tYLdq3i3PwyKyPb-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



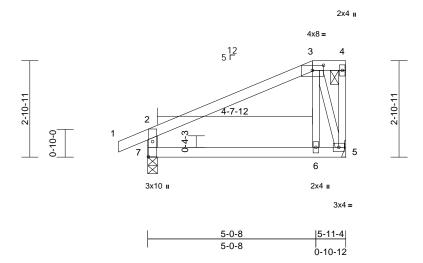


Plate Offsets (X, Y): [3:0-4-0,0-1-13], [7:0-5-8,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.25	Vert(LL)	-0.01	6-7	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	-0.03	6-7	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.01	6-7	>999	240	Weight: 21 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF No.2 **BOT CHORD** 2x4 SPF No.2

2x3 SPF No.2 \*Except\* 7-2:2x4 SPF No.2 WEBS

**BRACING** 

TOP CHORD Structural wood sheathing directly applied or

5-11-4 oc purlins, except end verticals, and

2-0-0 oc purlins: 3-4.

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

bracing.

REACTIONS (size) 5= Mechanical, 7=0-3-8

Max Horiz 7=119 (LC 5)

Max Uplift 5=-46 (LC 5), 7=-60 (LC 8) Max Grav 5=250 (LC 1), 7=334 (LC 1)

(lb) - Maximum Compression/Maximum **FORCES** 

Tension

TOP CHORD 2-7=-295/96, 1-2=0/27, 2-3=-194/27,

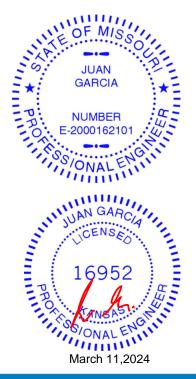
3-4=-37/28, 4-5=-39/47 BOT CHORD 6-7=-44/117, 5-6=-42/122 **WEBS** 3-6=0/225, 3-5=-368/91

#### NOTES

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SPF No.2
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 60 lb uplift at joint 7 and 46 lb uplift at joint 5.

- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



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

Job	Truss	Truss Type	Qty	Ply	Lot 124 MN	
240615	J14	Jack-Closed	1	1	Job Reference (optional)	164133414

Run: 8.73 S Feb 22 2024 Print: 8.730 S Feb 22 2024 MiTek Industries, Inc. Fri Mar 08 13:08:29 ID:8?kjZC8XHrU1tYLdq3i3PwyKyPb-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

-0-10-8	2-11-4	5-11-4
0-10-8	2-11-4	3-0-0

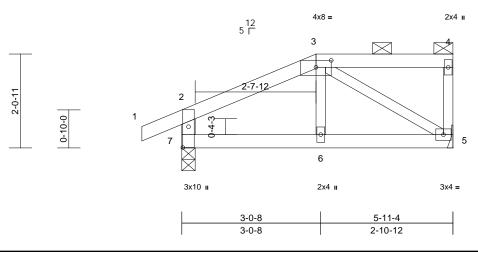


Plate Offsets (X, Y): [3:0-4-0,0-1-13], [7:0-5-8,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	-0.01	5-6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	-0.01	5-6	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.00	6	>999	240	Weight: 20 lb	FT = 10%

#### LUMBER

TOP CHORD 2x4 SPF No.2 BOT CHORD 2x4 SPF No.2

2x3 SPF No.2 \*Except\* 7-2:2x4 SPF No.2 WEBS

**BRACING** 

TOP CHORD Structural wood sheathing directly applied or

5-11-4 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.

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

bracing.

REACTIONS (size) 5= Mechanical, 7=0-3-8

Max Horiz 7=83 (LC 5)

Max Uplift 5=-50 (LC 5), 7=-56 (LC 4) Max Grav 5=250 (LC 1), 7=334 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 2-7=-284/74, 1-2=0/27, 2-3=-264/36,

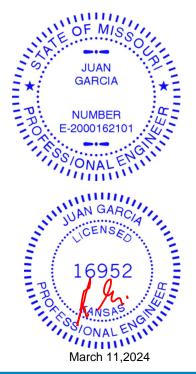
3-4=-29/22, 4-5=-103/41 BOT CHORD 6-7=-59/197, 5-6=-57/198 **WEBS** 3-6=0/108, 3-5=-215/46

#### NOTES

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding. This truss has been designed for a 10.0 psf bottom
- chord live load nonconcurrent with any other live loads. \* This truss has been designed for a live load of 20.0psf
- on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SPF No.2
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 56 lb uplift at joint 7 and 50 lb uplift at joint 5.

- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



Page: 1

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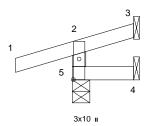
Job	Truss	Truss Type	Qty	Ply	Lot 124 MN	
240615	J15	Diagonal Hip Girder	2	1	Job Reference (optional)	164133415

Run: 8.73 S Feb 22 2024 Print: 8.730 S Feb 22 2024 MiTek Industries, Inc. Fri Mar 08 13:08:29 ID:o8D8AJbuDMypetrJ5XOODozdleU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

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12 3.54 ⊏



1-4-0

Scale = 1:25.1

Plate Offsets (X, Y): [5:0-5-6,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	0.00	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	0.00	4-5	>999	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R		Wind(LL)	0.00	4-5	>999	240	Weight: 5 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF No.2 BOT CHORD 2x4 SPF No.2 2x4 SPF No.2 WEBS

**BRACING** 

TOP CHORD Structural wood sheathing directly applied or 1-4-0 oc purlins, except end verticals. **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc

bracing.

REACTIONS (size) 3= Mechanical, 4= Mechanical,

Max Horiz 5=31 (LC 5)

Max Uplift 3=-8 (LC 8), 4=-3 (LC 1), 5=-89 (LC

3=3 (LC 19), 4=18 (LC 3), 5=207 Max Grav

(LC 1)

**FORCES** (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 2-5=-180/94, 1-2=0/27, 2-3=-23/0

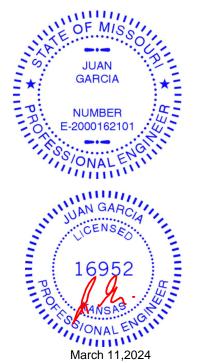
BOT CHORD 4-5=0/0

# NOTES

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SPF No.2.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 89 lb uplift at joint 5, 3 lb uplift at joint 4 and 8 lb uplift at joint 3.

7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not

besign value to use only with recks colline tools. This design is based only upon parameters shown, and is not an individual busining denipolinit, 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.sbcscomponents.com)

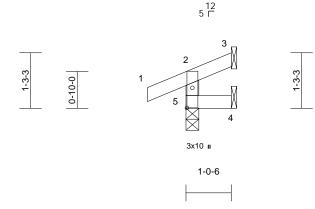
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ſ	Job	Truss	Truss Type	Qty	Ply	Lot 124 MN	
	240615	J16	Jack-Open	7	1	Job Reference (optional)	164133416

Run: 8.73 S Feb 22 2024 Print: 8.730 S Feb 22 2024 MiTek Industries, Inc. Fri Mar 08 13:08:29 ID:z?ssvGX7eWCgwyOAkGH\_\_Xzdlea-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1





Scale = 1:26.2

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	0.00	5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	0.00	5	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R		Wind(LL)	0.00	5	>999	240	Weight: 4 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF No.2 BOT CHORD 2x4 SPF No.2 WEBS 2x4 SPF No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 1-0-6 oc purlins, except end verticals.

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

bracing.

**REACTIONS** (size) 3= Mechanical, 4= Mechanical, 5=0-3-8

Max Horiz 5=32 (LC 5)

Max Uplift 3=-10 (LC 8), 4=-3 (LC 5), 5=-38

(LC 4)

Max Grav 3=3 (LC 19), 4=14 (LC 3), 5=153

(LC 1)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 2-5=-134/46, 1-2=0/27, 2-3=-24/1

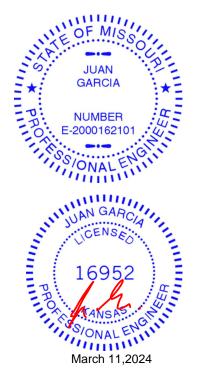
BOT CHORD 4-5=0/0

# NOTES

- Wind: ASCE 7-16; Vult=115mph (3-second gust)
   Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat.
   II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 4) All bearings are assumed to be SPF No.2.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 38 lb uplift at joint 5, 3 lb uplift at joint 4 and 10 lb uplift at joint 3.

 This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



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

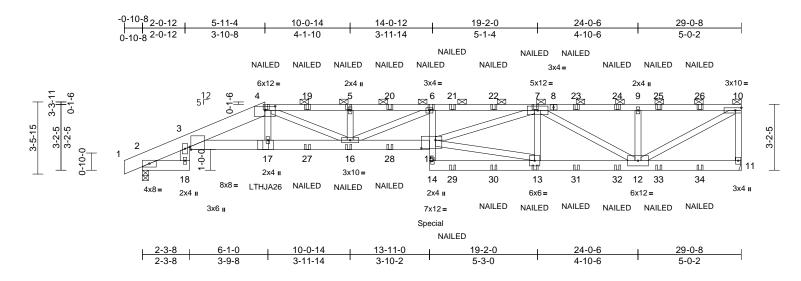
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not



Job	Truss	Truss Type	Qty	Ply	Lot 124 MN	
240615	K1	Half Hip Girder	1	2	Job Reference (optional)	164133417

Run: 8.73 S Feb 22 2024 Print: 8.730 S Feb 22 2024 MiTek Industries, Inc. Fri Mar 08 13:08:29 ID:RGQngUoaUjpOvYTilpTux?yKyAY-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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Scale = 1:55.9

Plate Offsets (X, Y):	[3:0-0-11,Edge], [4:0-6-0,0-2-6], [15:0-8-4,0-4-12]
-----------------------	-----------------------------------------------------

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.88	Vert(LL)	-0.39	15	>876	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.62	Vert(CT)	-0.71	15	>483	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.68	Horz(CT)	0.25	11	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.34	15	>999	240	Weight: 312 lb	FT = 10%

LUMBER TOP CHORD

**BOT CHORD** 

2x4 SPF No.2 \*Except\* 1-4:2x8 SP 2400F

2.0E

2x6 SPF No.2 \*Except\* 3-15:2x6 SP 2400F 2.0E

WEBS

2x4 SPF No.2 \*Except\* 18-3:2x6 SPF No.2

**BRACING** TOP CHORD

Structural wood sheathing directly applied or

6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (2-11-4 max.): 4-10.

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

bracing.

REACTIONS (size) 2=0-3-8, 11= Mechanical

Max Horiz 2=125 (LC 5)

Max Uplift 2=-461 (LC 4), 11=-519 (LC 5)

Max Grav 2=2516 (LC 1), 11=2475 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/6 2-3=-1334/235 3-4=-7584/1465

4-5=-9202/1819, 5-6=-9200/1819, 6-7=-10184/2105, 7-9=-3734/805,

9-10=-3734/805, 10-11=-2357/544

2-18=0/0, 3-17=-1480/7267,

16-17=-1484/7338, 15-16=-2204/10479, 13-14=-108/554, 12-13=-1271/6020,

11-12=-44/71

3-18=-30/210, 14-15=0/216, 6-15=0/193,

4-17=-53/812, 6-16=-1406/380, 5-16=-377/196, 4-16=-428/2028

10-12=-880/4235, 7-13=-788/349, 13-15=-1184/5564, 7-12=-2642/537,

7-15=-933/4406, 9-12=-623/308

NOTES

WEBS

**BOT CHORD** 

2-ply truss to be connected together with 10d (0.131"x3") nails as follows:

Top chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc. Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.

Web connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.

- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SPF No.2.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 519 lb uplift at joint 11 and 461 lb uplift at joint 2.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or
- 12) Use Simpson Strong-Tie LTHJA26 (LTHJA26 on 2 ply, Left Hand Hip) or equivalent at 5-11-10 from the left end to connect truss(es) to front face of bottom chord.

- 13) Fill all nail holes where hanger is in contact with lumber.
- 13) Fill all hall holes where hanger is in contact with lumber.
  14) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlings.
  15) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 68 lb down at 14-0-12 on bottom cherd. The design/selection of such connection device(s) is the responsibility of others. others.

#### GARCIA LOAD CASE(S) Standard

Dead + Roof Live (balanced): Lumber Increase=1.15, WEER. Plate Increase=1.15 NUMBER Uniform Loads (lb/ft)

Vert: 1-4=-70, 410=-70, 2018=120, 3015=-20/ CIT 11-14=-20

11-14=-20
Concentrated Loads (Ib)
Vert: 4=-102 (F), 6=-110 (F), 17=-440 (F), 5=-102 (F), 16=-65 (F), 13=-51 (F), 77=-110 (F), 116=-51 (F), 19=-102 (F), 20=-102 (F), 21=-110 (F), 22=-110 (F), 23=-110 ( 23=-110 (F), 24=-110 (F), 25=-110 (F), 26=-110 (F), 27=-65 (F), 28=-65 (F), 29=-51 (F), 30=-51 (F), 31=-51 (F), 32=-51 (F), 33=-51 (F), 34=-51 (F)



March 11,2024

MARNING - 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



Job	Truss	Truss Type	Qty	Ply	Lot 124 MN	
240615	K2	Hip	1	1	Job Reference (optional)	164133418

Run: 8.73 S Feb 22 2024 Print: 8.730 S Feb 22 2024 MiTek Industries, Inc. Fri Mar 08 13:08:29 ID:OeXX5Apq0K368rc5sEWM0QyKyAW-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1

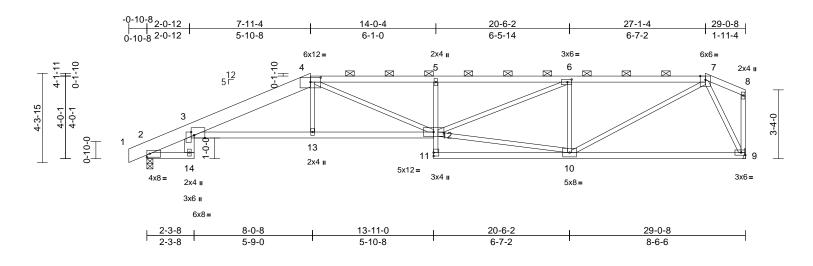


Plate Offsets (X, Y): [3:0-6-4,Edge], [3:0-1-14,0-1-11], [4:0-6-0,0-2-10], [6:0-2-8,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.78	Vert(LL)	-0.32	12-13	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.89	Vert(CT)	-0.59	12-13	>585	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.70	Horz(CT)	0.31	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.26	12-13	>999	240	Weight: 124 lb	FT = 10%

TOP CHORD 2x4 SPF No.2 \*Except\* 4-1:2x8 SP 2400F

2.0E

**BOT CHORD** 2x4 SPF No.2 \*Except\* 5-11:2x3 SPF No.2 2x3 SPF No.2 \*Except\* 14-3:2x6 SPF No.2 WEBS

**BRACING** 

BOT CHORD

TOP CHORD Structural wood sheathing directly applied or 5-1-3 oc purlins, except end verticals, and

2-0-0 oc purlins (2-4-15 max.): 4-7. Rigid ceiling directly applied or 8-4-7 oc

bracing

REACTIONS 2=0-3-8, 9= Mechanical (size)

Max Horiz 2=134 (LC 5)

Max Uplift 2=-195 (LC 4), 9=-214 (LC 5)

Max Grav 2=1368 (LC 1), 9=1294 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum

Tension

TOP CHORD

4-5=-3486/628, 5-6=-3451/625, 6-7=-2184/413, 7-8=-71/36, 8-9=-42/27,

1-2=0/0, 2-3=-693/86, 3-4=-2987/451

BOT CHORD 2-14=0/0, 3-13=-498/2825, 12-13=-493/2826, 11-12=0/100, 5-12=-426/181, 10-11=-33/167,

9-10=-153/600

WEBS 3-14=0/53, 4-13=0/228, 4-12=-191/866,

6-12=-272/1377, 6-10=-1051/312, 7-10=-289/1829, 7-9=-1333/311,

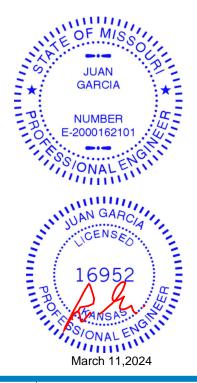
10-12=-376/2038

#### NOTES

- Unbalanced roof live loads have been considered for this design
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SPF No.2.
- 7) Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to 8) bearing plate capable of withstanding 195 lb uplift at joint 2 and 214 lb uplift at joint 9.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



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



Job	Truss	Truss Type	Qty	Ply	Lot 124 MN	
240615	K3	Hip	1	1	Job Reference (optional)	164133419

Run: 8 73 S. Feb 22 2024 Print: 8 730 S. Feb 22 2024 MiTek Industries. Inc. Fri Mar 08 13:08:30 ID:OeXX5Apq0K368rc5sEWM0QyKyAW-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1

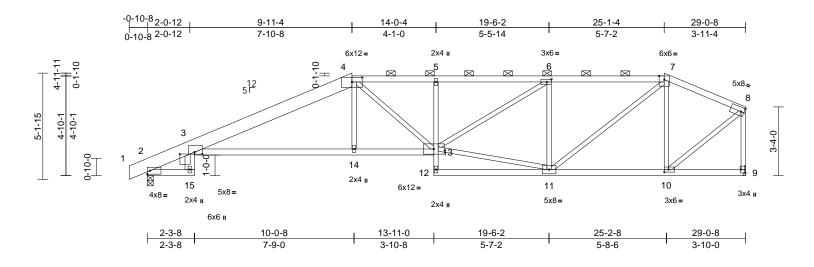


Plate Offsets (X, Y): [3:0-4-8,0-1-2], [3:0-1-1,0-8-8], [4:0-6-0,0-2-10], [6:0-2-8,0-1-8], [9:Edge,0-2-8], [10:0-2-8,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.61	Vert(LL)	-0.28	3-14	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.91	Vert(CT)	-0.59	3-14	>588	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.60	Horz(CT)	0.32	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.21	3-14	>999	240	Weight: 132 lb	FT = 10%

#### LUMBER

TOP CHORD 2x4 SPF No.2 \*Except\* 1-4:2x8 SP 2400F

2.0E

**BOT CHORD** 2x4 SPF No.2 \*Except\* 5-12:2x3 SPF No.2 2x3 SPF No.2 \*Except\* 15-3:2x6 SPF No.2 WEBS

**BRACING** 

Structural wood sheathing directly applied or TOP CHORD 5-0-0 oc purlins, except end verticals, and

2-0-0 oc purlins (3-3-11 max.): 4-7.

BOT CHORD Rigid ceiling directly applied or 9-5-1 oc bracing

REACTIONS (size) 2=0-3-8, 9= Mechanical

Max Horiz 2=132 (LC 7)

Max Uplift 2=-176 (LC 4), 9=-185 (LC 5)

Max Grav 2=1368 (LC 1), 9=1294 (LC 1) (lb) - Maximum Compression/Maximum

**FORCES** Tension

TOP CHORD 1-2=0/0, 2-3=-693/74, 3-4=-2649/358,

4-5=-2629/454, 5-6=-2622/455, 6-7=-1862/353, 7-8=-1061/196,

8-9=-1266/198

BOT CHORD 2-15=0/0, 3-14=-382/2454, 13-14=-378/2456,

12-13=0/99, 5-13=-306/131, 11-12=-7/139,

10-11=-174/960, 9-10=-42/32

WEBS 3-15=0/53, 4-14=0/284, 4-13=-106/391,

11-13=-326/1749, 6-13=-152/912, 6-11=-952/262, 7-11=-200/1192,

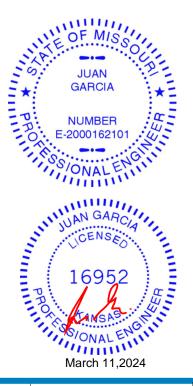
7-10=-666/180, 8-10=-184/1210

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.

- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SPF No.2.
- 7) Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 176 lb uplift at joint 2 and 185 lb uplift at joint 9.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



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



J	ob	Truss	Truss Type	Qty	Ply	Lot 124 MN	
2	40615	K4	Hip	1	1	Job Reference (optional)	164133420

Run: 8.73 S. Feb 22 2024 Print: 8.730 S. Feb 22 2024 MiTek Industries. Inc. Fri Mar 08 13:08:30 ID:sr5vJWqTneBzm?BHQx1bZdyKyAV-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1

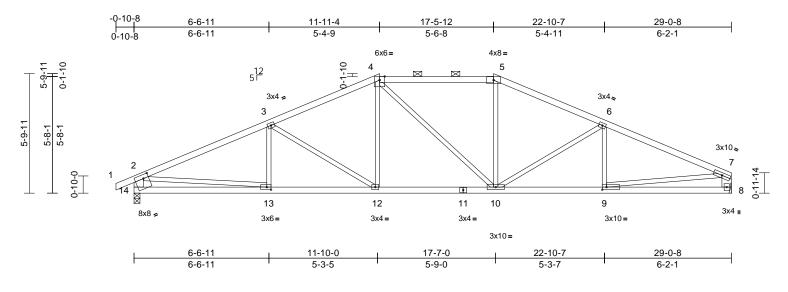


Plate Offsets (X, Y): [9:0-2-8,0-1-8], [13:0-2-8,0-1-8], [14:0-3-0,0-2-4]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.58	Vert(LL)	-0.11	12-13	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.53	Vert(CT)	-0.21	10-12	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.57	Horz(CT)	0.06	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.05	12-13	>999	240	Weight: 110 lb	FT = 10%

LUMBER

**BOT CHORD** 

TOP CHORD 2x4 SPF No.2 **BOT CHORD** 2x4 SPF No.2

2x3 SPF No.2 \*Except\* 14-2,8-7:2x6 SPF WEBS

**BRACING** 

TOP CHORD Structural wood sheathing directly applied or

3-4-10 oc purlins, except end verticals, and 2-0-0 oc purlins (3-9-8 max.): 4-5.

Rigid ceiling directly applied or 10-0-0 oc

bracing

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

Max Horiz 14=47 (LC 8)

Max Uplift 8=-4 (LC 9), 14=-17 (LC 8)

Max Grav 8=1285 (LC 1), 14=1365 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=0/30, 2-3=-2255/15, 3-4=-1870/35,

4-5=-1641/44, 5-6=-1854/35, 6-7=-2161/13,

2-14=-1294/54, 7-8=-1217/37

**BOT CHORD** 13-14=-91/534, 12-13=-4/1996

10-12=0/1656, 9-10=0/1924, 8-9=-16/282 **WEBS** 

3-13=-40/135, 3-12=-422/82, 4-12=0/353,

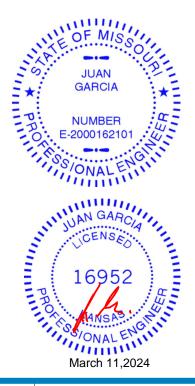
4-10=-192/158, 5-10=0/341, 6-10=-363/83, 6-9=-118/80, 2-13=0/1469, 7-9=0/1656

# NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SPF No.2.
- 7) Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to 8) bearing plate capable of withstanding 17 lb uplift at joint 14 and 4 lb uplift at joint 8.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



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



Job	Truss	Truss Type	Qty	Ply	Lot 124 MN	
240615	K5	Hip	1	1	Job Reference (optional)	164133421

Run: 8.73 S Feb 22 2024 Print: 8.730 S Feb 22 2024 MiTek Industries, Inc. Fri Mar 08 13:08:30 ID:5lcudmkRfBA5omalyFujEyyKyAd-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1

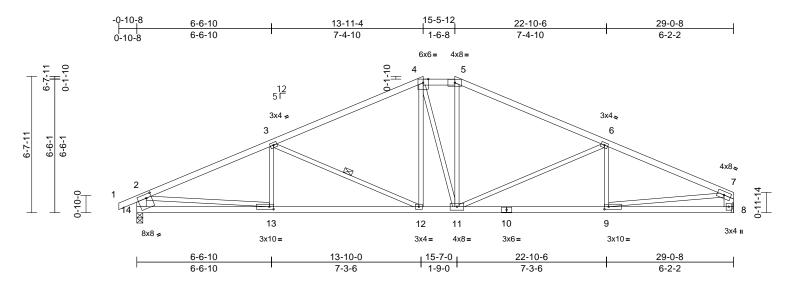


Plate Offsets (X, Y): [9:0-2-8,0-1-8], [13:0-2-8,0-1-8], [14:0-3-0,0-2-4]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.84	Vert(LL)	-0.12	12-13	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.62	Vert(CT)	-0.26	12-13	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.90	Horz(CT)	0.06	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.06	12-13	>999	240	Weight: 114 lb	FT = 10%

#### LUMBER

**BRACING** 

TOP CHORD 2x4 SPF No.2 **BOT CHORD** 2x4 SPF No.2

2x3 SPF No.2 \*Except\* 14-2,8-7:2x6 SPF WEBS

TOP CHORD

Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins

(4-4-10 max.): 4-5.

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

bracing

WEBS 1 Row at midpt 3-12

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

Max Horiz 14=56 (LC 8)

Max Uplift 8=-14 (LC 9), 14=-27 (LC 8) Max Grav 8=1285 (LC 1), 14=1365 (LC 1)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 4-5=-1491/55, 5-6=-1723/34, 6-7=-2198/35,

2-14=-1299/60, 7-8=-1222/43, 1-2=0/30,

2-3=-2293/37, 3-4=-1724/34

**BOT CHORD** 13-14=-88/450, 12-13=-36/2041,

11-12=0/1493, 9-11=0/1967, 8-9=-13/238 **WEBS** 3-13=-26/181, 3-12=-640/99, 4-12=0/345,

4-11=-240/229, 5-11=0/394, 6-11=-573/100,

6-9=-103/127, 2-13=0/1599, 7-9=0/1744

### NOTES

- Unbalanced roof live loads have been considered for
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SPF No.2.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 27 lb uplift at joint 14 and 14 lb uplift at joint 8.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



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

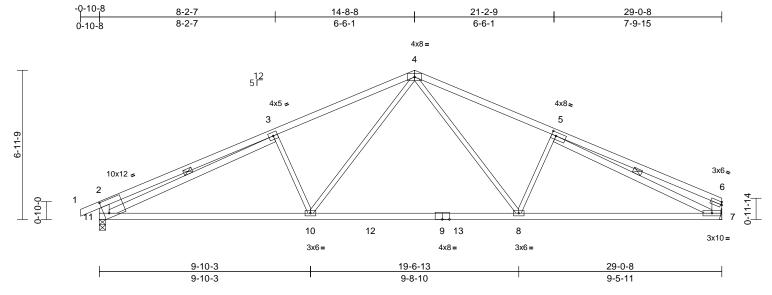
Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not



Job	Truss	Truss Type	Qty	Ply	Lot 124 MN	
240615	K6	Common	2	1	Job Reference (optional)	64133422

Run: 8.73 S Feb 22 2024 Print: 8.730 S Feb 22 2024 MiTek Industries, Inc. Fri Mar 08 13:08:30 ID:5lcudmkRfBA5omalyFujEyyKyAd-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:53.8

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.72	Vert(LL)	-0.27	8-10	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.43	8-10	>805	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.61	Horz(CT)	0.07	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.05	8-10	>999	240	Weight: 111 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF No.2 BOT CHORD 2x4 SPF 2100F 1.8E

WEBS 2x3 SPF No.2 \*Except\* 11-2,7-6:2x6 SPF

No.2, 11-3,7-5:2x4 SPF No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-2-4 oc purlins, except end verticals.

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

bracing.
WEBS 1 Row a

WEBS 1 Row at midpt 3-11, 5-7

**REACTIONS** (size) 7= Mechanical, 11=0-3-8

Max Horiz 11=60 (LC 8)

Max Uplift 7=-17 (LC 9), 11=-30 (LC 8) Max Grav 7=1352 (LC 2), 11=1417 (LC 2)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=0/30, 2-3=-907/142, 3-4=-2188/80,

4-5=-2151/80, 5-6=-530/68, 2-11=-671/123,

6-7=-412/74

BOT CHORD 10-11=-41/2063, 8-10=0/1461, 7-8=0/2012

WEBS 4-8=-35/797, 5-8=-401/161, 4-10=-33/850, 3-10=-431/162, 3-11=-1481/0, 5-7=-1798/0

### NOTES

- Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- All bearings are assumed to be SPF No.2 .

- 6) Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 30 lb uplift at joint 11 and 17 lb uplift at joint 7.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



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

Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not



Job	Truss	Truss Type	Qty	Ply	Lot 124 MN	
240615	K7	Roof Special	1	1	Job Reference (optional)	l64133423

Run: 8.73 S Feb 22 2024 Print: 8.730 S Feb 22 2024 MiTek Industries, Inc. Fri Mar 08 13:08:30 ID:ZVAGr6k4QUIyQw9xWzPyn9yKyAc-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f Page: 1

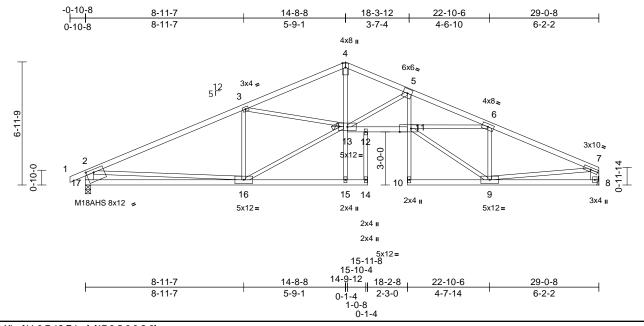


Plate Offsets (X, Y): [11:0-7-12, Edge], [17:0-5-0,0-2-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.97	Vert(LL)	-0.32	10	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.59	Vert(CT)	-0.57	10	>600	240	M18AHS	142/136
BCLL	0.0*	Rep Stress Incr	YES	WB	0.86	Horz(CT)	0.33	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.14	10	>999	240	Weight: 123 lb	FT = 10%

### LUMBER

TOP CHORD 2x4 SPF No.2

2x4 SPF No.2 \*Except\* 13-11:2x4 SPF 2100F **BOT CHORD** 

1.8E. 5-10:2x3 SPF No.2

WFBS 2x3 SPF No.2 \*Except\* 17-2:2x6 SP 2400F

2.0E, 8-7:2x6 SPF No.2

**BRACING** 

TOP CHORD Structural wood sheathing directly applied,

except end verticals.

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

bracing. JOINTS

1 Brace at Jt(s): 13

REACTIONS 8= Mechanical, 17=0-3-8 (size)

Max Horiz 17=60 (LC 10)

Max Uplift 8=-17 (LC 9), 17=-30 (LC 8) Max Grav 8=1285 (LC 1), 17=1365 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum

Tension TOP CHORD

1-2=0/30, 2-3=-2211/39, 3-4=-2794/6.

4-5=-2792/15, 5-6=-4626/0, 6-7=-2157/36,

2-17=-1280/81, 7-8=-1217/49

BOT CHORD 16-17=-173/890, 15-16=0/8, 14-15=0/0, 12-13=0/4188, 11-12=0/4192, 10-11=0/75,

5-11=0/1471, 9-10=0/40, 8-9=-22/288

12-14=-5/21, 3-16=-889/98, 3-13=0/596

13-15=0/124, 4-13=0/1800, 5-13=-1927/45,

9-11=0/2285, 6-11=0/2281, 6-9=-1418/65,

2-16=0/1038, 7-9=0/1645, 13-16=-23/2155

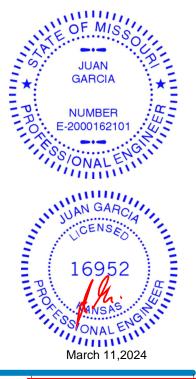
### NOTES

WEBS

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are MT20 plates unless otherwise indicated.

- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SPF No.2.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 30 lb uplift at joint 17 and 17 lb uplift at joint 8.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not

Job	Truss	Truss Type	Qty	Ply	Lot 124 MN	
240615	K8	Hip	1	1	Job Reference (optional)	164133424

Run: 8 73 S. Feb 22 2024 Print: 8 730 S. Feb 22 2024 MiTek Industries. Inc. Fri Mar 08 13:08:30 ID: d50zmbgxigwa?vUyKbmqTwyKyiG-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?ff

Page: 1

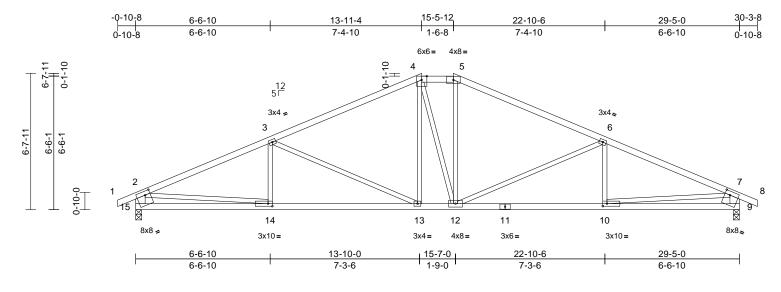


Plate Offsets (X, Y): [9:0-3-0,0-2-4], [10:0-2-8,0-1-8], [14:0-2-8,0-1-8], [15:0-3-0,0-2-4]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.85	Vert(LL)	-0.12	13-14	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.63	Vert(CT)	-0.27	13-14	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	1.00	Horz(CT)	0.06	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.08	13-14	>999	240	Weight: 116 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF No.2 **BOT CHORD** 2x4 SPF No.2

2x3 SPF No.2 \*Except\* 15-2,9-7:2x6 SPF WEBS

**BRACING** 

TOP CHORD Structural wood sheathing directly applied,

except end verticals, and 2-0-0 oc purlins

(4-3-13 max.): 4-5.

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

bracing

REACTIONS 9=0-3-8, 15=0-3-8 (size)

Max Horiz 15=86 (LC 8)

Max Uplift 9=-186 (LC 9), 15=-186 (LC 8)

Max Grav 9=1380 (LC 1), 15=1380 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/30, 2-3=-2325/281, 3-4=-1761/206,

4-5=-1529/233, 5-6=-1763/206.

6-7=-2324/281, 7-8=0/30, 2-15=-1314/218,

7-9=-1313/218

BOT CHORD 14-15=-179/453, 13-14=-276/2071,

12-13=-80/1527. 10-12=-189/2069.

9-10=-99/455

WEBS 3-14=-29/179, 3-13=-637/214, 4-13=-35/345,

4-12=-230/244, 5-12=-55/401,

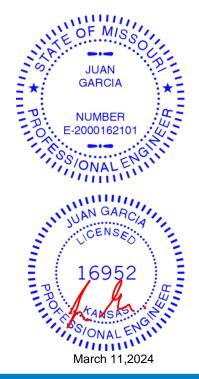
6-12=-634/214, 6-10=-31/177 2-14=-97/1625, 7-10=-91/1622

### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.

- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SPF No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 186 lb uplift at joint 15 and 186 lb uplift at joint 9.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



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



Job	Truss	Truss Type	Qty	Ply	Lot 124 MN	
240615	K9	Hip	1	1	Job Reference (optional)	l64133425

Run: 8.73 S Feb 22 2024 Print: 8.730 S Feb 22 2024 MiTek Industries, Inc. Fri Mar 08 13:08:30 ID:oDDgjBrjJFRg?JLgYM33e2yKyAT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1

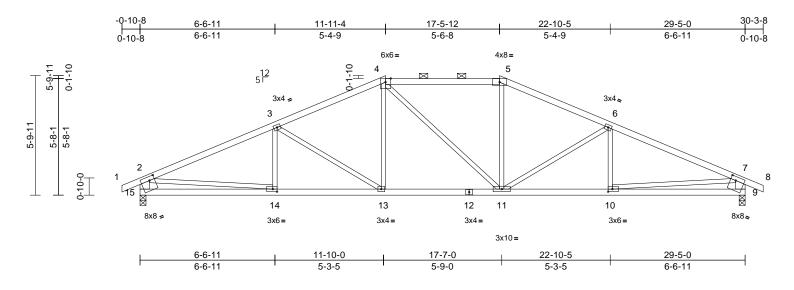


Plate Offsets (X, Y): [9:0-3-0,0-2-4], [10:0-2-8,0-1-8], [14:0-2-8,0-1-8], [15:0-3-0,0-2-4]

Loading	(psf)	Spacing	2-0-0	csı		DEFL	in	(loc)	l/defl	I /d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.59	Vert(LL)	-0.11	13-14	>999		MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.54	- ( /	-0.22	11-13	>999	240	-	137/144
	0.0*	Rep Stress Incr	YES	WB	0.54	- (- )	0.06	11-13				
BCLL		-,		l .	0.51	- (- /		40.44	n/a	n/a	144 : 14 440 !!	FT 400/
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.07	13-14	>999	240	Weight: 112 lb	FI = 10%

LUMBER

TOP CHORD 2x4 SPF No.2 **BOT CHORD** 2x4 SPF No.2

2x3 SPF No.2 \*Except\* 15-2,9-7:2x6 SPF WEBS

**BRACING** 

TOP CHORD Structural wood sheathing directly applied or

3-4-3 oc purlins, except end verticals, and 2-0-0 oc purlins (3-8-12 max.): 4-5.

Rigid ceiling directly applied or 10-0-0 oc

BOT CHORD

bracing

REACTIONS 9=0-3-8, 15=0-3-8 (size)

Max Horiz 15=72 (LC 12)

Max Uplift 9=-170 (LC 9), 15=-170 (LC 8)

Max Grav 9=1380 (LC 1), 15=1380 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension

TOP CHORD

1-2=0/30, 2-3=-2287/239, 3-4=-1905/231,

4-5=-1690/234, 5-6=-1906/231,

6-7=-2287/239, 7-8=0/30, 2-15=-1309/205,

7-9=-1309/205

BOT CHORD 14-15=-189/538, 13-14=-218/2026,

11-13=-80/1690, 10-11=-146/2025,

9-10=-122/538

WEBS 3-14=-43/132, 3-13=-419/167, 4-13=-24/352, 4-11=-177/178, 5-11=0/353, 6-11=-418/167,

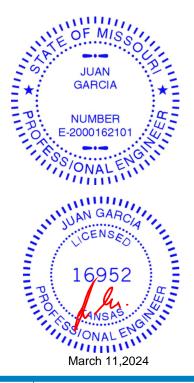
6-10=-44/132, 2-14=-71/1495, 7-10=-71/1495

### NOTES

- Unbalanced roof live loads have been considered for this design
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding. This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SPF No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 170 lb uplift at joint 15 and 170 lb uplift at joint 9.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



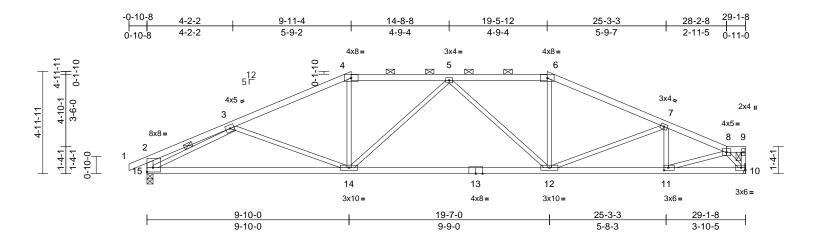
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not



Job	Truss	Truss Type	Qty	Ply	Lot 124 MN	
240615	K10	Roof Special	1	1	Job Reference (optional)	164133426

Run: 8.73 S Feb 22 2024 Print: 8.730 S Feb 22 2024 MiTek Industries, Inc. Fri Mar 08 13:08:31 ID:sr5vJWqTneBzm?BHQx1bZdyKyAV-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



Scale = 1:56.1

Plate Offsets (X, Y):	[2:Edge,0-2-8],	[11:0-2-8,0-1-8]
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	( 0		2.2.2					<i>(</i> 1 )	1/1 (1		DI 4750	anin.
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/a	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.67	Vert(LL)	-0.20	14-15	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.91	Vert(CT)	-0.41	14-15	>837	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.49	Horz(CT)	0.09	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.09	12-14	>999	240	Weight: 106 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF No.2 **BOT CHORD** 2x4 SPF No.2

2x3 SPF No.2 \*Except\* 15-2:2x4 SPF No.2 WEBS

**BRACING** 

TOP CHORD Structural wood sheathing directly applied or 2-10-0 oc purlins, except end verticals, and

2-0-0 oc purlins (4-1-1 max.): 4-6, 8-9.

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

bracing

WFBS 1 Row at midpt 3-15

REACTIONS (size) 10= Mechanical, 15=0-3-8

Max Horiz 15=67 (LC 8)

Max Uplift 10=-138 (LC 5), 15=-159 (LC 4)

Max Grav 10=1298 (LC 1), 15=1372 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=0/27, 2-3=-413/1, 3-4=-2113/258,

4-5=-1875/261, 5-6=-1841/267,

6-7=-2075/266, 7-8=-2118/236, 8-9=-38/9,

9-10=-69/19, 2-15=-343/58

**BOT CHORD** 14-15=-269/1981, 12-14=-256/2067, 11-12=-219/1949, 10-11=-116/963

**WEBS** 3-14=-139/220, 4-14=0/439, 5-14=-398/126,

5-12=-440/116, 6-12=0/424, 7-12=-147/156,

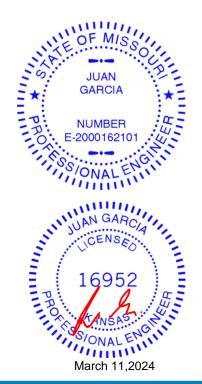
3-15=-1896/320, 7-11=-279/88 8-11=-109/1046, 8-10=-1506/178

### NOTES

- Unbalanced roof live loads have been considered for 1)
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SPF No.2.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 138 lb uplift at joint 10 and 159 lb uplift at joint 15.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



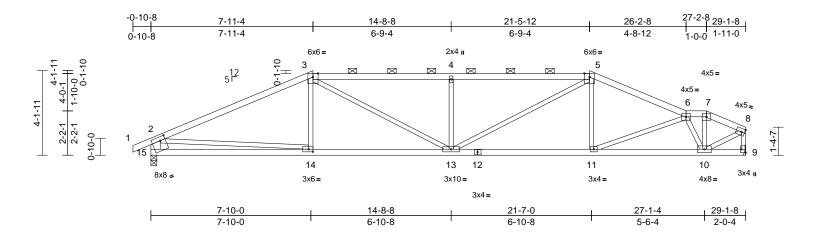
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not



Job	Truss	Truss Type	Qty	Ply	Lot 124 MN	
240615	K11	Roof Special	1	1	Job Reference (optional)	164133427

Run: 8.73 S Feb 22 2024 Print: 8.730 S Feb 22 2024 MiTek Industries, Inc. Fri Mar 08 13:08:31 ID:RGQngUoaUjpOvYTilpTux?yKyAY-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:56.4

Loading	(psf)	Spacing	2-0-0	csı		DEFL	in	(loc)	I/defl	I /d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.95	Vert(LL)	-0.16	13-14	>999		MT20	197/144
` '				1 -		- ( )					· ·	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.59	Vert(CT)	-0.29	11-13	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.47	Horz(CT)	0.07	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.12	13-14	>999	240	Weight: 106 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF No.2 **BOT CHORD** 2x4 SPF No.2

2x3 SPF No.2 \*Except\* 15-2:2x6 SPF No.2 WEBS

**BRACING** 

Structural wood sheathing directly applied, TOP CHORD

except end verticals, and 2-0-0 oc purlins

(2-2-0 max.): 3-5, 6-7.

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

bracing

REACTIONS (size) 9= Mechanical, 15=0-3-8

Max Horiz 15=52 (LC 8)

Max Uplift 9=-164 (LC 5), 15=-186 (LC 4) Max Grav 9=1294 (LC 1), 15=1374 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=0/30, 2-3=-2267/311, 3-4=-2607/446,

4-5=-2607/446, 5-6=-2166/321, 6-7=-1244/164, 7-8=-1348/167,

2-15=-1299/228, 8-9=-1268/160 BOT CHORD 14-15=-291/789, 13-14=-250/1988

11-13=-261/1956, 10-11=-247/1764,

9-10=-15/31

**WEBS** 3-14=0/228, 3-13=-157/834, 4-13=-587/229,

5-13=-157/851, 5-11=0/201, 6-11=-25/345,

6-10=-1204/203, 7-10=-49/453, 2-14=-87/1331, 8-10=-164/1373

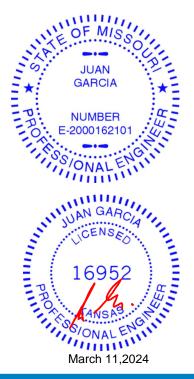
NOTES

- Unbalanced roof live loads have been considered for
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding. This truss has been designed for a 10.0 psf bottom

chord live load nonconcurrent with any other live loads.

- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SPF No.2.
- 7) Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 186 lb uplift at joint 15 and 164 lb uplift at joint 9.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



Page: 1

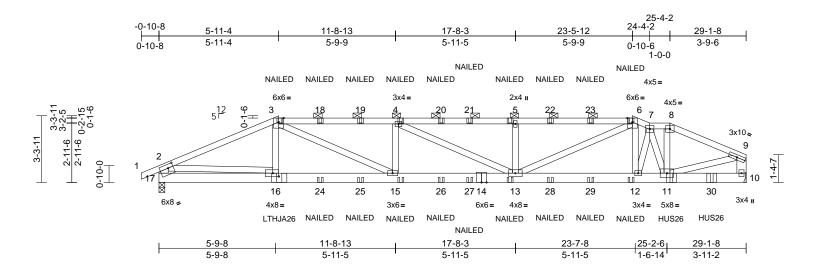
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not



Job	Truss	Truss Type	Qty	Ply	Lot 124 MN	
240615	K12	Roof Special Girder	1	2	Job Reference (optional)	l64133428

Run: 8 73 S. Feb 22 2024 Print: 8 730 S. Feb 22 2024 MiTek Industries. Inc. Fri Mar 08 13:08:31 ID:OeXX5Apq0K368rc5sEWM0QyKyAW-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f Page: 1



Scale = 1:57.1

Plate Offsets	(X, Y	):	[16:0-3-8,0-2-0], [17:0-3-0,0-2-4]
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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.93	Vert(LL)	-0.21	13-15	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.37	13-15	>922	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.41	Horz(CT)	0.05	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.18	13-15	>999	240	Weight: 279 lb	FT = 10%

LUMBER

WEBS

TOP CHORD 2x4 SPF No.2 **BOT CHORD** 2x6 SPF No.2

2x4 SPF No.2 \*Except\* 17-2,10-9:2x6 SPF

**BRACING** 

TOP CHORD Structural wood sheathing directly applied or

5-4-6 oc purlins, except end verticals, and 2-0-0 oc purlins (3-9-3 max.): 3-6, 7-8,

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

bracing

REACTIONS (size) 10= Mechanical, 17=0-3-8

Max Horiz 17=50 (LC 5)

Max Uplift 10=-528 (LC 5), 17=-516 (LC 4)

Max Grav 10=2591 (LC 1), 17=2498 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension

TOP CHORD

1-2=0/30, 2-3=-4723/1000, 3-4=-6497/1438,

4-5=-6343/1396, 5-6=-6347/1398, 6-7=-4215/896, 7-8=-3261/712,

8-9=-3521/745, 2-17=-2381/526

9-10=-2328/495

**BOT CHORD** 16-17=-287/1006, 15-16=-914/4283

13-15=-1404/6493, 12-13=-859/4074,

11-12=-803/3860, 10-11=-70/283 3-16=0/310, 3-15=-547/2532, 4-15=-812/379,

4-13=-214/67, 5-13=-828/388,

6-13=-570/2579, 6-12=-424/248 7-12=-172/798, 7-11=-1896/369,

8-11=-221/1146, 2-16=-679/3350,

9-11=-633/3039

NOTES

WFBS

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

Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.

- Web connected as follows: 2x4 1 row at 0-9-0 oc. All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B). unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SPF No.2
- Refer to girder(s) for truss to truss connections.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 516 lb uplift at joint 17 and 528 lb uplift at joint 10.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

- 13) Use Simpson Strong-Tie LTHJA26 (LTHJA26 on 2 ply, Right Hand Hip) or equivalent at 5-11-10 from the left
- end to connect truss(es) to back face of bottom chord.

  14) Use Simpson Strong-Tie HUS26 (141) of Girder, 4-10d Truss) or equivalent spaced at 2-0-0 or max starting at 25-5-0 from the left end to 27-5-0 to connect truss(es) to back face of bottom chord.
- 15) Fill all nail holes where hanger is in contact with lumber 16) "NAILED" indicates 3-10d (0.948 \(\frac{1}{2}\) or 3-12d (0.148 \(\frac{1}{2}\) x3.25 \(\frac{1}{2}\) toe-hails per NDS guidlines.
- LOAD CASE(S) Standard
- Dead + Roof Live (balanced). Lumber Increase ≠1,15, Plate Increase=105 E-2000162101

Concentrated Loads (lb) Vert: 3=-110 (B), 6=-110 (B), 16=-410 (B), 15=-51 (B), 4=-110 (B), 5=-110 (B), 13=-51 (B), 12=-51 (B), 11=-230 (B), 18=-110 (B), 19=-110 (B), 20=-110 (B), 21=-110 (B), 22=-110 (B), 23=-110 (B), 24=-51 (B), 25=-51 (B), 26=-51 (B), 27=-51 (B), 28=-51 (B),

29=-51 (B), 30=-230 (B)



March 11,2024

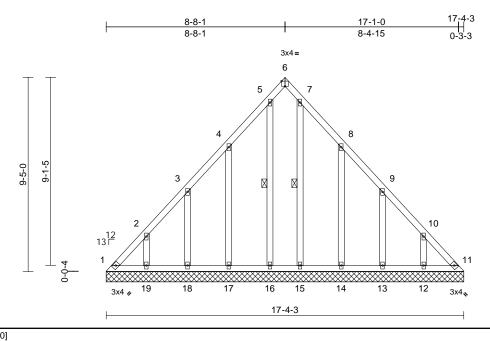
MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not



Job	Truss	Truss Type	Qty	Ply	Lot 124 MN	
240615	LAY2	Lay-In Gable	1	1	Job Reference (optional)	164133429

Run: 8.73 S. Feb 22 2024 Print: 8.730 S. Feb 22 2024 MiTek Industries. Inc. Fri Mar 08 13:08:31 ID:9vTbYFfJxMojOlvmmtEbxiyKyiH-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:55.9

Plate Offsets (X,	Y):	[6:Edge,0-3-0	)
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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.11	Horiz(TL)	0.01	11	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 92 lb	FT = 10%

LUMBER TOP CHORD 2x4 SPF No.2

**BOT CHORD** 2x4 SPF No.2 2x4 SPF No.2 OTHERS

**BRACING** 

TOP CHORD Structural wood sheathing directly applied or

6-0-0 oc purlins. **BOT CHORD** 

Rigid ceiling directly applied or 10-0-0 oc

bracing.

WEBS 1 Row at midpt 5-16, 7-15

REACTIONS (size) 1=17-4-3, 11=17-4-3, 12=17-4-3, 13=17-4-3, 14=17-4-3, 15=17-4-3,

16=17-4-3, 17=17-4-3, 18=17-4-3,

19=17-4-3

Max Horiz 1=242 (LC 5)

Max Uplift 1=-110 (LC 6), 11=-81 (LC 7),

12=-131 (LC 9), 13=-125 (LC 9), 14=-153 (LC 9), 16=-22 (LC 5),

17=-149 (LC 8), 18=-126 (LC 8),

19=-131 (LC 8) Max Grav 1=270 (LC 8), 11=251 (LC 9),

12=208 (LC 16), 13=203 (LC 16),

14=217 (LC 16), 15=137 (LC 16),

16=161 (LC 15), 17=214 (LC 15), 18=203 (LC 15), 19=207 (LC 15)

FORCES

(lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=-382/209, 2-3=-259/161, 3-4=-131/112,

4-5=-106/105, 5-6=-50/71, 6-7=-46/67, 7-8=-75/77, 8-9=-112/75, 9-10=-233/122,

10-11=-357/170

**BOT CHORD** 1-19=-116/268, 18-19=-116/268,

17-18=-116/268, 16-17=-116/268 15-16=-116/268, 14-15=-116/268,

13-14=-116/268, 12-13=-116/268,

11-12=-116/268

**WEBS** 

2-19=-162/149, 3-18=-165/151, 4-17=-172/174, 5-16=-128/42,

10-12=-162/149, 9-13=-164/150,

8-14=-176/177, 7-15=-103/9

### NOTES

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

Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SPF No.2.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 110 lb uplift at joint 1, 81 lb uplift at joint 11, 131 lb uplift at joint 19, 126 lb uplift at joint 18, 149 lb uplift at joint 17, 22 lb uplift at joint 16, 131 lb uplift at joint 12, 125 lb uplift at joint 13 and 153 lb uplift at joint 14.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



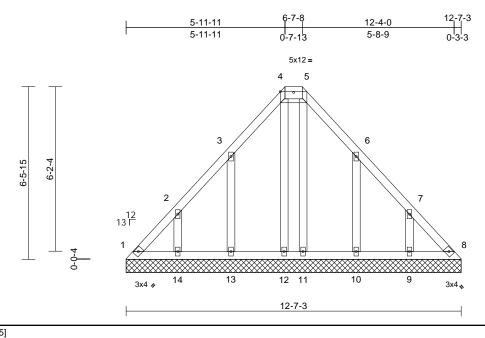
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not



Job	Truss	Truss Type	Qty	Ply	Lot 124 MN	
240615	LAY3	Lay-In Gable	1	1	Job Reference (optional)	164133430

Run: 8.73 S Feb 22 2024 Print: 8.730 S Feb 22 2024 MiTek Industries, Inc. Fri Mar 08 13:08:31 ID:LDGJfTM8h0uSwkC3JHOhwUzdKnf-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



Scale = 1:43.3

Plate Offsets (X	(, Y):	[4:0-6-0	,0-0-5
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Loading	(psf)	Spacing	2-0-0	csı		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.06	Horiz(TL)	0.00	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 60 lb	FT = 10%

2x4 SPF No.2 \*Except\* 4-5:2x6 SPF No.2 TOP CHORD **BOT CHORD** 2x4 SPF No.2

2x4 SPF No.2 OTHERS

**BRACING** 

Structural wood sheathing directly applied or TOP CHORD

6-0-0 oc purlins, except

2-0-0 oc purlins (6-0-0 max.): 4-5.

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

bracing.

REACTIONS (size) 1=12-7-3, 8=12-7-3, 9=12-7-3,

10=12-7-3, 11=12-7-3, 12=12-7-3,

13=12-7-3, 14=12-7-3 Max Horiz 1=164 (LC 5)

Max Uplift

1=-63 (LC 6), 8=-29 (LC 7), 9=-130 (LC 9), 10=-135 (LC 9), 12=-18 (LC 5), 13=-136 (LC 8), 14=-130 (LC 8)

1=132 (LC 17), 8=115 (LC 18), Max Grav

9=204 (LC 16), 10=218 (LC 16), 11=111 (LC 17), 12=127 (LC 18),

13=219 (LC 15), 14=204 (LC 15)

**FORCES** (lb) - Maximum Compression/Maximum

Tension 1-2=-188/145, 2-3=-129/99, 3-4=-104/144,

4-5=-31/117, 5-6=-85/119, 6-7=-94/54,

7-8=-158/99

1-14=-68/133, 13-14=-68/133, BOT CHORD

12-13=-68/133, 11-12=-68/133,

10-11=-68/133, 9-10=-68/133, 8-9=-68/133 WEBS 2-14=-159/148, 3-13=-178/162,

4-12=-102/41, 7-9=-160/148, 6-10=-177/162

5-11=-85/8

### NOTES

TOP CHORD

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

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1. Provide adequate drainage to prevent water ponding.
- All plates are 2x4 MT20 unless otherwise indicated. 5)
- 6) Gable requires continuous bottom chord bearing.
- 7) Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 10) All bearings are assumed to be SPF No.2.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 63 lb uplift at joint 1, 29 lb uplift at joint 8, 130 lb uplift at joint 14, 136 lb uplift at joint 13, 18 lb uplift at joint 12, 130 lb uplift at joint 9 and 135 lb uplift at joint 10.
- 12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



MARNING - 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

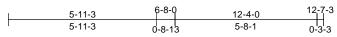
a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing 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.sbcscomponents.com)

LEE'S'SUMNITUS MISSOURI 04/22/2024 8:28:33

Job	Truss	Truss Type	Qty	Ply	Lot 124 MN	
240615	LAY4	Lay-In Gable	1	1	Job Reference (optional)	l64133431

Run: 8.73 S Feb 22 2024 Print: 8.730 S Feb 22 2024 MiTek Industries, Inc. Fri Mar 08 13:08:32 ID:UOkk2KOdDJIKu1libZMLQhzdK5i-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1





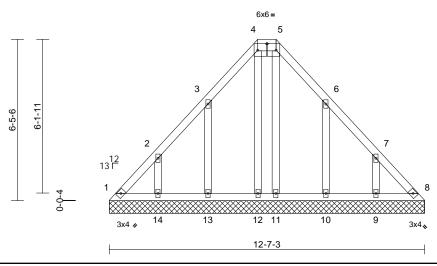


Plate Offsets (X, Y): [4:0-4-4,0-3-1], [5:0-4-4,0-3-1]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.06	Horiz(TL)	0.00	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 60 lb	FT = 10%

### LUMBER

2x4 SPF No.2 \*Except\* 4-5:2x6 SPF No.2 TOP CHORD **BOT CHORD** 2x4 SPF No.2

2x4 SPF No.2 **OTHERS** 

**BRACING** 

**BOT CHORD** 

TOP CHORD Structural wood sheathing directly applied or

6-0-0 oc purlins, except

2-0-0 oc purlins (6-0-0 max.): 4-5.

Rigid ceiling directly applied or 10-0-0 oc

bracing.

REACTIONS (size) 1=12-7-3, 8=12-7-3, 9=12-7-3,

10=12-7-3, 11=12-7-3, 12=12-7-3,

13=12-7-3, 14=12-7-3

Max Horiz 1=163 (LC 5)

1=-62 (LC 6), 8=-28 (LC 7), 9=-131 (LC 9), 10=-133 (LC 9), 12=-18 (LC Max Uplift

5), 13=-134 (LC 8), 14=-130 (LC 8)

Max Grav 1=132 (LC 17), 8=115 (LC 18),

9=205 (LC 16), 10=216 (LC 16), 11=111 (LC 17), 12=128 (LC 18),

13=217 (LC 15), 14=205 (LC 15) (lb) - Maximum Compression/Maximum

**FORCES** Tension

TOP CHORD

1-2=-187/144, 2-3=-128/98, 3-4=-102/143,

4-5=-31/116, 5-6=-84/119, 6-7=-93/53,

7-8=-157/98

**BOT CHORD** 1-14=-68/132, 13-14=-68/132

12-13=-68/132, 11-12=-68/132,

10-11=-68/132, 9-10=-68/132, 8-9=-68/132

2-14=-160/148, 3-13=-176/160, WEBS

4-12=-102/41, 7-9=-160/149, 6-10=-175/159

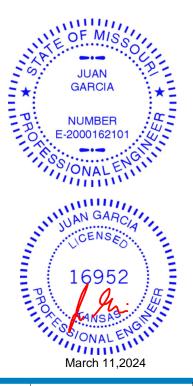
5-11=-85/8

### NOTES

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

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Provide adequate drainage to prevent water ponding. All plates are 2x4 MT20 unless otherwise indicated. 5)
- 6) Gable requires continuous bottom chord bearing.
- 7) Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 10) All bearings are assumed to be SPF No.2.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 62 lb uplift at joint 1, 28 lb uplift at joint 8, 130 lb uplift at joint 14, 134 lb uplift at joint 13, 18 lb uplift at joint 12, 131 lb uplift at joint 9 and 133 lb uplift at joint 10.
- 12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



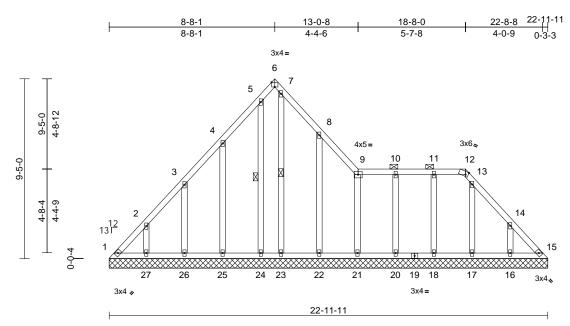
MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not



Jo	b	Truss	Truss Type	Qty	Ply	Lot 124 MN	
24	10615	LAY5	Lay-In Gable	1	1	Job Reference (optional)	164133432

Run: 8.73 S Feb 22 2024 Print: 8.730 S Feb 22 2024 MiTek Industries, Inc. Fri Mar 08 13:08:32 ID:Vtl0FomKy6ZgfEJKdORQsayKyAa-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:60.3

**FORCES** 

Plate Offsets (X, Y):	[6:Edge,0-3-0], [12:0-1-10,Edge]
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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.14	Horiz(TL)	0.01	15	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 120 lb	FT = 10%

1-2=-342/231, 2-3=-218/183, 3-4=-145/134,

4-5=-121/176, 5-6=-55/138, 6-7=-34/67,

DCDL		10.0	Code	ır
LUMBER				
TOP CHORD	2x4 SPF I	No.2		
BOT CHORD	2x4 SPF I	No.2		
OTHERS	2x4 SPF I	No.2		
BRACING				
TOP CHORD	Structura	wood shea	athing directly applied	or
		ourlins, exc	0 , 11	
	2-0-0 oc	ourlins (6-0	-0 max.): 9-12.	
BOT CHORD	Rigid ceil	ing directly	applied or 10-0-0 oc	
	bracing.			
WEBS	1 Row at	midpt	5-24, 7-23	
REACTIONS	(size)	1=22-11-1	1, 15=22-11-11,	
		16=22-11-	-11, 17=22-11-11,	
		18=22-11-	-11, 20=22-11-11,	
			·11, 22=22-11-11,	
			·11, 24=22-11-11,	
			-11, 26=22-11-11,	
		27=22-11-		
	Max Horiz	,	,	
	Max Uplift		C 6), 15=-65 (LC 7),	
			LC 9), 17=-136 (LC 9)	),
			C 9), 20=-41 (LC 5),	
			C 9), 22=-155 (LC 9), C 5), 25=-146 (LC 8),	
			LC 8), 25=-146 (LC 6), LC 8), 27=-131 (LC 8)	
	Max Grav		8), 15=197 (LC 9),	,
	wax Olav		.C 16), 17=190 (LC 16	8)
			.C 22), 20=187 (LC 1)	
			.C 1), 22=230 (LC 16)	
			.C 18), 24=159 (LC 1	
			.C 15), 26=203 (LC 1	
		27=207 (L	C 15)	

(lb) - Maximum Compression/Maximum

7-8=-79/155, 8-9=-74/59, 9-10=-40/34,
10-11=-39/34, 11-12=-39/34, 12-13=-65/35,
13-14=-158/98, 14-15=-283/148

BOT CHORD 1-27=-102/219, 26-27=-102/219,
25-26=-102/219, 24-25=-102/219,
23-24=-102/219, 22-23=-102/219,
21-22=-102/219, 20-21=-102/218,
18-20=-102/218, 17-18=-102/218,
16-17=-102/218, 15-16=-102/218

WEBS 2-27=-162/149, 3-26=-165/152.

4-25=-172/170, 5-24=-130/50, 7-23=-127/0, 14-16=-168/151, 13-17=-151/161, 11-18=-138/65, 10-20=-147/65, 9-21=-137/53, 8-22=-188/180

### NOTES

TOP CHORD

- Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) Provide adequate drainage to prevent water ponding.
- 5) All plates are 2x4 MT20 unless otherwise indicated.
- 6) Gable requires continuous bottom chord bearing.
- 7) Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 10) All bearings are assumed to be SPF No.2.

11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 126 lb uplift at joint 1, 65 lb uplift at joint 15, 131 lb uplift at Joint 27, 127 lb uplift at joint 26, 146 lb uplift at joint 25, 33 lb uplift at joint 24, 133 lb uplift at joint 24, 133 lb uplift at joint 24, 136 lb uplift at joint 17, 42 lb uplift at joint 18,41 lb uplift at joint 20, 30 lb uplift at joint 21 and 155 lb uplift at joint 22.
12) This truss is designed in accordance with the 2018

Page: 1

- 12) This truss is designed in accordance with the 2018 International Residential Code Sections R502.11, 1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 13) Graphical purint representation does not depict the size or the orientation of the purint along the top and of bottom chord.

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LOAD CASE(S) Standard



March 11,2024

MARNING - 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

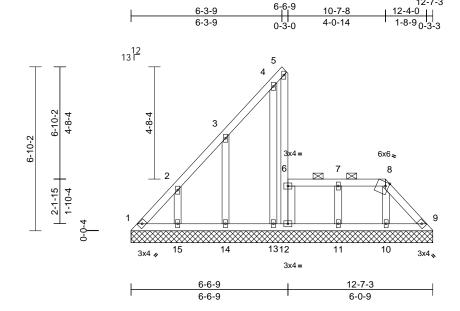


Job	Truss	Truss Type	Qty	Ply	Lot 124 MN	
240615	LAY6	Lay-In Gable	1	1	Job Reference (optional)	164133433

Run: 8.73 S. Feb 22 2024 Print: 8.730 S. Feb 22 2024 MiTek Industries. Inc. Fri Mar 08 13:08:32 ID:IfJhugTxuPCjsIQOXLpd3czdJLr-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

12-7-3

Page: 1



Scale = 1:48.1

Plate Offsets (X, Y): [8:0-1-10,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.06	Horiz(TL)	0.00	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 57 lb	FT = 10%

### LUMBER

TOP CHORD 2x4 SPF No.2 **BOT CHORD** 2x4 SPF No.2 2x4 SPF No.2 WEBS 2x4 SPF No.2 **OTHERS** 

### **BRACING**

TOP CHORD Structural wood sheathing directly applied or

6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-12, 6-8.

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

bracing.

REACTIONS (size) 1=12-7-3, 9=12-7-3, 10=12-7-3, 11=12-7-3, 12=12-7-3, 13=12-7-3,

14=12-7-3, 15=12-7-3

1=335 (LC 8) Max Horiz

Max Uplift 1=-41 (LC 6), 9=-130 (LC 9), 10=-39 (LC 5), 11=-43 (LC 9),

12=-39 (LC 9), 13=-117 (LC 8) 14=-141 (LC 8), 15=-128 (LC 8)

Max Grav 1=301 (LC 8), 9=140 (LC 16), 10=154 (LC 18), 11=207 (LC 1),

12=87 (LC 22), 13=132 (LC 15), 14=217 (LC 15), 15=205 (LC 15)

**FORCES** (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-425/116 2-3=-304/83 3-4=-182/84

4-5=-78/51, 6-12=-69/45, 5-6=-15/22, 6-7=-97/148, 7-8=-98/147, 8-9=-139/170

**BOT CHORD** 1-15=-32/47, 14-15=-32/47, 13-14=-32/47, 12-13=-32/47, 11-12=-71/70, 10-11=-71/70,

9-10=-72/71

2-15=-160/145, 3-14=-177/167,

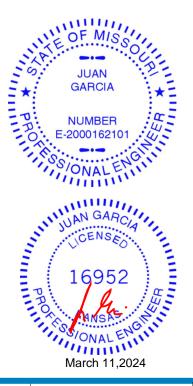
4-13=-99/138, 8-10=-114/67, 7-11=-165/70

### WEBS NOTES

Unbalanced roof live loads have been considered for this design.

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1. Provide adequate drainage to prevent water ponding.
- All plates are 2x4 MT20 unless otherwise indicated.
- 6) Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 10) All bearings are assumed to be SPF No.2.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 41 lb uplift at joint 1, 39 lb uplift at joint 12, 130 lb uplift at joint 9, 128 lb uplift at joint 15, 141 lb uplift at joint 14, 117 lb uplift at joint 13, 39 lb uplift at joint 10 and 43 lb uplift at joint 11.
- 12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



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

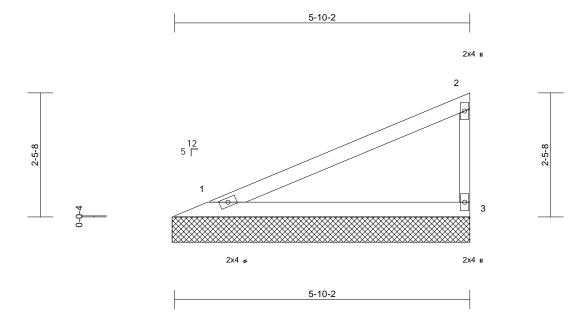
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not

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.sbcscomponents.com)

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Job	Truss	Truss Type	Qty	Ply	Lot 124 MN	
240615	V6	Valley	1	1	Job Reference (optional)	l64133434

Run: 8.73 S Feb 22 2024 Print: 8.730 S Feb 22 2024 MiTek Industries, Inc. Fri Mar 08 13:08:32 ID:F?QpQKt6HqkA\_dmv?WIOnyzdKs8-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



Scal	le	=	1	:22	3.

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.49	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.27	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 15 lb	FT = 10%

### LUMBER

TOP CHORD 2x4 SPF No.2 2x4 SPF No.2 **BOT CHORD** 2x3 SPF No.2 WEBS

### **BRACING**

TOP CHORD Structural wood sheathing directly applied or 5-10-12 oc purlins, except end verticals.

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

bracing.

REACTIONS (size) 1=5-10-12, 3=5-10-12

Max Horiz 1=92 (LC 5)

Max Uplift 1=-33 (LC 8), 3=-52 (LC 8) Max Grav 1=227 (LC 1), 3=227 (LC 1)

**FORCES** 

(lb) - Maximum Compression/Maximum Tension

TOP CHORD

1-2=-82/54, 2-3=-176/82

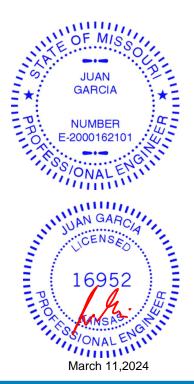
BOT CHORD 1-3=-30/23

### NOTES

- Wind: ASCE 7-16; Vult=115mph (3-second gust) 1) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable or consult qualified building designer as per ANSI/TPI 1.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf 6) on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SPF No.2 .
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 33 lb uplift at joint 1 and 52 lb uplift at joint 3.

9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



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

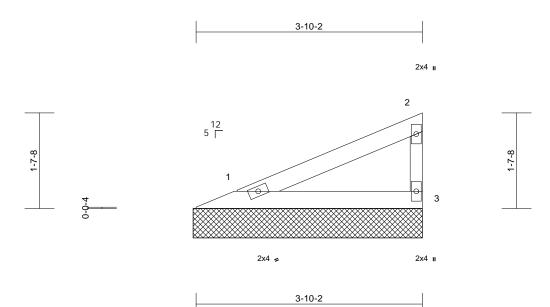
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not



Job	Truss	Truss Type	Qty	Ply	Lot 124 MN	
240615	V7	Valley	2	1	Job Reference (optional)	164133435

Run: 8.73 S. Feb 22 2024 Print: 8.730 S. Feb 22 2024 MiTek Industries. Inc. Fri Mar 08 13:08:32 ID:7mfKFiwdL3EcTE4gELpKyozdKs4-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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Scale = 1:19.6

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.16	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 9 lb	FT = 10%

### LUMBER

TOP CHORD 2x4 SPF No.2 2x4 SPF No.2 **BOT CHORD** 2x3 SPF No.2 WEBS

### **BRACING**

TOP CHORD Structural wood sheathing directly applied or 3-10-12 oc purlins, except end verticals. BOT CHORD Rigid ceiling directly applied or 10-0-0 oc

bracing.

REACTIONS (size) 1=3-10-12, 3=3-10-12

Max Horiz 1=56 (LC 5)

Max Uplift 1=-20 (LC 8), 3=-31 (LC 8) Max Grav 1=137 (LC 1), 3=137 (LC 1) (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=-50/33, 2-3=-106/49

BOT CHORD 1-3=-18/14

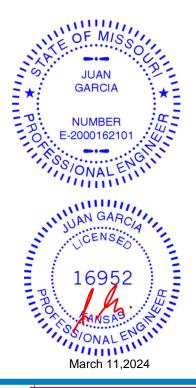
### NOTES

**FORCES** 

- Wind: ASCE 7-16; Vult=115mph (3-second gust) 1) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable or consult qualified building designer as per ANSI/TPI 1.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf 6) on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SPF No.2 .
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 20 lb uplift at joint 1 and 31 lb uplift at joint 3.

9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



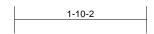
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not

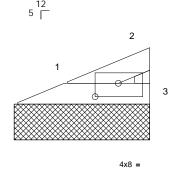


Job	Truss	Truss Type	Qty	Ply	Lot 124 MN	
240615	V8	Valley	2	1	Job Reference (optional)	164133436

Run: 8.73 S Feb 22 2024 Print: 8.730 S Feb 22 2024 MiTek Industries, Inc. Fri Mar 08 13:08:32 ID:WZyUxL4Chseym7cWzV5DwFzdKvl-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1









1-10-2

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.02	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.01	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 4 lb	FT = 10%

### LUMBER

TOP CHORD 2x4 SPF No.2 BOT CHORD 2x4 SPF No.2 2x3 SPF No.2 WEBS

**BRACING** 

TOP CHORD Structural wood sheathing directly applied or 1-10-12 oc purlins, except end verticals.

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

bracing.

REACTIONS 1=1-10-12, 3=1-10-12 (size) Max Horiz 1=19 (LC 5)

Max Uplift 1=-7 (LC 8), 3=-11 (LC 8)

Max Grav 1=47 (LC 1), 3=47 (LC 1) (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=-17/11, 2-3=-36/17

**BOT CHORD** 1-3=-6/5

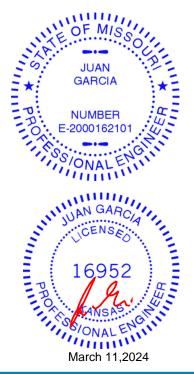
### NOTES

**FORCES** 

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SPF No.2 .

- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 7 lb uplift at joint 1 and 11 lb uplift at joint 3.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not

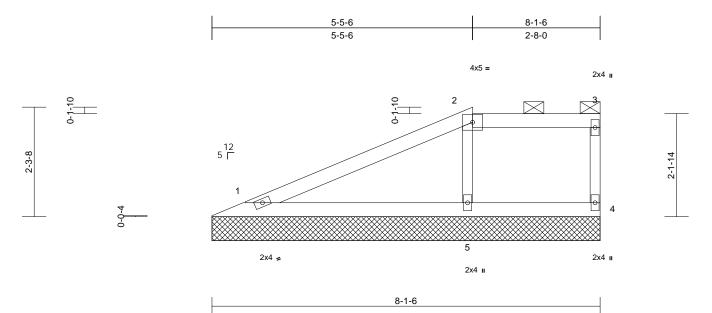
a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/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.sbcscomponents.com)

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Job	Truss	Truss Type	Qty	Ply	Lot 124 MN	
240615	V9	Valley	1	1	Job Reference (optional)	164133437

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Scale = 1:24.1

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.43	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.05	Horiz(TL)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 21 lb	FT = 10%

### LUMBER

TOP CHORD 2x4 SPF No.2 BOT CHORD 2x4 SPF No.2 WEBS 2x3 SPF No.2 OTHERS 2x3 SPF No.2

### BRACING

TOP CHORD Structural wood sheathing directly applied or

8-2-0 oc purlins, except end verticals, and

2-0-0 oc purlins: 2-3.

BOT CHORD Rigid ceiling directly applied or 6-0-0 oc

bracing.

**REACTIONS** (size) 1=8-1-6, 4=8-1-6, 5=8-1-6

Max Horiz 1=81 (LC 5)

Max Uplift 1=-36 (LC 8), 4=-31 (LC 4), 5=-34

(LC 8)

Max Grav 1=198 (LC 1), 4=101 (LC 1), 5=359

(LC 1)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=-64/65, 2-3=-26/22, 3-4=-90/37

BOT CHORD 1-5=-28/25, 4-5=-26/20

WEBS 2-5=-262/92

### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) Provide adequate drainage to prevent water ponding.5) Gable requires continuous bottom chord bearing.
- 5) Gable requires continuous bottom chord
- 6) Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 9) All bearings are assumed to be SPF No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 36 lb uplift at joint 1, 31 lb uplift at joint 4 and 34 lb uplift at joint 5.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI.1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



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

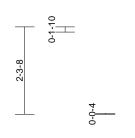


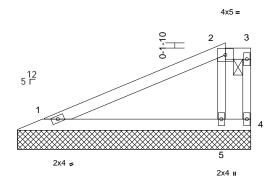
Job	Truss	Truss Type	Qty	Ply	Lot 124 MN	
240615	V10	Valley	1	1	Job Reference (optional)	164133438

Run: 8.73 S. Feb 22 2024 Print: 8.730 S. Feb 22 2024 MiTek Industries. Inc. Fri Mar 08 13:08:32 ID:GjNuAYC1yy9M4iC\_7QvZoMyKxz6-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



0-8-0





6-1-6

2x4 II

2x4 II

Scale = 1:30.2

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.43	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.16	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.04	Horiz(TL)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 16 lb	FT = 10%

### LUMBER

TOP CHORD 2x4 SPF No.2 **BOT CHORD** 2x4 SPF No.2 2x3 SPF No.2 WEBS 2x3 SPF No.2 OTHERS

BRACING TOP CHORD

Structural wood sheathing directly applied or 6-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 2-3.

Rigid ceiling directly applied or 6-0-0 oc **BOT CHORD** 

bracing.

REACTIONS (size) 1=6-1-6, 4=6-1-6, 5=6-1-6 Max Horiz 1=81 (LC 7)

Max Uplift 1=-37 (LC 8), 4=-123 (LC 3) 1=198 (LC 1), 4=-33 (LC 20), Max Grav 5=324 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum

Tension TOP CHORD

1-2=-67/61, 2-3=-26/22, 3-4=-20/10

**BOT CHORD** 1-5=-26/23, 4-5=-26/20

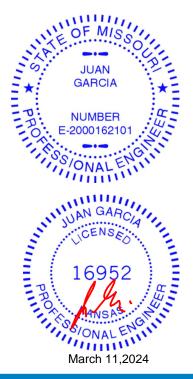
**WEBS** 2-5=-190/79

### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Provide adequate drainage to prevent water ponding.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SPF No.2.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 37 lb uplift at joint 1 and 123 lb uplift at joint 4.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



Page: 1

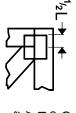
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not

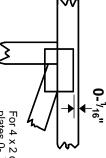


## Symbols

# PLATE LOCATION AND ORIENTATION



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



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

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

\* Plate location details available in MiTek software or upon request

### PLATE SIZE

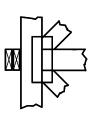
to slots. Second dimension is the length parallel to slots. width measured perpendicular The first dimension is the plate

## LATERAL BRACING LOCATION



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

### **BEARING**



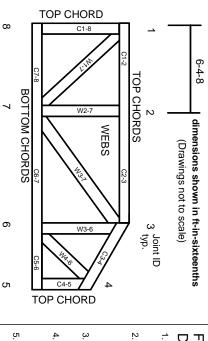
Min size shown is for crushing only reaction section indicates joint number/letter where bearings occur (supports) occur. Icons vary but Indicates location where bearings

## Industry Standards:

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

DSB-22: ANSI/TPI1:

# 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

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

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

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# Mile

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

## Damage or Personal Injury Failure to Follow Could Cause Property General Safety Not Could Cause Property SE FOR CONSTRUCT DIED ON PLANS BEV. VELOPMENT SERVICE EE'S SUMMIT, MISSOU 20024 8:28:

- 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.

œ

Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.

9

- 10. Camber is a non-structural consideration and is the camber for dead load deflection responsibility of truss fabricator. General practice is to
- 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
- 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.
- 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 project engineer before use. environmental, health or performance risks. Consult with
- 19. Review all portions of this design (front, back, words is not sufficient. and pictures) before use. Reviewing pictures alone
- Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.

21. The design does not take into account any dynamic

or other loads other than those expressly stated.

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