

Lymber design values are in accordance with ANSI/TPI 1 section 6.3

RE: 1124-062 - McCarthy MiTek, Inc.

Site Information:

Customer Info: Paul Davis Project Name: . Model: . Lot/Block: .

Address: ., .

Subdivision: .

City: Lake City

State: FI

Name Address and License # of Structural Engineer of Record, If there is one, for the building.

Name: License #:

Address:

City: State:

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

Design Code: FBC2023/TPI2014 Design Program: MiTek 20/20 8.7

Wind Code: ASCE 7-22 Wind Speed: 130 mph Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 12 individual, Truss Design Drawings and 0 Additional Drawings. With my seal affixed to this sheet, I hereby certify that I am the Truss Design Engineer and this index sheet conforms to 61G15-31.003, section 5 of the Florida Board of Professional Engineers Rules.

No. Seal# 1 T35638029 2 T35638030 3 T35638031 4 T35638032 5 T35638033 6 T35638034 7 T35638035 8 T35638036 9 T35638037 10 T35638037 11 T35638039 12 T35638040	Truss Name A01 A02 A03 A04 A05 A06 A07 CJ01 J01 J02 J03 J04	Date  11/22/24  11/22/24  11/22/24  11/22/24  11/22/24  11/22/24  11/22/24  11/22/24  11/22/24  11/22/24
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The truss drawing(s) referenced above have been prepared by MiTek USA, Inc. under my direct supervision based on the parameters provided by Mayo Truss Company, Inc..

Truss Design Engineer's Name: Velez, Joaquin

My license renewal date for the state of Florida is February 28, 2025.

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



16023 Swingley Ridge Rd.

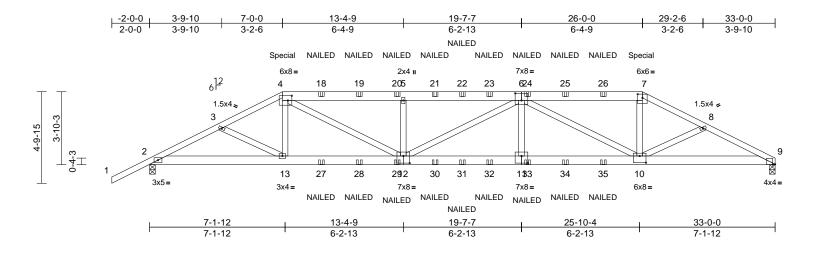
Chesterfield, MO 63017

314.434.1200

November 22,2024

Job	Truss	Truss Type	Qty	Ply	McCarthy	
1124-062	A01	Hip Girder	1	2	Job Reference (optional)	T35638029

Run: 8.73 S Oct 31 2024 Print: 8.730 S Oct 31 2024 MiTek Industries, Inc. Fri Nov 22 08:43:27 ID:LV1eiEn7p21BuOKO9MErmXyGhJZ-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f Page: 1



Scale = 1:60.8

Plate Offsets (X, Y): [4:0-2-8,0-3-0], [6:0-4-0,0-4-8], [7:0-3-0,0-2-7], [9:0-1-8,Edge], [10:0-4-0,0-4-4], [11:0-4-0,0-4-8], [12:0-4-0,0-4-8]

Loading	(psf)	Spacing	2-0-0	csı		DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.35	Vert(LL)	-0.19	11-12	>999		MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.70	Vert(CT)	-0.39	11-12	>999	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.47	Horz(CT)	0.10	9	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 413 lb	FT = 20%

LUMBER

2x4 SP No.2 \*Except\* 4-6,6-7:2x6 SP No.2 TOP CHORD

**BOT CHORD** 2x6 SP No.2 2x4 SP No.2 WEBS

**BRACING** 

TOP CHORD Structural wood sheathing directly applied or

5-2-13 oc purlins.

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

bracing.

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

Max Horiz 2=74 (LC 7) Max Uplift 2=-2 (LC 8)

Max Grav 2=2752 (LC 1), 9=2625 (LC 1)

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

Tension

TOP CHORD 1-2=0/54, 2-3=-5522/0, 3-4=-5365/0,

4-5=-7082/0, 5-7=-7077/0, 7-8=-5392/0,

8-9=-5561/0

BOT CHORD 2-13=0/4905, 10-13=0/7084, 9-10=0/4946 WEBS

4-13=0/742, 4-12=-45/2617, 5-12=-906/188, 6-12=-42/31, 6-11=0/527, 6-10=-2550/37,

7-10=0/1853, 3-13=-138/101, 8-10=-156/116

### NOTES

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

Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 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.
- 3) Unbalanced roof live loads have been considered for this design.

- Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=33ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 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 SP No.2
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 2 lb uplift at joint 2.
- 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) 225 lb down and 76 lb up at 7-0-0, and 225 lb down and 76 lb up at 26-0-0 on top chord, and 353 lb down at 7-0-0, and 353 lb down at 25-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

### LOAD CASE(S) Standard

Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25 Uniform Loads (lb/ft)

Vert: 1-4=-60, 4-7=-60, 7-9=-60, 2-9=-20 Concentrated Loads (lb)

Vert: 4=-177 (F), 7=-177 (F), 13=-320 (F), 10=-320 (F), 18=-121 (F), 19=-121 (F), 20=-121 (F), 21=-121 (F), 22=-121 (F), 23=-121 (F), 24=-121 (F), 25=-121 (F), 26=-121 (F), 27=-59 (F), 28=-59 (F), 29=-59 (F), 30=-59 (F), 31=-59 (F), 32=-59 (F), 33=-59 (F), 34=-59 (F), 35=-59 (F)



MiTek Inc. DBA MiTek USA FL Cert 6634 16023 Swingley Ridge Rd. Chesterfield, MO 63017 Date:

November 22,2024



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



Job	Truss	Truss Type	Qty	Ply	McCarthy	
1124-062	A02	Hip	1	1	Job Reference (optional)	T35638030

Run: 8 73 S. Oct 31 2024 Print: 8 730 S. Oct 31 2024 MiTek Industries. Inc. Fri Nov 22 08:43:28  $ID: I?c330\_M74rQbPsvsDZcdqyGhKa-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?ff$ 

Page: 1

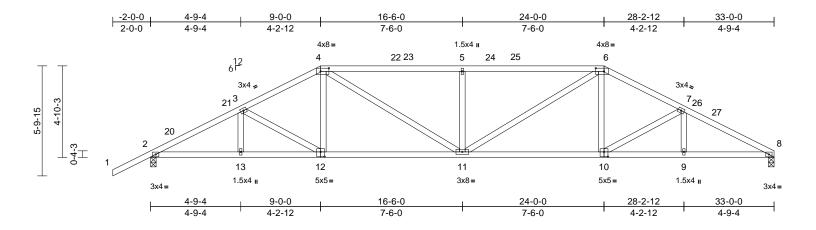


Plate Offsets (X, Y): [4:0-5-4,0-2-0], [6:0-5-4,0-2-0], [10:0-2-8,0-3-0], [12:0-2-8,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.57	Vert(LL)	-0.16	11	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.67	Vert(CT)	-0.34	10-11	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.18	Horz(CT)	0.11	8	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 169 lb	FT = 20%

### LUMBER

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

**BRACING** 

TOP CHORD Structural wood sheathing directly applied. **BOT CHORD** 

Rigid ceiling directly applied. REACTIONS 2=0-3-8, 8=0-3-8 (size)

Max Horiz 2=92 (LC 11)

Max Uplift 2=-49 (LC 12)

Max Grav 2=1444 (LC 1), 8=1316 (LC 1)

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

Tension TOP CHORD

1-2=0/54, 2-3=-2514/96, 3-4=-2201/109,

4-5=-2470/135, 5-6=-2470/135, 6-7=-2215/116, 7-8=-2549/106

**BOT CHORD** 2-13=-46/2195, 11-13=-46/2195 9-11=-48/2243. 8-9=-48/2243

WEBS 3-12=-321/55, 4-12=0/373, 4-11=-23/736

5-11=-506/115, 6-11=-17/726, 6-10=0/379, 7-10=-359/64, 3-13=0/139, 7-9=0/146

### NOTES

- 1) Unbalanced roof live loads have been considered for this design
- Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=33ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -2-0-0 to 1-3-10, Zone1 1-3-10 to 9-0-0, Zone2 9-0-0 to 13-8-0, Zone1 13-8-0 to 24-0-0, Zone2 24-0-0 to 28-8-0, Zone1 28-8-0 to 33-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 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 SP No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 49 lb uplift at joint
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard



MiTek Inc. DBA MiTek USA FL Cert 6634 16023 Swingley Ridge Rd. Chesterfield, MO 63017 Date:

November 22,2024



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



١	Job	Truss	Truss Type	Qty	Ply	McCarthy	
l	1124-062	A03	Hip	1	1	Job Reference (optional)	T35638031

Run: 8 73 S. Oct 31 2024 Print: 8 730 S. Oct 31 2024 MiTek Industries. Inc. Fri Nov 22 08:43:28 ID:6yPy6j2VxdUiiAlsem9nKtyGhKV-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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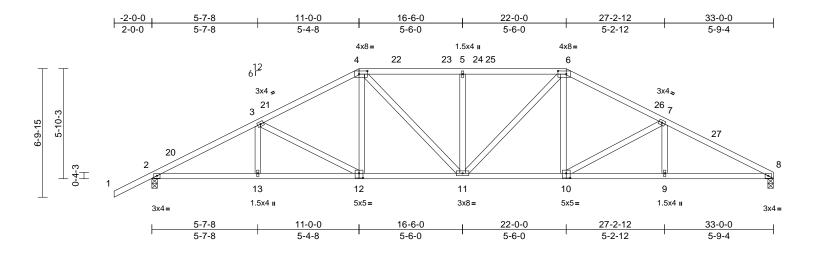


Plate Offsets (X, Y): [4:0-5-4,0-2-0], [6:0-5-4,0-2-0], [10:0-2-8,0-3-0], [12:0-2-8,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.32	Vert(LL)	-0.13	11	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.60	Vert(CT)	-0.27	10-11	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.33	Horz(CT)	0.10	8	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 176 lb	FT = 20%

### LUMBER

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

**BRACING** 

TOP CHORD Structural wood sheathing directly applied.

**BOT CHORD** Rigid ceiling directly applied.

REACTIONS 2=0-3-8, 8=0-3-8 (size) Max Horiz 2=110 (LC 11)

Max Uplift 2=-49 (LC 12)

Max Grav 2=1444 (LC 1), 8=1316 (LC 1)

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

Tension

TOP CHORD 1-2=0/54, 2-3=-2501/100, 3-4=-2040/123,

4-5=-1987/141, 5-6=-1987/141,

6-7=-2046/127, 7-8=-2514/107 2-13=-44/2180, 11-13=-44/2180

**BOT CHORD** 9-11=-42/2208, 8-9=-42/2208

WEBS 3-13=0/216, 3-12=-482/61, 4-12=0/393

4-11=-18/438, 5-11=-361/83, 6-11=-14/432, 6-10=0/398, 7-10=-514/68, 7-9=0/222

### NOTES

- 1) Unbalanced roof live loads have been considered for this design
- Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=33ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -2-0-0 to 1-3-10, Zone1 1-3-10 to 11-0-0, Zone2 11-0-0 to 15-8-0, Zone1 15-8-0 to 22-0-0, Zone2 22-0-0 to 26-8-0, Zone1 26-8-0 to 33-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 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 SP No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 49 lb uplift at joint
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard



MiTek Inc. DBA MiTek USA FL Cert 6634 16023 Swingley Ridge Rd. Chesterfield, MO 63017 Date:

November 22,2024



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



ſ	Job	Truss	Truss Type	Qty	Ply	McCarthy	
	1124-062	A04	Hip	1	1	Job Reference (optional)	T35638032

Run: 8 73 S. Oct 31 2024 Print: 8 730 S. Oct 31 2024 MiTek Industries. Inc. Fri Nov 22 08:43:29 ID:\_kfTy55??r\_8An2etcEjVjyGhKR-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

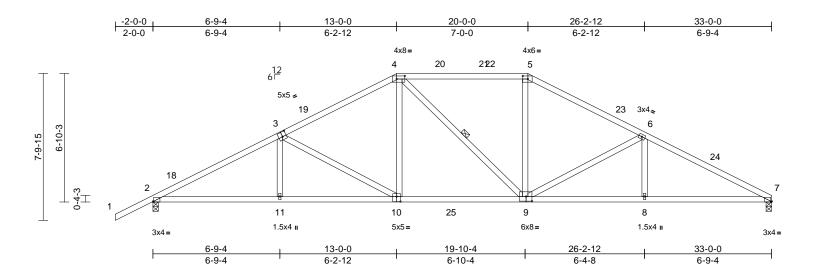


Plate Offsets (X, Y): [2:0-0-8,Edge], [3:0-2-8,0-3-0], [4:0-5-4,0-2-0], [5:0-3-4,0-2-0], [7:0-0-8,Edge], [9:0-3-12,0-3-0], [10:0-2-8,0-3-4]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.59	Vert(LL)	-0.18	9-10	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.76	Vert(CT)	-0.34	9-10	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.65	Horz(CT)	0.11	7	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 168 lb	FT = 20%

### LUMBER

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

**BRACING** 

TOP CHORD Structural wood sheathing directly applied. **BOT CHORD** Rigid ceiling directly applied.

WFBS 1 Row at midpt 4-9

REACTIONS (size) 2=0-3-8, 7=0-3-8 Max Horiz 2=127 (LC 11)

Max Uplift 2=-49 (LC 12)

Max Grav 2=1587 (LC 17), 7=1469 (LC 18)

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

Tension

TOP CHORD 1-2=0/54, 2-4=-2708/134, 4-5=-1795/143,

5-6=-2064/135, 6-7=-2715/110

**BOT CHORD** 2-11=-37/2442, 8-11=-39/2437, 7-8=-36/2380 **WEBS** 3-11=0/262, 3-10=-685/69, 4-10=0/606,

4-9=-151/161, 5-9=0/572, 6-9=-726/75,

6-8=0/267

### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=33ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -2-0-0 to 1-3-10, Zone1 1-3-10 to 13-0-0, Zone2 13-0-0 to 17-8-0, Zone1 17-8-0 to 20-0-0, Zone2 20-0-0 to 24-8-0, Zone1 24-8-0 to 33-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.

- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- All bearings are assumed to be SP No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 49 lb uplift at joint
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard



Page: 1

MiTek Inc. DBA MiTek USA FL Cert 6634 16023 Swingley Ridge Rd. Chesterfield, MO 63017 Date:

November 22,2024

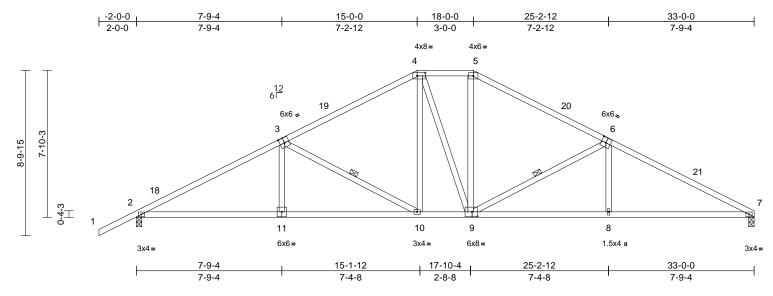


MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.



Job	Truss	Truss Type	Qty	Ply	McCarthy	
1124-062	A05	Hip	1	1	Job Reference (optional)	T35638033

Run: 8 73 S. Oct 31 2024 Print: 8 730 S. Oct 31 2024 MiTek Industries. Inc. Fri Nov 22 08:43:29 ID:LhSM?o98qOcRHYxbg9puCnyGhKM-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



Scale = 1:61.5

Plate Offsets (X, Y): [3:0-3-0,0-3-4], [4:0-5-4,0-2-0], [6:0-3-0,0-3-4], [9:0-3-8,0-3-0]

Loading	(psf)	Spacing	2-0-0	csı		DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.58	Vert(LL)	-0.12	8-17	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.74	Vert(CT)	-0.27	10-11	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.25	Horz(CT)	0.10	7	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 175 lb	FT = 20%

### LUMBER

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

**BRACING** 

TOP CHORD Structural wood sheathing directly applied. **BOT CHORD** Rigid ceiling directly applied.

WFBS 1 Row at midpt 3-10.6-9 REACTIONS (size) 2=0-3-8, 7=0-3-8

Max Horiz 2=145 (LC 11) Max Uplift 2=-49 (LC 12)

Max Grav 2=1444 (LC 1), 7=1316 (LC 1)

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

Tension

TOP CHORD 1-2=0/54, 2-4=-2410/134, 4-5=-1444/146,

5-7=-2412/137

**BOT CHORD** 2-10=-25/2080, 8-10=-21/2100, 7-8=-26/2104 **WEBS** 

3-11=0/328, 3-10=-733/77, 4-10=0/454, 4-9=-167/170, 5-9=0/455, 6-9=-756/83,

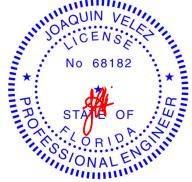
6-8=0/330

### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=33ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -2-0-0 to 1-3-10, Zone1 1-3-10 to 15-0-0, Zone3 15-0-0 to 18-0-0, Zone2 18-0-0 to 22-8-0, Zone1 22-8-0 to 33-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 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 SP No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 49 lb uplift at joint
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard



MiTek Inc. DBA MiTek USA FL Cert 6634 16023 Swingley Ridge Rd. Chesterfield, MO 63017 Date:

November 22,2024



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



Job	Truss	Truss Type	Qty	Ply	McCarthy	
1124-062	A06	Hip	1	1	Job Reference (optional)	T35638034

Run: 8 73 S. Oct 31 2024 Print: 8 730 S. Oct 31 2024 MiTek Industries. Inc. Fri Nov 22 08:43:29 ID:WpdWJZI2Em?t5FHipzWT85yGhKB-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1

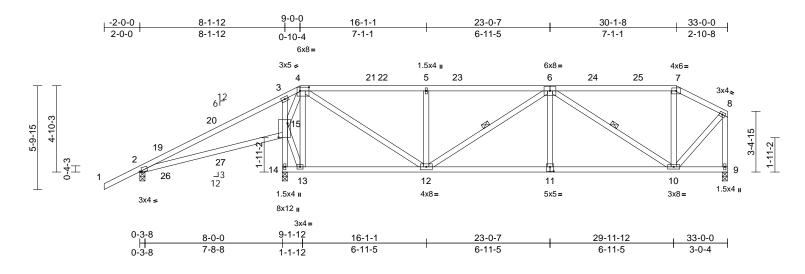


Plate Offsets (X, Y): [2:0-1-7,Edge], [4:0-6-0,0-2-8], [11:0-2-8,0-3-0], [15:0-9-8,0-6-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	\( \( \)	Plate Grip DOL	1.25	TC	0.59	Vert(LL)	0.12	15-18	>792	240	MT20	244/190
TCDL		Lumber DOL	1.25	BC	0.51	Vert(CT)	-0.21	15-18	>476	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.29	Horz(CT)	-0.02	14	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 188 lb	FT = 20%

### LUMBER

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

**BRACING** 

TOP CHORD Structural wood sheathing directly applied, except end verticals.

**BOT CHORD** Rigid ceiling directly applied. WEBS 1 Row at midpt 6-12, 6-10

REACTIONS 2=0-3-8, 9=0-3-8, 14=0-3-8 (size)

Max Horiz 2=178 (LC 11)

Max Uplift 2=-130 (LC 12), 9=-3 (LC 12), 14=-52 (LC 12)

Max Grav 2=417 (LC 23), 9=974 (LC 1),

14=1358 (LC 1)

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

TOP CHORD

1-2=0/54, 2-3=-195/175, 3-4=-51/206,

4-5=-1188/125, 5-7=-1188/125, 7-8=-657/77,

8-9=-964/42

2-15=-248/190, 14-15=-1404/180, **BOT CHORD** 3-15=-282/121, 13-14=-22/9, 12-13=-7/153,

10-12=-59/1327, 9-10=-46/49

WEBS 13-15=-41/462, 4-15=-793/0, 4-13=-291/130,

4-12=-38/1233, 5-12=-436/101,

6-12=-166/34, 6-11=0/284, 6-10=-910/31,

7-10=-29/114, 8-10=-31/858

### NOTES

Unbalanced roof live loads have been considered for this design.

- Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=33ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -2-0-0 to 1-3-10, Zone1 1-3-10 to 9-0-0, Zone2 9-0-0 to 13-8-0, Zone1 13-8-0 to 30-1-8, Zone3 30-1-8 to 32-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 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 SP No.2.
- Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 130 lb uplift at joint 2, 52 lb uplift at joint 14 and 3 lb uplift at joint 9.
- 10) This truss design requires that a minimum of 7/16' structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard



Joaquin Velez PE No.68182 MiTek Inc. DBA MiTek USA FL Cert 6634 16023 Swingley Ridge Rd. Chesterfield, MO 63017 Date:

November 22,2024



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



Job	Truss	Truss Type	Qty	Ply	McCarthy	
1124-062	A07	Hip	1	1	Job Reference (optional)	T35638035

Run: 8 73 S. Oct 31 2024 Print: 8 730 S. Oct 31 2024 MiTek Industries. Inc. Fri Nov 22 08:43:29 ID:iwngcKQxe8NJwxdqznD25QyGhK0-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1

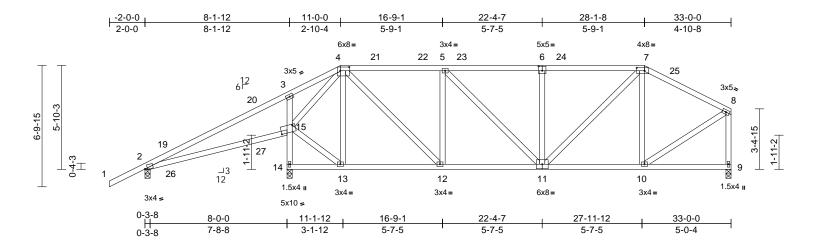


Plate Offsets (X, Y): [2:0-1-11,0-0-9], [4:0-6-0,0-2-8], [6:0-2-8,0-3-0], [7:0-5-4,0-2-0], [15:0-8-4,0-4-4]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.55	Vert(LL)	0.12	15-18	>814	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.47	Vert(CT)	-0.21	15-18	>470	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.24	Horz(CT)	0.01	9	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 199 lb	FT = 20%

### LUMBER

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

**BRACING** 

TOP CHORD Structural wood sheathing directly applied, except end verticals.

BOT CHORD Rigid ceiling directly applied.

REACTIONS 2=0-3-8, 9=0-3-8, 14=0-3-8 (size)

Max Horiz 2=190 (LC 11)

Max Uplift 2=-129 (LC 12), 9=-2 (LC 12),

14=-54 (LC 12)

Max Grav 2=444 (LC 23), 9=982 (LC 1).

14=1323 (LC 1)

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

Tension

TOP CHORD 1-2=0/54, 2-3=-291/144, 3-4=-102/140,

4-5=-1022/132, 5-7=-1100/121, 7-8=-858/97,

8-9=-937/68

BOT CHORD 2-15=-197/240, 14-15=-1305/207,

3-15=-297/114, 13-14=-28/7, 12-13=-28/447,

10-12=-55/1022, 9-10=-37/56 WEBS

13-15=-46/578, 4-15=-702/0, 4-13=-252/85, 7-10=-338/84, 8-10=-24/819, 5-12=-446/88,

4-12=-27/808, 5-11=-19/119, 6-11=-356/83,

7-11=-17/585

### NOTES

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

- Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=33ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -2-0-0 to 1-3-10, Zone1 1-3-10 to 11-0-0, Zone2 11-0-0 to 15-8-0, Zone1 15-8-0 to 28-1-8, Zone3 28-1-8 to 32-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 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 SP No.2.
- Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 129 lb uplift at joint 2, 54 lb uplift at joint 14 and 2 lb uplift at joint 9.
- 10) This truss design requires that a minimum of 7/16 structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard



MiTek Inc. DBA MiTek USA FL Cert 6634 16023 Swingley Ridge Rd. Chesterfield, MO 63017 Date:

November 22,2024



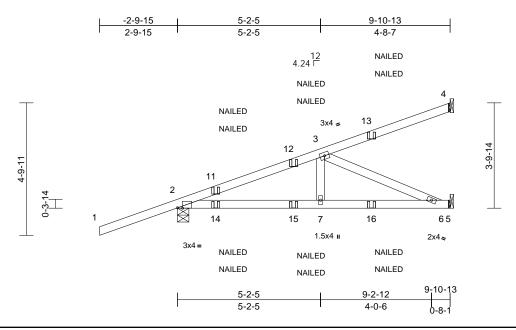
MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.



Job	Truss	Truss Type	Qty	Ply	McCarthy	
1124-062	CJ01	Diagonal Hip Girder	2	1	Job Reference (optional)	T35638036

Run: 8 73 S. Oct 31 2024 Print: 8 730 S. Oct 31 2024 MiTek Industries. Inc. Fri Nov 22 08:43:29 ID:HcdzZ6bjLS8Kb4hWnjTKfNyGhJo-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:41.8

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.62	Vert(LL)	-0.06	7-10	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.60	Vert(CT)	-0.08	6-7	>999	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.25	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 44 lb	FT = 20%

### LUMBER

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

**BRACING** 

TOP CHORD Structural wood sheathing directly applied or

6-0-0 oc purlins.

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

bracing.

REACTIONS (size) 2=0-4-15, 4= Mechanical, 5=

Mechanical Max Horiz 2=120 (LC 25)

Max Uplift 2=-151 (LC 8), 4=-32 (LC 8) 2=537 (LC 13), 4=141 (LC 1), Max Grav

5=315 (LC 14)

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

Tension

TOP CHORD 1-2=0/57, 2-3=-745/222, 3-4=-76/38 **BOT CHORD** 2-7=-230/657, 6-7=-31/657, 5-6=0/0

WFBS 3-7=0/250, 3-6=-714/34

### NOTES

- 1) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 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.
- Bearings are assumed to be: , Joint 2 SP No.2 .
- Refer to girder(s) for truss to truss connections.

- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 32 lb uplift at joint 4 and 151 lb uplift at joint 2.
- "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=1.25,

Plate Increase=1.25 Uniform Loads (lb/ft) Vert: 1-4=-60, 5-8=-20

Concentrated Loads (lb)

Vert: 11=72 (F=36, B=36), 13=-71 (F=-36, B=-36),

14=82 (F=41, B=41), 15=6 (F=3, B=3), 16=-49

(F=-24, B=-24)



Joaquin Velez PE No.68182 MiTek Inc. DBA MiTek USA FL Cert 6634 16023 Swingley Ridge Rd. Chesterfield, MO 63017 Date:

November 22,2024



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



Ī	Job	Truss	Truss Type	Qty	Ply	McCarthy	
	1124-062	J01	Jack-Open	11	1	Job Reference (optional)	T35638037

Run: 8.73 S. Oct 31 2024 Print: 8.730 S. Oct 31 2024 MiTek Industries. Inc. Fri Nov 22 08:43:29 ID:TTGil3WymcOAt9EMRSMwQ6yGhJu-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f Page: 1

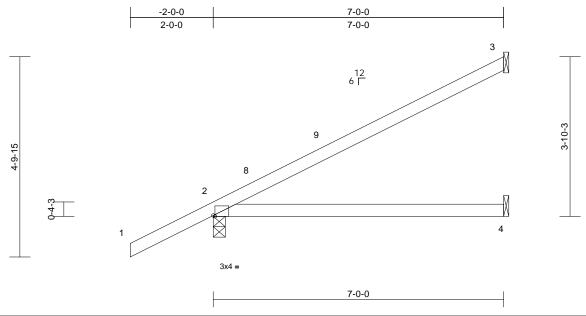


Plate Offsets (X, Y): [2:0-0-8,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.57	Vert(LL)	-0.09	4-7	>969	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.49	Vert(CT)	-0.20	4-7	>408	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 26 lb	FT = 20%

### LUMBER

Scale = 1:27.8

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

**BRACING** 

TOP CHORD Structural wood sheathing directly applied. Rigid ceiling directly applied. BOT CHORD

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

Max Horiz 2=119 (LC 12)

Max Uplift 2=-37 (LC 12), 3=-42 (LC 12)

Max Grav 2=415 (LC 1), 3=181 (LC 1), 4=123

(LC 3)

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

Tension

TOP CHORD 1-2=0/54, 2-3=-227/64

2-4=-44/124 **BOT CHORD** 

- 1) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft: L=24ft: eave=4ft: Cat. II: Exp B: Enclosed: MWFRS (directional) and C-C Zone3 -2-0-0 to 1-0-0, Zone1 1-0-0 to 6-11-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 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.
- Bearings are assumed to be: , Joint 2 SP No.2 .
- Refer to girder(s) for truss to truss connections.

- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 42 lb uplift at joint 3 and 37 lb uplift at joint 2.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard



Joaquin Velez PE No.68182 MiTek Inc. DBA MiTek USA FL Cert 6634 16023 Swingley Ridge Rd. Chesterfield, MO 63017 Date:

November 22,2024

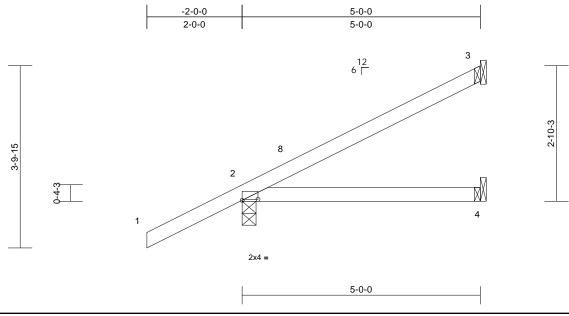


🗥 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.



Job	Truss	Truss Type	Qty	Ply	McCarthy	
1124-062	J02	Jack-Open	4	1	Job Reference (optional)	T35638038

Run: 8.73 S Oct 31 2024 Print: 8.730 S Oct 31 2024 MiTek Industries, Inc. Fri Nov 22 08:43:29 ID:TTGil3WymcOAt9EMRSMwQ6yGhJu-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f Page: 1



Scale = 1:24.2

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.26	Vert(LL)	-0.02	4-7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.23	Vert(CT)	-0.05	4-7	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 19 lb	FT = 20%

### LUMBER

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

### BRACING

TOP CHORD Structural wood sheathing directly applied.

BOT CHORD Rigid ceiling directly applied.

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

Max Horiz 2=96 (LC 12)

Max Uplift 2=-47 (LC 12), 3=-26 (LC 12)

Max Grav 2=342 (LC 1), 3=121 (LC 1), 4=86

(LC 3)

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

Tension

TOP CHORD 1-2=0/54, 2-3=-215/72

**BOT CHORD** 2-4=-75/153

- 1) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -2-0-0 to 1-0-0, Zone1 1-0-0 to 4-11-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 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.
- Bearings are assumed to be: , Joint 2 SP 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 3 and 47 lb uplift at joint 2.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard



Joaquin Velez PE No.68182 MiTek Inc. DBA MiTek USA FL Cert 6634 16023 Swingley Ridge Rd. Chesterfield, MO 63017 Date:

November 22,2024



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

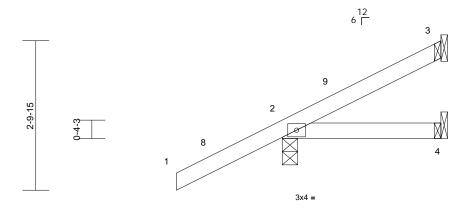


Job	Truss	Truss Type	Qty	Ply	McCarthy	
1124-062	J03	Jack-Open	4	1	Job Reference (optional)	T35638039

Run: 8.73 S Oct 31 2024 Print: 8.730 S Oct 31 2024 MiTek Industries, Inc. Fri Nov 22 08:43:29 ID:TTGil3WymcOAt9EMRSMwQ6yGhJu-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?ff Page: 1

1-10-3





Scale = 1:21.8

Loading	(psf)	Spacing	2-0-0	csı		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.27	Vert(LL)	0.00	4-7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.07	Vert(CT)	-0.01	4-7	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MP							Weight: 13 lb	FT = 20%

3-0-0

### LUMBER

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

**BRACING** 

TOP CHORD Structural wood sheathing directly applied or

3-0-0 oc purlins.

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

bracing.

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

Mechanical

Max Horiz 2=72 (LC 12)

Max Uplift 2=-62 (LC 12), 3=-8 (LC 12) Max Grav 2=278 (LC 1), 3=57 (LC 1), 4=47

(LC 3)

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

TOP CHORD 1-2=0/54, 2-3=-185/92

BOT CHORD 2-4=-102/165

### **NOTES**

- Wind: ASCE 7-22; Vult=130mph (3-second gust) 1) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -2-0-0 to 1-0-0, Zone1 1-0-0 to 2-11-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 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.
- Bearings are assumed to be: , Joint 2 SP No.2 .
- Refer to girder(s) for truss to truss connections.

7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 8 lb uplift at joint 3 and 62 lb uplift at joint 2.

LOAD CASE(S) Standard



Joaquin Velez PE No.68182 MiTek Inc. DBA MiTek USA FL Cert 6634 16023 Swingley Ridge Rd. Chesterfield, MO 63017 Date:

November 22,2024



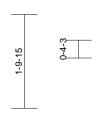
MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

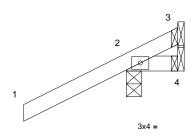


Job	Truss	Truss Type	Qty	Ply	McCarthy	
1124-062	J04	Jack-Open	4	1	Job Reference (optional)	T35638040

Run: 8.73 S Oct 31 2024 Print: 8.730 S Oct 31 2024 MiTek Industries, Inc. Fri Nov 22 08:43:29 ID:TTGil3WymcOAt9EMRSMwQ6yGhJu-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?ff Page: 1

-2-0-0	1-0-0
2-0-0	1-0-0







1-0-0

Scale = 1:22.4

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	I/defI	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.27	Vert(LL)	0.00	7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.06	Vert(CT)	0.00	7	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MP							Weight: 7 lb	FT = 20%

LUMBER

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

**BRACING** 

TOP CHORD Structural wood sheathing directly applied or

1-0-0 oc purlins.

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

bracing.

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

Mechanical

Max Horiz 2=48 (LC 12)

Max Uplift 2=-112 (LC 12), 3=-29 (LC 1),

4=-53 (LC 1)

2=281 (LC 1), 3=24 (LC 12), 4=39

(LC 12)

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

Tension

TOP CHORD 1-2=0/54, 2-3=-126/87

BOT CHORD 2-4=-103/144

### NOTES

- 1) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 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.
- Bearings are assumed to be: , Joint 2 SP No.2 .
- Refer to girder(s) for truss to truss connections.

7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 112 lb uplift at joint 2, 53 lb uplift at joint 4 and 29 lb uplift at joint 3.

LOAD CASE(S) Standard



Joaquin Velez PE No.68182 MiTek Inc. DBA MiTek USA FL Cert 6634 16023 Swingley Ridge Rd. Chesterfield, MO 63017 Date:

November 22,2024

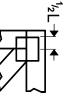


🗥 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

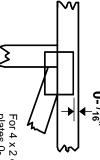


### Symbols

## PLATE LOCATION AND ORIENTATION



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



For 4 x 2 orientation, locate plates 0-  $\frac{1}{16}$  from outside edge of truss.

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

\* Plate location details available in MiTek software or upon request.

### PLATE SIZE

4 × 4

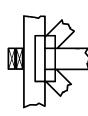
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## LATERAL BRACING LOCATION



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

### BEARING



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

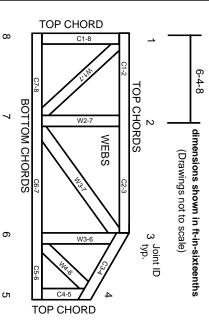
### Industry Standards:

National Design Specification for Metal Plate Connected Wood Truss Construction Design Standard for Bracing.

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

ANSI/TPI1: DSB-22:

## **Numbering System**



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

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

# Product Code Approvals

ICC-ES Reports:

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

# Design General Notes

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

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

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

# **General Safety Notes**

## Failure to Follow Could Cause Property Damage or Personal Injury

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI
- Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
- Never exceed the design loading shown and never stack materials on inadequately braced trusses.

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- 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.

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- 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.

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- Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
- Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
- Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
- Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
- Top chords must be sheathed or purlins provided at spacing indicated on design.
- Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
- 15. Connections not shown are the responsibility of others
- Do not cut or alter truss member or plate without prior approval of an engineer.
- 17. Install and load vertically unless indicated otherwise.
- Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
- Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
- Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
- The design does not take into account any dynamic or other loads other than those expressly stated.