

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

RE: 0624-025 -MiTek, Inc.

Site Information:

Customer Info: Scott Rosenboom Project Name: . Model: .

Lot/Block: .

Subdivision: .

Address: ., .

City: High Springs State: FL

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 19 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#	Truss Name	Date
1	T35491791	A01	11/7/24
2	T35491792	A02	11/7/24
3	T35491793	A03	11/7/24
4	T35491794	A04	11/7/24
4 5 6	T35491795	A05	11/7/24
6	T35491796	B01	11/7/24
7	T35491797	B02	11/7/24
8 9	T35491798	B03 C01	11/7/24
10	T35491799 T35491800	C01 C02	11/7/24
11	T35491801	D01	11/7/24 11/7/24
12	T35491802	D02	11/7/24
13	T35491803	D02A	11/7/24
14	T35491804	D03	11/7/24
15	T35491805	D04	11/7/24
16	T35491806	D05	11/7/24
17	T35491807	D06	11/7/24
18	T35491808	D07	11/7/24
19	T35491809	D08	11/7/24

Review for Code Compliance Universal Engineering Science

Laudence Pernell

PX2707

16023 Swingley Ridge Rd.

Chesterfield, MO 63017

314.434.1200

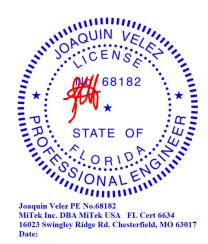
12/31/2024

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.



November 7,2024

Job	Truss	Truss Type	Qty	Ply		
0624-025	A01	Common Supported Gable	1	1	Job Reference (optional)	T35491791

Run: 8 73 S. Oct 31 2024 Print: 8 730 S. Oct 31 2024 MiTek Industries. Inc. Thu Nov 07 08:37:28 ID:13kdiCfjvdy0G5qebNP7HkyLsF2-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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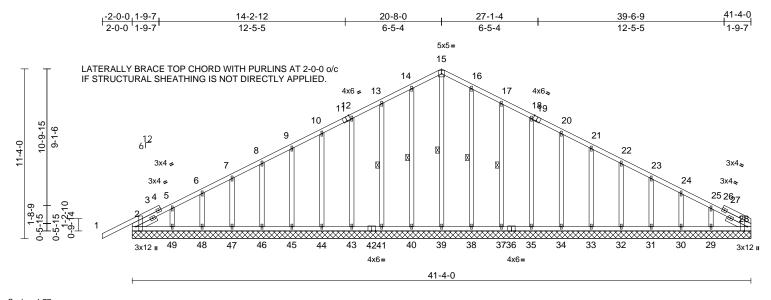


Plate Offsets (X, Y):	[2:0-3-8,Edge], [11:	:0-3-0,Edge], [19:0-3-0	,Edge], [28:0-3-8,Edge	:]

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	0.34	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.04	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.01	28	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 301 lb	FT = 20%

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

Left 2x4 SP No.2 -- 1-6-0, Right 2x4 SP No.2

-- 1-6-0

**BRACING** TOP CHORD

LUMBER

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

15-39, 14-40, 13-41, WFRS 1 Row at midpt 16-38, 17-37

REACTIONS (size) 2=41-4-0, 28=41-4-0, 29=41-4-0, 30=41-4-0, 31=41-4-0, 32=41-4-0, 33=41-4-0, 34=41-4-0, 35=41-4-0, 37=41-4-0, 38=41-4-0, 39=41-4-0, 40=41-4-0, 41=41-4-0, 43=41-4-0, 44=41-4-0, 45=41-4-0, 46=41-4-0,

47=41-4-0 48=41-4-0 49=41-4-0 Max Horiz 2=201 (LC 11) Max Uplift 2=-47 (LC 12), 29=-33 (LC 12),

30=-9 (LC 12), 31=-12 (LC 12), 32=-12 (LC 12), 33=-12 (LC 12), 34=-12 (LC 12), 35=-11 (LC 12), 37=-15 (LC 12), 38=-3 (LC 12), 40=-3 (LC 12), 41=-15 (LC 12),

43=-11 (LC 12), 44=-12 (LC 12), 45=-12 (LC 12), 46=-12 (LC 12), 47=-10 (LC 12), 48=-19 (LC 12) Max Grav 2=305 (LC 1), 28=93 (LC 17),

29=192 (LC 18), 30=157 (LC 1), 31=161 (LC 24), 32=160 (LC 1), 33=160 (LC 24), 34=160 (LC 24), 35=160 (LC 1), 37=160 (LC 1), 38=166 (LC 24), 39=149 (LC 17), 40=166 (LC 23), 41=160 (LC 1), 43=160 (LC 1), 44=160 (LC 23), 45=160 (LC 1), 46=161 (LC 1),

47=158 (LC 23), 48=170 (LC 1),

49=114 (LC 3)

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

TOP CHORD

**WEBS** 

1-2=0/47, 2-5=-166/140, 5-6=-143/137, 6-7=-134/125, 7-8=-125/114, 8-9=-116/103, 9-10=-106/111, 10-12=-97/156, 12-13=-90/200, 13-14=-110/248,

14-15=-126/286, 15-16=-126/286, 16-17=-110/248, 17-18=-90/200,

18-20=-72/156, 20-21=-54/111 22-23=-52/27, 23-24=-59/38, 2 25-28=-137/69

BOT CHORD 2-49=-60/149, 48-49=-56/146,

45-46=-56/146, 44-45=-56/146, 43-44=-56/146, 41-43=-56/146, 40-41=-56/146, 39-40=-56/146, 38-39=-56/146, 37-38=-56/146, 35-37=-56/146, 34-35=-56/146, 33-34=-56/146, 32-33=-56/146,

31-32=-56/146, 30-31=-56/146, 29-30=-56/146, 28-29=-56/146 15-39=-179/46, 14-40=-126/61, 13-41=-120/82, 12-43=-120/75,

10-44=-120/76, 9-45=-120/76, 8-46=-120/76, 7-47=-118/75, 6-48=-129/84, 5-49=-86/49,

16-38=-126/61, 17-37=-120/82, 18-35=-120/75, 20-34=-120/76, 21-33=-120/76, 22-32=-120/76, 23-31=-120/77, 24-30=-119/72,

25-29=-144/111

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=41ft; eave=2ft; 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

22=-45(67). Truse designed for wind loads in the plane of the truss --77/48, Property only. For study exposed to wind (normal to the face), or consult qualified building designer as per ANSI/TPI 1. 47-48=-56/146, 46-47=-56/146 Lulence Pan Building Designex2Pooject engineer/responsible for

verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component. All plates are 1.5x4 MT20 unless otherwise indicated.

- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.



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

November 7,2024

### Continued on page 2

· 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	
0624-025	A01	Common Supported Gable	1	1	T35491791 Job Reference (optional)

Run: 8.73 S Oct 31 2024 Print: 8.730 S Oct 31 2024 MiTek Industries, Inc. Thu Nov 07 08:37:28 ID:13kdiCfjvdy0G5qebNP7HkyLsF2-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

\* 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 SP No.2 .

- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 47 lb uplift at joint 2, 3 lb uplift at joint 40, 15 lb uplift at joint 41, 11 lb uplift at joint 43, 12 lb uplift at joint 44, 12 lb uplift at joint 45, 12 lb uplift at joint 46, 10 lb uplift at joint 47, 19 lb uplift at joint 48, 3 lb uplift at joint 38, 15 lb uplift at joint 37, 11 lb uplift at joint 35, 12 lb uplift at joint 34, 12 lb uplift at joint 33, 12 lb uplift at joint 32, 12 lb uplift at joint 31, 9 lb uplift at joint 30 and 33 lb uplift at joint 29.
- 12) 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



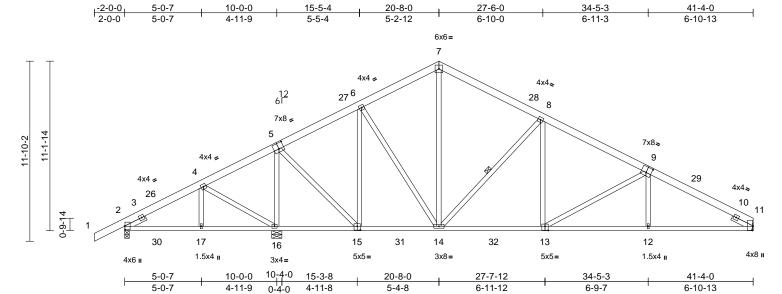
PX2707 12/31/2024 Page: 2



Job	Truss	Truss Type	Qty	Ply	
0624-025	A02	Common	6	1	T35491792 Job Reference (optional)

Run: 8 73 S. Oct 31 2024 Print: 8 730 S. Oct 31 2024 MiTek Industries. Inc. Thu Nov 07 08:37:30 ID:9Nbq74RsrI0wywjxLpY7tDyLsE2-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:75.8

Plate Offsets (X, Y): [2:0-2-15,0-0-3], [5:0-4-0,0-4-8], [9:0-4-0,0-4-8], [11:0-3-7,0-0-7], [13:0-2-8,0-3-4], [15:0-2-8,0-3-0]

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	0.28	Vert(LL)	-0.11	13-14	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.67	Vert(CT)	-0.21	13-14	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.89	Horz(CT)	0.05	11	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 292 lb	FT = 20%

LUMBER

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

SLIDER Left 2x4 SP No.2 -- 1-6-0, Right 2x4 SP No.2

-- 1-6-0

**BRACING** 

TOP CHORD Structural wood sheathing directly applied.

**BOT CHORD** Rigid ceiling directly applied. WFRS 1 Row at midpt 8-14

REACTIONS (size) 2=0-3-8, 11= Mechanical, 16=0-8-0

Max Horiz 2=203 (LC 11)

Max Uplift 2=-128 (LC 12), 16=-93 (LC 12) Max Grav 2=369 (LC 23), 11=1361 (LC 18),

16=2174 (LC 17)

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

TOP CHORD 1-2=0/54, 2-4=-145/212, 4-6=-682/618,

6-7=-976/168, 7-8=-986/169, 8-11=-2208/137

BOT CHORD 2-17=-226/96, 16-17=-226/96 14-16=-501/590, 12-14=-27/1883,

11-12=-90/1885

WEBS 7-14=-31/511, 5-16=-1787/119,

4-16=-473/257, 4-17=-142/194, 6-14=0/516,

6-15=-779/88, 5-15=-20/1368,

8-14=-954/107, 8-13=0/573, 9-13=-555/96,

9-12=0/248

### 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=41ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -2-0-0 to 2-1-10, Zone1 2-1-10 to 20-8-0, Zone2 20-8-0 to 26-6-2, Zone1 26-6-2 to 41-4-0 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=
- Building Designer / Project engineer responsively for Formula Science religions applied roof live load shown covers rain loading niversal Engineering Science requirements specific to the use of this truss component.
- This truss has been designed for a 10.0 pst bottomur Pome H chord live load nonconcurrent with any other live loads 5) \* 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.
- Bearings are assumed to be: Joint 2 SP No.2, Joint 16 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 128 lb uplift at joint 2 and 93 lb uplift at joint 16.
- 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



12/31/2024

PX2707

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

November 7,2024



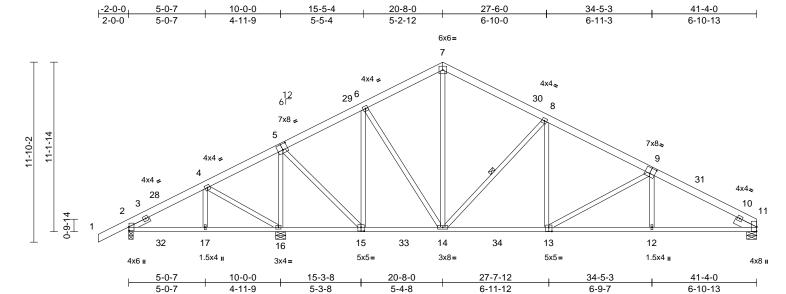
MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.



Job	Truss	Truss Type	Qty	Ply	
0624-025	A03	Common	1	1	T35491793 Job Reference (optional)

Run: 8 73 S. Oct 31 2024 Print: 8 730 S. Oct 31 2024 MiTek Industries. Inc. Thu Nov 07 08:37:30 ID:Le3P3skchsCnVEC7?oPrdbyLs7C-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:75.8

Plate Offsets (X, Y): [2:0-2-15,0-0-3], [5:0-4-0,0-4-8], [9:0-4-0,0-4-8], [11:0-3-7,0-0-3], [13:0-2-8,0-3-4], [15:0-2-8,0-3-0]

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	0.43	Vert(LL)	-0.12	13-14	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.68	Vert(CT)	-0.21	12-13	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.90	Horz(CT)	0.06	11	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 293 lb	FT = 20%

### LUMBER

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

**SLIDER** Left 2x4 SP No.2 -- 1-6-0, Right 2x6 SP No.2

-- 1-6-0

### **BRACING** TOP CHORD

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

Rigid ceiling directly applied. WFRS 1 Row at midpt 8-14

REACTIONS (size) 2=0-3-8, 11=0-8-0, 16=0-8-0

Max Horiz 2=203 (LC 11)

Max Uplift 2=-130 (LC 12), 16=-92 (LC 12)

2=356 (LC 23), 11=1367 (LC 18), Max Grav

16=2194 (LC 17)

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

1-2=0/54, 2-4=-120/259, 4-6=-641/669, TOP CHORD

6-7=-942/169, 7-8=-953/170, 8-11=-2082/136 BOT CHORD 2-17=-252/79. 16-17=-252/74.

14-16=-549/556, 12-14=-21/1748,

11-12=-20/1750

WEBS 7-14=-32/485, 4-17=-142/195

4-16=-479/256, 5-16=-1804/116, 6-14=0/524,

6-15=-791/86, 5-15=-17/1386,

8-14=-932/106, 8-13=0/528, 9-13=-453/89,

9-12=0/233

### 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=41ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -2-0-0 to 2-1-10, Zone1 2-1-10 to 20-8-0, Zone2 20-8-0 to 26-6-2, Zone1 26-6-2 to 41-4-0 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=
- Building Designer / Project engineer responsery residual for series applied roof live load shown covers rain loading niversal Engineering Science requirements specific to the use of this truss component.
- This truss has been designed for a 10.0 pst bottomur Pome H 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 130 lb uplift at joint 2 and 92 lb uplift at joint 16.
- 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



12/31/2024

PX2707

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

November 7,2024



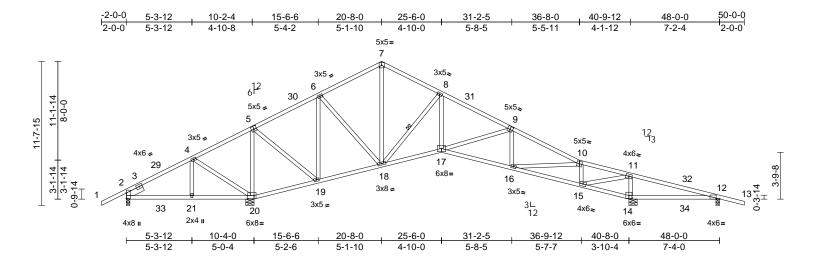
MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.



Job	Truss	Truss Type	Qty	Ply	_	
0624-025	A04	Roof Special	11	1	Job Reference (optional)	35491794

Run: 8 73 S. Oct 31 2024 Print: 8 730 S. Oct 31 2024 MiTek Industries. Inc. Thu Nov 07 08:37:30 ID:tG4JYyLzvEVhUw1kwJlae8yLs6Q-RfC?PsB70Hq3NSqPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:93.2

Plate Offsets (X, Y): [2:0-5-3,0-0-3], [5:0-2-8,0-3-0], [9:0-2-8,0-3-0], [12:0-3-4,Edge], [14:0-3-0,0-2-12], [20:0-6-0,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.66	Vert(LL)	0.13	14-28	>698	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.45	Vert(CT)	-0.22	16-17	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.87	Horz(CT)	0.11	14	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 273 lb	FT = 20%

LUMBER

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

Left 2x6 SP No.2 -- 1-6-0 SLIDER

**BRACING** 

TOP CHORD Structural wood sheathing directly applied.

BOT CHORD Rigid ceiling directly applied. WFBS 1 Row at midpt 8-18

REACTIONS (size) 2=0-3-8, 12=0-3-8, 14=0-8-0, 20=0-8-0

Max Horiz 2=-201 (LC 10)

2=-151 (LC 12), 12=-134 (LC 9), Max Uplift

14=-46 (LC 12), 20=-72 (LC 12)

2=243 (LC 23), 12=115 (LC 24), Max Grav

14=1749 (LC 1), 20=2160 (LC 1)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=0/54, 2-4=-47/544, 4-6=-265/979,

6-7=-666/161, 7-8=-661/153 8-10=-1774/106, 10-11=-800/47, 11-12=-2/1195, 12-13=0/29

BOT CHORD 2-21=-515/75, 20-21=-515/0

19-20=-877/119. 18-19=-51/248.

17-18=0/1279, 16-17=0/1593, 15-16=0/841,

14-15=-1261/17, 12-14=-1105/16

WEBS 4-21=-166/243, 4-20=-520/295,

5-20=-1583/88, 8-18=-1099/86, 10-15=-863/67, 11-15=0/1986,

11-14=-1287/98, 7-18=-38/300, 6-18=0/579, 6-19=-950/70, 5-19=0/1272, 8-17=0/884,

9-17=-349/79, 9-16=-119/68, 10-16=0/732

### 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=48ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -2-0-0 to 2-9-10, Zone1 2-9-10 to 20-8-0, Zone2 20-8-0 to 27-5-7, Zone1 27-5-7 to 50-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate Review for Code Compliance

DOL=1.60 Universal Engineering Science Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this trust component. Paney

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 151 lb uplift at joint 2, 72 lb uplift at joint 20, 46 lb uplift at joint 14 and 134 lb uplift at joint 12.
- 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



12/31/2024

PX2707

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

November 7,2024



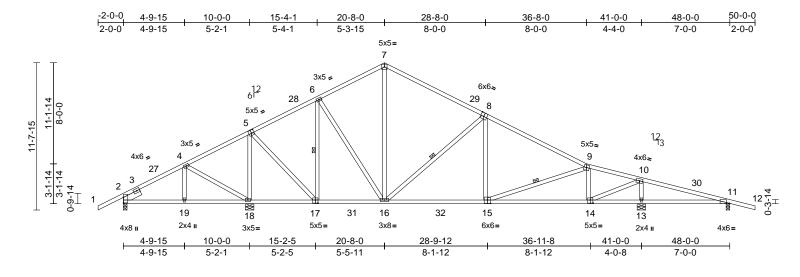
MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE



Job	Truss	Truss Type	Qty	Ply	
0624-025	A05	Roof Special	1	1	T35491795 Job Reference (optional)

Run: 8 73 S. Oct 31 2024 Print: 8 730 S. Oct 31 2024 MiTek Industries. Inc. Thu Nov 07 08:37:30 ID:maNgXxopzvII2mx19H\_UB8yLs5q-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

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Scale = 1:91.2

Plate Offsets (X, Y): [2:0-5-3,0-0-3], [5:0-2-8,0-3-0], [8:0-3-0,Edge], [11:0-3-4,Edge], [14:0-2-8,0-3-0], [15:0-3-0,0-3-4], [17:0-2-8,0-3-0]

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	0.63	Vert(LL)	-0.15	15-16	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.75	Vert(CT)	-0.26	15-16	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.89	Horz(CT)	0.03	13	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 282 lb	FT = 20%

LUMBER

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

Left 2x6 SP No.2 -- 1-6-0 SLIDER

**BRACING** 

TOP CHORD Structural wood sheathing directly applied. BOT CHORD

Rigid ceiling directly applied. WFBS 1 Row at midpt 8-16, 9-15, 6-17

REACTIONS (size) 2=0-3-8, 11=0-3-8, 13=0-8-0, 18=0-8-0

Max Horiz 2=-201 (LC 10)

Max Uplift 2=-51 (LC 12), 11=-61 (LC 12)

Max Grav 2=379 (LC 23), 11=242 (LC 24), 13=1894 (LC 18), 18=2146 (LC 17)

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

TOP CHORD 1-2=0/54, 2-4=-156/121, 4-6=-635/551,

6-7=-917/205. 7-9=-1616/194.

9-10=-1348/93, 10-11=-87/707, 11-12=0/29

2-19=-138/184, 18-19=-137/184 16-18=-448/575, 13-16=-642/1346,

11-13=-642/106

WEBS 7-16=-42/432, 8-16=-861/128, 8-15=0/396

> 9-15=-29/71, 9-14=-670/95, 5-18=-1695/121, 4-18=-533/54, 4-19=0/205, 5-17=-21/1280, 6-16=0/483, 6-17=-746/74, 10-13=-1656/96

10-14=-45/2091

### NOTES

BOT CHORD

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=48ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -2-0-0 to 2-9-10, Zone1 2-9-10 to 20-8-0, Zone2 20-8-0 to 27-5-7, Zone1 27-5-7 to 50-0-0 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 response for Formula applied roof live load shown covers rain loading niversal Engineering Science requirements specific to the use of this truss component.
- This truss has been designed for a 10.0 pst bottomy Powell PX2707 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 51 lb uplift at joint 2 and 61 lb uplift at joint 11.
- 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



12/31/2024

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November 7,2024



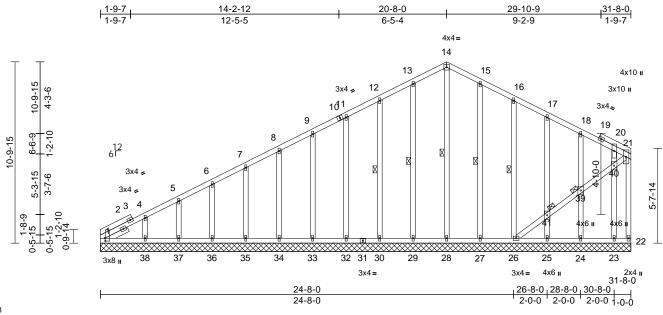
MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.



Job	Truss	Truss Type	Qty	Ply	
0624-025	B01	Common Supported Gable	1	1	T35491796 Job Reference (optional)

Run: 8 73 S. Oct 31 2024 Print: 8 730 S. Oct 31 2024 MiTek Industries. Inc. Thu Nov 07 08:37:30 ID:cxntVYu4n6xPYVuBkRhlZjyLdpc-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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Scale = 1:68.8 Plate Offsets (X, Y): [1:0-2-0,0-0-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.15	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.12	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.12	Horiz(TL)	0.01	22	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 267 lb	FT = 20%

LUMBER **FORCES** TOP CHORD 2x4 SP No.2 Tension TOP CHORD 1-4=-289/144, 4-5=-219/114, 5-6=-178/102, 2x4 SP No.2 **BOT CHORD** 6-7=-133/90, 7-8=-119/80, 8-9=-110/82, 2x4 SP No.2 WEBS 9-11=-101/127, 11-12=-99/171, OTHERS 2x4 SP No 2 12-13=-113/218, 13-14=-125/257, SLIDER Left 2x4 SP No.2 -- 1-6-0 14-15=-125/257, 15-16=-113/218, **BRACING** 16-17=-99/171, 17-18=-85/126, TOP CHORD Structural wood sheathing directly applied, 18-20=-69/83, 20-21=-81/88, 21-21 1-38=-110/171, 37-38=-110/1 except end verticals **BOT CHORD** BOT CHORD Rigid ceiling directly applied. 36-37=-110/171, 35-36=-110/171, WEBS 1 Row at midpt 14-28, 13-29, 12-30, 34-35=-110/171, 33-34=-110/171 15-27, 16-26 **JOINTS** 1 Brace at Jt(s): 39, 29-30=-110/171, 28-29=-110/171 41 27-28=-110/171, 26-27=-110/171, REACTIONS (size) 1=31-8-0, 22=31-8-0, 23=31-8-0, 25-26=-77/103, 24-25=-77/103, 24=31-8-0, 25=31-8-0, 26=31-8-0, 23-24=-77/103, 22-23=-77/103 27=31-8-0, 28=31-8-0, 29=31-8-0, WFBS 14-28=-155/35, 13-29=-126/69 30=31-8-0. 32=31-8-0. 33=31-8-0. 12-30=-120/81, 11-32=-120/75, 34=31-8-0, 35=31-8-0, 36=31-8-0,

37=31-8-0, 38=31-8-0 Max Horiz 1=250 (LC 11) Max Uplift 1=-27 (LC 10), 22=-34 (LC 11), 23=-23 (LC 12), 24=-3 (LC 12), 25=-10 (LC 12), 26=-47 (LC 12), 27=-4 (LC 12), 29=-4 (LC 12), 30=-15 (LC 12), 32=-11 (LC 12), 33=-12 (LC 12), 34=-12 (LC 12), 35=-12 (LC 12), 36=-13 (LC 12),

37=-8 (LC 12), 38=-38 (LC 12) 1=136 (LC 18), 22=55 (LC 17), Max Grav 23=134 (LC 18), 24=167 (LC 24), 25=161 (LC 1), 26=185 (LC 18), 27=166 (LC 24), 28=142 (LC 1), 29=166 (LC 23), 30=160 (LC 1), 32=160 (LC 1), 33=160 (LC 23),

34=160 (LC 23), 35=160 (LC 1), 36=161 (LC 23), 37=157 (LC 1), 38=199 (LC 17)

(lb) - Maximum Compression/Maximum

9-33=-120/76, 8-34=-120/76, 7-35=-120/76, 6-36=-120/78, 5-37=-119/71, 4-38=-150/138, 15-27=-126/69, 16-26=-120/81 17-41=-120/76, 18-39=-124/82,

20-40=-98/81, 26-41=-70/90, 39-41=-67/86, 39-40=-66/84, 21-40=-65/86, 23-40=-93/72, 24-39=-125/86, 25-41=-121/73

### NOTES

- Unbalanced roof live loads have been considered for 1) this design.
- Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=32ft; eave=2ft; 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

- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- All plates are 1.5x4 MT20 unless otherwise indicated. Gable requires continuous bottom chord bearing. Gable study spaced at 2-0-0 oc.

Universahis noting has been Seisghed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads. 32-33=-110/171, 30-32=-110/171, ule Nur Palme This truss has Pose Todesigned For Parity load of 20.0psf ethe 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 SP No.2



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

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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	
0624-025	B01	Common Supported Gable	1	1	T35491796 Job Reference (optional)

Run: 8.73 S Oct 31 2024 Print: 8.730 S Oct 31 2024 MiTek Industries, Inc. Thu Nov 07 08:37:30 

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11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 27 lb uplift at joint 1, 34 lb uplift at joint 22, 4 lb uplift at joint 29, 15 lb uplift at joint 30, 11 lb uplift at joint 32, 12 lb uplift at joint 33, 12 lb uplift at joint 34, 12 lb uplift at joint 35, 13 lb uplift at joint 36, 8 lb uplift at joint 37, 38 lb uplift at joint 38, 4 lb uplift at joint 27, 47 lb uplift at joint 26, 23 lb uplift at joint 23, 3 lb uplift at joint 24 and 10 lb uplift at joint 25.

12) 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



Laydena Pernell

PX2707

12/31/2024



Job	Truss	Truss Type	Qty	Ply		
0624-025	B02	Common	6	1	Job Reference (optional)	T35491797

Run: 8.73 S. Oct 31 2024 Print: 8.730 S. Oct 31 2024 MiTek Industries. Inc. Thu Nov 07 08:37:30 ID:S3xq?XD8KPF0C99HYTfYtQyLdmb-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

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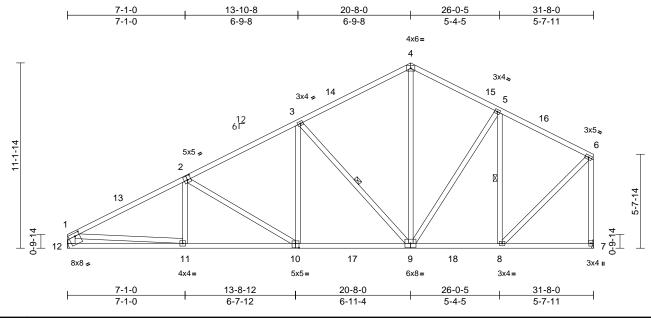


Plate Offsets (X, Y): [2:0-2-8,0-3-0], [10:0-2-8,0-3-4], [12:0-3-4,0-2-4]

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	0.60	Vert(LL)	-0.13	9-10	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.66	Vert(CT)	-0.23	9-10	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.55	Horz(CT)	0.05	7	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 213 lb	FT = 20%

### LUMBER

Scale = 1:69.4

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

2x4 SP No.2 \*Except\* 12-1:2x6 SP No.2 WEBS

**BRACING** 

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

**BOT CHORD** Rigid ceiling directly applied. WEBS 3-9, 5-8 1 Row at midpt

REACTIONS 7= Mechanical, 12= Mechanical (size)

Max Horiz 12=256 (LC 11)

Max Grav 7=1401 (LC 17), 12=1424 (LC 17)

(lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-3=-2259/149, 3-4=-1141/185, 4-5=-1132/176, 5-6=-977/136,

6-7=-1312/130, 1-12=-1300/119

**BOT CHORD** 11-12=-244/648, 8-11=-214/2067, 7-8=-68/87

6-8=-69/1138, 4-9=-45/656, 2-11=0/182, WEBS

2-10=-516/73, 3-10=0/559, 3-9=-902/96, 5-9=-1/309, 5-8=-586/125, 1-11=0/1427

### NOTES

**FORCES** 

- 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=32ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 0-2-12 to 3-4-12, Zone1 3-4-12 to 20-8-0, Zone2 20-8-0 to 25-1-12, Zone1 25-1-12 to 31-6-4 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, with BCDL = 10.0psf.
- Refer to girder(s) for truss to truss connections.
- 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

Review for Code Compliance Universal Engineering Science



12/31/2024 PX2707



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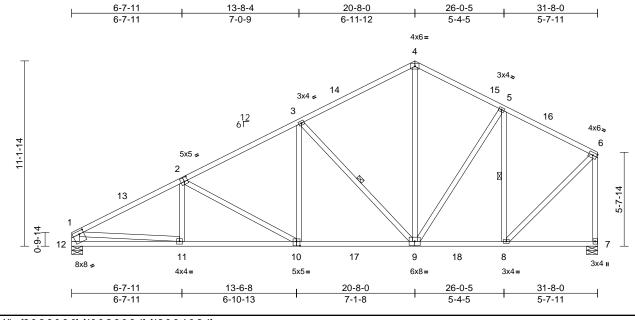
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Job	Truss	Truss Type	Qty	Ply		
0624-025	B03	Common	1	1	Job Reference (optional)	5491798

Run: 8.73 S. Oct 31 2024 Print: 8.730 S. Oct 31 2024 MiTek Industries. Inc. Thu Nov 07 08:37:31 ID:pIG9c3Ux890vrXqVq42jm3yLdmF-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:69.4

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

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	0.60	Vert(LL)	-0.13	9-10	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.69	Vert(CT)	-0.23	9-10	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.55	Horz(CT)	0.05	7	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 212 lb	FT = 20%

### LUMBER

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

2x4 SP No.2 \*Except\* 12-1:2x6 SP No.2 WEBS

**BRACING** 

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

**BOT CHORD** Rigid ceiling directly applied.

WEBS 3-9, 5-8 1 Row at midpt

REACTIONS 7=0-8-0, 12=0-8-0 (size)

Max Horiz 12=256 (LC 11)

Max Grav 7=1401 (LC 17), 12=1424 (LC 17)

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

Tension

TOP CHORD 1-3=-2270/147, 3-4=-1145/184, 4-5=-1132/176, 5-6=-977/136,

6-7=-1312/130, 1-12=-1309/116

**BOT CHORD** 11-12=-242/591, 8-11=-216/2084, 7-8=-68/87 WEBS 6-8=-69/1138, 4-9=-44/654, 3-9=-913/96,

2-11=-6/166, 2-10=-498/74, 3-10=0/545, 5-9=-1/310, 5-8=-586/125, 1-11=0/1501

### 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=32ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 0-2-12 to 3-4-12, Zone1 3-4-12 to 20-8-0, Zone2 20-8-0 to 25-1-12, Zone1 25-1-12 to 31-6-4 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, with BCDL = 10.0psf.
- All bearings are assumed to be SP No.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

Review for Code Compliance Universal Engineering Science

Laurena Pernell

12/31/2024 PX2707



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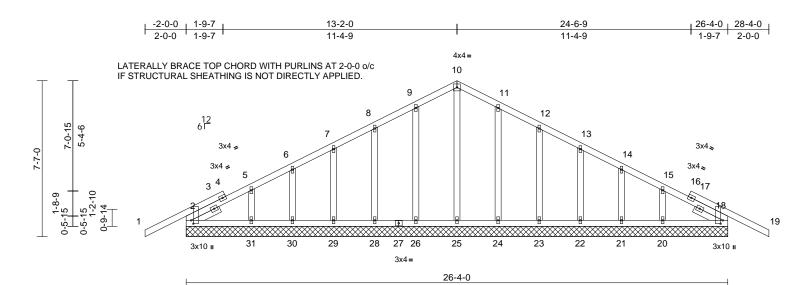


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Job	Truss	Truss Type	Qty	Ply		
0624-025	C01	Common Supported Gable	1	1	Job Reference (optional)	T35491799

Run: 8 73 S. Oct 31 2024 Print: 8 730 S. Oct 31 2024 MiTek Industries. Inc. Thu Nov 07 08:37:31 ID:E8UipukURJY3FcML?HPPaHyLdlx-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:56

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	0.34	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.06	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00	18	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 163 lb	FT = 20%

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

SLIDER Left 2x4 SP No.2 -- 1-6-0, Right 2x4 SP No.2

-- 1-6-0

**BRACING** 

TOP CHORD Structural wood sheathing directly applied.

BOT CHORD Rigid ceiling directly applied.

REACTIONS (size)

2=26-4-0, 18=26-4-0, 20=26-4-0, 21=26-4-0, 22=26-4-0, 23=26-4-0, 24=26-4-0, 25=26-4-0, 26=26-4-0, 28=26-4-0, 29=26-4-0, 30=26-4-0,

31=26-4-0 Max Horiz 2=122 (LC 11)

Max Uplift 2=-66 (LC 12), 18=-66 (LC 12), 21=-22 (LC 12), 22=-9 (LC 12), 23=-14 (LC 12), 24=-8 (LC 12), 26=-8 (LC 12), 28=-14 (LC 12),

29=-9 (LC 12), 30=-22 (LC 12) Max Grav 2=308 (LC 1), 18=308 (LC 1),

20=146 (LC 18), 21=164 (LC 1), 22=159 (LC 24), 23=159 (LC 1), 24=167 (LC 24), 25=145 (LC 1),

26=167 (LC 23), 28=159 (LC 1),

29=159 (LC 23), 30=164 (LC 1),

31=141 (LC 3) **FORCES** 

TOP CHORD

(lb) - Maximum Compression/Maximum Tension

1-2=0/47, 2-5=-119/84, 5-6=-81/76 6-7=-75/66, 7-8=-67/100, 8-9=-66/146, 9-10=-84/188, 10-11=-84/188, 11-12=-66/146,

12-13=-47/100, 13-14=-37/56, 14-15=-40/28, 15-18=-80/33, 18-19=0/47

BOT CHORD

28-29=-40/118, 26-28=-40/118, 25-26=-40/118, 24-25=-40/118,

23-24=-40/118, 22-23=-40/118, 21-22=-40/118, 20-21=-40/118,

18-20=-42/120

10-25=-105/12, 9-26=-127/70, 8-28=-120/79, 7-29=-119/75, 6-30=-125/84, 5-31=-99/64,

11-24=-127/70, 12-23=-120/79 13-22=-119/75, 14-21=-125/84

**NOTES** 

WFBS

Unbalanced roof live loads have been consigned for 1) Laylehur Pernell this design

Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=26ft; eave=2ft; 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 DOI =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.

- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- All plates are 1.5x4 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.
- 10) All bearings are assumed to be SP No.2.

2-31=-43/121, 30-31=-40/118, 29-30=-40/118, 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 66 lb uplift at joint 2, 66 lb uplift at joint 18, 8 lb uplift at joint 26, 14 lb uplift at joint 28, 9 lb uplift at joint 29, 22 lb uplift at joint 30, 8 Ib uplift at joint 24, 14 lb uplift at joint 23, 9 lb uplift at joint 22 and 22 lb uplift at joint 21.

Page: 1

12) This truss design requires that a minimum of 7/16' structural wood sheathing be applied directly to the top 20=-99,62 view the bond and 1/2" gypsym spectrock be applied directly to

Universal Enginsering Science 12/31/2024

PX2707

JOAQUIN VE 68182

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

November 7,2024



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		
0624-025	C02	Common	12	1	Job Reference (optional)	T35491800

Run: 8.73 S Oct 31 2024 Print: 8.730 S Oct 31 2024 MiTek Industries. Inc. Thu Nov 07 08:37:31 ID:3rvqCaDa0baO2mQ1Lh7nCjyLdlJ-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1

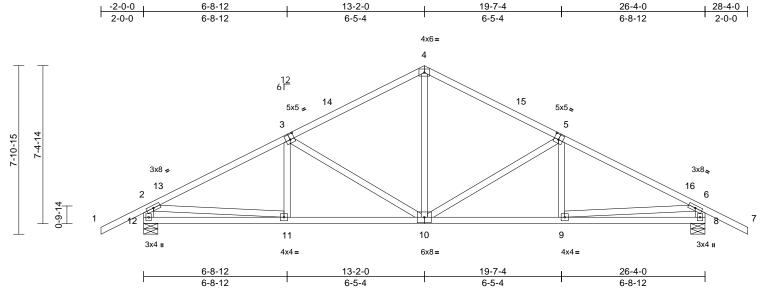


Plate Offsets (X, Y): [3:0-2-8,0-3-0], [5:0-2-8,0-3-0]

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	0.41	Vert(LL)	-0.05	9-10	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.46	Vert(CT)	-0.13	9-10	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.45	Horz(CT)	0.03	8	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 152 lb	FT = 20%

LUMBER

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

**BOT CHORD** WEBS

2x4 SP No.2 \*Except\* 12-2,8-6:2x6 SP No.2 **BRACING** 

TOP CHORD

Structural wood sheathing directly applied, except end verticals.

BOT CHORD Rigid ceiling directly applied.

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

Max Horiz 12=-145 (LC 10)

Max Uplift 8=-53 (LC 12), 12=-53 (LC 12)

Max Grav 8=1169 (LC 1), 12=1169 (LC 1)

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

Tension

TOP CHORD 1-2=0/60, 2-4=-1570/122, 4-6=-1570/122,

6-7=0/60, 2-12=-1100/178, 6-8=-1100/179 BOT CHORD 11-12=-8/372, 9-11=0/1321, 8-9=0/289

**WEBS** 2-11=-68/1041, 6-9=-69/1041, 3-11=0/189,

3-10=-467/75, 4-10=0/600, 5-10=-467/75,

5-9=0/189

### 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=26ft; 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 13-2-0, Zone2 13-2-0 to 17-4-15, Zone1 17-4-15 to 28-4-0 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.
- 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 7) bearing plate capable of withstanding 53 lb uplift at joint 12 and 53 lb uplift at joint 8.
- This truss design requires that a minimum structural wood sheathing be applied directly to Universal Engineering Science the bottom chord.

LOAD CASE(S) Standard



12/31/2024

PX2707



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

November 7,2024



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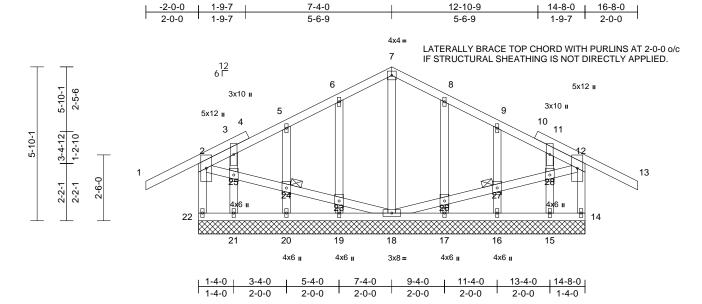


Job Truss Truss Type Qty Ply T35491801 0624-025 D01 2 Common Supported Gable Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066,

Run: 8.73 S Oct 31 2024 Print: 8.730 S Oct 31 2024 MiTek Industries, Inc. Thu Nov 07 08:37:31 ID:ymMlbRvO2cDWrG7xY5ectEyLdj7-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:43.7

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	0.29	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	14	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 121 lb	FT = 20%

### LUMBER

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

### BRACING

Structural wood sheathing directly applied, TOP CHORD

except end verticals.

**BOT CHORD** Rigid ceiling directly applied.

JOINTS 1 Brace at Jt(s): 24,

REACTIONS (size)

14=14-8-0, 15=14-8-0, 16=14-8-0, 17=14-8-0, 18=14-8-0, 19=14-8-0, 20=14-8-0, 21=14-8-0, 22=14-8-0

Max Horiz 22=130 (LC 11)

Max Uplift 14=-76 (LC 12), 16=-9 (LC 12),

17=-3 (LC 12), 19=-3 (LC 12), 20=-9 (LC 12), 22=-76 (LC 12)

Max Grav 14=246 (LC 24), 15=78 (LC 3),

16=154 (LC 1), 17=169 (LC 24)

18=172 (LC 1), 19=169 (LC 23), 20=154 (LC 1), 21=78 (LC 3),

22=246 (LC 23)

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

Tension TOP CHORD

2-22=-242/182, 1-2=0/50, 2-3=-49/27, 3-5=-27/50, 5-6=-22/55, 6-7=-38/106, 7-8=-38/106, 8-9=-21/56, 9-11=-26/49

11-12=-47/18, 12-13=0/50, 12-14=-242/179

BOT CHORD 21-22=-120/101, 20-21=-120/101, 19-20=-120/101. 18-19=-120/101.

17-18=-30/47, 16-17=-30/47, 15-16=-30/47,

14-15=-30/47

**WEBS** 

7-18=-127/0, 6-23=-128/90, 5-24=-116/91, 3-25=-68/9, 8-26=-128/90, 9-27=-116/91 11-28=-51/7, 2-25=-52/121, 24-25=-51/119, 23-24=-51/119, 18-23=-53/124, 18-26=-55/126, 26-27=-53/121, 27-28=-53/121, 12-28=-54/123, 21-25=-68/18, 20-24=-113/89, 16-27=-113/89,

15-28=-53/15, 19-23=-129/82, 17-26=-129/82

NOTES

Unbalanced roof live loads have been con do for Review for Code Compliance 1) this design.

Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; <u>h\_\_15ftw</u> Pany H B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; Examiner-License No. 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

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.

- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- All plates are 1.5x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 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.
- 11) All bearings are assumed to be SP No.2.

12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 76 lb uplift at joint 22, 76 lb uplift at joint 14, 9 lb uplift at joint 20, 9 lb uplift at joint 16, 3 lb uplift at joint 19 and 3 lb uplift at joint 17.

13) 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

Universal Engineering Science

PX2707

No 6818

No 6818

No 6818

No 6818 JOAQUIN VE 68182

12/31/2024

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

November 7,2024



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	
0624-025	D02	Common	4	1	T35491802 Job Reference (optional)

Run: 8 73 S. Oct 31 2024 Print: 8 730 S. Oct 31 2024 MiTek Industries. Inc. Thu Nov 07 08:37:31 ID:nwj1rV\_9dS\_gZBa5vLl07VyLdj1-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

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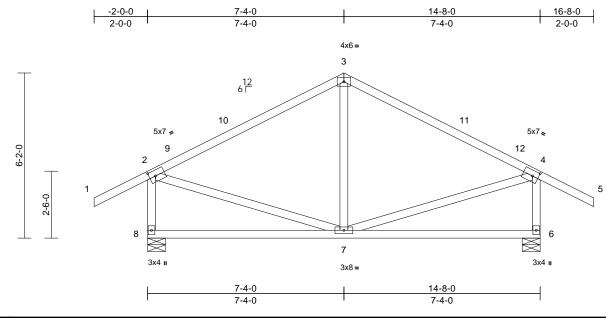


Plate Offsets (X, Y): [2:0-2-11,0-2-8], [4:0-2-11,0-2-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.44	Vert(LL)	-0.05	7-8	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.43	Vert(CT)	-0.10	7-8	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 89 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 (size) 6=0-8-0, 8=0-8-0

Max Horiz 8=140 (LC 11)

Max Uplift 6=-52 (LC 12), 8=-52 (LC 12)

Max Grav 6=704 (LC 1), 8=704 (LC 1) (lb) - Maximum Compression/Maximum

**FORCES** Tension

1-2=0/58, 2-3=-521/117, 3-4=-521/117,

TOP CHORD 4-5=0/58, 2-8=-637/237, 4-6=-637/237

7-8=-101/173. 6-7=-3/86

**BOT CHORD** 

**WEBS** 3-7=-34/169, 2-7=0/326, 4-7=-1/327

### NOTES

- Unbalanced roof live loads have been considered for
- 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 7-4-0, Zone2 7-4-0 to 11-6-15, Zone1 11-6-15 to 16-8-0 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.
- 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 52 lb uplift at joint 8 and 52 lb uplift at joint 6.
- This truss design requires that a minimum structural wood sheathing be applied directly to unectly the unec the bottom chord.

LOAD CASE(S) Standard

Lawlence Pernell

PX2707

12/31/2024



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

November 7,2024



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Job	Truss	Truss Type	Qty	Ply		
0624-025	D02A	Common	2	1	Job Reference (optional)	T35491803

Run: 8 73 S. Oct 31 2024 Print: 8 730 S. Oct 31 2024 MiTek Industries. Inc. Thu Nov 07 08:37:31 ID:8uWwvC2IS?czfzT3hvKBqZyLdiy-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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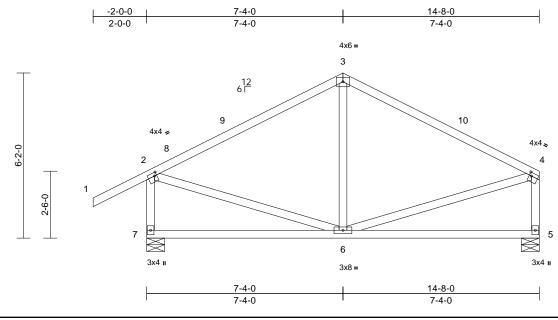


Plate Offsets (X, Y): [2:0-1-0,0-1-8], [4:0-1-0,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.50	Vert(LL)	-0.05	5-6	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.43	Vert(CT)	-0.10	6-7	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 86 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 (size) 5=0-8-0, 7=0-8-0

Max Horiz 7=136 (LC 11)

Max Uplift 7=-51 (LC 12)

Max Grav 5=565 (LC 1), 7=713 (LC 1)

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

Tension

TOP CHORD 1-2=0/58, 2-3=-536/116, 3-4=-531/122,

2-7=-647/235, 4-5=-498/150

BOT CHORD 6-7=-129/159. 5-6=-52/103

**WEBS** 3-6=-39/167, 2-6=-2/342, 4-6=-17/316

### NOTES

- Unbalanced roof live loads have been considered for
- 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 7-4-0, Zone2 7-4-0 to 11-6-15, Zone1 11-6-15 to 14-6-4 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.
- All bearings are assumed to be SP No.2.
- Provide mechanical connection (by others) of truss to 7) bearing plate capable of withstanding 51 lb uplift at joint
- This truss design requires that a minimum structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied unectly to Universal Engineering Science the bottom chord. Lawlence Pernell

LOAD CASE(S) Standard



12/31/2024 PX2707



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

November 7,2024



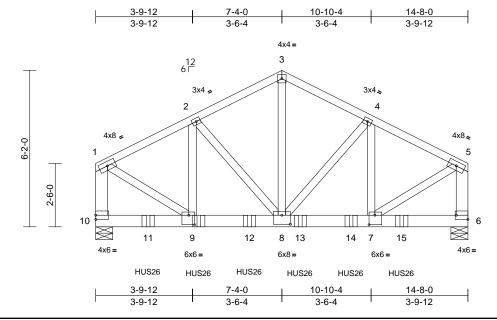
🗥 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.



Job	Truss	Truss Type	Qty	Ply		T05404004
0624-025	D03	Common Girder	1	2	Job Reference (optional)	T35491804

Run: 8.73 S. Oct 31 2024 Print: 8.730 S. Oct 31 2024 MiTek Industries. Inc. Thu Nov 07 08:37:31 ID:viXM8ILzZglQ9ptsffH2LqyLdiZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:45.4

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	I/defl	I /d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL		TC	0.19	Vert(LL)		7-8			MT20	244/190
' '			1.25	1		- ( /	-0.04		>999		-	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.65	Vert(CT)	-0.07	7-8	>999	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.46	Horz(CT)	0.01	6	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 226 lb	FT = 20%

### LUMBER

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

2x4 SP No.2 \*Except\* 10-1,6-5:2x6 SP No.2 WEBS

**BRACING** 

TOP CHORD Structural wood sheathing directly applied or

6-0-0 oc purlins, except end verticals. **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc

bracing.

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

Max Horiz 10=-121 (LC 6)

Max Grav 6=4529 (LC 14), 10=4899 (LC 13)

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

Tension

TOP CHORD 1-2=-4257/0, 2-3=-3843/0, 3-4=-3844/0, 4-5=-4172/0, 1-10=-4200/0, 5-6=-4147/0

9-10=-21/266, 8-9=0/3813, 7-8=0/3694,

**BOT CHORD** 6-7=0/150

**WEBS** 1-9=0/4198, 5-7=0/4172, 2-9=0/462,

2-8=-560/0, 3-8=0/3205, 4-8=-446/0,

4-7=0/342

### **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 0-7-0 oc.

Web connected as follows: 2x4 - 1 row at 0-9-0 oc, Except member 2-9 2x4 - 1 row at 0-6-0 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 7-22; 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
- 5) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading
- requirements specific to the use of this trust pronent requirements specific to the use of this trust pronent requirements specific to the use of this trust pronent requirements specific to the use of this trust pronent requirements specific to the use of this trust pronent requirements specific to the use of this trust pronent requirements specific to the use of this trust pronent requirements specific to the use of this trust pronent requirements specific to the use of this trust pronent requirements specific to the use of this trust pronent requirements specific to the use of this trust pronent requirements specific to the use of this trust pronent requirements specific to the use of this trust pronent requirements specific to the use of this trust pronent requirements specific to the use of this trust pronent requirements specific to the use of this trust pronent requirements specific to the use of this trust pronent requirements are the use of the use of the use of this trust pronent requirements are the use of the u
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a restangle Mur Pannell 3-06-00 tall by 2-00-00 wide will fit between the bottom Examiner-License N 12/31/2024 PX2707 chord and any other members.
- All bearings are assumed to be SP No.2.
- Use MiTek HUS26 (With 14-16d nails into Girder & 6-16d nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 2-0-12 from the left end to 12-0-12 to connect truss(es) to back face of bottom chord.
- 10) Fill all nail holes where hanger is in contact with lumber.

### LOAD CASE(S) Standard

Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25

Uniform Loads (lb/ft)

Vert: 1-3=-60, 3-5=-60, 6-10=-20

Concentrated Loads (lb)

Vert: 9=-1232 (B), 11=-1232 (B), 12=-1232 (B), 13=-1232 (B), 14=-1232 (B), 15=-1232 (B)



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

November 7,2024



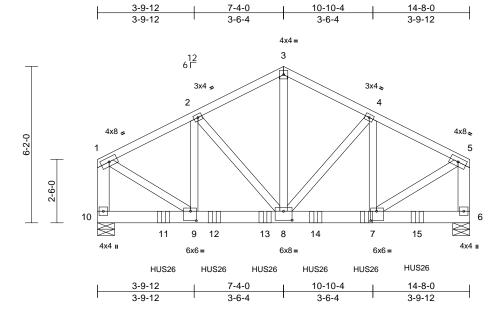
MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE



Job	Truss	Truss Type	Qty	Ply		
0624-025	D04	Common Girder	1	2	Job Reference (optional)	T35491805

Run: 8 73 S. Oct 31 2024 Print: 8 730 S. Oct 31 2024 MiTek Industries. Inc. Thu Nov 07 08:37:32 ID:rdizi3nY5kIJULdnmCxVoQyLdi?-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:45.4

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.18	Vert(LL)	-0.04	8-9	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.61	Vert(CT)	-0.07	8-9	>999	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.43	Horz(CT)	0.01	6	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 226 lb	FT = 20%

### LUMBER

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

WEBS **BRACING** 

TOP CHORD Structural wood sheathing directly applied or

6-0-0 oc purlins, except end verticals.

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

bracing.

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

Max Horiz 10=-121 (LC 6)

Max Grav 6=4701 (LC 14), 10=4347 (LC 13)

2x4 SP No.2 \*Except\* 10-1,6-5:2x6 SP No.2

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

Tension TOP CHORD

1-2=-4004/0, 2-3=-3688/0, 3-4=-3688/0,

4-5=-4085/0, 1-10=-3981/0, 5-6=-4032/0

**BOT CHORD** 9-10=-46/209, 8-9=0/3588, 7-8=0/3615, 6-7=0/195

1-9=0/4002, 5-7=0/4027, 2-9=0/315,

2-8=-430/0, 3-8=0/3068, 4-8=-539/0,

4-7=0/427

### **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 - 2 rows staggered at 0-9-0 oc.

Web connected as follows: 2x4 - 1 row at 0-9-0 oc, Except member 4-7 2x4 - 1 row at 0-7-0 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 7-22; 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
- 5) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading
- requirements specific to the use of this trust pronent requirements specific to the use of this trust pronent requirements specific to the use of this trust pronent requirements specific to the use of this trust pronent requirements specific to the use of this trust pronent requirements specific to the use of this trust pronent requirements specific to the use of this trust pronent requirements specific to the use of this trust pronent requirements specific to the use of this trust pronent requirements specific to the use of this trust pronent requirements specific to the use of this trust pronent requirements specific to the use of this trust pronent requirements specific to the use of this trust pronent requirements specific to the use of this trust pronent requirements specific to the use of this trust pronent requirements specific to the use of this trust pronent requirements specific to the use of this trust pronent requirements are the use of the use of the use of this trust pronent requirements are the use of the u
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a restangle Mur Pannell 3-06-00 tall by 2-00-00 wide will fit between the bottom Examiner-License N 12/31/2024 PX2707 chord and any other members.
- All bearings are assumed to be SP No.2.
- Use MiTek HUS26 (With 14-16d nails into Girder & 6-16d nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 2-7-4 from the left end to 12-7-4 to connect truss(es) to back face of bottom chord.
- 10) Fill all nail holes where hanger is in contact with lumber.

### LOAD CASE(S) Standard

Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25

Uniform Loads (lb/ft)

Vert: 1-3=-60, 3-5=-60, 6-10=-20

Concentrated Loads (lb)

Vert: 7=-1156 (B), 11=-1156 (B), 12=-1156 (B), 13=-1156 (B), 14=-1156 (B), 15=-1156 (B)



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

November 7,2024



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

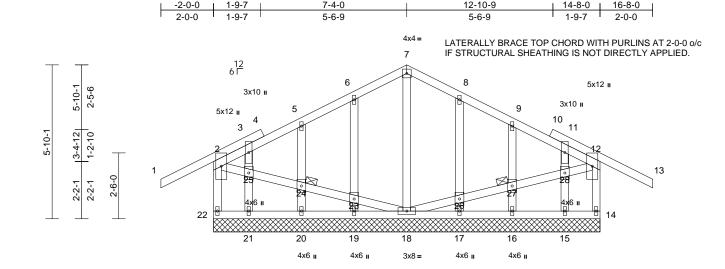


Job Truss Truss Type Qty Ply T35491806 0624-025 D05 1 Common Supported Gable Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066,

Run: 8.73 S Oct 31 2024 Print: 8.730 S Oct 31 2024 MiTek Industries, Inc. Thu Nov 07 08:37:32 ID:ZMu1VwWpjU\_fljoVrWXomHyLdh2-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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Scale = 1:43.7

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	0.29	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	14	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 121 lb	FT = 20%

5-4-0

2-0-0

### LUMBER

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

### BRACING

Structural wood sheathing directly applied, TOP CHORD

except end verticals.

**BOT CHORD** Rigid ceiling directly applied. JOINTS

1 Brace at Jt(s): 24,

REACTIONS (size)

14=14-8-0, 15=14-8-0, 16=14-8-0, 17=14-8-0, 18=14-8-0, 19=14-8-0, 20=14-8-0, 21=14-8-0, 22=14-8-0

Max Horiz 22=-130 (LC 10)

Max Uplift 14=-76 (LC 12), 16=-9 (LC 12), 17=-3 (LC 12), 19=-3 (LC 12), 20=-9 (LC 12), 22=-76 (LC 12)

Max Grav 14=246 (LC 24), 15=78 (LC 3),

16=154 (LC 1), 17=169 (LC 24)

18=172 (LC 1), 19=169 (LC 23),

20=154 (LC 1), 21=78 (LC 3),

22=246 (LC 23)

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

Tension TOP CHORD

2-22=-242/182, 1-2=0/50, 2-3=-49/27, 3-5=-27/50, 5-6=-22/55, 6-7=-38/106, 7-8=-38/106, 8-9=-21/56, 9-11=-26/49

11-12=-47/18, 12-13=0/50, 12-14=-242/179 BOT CHORD 21-22=-120/101, 20-21=-120/101,

19-20=-120/101. 18-19=-120/101.

17-18=-30/47, 16-17=-30/47, 15-16=-30/47,

14-15=-30/47

**WEBS** 

1-4-0

3-4-0

2-0-0

7-18=-127/0, 6-23=-128/90, 5-24=-116/91, 3-25=-68/9, 8-26=-128/90, 9-27=-116/91 11-28=-51/7, 2-25=-52/121, 24-25=-51/119, 23-24=-51/119, 18-23=-53/124, 18-26=-55/126, 26-27=-53/121, 27-28=-53/121, 12-28=-54/123, 21-25=-68/18, 20-24=-113/89,

2-0-0

9-4-0

2-0-0

11-4-0

2-0-0

NOTES

Unbalanced roof live loads have been con-1) this design.

17-26=-129/82, 16-27=-113/89,

15-28=-53/15, 19-23=-129/82

Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; <u>h\_\_15ftw</u> Pany H B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; Examiner-License No. 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

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.

- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- All plates are 1.5x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 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.
- 11) All bearings are assumed to be SP No.2.

12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 76 lb uplift at joint 22, 76 lb uplift at joint 14, 9 lb uplift at joint 20, 3 lb uplift at joint 17, 9 lb uplift at joint 16 and 3 lb uplift at joint 19.

13) 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

13-4-0

d for Review for Code Compliance Universal Engineering Science

PX2707

No 6818

No 6818

No 6818 JOAQUIN VE 68182

12/31/2024

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

November 7,2024



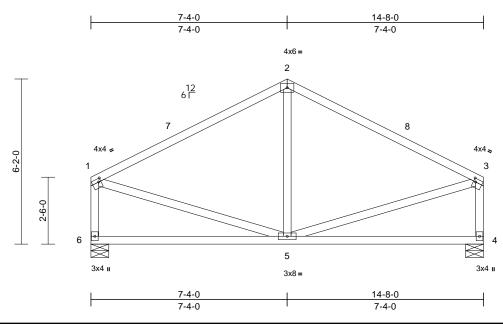
MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE



Job	Truss	Truss Type	Qty	Ply	
0624-025	D06	Common	3	1	T35491807 Job Reference (optional)

Run: 8.73 S. Oct 31 2024 Print: 8.730 S. Oct 31 2024 MiTek Industries. Inc. Thu Nov 07 08:37:32  $ID: S78YLHZKniU4nK5H4Mbkx7yLdh\_-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?ff$ 

Page: 1



Scale = 1:43

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.50	Vert(LL)	-0.05	4-5	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.43	Vert(CT)	-0.10	4-5	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 82 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 (size) 4=0-8-0, 6=0-8-0

Max Horiz 6=-122 (LC 10)

Max Grav 4=575 (LC 1), 6=575 (LC 1)

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

Tension TOP CHORD 1-2=-546/122, 2-3=-546/121, 1-6=-508/149,

3-4=-508/149 **BOT CHORD** 

5-6=-105/167, 4-5=-51/102

WFBS 2-5=-43/165, 1-5=-16/330, 3-5=-17/331

### 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=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 0-1-12 to 3-1-12, Zone1 3-1-12 to 7-4-0, Zone2 7-4-0 to 11-6-15, Zone1 11-6-15 to 14-6-4 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.

- All bearings are assumed to be SP No.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



Review for Code Compliance Universal Engineering Science

Laudence Parnell

PX2707

12/31/2024



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

November 7,2024



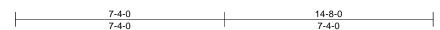
🗥 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

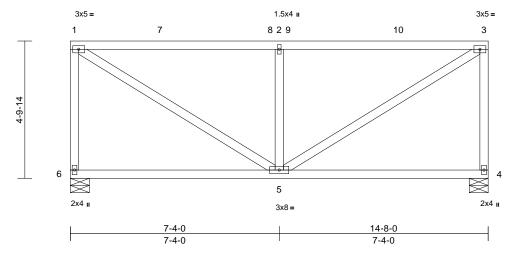


Job	Truss	Truss Type	Qty	Ply	
0624-025	D07	Flat	1	1	T35491808 Job Reference (optional)

Run: 8.73 S. Oct 31 2024 Print: 8.730 S. Oct 31 2024 MiTek Industries. Inc. Thu Nov 07 08:37:32 ID:kT3Cphfj7sM57P7d\_KDNjcyLdgt-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1





Scale = 1:40.4

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	0.51	Vert(LL)	-0.06	5-6	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.43	Vert(CT)	-0.11	5-6	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.36	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 87 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 (size) 4=0-8-0, 6=0-8-0 Max Horiz 6=-127 (LC 10)

Max Uplift 4=-29 (LC 9), 6=-29 (LC 8)

Max Grav 4=575 (LC 1), 6=575 (LC 1)

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

Tension

TOP CHORD 1-6=-509/296, 1-2=-549/215, 2-3=-549/215,

3-4=-509/296 BOT CHORD 5-6=-163/177, 4-5=-54/68

1-5=-288/609, 2-5=-495/343, 3-5=-288/609 **WEBS** 

### NOTES

- 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 0-1-12 to 3-1-12, Zone2 3-1-12 to 11-6-4, Zone3 11-6-4 to 14-6-4 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.
- 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 .

- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 29 lb uplift at joint 6 and 29 lb uplift at joint 4.
- 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



Review for Code Compliance Universal Engineering Science

Laudence Parnell

PX2707 12/31/2024



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

November 7,2024



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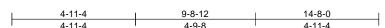


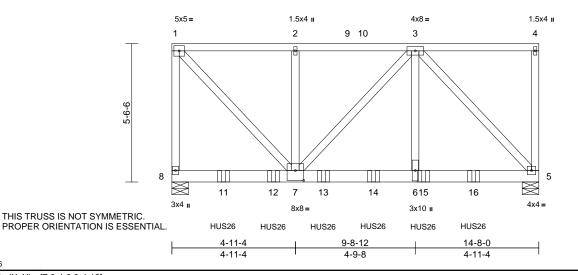
Ply Job Truss Truss Type Qty T35491809 0624-025 D08 Flat Girder 2 Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066,

Run: 8 73 S. Oct 31 2024 Print: 8 730 S. Oct 31 2024 MiTek Industries. Inc. Thu Nov 07 08:37:32 ID:wbDM7RncYEIXx5Tk78wyfwyLdgi-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1





Scale = 1:46

Plate Offsets (X, Y): [7:0-4-0,0-4-12]

-		1										
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.42	Vert(LL)	-0.05	6-7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.41	Vert(CT)	-0.10	6-7	>999	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.93	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 228 lb	FT = 20%

### LUMBER

TOP CHORD 2x4 SP No.2 **BOT CHORD** 2x6 SP 2400F 2.0E 2x4 SP No.2 WEBS

**BRACING** 

TOP CHORD Structural wood sheathing directly applied or

6-0-0 oc purlins, except end verticals. **BOT CHORD** 

Rigid ceiling directly applied or 10-0-0 oc

bracing.

REACTIONS 5=0-8-0, 8=0-8-0 (size) Max Horiz 8=-144 (LC 6)

Max Uplift 5=-71 (LC 5), 8=-73 (LC 4)

Max Grav 5=4513 (LC 13), 8=4825 (LC 14)

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

Tension

TOP CHORD 1-8=-3985/84, 1-2=-3641/79, 2-3=-3641/79,

3-4=-74/49, 4-5=-134/28

7-8=-109/123, 6-7=-90/3586, 5-6=-90/3586 BOT CHORD

WFBS 1-7=-79/5278, 2-7=-289/84, 3-7=-30/115,

3-6=0/3483, 3-5=-5199/79

### NOTES

1) 2-ply truss to be connected together with 10d

(0.131"x3") nails as follows:

Top chords connected as follows: 2x4 - 1 row at 0-9-0

Bottom chords connected as follows: 2x6 - 2 rows

staggered at 0-7-0 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.

- 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 trust proponent eview for Code Compliance Provide adequate drainage to prevent water ding. This truss has been designed for a 10.0 ps pouron. Universal Engineering Science

chord live load nonconcurrent with any other-live loads.

- \* This truss has been designed for a live lead of 20 0ps f Powe II 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 2400F 2.0E
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 73 lb uplift at joint 8 and 71 lb uplift at joint 5.
- 10) Use MiTek HUS26 (With 14-16d nails into Girder & 6-16d nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 2-0-12 from the left end to 12-0-12 to connect truss(es) to front face of bottom chord.
- 11) Fill all nail holes where hanger is in contact with lumber.

### 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=-1232 (F), 12=-1232 (F), 13=-1232 (F), 14=-1232 (F), 15=-1232 (F), 16=-1232 (F)



12/31/2024

PX2707

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

November 7,2024

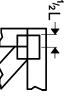


MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE

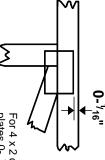


### Symbols

## 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



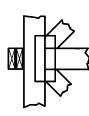
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## 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.

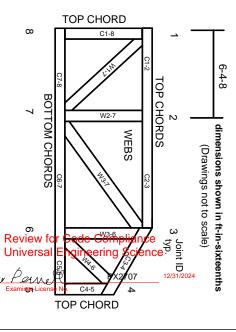
### Industry Standards:

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 CLOCKVISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.

CHORDS AND WEBS ARE IDENTIFIED BY END JOINT

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

# Product Code Approvals

ICC-ES Reports:

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

# Design General Notes

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

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

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

# **General Safety Notes**

# Failure to Follow Could Cause Property Damage or Personal Injury

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI
- Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
- Never exceed the design loading shown and never stack materials on inadequately braced trusses.
- Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.

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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.

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

