

RE: 6250756  
1820-B

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

## Site Information:

Customer: Adams Homes-Gainesville Project Name: 6250756  
Lot/Block: 139 Model: 1820-B

Address: 225 SW Silver Palm Dr Subdivision: The Preserve at Laurel Lake  
City: Lake City State: fl

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

Design Code: **FBC2023/TPI2014**

Wind Code: ASCE 7-22

Roof Load: 40.0 psf

Design Program: MiTek 20/20 8.7

Wind Speed: 130 mph

Floor Load: N/A psf

This package includes 24 individual, dated 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	No.	Seal#	Truss Name	Date
1	T34578771	A01	7/30/2024	21	T34578791	G01	7/30/2024
2	T34578772	A02	7/30/2024	22	T34578792	G01X	7/30/2024
3	T34578773	A03	7/30/2024	23	T34578793	G02	7/30/2024
4	T34578774	A04	7/30/2024	24	T34578794	H7V	7/30/2024
5	T34578775	A05	7/30/2024				
6	T34578776	A06	7/30/2024				
7	T34578777	A07	7/30/2024				
8	T34578778	A08	7/30/2024				
9	T34578779	A09	7/30/2024				
10	T34578780	A10	7/30/2024				
11	T34578781	A11	7/30/2024				
12	T34578782	C1V	7/30/2024				
13	T34578783	C3V	7/30/2024				
14	T34578784	C5V	7/30/2024				
15	T34578785	E01	7/30/2024				
16	T34578786	E01X	7/30/2024				
17	T34578787	E02	7/30/2024				
18	T34578788	E03	7/30/2024				
19	T34578789	E7A	7/30/2024				
20	T34578790	E7V	7/30/2024				

**APPROVED**

*By troy crews at 3:29 pm, May 01, 2025*

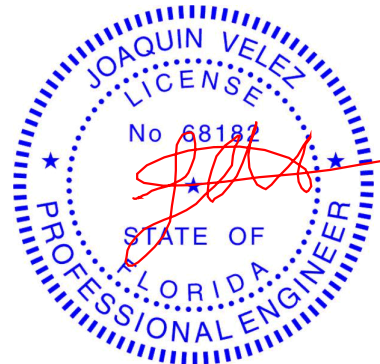
The truss drawing(s) referenced above have been prepared by  
MiTek USA, Inc. under my direct supervision  
based on the parameters provided by Tibbetts Lumber Co., LLC.

Truss Design Engineer's Name: Velez, Joaquin

My license renewal date for the state of Florida is February 28, 2027.

Florida COA: 6634

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



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

July 30, 2024

Job	Truss	Truss Type	Qty	Ply	1820-B	T34578771
6250756	A01	Roof Special	8	1		
Job Reference (optional)						

Tibbetts Lumber Co., LLC (Ocala, FL), Ocala, FL - 34472,

8.730 s Jul 11 2024 MiTek Industries, Inc. Mon Jul 29 12:10:44 2024 Page 1  
ID:9677KBVwwjNKu0WI9IYrcUzY81Q-3KxulUDrSI8J0xdCVB?GutzwZUkATJUrhg6F6cytCpf

-2-0-0	4-7-7	8-4-0	12-4-12	19-4-0	26-3-4	30-4-0	34-0-9	38-8-0	40-8-0
2-0-0	4-7-7	3-8-9	4-0-12	6-11-4	6-11-4	4-0-12	3-8-9	4-7-7	2-0-0

Scale = 1:69.5

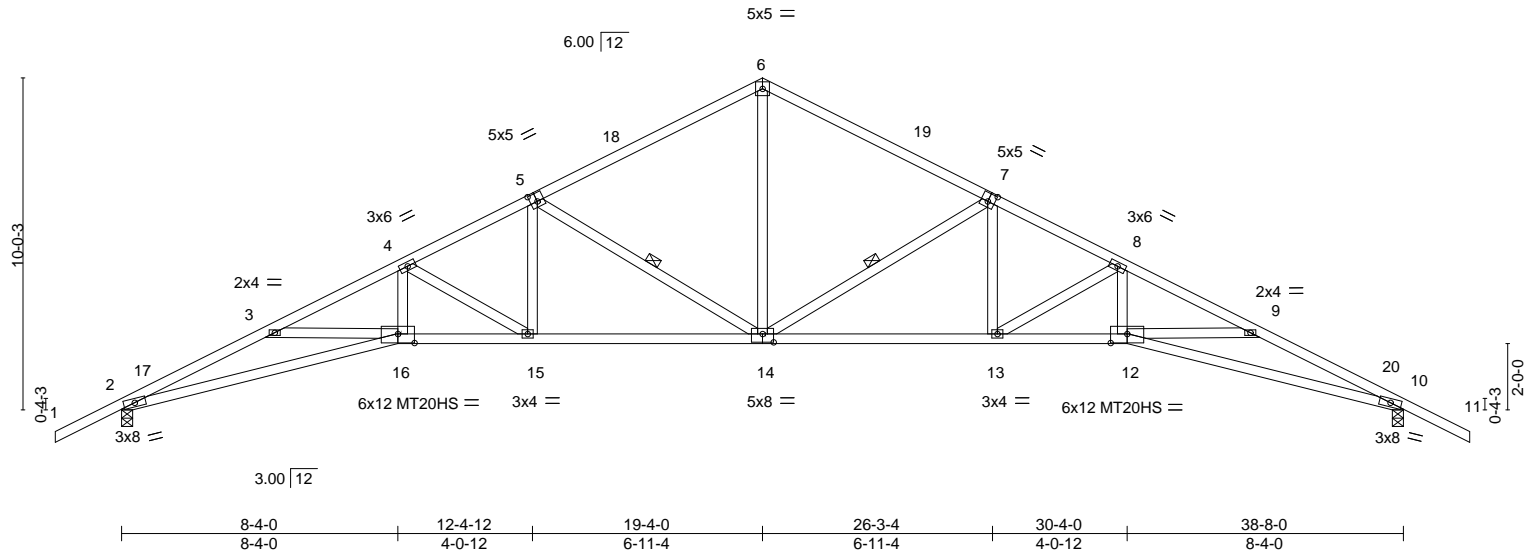


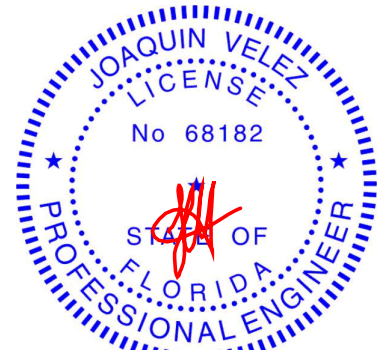
Plate Offsets (X,Y)-- [5:0-2-8,0-3-0], [7:0-2-8,0-3-0], [12:0-6-0,0-3-4], [14:0-4-0,0-3-0], [16:0-6-0,0-3-4]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES GRIP	
TCLL	20.0	Plate Grip DOL	1.25	TC	0.85	Vert(LL)	-0.45 14 >999	360	MT20 244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.97	Vert(CT)	-0.93 14-15 >495	240	MT20HS 187/143
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.53	Horz(CT)	0.63 10 n/a	n/a	
BCDL	10.0	Code FBC2023/TPI2014		Matrix-S		Wind(LL)	0.25 14 >999	240	Weight: 206 lb FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied.
BOT CHORD 2x4 SP No.2 *Except*	BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
2-16,10-12: 2x4 SP M 31 or 2x4 SP SS	WEBS 1 Row at midpt 7-14, 5-14
WEBS 2x4 SP No.2	

REACTIONS.	(size) 2=0-4-0, 10=0-4-0
	Max Horz 2=-175(LC 10)
	Max Uplift 2=-128(LC 12), 10=-128(LC 12)
	Max Grav 2=1663(LC 1), 10=1663(LC 1)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-5166/360, 3-4=-4976/262, 4-5=-3428/246, 5-6=-2243/226, 6-7=-2243/222, 7-8=-3428/253, 8-9=-4976/278, 9-10=-5166/375
BOT CHORD	2-16=-262/4637, 15-16=-112/4336, 14-15=-55/3018, 13-14=-78/3018, 12-13=-142/4336, 10-12=-291/4637
WEBS	6-14=-48/1524, 7-14=-1293/150, 7-13=0/867, 8-13=-1505/74, 8-12=-0/1235, 5-14=-1293/146, 5-15=0/867, 4-15=-1505/66, 4-16=0/1235

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=5ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Zone3 -2-0-0 to 1-0-0, Zone1 1-0-0 to 19-4-0, Zone2 19-4-0 to 23-6-15, Zone1 23-6-15 to 40-8-0 zone; cantilever 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.
  - All plates are MT20 plates unless otherwise indicated.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Bearing at joint(s) 2, 10 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 100 lb uplift at joint(s) except (jt=lb) 2=128, 10=128.



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

July 30,2024

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

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

**MiTek®**

16023 Swingley Ridge Rd.  
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314.434.1200 / MiTek-US.com

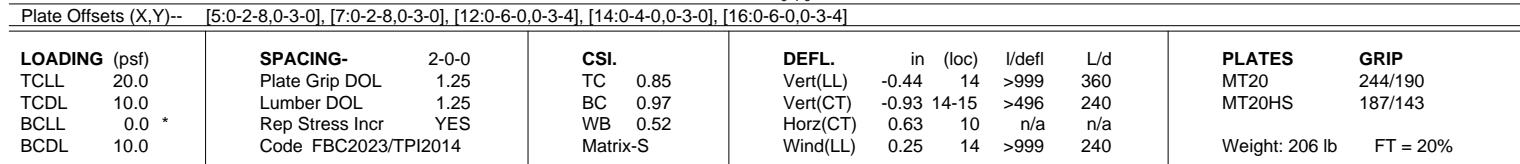
Tibbetts Lumber Co., LLC (Ocala, FL), Ocala, FL - 34472, 8.730 s Jul 11 2024 MiTek Industries, Inc. Mon Jul 29 12:10:45 2024 Page 1

ID:9677KBVwwjNKu0Wl9lYrcUy81Q-XWVGyqEUDcGAe5CP2vWV14W4Hu3Qcmm?wkRpe2ytCpe

19-8-0  
19-4-0  
0-4-0  
0-4-0

2-0-0 4-7-7 8-4-0 12-4-11 19-0-0 26-3-5 30-4-0 34-0-9 38-8-0 40-8-0  
2-0-0 4-7-7 3-8-9 4-0-11 6-7-5 6-7-5 4-0-11 3-8-9 4-7-7 2-0-0

Scale = 1:71.8



**REACTIONS.** (size) 2=0-4-0, 10=0-4-0  
 Max Horz 2=175(LC 11)  
 Max Uplift 2=-128(LC 12), 10=-128(LC 12)  
 Max Grav 2=1663(LC 1), 10=1663(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 2-3=-5159/328, 3-4=-4971/230, 4-5=-3427/218, 5-6=-2242/198, 6-7=-2242/194,  
7-8=-3427/223, 8-9=-4971/243, 9-10=-5159/340

BOT CHORD 2-16=-236/4630, 15-16=-87/4332, 14-15=-33/3018, 13-14=-50/3018, 12-13=-111/4332,  
10-12=-259/4630

WEBS 4-16=0/1233, 4-15=-1502/65, 5-15=0/866, 5-14=-1293/131, 7-14=-1293/134, 7-13=0/866,  
8-13=-1502/71, 8-12=0/1233, 6-14=-40/1523

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=5ft; Cat. II; Exp B; Encl. GCPI=0.18; MWFRS (directional) and C-C Zone3 -2-0-0 to 1-0-0, Zone1 1-0-0 to 19-4-0, Zone2 19-4-0 to 23-6-15, Zone1 23-6-15 to 40-8-0 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 4) All plates are MT20 plates unless otherwise indicated.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Bearing at joint(s) 2, 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=128. 10=128.



July 30, 2024

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Job	Truss	Truss Type	Qty	Ply	1820-B	T34578773
6250756	A03	Hip	2	1		
Job Reference (optional)						

Tibbetts Lumber Co., LLC (Ocala, FL),

Ocala, FL - 34472,

8.730 s Jul 11 2024 MiTek Industries, Inc. Mon Jul 29 12:10:46 2024 Page 1

ID:9677KBVwwjNKu0Wl9YrcUzY81Q-zj3e9AF6\_wO1FFnbcc2kZl3lEHpgxAS89\_bMAUytCpd

-2-0-0	4-7-7	8-4-0	12-4-12	17-0-0	21-8-0	26-3-4	30-4-0	34-0-9	38-8-0	40-8-0
2-0-0	4-7-7	3-8-9	4-0-12	4-7-5	4-8-0	4-7-5	4-0-12	3-8-9	4-7-7	2-0-0

Scale = 1:71.8

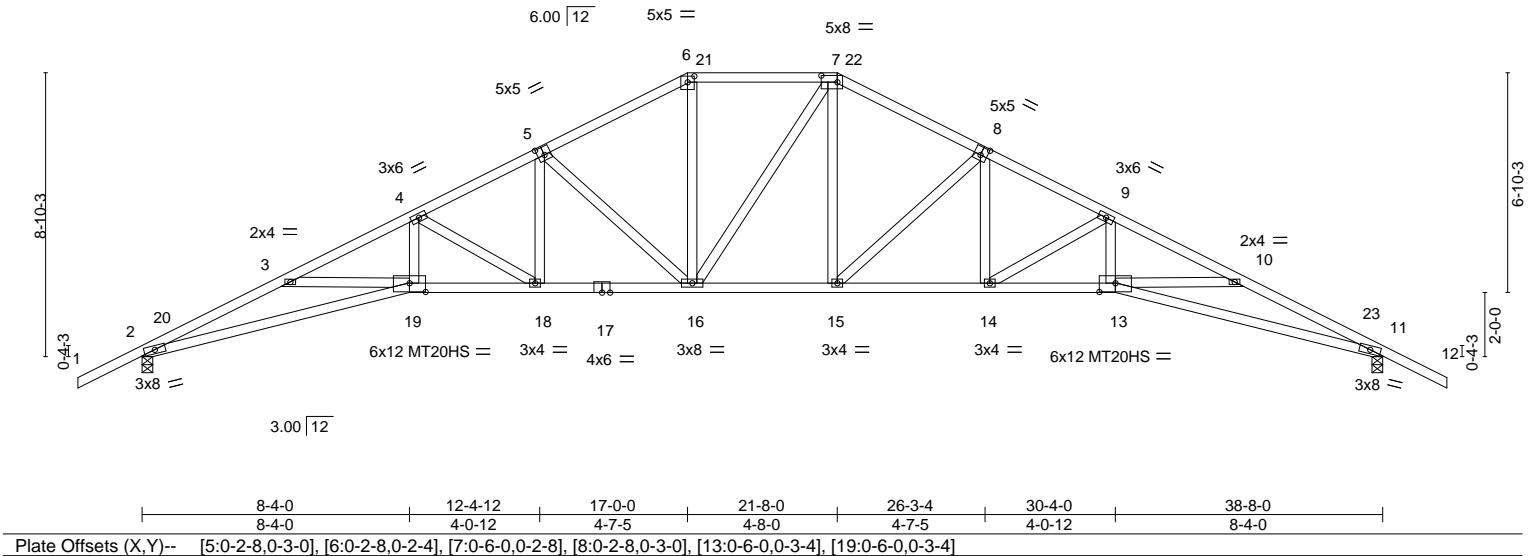


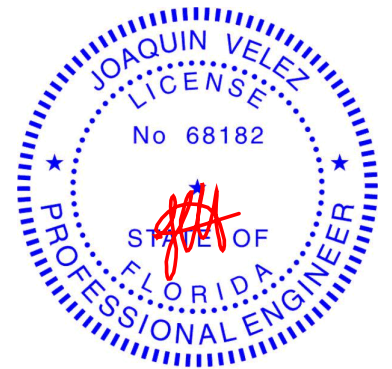
Plate Offsets (X,Y)--		[5:0-2-8,0-3-0], [6:0-2-8,0-2-4], [7:0-6-0,0-2-8], [8:0-2-8,0-3-0], [13:0-6-0,0-3-4], [19:0-6-0,0-3-4]	
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>
TCLL 20.0	Plate Grip DOL	1.25	TC 0.65
TCDL 10.0	Lumber DOL	1.25	BC 0.97
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.75
BCDL 10.0	Code FBC2023/TPI2014		Matrix-S
			<b>DEFL.</b>
			in (loc) l/defl L/d
			Vert(LL) -0.44 15 >999 360
			Vert(CT) -0.88 14-15 >522 240
			Horz(CT) 0.61 11 n/a n/a
			Wind(LL) 0.24 15 >999 240
			<b>PLATES</b>
			MT20 244/190
			MT20HS 187/143
			Weight: 219 lb FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins.
BOT CHORD 2x4 SP No.2 *Except*	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
2-19,11-13: 2x4 SP M 31 or 2x4 SP SS	2-2-0 oc bracing: 18-19,13-14.
WEBS 2x4 SP No.2	

<b>REACTIONS.</b>	(size) 2=0-4-0, 11=0-4-0
	Max Horz 2=156(LC 11)
	Max Uplift 2=128(LC 12), 11=128(LC 12)
	Max Grav 2=1663(LC 1), 11=1663(LC 1)

<b>FORCES.</b>	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-5161/376, 3-4=-4987/288, 4-5=-3409/257, 5-6=-2512/235, 6-7=-2207/235, 7-8=-2510/239, 8-9=-3410/263, 9-10=-4986/300, 10-11=-5161/387
BOT CHORD	2-19=-280/4632, 18-19=-141/4348, 16-18=-62/2988, 15-16=0/2205, 14-15=-80/2989, 13-14=-163/4348, 11-13=-302/4632
WEBS	4-19=0/1239, 4-18=-1555/91, 5-18=0/868, 5-16=-1084/112, 6-16=-18/827, 7-15=-22/825, 8-15=-1087/115, 8-14=-1/870, 9-14=-1554/96, 9-13=0/1239

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=5ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Zone3 -2-0-0 to 1-0-0, Zone1 1-0-0 to 17-0-0, Zone2 17-0-0 to 21-2-15, Zone1 21-2-15 to 21-8-0, Zone2 21-8-0 to 26-2-5, Zone1 26-2-5 to 40-8-0 zone; cantilever 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.
  - All plates are MT20 plates unless otherwise indicated.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Bearing at joint(s) 2, 11 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 100 lb uplift at joint(s) except (jt=lb) 2=128, 11=128.



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

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Job	Truss	Truss Type	Qty	Ply	1820-B	T34578774
6250756	A04	Hip	2	1		

Tibbetts Lumber Co., LLC (Ocala, FL), Ocala, FL - 34472,

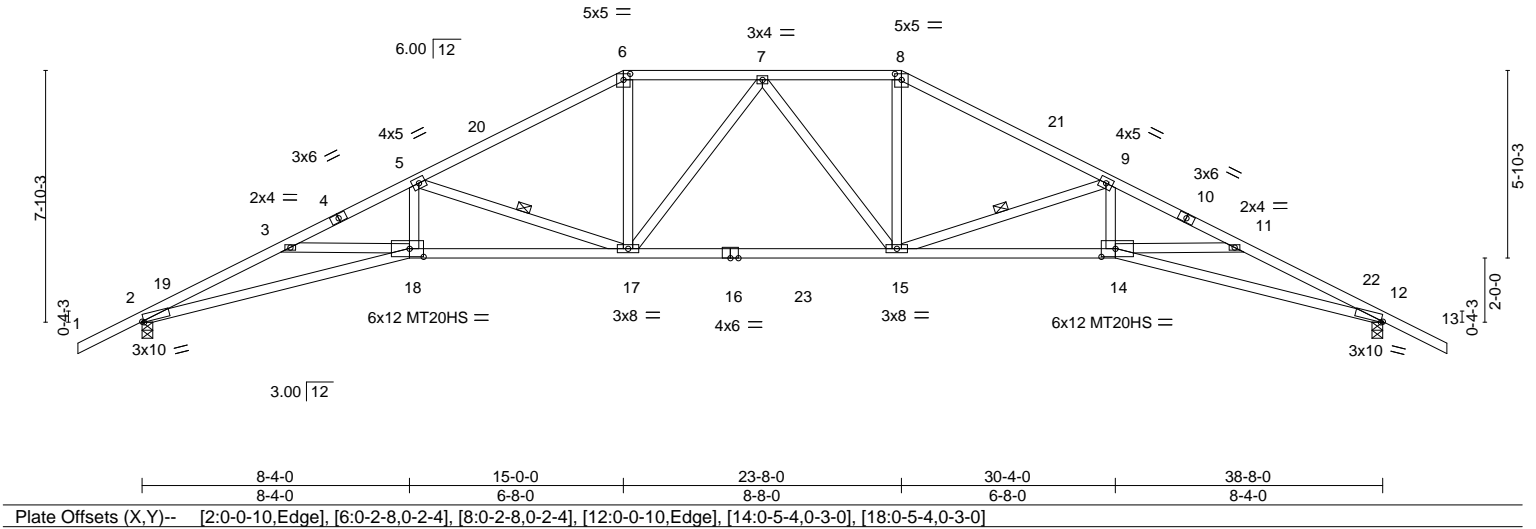
8.730 s Jul 11 2024 MiTek Industries, Inc. Mon Jul 29 12:10:46 2024 Page 1

ID:9677KBVwwjNKu0WI9lYrcUzY81Q-?j3e9AF6\_wO1FFnbcc2kZl3laHTaxDz89\_bMAUytCpd

Job Reference (optional)

-2-0-0	4-7-7	8-4-0	15-0-0	19-4-0	23-8-0	30-4-0	34-0-9	38-8-0	40-8-0
2-0-0	4-7-7	3-8-9	6-8-0	4-4-0	4-4-0	6-8-0	3-8-9	4-7-7	2-0-0

Scale = 1:71.8



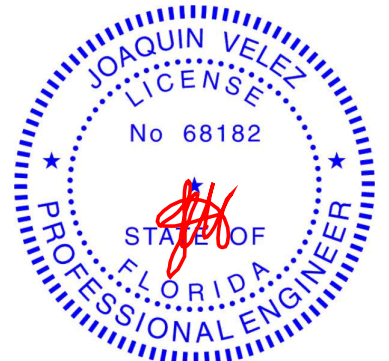
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.69	Vert(LL)	-0.54 15-17	>844	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.25	BC 0.72	Vert(CT)	-1.01 15-17	>456	240	MT20HS	187/143
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.53	Horz(CT)	0.63 12	n/a	n/a		
BCDL 10.0	Code FBC2023/TPI2014		Matrix-S	Wind(LL)	0.23 14-15	>999	240	Weight: 202 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 *Except*	TOP CHORD Structural wood sheathing directly applied or 2-1-15 oc purlins.
4-6,8-10: 2x4 SP M 31 or 2x4 SP SS	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
BOT CHORD 2x4 SP M 31 or 2x4 SP SS	WEBS 1 Row at midpt 5-17, 9-15
WEBS 2x4 SP No.2	

REACTIONS.	(size) 2=0-4-0, 12=0-4-0
Max Horz	2=140(LC 10)
Max Uplift	2=128(LC 12), 12=128(LC 12)
Max Grav	2=1808(LC 17), 12=1808(LC 18)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-5688/359, 3-5=-5621/306, 5-6=-3182/221, 6-7=-2815/230, 7-8=-2777/234, 8-9=-3146/225, 9-11=-5514/319, 11-12=-5589/370
BOT CHORD	2-18=-263/5232, 17-18=-164/5000, 15-17=-40/2910, 14-15=-188/4803, 12-14=-287/5035
WEBS	5-18=0/1498, 5-17=-2280/174, 6-17=0/1095, 7-17=-309/56, 7-15=-309/56, 8-15=0/1108, 9-15=-2222/181, 9-14=0/1451

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TC DL=4.2psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=5ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Zone3 -2-0-0 to 1-0-0, Zone1 1-0-0 to 15-0-0, Zone2 15-0-0 to 19-4-0, Zone1 19-4-0 to 23-8-0, Zone2 23-8-0 to 27-10-15, Zone1 27-10-15 to 40-8-0 zone; cantilever 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.
  - All plates are MT20 plates unless otherwise indicated.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Bearing at joint(s) 2, 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=128, 12=128.



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

July 30,2024

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Job	Truss	Truss Type	Qty	Ply	1820-B	T34578775
6250756	A05	Hip	2	1		
Job Reference (optional)						

Tibbetts Lumber Co., LLC (Ocala, FL),

Ocala, FL - 34472,

8.730 s Jul 11 2024 MiTek Industries, Inc. Mon Jul 29 12:10:47 2024 Page 1

ID:9677KBVwwjNku0WI9IYrcUzY81Q-Tvd1NWGkIDWutPLnAJZz6VbSIhIPgcSHOeKwiwyTCpc

-2-0-0	4-7-7	8-4-0	13-0-0	19-4-0	25-8-0	30-4-0	34-0-9	38-8-0	40-8-0
2-0-0	4-7-7	3-8-9	4-8-0	6-4-0	6-4-0	4-8-0	3-8-9	4-7-7	2-0-0

Scale = 1:71.8

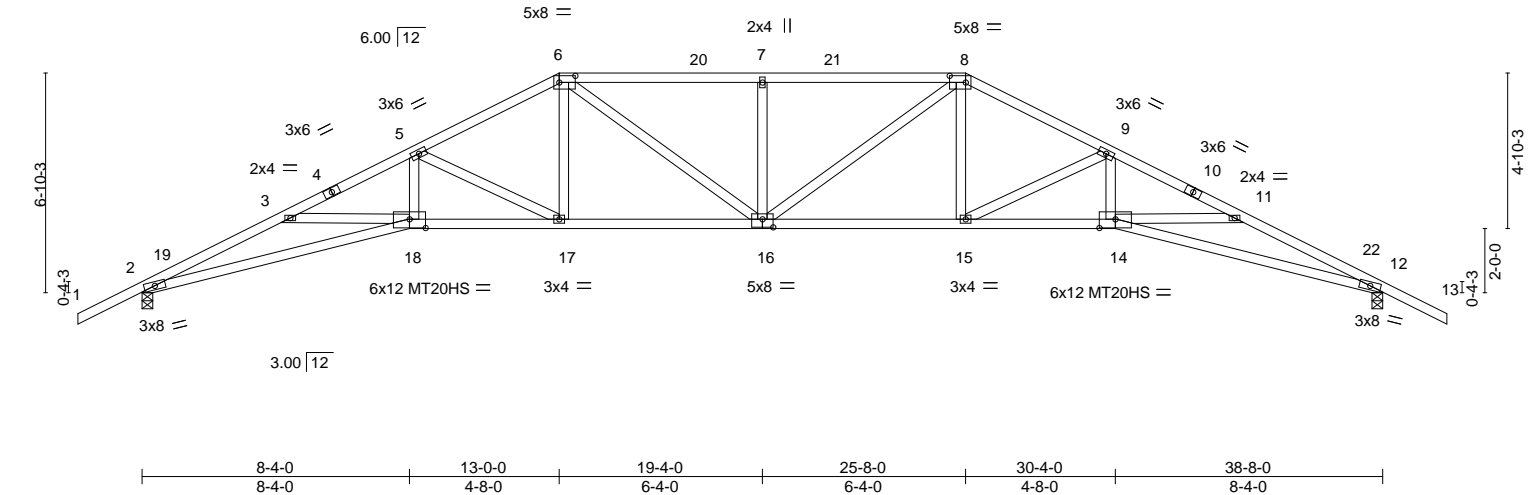


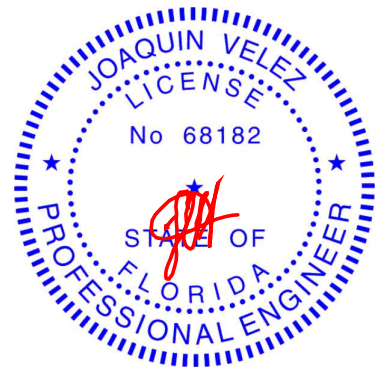
Plate Offsets (X,Y)-- [6:0-6-0,0-2-8], [8:0-6-0,0-2-8], [14:0-6-0,0-3-4], [16:0-4-0,0-3-0], [18:0-6-0,0-3-4]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES GRIP	
TCLL	20.0	Plate Grip DOL	1.25	TC	0.73	Vert(LL)	-0.47 16 >970	360	MT20 244/190
TCDL	10.0	Lumber DOL	1.25	BC	1.00	Vert(CT)	-0.96 16-17 >481	240	MT20HS 187/143
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.77	Horz(CT)	0.64 12 n/a	n/a	
BCDL	10.0	Code FBC2023/TPI2014		Matrix-S		Wind(LL)	0.26 16 >999	240	Weight: 201 lb FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins.
BOT CHORD 2x4 SP No.2 *Except*	BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
2-18,12-14: 2x4 SP M 31 or 2x4 SP SS	
WEBS 2x4 SP No.2	

<b>REACTIONS.</b>	(size) 2=0-4-0, 12=0-4-0
	Max Horz 2=124(LC 11)
	Max Uplift 2=128(LC 12), 12=128(LC 12)
	Max Grav 2=1663(LC 1), 12=1663(LC 1)

<b>FORCES.</b>	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-5157/374, 3-5=-4992/298, 5-6=-3252/239, 6-7=-3259/268, 7-8=-3259/268, 8-9=-3252/245, 9-11=-4992/310, 11-12=-5156/386
BOT CHORD	2-18=-278/4628, 17-18=-153/4355, 16-17=-38/2880, 15-16=-50/2880, 14-15=-175/4355, 12-14=-300/4628
WEBS	5-18=0/1238, 5-17=-1672/133, 6-17=0/853, 6-16=-46/617, 7-16=-426/125, 8-16=-46/617, 8-15=0/853, 9-15=-1672/139, 9-14=0/1238

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=5ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Zone3 -2-0-0 to 1-0-0, Zone1 1-0-0 to 13-0-0, Zone2 13-0-0 to 17-2-15, Zone1 17-2-15 to 25-8-0, Zone2 25-8-0 to 30-2-4, Zone1 30-2-4 to 40-8-0 zone; cantilever 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.
  - All plates are MT20 plates unless otherwise indicated.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Bearing at joint(s) 2, 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=128, 12=128.



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

July 30,2024

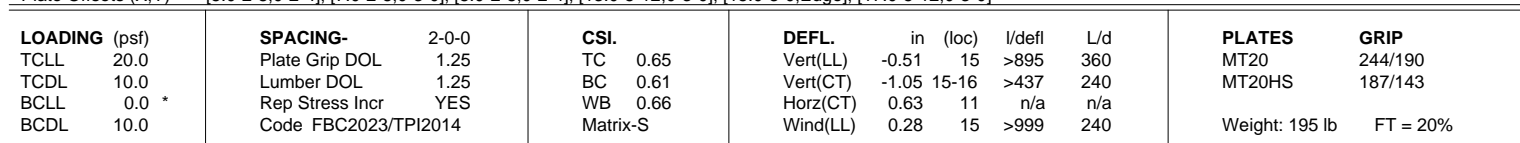
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.**

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ID:9677KBVvwjNku0Wl9lYrcUzY81Q-x5BPasHMWwXelVZw\_k14Cfj8eg5BjP5RRcl4TFNfCpb  
|-2-0-0| 4-7-7| 8-4-0| 11-0-0| 16-6-11| 22-1-5| 27-8-0| 30-4-0| 34-0-9| 38-8-0| 40-8-0|  
|-2-0-0| 4-7-7| 3-8-9| 2-8-0| 5-6-11| 5-6-11| 5-6-11| 2-8-0| 3-8-9| 4-7-7| 2-0-0|  
Scale = 1:70.6



**REACTIONS.** (size) 2=0-4-0, 11=0-4-0  
 Max Horz 2=107(LC 11)  
 Max Uplift 2=-128(LC 12), 11=-128(LC 12)  
 Max Grav 2=1663(LC 1), 11=1663(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD	2-3=-5163/376, 3-4=-4978/284, 4-5=-3747/248, 5-6=-3380/236, 6-7=-4100/266, 7-8=-3379/243, 8-9=-3747/256, 9-10=-4978/296, 10-11=-5163/388
BOT CHORD	2-17=-279/4634, 16-17=-134/4340, 15-16=-140/4033, 14-15=-139/4033, 13-14=-158/4340, 11-13=-303/4634
WEBS	4-17=-71/206, 4-16=-1341/107, 5-16=-46/1432, 6-16=-892/94, 7-14=-892/94, 8-14=-50/1432, 9-14=-1341/112, 9-13=-13/206

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TC DL=4.2psf; BC DL=6.0psf; h=15ft; B=45ft; L=24ft; eave=5ft; Cat. II; Exp B; Encl. GCpi=0.18; MWFRS (directional) and C-C Zone3 -2-0-0 to 1-0-0, Zone1 1-0-0 to 11-0-0, Zone2 11-0-0 to 15-2-15, Zone1 15-2-15 to 27-8-0, Zone2 27-8-0 to 31-10-15, Zone1 31-10-15 to 40-8-0 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 4) Provide adequate drainage to prevent water ponding.
- 5) All plates are MT20 plates unless otherwise indicated.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Bearing at joint(s) 2, 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb)  
2=128. 11=128.



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

July 30, 2024



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Job	Truss	Truss Type	Qty	Ply	1820-B	T34578777
6250756	A07	Hip	1	1		
Job Reference (optional)						

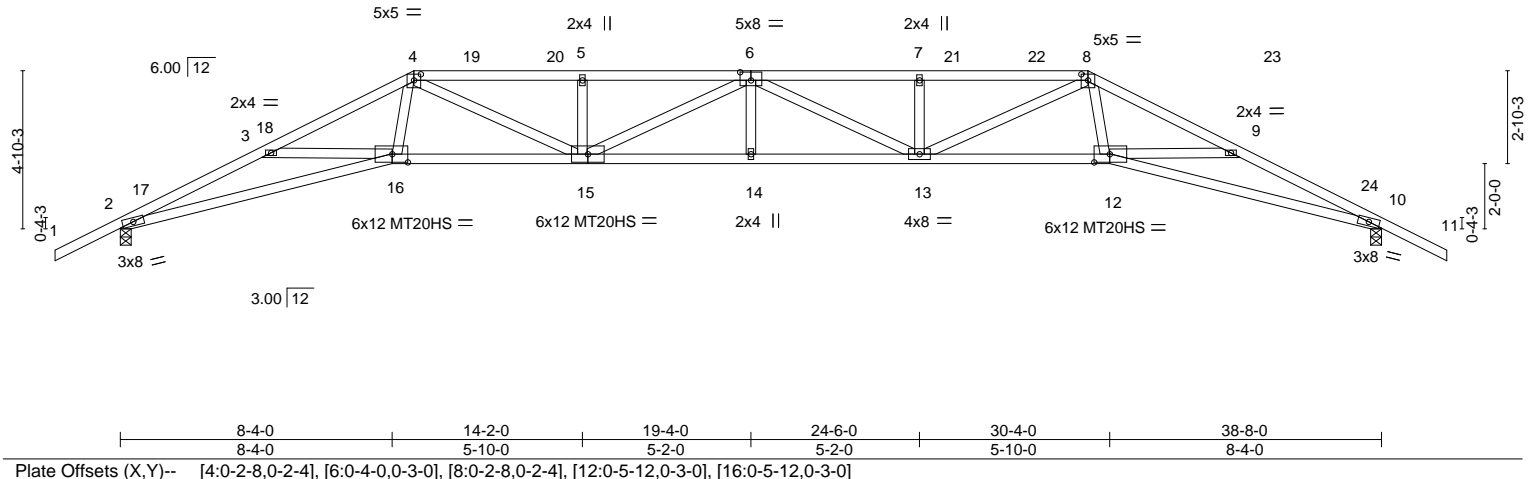
Tibbetts Lumber Co., LLC (Ocala, FL), Ocala, FL - 34472,

8.730 s Jul 11 2024 MiTek Industries, Inc. Mon Jul 29 12:10:48 2024 Page 1

ID:9677KBVwwjNku0WI9IYrcUzY81Q-x5BPasHMWxElVZw\_k14Cfj8Zm5BuPAKRcl4TFNytCpb

-2-0-0	4-7-7	9-0-0	14-2-0	19-4-0	24-6-0	29-8-0	34-0-9	38-8-0	40-8-0
2-0-0	4-7-7	4-4-9	5-2-0	5-2-0	5-2-0	5-2-0	4-4-9	4-7-7	2-0-0

Scale = 1:70.6



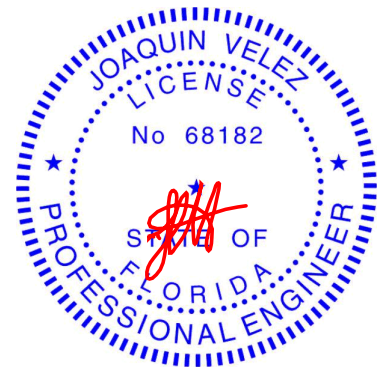
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.97	Vert(LL)	-0.66	14	>698	360	MT20 244/190
TCDL 10.0	Lumber DOL	1.25	BC 0.60	Vert(CT)	-1.32	14	>349	240	MT20HS 187/143
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.34	Horz(CT)	0.71	10	n/a	n/a	
BCDL 10.0	Code FBC2023/TPI2014		Matrix-S	Wind(LL)	0.37	14	>999	240	Weight: 187 lb FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2 *Except*	TOP CHORD Structural wood sheathing directly applied.
4-6,6-8: 2x4 SP M 31 or 2x4 SP SS	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
BOT CHORD 2x4 SP M 31 or 2x4 SP SS	
WEBS 2x4 SP No.2	

<b>REACTIONS.</b>	(size) 2=0-4-0, 10=0-4-0
	Max Horz 2=91(LC 11)
	Max Uplift 2=-128(LC 12), 10=-128(LC 12)
	Max Grav 2=1663(LC 1), 10=1663(LC 1)

<b>FORCES.</b>	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-5178/390, 3-4=-4945/261, 4-5=-5329/339, 5-6=-5329/339, 6-7=-5329/337, 7-8=-5329/337, 8-9=-4945/273, 9-10=-5178/402
BOT CHORD	2-16=-294/4649, 15-16=-109/4048, 14-15=-218/5733, 13-14=-218/5733, 12-13=-129/4048, 10-12=-317/4649
WEBS	4-16=0/1306, 4-15=-97/1527, 5-15=-327/98, 6-15=-534/27, 6-13=-534/27, 7-13=-327/98, 8-13=-97/1527, 8-12=0/1306

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=5ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Zone3 -2-0-0 to 1-0-0, Zone1 1-0-0 to 9-0-0, Zone2 9-0-0 to 13-2-15, Zone1 13-2-15 to 29-8-0, Zone2 29-8-0 to 33-10-15, Zone1 33-10-15 to 40-8-0 zone; cantilever 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.
  - All plates are MT20 plates unless otherwise indicated.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Bearing at joint(s) 2, 10 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 100 lb uplift at joint(s) except (jt=lb) 2=128, 10=128.



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

July 30,2024

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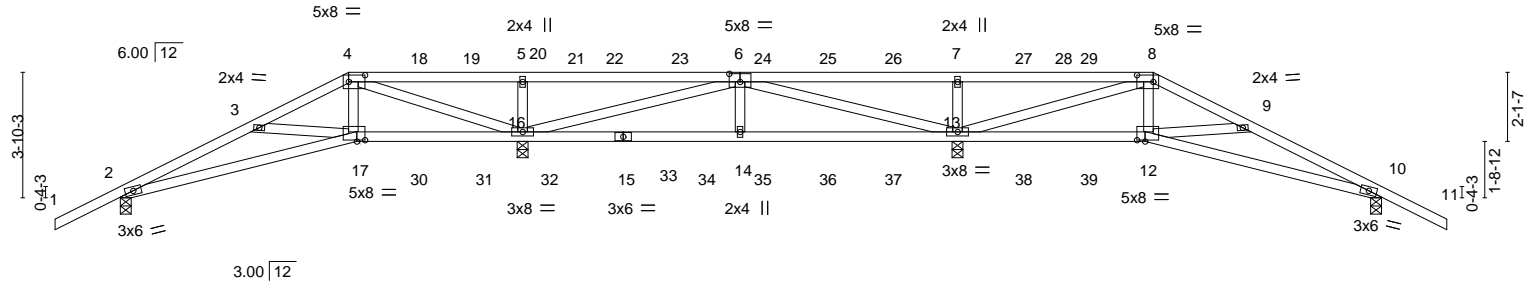
Job	Truss	Truss Type	Qty	Ply	1820-B	T34578778
6250756	A08	Hip Girder	1	2	Job Reference (optional)	

Tibbetts Lumber Co., LLC (Ocala, FL), Ocala, FL - 34472,

8.730 s Jul 11 2024 MiTek Industries, Inc. Mon Jul 29 12:10:50 2024 Page 1  
ID:96777KBVwwjNKKu0WI9lYrcUzY81Q-tUJ9?XlC28uTks4MrS6gk8D\_avvot3pk4cZaJFytCpZ

-2-0-0	4-3-1	7-0-0	12-4-0	19-0-0	25-8-0	31-8-0	34-4-15	38-8-0	40-8-0
2-0-0	4-3-1	2-8-15	5-4-0	6-8-0	6-8-0	6-0-0	2-8-15	4-3-1	2-0-0

Scale = 1:70.6



	7-3-0	12-4-0	19-0-0	25-8-0	31-5-0	38-8-0			
	7-3-0	5-1-0	6-8-0	6-8-0	5-9-0	7-3-0			
Plate Offsets (X,Y)--	[4:0-6-0,0-2-8], [6:0-4-0,0-3-0], [8:0-6-0,0-2-8], [12:0-3-0,0-0-8], [17:0-3-0,0-0-8]								
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.25	TC 0.69	Vert(LL)	-0.05 10-12	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.25	BC 0.51	Vert(CT)	-0.12 10-12	>999	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.41	Horz(CT)	0.06 10	n/a	n/a		
BCDL 10.0	Code FBC2023/TPI2014		Matrix-S	Wind(LL)	0.02 14	>999	240	Weight: 363 lb	FT = 20%

**LUMBER-**

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

**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.**

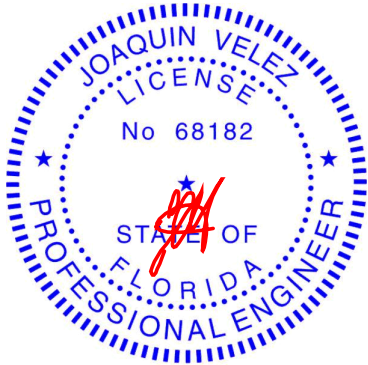
All bearings 0-4-0.  
(lb) - Max Horz 2=-74(LC 6)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 10 except 16=-131(LC 8), 13=-139(LC 8)  
Max Grav All reactions 250 lb or less at joint(s) except 2=663(LC 19), 10=728(LC 20), 16=2456(LC 19), 13=2514(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 2-3=-1328/30, 3-4=-1035/0, 4-5=-8/1133, 5-6=-8/1132, 6-7=-1/1128, 7-8=-1/1129, 8-9=-1307/0, 9-10=-1566/32  
BOT CHORD 2-17=0/1158, 16-17=0/988, 14-16=-81/1055, 13-14=-81/1055, 12-13=0/1253, 10-12=0/1376  
WEBS 3-17=-296/137, 4-17=0/808, 4-16=-2240/0, 5-16=-825/253, 6-16=-2265/184, 6-14=0/640, 6-13=-2263/185, 7-13=-867/267, 8-13=-2488/0, 8-12=0/882, 9-12=-285/158

**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.  
Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc.  
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=5ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional); cantilever 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Bearing at joint(s) 2, 10 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 100 lb uplift at joint(s) 2, 10 except (jt=lb) 16=131, 13=139.



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Date:

July 30,2024

Continued on page 2

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Job	Truss	Truss Type	Qty	Ply	1820-B	T34578778
6250756	A08	Hip Girder	1	2	Job Reference (optional)	

**NOTES-**

11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 252 lb down and 172 lb up at 7-0-0, 122 lb down and 83 lb up at 9-0-12, 122 lb down and 83 lb up at 11-0-12, 127 lb down and 85 lb up at 13-0-12, 127 lb down and 85 lb up at 15-0-12, 127 lb down and 85 lb up at 17-0-12, 127 lb down and 85 lb up at 19-0-12, 127 lb down and 85 lb up at 19-7-4, 127 lb down and 85 lb up at 21-7-4, 127 lb down and 85 lb up at 23-7-4, 122 lb down and 83 lb up at 25-7-4, 122 lb down and 83 lb up at 27-7-4, and 122 lb down and 83 lb up at 29-7-4, and 252 lb down and 172 lb up at 31-8-0 on top chord, and 312 lb down at 7-3-0, 95 lb down at 9-0-12, 95 lb down at 11-0-12, 97 lb down at 13-0-12, 97 lb down at 15-0-12, 97 lb down at 17-0-12, 97 lb down at 19-0-12, 97 lb down at 19-7-4, 97 lb down at 21-7-4, 97 lb down at 23-7-4, 95 lb down at 25-7-4, 95 lb down at 27-7-4, and 95 lb down at 29-7-4, and 312 lb down at 31-5-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

Vert: 1-4=-60, 4-8=-60, 8-11=-60, 2-17=-20, 12-17=-20, 10-12=-20

Concentrated Loads (lb)

Vert: 4=-205(B) 8=-205(B) 17=-262(B) 12=-262(B) 6=-127(B) 14=-49(B) 7=-122(B) 13=-48(B) 18=-122(B) 20=-122(B) 21=-127(B) 22=-127(B) 23=-127(B) 24=-127(B) 25=-127(B) 26=-127(B) 27=-122(B) 29=-122(B) 30=-48(B) 31=-48(B) 32=-49(B) 33=-49(B) 34=-49(B) 35=-49(B) 36=-49(B) 37=-49(B) 38=-48(B) 39=-48(B)

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

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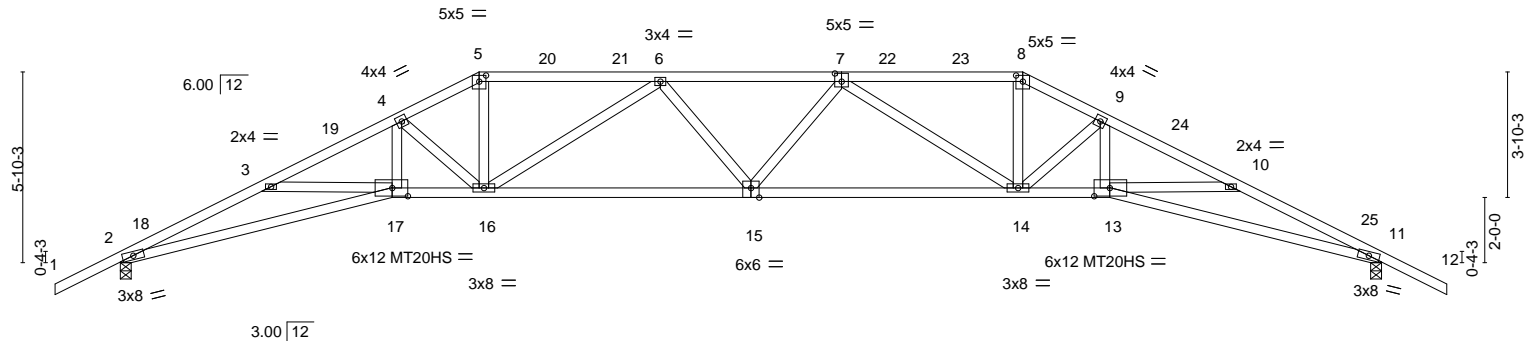
Job	Truss	Truss Type	Qty	Ply	1820-B	T34578779
6250756	A09	Hip	1	1		
Job Reference (optional)						

Tibbetts Lumber Co., LLC (Ocala, FL), Ocala, FL - 34472,

8.730 s Jul 11 2024 MiTek Industries, Inc. Mon Jul 29 12:10:51 2024 Page 1  
ID:9677KBVwwjNku0WI9lYrcUzY81Q-MgsXDtJEpS0KM0fZP9dvGLm9vIDQcSAtJGI7riytCpY

-2-0-0	4-7-7	8-4-0	11-0-0	16-6-11	22-1-5	27-8-0	30-4-0	34-0-9	38-8-0	40-8-0
2-0-0	4-7-7	3-8-9	2-8-0	5-6-11	5-6-11	5-6-11	2-8-0	3-8-9	4-7-7	2-0-0

Scale = 1:70.6



	8-4-0	11-0-0	19-4-0	27-8-0	30-4-0	38-8-0
	8-4-0	2-8-0	8-4-0	8-4-0	2-8-0	8-4-0
Plate Offsets (X,Y)--	[5:0-2-8,0-2-4], [7:0-2-8,0-3-0], [8:0-2-8,0-2-4], [13:0-5-12,0-3-0], [15:0-3-0,Edge], [17:0-5-12,0-3-0]					

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.65	Vert(LL)	-0.51 15	>895	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.25	BC 0.61	Vert(CT)	-1.05 15-16	>437	240	MT20HS	187/143
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.66	Horz(CT)	0.63 11	n/a	n/a		
BCDL 10.0	Code FBC2023/TPI2014		Matrix-S	Wind(LL)	0.28 15	>999	240	Weight: 195 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins.
BOT CHORD 2x4 SP M 31 or 2x4 SP SS	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2	

**REACTIONS.** (size) 2=0-4-0, 11=0-4-0  
Max Horz 2=107(LC 11)  
Max Uplift 2=128(LC 12), 11=128(LC 12)  
Max Grav 2=1663(LC 1), 11=1663(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-5163/376, 3-4=-4978/284, 4-5=-3747/248, 5-6=-3380/236, 6-7=-4100/266,  
7-8=-3380/243, 8-9=-3747/256, 9-10=-4978/296, 10-11=-5163/388  
BOT CHORD 2-17=-279/4634, 16-17=-134/4340, 15-16=-140/4033, 14-15=-139/4033, 13-14=-158/4340,  
11-13=-303/4634  
WEBS 4-17=-7/1206, 4-16=-1341/107, 5-16=-46/1432, 6-16=-892/94, 7-14=-892/94,  
8-14=-50/1432, 9-14=-1341/112, 9-13=-13/1206

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TC DL=4.2psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=5ft; Cat. II; Exp B; Encl., GCPI=0.18; MWFRS (directional) and C-C Zone3 -2-0-0 to 1-0-0, Zone1 1-0-0 to 11-0-0, Zone2 11-0-0 to 15-2-15, Zone1 15-2-15 to 27-8-0, Zone2 27-8-0 to 31-10-15, Zone1 31-10-15 to 40-8-0 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - 4) Provide adequate drainage to prevent water ponding.
  - 5) All plates are MT20 plates unless otherwise indicated.
  - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 8) Bearing at joint(s) 2, 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=128, 11=128.



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

July 30,2024

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Job	Truss	Truss Type	Qty	Ply	1820-B	T34578780
6250756	A10	Hip	1	1		
Job Reference (optional)						

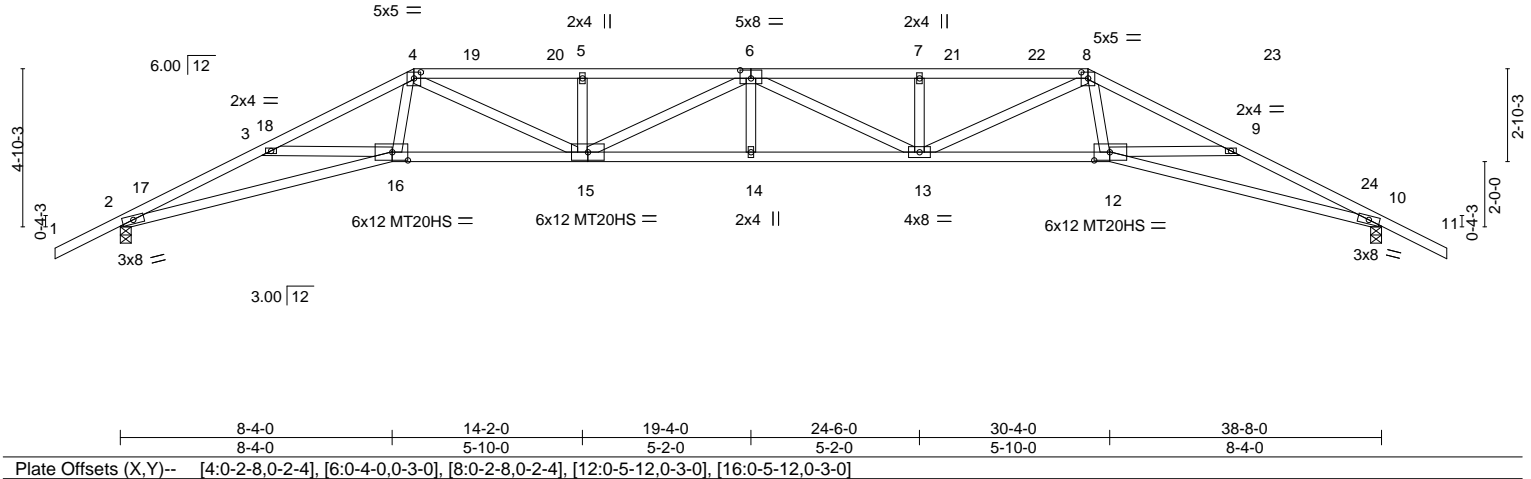
Tibbetts Lumber Co., LLC (Ocala, FL), Ocala, FL - 34472,

8.730 s Jul 11 2024 MiTek Industries, Inc. Mon Jul 29 12:10:51 2024 Page 1

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-2-0-0	4-7-7	9-0-0	14-2-0	19-4-0	24-6-0	29-8-0	34-0-9	38-8-0	40-8-0
2-0-0	4-7-7	4-4-9	5-2-0	5-2-0	5-2-0	5-2-0	4-4-9	4-7-7	2-0-0

Scale = 1:70.6



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.97	Vert(LL)	-0.66	14	>698	360	244/190
TCDL 10.0	Lumber DOL	1.25	BC 0.60	Vert(CT)	-1.32	14	>349	240	187/143
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.34	Horz(CT)	0.71	10	n/a	n/a	
BCDL 10.0	Code FBC2023/TPI2014		Matrix-S	Wind(LL)	0.37	14	>999	240	
								Weight: 187 lb	FT = 20%

<b>LUMBER-</b>		<b>BRACING-</b>	
TOP CHORD	2x4 SP No.2 *Except*	TOP CHORD	Structural wood sheathing directly applied.
	4-6,6-8: 2x4 SP M 31 or 2x4 SP SS	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
BOT CHORD	2x4 SP M 31 or 2x4 SP SS		
WEBS	2x4 SP No.2		

<b>REACTIONS.</b>	(size) 2=0-4-0, 10=0-4-0
	Max Horz 2=91(LC 11)
	Max Uplift 2=-128(LC 12), 10=-128(LC 12)
	Max Grav 2=1663(LC 1), 10=1663(LC 1)

<b>FORCES.</b>	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-5178/390, 3-4=-4945/261, 4-5=-5329/339, 5-6=-5329/339, 6-7=-5329/337, 7-8=-5329/337, 8-9=-4945/273, 9-10=-5177/402
BOT CHORD	2-16=-294/4649, 15-16=-109/4048, 14-15=-218/5733, 13-14=-218/5733, 12-13=-129/4048, 10-12=-317/4649
WEBS	4-16=0/1306, 4-15=-97/1527, 5-15=-327/98, 6-15=-534/27, 6-13=-534/27, 7-13=-327/98, 8-13=-97/1527, 8-12=0/1306

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=5ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Zone3 -2-0-0 to 1-0-0, Zone1 1-0-0 to 9-0-0, Zone2 9-0-0 to 13-2-15, Zone1 13-2-15 to 29-8-0, Zone2 29-8-0 to 33-10-15, Zone1 33-10-15 to 40-8-0 zone; cantilever 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.
  - All plates are MT20 plates unless otherwise indicated.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Bearing at joint(s) 2, 10 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 100 lb uplift at joint(s) except (jt=lb) 2=128, 10=128.



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

July 30,2024

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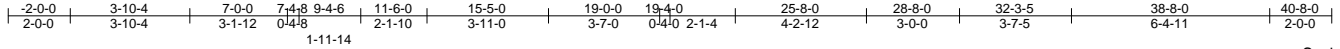
Job	Truss	Truss Type	Qty	Ply	1820-B	T34578781
6250756	A11	Roof Special Girder	1	3	Job Reference (optional)	

Tibbetts Lumber Co., LLC (Ocala, FL), Ocala, FL - 34472,

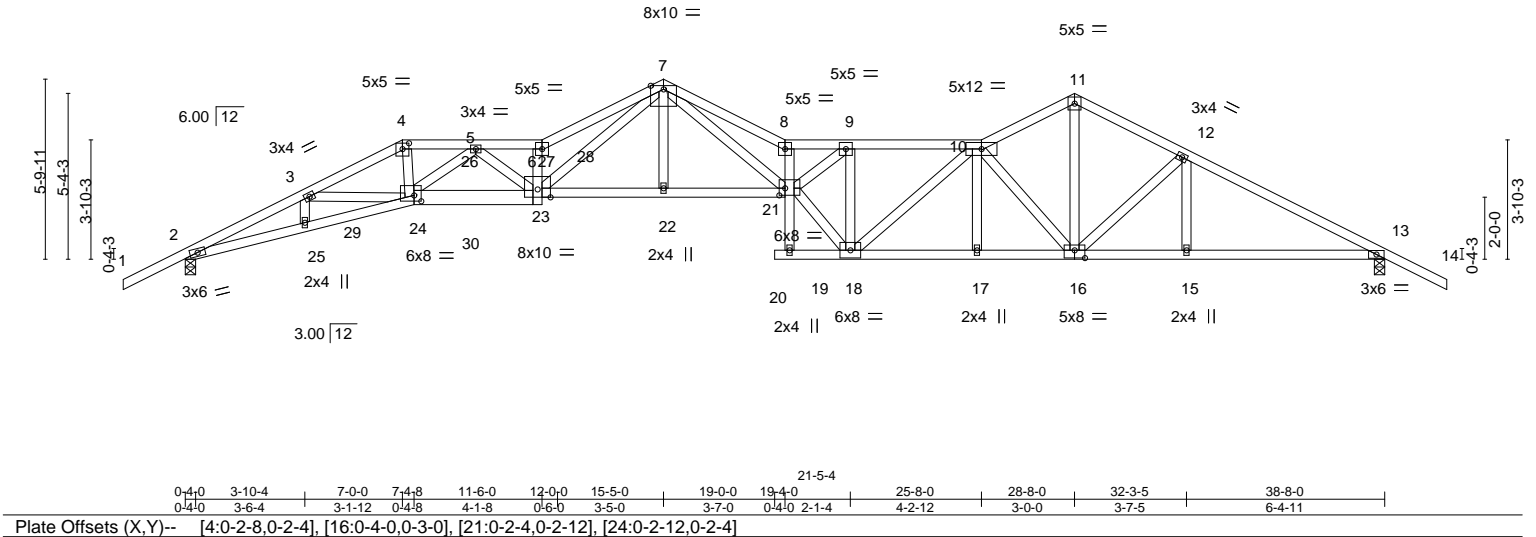
8.730 s Jul 11 2024 MiTek Industries, Inc. Mon Jul 29 12:10:52 2024 Page 1

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21-5-4



Scale = 1:74.3



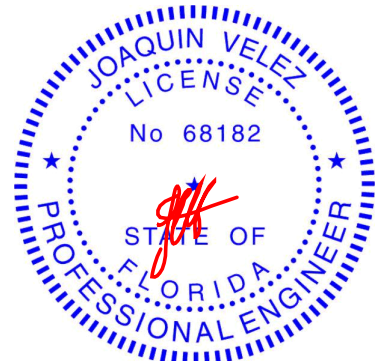
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	20.0	Plate Grip DOL	1.25	TC	0.63	Vert(LL)	-0.53	MT20	244/190		
TCDL	10.0	Lumber DOL	1.25	BC	0.66	Vert(CT)	-1.08				
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.63	Horz(CT)	0.38				
BCDL	10.0	Code FBC2023/TPI2014		Matrix-S		Wind(LL)	0.31			Weight: 666 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 5-7-6 oc purlins.
BOT CHORD	2x4 SP No.2 *Except*	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
	23-24: 2x6 SP No.2		
WEBS	2x4 SP No.2		

REACTIONS.	
(size)	2=0-4-0, 13=0-4-0
Max Horz	2=106(LC 25)
Max Uplift	2=142(LC 8), 13=133(LC 8)
Max Grav	2=2303(LC 1), 13=1838(LC 1)

FORCES.	
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	2-3=-7439/142, 3-4=-7655/205, 4-5=-7490/189, 5-6=-9781/310, 6-7=-11442/403, 7-8=-12767/439, 8-9=-11223/360, 9-10=-4913/222, 10-11=-2883/155, 11-12=-2909/157, 12-13=-3260/121
BOT CHORD	2-25=-57/6654, 24-25=-64/6739, 23-24=-180/8762, 17-18=-75/4287, 16-17=-77/4285, 15-16=-20/2816, 13-15=-20/2816, 22-23=-33/5231, 21-22=-32/5224
WEBS	5-24=-1714/148, 8-21=-5663/228, 7-22=0/393, 4-24=0/3035, 3-24=-81/472, 7-23=-241/6714, 6-23=-5261/256, 7-21=-285/8318, 9-18=-4964/158, 10-18=-35/816, 18-21=-136/6554, 9-21=-171/7846, 12-16=-370/44, 11-16=-92/2361, 10-16=-2689/126, 5-23=-15/1336

- NOTES-**
- 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.  
Bottom chords connected as follows: 2x4 - 1 row at 0-7-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.  
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional); cantilever 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 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 100 lb uplift at joint(s) except (jt=lb)



Joaquin Velez PE No.68182  
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16023 Swingley Ridge Rd. Chesterfield, MO 63017  
Date:

July 30,2024



Job	Truss	Truss Type	Qty	Ply	1820-B	T34578781
6250756	A11	Roof Special Girder	1	3	Job Reference (optional)	

Tibbetts Lumber Co., LLC (Ocala, FL),Ocala, FL - 34472,

8.730 s Jul 11 2024 MiTek Industries, Inc. Mon Jul 29 12:10:52 2024 Page 2  
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**NOTES-**

11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 302 lb down and 172 lb up at 7-0-0, and 162 lb down and 83 lb up at 9-0-12, and 162 lb down and 85 lb up at 11-0-12 on top chord, and 312 lb down at 7-0-0, and 95 lb down at 9-0-12, and 95 lb down at 11-4-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

Vert: 1-4=-60, 4-6=-60, 6-7=-60, 7-8=-60, 8-10=-60, 10-11=-60, 11-14=-60, 2-24=-20, 21-24=-20, 13-20=-20

Concentrated Loads (lb)

Vert: 4=-205(F) 23=-48(F) 26=-122(F) 28=-122(F) 29=-262(F) 30=-48(F)

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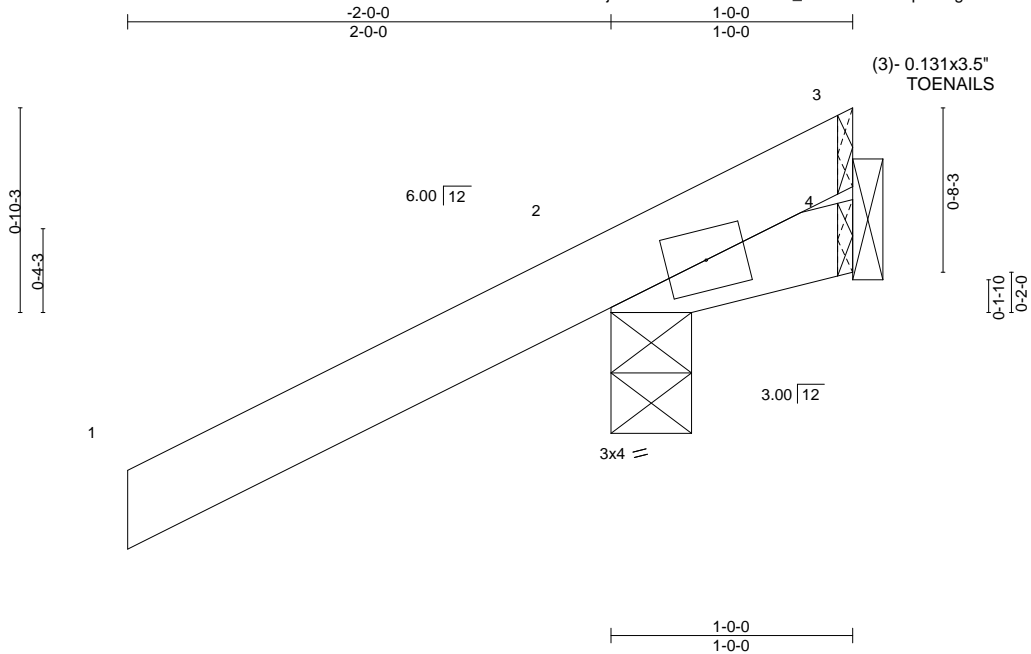
Job 6250756	Truss C1V	Truss Type Corner Jack	Qty 6	Ply 1	1820-B	T34578782
Job Reference (optional)						

Tibbetts Lumber Co., LLC (Ocala, FL),

Ocala, FL - 34472,

8.730 s Jul 11 2024 MiTek Industries, Inc. Mon Jul 29 12:10:53 2024 Page 1

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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.28	Vert(LL)	0.00 2	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.25	BC 0.20	Vert(CT)	0.00 2-4	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00 4	n/a	n/a		
BCDL 10.0	Code FBC2023/TPI2014		Matrix-P					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 6-0-0 oc bracing.

#### REACTIONS.

(size) 2=0-4-0, 4=Mechanical

Max Horz 2=81(LC 12)

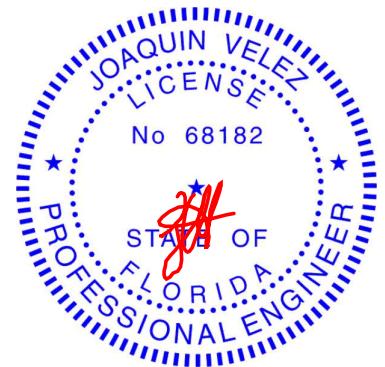
Max Uplift 2=-218(LC 12), 4=-91(LC 1)

Max Grav 2=290(LC 1), 4=94(LC 12)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

#### NOTES-

- 1) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Zone3 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) 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.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 2=218.



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

July 30,2024

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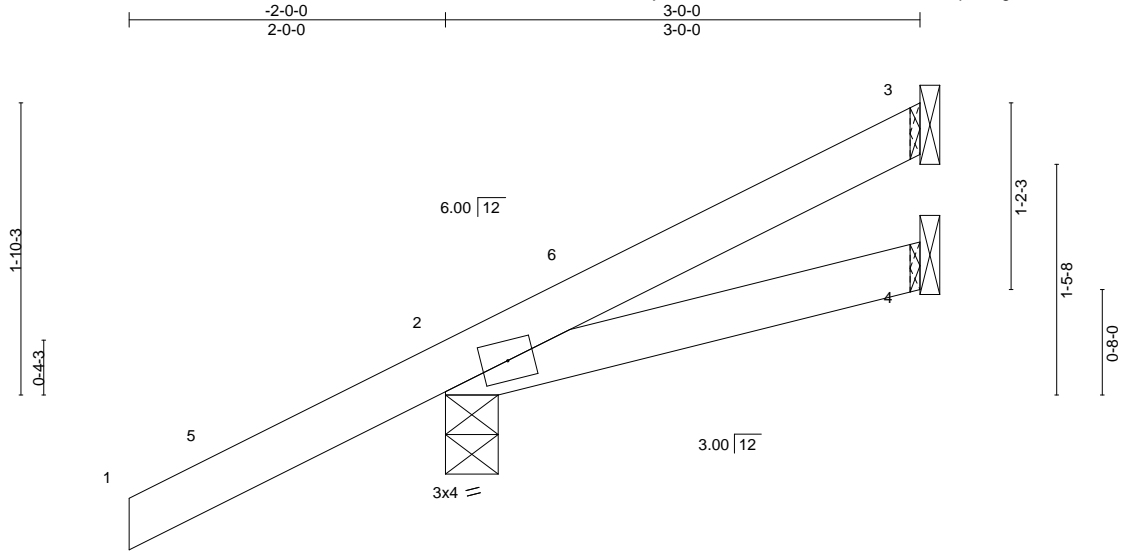
Job	Truss	Truss Type	Qty	Ply	1820-B	T34578783
6250756	C3V	Corner Jack	6	1		
Job Reference (optional)						

Tibbetts Lumber Co., LLC (Ocala, FL),

Ocala, FL - 34472,

8.730 s Jul 11 2024 MiTek Industries, Inc. Mon Jul 29 12:10:53 2024 Page 1

ID:9677KBVwwjNKu0Wl9lYrcUzY81Q-I3\_IdZKVK3G1bKpxWagNMmraS6034WxAmanEwaytCpW



Scale = 1:14.6

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.33	Vert(LL)	-0.00 2-4	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.25	BC 0.09	Vert(CT)	-0.01 2-4	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00 3	n/a	n/a		
BCDL 10.0	Code FBC2023/TPI2014		Matrix-P	Wind(LL)	0.00 2	****	240		
								Weight: 13 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 3-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

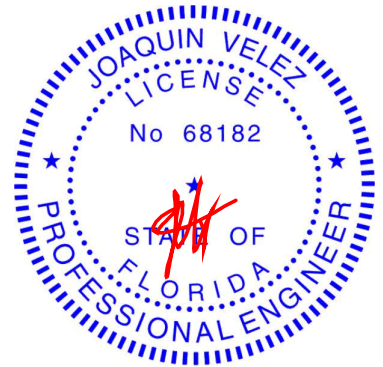
#### REACTIONS.

(size) 3=Mechanical, 2=0-4-0, 4=Mechanical  
Max Horz 2=71(LC 12)  
Max Uplift 3=14(LC 9), 2=85(LC 12)  
Max Grav 3=35(LC 17), 2=292(LC 1), 4=55(LC 3)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

#### NOTES-

- Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Encl., GCpi=0.18; 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 ;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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- 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 100 lb uplift at joint(s) 3, 2.



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

July 30,2024

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

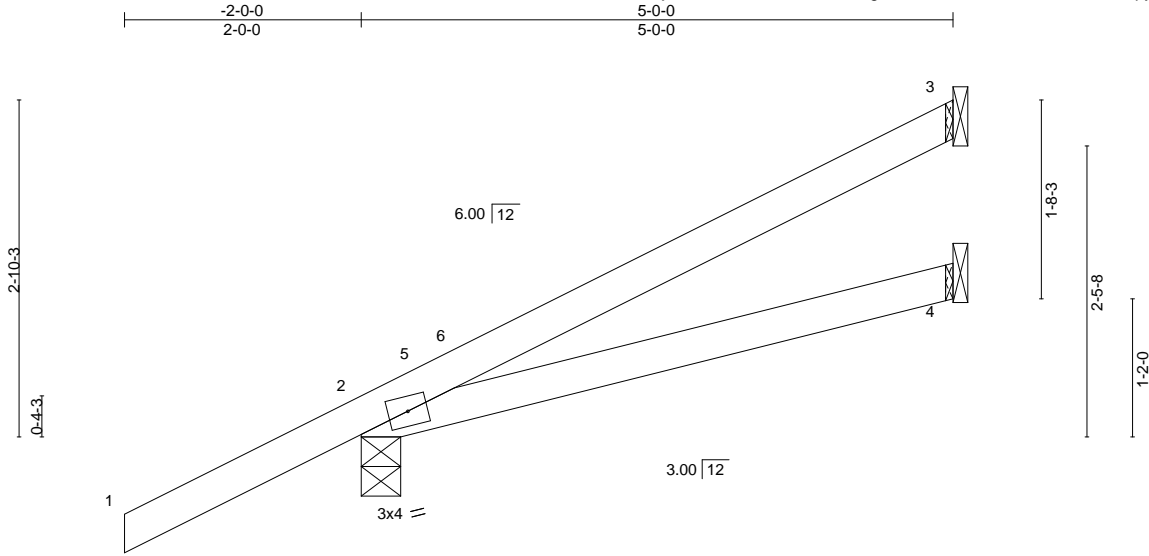
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

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Job	Truss	Truss Type	Qty	Ply	1820-B	T34578784
6250756	C5V	Corner Jack	6	1		
Job Reference (optional)						

Tibbetts Lumber Co., LLC (Ocala, FL), Ocala, FL - 34472, 8.730 s Jul 11 2024 MiTek Industries, Inc. Mon Jul 29 12:10:54 2024 Page 1  
ID:9677KBVwwjNku0WI9IYrcUzY81Q-mFYgrvL75NOuDUO74HBcu\_OmRWJFpyBJ?EXnS0ytCpV



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.31	Vert(LL)	-0.03 2-4	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.25	BC 0.28	Vert(CT)	-0.06 2-4	>894	240		
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-P	Wind(LL)	0.00 2	****	240	Weight: 20 lb	FT = 20%

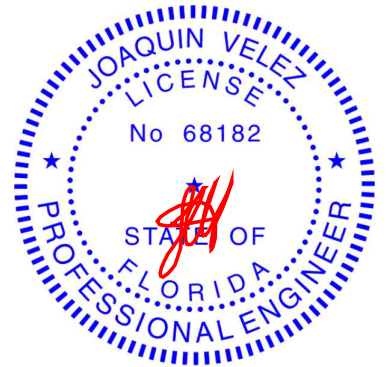
**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 5-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 3=Mechanical, 2=0-4-0, 4=Mechanical  
Max Horz 2=95(LC 12)  
Max Uplift 3=36(LC 12), 2=70(LC 12)  
Max Grav 3=114(LC 1), 2=350(LC 1), 4=95(LC 3)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

- NOTES-**
- 1) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Encl., GCpi=0.18; 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 ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 5) Refer to girder(s) for truss to truss connections.
  - 6) 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.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2.



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

July 30,2024

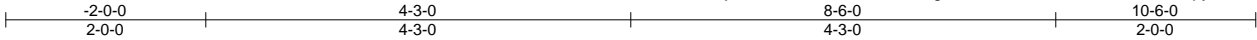
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.**

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Job	Truss	Truss Type	Qty	Ply	1820-B	T34578785
6250756	E01	Common	2	1		

Tibbetts Lumber Co., LLC (Ocala, FL), Ocala, FL - 34472, 8.730 s Jul 11 2024 MiTek Industries, Inc. Mon Jul 29 12:10:54 2024 Page 1  
ID:9677KBVwwjNKu0Wl9lYrcUzY81Q-mFYgrvL75NOuDUO74HBcu\_OkkWEPpyUJ?EXnS0ytCpV



Scale = 1:23.0

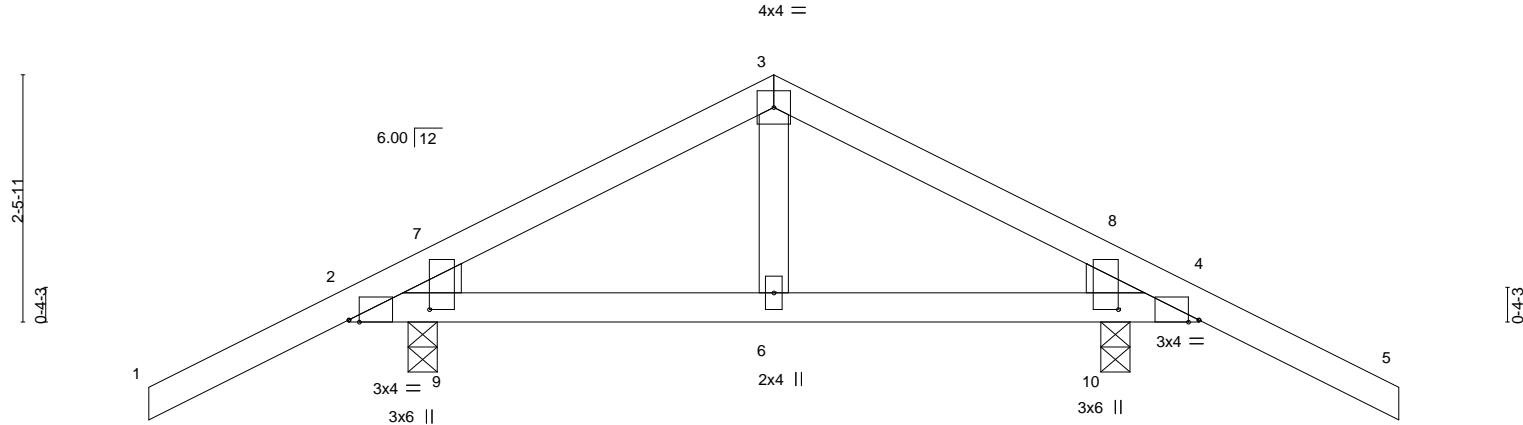


Plate Offsets (X,Y)--	[2:0-1-4,Edge], [2:0-1-4,0-9-11], [4:0-1-4,Edge], [4:0-1-4,0-9-11]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.42	Vert(LL)	-0.01	2-6	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.25	BC 0.59	Vert(CT)	-0.02	2-6	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.00	4	n/a	n/a		
BCDL 10.0	Code FBC2023/TPI2014		Matrix-P	Wind(LL)	0.01	2-6	>999	240	Weight: 38 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.2  
WEDGE  
Left: 2x4 SP No.2 , Right: 2x4 SP No.2

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.

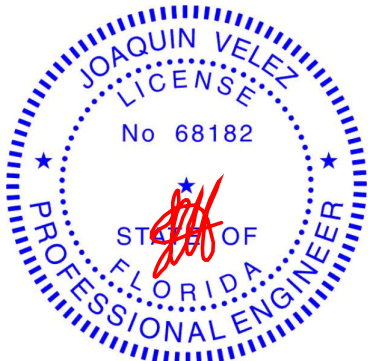
(size) 2=0-3-8, 4=0-3-8  
Max Horz 2=51(LC 11)  
Max Uplift 2=-145(LC 12), 4=-145(LC 12)  
Max Grav 2=457(LC 1), 4=457(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 2-3=-371/199, 3-4=-371/199  
BOT CHORD 2-6=-40/264, 4-6=-40/264

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Zone3 -2-0-0 to 1-0-0, Zone1 1-0-0 to 4-3-0, Zone2 4-3-0 to 8-4-4, Zone1 8-4-4 to 10-6-0 zone; cantilever left and right exposed ; porch 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=145, 4=145.



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

July 30,2024

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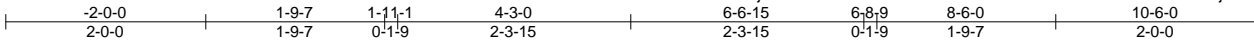
MiTek®

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Chesterfield, MO 63017  
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Job	Truss	Truss Type	Qty	Ply	1820-B	T34578786
6250756	E01X	GABLE	1	1		
Job Reference (optional)						

Tibbetts Lumber Co., LLC (Ocala, FL), Ocala, FL - 34472, 8.730 s Jul 11 2024 MiTek Industries, Inc. Mon Jul 29 12:10:55 2024 Page 1  
ID:9677KBVwwjNKu0Wl9lYrcUzY81Q-ER622FMlshWlrezKe?irRBwwcwaSYpJTduGL\_TytCpU



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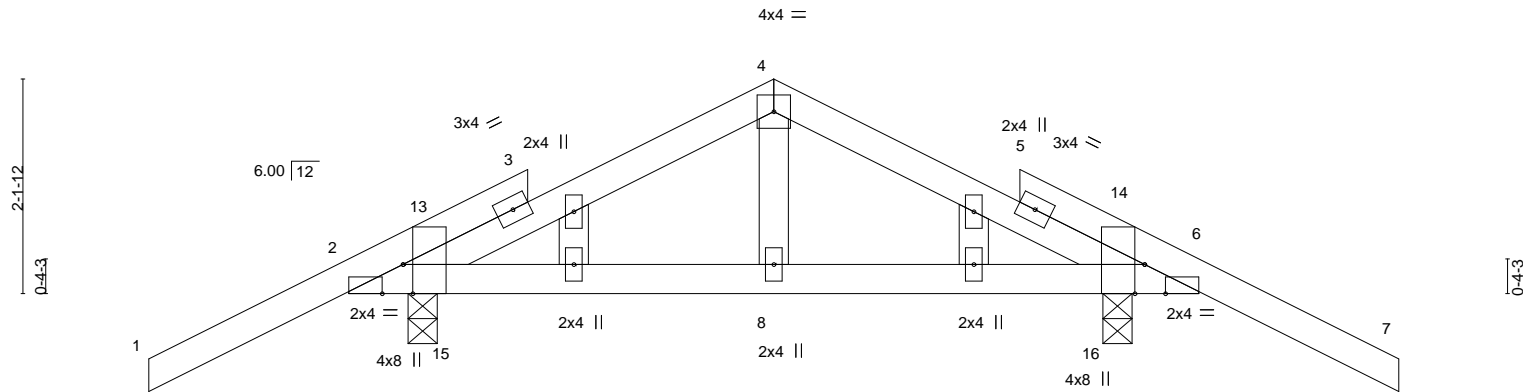


Plate Offsets (X,Y)--		[2:0-3-8,Edge], [2:0-2-8,Edge], [6:0-3-8,Edge], [6:0-2-8,Edge]
LOADING (psf)	SPACING-	2-0-0
TCLL 20.0	Plate Grip DOL	1.25
TCDL 10.0	Lumber DOL	1.25
BCLL 0.0 *	Rep Stress Incr	YES
BCDL 10.0	Code	FBC2023/TPI2014
	CSI.	
	TC	0.35
	BC	0.60
	WB	0.05
	Matrix-P	
	DEFL.	in (loc) l/defl L/d
	Vert(LL)	-0.01 2-8 >999 360
	Vert(CT)	-0.02 2-8 >999 240
	Horz(CT)	0.00 6 n/a n/a
	Wind(LL)	0.01 2-8 >999 240
	PLATES	MT20
	GRIP	244/190
	Weight:	42 lb
	FT =	20%

LUMBER-

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

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.

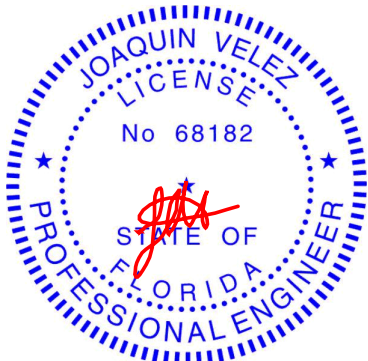
(size) 2=0-3-8, 6=0-3-8  
Max Horz 2=46(LC 11)  
Max Uplift 2=145(LC 12), 6=145(LC 12)  
Max Grav 2=457(LC 1), 6=457(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 2-4=-393/212, 4-6=-393/212  
BOT CHORD 2-8=-73/308, 6-8=-73/308

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Zone3 -2-0-0 to 1-0-0, Zone1 1-0-0 to 4-3-0, Zone2 4-3-0 to 8-4-4, Zone1 8-4-4 to 10-6-0 zone; cantilever left and right exposed; porch 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.
- 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=145, 6=145.



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

July 30,2024

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

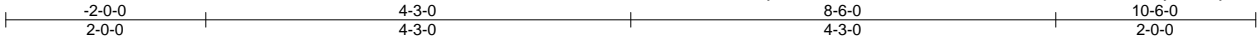
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Chesterfield, MO 63017  
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Job	Truss	Truss Type	Qty	Ply	1820-B	T34578787
6250756	E02	Common	3	1		

Tibbetts Lumber Co., LLC (Ocala, FL), Ocala, FL - 34472, 8.730 s Jul 11 2024 MiTek Industries, Inc. Mon Jul 29 12:10:55 2024 Page 1  
ID:9677KBVwwjNku0W9IYrcUzY81Q-ER622FMlshWlrezKe?irRBwuywZiYPjTDuGL\_TytCpU



Scale = 1:23.0

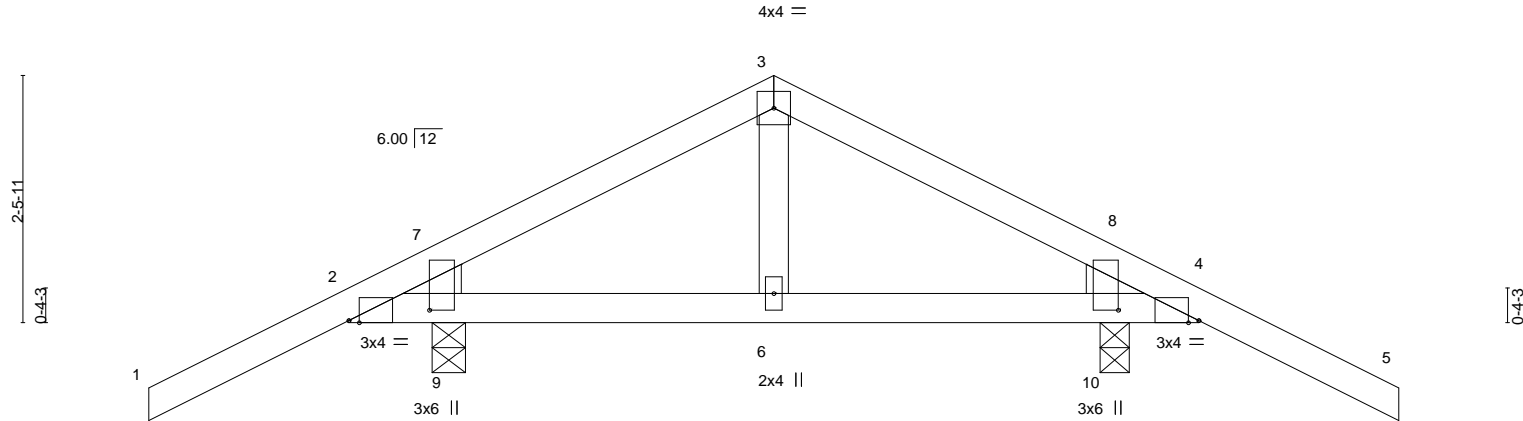


Plate Offsets (X,Y)--	[2:0-1-4,Edge], [2:0-1-4,0-9-11], [4:0-1-4,Edge], [4:0-1-4,0-9-11]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.46	Vert(LL)	-0.01	4-6	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.25	BC 0.65	Vert(CT)	-0.02	4-6	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.00	4	n/a	n/a		
BCDL 10.0	Code FBC2023/TPI2014		Matrix-P	Wind(LL)	0.01	4-6	>999	240	Weight: 38 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.2  
WEDGE  
Left: 2x4 SP No.2 , Right: 2x4 SP No.2

**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.**

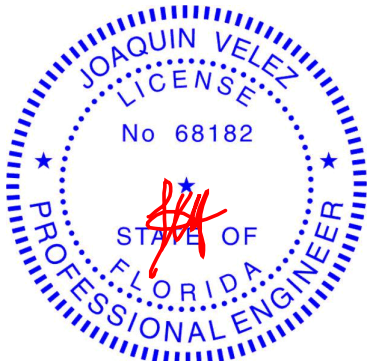
(size) 2=0-4-0, 4=0-3-8  
Max Horz 2=51(LC 11)  
Max Uplift 2=-146(LC 12), 4=-145(LC 12)  
Max Grav 2=458(LC 1), 4=456(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 2-3=-370/198, 3-4=-369/198  
BOT CHORD 2-6=-38/262, 4-6=-38/262

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Zone3 -2-0-0 to 1-0-0, Zone1 1-0-0 to 4-3-0, Zone2 4-3-0 to 8-4-4, Zone1 8-4-4 to 10-6-0 zone; cantilever left and right exposed ; porch 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=146, 4=145.



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

July 30,2024

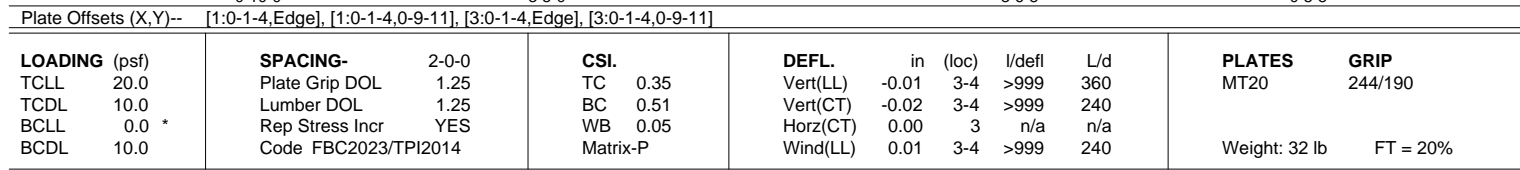
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.**

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Tibbetts Lumber Co., LLC (Ocala, FL), Ocala, FL - 34472, 8.730 s Jul 11 2024 MiTek Industries, Inc. Mon Jul 29 12:10:55 2024 Page 1  
ID:9677KBVwwjNkUw0I9YrcUzY81Q-ER622FMlshWlrezKe?irRbwewcwYPjTDuGL\_TytCpU  
4-3-0 8-6-0  
4-3-0 4-3-0  
Scale = 1:17.0

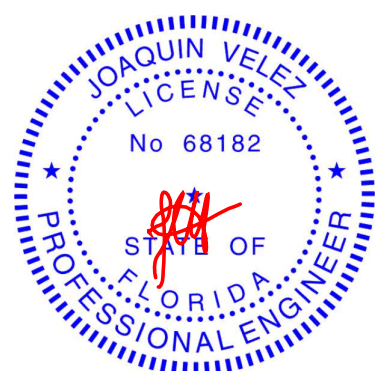


**REACTIONS.** (size) 1=0-4-0, 3=0-3-8  
 Max Horz 1=36(LC 11)  
 Max Uplift 1=-85(LC 12), 3=-85(LC 12)  
 Max Grav 1=328(LC 1), 3=328(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.


TOP CHORD	1-2=-414/296, 2-3=-414/280
BOT CHORD	1-4=-172/326, 3-4=-172/326

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Encl. GCPI=0.18; MWFRS (directional) and C-C Zone3 0-2-0 to 3-2-0, Zone1 3-2-0 to 4-3-0, Zone3 4-3-0 to 8-4-4 zone; cantilever left and right exposed ; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 4) This truss has been designed for a 10.0 psf bottom 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



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

July 30,2024

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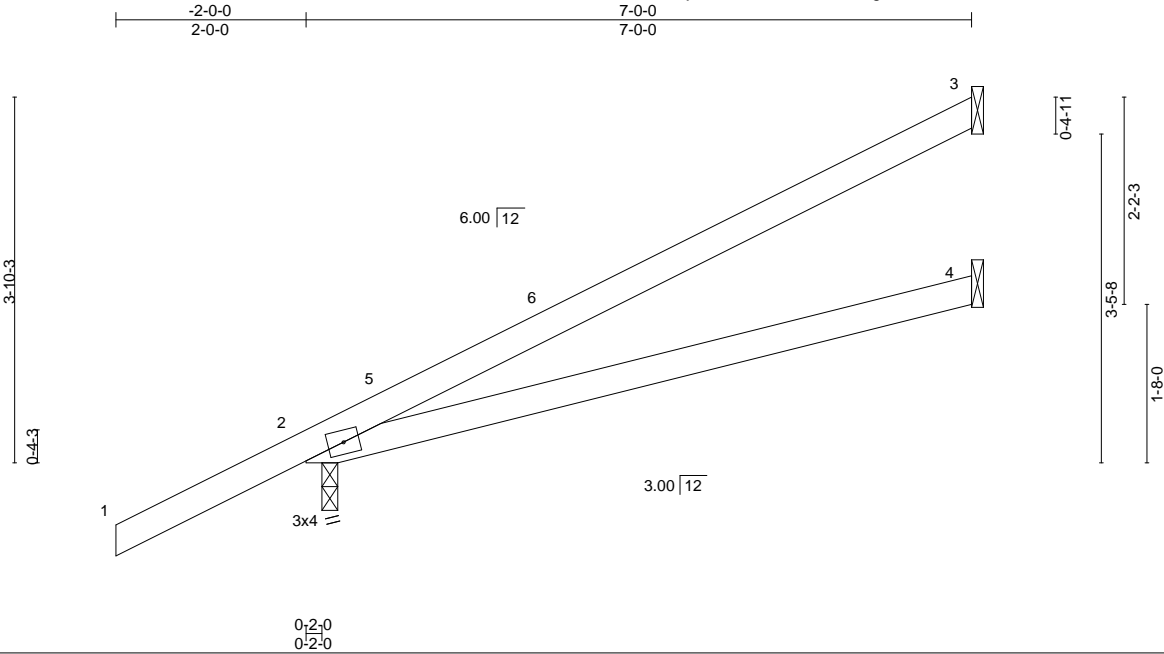
Job	Truss	Truss Type	Qty	Ply	1820-B	T34578789
6250756	E7A	Jack-Open	7	1		
Job Reference (optional)						

Tibbetts Lumber Co., LLC (Ocala, FL),

Ocala, FL - 34472,

8.730 s Jul 11 2024 MiTek Industries, Inc. Mon Jul 29 12:10:56 2024 Page 1

ID:9677KBVwwjNKu0Wl9lYrcUzY81Q-iegQGbNND\_ecSnXWCiD4zPT?DJwSHsgcSX0uXvytCpT



LOADING (psf)	SPACING-		CSI.		DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.74		Vert(LL)	-0.14 2-4	>603	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.25	BC 0.62		Vert(CT)	-0.27 2-4	>301	240		
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-P		Wind(LL)	0.00 2	****	240		
									Weight: 26 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 6-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

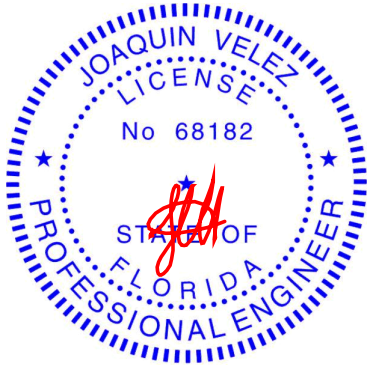
**REACTIONS.**

(size) 3=Mechanical, 4=Mechanical, 2=0-2-0  
Max Horz 2=118(LC 12)  
Max Uplift 3=64(LC 12), 2=60(LC 12)  
Max Grav 3=187(LC 1), 4=137(LC 3), 2=418(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

**NOTES-**

- 1) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Encl., GCpi=0.18; 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 ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) 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.
- 7) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 2.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2.



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

July 30,2024

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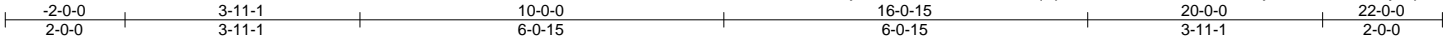
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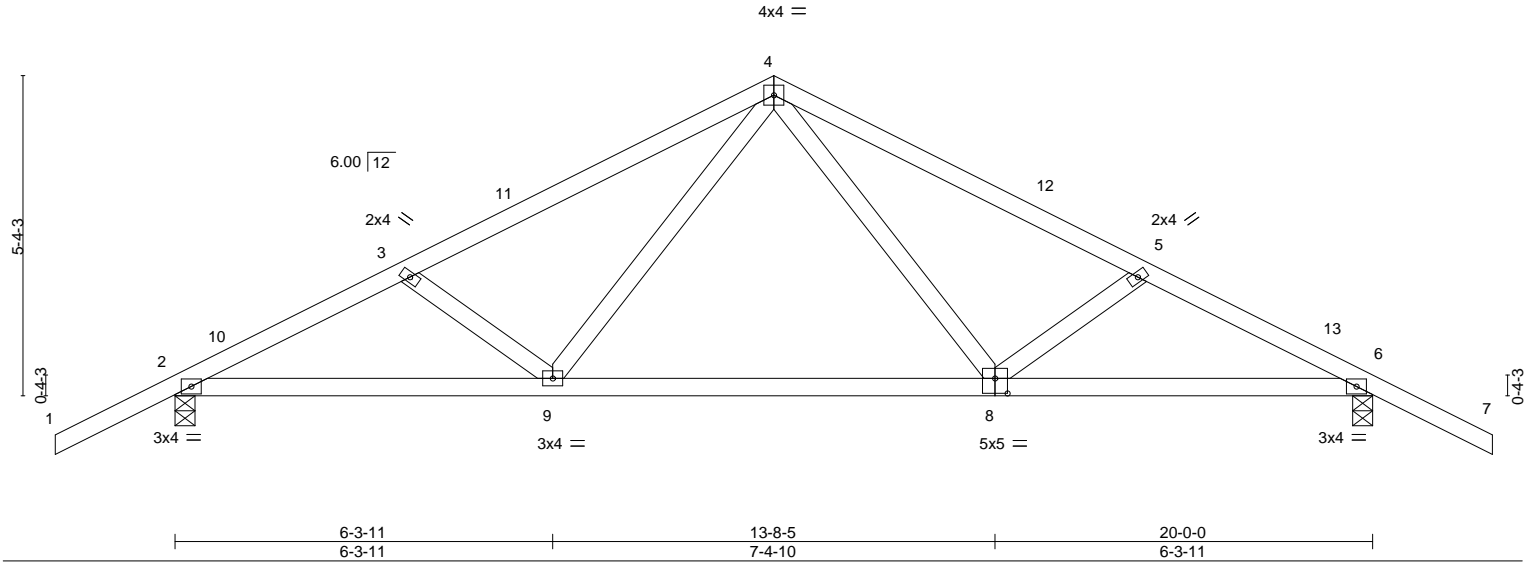
Job	Truss	Truss Type	Qty	Ply	1820-B	T34578791
6250756	G01	Common	2	1		
Job Reference (optional)						

Tibbetts Lumber Co., LLC (Ocala, FL), Ocala, FL - 34472,

8.730 s Jul 11 2024 MiTek Industries, Inc. Mon Jul 29 12:10:57 2024 Page 1  
ID:9677KBVwwjNKu0Wl9lYrcUzY81Q-AqEpTxN?OlmT4x6ilQkJWc0EbjHMOIRmhBIR3LytCpS



Scale = 1:38.5



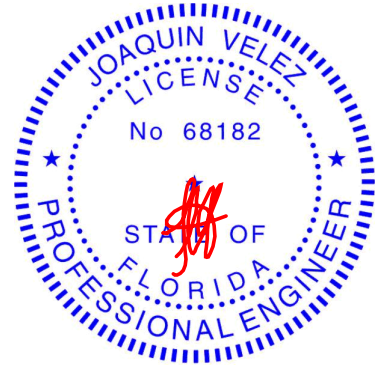
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.51	Vert(LL)	-0.06	8-9	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.25	BC 0.51	Vert(CT)	-0.16	8-9	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.10	Horz(CT)	0.03	6	n/a		
BCDL 10.0	Code FBC2023/TPI2014		Matrix-S	Wind(LL)	0.03	8-9	>999		
								Weight: 97 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-7-4 oc purlins.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2	

REACTIONS.	(size) 2=0-4-0, 6=0-4-0
Max Horz	2=99(LC 10)
Max Uplift	2=95(LC 12), 6=95(LC 12)
Max Grav	2=917(LC 1), 6=917(LC 1)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-1394/180, 3-4=-1175/140, 4-5=-1175/140, 5-6=-1394/180
BOT CHORD	2-9=-88/1191, 8-9=0/752, 6-8=-109/1191
WEBS	4-8=-2/422, 5-8=-293/149, 4-9=-2/422, 3-9=-293/149

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Zone3 -2-0-0 to 1-0-0, Zone1 1-0-0 to 10-0-0, Zone2 10-0-0 to 14-2-15, Zone1 14-2-15 to 22-0-0 zone; cantilever 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6.



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

July 30,2024

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Job	Truss	Truss Type	Qty	Ply	1820-B	T34578792
6250756	G01X	Common Supported Gable	1	1	Job Reference (optional)	

Tibbetts Lumber Co., LLC (Ocala, FL), Ocala, FL - 34472,

8.730 s Jul 11 2024 MiTek Industries, Inc. Mon Jul 29 12:10:58 2024 Page 1

ID:9677KBVwwjNKu0Wl9lYrcUzY81Q-e0nBhGOd9cuKi5hwJ7FY3qYSG7j\_lmQvwrV?boytcPpR

2-0-0	1-9-7	1-11-1	10-0-0	18-0-15	18-2-9	20-0-0	22-0-0
2-0-0	1-9-7	0-1-9	8-0-15	8-0-15	0-1-9	1-9-7	2-0-0

Scale = 1:38.5

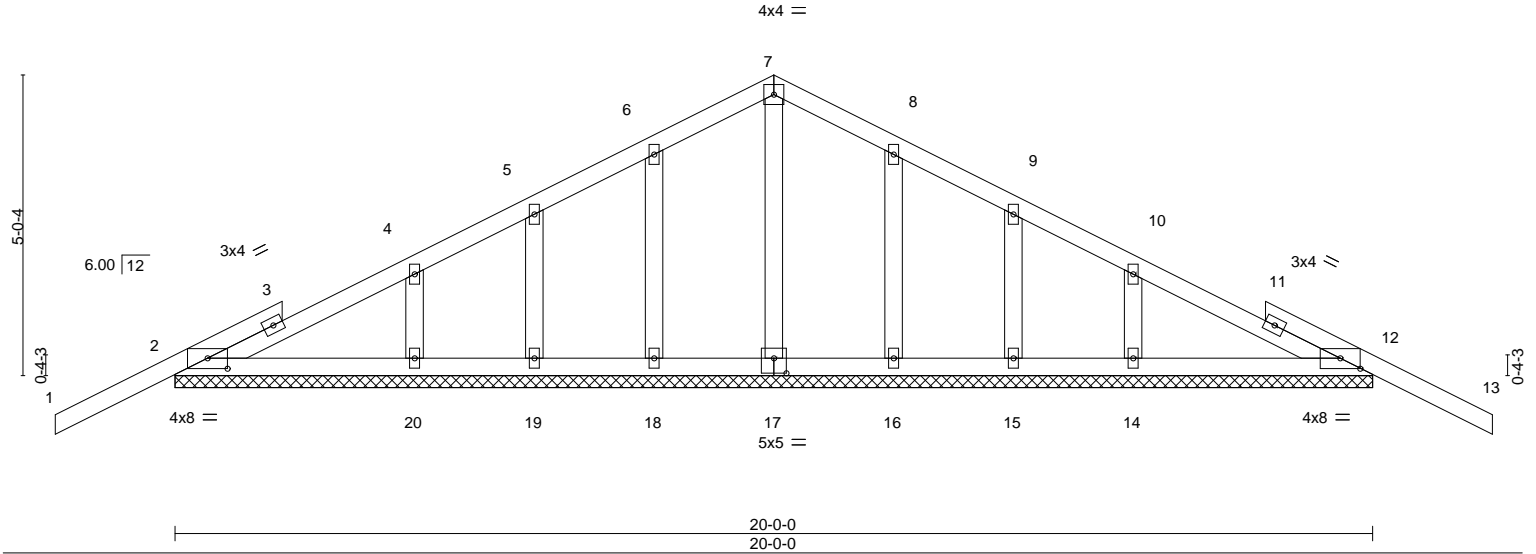


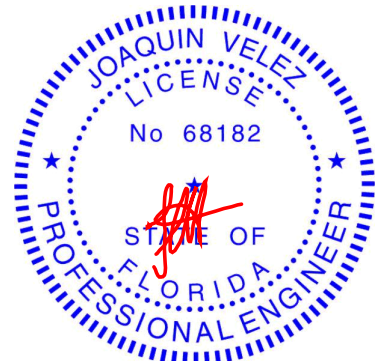
Plate Offsets (X, Y)--		[2:0-4-0,0-2-1], [12:0-4-0,0-2-1], [17:0-2-8,0-3-0]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 20.0	Plate Grip DOL	1.25	TC 0.26
TCDL 10.0	Lumber DOL	1.25	BC 0.10
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05
BCDL 10.0	Code	FBC2023/TPI2014	Matrix-S
DEFLECT.	in (loc)	l/defl	L/d
Vert(LL)	-0.01	13	n/r
Vert(CT)	-0.02	13	n/r
Horz(CT)	0.00	12	n/a
PLATES	GRIP		
MT20	244/190		
Weight: 103 lb	FT = 20%		

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
OTHERS 2x4 SP No.2	

REACTIONS.	All bearings 20-0-0.
(lb) - Max Horz	2=93(LC 11)
Max Uplift	All uplift 100 lb or less at joint(s) 2, 12, 18, 19, 16, 15
Max Grav	All reactions 250 lb or less at joint(s) 17, 18, 19, 16, 15 except 2=285(LC 23), 12=285(LC 24), 20=258(LC 23), 14=258(LC 24)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
---------	--

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Zone3 zone; cantilever 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.
  - 4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - 5) All plates are 2x4 MT20 unless otherwise indicated.
  - 6) Gable requires continuous bottom chord bearing.
  - 7) Gable studs spaced at 2-0-0 oc.
  - 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 9) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 12, 18, 19, 16, 15.



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

July 30,2024

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Job	Truss	Truss Type	Qty	Ply	1820-B	T34578793
6250756	G02	COMMON	6	1		
Job Reference (optional)						

Tibbetts Lumber Co., LLC (Ocala, FL), Ocala, FL - 34472, 8.730 s Jul 11 2024 MiTek Industries, Inc. Mon Jul 29 12:10:58 2024 Page 1  
ID:9677KBVwwjNkU0Wi9lYrcUzY81Q-e0nBhGOd9cuKi5hvJ7FY3qYOJ7cOllevwrV?boytcP  
3-11-1 10-0-0 16-0-15 20-0-0 22-0-0  
3-11-1 6-0-15 6-0-15 3-11-1 2-0-0  
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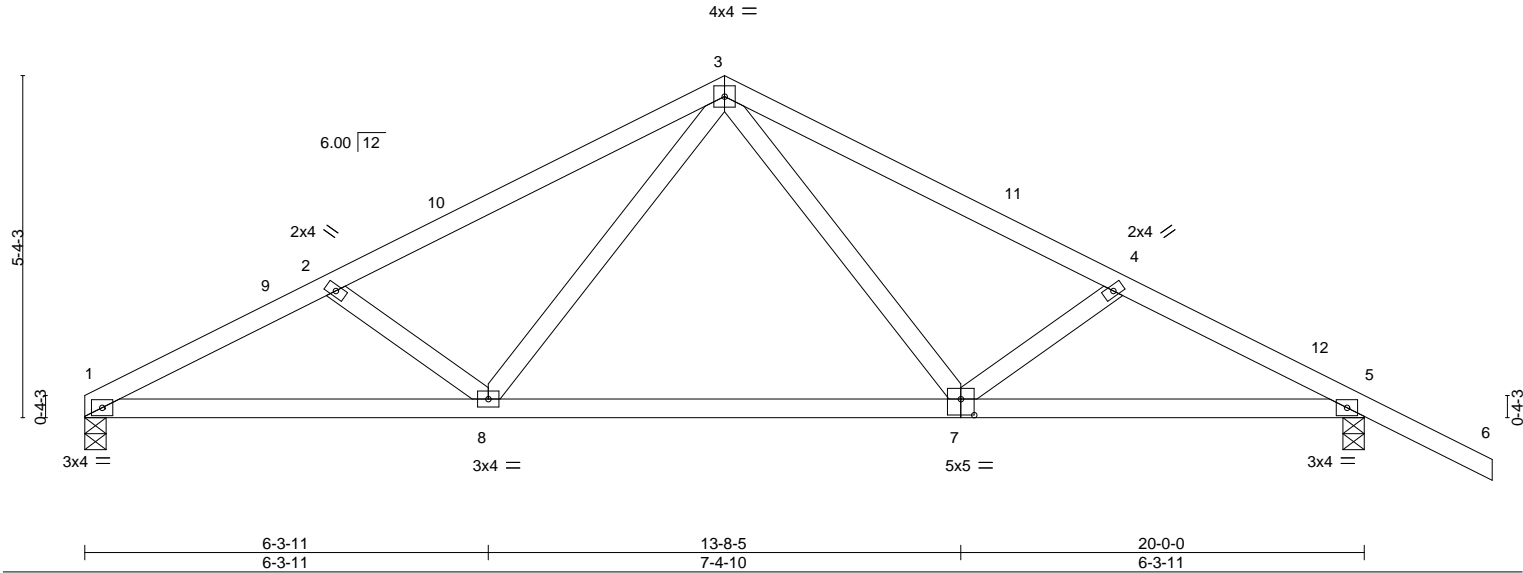


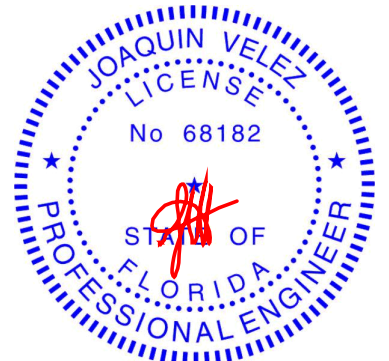
Plate Offsets (X,Y)--		[7:0-2-8,0-3-0]									
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.51	Vert(LL)	-0.06	7-8	>999	360	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.53	Vert(CT)	-0.15	7-8	>999	240	
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.03	5	n/a	n/a	
BCDL	10.0	Code FBC2023/TPI2014		Matrix-S		Wind(LL)	0.03	7-8	>999	240	
										Weight: 94 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 4-6-12 oc purlins.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.2		

REACTIONS.	
(size)	1=0-4-0, 5=0-4-0
Max Horz	1=-95(LC 10)
Max Uplift	1=-30(LC 12), 5=-99(LC 12)
Max Grav	1=780(LC 1), 5=924(LC 1)

FORCES.	
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	1-2=-1440/226, 2-3=-1217/181, 3-4=-1189/161, 4-5=-1409/202
BOT CHORD	1-8=-144/1255, 7-8=-10/766, 5-7=-129/1204
WEBS	3-7=-0/421, 4-7=-293/150, 3-8=-14/435, 2-8=-326/161

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Zone3 0-2-0 to 3-2-0, Zone1 3-2-0 to 10-0-0, Zone2 10-0-0 to 14-2-15, Zone1 14-2-15 to 22-0-0 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - 4) This truss has been designed for a 10.0 psf bottom 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5.

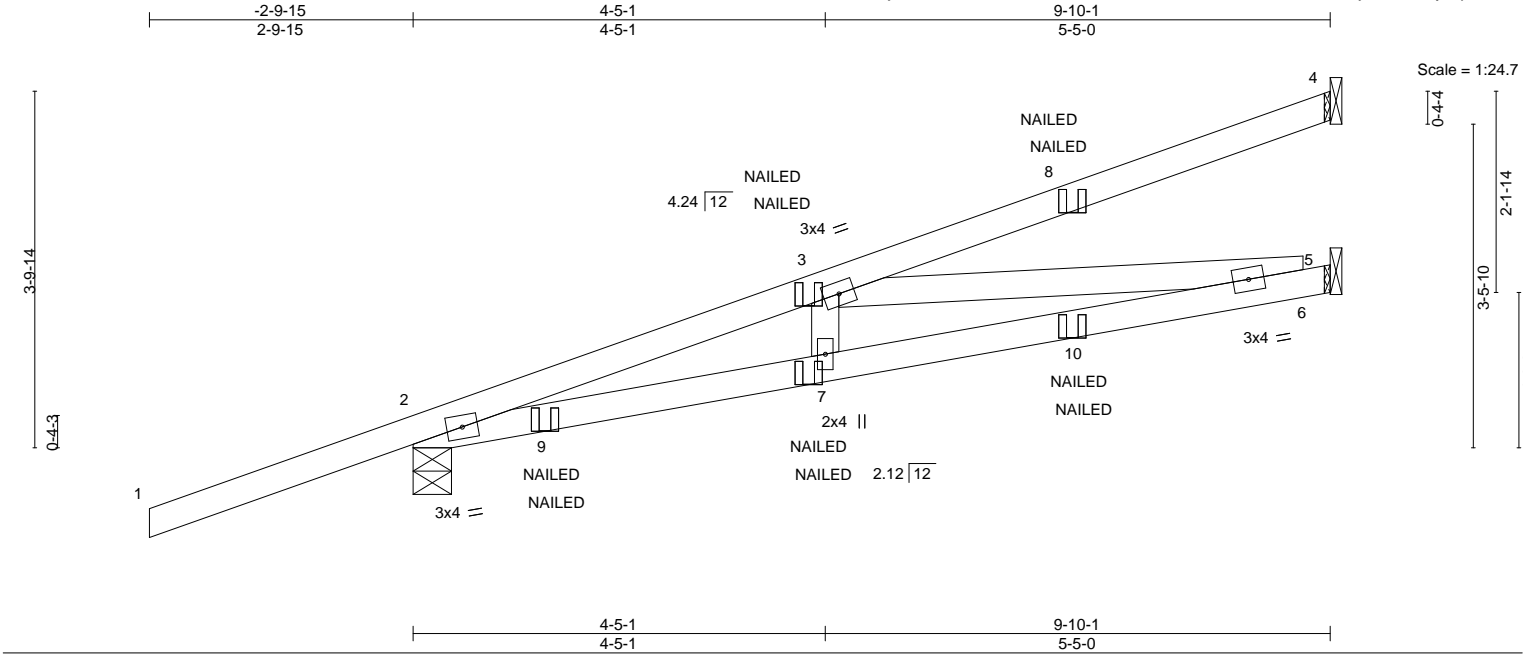


Joaquin Velez PE No.68182  
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Date:

July 30,2024

Job	Truss	Truss Type	Qty	Ply	1820-B	T34578794
6250756	H7V	Diagonal Hip Girder	3	1		
Job Reference (optional)						

Tibbetts Lumber Co., LLC (Ocala, FL),
Ocala, FL - 34472,
8.730 s Jul 11 2024 MiTek Industries, Inc.
Mon Jul 29 12:10:59 2024
Page 1
ID:9677KBVwwjNKu0WI9IYrcUzY81Q-7DLZucPGwv1BJFG5trnnb15WxXuXU5j28VEY7EytCpQ



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	20.0	Plate Grip DOL	1.25	TC	0.71	Vert(LL)	-0.07 6-7 >999 360	MT20		244/190	
TCDL	10.0	Lumber DOL	1.25	BC	0.79	Vert(CT)	-0.17 6-7 >666 240				
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.56	Horz(CT)	0.02 5 n/a n/a				
BCDL	10.0	Code FBC2023/TPI2014		Matrix-S		Wind(LL)	-0.07 2-7 >999 240				
								Weight: 43 lb		FT = 20%	

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 4=Mechanical, 2=0-4-15, 5=Mechanical  
Max Horz 2=118(LC 8)  
Max Uplift 4=-54(LC 8), 2=-186(LC 8)  
Max Grav 4=168(LC 1), 2=628(LC 31), 5=273(LC 3)

FORCES.

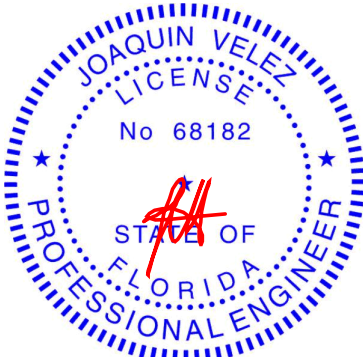
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1292/72  
BOT CHORD 2-7=-118/1186, 6-7=-123/1184  
WEBS 3-6=-1159/113

NOTES-

- Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional); cantilever 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- 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 100 lb uplift at joint(s) 4 except (jt=lb) 2=186.
- "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidelines.
- 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 (plf)  
Vert: 1-4=-60, 2-5=-20  
Concentrated Loads (lb)  
Vert: 8=-58(F=-29, B=-29) 9=100(F=50, B=50) 10=-39(F=-19, B=-19)



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

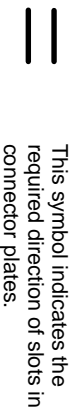
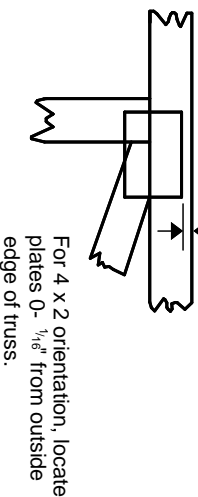
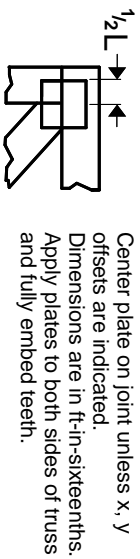
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

**MiTek®**

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Chesterfield, MO 63017  
314.434.1200 / MiTek-US.com

## Symbols

### PLATE LOCATION AND ORIENTATION



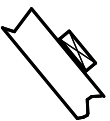
\* Plate location details available in MITek software or upon request.

### PLATE SIZE

**4 X 4**

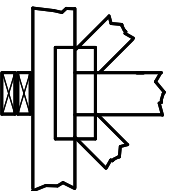
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

### LATERAL BRACING LOCATION



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

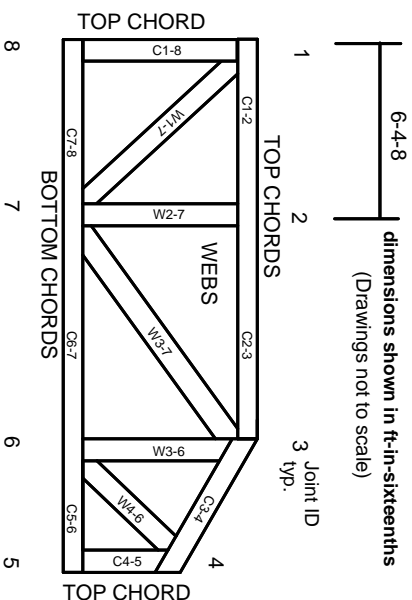
### BEARING



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

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

## Numbering System



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

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

## Product Code Approvals

ICC-ES Reports:  
ESR-1988, ESR-2362, ESR-2685, ESR-3282  
ESR-4722, ESL-1388

## Design General Notes

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

Lumber design values are in accordance with ANSI/TP1 1 section 6.3. These truss designs rely on lumber values established by others.

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# MITek®

MITek Engineering Reference Sheet: MIL-7473 rev. 1/2/2023

## General Safety Notes

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

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. 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.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TP1 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. 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.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TP1 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.