



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

RE: 4525744 - GIEBEIG - LOT 53 CW

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

**Site Information:**

Customer Info: Giebeig Const. Project Name: N/A Model: St. Johns Modified  
Lot/Block: 53 Subdivision: Crosswinds  
Address: TBD, N/A  
City: Columbia Cty State: FL

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

Name: License #:  
Address: State:  
City:

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

Design Code: FRC2023/TPI2014 Design Program: MiTek 20/20 8.8  
Wind Code: ASCE 7-22 Wind Speed: 130 mph  
Roof Load: 37.0 psf Floor Load: N/A psf

This package includes 31 individual, Truss Design Drawings and 0 Additional Drawings.  
With my seal affixed to this sheet, I hereby certify that I am the Truss Design Engineer and this index sheet conforms to 61G15-31.003, section 5 of the Florida Board of Professional Engineers Rules.

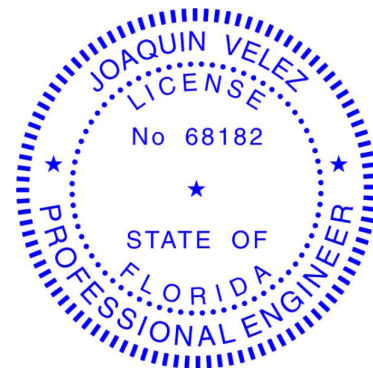
No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	T36620349	CJ01	3/10/25	15	T36620363	T06	3/10/25
2	T36620350	CJ03	3/10/25	16	T36620364	T07	3/10/25
3	T36620351	CJ05	3/10/25	17	T36620365	T08	3/10/25
4	T36620352	EJ05	3/10/25	18	T36620366	T09	3/10/25
5	T36620353	EJ07	3/10/25	19	T36620367	T10	3/10/25
6	T36620354	HJ07	3/10/25	20	T36620368	T11	3/10/25
7	T36620355	HJ09	3/10/25	21	T36620369	T13	3/10/25
8	T36620356	T01	3/10/25	22	T36620370	T14	3/10/25
9	T36620357	T01G	3/10/25	23	T36620371	T15	3/10/25
10	T36620358	T02	3/10/25	24	T36620372	T16	3/10/25
11	T36620359	T02G	3/10/25	25	T36620373	T17	3/10/25
12	T36620360	T03	3/10/25	26	T36620374	T18	3/10/25
13	T36620361	T04	3/10/25	27	T36620375	T19	3/10/25
14	T36620362	T05	3/10/25	28	T36620376	T20	3/10/25

This item has been digitally signed and sealed by Velez, Joaquin, PE on the date adjacent to the seal.  
Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies

The truss drawing(s) referenced above have been prepared by  
MiTek USA, Inc. under my direct supervision based on the parameters  
provided by Builders FirstSource-Lake City, FL.

Truss Design Engineer's Name: Velez, Joaquin  
My license renewal date for the state of Florida is February 28, 2027.

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



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

March 10,2025

Velez, Joaquin

1 of 2



RE: 4525744 - GIEBEIG - LOT 53 CW

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

**Site Information:**

Customer Info: Giebeig Const.    Project Name: N/A    Model: St. Johns Modified  
Lot/Block: 53    Subdivision: Crosswinds  
Address: TBD, N/A  
City: Columbia Cty    State: FL

No.	Seal#	Truss Name	Date
29	T36620377	T21	3/10/25
30	T36620378	T22	3/10/25
31	T36620379	T23	3/10/25

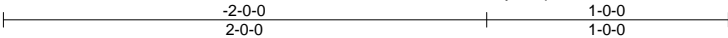
Job	Truss	Truss Type	Qty	Ply	GIEBEIG - LOT 53 CW	T36620349
4525744	CJ01	Jack-Open	10	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL),

Lake City, FL - 32055,

8.830 s Feb 18 2025 MiTek Industries, Inc. Fri Mar 7 14:46:36 2025 Page 1

ID:9B5QRtZPhUL0yMYqzVn3hhzz6?b-eM1U6Aoa8kfDGQaQLzinAU8CGERbyzEyA041iezdHLH



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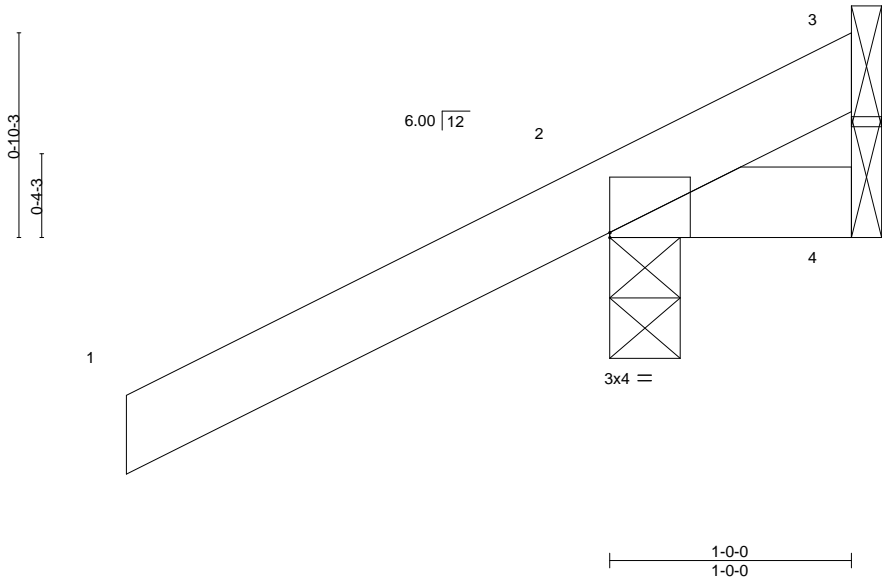


Plate Offsets (X,Y)--		[2:Edge,0-0-4]	
<b>LOADING</b> (psf)		<b>SPACING-</b> 2-0-0	<b>CSI.</b>
TCLL 20.0		Plate Grip DOL 1.25	TC 0.30
TCDL 7.0		Lumber DOL 1.25	BC 0.06
BCLL 0.0 *		Rep Stress Incr YES	WB 0.00
BCDL 10.0		Code FRC2023/TPI2014	Matrix-MP
			<b>DEFL.</b> in (loc) l/defl L/d
			Vert(LL) 0.00 7 >999 240
			Vert(CT) 0.00 7 >999 180
			Horz(CT) 0.00 4 n/a n/a
			<b>PLATES</b> <b>GRIP</b>
			MT20 244/190
			Weight: 7 lb FT = 20%

<b>LUMBER-</b>		<b>BRACING-</b>	
TOP CHORD 2x4 SP No.2		TOP CHORD	Structural wood sheathing directly applied or 1-0-0 oc purlins.
BOT CHORD 2x4 SP No.2		BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 3=Mechanical, 2=0-3-8, 4=Mechanical  
Max Horz 2=52(LC 12)  
Max Uplift 3=26(LC 1), 2=121(LC 12), 4=47(LC 1)  
Max Grav 3=19(LC 16), 2=254(LC 1), 4=34(LC 16)

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

- NOTES-** (6)
- 1) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 3) \* 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.
  - 4) Refer to girder(s) for truss to truss connections.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4 except (jt=lb) 2=121.
  - 6) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

This item has been digitally signed and sealed by Velez, Joaquin, PE on the date indicated here. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

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

March 10,2025

**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.  
Chesterfield, MO 63017  
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	GIEBEIG - LOT 53 CW	T36620350
4525744	CJ03	JACK-OPEN	10	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.830 s Feb 18 2025 MiTek Industries, Inc. Fri Mar 7 14:46:37 2025 Page 1  
ID:9B5QRtZPhUL0yMYqzVn3hhzz6?b-7YasKW0Cv1o4uZ9dvhE0ihgN0eAohQU6PgqbE5zdHLG

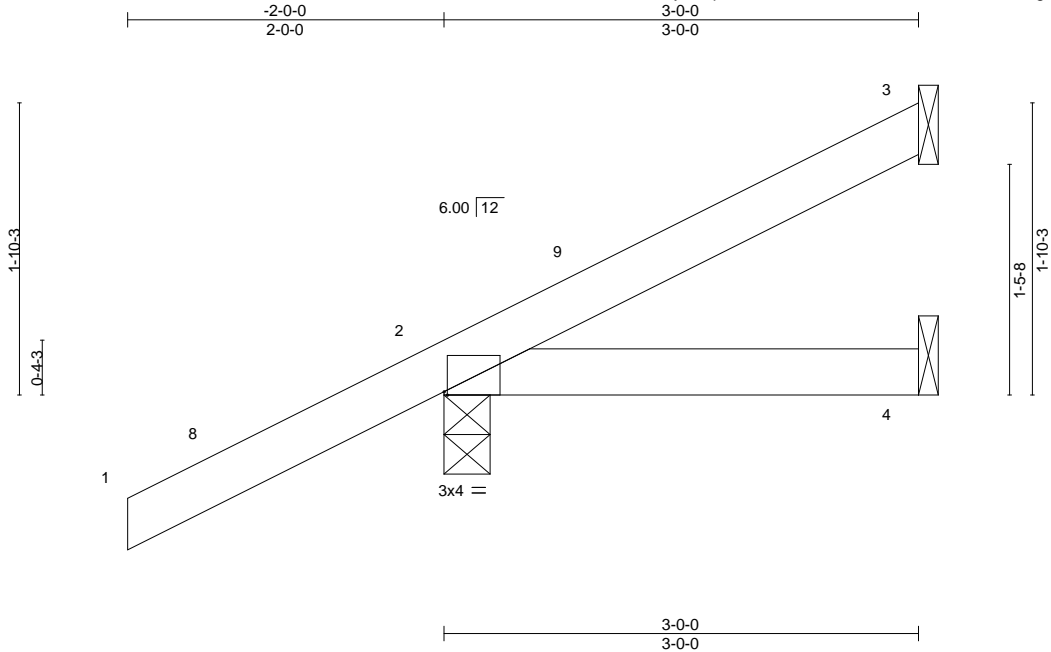


Plate Offsets (X,Y)--		[2:0-0-4,Edge]									
<b>LOADING</b> (psf)		<b>SPACING-</b>		<b>CSI.</b>		<b>DEFL.</b>				<b>PLATES</b>	
TCLL	20.0	Plate Grip DOL	1.25	TC	0.30	in (loc)	l/defl	L/d		MT20	GRIP
TCDL	7.0	Lumber DOL	1.25	BC	0.06	Vert(LL)	-0.00 4-7	>999	240		244/190
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Vert(CT)	-0.01 4-7	>999	180		
BCDL	10.0	Code	FRC2023/TPI2014	Matrix-MP		Horz(CT)	-0.00 3	n/a	n/a		
										Weight: 13 lb FT = 20%	

<b>LUMBER-</b>		<b>BRACING-</b>	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 3-0-0 oc purlins.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 3=Mechanical, 2=0-3-8, 4=Mechanical  
Max Horz 2=90(LC 12)  
Max Uplift 3=-36(LC 12), 2=-92(LC 12), 4=-16(LC 9)  
Max Grav 3=52(LC 1), 2=253(LC 1), 4=47(LC 3)

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

- NOTES-** (6)
- 1) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 -2-0-0 to 1-0-0, Zone1 1-0-0 to 2-11-4 zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 3) \* 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.
  - 4) Refer to girder(s) for truss to truss connections.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2, 4.
  - 6) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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

March 10,2025

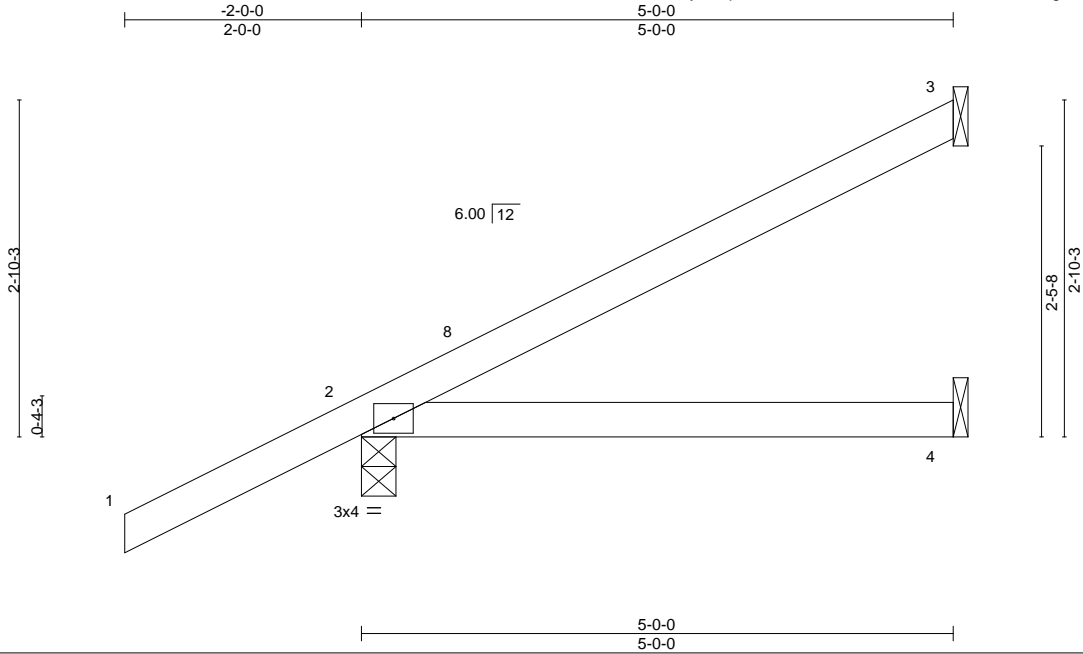
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**MiTek®**  
16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	GIEBEIG - LOT 53 CW	T36620351
4525744	CJ05	Jack-Open	6	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.830 s Feb 18 2025 MiTek Industries, Inc. Fri Mar 7 14:46:37 2025 Page 1  
ID:9B5QRtZPhUL0yMYqzVn3hhzz6?b-7YasKW0Cv1o4uZ9dvhE0ihgN0e8EhQU6PgqbE5zdHLG



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 0.30	Vert(LL)	-0.02	4-7	>999	240	MT20
TCDL 7.0	Lumber DOL	1.25	BC 0.23	Vert(CT)	-0.05	4-7	>999	180	244/190
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a	n/a	
BCDL 10.0	Code FRC2023/TPI2014		Matrix-MP						
								Weight: 19 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=0-3-8, 4=Mechanical  
Max Horz 2=128(LC 12)  
Max Uplift 3=74(LC 12), 2=98(LC 12)  
Max Grav 3=108(LC 1), 2=313(LC 1), 4=87(LC 3)

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

- NOTES-** (6)
- 1) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 -2-0-0 to 1-0-0, Zone1 1-0-0 to 4-11-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 3) \* 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.
  - 4) Refer to girder(s) for truss to truss connections.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2.
  - 6) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
Date:

March 10,2025

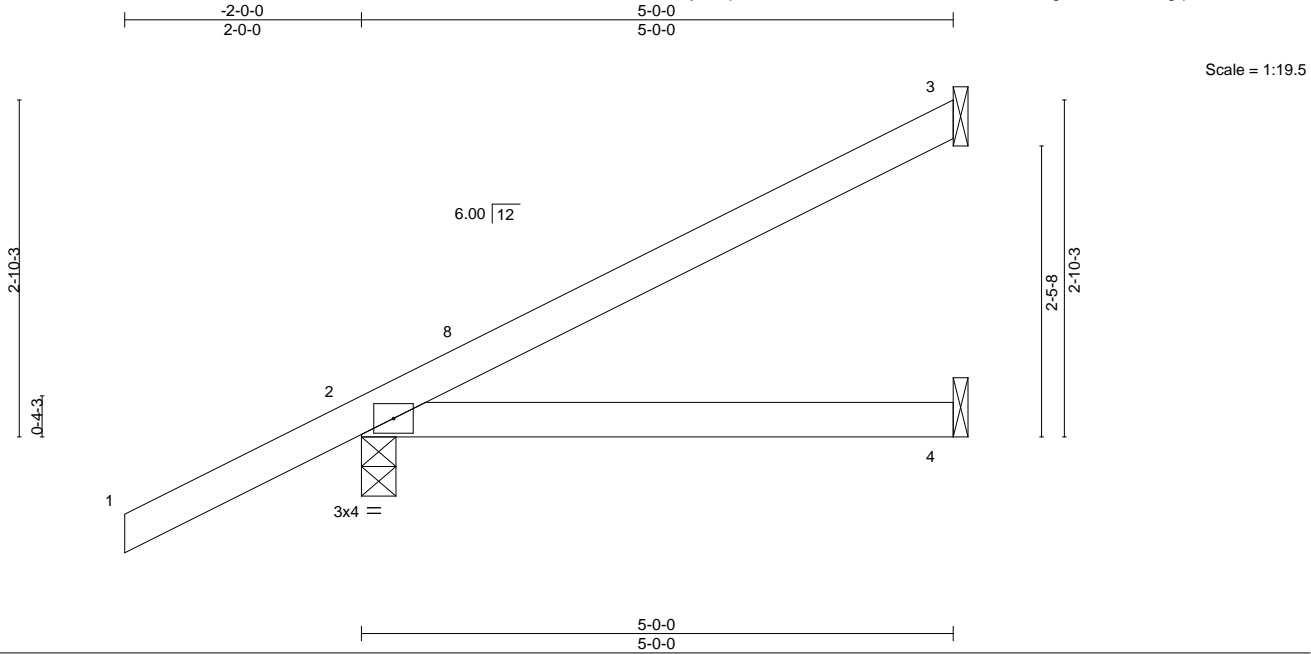
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**MiTek®**  
16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	GIEBEIG - LOT 53 CW	T36620352
4525744	EJ05	JACK-OPEN	3	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.830 s Feb 18 2025 MiTek Industries, Inc. Fri Mar 7 14:46:37 2025 Page 1  
ID:9B5QRtZPhUL0yMYqzVn3hhzz6?b-7YasKW0Cv1o4uZ9dvhE0ihgN0e8EhQU6PgqbE5zdHLG



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 0.30	Vert(LL)	-0.02 4-7	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.23	Vert(CT)	-0.05 4-7	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00 3	n/a	n/a		
BCDL 10.0	Code FRC2023/TPI2014		Matrix-MP					Weight: 19 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=0-3-8, 4=Mechanical  
Max Horz 2=128(LC 12)  
Max Uplift 3=-74(LC 12), 2=-98(LC 12)  
Max Grav 3=108(LC 1), 2=313(LC 1), 4=87(LC 3)

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

**NOTES-** (6)  
1) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 -2-0-0 to 1-0-0, Zone1 1-0-0 to 4-11-4 zone; porch right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60  
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Date:

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**MiTek®**

16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	GIEBEIG - LOT 53 CW	T36620353
4525744	EJ07	Jack-Partial	22	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL),

Lake City, FL - 32055,

8.830 s Feb 18 2025 MiTek Industries, Inc. Fri Mar 7 14:46:38 2025 Page 1

ID:9B5QRtZPhUL0yMYqzVn3hhzz6?b-bk8EXspqgLwwVjKpTOIFFvDT22QAQtjFeKZ8mXzdHLF



Scale: 1/2"=1'

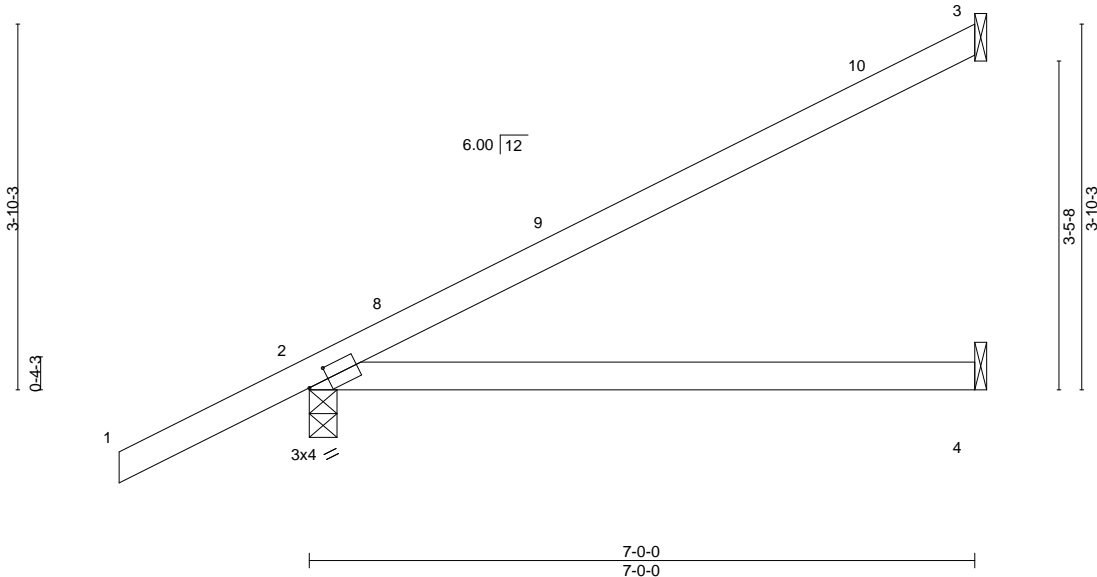


Plate Offsets (X,Y)--		[2:0-2-10,0-1-8]							
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.60	Vert(LL)	0.10 4-7	>837	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.50	Vert(CT)	-0.21 4-7	>395	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00 2	n/a	n/a		
BCDL 10.0	Code	FRC2023/TPI2014	Matrix-MP					Weight: 26 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 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical  
Max Horz 2=161(LC 12)  
Max Uplift 3=-97(LC 12), 2=-110(LC 12)  
Max Grav 3=160(LC 1), 2=380(LC 1), 4=125(LC 3)

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

- NOTES- (6)
- 1) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 -2-0-0 to 1-0-0, Zone1 1-0-0 to 6-11-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 3) \* 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.
  - 4) Refer to girder(s) for truss to truss connections.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3 except (jt=lb) 2=110.
  - 6) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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

March 10,2025











Job	Truss	Truss Type	Qty	Ply	GIEBEIG - LOT 53 CW	T36620357
4525744	T01G	Common Supported Gable	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.830 s Feb 18 2025 MiTek Industries, Inc. Fri Mar 7 14:46:41 2025 Page 1  
ID:9B5QRiZPhUL0yMYqzVn3hhzz6?b-?JqNAusjzGIVNBTO8WlytXr4qFX8dJhKlooNsZdHLC  
20-0-0 22-0-0  
10-0-0 2-0-0  
Scale = 1:39.7

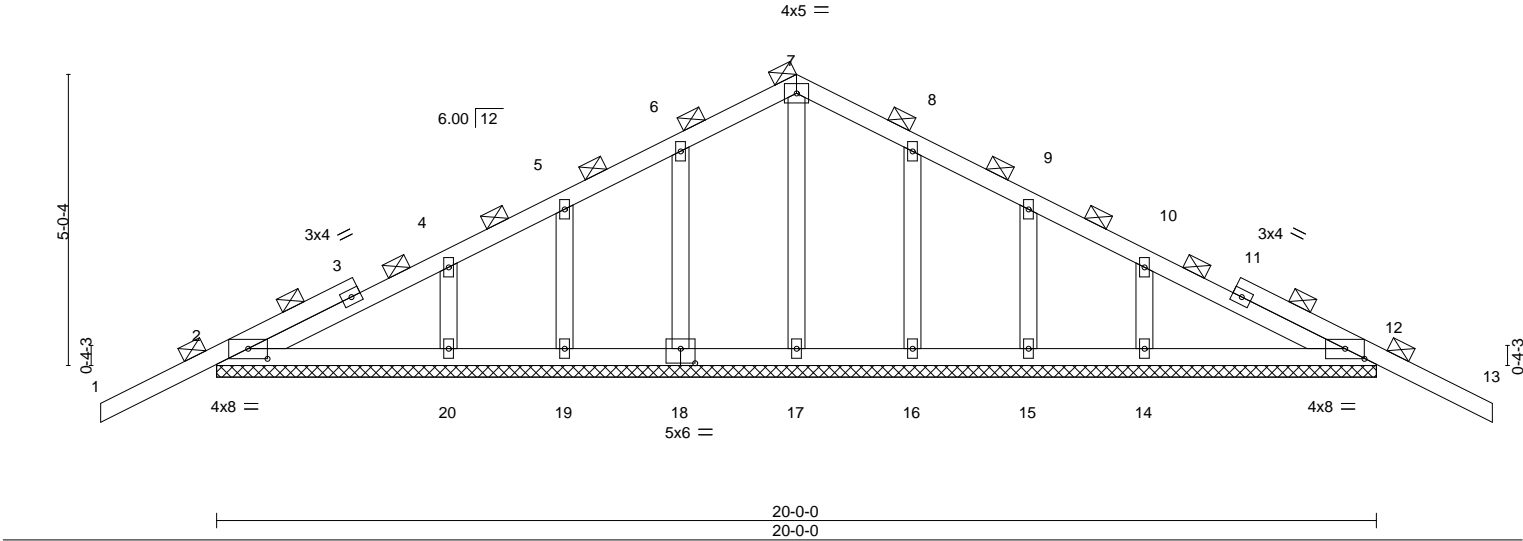


Plate Offsets (X,Y)--		[2:0-4-0,0-2-1], [12:0-4-0,0-2-1], [18:0-3-0,0-3-0]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 20.0	Plate Grip DOL	1.25	TC 0.24
TCDL 7.0	Lumber DOL	1.25	BC 0.10
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05
BCDL 10.0	Code	FRC2023/TPI2014	Matrix-S
DEFL.	in (loc)	l/defl	L/d
Vert(LL)	-0.02	13	n/r
Vert(CT)	-0.02	13	n/r
Horz(CT)	0.00	12	n/a
PLATES	GRIP		
MT20	244/190		
Weight: 105 lb	FT = 20%		

**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
OTHERS 2x4 SP No.3

**BRACING-**  
TOP CHORD 2-0-0 oc purlins (6-0-0 max.).  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

**REACTIONS.** All bearings 20-0-0.  
(lb) - Max Horz 2=95(LC 13)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 12, 18, 19, 20, 16, 15, 14  
Max Grav All reactions 250 lb or less at joint(s) 17, 18, 19, 20, 16, 15, 14 except 2=265(LC 25), 12=265(LC 26)

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

- NOTES-** (11)
- 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=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 zone;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) All plates are 2x4 MT20 unless otherwise indicated.
  - 5) Gable requires continuous bottom chord bearing.
  - 6) Gable studs spaced at 2-0-0 oc.
  - 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 12, 18, 19, 20, 16, 15, 14.
  - 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - 11) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
Date:

March 10,2025

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

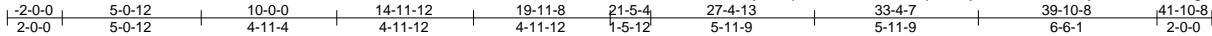
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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	GIEBEIG - LOT 53 CW	T36620358
4525744	T02	Roof Special	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.830 s Feb 18 2025 MiTek Industries, Inc. Fri Mar 7 14:46:41 2025 Page 1  
ID:9B5QRizPhUL0yMYqzVn3hhzz67b-?JqNAusjzGIVNBTO8WlytXr0OFKmd7ghKlooNszdHLC



Scale = 1:83.9

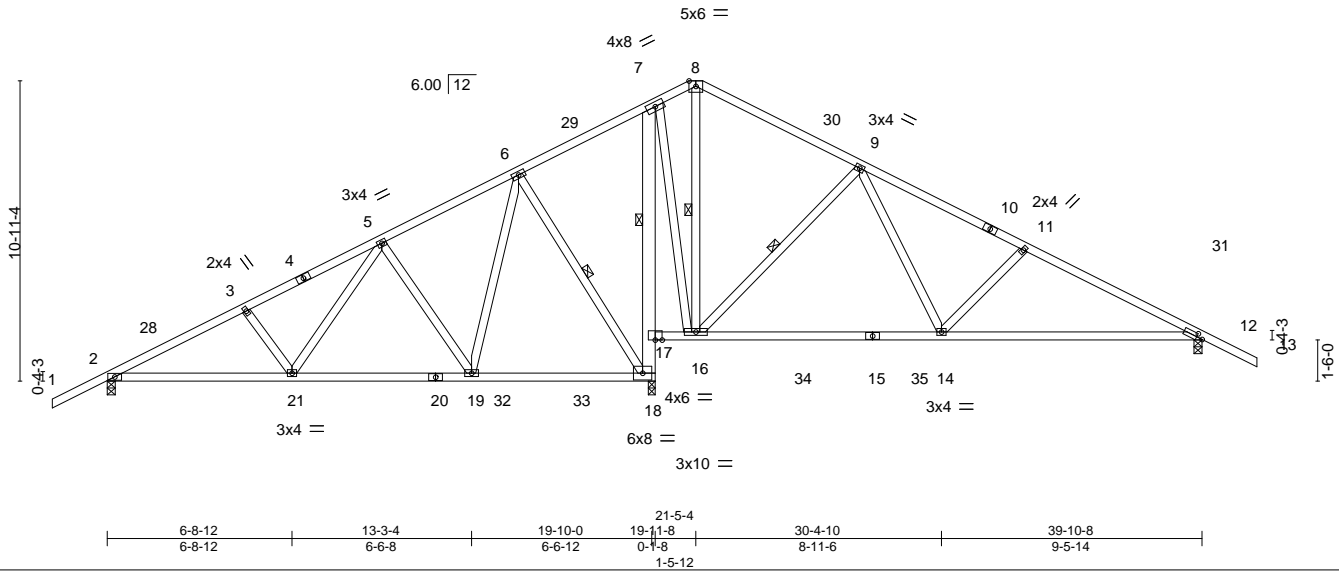


Plate Offsets (X,Y)--		[12:0-2-9,0-1-8]											
<b>LOADING</b> (psf)		<b>SPACING-</b> 2-0-0		<b>CSI.</b>		<b>DEFL.</b> in (loc) l/defl L/d				<b>PLATES</b>		<b>GRIP</b>	
TCLL	20.0	Plate Grip DOL 1.25		TC	0.46	Vert(LL)	-0.19	14-16	>999	240	MT20	244/190	
TCDL	7.0	Lumber DOL 1.25		BC	0.96	Vert(CT)	-0.31	14-27	>768	180			
BCLL	0.0 *	Rep Stress Incr NO		WB	0.44	Horz(CT)	0.03	18	n/a	n/a			
BCDL	10.0	Code FRC2023/TPI2014		Matrix-MS							Weight: 255 lb	FT = 20%	

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-8-13 oc purlins.
BOT CHORD 2x4 SP No.2 *Except*	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. Except:
7-18: 2x6 SP No.2	1 Row at midpt 7-17
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 6-18, 8-16, 9-16

**REACTIONS.** (size) 2=0-3-8, 18=0-3-0, 12=0-3-8  
Max Horz 2=227(LC 12)  
Max Uplift 2=291(LC 12), 18=482(LC 12), 12=299(LC 13)  
Max Grav 2=948(LC 27), 18=2037(LC 2), 12=813(LC 28)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1509/454, 3-5=-1394/460, 5-6=-636/323, 6-7=-29/429, 9-11=-883/465, 11-12=-1075/486  
BOT CHORD 2-21=-515/1344, 19-21=-310/846, 18-19=-91/324, 17-18=-1157/388, 7-17=-1157/372, 16-17=-257/174, 14-16=-134/452, 12-14=-367/934  
WEBS 5-21=-203/709, 5-19=-578/287, 6-19=-283/980, 6-18=-951/397, 7-16=-303/937, 8-16=-278/0, 9-16=-683/351, 9-14=-296/659, 11-14=-333/225

- NOTES-** (8)
- 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=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 -2-0-0 to 1-0-0, Zone1 1-0-0 to 21-5-4, Zone2 21-5-4 to 25-8-3, Zone1 25-8-3 to 41-10-8 zone; porch right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - All plates are 3x6 MT20 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=291, 18=482, 12=299.
  - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
  - This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**LOAD CASE(S)** Standard  
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25  
Uniform Loads (plf)  
Vert: 1-8=-54, 8-13=-54, 21-22=-20, 19-21=-80(F=-60), 18-19=-20, 17-25=-20

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

March 10,2025

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

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Job	Truss	Truss Type	Qty	Ply	GIEBEIG - LOT 53 CW	T36620359
4525744	T02G	GABLE	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.830 s Feb 18 2025 MiTek Industries, Inc. Fri Mar 7 14:46:43 2025 Page 2  
ID:9B5QRtZPhUL0yMYqzVn3hhzz6?b-xiy7batzVtYDcUdnGxKQyywF230051V\_ncHvRlzdHLA

**LOAD CASE(S)** Standard  
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25  
Uniform Loads (plf)  
Vert: 1-9=-54, 9-15=-54, 23-50=-20, 21-23=-80(F=-60), 20-21=-20, 19-53=-20

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

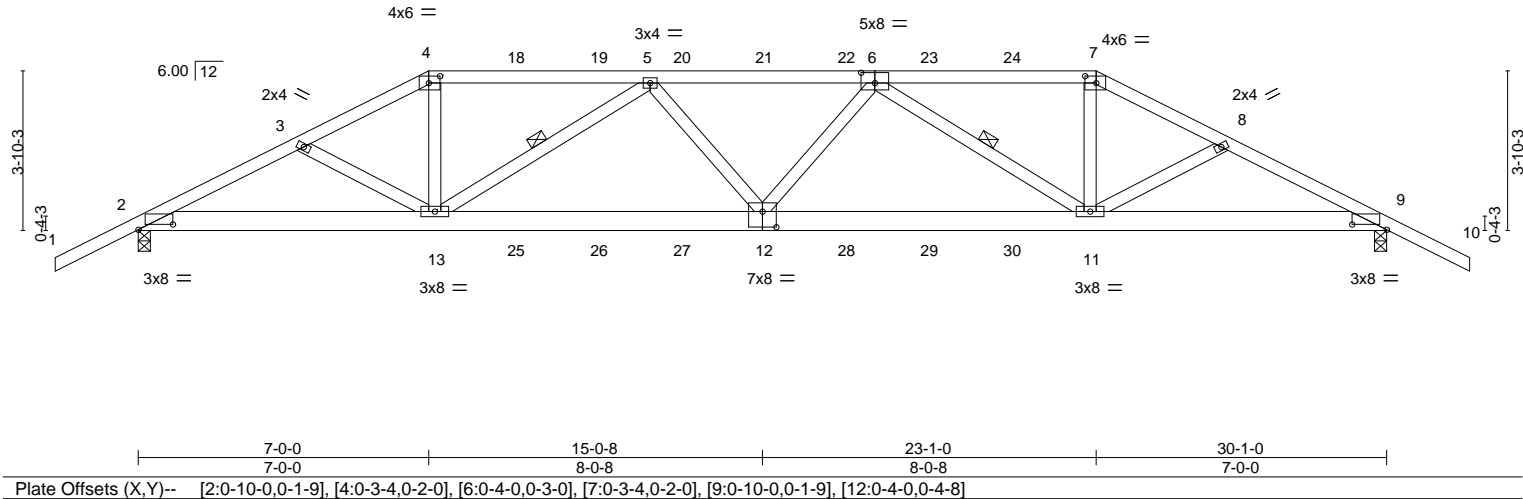
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Job	Truss	Truss Type	Qty	Ply	GIEBEIG - LOT 53 CW	T36620360
4525744	T03	Hip Girder	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.830 s Feb 18 2025 MiTek Industries, Inc. Fri Mar 7 14:46:44 2025 Page 1  
ID:9B5QRtZPhUL0yMYqzVn3hhzz6?b-PuVWovubGBg4EeBzpfsvATSmSUBqSV80G0T\_BzdHL9  
-2-0-0 3-11-13 7-0-0 12-4-0 17-9-0 23-1-0 26-1-3 30-1-0 32-1-0  
2-0-0 3-11-13 3-0-3 5-4-0 5-4-15 5-4-0 3-0-3 3-11-13 2-0-0  
Scale = 1:55.5



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 0.78	Vert(LL)	-0.24	12	>999	240	
TCDL 7.0	Lumber DOL	1.25	BC 0.40	Vert(CT)	-0.47	11-12	>774	180	
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.56	Horz(CT)	0.11	9	n/a	n/a	
BCDL 10.0	Code FRC2023/TPI2014		Matrix-MS						
								Weight: 174 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2 *Except* 4-6,6-7: 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied or 2-3-8 oc purlins.
BOT CHORD 2x6 SP 2400F 2.0E or 2x6 SP M 26	BOT CHORD Rigid ceiling directly applied or 8-0-2 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 5-13, 6-11

**REACTIONS.** (size) 2=0-3-8, 9=0-3-8  
Max Horz 2=75(LC 29)  
Max Uplift 2=706(LC 8), 9=727(LC 9)  
Max Grav 2=2215(LC 1), 9=2255(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-4368/1359, 3-4=-4209/1305, 4-5=-3805/1210, 5-6=-5227/1569, 6-7=-3883/1248,  
7-8=-4298/1349, 8-9=-4457/1402  
BOT CHORD 2-13=-1205/3867, 12-13=-1548/5049, 11-12=-1553/5076, 9-11=-1169/3947  
WEBS 4-13=-345/1465, 5-13=-1546/590, 5-12=0/445, 6-12=0/425, 6-11=-1472/538,  
7-11=-317/1431

- NOTES-** (9)
- 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=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Provide adequate drainage to prevent water ponding.
  - 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) except (jt=lb) 2=706, 9=727.
  - 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 125 lb down and 100 lb up at 7-0-0, 106 lb down and 100 lb up at 9-0-12, 106 lb down and 100 lb up at 11-0-12, 106 lb down and 100 lb up at 13-0-12, 106 lb down and 91 lb up at 15-0-8, 106 lb down and 100 lb up at 17-0-4, 106 lb down and 100 lb up at 19-0-4, and 106 lb down and 100 lb up at 21-0-4, and 228 lb down and 195 lb up at 23-1-0 on top chord, and 294 lb down and 103 lb up at 7-0-0, 85 lb down at 9-0-12, 85 lb down at 11-0-12, 85 lb down at 13-0-12, 85 lb down at 15-0-8, 85 lb down at 17-0-4, 85 lb down at 19-0-4, and 85 lb down at 21-0-4, and 294 lb down and 103 lb up at 23-0-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
  - 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
  - 9) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**LOAD CASE(S)** Standard

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March 10,2025

Continued on page 2

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Job	Truss	Truss Type	Qty	Ply	GIEBEIG - LOT 53 CW	T36620360
4525744	T03	Hip Girder	1	1	Job Reference (optional)	

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
- Uniform Loads (plf)
- Vert: 1-4=-54, 4-7=-54, 7-10=-54, 2-9=-20
- Concentrated Loads (lb)
- Vert: 4=-106(F) 7=-181(F) 12=-61(F) 13=-285(F) 11=-285(F) 18=-106(F) 19=-106(F) 20=-106(F) 21=-106(F) 22=-106(F) 23=-106(F) 24=-106(F) 25=-61(F) 26=-61(F) 27=-61(F) 28=-61(F) 29=-61(F) 30=-61(F)

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Job	Truss	Truss Type	Qty	Ply	GIEBEIG - LOT 53 CW	T36620361
4525744	T04	Hip	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.830 s Feb 18 2025 MiTek Industries, Inc. Fri Mar 7 14:46:44 2025 Page 1  
ID:9B5QRIZPhUL0yMYqzVn3hhzz6?b-PuVWovubGBg4EeBzpfsvATYXSPpqSP80G0T\_BzdHL9  
-2-0-0 4-9-5 9-0-0 15-0-8 21-1-0 25-3-11 30-1-0 32-1-0  
2-0-0 4-9-5 4-2-11 6-0-8 6-0-8 4-2-11 4-9-5 2-0-0  
Scale = 1:56.4

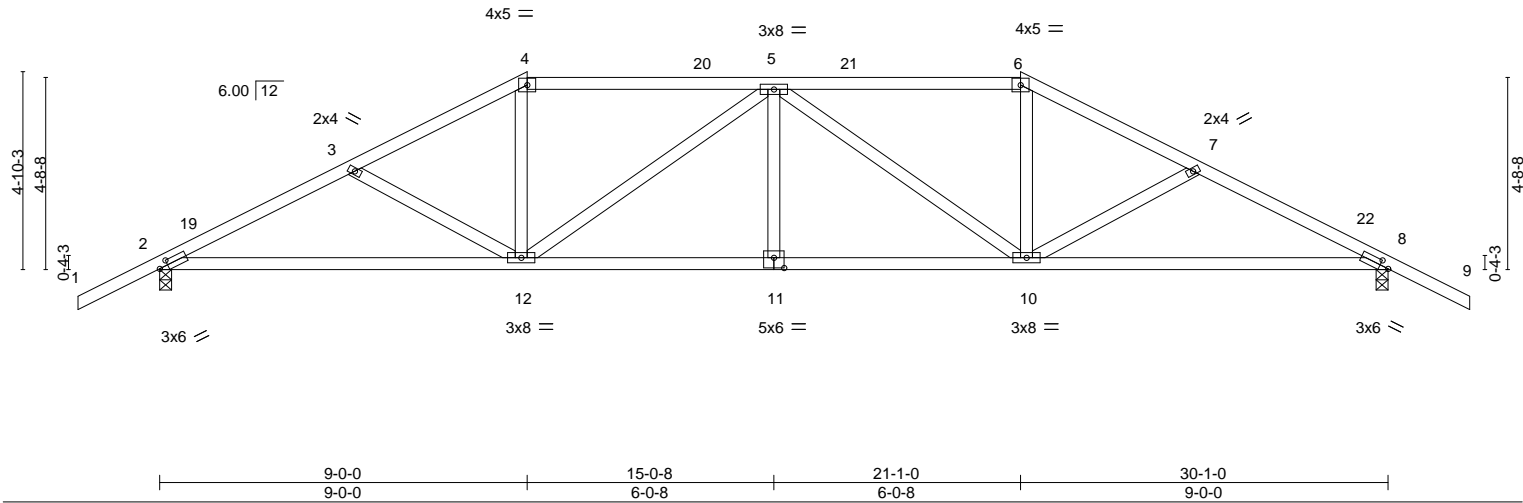


Plate Offsets (X,Y)--		[2:0-2-9,0-1-8], [8:0-2-9,0-1-8], [11:0-3-0,0-3-0]							
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.41	Vert(LL)	-0.14 12-15	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.74	Vert(CT)	-0.30 12-15	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.56	Horz(CT)	0.09 8	n/a	n/a		
BCDL 10.0	Code FRC2023/TPI2014		Matrix-MS					Weight: 153 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 3-11-5 oc purlins.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 8-5-2 oc bracing.
WEBS 2x4 SP No.3	

REACTIONS. (size) 2=0-3-8, 8=0-3-8  
Max Horz 2=-90(LC 17)  
Max Uplift 2=-347(LC 12), 8=-347(LC 13)  
Max Grav 2=1221(LC 1), 8=1221(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-2049/551, 3-4=-1821/470, 4-5=-1576/454, 5-6=-1576/454, 6-7=-1821/470, 7-8=-2049/551  
BOT CHORD 2-12=-490/1805, 11-12=-407/1924, 10-11=-407/1924, 8-10=-401/1805  
WEBS 4-12=-95/533, 5-12=-519/198, 5-10=-519/198, 6-10=-95/533

- NOTES- (7)
- 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=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone 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 21-1-0, Zone2 21-1-0 to 25-5-9, Zone1 25-5-9 to 32-1-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 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=347, 8=347.
  - This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

This item has been digitally signed and sealed by Velez, Joaquin, PE on the date indicated here. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

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

March 10,2025

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Job	Truss	Truss Type	Qty	Ply	GIEBEIG - LOT 53 CW	T36620364
4525744	T07	Roof Special	4	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.830 s Feb 18 2025 MiTek Industries, Inc. Fri Mar 7 14:46:46 2025 Page 1  
ID:9B5QRtZPhUL0yMYqzVn3hhzz6?b-MHdGDbvroowoTyLLx4u7abYrSG3?1LMRUaVZ23zdHL7

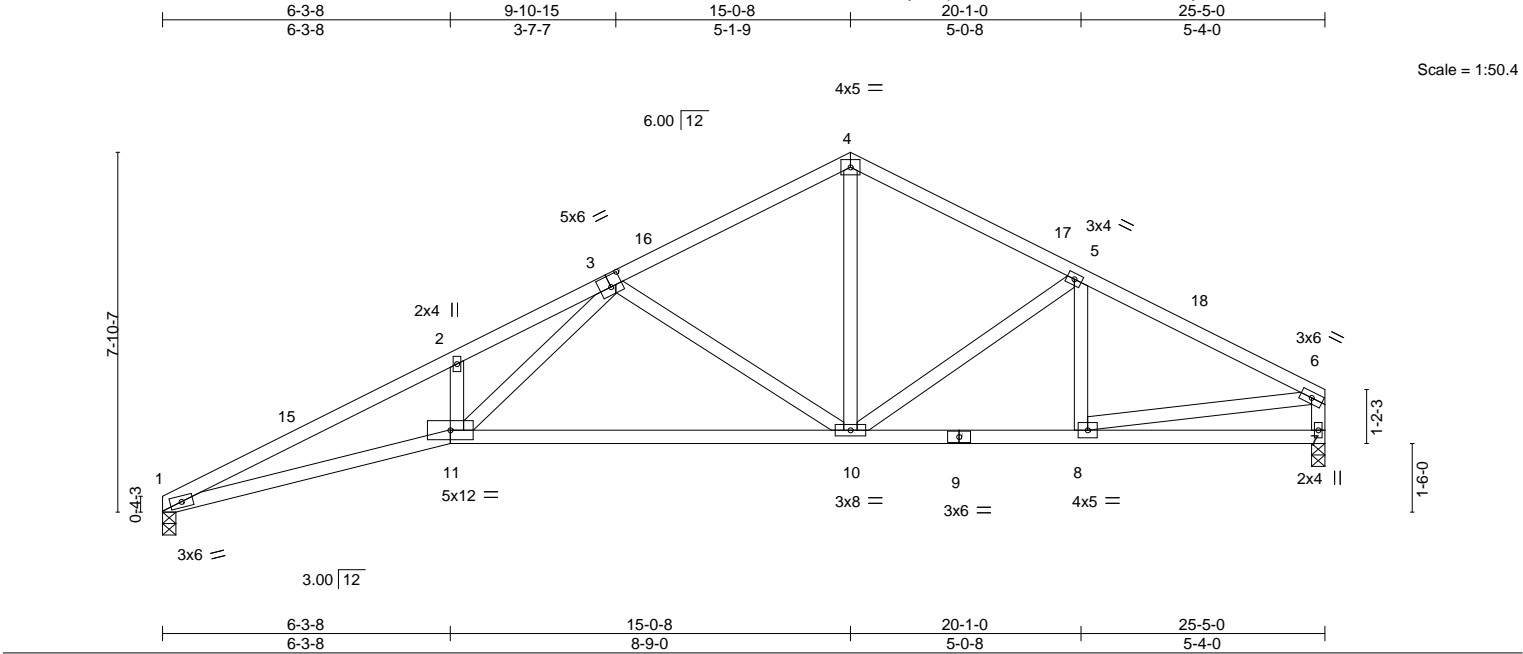


Plate Offsets (X,Y)--	[3:0-3-0,0-3-0]								
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.57	Vert(LL)	-0.23 10-11	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.83	Vert(CT)	-0.52 10-11	>580	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.60	Horz(CT)	0.14 7	n/a	n/a		
BCDL 10.0	Code FRC2023/TPI2014		Matrix-MS					Weight: 129 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 2-8-14 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 6-0-1 oc bracing.

**REACTIONS.**

(size) 1=0-3-8, 7=0-3-8  
Max Horz 1=178(LC 12)  
Max Uplift 1=-249(LC 12), 7=-217(LC 13)  
Max Grav 1=935(LC 1), 7=935(LC 1)

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

TOP CHORD 1-2=-3043/892, 2-3=-3019/998, 3-4=-1154/319, 4-5=-1153/341, 5-6=-1320/309, 6-7=-877/234  
BOT CHORD 1-11=-930/2753, 10-11=-534/1642, 8-10=-240/1129  
WEBS 3-11=-530/1450, 3-10=-797/383, 4-10=-179/712, 5-10=-252/174, 6-8=-224/1027

**NOTES-** (7)

- 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=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 0-0-0 to 3-0-0, Zone1 3-0-0 to 15-0-8, Zone2 15-0-8 to 19-3-7, Zone1 19-3-7 to 25-3-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=249, 7=217.
- 7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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Chesterfield, MO 63017  
Date:

March 10,2025

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Job	Truss	Truss Type	Qty	Ply	GIEBEIG - LOT 53 CW	T36620365
4525744	T08	Roof Special	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.830 s Feb 18 2025 MiTek Industries, Inc. Fri Mar 7 14:46:47 2025 Page 1  
ID:9B5QRiZPhUL0yMYqzVn3hhzz67b-qTBeQxwUZ62f56wYVnPM6o5\_VgNV1nkaiEF7aWzdHL6

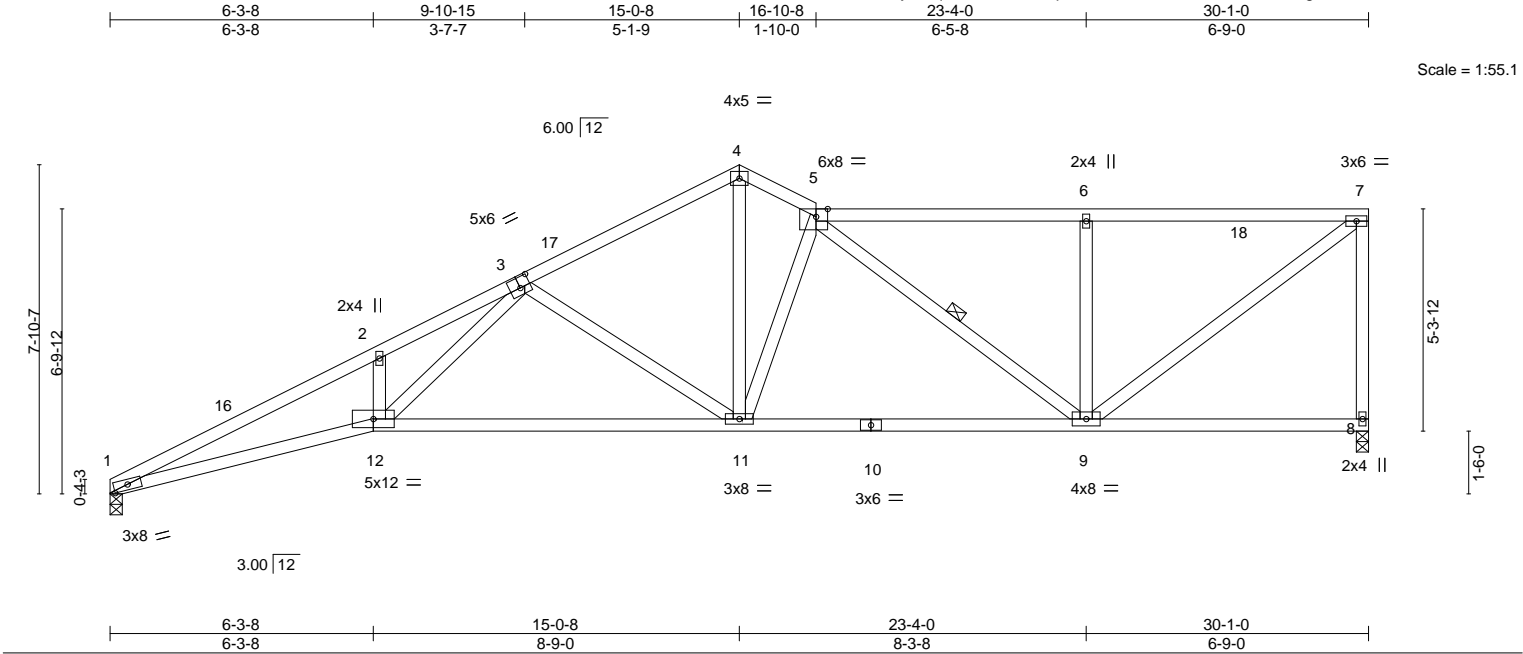


Plate Offsets (X,Y)--		[1:0-4-0,0-1-9], [3:0-3-0,0-3-0], [5:0-3-5,Edge]							
<b>LOADING</b> (psf)		<b>SPACING-</b> 2-0-0		<b>CSI.</b>		<b>DEFL.</b> in (loc) l/defl L/d		<b>PLATES</b>	<b>GRIP</b>
TCLL	20.0	Plate Grip DOL	1.25	TC	0.68	Vert(LL)	-0.25 11-12 >999 240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.94	Vert(CT)	-0.59 11-12 >612 180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.65	Horz(CT)	0.19 8 n/a n/a		
BCDL	10.0	Code FRC2023/TPI2014		Matrix-MS				Weight: 165 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-3-5 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 5-9

<b>REACTIONS.</b>	(size) 8=0-3-8, 1=0-3-8
	Max Horz 1=268(LC 12)
	Max Uplift 8=311(LC 13), 1=269(LC 12)
	Max Grav 8=1108(LC 1), 1=1108(LC 1)

<b>FORCES.</b>	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	1-2=-3742/1060, 2-3=-3708/1163, 3-4=-1637/396, 4-5=-1613/430, 5-6=-1204/327, 6-7=-1202/326, 7-8=-1050/326
BOT CHORD	1-12=-1175/3392, 11-12=-718/2136, 9-11=-410/1621
WEBS	3-12=-607/1627, 3-11=-871/412, 4-11=-289/1264, 5-11=-639/249, 5-9=-532/207, 6-9=-422/234, 7-9=-401/1487

- NOTES-** (8)
- 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=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 0-0-0 to 3-0-0, Zone1 3-0-0 to 15-0-8, Zone3 15-0-8 to 16-10-8, Zone1 16-10-8 to 29-11-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Bearing at joint(s) 1 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) 8=311, 1=269.
  - This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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MiTek Inc. DBA MiTek USA FL Cert 6634  
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Chesterfield, MO 63017  
Date:

March 10,2025

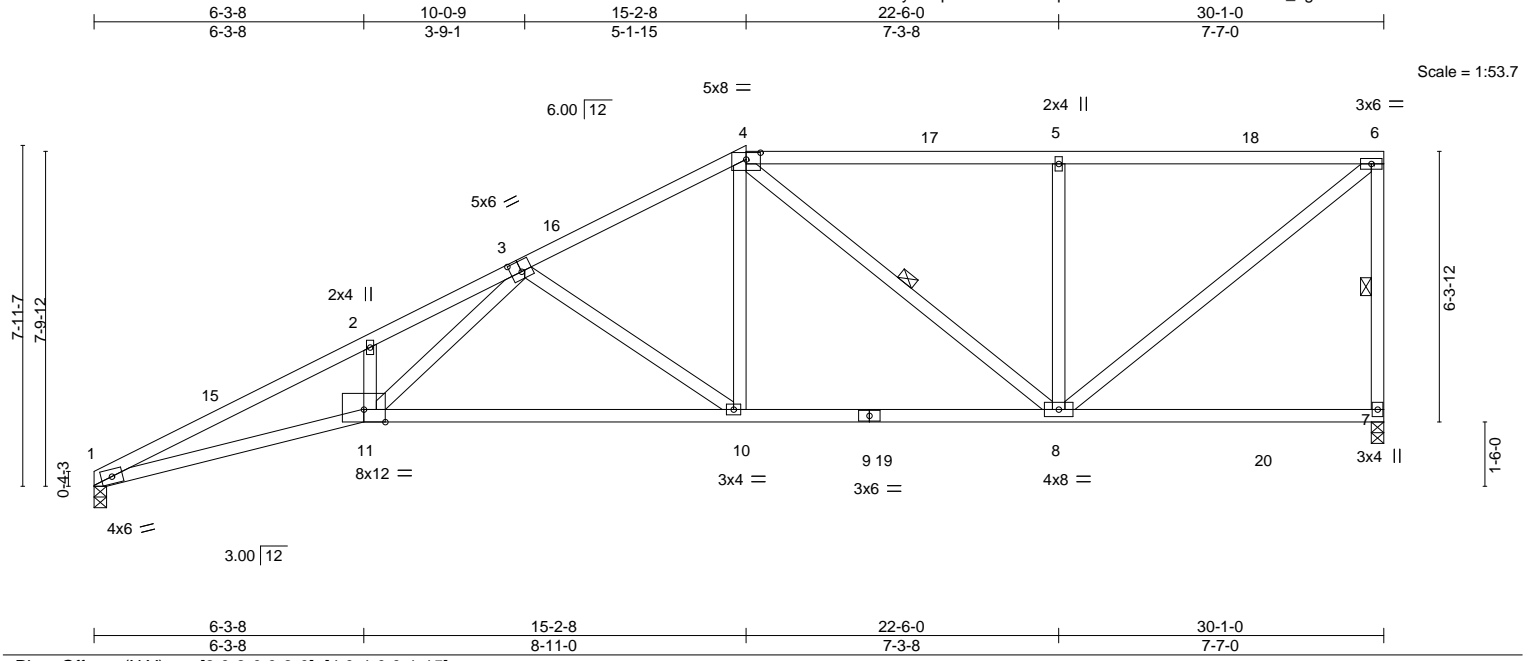
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Job	Truss	Truss Type	Qty	Ply	GIEBEIG - LOT 53 CW	T36620366
4525744	T09	Half Hip	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.830 s Feb 18 2025 MiTek Industries, Inc. Fri Mar 7 14:46:47 2025 Page 1  
ID:9B5QRtZPhUL0yMYqzVn3hhzz6?b-qTBeQxwUZ62f56wYVnPM6o5\_LgM01n2aiEF7aWzdHL6



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)	-0.35 10-11	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.97	Vert(CT)	-0.66 10-11	>540	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.70	Horz(CT)	0.19 7	n/a	n/a		
BCDL 10.0	Code FRC2023/TPI2014		Matrix-MS					Weight: 164 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-2-3 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2 *Except*	BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
9-11: 2x4 SP No.1	WEBS 1 Row at midpt 6-7, 4-8
WEBS 2x4 SP No.3	

**REACTIONS.** (size) 7=0-3-8, 1=0-3-8  
Max Horz 1=290(LC 12)  
Max Uplift 7=-327(LC 9), 1=-265(LC 12)  
Max Grav 7=1243(LC 2), 1=1203(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-4067/1066, 2-3=-4029/1172, 3-4=-1806/394, 4-5=-1205/319, 5-6=-1204/317, 6-7=-1095/345  
BOT CHORD 1-11=-1204/3712, 10-11=-726/2274, 8-10=-387/1557  
WEBS 3-11=-627/1832, 3-10=-842/405, 4-10=-175/820, 4-8=-479/194, 5-8=-472/264, 6-8=-400/1520

- NOTES-** (8)
- 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=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 0-0-0 to 3-0-0, Zone1 3-0-0 to 15-2-8, Zone2 15-2-8 to 19-5-7, Zone1 19-5-7 to 29-11-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Provide adequate drainage to prevent water ponding.
  - 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, with BCDL = 10.0psf.
  - 6) Bearing at joint(s) 1 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) except (jt=lb) 7=327, 1=265.
  - 8) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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Date:

March 10,2025

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Job	Truss	Truss Type	Qty	Ply	GIEBEIG - LOT 53 CW	T36620367
4525744	T10	Half Hip	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.830 s Feb 18 2025 MiTek Industries, Inc. Fri Mar 7 14:46:48 2025 Page 1

ID:9B5QRtZPhUL0yMYqzVn3hhzz6?b-Igl0eHx6KQAWiGVk2Uwbf0dA83iimAYjxt\_g7yzdHL5

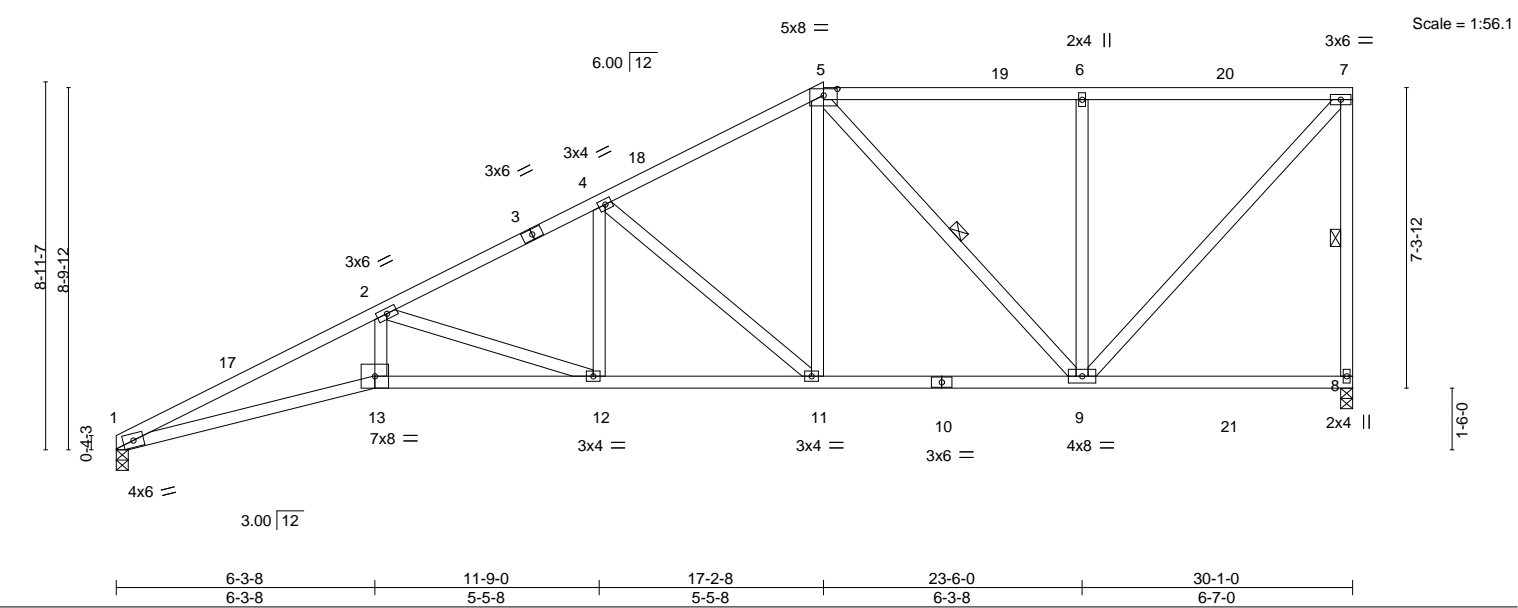


Plate Offsets (X,Y)-- [5:0-4-0,0-1-15]							
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d
TCLL 20.0	Plate Grip DOL	1.25	TC 0.62	Vert(LL)	-0.27 12-13	>999	240
TCDL 7.0	Lumber DOL	1.25	BC 1.00	Vert(CT)	-0.48 12-13	>745	180
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.94	Horz(CT)	0.21 8	n/a	n/a
BCDL 10.0	Code FRC2023/TPI2014		Matrix-MS				
				Weight: 176 lb		FT = 20%	

<b>LUMBER-</b>		<b>BRACING-</b>	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 2-4-2 oc purlins, except end verticals.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied.
WEBS	2x4 SP No.3	WEBS	1 Row at midpt 7-8, 5-9

<b>REACTIONS.</b>	
(size)	8=0-3-8, 1=0-3-8
Max Horz	1=328(LC 12)
Max Uplift	8=-317(LC 9), 1=-269(LC 12)
Max Grav	8=1252(LC 2), 1=1202(LC 2)

<b>FORCES.</b>	
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	1-2=-4059/1142, 2-4=-2294/568, 4-5=-1513/359, 5-6=-936/236, 6-7=-934/234, 7-8=-1124/332
BOT CHORD	1-13=-1316/3703, 12-13=-1247/3490, 11-12=-654/2012, 9-11=-354/1292
WEBS	2-13=-292/1059, 2-12=-1557/624, 4-12=-164/689, 4-11=-914/384, 5-11=-212/819, 5-9=-541/225, 6-9=-409/229, 7-9=-342/1363

- NOTES-** (8)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCCL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 0-0-0 to 3-0-0, Zone1 3-0-0 to 17-2-8, Zone2 17-2-8 to 21-5-7, Zone1 21-5-7 to 29-11-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Bearing at joint(s) 1 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) 8=317, 1=269.
  - This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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

March 10,2025

Job	Truss	Truss Type	Qty	Ply	GIEBEIG - LOT 53 CW	T36620368
4525744	T11	Half Hip	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.830 s Feb 18 2025 MiTek Industries, Inc. Fri Mar 7 14:46:48 2025 Page 1  
ID:9B5QRtZPhUL0yMYqzVn3hhzz6?b-Igl0eHx6KQAWiGVk2UwbfdCC3iLmGjjxt\_g7yzdHL5

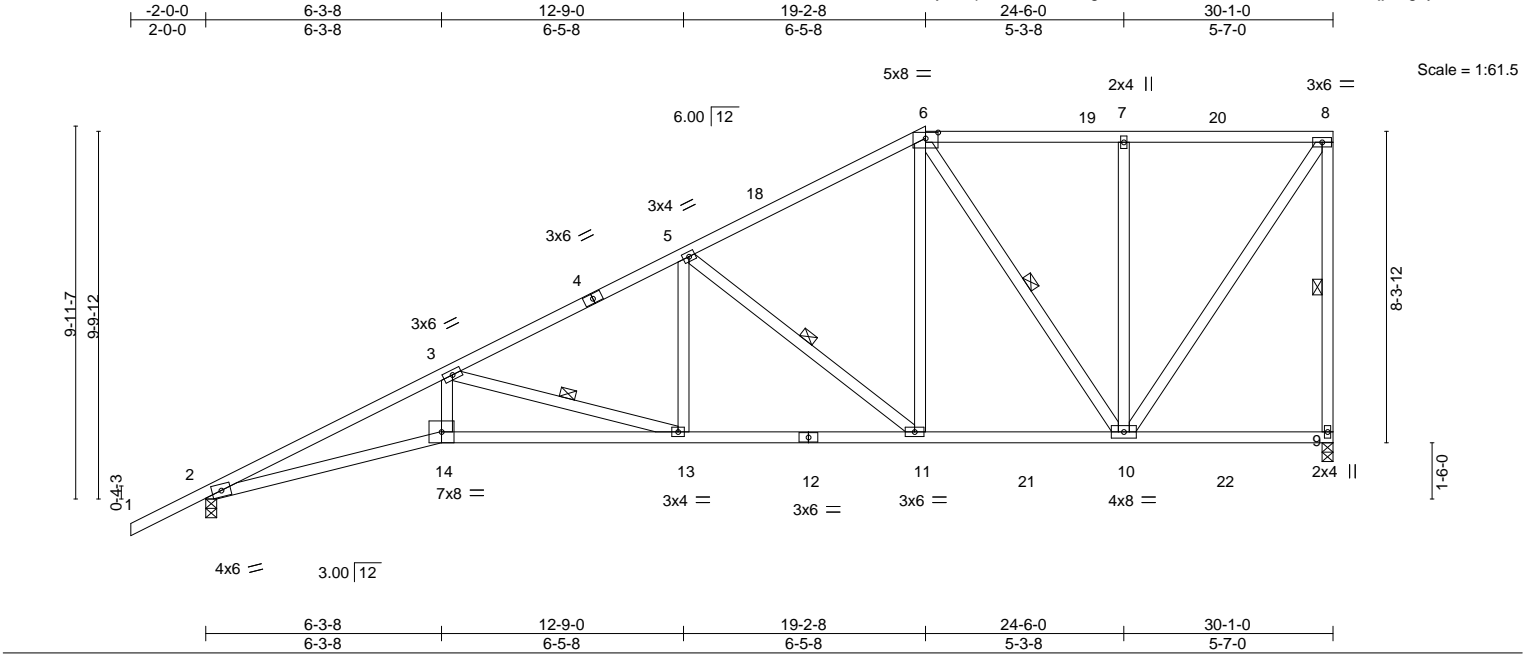


Plate Offsets (X,Y)--		[6:0-4-0,0-1-15]									
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.49	Vert(LL)	-0.29 13-14	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.96	Vert(CT)	-0.51 13-14	>708	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.54	Horz(CT)	0.21 9	n/a	n/a		
BCDL	10.0	Code FRC2023/TPI2014		Matrix-MS						Weight: 189 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2 \*Except\*  
12-14: 2x4 SP No.1  
WEBS 2x4 SP No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-6-14 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.  
WEBS 1 Row at midpt 8-9, 3-13, 5-11, 6-10

REACTIONS.

(size) 9=0-3-8, 2=0-3-8  
Max Horz 2=400(LC 12)  
Max Uplift 9=305(LC 9), 2=322(LC 12)  
Max Grav 9=1248(LC 2), 2=1289(LC 2)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-4003/1156, 3-5=-2130/528, 5-6=-1266/307, 6-7=-711/174, 7-8=-710/173, 8-9=-1137/318  
BOT CHORD 2-14=-1365/3648, 13-14=-1297/3439, 11-13=-648/1858, 10-11=-313/1059  
WEBS 3-14=-293/1050, 3-13=-1641/673, 5-13=-142/692, 5-11=-994/420, 6-11=-224/836, 6-10=-636/256, 7-10=-345/193, 8-10=-307/1251

NOTES- (8)

- 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=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 -2-0-0 to 0-9-15, Zone1 0-9-15 to 19-2-8, Zone2 19-2-8 to 23-5-7, Zone1 23-5-7 to 29-11-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 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, with BCDL = 10.0psf.
- 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) except (jt=lb) 9=305, 2=322.
- 8) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

This item has been digitally signed and sealed by Velez, Joaquin, PE on the date indicated here. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

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

March 10,2025

**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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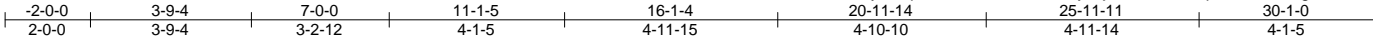
16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	GIEBEIG - LOT 53 CW	T36620369
4525744	T13	Half Hip Girder	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.830 s Feb 18 2025 MiTek Industries, Inc. Fri Mar 7 14:46:49 2025 Page 1

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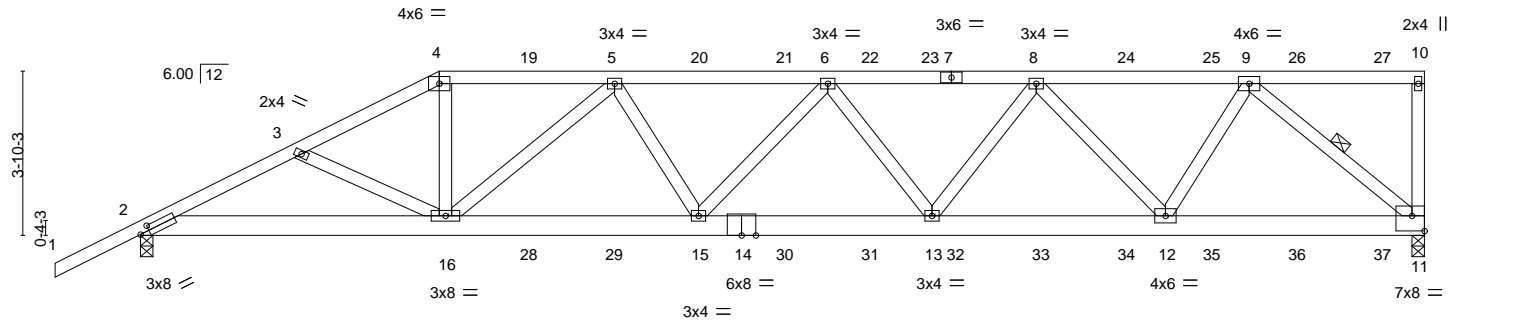


Plate Offsets (X,Y)--	[2:0-2-10,0-1-8], [11:Edge,0-4-4]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.82	Vert(LL)	-0.26 13-15	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.97	Vert(CT)	-0.49 13-15	>728	180		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.76	Horz(CT)	0.13 11	n/a	n/a		
BCDL 10.0	Code FRC2023/TPI2014		Matrix-MS					Weight: 185 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 1-11-14 oc purlins, except end verticals.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 5-9-14 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 9-11

**REACTIONS.** (size) 11=0-3-8, 2=0-3-8  
Max Horz 2=169(LC 8)  
Max Uplift 11=830(LC 5), 2=696(LC 8)  
Max Grav 11=2507(LC 1), 2=2186(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-4303/1351, 3-4=-4128/1283, 4-5=-3726/1191, 5-6=-4984/1534, 6-8=-4773/1477, 8-9=-3224/978, 10-11=-319/189  
BOT CHORD 2-16=-1295/3823, 15-16=-1530/4759, 13-15=-1626/5076, 12-13=-1376/4287, 11-12=-774/2361  
WEBS 4-16=-376/1497, 5-16=-1417/520, 5-15=-41/505, 6-13=-526/294, 8-13=-210/845, 8-12=-1618/605, 9-12=-416/1755, 9-11=-3099/1017

- NOTES-** (9)
- 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=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Provide adequate drainage to prevent water ponding.
  - 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) except (jt=lb) 11=830, 2=696.
  - 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 125 lb down and 100 lb up at 7-0-0, 106 lb down and 100 lb up at 9-0-12, 106 lb down and 100 lb up at 11-0-12, 106 lb down and 100 lb up at 13-0-12, 106 lb down and 100 lb up at 15-0-12, 106 lb down and 100 lb up at 17-0-12, 106 lb down and 96 lb up at 19-0-12, 106 lb down and 100 lb up at 21-0-12, 106 lb down and 100 lb up at 23-0-12, 106 lb down and 100 lb up at 25-0-12, 106 lb down and 100 lb up at 27-0-12, and 109 lb down and 100 lb up at 29-0-12, and 135 lb down and 98 lb up at 29-11-4 on top chord, and 294 lb down and 103 lb up at 7-0-0, 85 lb down at 9-0-12, 85 lb down at 11-0-12, 85 lb down at 13-0-12, 85 lb down at 15-0-12, 85 lb down at 17-0-12, 85 lb down at 19-0-12, 85 lb down at 21-0-12, 85 lb down at 23-0-12, 85 lb down at 25-0-12, and 85 lb down at 27-0-12, and 87 lb down at 29-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
  - 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
  - 9) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**LOAD CASE(S)** Standard  
Continued on page 2

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

March 10,2025

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

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Job	Truss	Truss Type	Qty	Ply	GIEBEIG - LOT 53 CW	T36620369
4525744	T13	Half Hip Girder	1	1	Job Reference (optional)	

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
- Uniform Loads (plf)
- Vert: 1-4=-54, 4-10=-54, 2-11=-20
- Concentrated Loads (lb)
- Vert: 4=-106(B) 7=-106(B) 10=-135(B) 16=-285(B) 5=-106(B) 15=-61(B) 8=-106(B) 19=-106(B) 20=-106(B) 21=-106(B) 22=-106(B) 24=-106(B) 25=-106(B) 26=-106(B) 27=-109(B) 28=-61(B) 29=-61(B) 30=-61(B) 31=-61(B) 32=-61(B) 33=-61(B) 34=-61(B) 35=-61(B) 36=-61(B) 37=-62(B)

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Job	Truss	Truss Type	Qty	Ply	GIEBEIG - LOT 53 CW	T36620370
4525744	T14	Half Hip	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.830 s Feb 18 2025 MiTek Industries, Inc. Fri Mar 7 14:46:50 2025 Page 1

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-2-0-0

2-0-0

4-9-5

4-9-5

9-0-0

4-2-11

15-10-9

6-10-9

22-10-14

7-0-5

30-1-0

7-2-2

Scale = 1:54.9

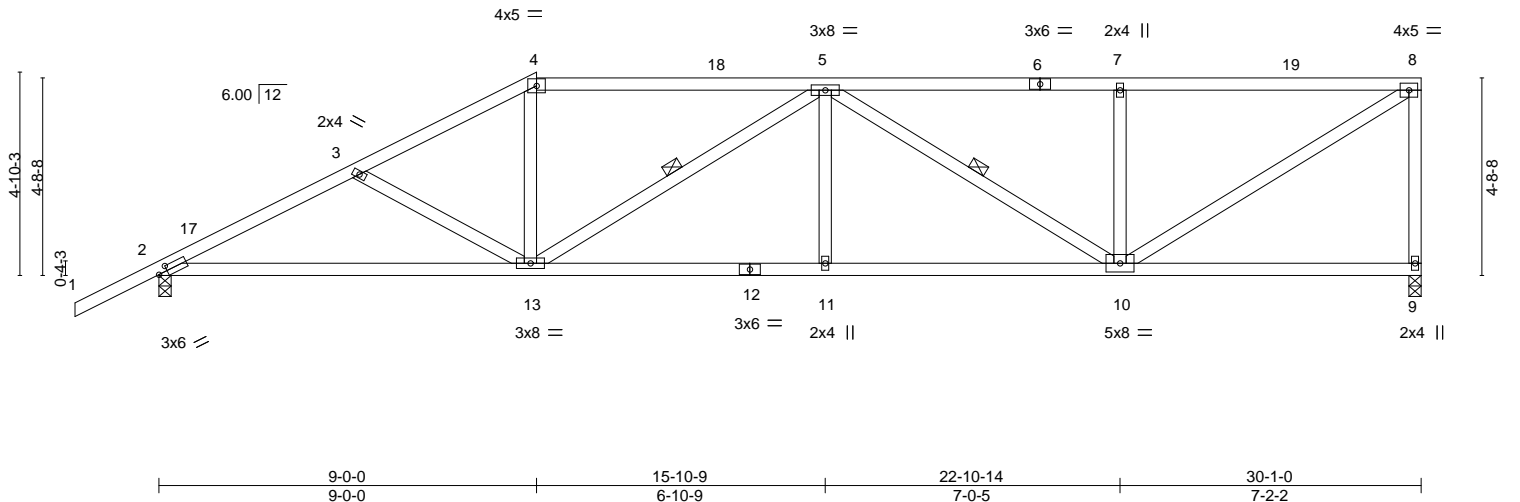


Plate Offsets (X,Y)--	[2:0-2-9,0-1-8]								
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.57	Vert(LL)	-0.14 13-16	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.75	Vert(CT)	-0.29 13-16	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.66	Horz(CT)	0.07 9	n/a	n/a		
BCDL 10.0	Code FRC2023/TPI2014		Matrix-MS					Weight: 161 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 3-10-11 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 7-8-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 5-13, 5-10

REACTIONS. (size) 9=0-3-8, 2=0-3-8  
Max Horz 2=203(LC 12)  
Max Uplift 9=349(LC 9), 2=279(LC 12)  
Max Grav 9=1104(LC 1), 2=1219(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-2044/503, 3-4=-1821/479, 4-5=-1579/448, 5-7=-1418/444, 7-8=-1418/444, 8-9=-1040/365  
BOT CHORD 2-13=-511/1800, 11-13=-593/1925, 10-11=-593/1925  
WEBS 4-13=-77/523, 5-13=-508/214, 5-11=0/260, 5-10=-598/177, 7-10=-405/227, 8-10=-513/1642

- NOTES- (7)
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCCL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone 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 29-11-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Provide adequate drainage to prevent water ponding.
  - 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) except (jt=lb) 9=349, 2=279.
  - 7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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

March 10,2025

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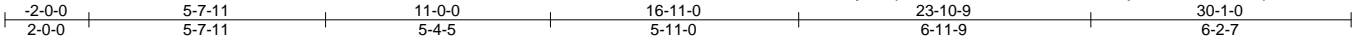
**MiTek®**  
16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	GIEBEIG - LOT 53 CW	T36620371
4525744	T15	Half Hip	1	1	Job Reference (optional)	

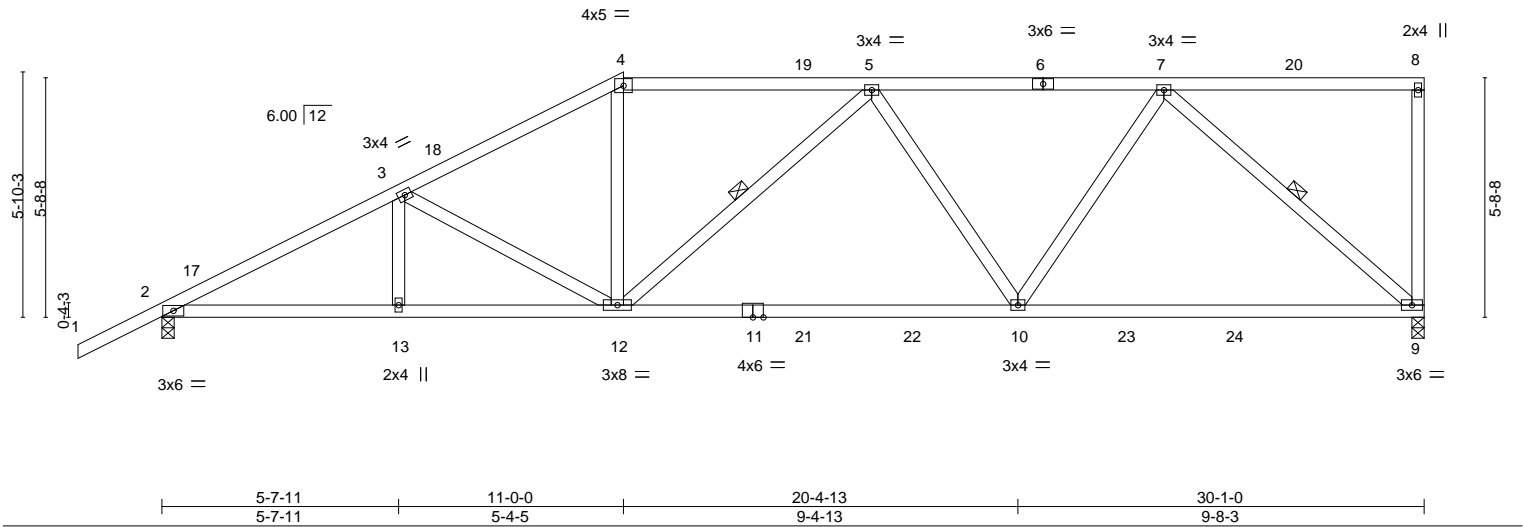
Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.830 s Feb 18 2025 MiTek Industries, Inc. Fri Mar 7 14:46:51 2025 Page 1

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Scale = 1:54.9



LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.51	Vert(LL)	-0.25	9-10	>999	240	MT20	244/190
BCDL 7.0	Lumber DOL	1.25	BC 0.85	Vert(CT)	-0.45	9-10	>806	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.53	Horz(CT)	0.07	9	n/a	n/a		
BCDL 10.0	Code FRC2023/TPI2014		Matrix-MS						Weight: 164 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2 \*Except\*  
9-11: 2x4 SP No.1  
WEBS 2x4 SP No.3

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 3-8-13 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 8-2-9 oc bracing.  
WEBS 1 Row at midpt 5-12, 7-9

**REACTIONS.** (size) 9=0-3-8, 2=0-3-8  
Max Horz 2=242(LC 12)  
Max Uplift 9=343(LC 9), 2=295(LC 12)  
Max Grav 9=1232(LC 2), 2=1298(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-2243/438, 3-4=-1835/417, 4-5=-1586/394, 5-7=-1532/377  
BOT CHORD 2-13=-516/1968, 12-13=-516/1968, 10-12=-469/1679, 9-10=-328/1109  
WEBS 3-12=-434/221, 4-12=-67/571, 5-12=-253/150, 5-10=-347/169, 7-10=-91/783, 7-9=-1451/437

- NOTES-** (7)
- 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=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone 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 29-11-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=343, 2=295.
  - This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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Chesterfield, MO 63017  
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Job	Truss	Truss Type	Qty	Ply	GIEBEIG - LOT 53 CW	T36620372
4525744	T16	Half Hip	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.830 s Feb 18 2025 MiTek Industries, Inc. Fri Mar 7 14:46:52 2025 Page 1  
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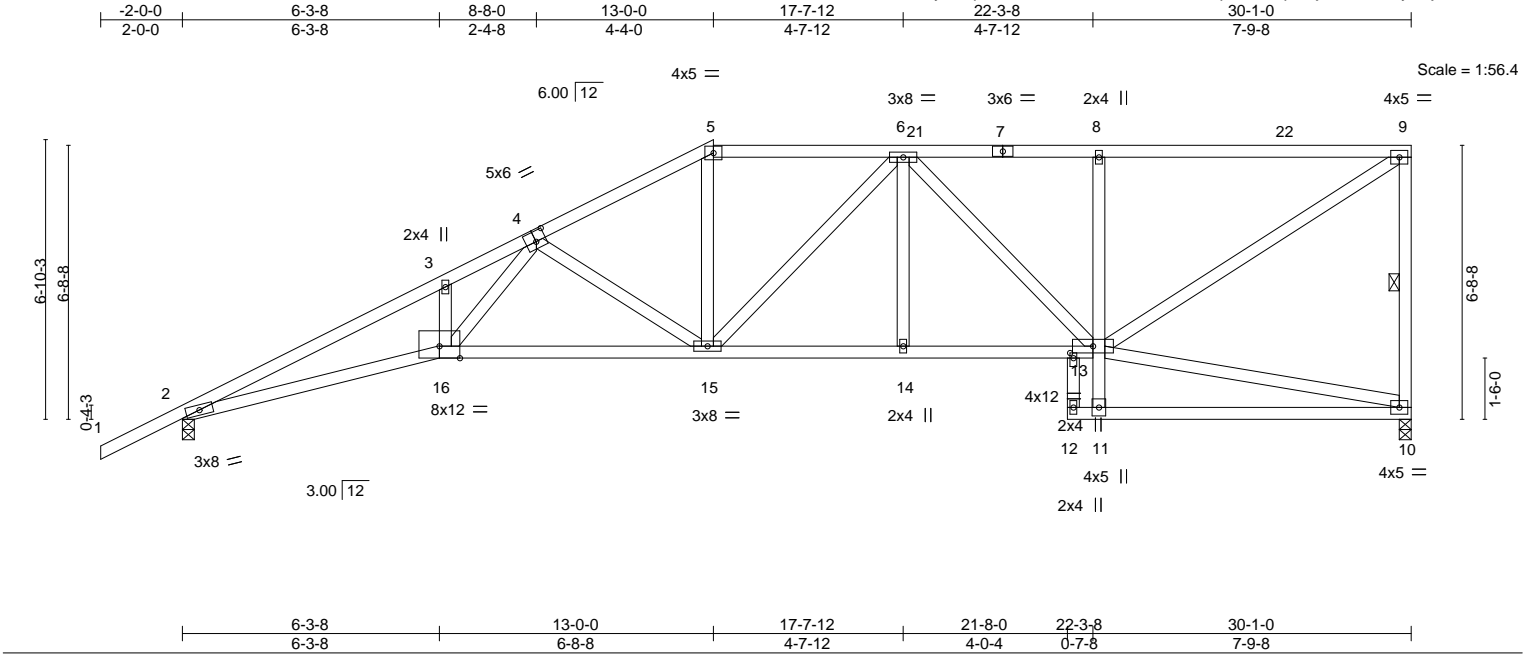


Plate Offsets (X,Y)--		[4:0-3-0,0-3-0], [17:0-1-8,0-1-0]								
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0		Plate Grip DOL 1.25		TC 0.65		Vert(LL) -0.22 15-16	>999	240	MT20	244/190
TCDL 7.0		Lumber DOL 1.25		BC 0.82		Vert(CT) -0.45 15-16	>803	180		
BCLL 0.0 *		Rep Stress Incr YES		WB 0.71		Horz(CT) 0.22 10	n/a	n/a		
BCDL 10.0		Code FRC2023/TPI2014		Matrix-MS					Weight: 188 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2 \*Except\*  
8-11: 2x4 SP No.3  
WEBS 2x4 SP No.3

**REACTIONS.** (size) 10=0-3-8, 2=0-3-8  
Max Horz 2=280(LC 12)  
Max Uplift 10=332(LC 9), 2=305(LC 12)  
Max Grav 10=1115(LC 1), 2=1223(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-3683/948, 3-4=-3623/1037, 4-5=-1920/478, 5-6=-1664/445, 6-8=-1323/390,  
8-9=-1330/399, 9-10=-1038/356  
BOT CHORD 2-16=-1049/3328, 15-16=-719/2377, 14-15=-469/1658, 13-14=-469/1658, 8-13=-385/216  
WEBS 4-16=-486/1361, 4-15=-836/362, 5-15=-109/593, 6-13=-480/143, 9-13=-470/1567

**NOTES-** (8)

- 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=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 -2-0-0 to 0-9-15, Zone1 0-9-15 to 13-0-0, Zone2 13-0-0 to 17-2-15, Zone1 17-2-15 to 29-11-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 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) 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) except (jt=lb) 10=332, 2=305.
- 8) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 2-6-4 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 5-8-14 oc bracing. Except:  
10-0-0 oc bracing: 11-13  
WEBS 1 Row at midpt 9-10

This item has been digitally signed and sealed by Velez, Joaquin, PE on the date indicated here. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

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

March 10,2025

**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.  
Chesterfield, MO 63017  
314.434.1200 / MiTek-US.com



Job	Truss	Truss Type	Qty	Ply	GIEBEIG - LOT 53 CW	T36620373
4525744	T17	Half Hip	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.830 s Feb 18 2025 MiTek Industries, Inc. Fri Mar 7 14:46:53 2025 Page 1

ID:9B5QRtZPhUL0yMYqzVn3hhzz67b-fdYvh\_?E8ypop1Nir2WmM3L1z4PQRVhT59iRo9zdHL0

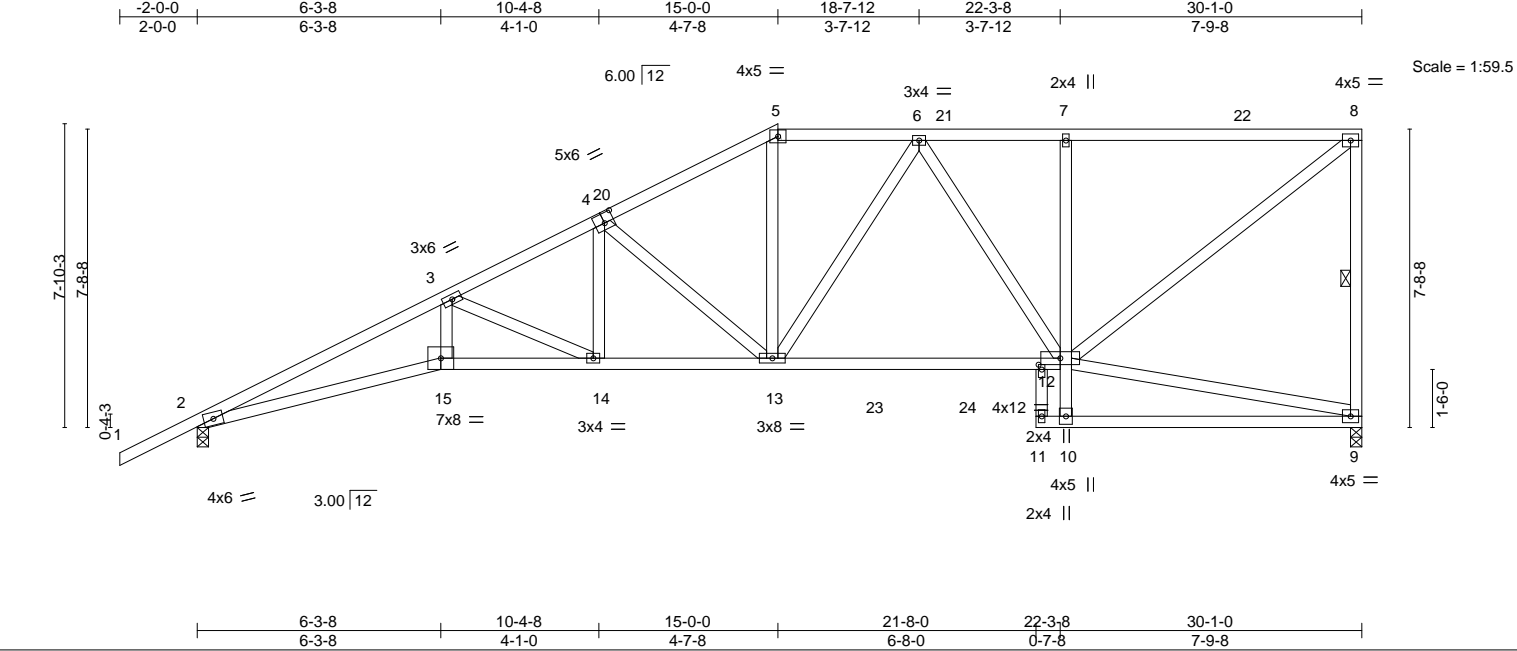


Plate Offsets (X,Y)--		[4:0-3-0,0-3-0], [16:0-1-8,0-1-0]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 20.0	Plate Grip DOL	1.25	TC 0.62
TCDL 7.0	Lumber DOL	1.25	BC 0.97
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.69
BCDL 10.0	Code	FRC2023/TPI2014	Matrix-MS
		DEFL.	in (loc) l/defl L/d
		Vert(LL)	-0.27 12-13 >999 240
		Vert(CT)	-0.48 12-13 >754 180
		Horz(CT)	0.24 9 n/a n/a
		PLATES	GRIP
		MT20	244/190
		Weight: 194 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-5-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2 *Except* 7-10: 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing. Except: 10-0-0 oc bracing: 10-12
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 8-9

REACTIONS.	(size) 9=0-3-8, 2=0-3-8
	Max Horz 2=319(LC 12)
	Max Uplift 9=324(LC 9), 2=314(LC 12)
	Max Grav 9=1222(LC 2), 2=1294(LC 2)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-3998/1028, 3-4=-2503/598, 4-5=-1804/395, 5-6=-1568/385, 6-7=-1221/312, 7-8=-1219/320, 8-9=-1095/347
BOT CHORD	2-15=-1163/3640, 14-15=-1103/3434, 13-14=-648/2202, 12-13=-366/1437, 7-12=-382/214
WEBS	3-15=-253/1021, 3-14=-1333/494, 4-13=-818/344, 5-13=-81/608, 6-13=-121/291, 6-12=-399/161, 8-12=-401/1531, 4-14=-183/662

- NOTES- (8)
- 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=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 -2-0-0 to 0-9-15, Zone1 0-9-15 to 15-0-0, Zone2 15-0-0 to 19-2-15, Zone1 19-2-15 to 29-11-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 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 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) 9=324, 2=314.
  - This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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

March 10,2025

Job	Truss	Truss Type	Qty	Ply	GIEBEIG - LOT 53 CW	T36620374
4525744	T18	Half Hip	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.830 s Feb 18 2025 MiTek Industries, Inc. Fri Mar 7 14:46:53 2025 Page 1  
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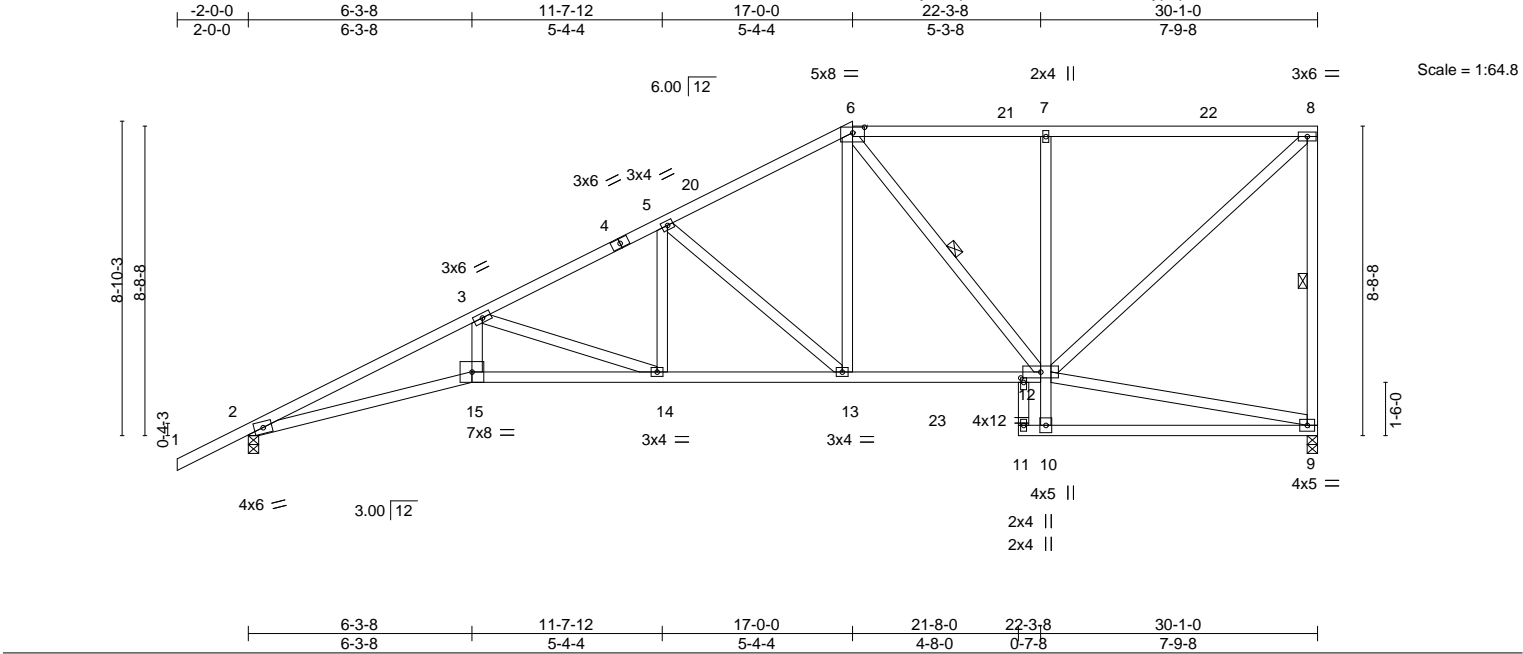


Plate Offsets (X,Y)--		[6:0-4-0,0-1-15], [16:0-1-8,0-1-0]			
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.64	Vert(LL) -0.27 14-15 >999 240	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.97	Vert(CT) -0.48 14-15 >748 180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.88	Horz(CT) 0.25 9 n/a n/a		
BCDL 10.0	Code FRC2023/TPI2014	Matrix-MS		Weight: 197 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2 \*Except\*  
7-10: 2x4 SP No.3  
WEBS 2x4 SP No.3

**REACTIONS.**

(size) 9=0-3-8, 2=0-3-8  
Max Horz 2=357(LC 12)  
Max Uplift 9=314(LC 9), 2=319(LC 12)  
Max Grav 9=1222(LC 2), 2=1295(LC 2)

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

TOP CHORD 2-3=-4013/1094, 3-5=-2304/558, 5-6=-1537/356, 6-7=-1041/262, 7-8=-1039/265,  
8-9=-1089/337  
BOT CHORD 2-15=-1263/3655, 14-15=-1199/3448, 13-14=-643/2023, 12-13=-350/1313, 7-12=-426/238  
WEBS 3-15=-273/1038, 3-14=-1504/587, 5-14=-158/677, 5-13=-904/376, 6-13=-206/815,  
6-12=-468/195, 8-12=-355/1394

**NOTES-** (8)

- 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=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 -2-0-0 to 0-9-15, Zone1 0-9-15 to 17-0-0, Zone2 17-0-0 to 21-2-15, Zone1 21-2-15 to 29-11-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 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, with BCDL = 10.0psf.
- 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) except (jt=lb) 9=314, 2=319.
- 8) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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Chesterfield, MO 63017  
Date:

March 10,2025

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

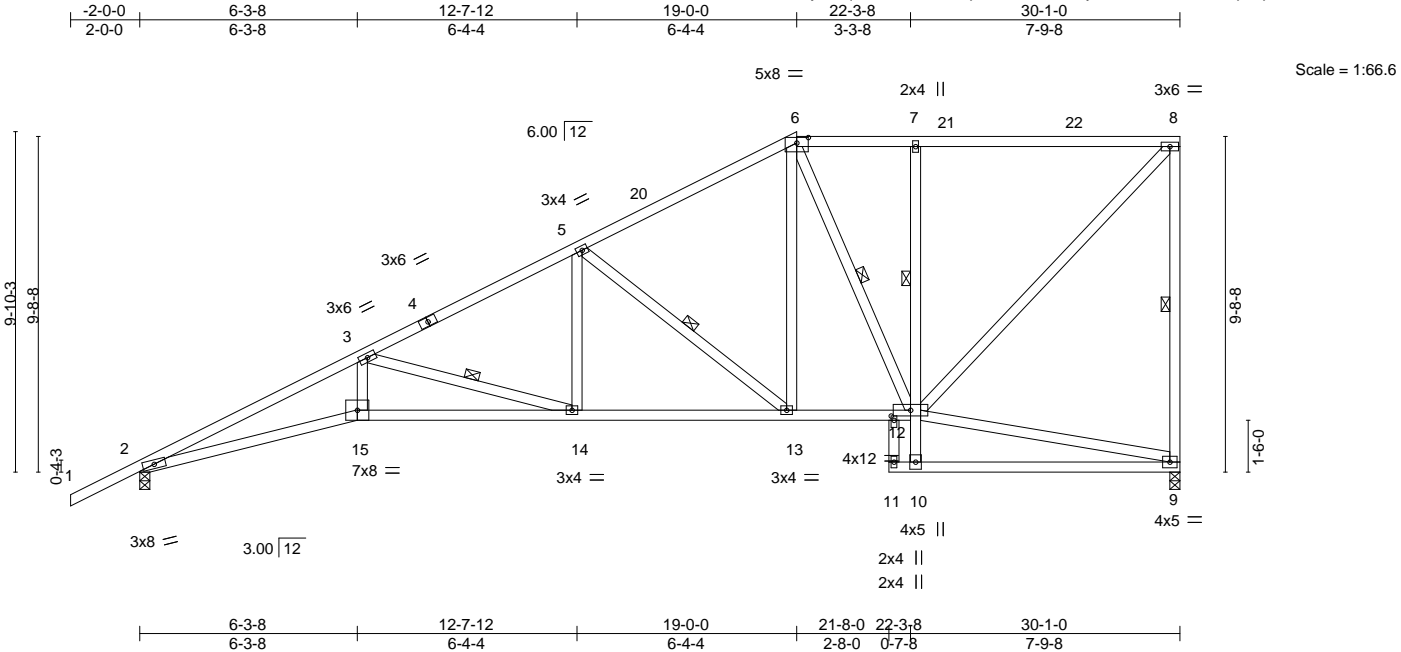
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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	GIEBEIG - LOT 53 CW	T36620375
4525744	T19	Half Hip	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.830 s Feb 18 2025 MiTek Industries, Inc. Fri Mar 7 14:46:54 2025 Page 1  
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Builders FirstSource (Lake City, FL), Lake City, FL - 32055, 8.830 s Feb 18 2025 MiTek Industries, Inc. Fri Mar 7 14:46:55 2025 Page 1

ID:9B5QRtZPhUL0yMYqzVn3hhzz6?b-b0gg6g0VgZ3W2LX4zTYERUQOSu6HvPzIYTBvY12zdHL\_

Scale = 1:65.4

Diagram showing a structural truss system with dimensions and member labels. The diagram includes a main truss structure with a peak height of 10'-10.3" and a base width of 30'-1.0". The truss is supported by a foundation with a width of 1'-6.0". The truss members are labeled with numbers 1 through 21. The dimensions are given in feet and inches, with some values in parentheses indicating alternative or approximate dimensions. The truss is composed of several interconnected members, including a main top chord, a bottom chord, and various internal bracing members. The labels for the members are: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21. The dimensions are: 10'-10.3", 10'-8.8", 9'-2.8", 1'-6.0", 30'-1.0", 9'-1.0", 6'-3.8", 6'-3.8", 13'-8.6", 7'-4.14", 21'-0.0", 7'-3.10", 30'-1.0", 9'-1.0", 4'-2.8", 5'-10.0", 21'-0.0", 4'-8.0", 25'-4.12", 30'-1.0", 4'-8.4", 6'-0.0", 12", 3.00", 12", 4x6, 3x6, 2x4, 5x6, 4x5, 3x4, 2x4, 8x12, 3x8, 3x6, 4x6, 6x8, 6x10, 6x12, 6x14, 6x16, 6x18, 6x20, 6x22, 6x24, 6x26, 6x28, 6x30, 6x32, 6x34, 6x36, 6x38, 6x40, 6x42, 6x44, 6x46, 6x48, 6x50, 6x52, 6x54, 6x56, 6x58, 6x60, 6x62, 6x64, 6x66, 6x68, 6x70, 6x72, 6x74, 6x76, 6x78, 6x80, 6x82, 6x84, 6x86, 6x88, 6x90, 6x92, 6x94, 6x96, 6x98, 6x100, 6x102, 6x104, 6x106, 6x108, 6x110, 6x112, 6x114, 6x116, 6x118, 6x120, 6x122, 6x124, 6x126, 6x128, 6x130, 6x132, 6x134, 6x136, 6x138, 6x140, 6x142, 6x144, 6x146, 6x148, 6x150, 6x152, 6x154, 6x156, 6x158, 6x160, 6x162, 6x164, 6x166, 6x168, 6x170, 6x172, 6x174, 6x176, 6x178, 6x180, 6x182, 6x184, 6x186, 6x188, 6x190, 6x192, 6x194, 6x196, 6x198, 6x200, 6x202, 6x204, 6x206, 6x208, 6x210, 6x212, 6x214, 6x216, 6x218, 6x220, 6x222, 6x224, 6x226, 6x228, 6x230, 6x232, 6x234, 6x236, 6x238, 6x240, 6x242, 6x244, 6x246, 6x248, 6x250, 6x252, 6x254, 6x256, 6x258, 6x260, 6x262, 6x264, 6x266, 6x268, 6x270, 6x272, 6x274, 6x276, 6x278, 6x280, 6x282, 6x284, 6x286, 6x288, 6x290, 6x292, 6x294, 6x296, 6x298, 6x300, 6x302, 6x304, 6x306, 6x308, 6x310, 6x312, 6x314, 6x316, 6x318, 6x320, 6x322, 6x324, 6x326, 6x328, 6x330, 6x332, 6x334, 6x336, 6x338, 6x340, 6x342, 6x344, 6x346, 6x348, 6x350, 6x352, 6x354, 6x356, 6x358, 6x360, 6x362, 6x364, 6x366, 6x368, 6x370, 6x372, 6x374, 6x376, 6x378, 6x380, 6x382, 6x384, 6x386, 6x388, 6x390, 6x392, 6x394, 6x396, 6x398, 6x400, 6x402, 6x404, 6x406, 6x408, 6x410, 6x412, 6x414, 6x416, 6x418, 6x420, 6x422, 6x424, 6x426, 6x428, 6x430, 6x432, 6x434, 6x436, 6x438, 6x440, 6x442, 6x444, 6x446, 6x448, 6x450, 6x452, 6x454, 6x456, 6x458, 6x460, 6x462, 6x464, 6x466, 6x468, 6x470, 6x472, 6x474, 6x476, 6x478, 6x480, 6x482, 6x484, 6x486, 6x488, 6x490, 6x492, 6x494, 6x496, 6x498, 6x500, 6x502, 6x504, 6x506, 6x508, 6x510, 6x512, 6x514, 6x516, 6x518, 6x520, 6x522, 6x524, 6x526, 6x528, 6x530, 6x532, 6x534, 6x536, 6x538, 6x540, 6x542, 6x544, 6x546, 6x548, 6x550, 6x552, 6x554, 6x556, 6x558, 6x560, 6x562, 6x564, 6x566, 6x568, 6x570, 6x572, 6x574, 6x576, 6x578, 6x580, 6x582, 6x584, 6x586, 6x588, 6x590, 6x592, 6x594, 6x596, 6x598, 6x600, 6x602, 6x604, 6x606, 6x608, 6x610, 6x612, 6x614, 6x616, 6x618, 6x620, 6x622, 6x624, 6x626, 6x628, 6x630, 6x632, 6x634, 6x636, 6x638, 6x640, 6x642, 6x644, 6x646, 6x648, 6x650, 6x652, 6x654, 6x656, 6x658, 6x660, 6x662, 6x664, 6x666, 6x668, 6x670, 6x672, 6x674, 6x676, 6x678, 6x680, 6x682, 6x684, 6x686, 6x688, 6x690, 6x692, 6x694, 6x696, 6x698, 6x700, 6x702, 6x704, 6x706, 6x708, 6x710, 6x712, 6x714, 6x716, 6x718, 6x720, 6x722, 6x724, 6x726, 6x728, 6x730, 6x732, 6x734, 6x736, 6x738, 6x740, 6x742, 6x744, 6x746, 6x748, 6x750, 6x752, 6x754, 6x756, 6x758, 6x760, 6x762, 6x764, 6x766, 6x768, 6x770, 6x772, 6x774, 6x776, 6x778, 6x780, 6x782, 6x784, 6x786, 6x788, 6x790, 6x792, 6x794, 6x796, 6x798, 6x800, 6x802, 6x804, 6x806, 6x808, 6x810, 6x812, 6x814, 6x816, 6x818, 6x820, 6x822, 6x824, 6x826, 6x828, 6x830, 6x832, 6x834, 6x836, 6x838, 6x840, 6x842, 6x844, 6x846, 6x848, 6x850, 6x852, 6x854, 6x856, 6x858, 6x860, 6x862, 6x864, 6x866, 6x868, 6x870, 6x872, 6x874, 6x876, 6x878, 6x880, 6x882, 6x884, 6x886, 6x888, 6x890, 6x892, 6x894, 6x896, 6x898, 6x900, 6x902, 6x904, 6x906, 6x908, 6x910, 6x912, 6x914, 6x916, 6x918, 6x920, 6x922, 6x924, 6x926, 6x928, 6x930, 6x932, 6x934, 6x936, 6x938, 6x940, 6x942, 6x944, 6x946, 6x948, 6x950, 6x952, 6x954, 6x956, 6x958, 6x960, 6x962, 6x964, 6x966, 6x968, 6x970, 6x972, 6x974, 6x976, 6x978, 6x980, 6x982, 6x984, 6x986, 6x988, 6x990, 6x992, 6x994, 6x996, 6x998, 6x1000, 6x1002, 6x1004, 6x1006, 6x1008, 6x1010, 6

<b>LUMBER-</b>		<b>BRACING-</b>	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 2-5-1 oc purlins, except end verticals.
BOT CHORD	2x4 SP No.2 *Except*	BOT CHORD	
	9-11: 2x4 SP No.1		Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS	2x4 SP No.3	WEBS	1 Row at midpt                      8-9, 5-10, 7-9
<b>REACTIONS.</b>			
	(size)    9=0-3-8, 2=0-3-8		
	Max Horz   2=435(LC 12)		
	Max Uplift   9=305(LC 12), 2=320(LC 12)		
	Max Grav   9=1265(LC 2), 2=1303(LC 2)		
<b>FORCES.</b> (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.			
TOP CHORD	2-3=404/11161, 3-4=4003/1269, 4-5=1975/508, 5-6=1082/272, 6-7=923/273		
BOT CHORD	2-13=1403/3683, 12-13=842/2199, 10-12=490/1385, 9-10=153/527		
WEBS	4-13=714/1843, 4-12=743/387, 5-12=271/902, 5-10=820/389, 6-10=35/295, 7-10=261/870, 7-9=1131/340		

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCFL=4.2psf; BCFL=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 -2-0-0 to 0-9-15, Zone1 0-9-15 to 21-0-0, Zone2 21-0-0 to 25-4-12 Zone1 25-4-12 to 29-11-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 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, with BCFL = 10.0psf.
- 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) except (jt=lb) 9=305, 2=320.
- 8) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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March 10, 2025



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Job	Truss	Truss Type	Qty	Ply	GIEBEIG - LOT 53 CW	T36620377
4525744	T21	HIP GIRDER	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.830 s Feb 18 2025 MiTek Industries, Inc. Fri Mar 7 14:46:56 2025 Page 1  
ID:9B5QRtZPhUL0yMYqzVn3hhzz6?b-3CE2J017RtBNgU6GWA3T\_izcdlbZe?Pvn7w5OUzdHKz  
2-0-0 5-0-0 9-0-0 14-0-0 16-0-0  
2-0-0 5-0-0 4-0-0 5-0-0 2-0-0  
Scale = 1:29.3

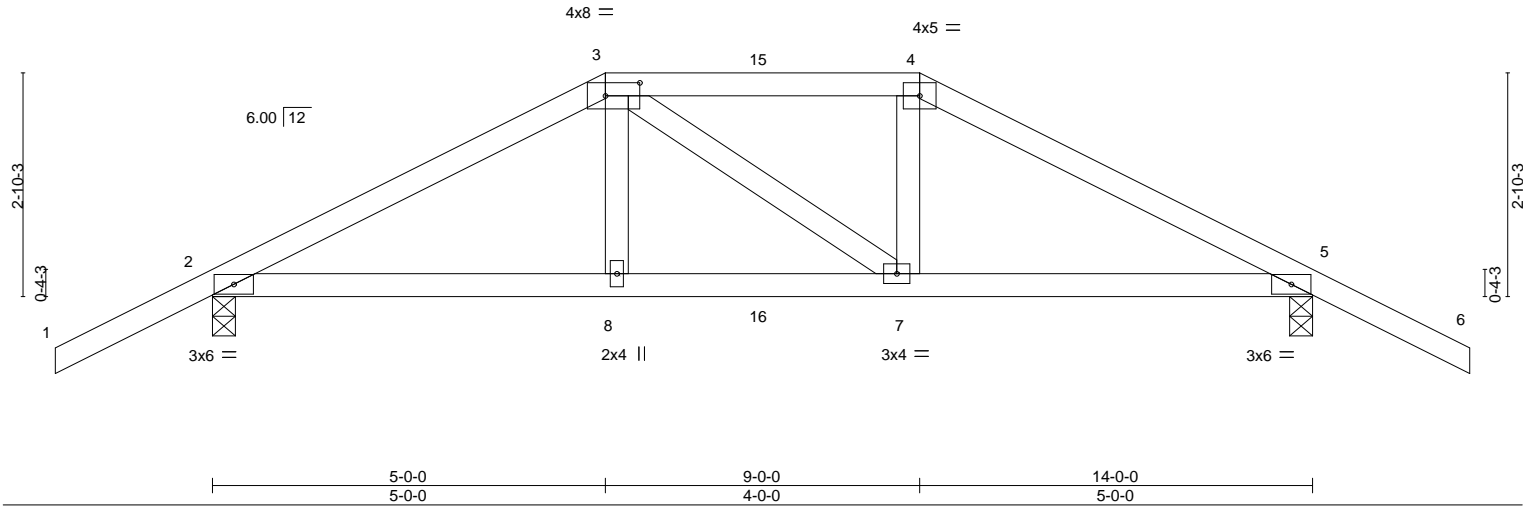


Plate Offsets (X,Y)--		[3:0-5-4,0-2-0]	
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>
TCLL 20.0	Plate Grip DOL	1.25	TC 0.34
TCDL 7.0	Lumber DOL	1.25	BC 0.36
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.11
BCDL 10.0	Code FRC2023/TPI2014		Matrix-MS
			<b>DEFL.</b>
			in (loc) l/defl L/d
			Vert(LL) 0.04 7-14 >999 240
			Vert(CT) -0.05 8-11 >999 180
			Horz(CT) 0.02 5 n/a n/a
			<b>PLATES</b> <b>GRIP</b>
			MT20 244/190
			Weight: 63 lb FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 5-0-9 oc purlins.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 8-6-5 oc bracing.
WEBS 2x4 SP No.3	

<b>REACTIONS.</b>	(size) 2=0-3-8, 5=0-3-8
	Max Horz 2=59(LC 12)
	Max Uplift 2=-337(LC 5), 5=-350(LC 4)
	Max Grav 2=811(LC 1), 5=829(LC 1)

<b>FORCES.</b>	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-1179/563, 3-4=-1049/552, 4-5=-1220/592
BOT CHORD	2-8=-471/1005, 7-8=-475/1015, 5-7=-478/1041
WEBS	3-8=-72/302, 4-7=-49/290

- NOTES-** (9)
- 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=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 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=337, 5=350.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 72 lb down and 77 lb up at 5-0-0, and 54 lb down and 68 lb up at 7-0-0, and 165 lb down and 171 lb up at 9-0-0 on top chord, and 153 lb down and 54 lb up at 5-0-0, and 63 lb down at 7-0-0, and 153 lb down and 54 lb up at 8-10-15 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
  - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
  - This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

<b>LOAD CASE(S)</b> Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-3=-54, 3-4=-54, 4-6=-54, 9-12=-20
Concentrated Loads (lb)
Vert: 3=-54(F) 4=-119(F) 8=-64(F) 7=-64(F) 15=-54(F) 16=-33(F)

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Chesterfield, MO 63017  
Date:

March 10,2025

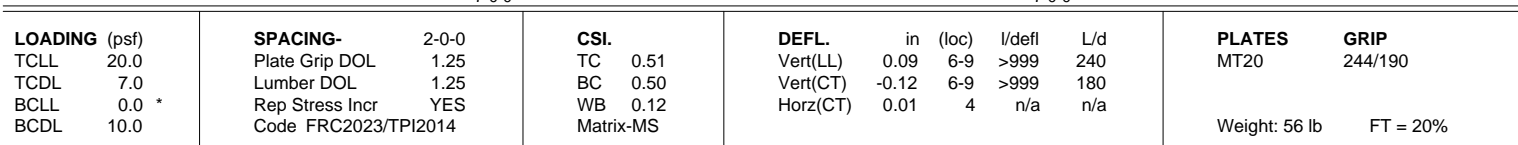
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.**

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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 ID:9B5QRtZPhUL0yMYqzVn3hhz6?b-3CE2J017RtBNgU6GWA3T\_izawIZQe?lvn7w5OUzdHKz  
 -2-0-0 7-0-0 14-0-0 16-0-0  
 2-0-0 7-0-0 7-0-0 2-0-0



**REACTIONS.** (size) 2=0-3-8, 4=0-3-8  
 Max Horz 2=75(LC 12)  
 Max Uplift 2=-185(LC 12), 4=-185(LC 13)  
 Max Grav 2=626(LC 1), 4=626(LC 1)

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

TOP CHORD	2-3=-705/413, 3-4=-705/413
BOT CHORD	2-6=-248/562, 4-6=-248/562
WEBS	3-6=-158/320

**NOTES-** (6)

- 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=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 -2-0-0 to 1-0-0, Zone1 1-0-0 to 7-0-0, Zone2 7-0-0 to 11-2-15, Zone1 11-2-15 to 16-0-0 zone; 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) 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=185, 4=185.
- 6) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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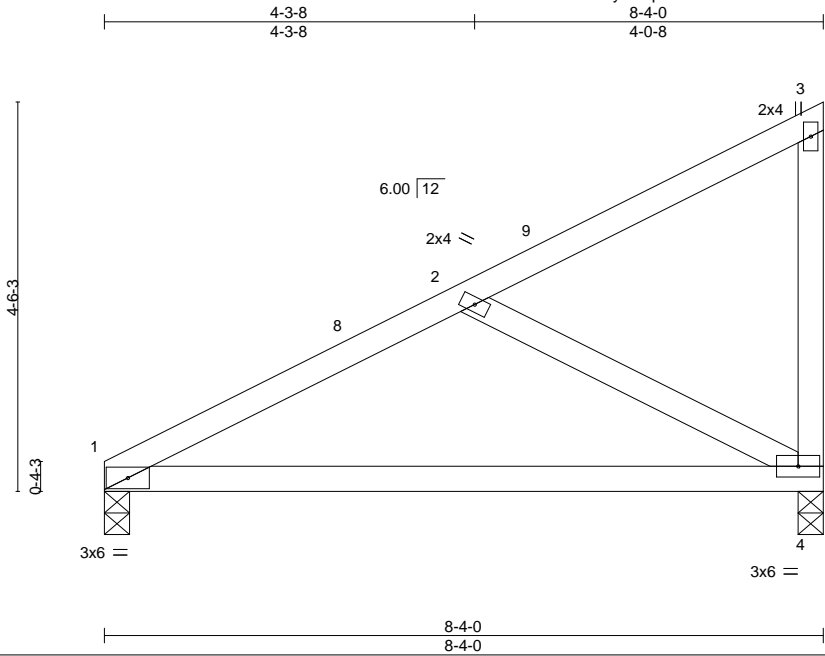
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Job	Truss	Truss Type	Qty	Ply	GIEBEIG - LOT 53 CW	T36620379
4525744	T23	Monopitch	3	1	Job Reference (optional)	

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ID:9B5QRtZPhUL0yMYqzVn3hhzz6?b-XOoQXM2ICBJEH4taiWvV7ivVNRL20ngfwxzdHKy



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 0.48	Vert(LL)	0.13 4-7	>780	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.51	Vert(CT)	-0.23 4-7	>427	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.13	Horz(CT)	0.00 4	n/a	n/a		
BCDL 10.0	Code FRC2023/TPI2014		Matrix-MS					Weight: 39 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3

BRACING-

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

REACTIONS.

(size) 1=0-3-8, 4=0-3-8  
Max Horz 1=158(LC 12)  
Max Uplift 1=-88(LC 9), 4=-139(LC 12)  
Max Grav 1=303(LC 1), 4=303(LC 1)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-349/159  
BOT CHORD 1-4=-299/307  
WEBS 2-4=-328/316

NOTES- (6)

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCCL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 0-0-0 to 3-0-0, Zone1 3-0-0 to 8-2-4 zone; 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) 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 4=139.
- 6) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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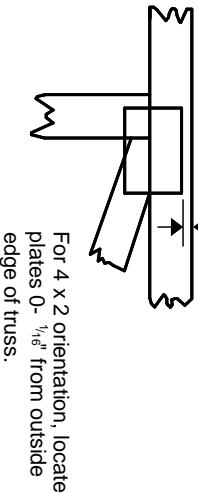
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## Symbols

### PLATE LOCATION AND ORIENTATION



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

### PLATE SIZE

**4 X 4**

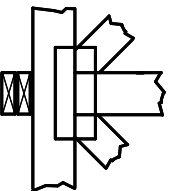
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

### 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

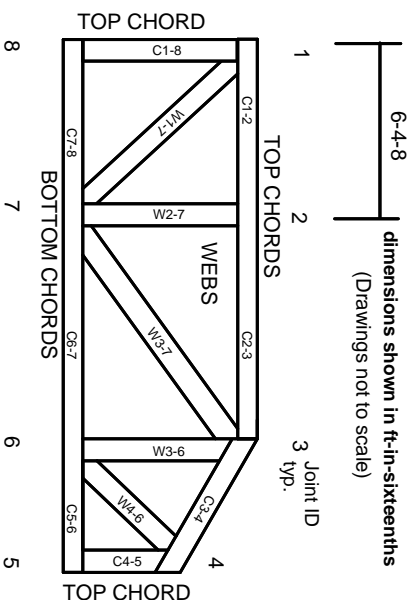


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

### 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: MII-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.