



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

RE: 4461086 - 188 SW BIRCH GLEN

**MiTek, Inc.**

16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
314.434.1200

**Site Information:**

Customer Info: YASMANIS REYES Project Name: Spec Hse Model: Custom  
Lot/Block: N/A Subdivision: N/A  
Address: 188 SW Birch Glen, N/A  
City: Columbia City State: FL

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

Name: License #:  
Address:  
City: State:

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

Design Code: FBC2023/TPI2014 Design Program: MiTek 20/20 8.8  
Wind Code: ASCE 7-22 Wind Speed: 140 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.

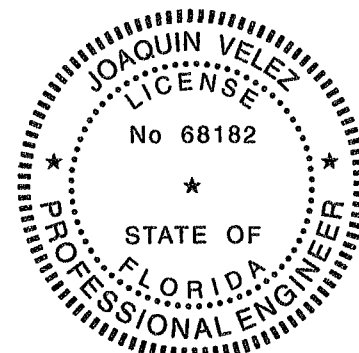
No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	T36279618	CJ01	2/5/25	15	T36279632	T06	2/5/25
2	T36279619	CJ03	2/5/25	16	T36279633	T07	2/5/25
3	T36279620	CJ05	2/5/25	17	T36279634	T08	2/5/25
4	T36279621	EJ01	2/5/25	18	T36279635	T09	2/5/25
5	T36279622	EJ02	2/5/25	19	T36279636	T10	2/5/25
6	T36279623	EJ03	2/5/25	20	T36279637	T11	2/5/25
7	T36279624	HJ05	2/5/25	21	T36279638	T12	2/5/25
8	T36279625	HJ08	2/5/25	22	T36279639	T13	2/5/25
9	T36279626	HJ10	2/5/25	23	T36279640	T14	2/5/25
10	T36279627	T01	2/5/25	24	T36279641	T15	2/5/25
11	T36279628	T02	2/5/25	25	T36279642	T16	2/5/25
12	T36279629	T03	2/5/25	26	T36279643	T17	2/5/25
13	T36279630	T04	2/5/25	27	T36279644	T18	2/5/25
14	T36279631	T05	2/5/25	28	T36279645	T19	2/5/25

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:

February 5, 2025

Velez, Joaquin

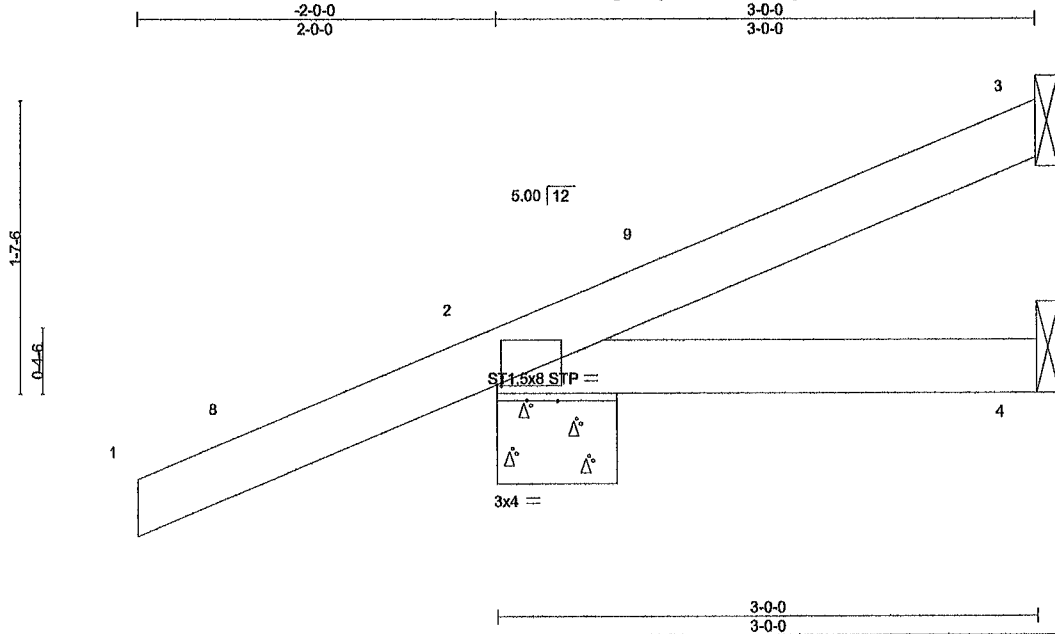
1 of 2





Job	Truss	Truss Type	Qty	Ply	188 SW BIRCH GLEN	T36279619
4461086	CJ03	Jack-Open	14	1	Job Reference (optional)	

Builders FirstSource (Lake City, FL), Lake City, FL - 32055, 8.830 s Nov 8 2024 MiTek Industries, Inc. Tue Feb 4 16:41 51 2025 Page 1  
ID:g5X?LynzTetcEw796RxbjZzGC8o-Xi0HaQQeb76W6q7bq\_BOKFXrIF40lhmCmOay5zoSrE



Scale = 1 12.4

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

LOADING (psf)	SPACING-	CSL	DEFL.	In	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.50	Vert(LL)	-0.01	4-7	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.11	Vert(CT)	-0.01	4-7	>999	180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL 10.0	Code FBC2023/TP12014	Matrix-MP						Weight: 13 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS.

(size) 3=Mechanical, 2=0-8-0, 4=Mechanical  
Max Horz 2=112(LC 12)  
Max Uplift 3=53(LC 12), 2=175(LC 8)  
Max Grav 3=51(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-

- 1) Wind- ASCE 7-22; Vult=140mph (3-second gust) Vasd=108mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp C, 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,C-C for members and forces & MWFRS for reactions shown, Lumber DOL=1.60 plate grip DOL=1.60
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3 except (If=lb) 2=175

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:

February 5, 2025

#### WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MI-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/TPI-1 Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinstitute.org) and BCB 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	188 SW BIRCH GLEN	T36279620
4461086	CJ05	Jack-Open	10	1	Job Reference (optional)	

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

8,830 s Nov 8 2024 MiTek Industries, Inc. Tue Feb 4 16:41 51 2025 Page 1  
ID:g5X7LynzTetcEw796RxbjZzGC8o-Xi9HaQQeb?6W6q7bq\_BOkFXrlCR0ihmCmOay5zoSrE

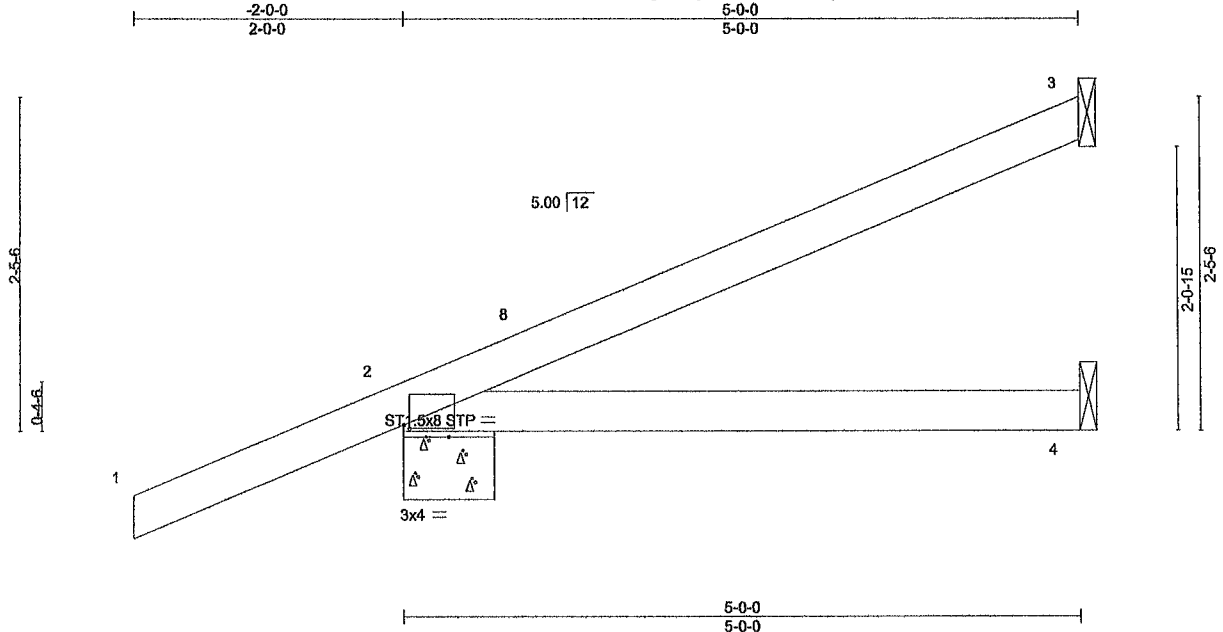


Plate Offsets (X,Y)~ [2:0-0-8,0-0-5]									
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	GRIP
TCLL	20 0	Plate Grip DOL	2.0-0	TC	0.50	in (loc)	I/defl	L/d	
TCDL	7 0	Lumber DOL	1.25	BC	0.28	Vert(LL)	0.04 4-7 >999	240	MT20
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Vert(CT)	-0.06 4-7 >999	180	
BCDL	10 0	Code	FBC2023/TP12014	Matrix-MP		Horz(CT)	-0.00 3 n/a n/a		
									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=0-8-0, 4=Mechanical  
Max Horz 2=160(LC 12)  
Max Uplift 3=110(LC 12), 2=183(LC 12), 4=3(LC 12)  
Max Grav 3=108(LC 1) 2=313(LC 1), 4=88(LC 3)

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

#### NOTES-

- 1) Wind ASCE 7-22, Vult=140mph (3-second gust) Vasd=108mph; TCCL=4.2psf; BCDL=3 0psf; h=20ft; Cat. II, Exp C, 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
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 3) This truss has been designed for a 10 0 psf bottom chord live load nonconcurrent with any other live loads
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 3=110, 2=183

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:

February 5,2025



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Chesterfield, MO 63017  
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	188 SW BIRCH GLEN	T36279621
4461086	EJ01	Jack-Partial	30	1	Job Reference (optional)	

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

8,830 s Nov 8 2024 MiTek Industries, Inc. Tue Feb 4 16:41 52 2025 Page 1  
ID:g5X7LynzTetcEw796RxbjZzGC8o-7vjgomRHMJENj\_inQldHT46HIVNllhwQQ77UYzoSrD

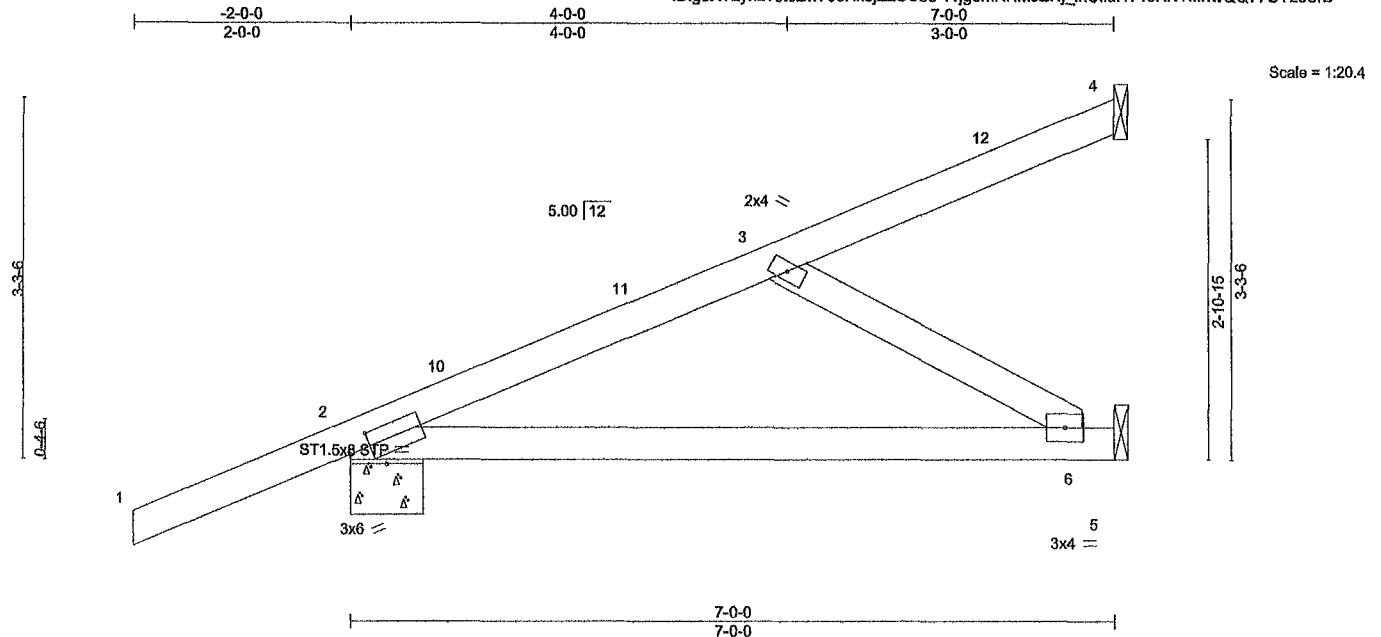


Plate Offsets (X,Y)-- [2:0-2-6,0-1-8]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 20 0	Plate Grip DOL	1.25	TC 0.46	Vert(LL)	0 13 6-9	>645	240	MT20	244/190
TCDL 7 0	Lumber DOL	1.25	BC 0.43	Vert(CT)	-0.15 6-9	>569	180		
BCLL 0 0 *	Rep Stress Incr	YES	WB 0 14	Horz(CT)	-0.00 5	n/a	n/a		
BCDL 10 0	Code FBC2023/TP12014		Matrix-MS					Weight: 30 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.  
BOT CHORD Rigid ceiling directly applied or 7-11-13 oc bracing

#### REACTIONS.

(size) 4=Mechanical, 2=0-8-0, 5=Mechanical  
Max Horz 2=201(LC 12)  
Max Uplift 4=-59(LC 12), 2=-286(LC 8), 5=-158(LC 9)  
Max Grav 4=61(LC 1), 2=380(LC 1), 5=181(LC 1)

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

TOP CHORD 2-3=-264/243  
BOT CHORD 2-6=-420/231  
WEBS 3-6=-266/485

#### NOTES-

- 1) Wind ASCE 7-22; Vult=140mph (3-second gust) Vasd=108mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II, Exp C, 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; 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) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (if=lb) 2=286, 5=158.

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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:

February 5, 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.tpinstitute.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	188 SW BIRCH GLEN	T36279622
4461086	EJ02	Jack-Open	4	1	Job Reference (optional)	

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

8,830 s Nov 8 2024 MiTek Industries, INC. Tue Feb 4 16:41 52 2025 Page 1  
ID:g5X?LynzTetcEw796RxbjZzGC8o-?vjgomRHMJEN\_inOidHT46biXglKxwQQ77UYzoSrD

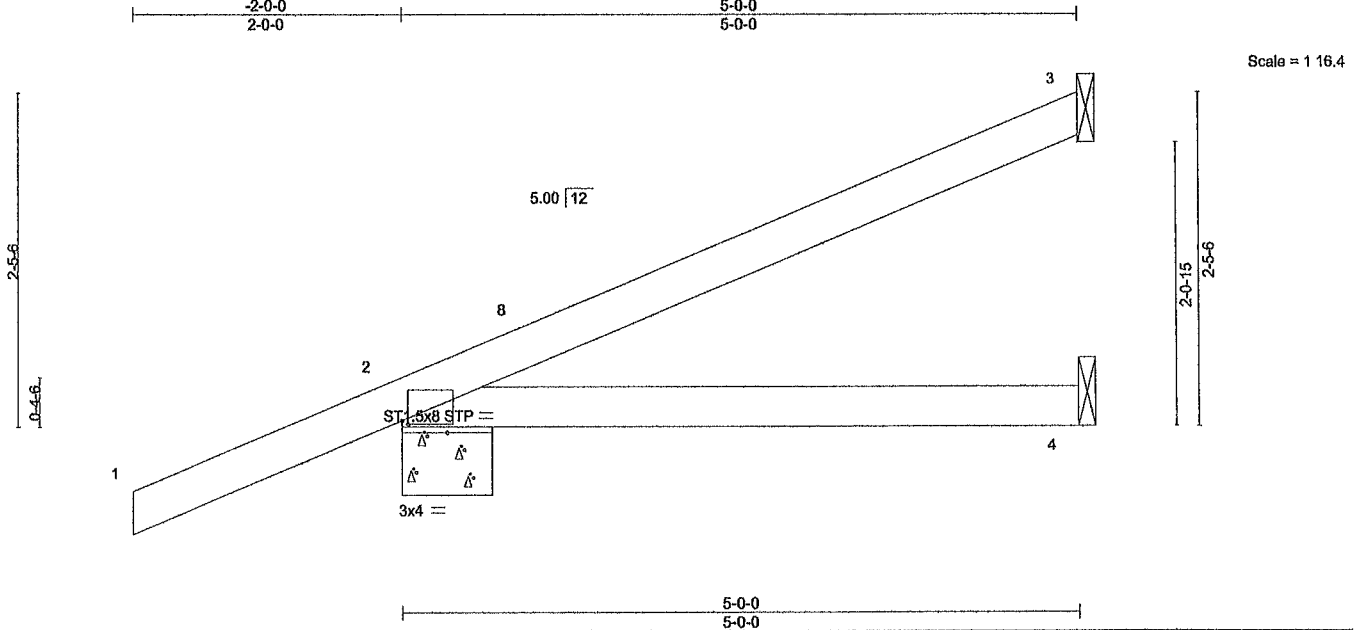


Plate Offsets (X,Y)-- [2'-0"-0-8,0-0-5]

LOADING (psf)	SPACING-	2'-0"-0-8,0-0-5	CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.50	Vert(LL)	0.04	4-7	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.28	Vert(CT)	-0.06	4-7	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL 10.0	Code FBC2023/TP12014		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=0-8-0, 4=Mechanical  
Max Horz 2=160(LC 12)  
Max Uplift 3=110(LC 12), 2=182(LC 12), 4=3(LC 12)  
Max Grav 3=108(LC 1), 2=313(LC 1), 4=86(LC 3)

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

#### NOTES-

- 1) Wind ASCE 7-22, Vult=140mph (3-second gust) Vasd=108mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II, Exp C, Encl , GCpl=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) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3'-6"-0 tall by 2'-0"-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (it=lb) 3=110, 2=182

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:

February 5,2025

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**MiTek®**

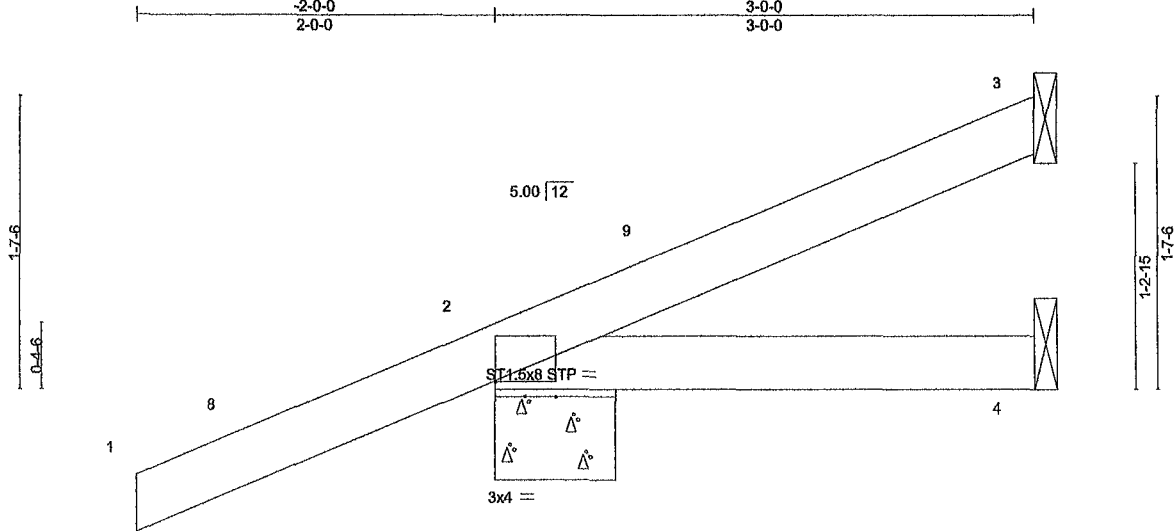
16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	188 SW BIRCH GLEN	T36279623
4461086	EJ03	Jack-Partial	2	1	Job Reference (optional)	

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

8,830 s Nov 8 2024 MITek Industries, Inc. Tue Feb 4 16:41:52 2025 Page 1

ID:g5X7LynzTetcEw796RxbjZzGC8o-7vjgomRHMJENj\_inOiidHT46biaOIKxwQQ77UYzoSrD



Scale = 1 12.4

Plate Offsets (X,Y)-- [2' Edge, 0-0-1]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 20 0	Plate Grip DOL	1.25	TC 0.50	Vert(LL)	0.01	4-7	>999	240	MT20	244/190
TCDL 7 0	Lumber DOL	1.25	BC 0.11	Vert(CT)	-0.00	4-7	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL 10 0	Code FBC2023/TP12014		Matrix-MP						Weight: 13 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing

#### REACTIONS.

(size) 3=Mechanical, 2=0-8-0, 4=Mechanical  
Max Horz 2=112(LC 12)  
Max Uplift 3=-53(LC 12), 2=-215(LC 8), 4=-28(LC 9)  
Max Grav 3=51(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-

- 1) Wind ASCE 7-22, Vult=140mph (3-second gust) Vasd=108mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II, Exp C, 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
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- 5) Refer to girder(s) for truss to truss connections.
- 6) 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=215.

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.

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Date:

February 5, 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	188 SW BIRCH GLEN	T36279624
4461086	HJ05	Diagonal Hip Girder	2	1	Job Reference (optional)	

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

8,830 s Nov 8 2024 MiTek Industries, Inc. Tue Feb 4 16:41:53 2025 Page 1  
ID:g5X?LynzTetEw796RxbjZzGC8o-T5H276Sv6dMEL7HzxPDsqgcFw6qGUnB3f4tg0\_zoSrC

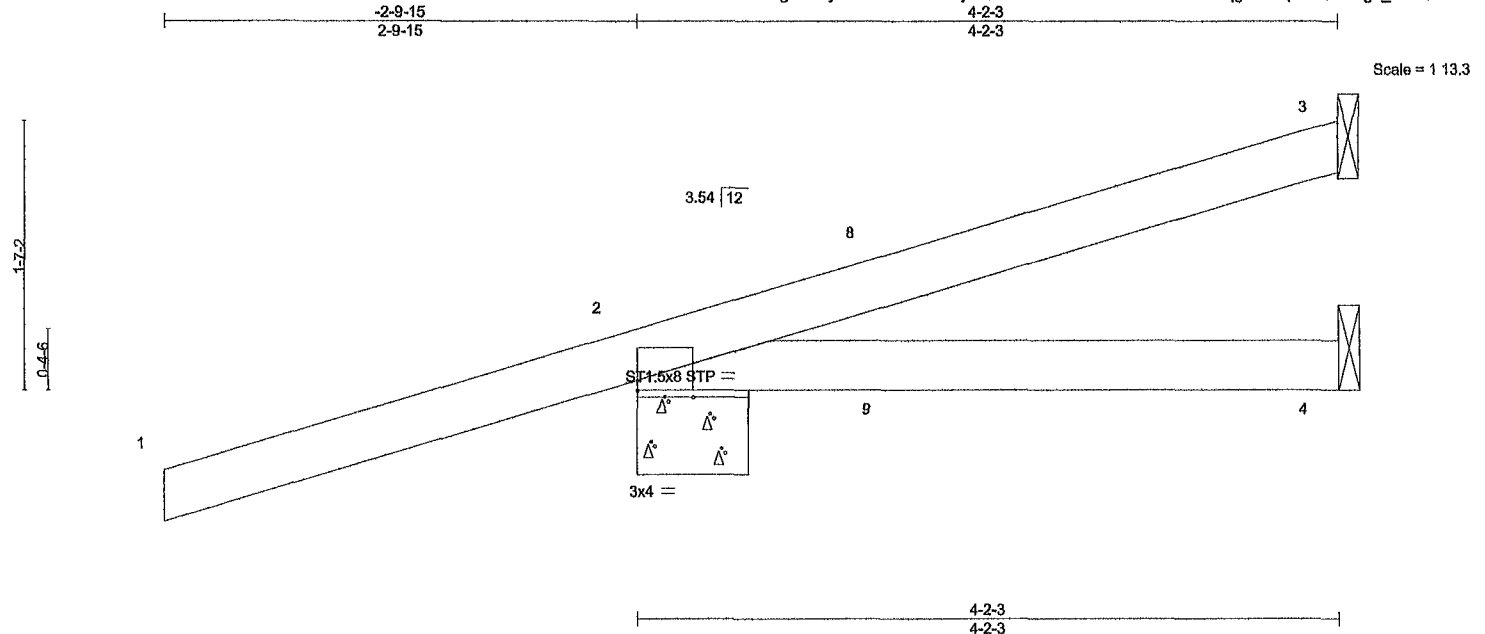


Plate Offsets (X,Y)– [2 Edge,0-0-11]											
LOADING (psf)		SPACING- 2-0-0		CSL		DEFL. in (loc) l/defl L/d			PLATES GRIP		
TCLL	20.0	Plate Grip DOL	1.25	TC	0.59	Vert(LL)	-0.08	4-7	>658	240	MT20 244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.45	Vert(CT)	-0.07	4-7	>726	180	
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	2	n/a	n/a	
BCDL	10.0	Code FBC2023/TP12014		Matrix-MP							Weight: 17 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 4-2-3 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing

#### REACTIONS.

(size) 3=Mechanical, 2=0-8-0, 4=Mechanical  
Max Horz 2=134(LC 25)  
Max Uplift 3=-35(LC 8), 2=-255(LC 4), 4=-36(LC 21)  
Max Grav 3=51(LC 1), 2=282(LC 1), 4=86(LC 33)

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

#### NOTES-

- Wind. ASCE 7-22, Vult=140mph (3-second gust) Vasd=108mph; TCDL=4 2psf; BCDL=3.0psf; h=20ft; Cat. II, Exp C, Encl, GCpi=0.18, MWFRS (envelope) gable end zone; porch left and right exposed, Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads
- \* This truss has been designed for a live load of 20.0 psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- 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=255
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 117 lb down and 103 lb up at 1-6-1, and 117 lb down and 103 lb up at 1-6-1 on top chord, and 99 lb down and 74 lb up at 1-6-1, and 99 lb down and 74 lb up at 1-6-1 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).

#### LOAD CASE(S) Standard

- Dead + Roof Live (balanced). Lumber Increase=1.25, Plate Increase=1.25  
Uniform Loads (plf)  
Vert: 1-3=-54, 4-5=-20  
Concentrated Loads (lb)  
Vert: 8=49(F=24, B=24) 9=70(F=35, B=35)

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.69182  
MiTek Inc. DBA MiTek USA FL Cert 6634  
16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
Date:

February 5, 2025

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Job	Truss	Truss Type	Qty	Ply	188 SW BIRCH GLEN	T36279625
4461086	HJ08	Diagonal Hip Girder	2	1	Job Reference (optional)	

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

8.830 s Nov 8 2024 MITek Industries, Inc. Tue Feb 4 16:41:53 2025 Page 1
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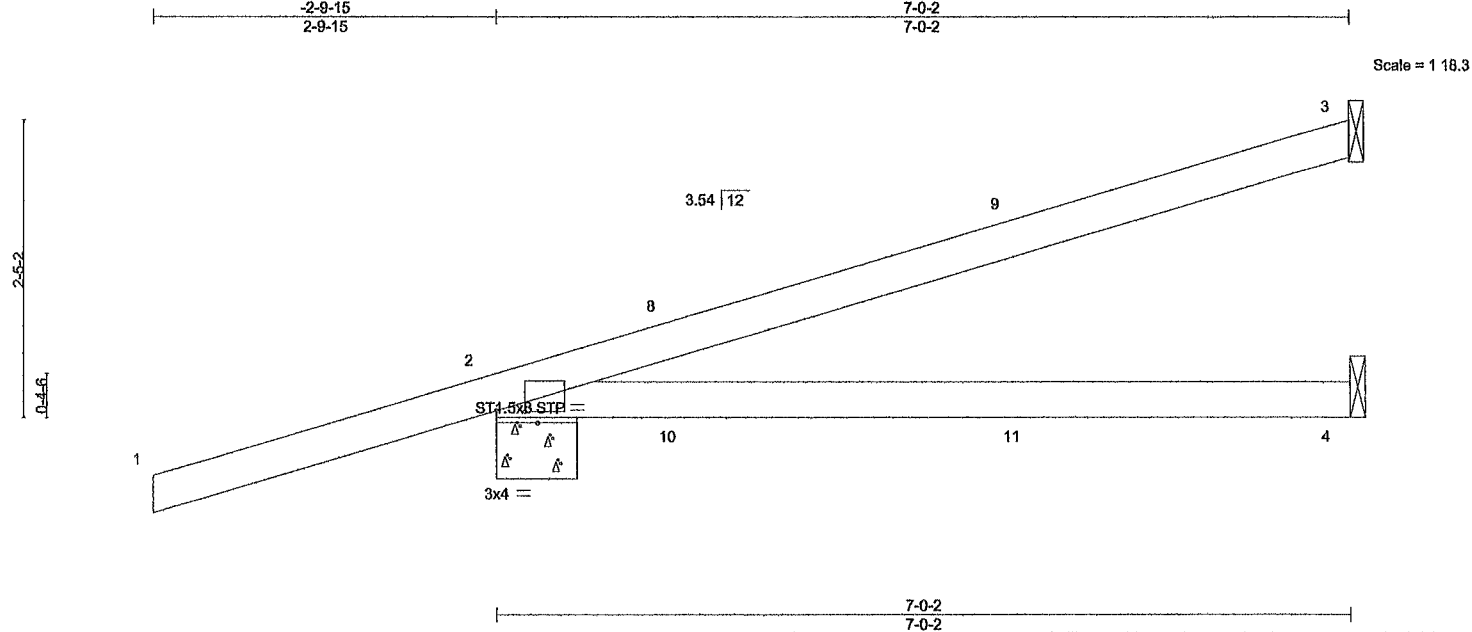


Plate Offsets (X,Y)--		[2 0-2-12,0-0-2]									
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 20 0		Plate Grip DOL	1.25	TC 0.65		Vert(LL)	-0.20 4-7	>418	240	MT20	244/190
TCDL 7 0		Lumber DOL	1.25	BC 0.44		Vert(CT)	-0.24 4-7	>348	180		
BCLL 0.0 *		Rep Stress Incr	NO	WB 0.00		Horz(CT)	0.01 2	n/a	n/a		
BCDL 10 0		Code FBC2023/TPI2014		Matrix-MS						Weight: 26 lb	FT = 20%

<b>LUMBER-</b>		<b>BRACING-</b>	
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=0-8-0, 4=Mechanical  
Max Horz 2=182(LC 4)  
Max Uplift 3=-201(LC 8), 2=-250(LC 4)  
Max Grav 3=211(LC 1), 2=346(LC 1), 4=108(LC 3)

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

- NOTES-**
- 1) Wind ASCE 7-22; Vult=140mph (3-second gust) Vasd=108mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II, Exp C, Encl , GCpi=0 18, MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1 60
  - 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - 3) This truss has been designed for a 10 0 psf bottom chord live load nonconcurrent with any other live loads
  - 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 5) Refer to girder(s) for truss to truss connections.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 3=201, 2=250.
  - 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 117 lb down and 103 lb up at 1-6-1, 117 lb down and 103 lb up at 1-6-1, 29 lb down and 54 lb up at 4-4-0, and 29 lb down and 54 lb up at 4-4-0, and 71 lb down and 114 lb up at 6-11-6 on top chord, and 60 lb down and 74 lb up at 1-6-1, 60 lb down and 74 lb up at 1-6-1, and 31 lb down and 2 lb up at 4-4-0, and 31 lb down and 2 lb up at 4-4-0 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).

**LOAD CASE(S)** Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1 25

Uniform Loads (plf)  
Vert: 1-3=-54, 4-5=-20

Concentrated Loads (lb)  
Vert: 3=-71(F) 8=49(F=24, B=24) 10=70(F=35, B=35) 11=4(F=2, B=2)

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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:

February 5,2025

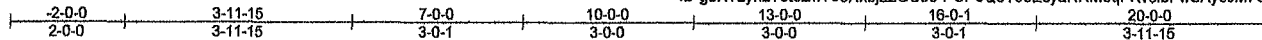


Job 4461086	Truss T01	Truss Type Hip Girder	Qty 1	Ply 1	188 SW BIRCH GLEN Job Reference (optional)	T36279627
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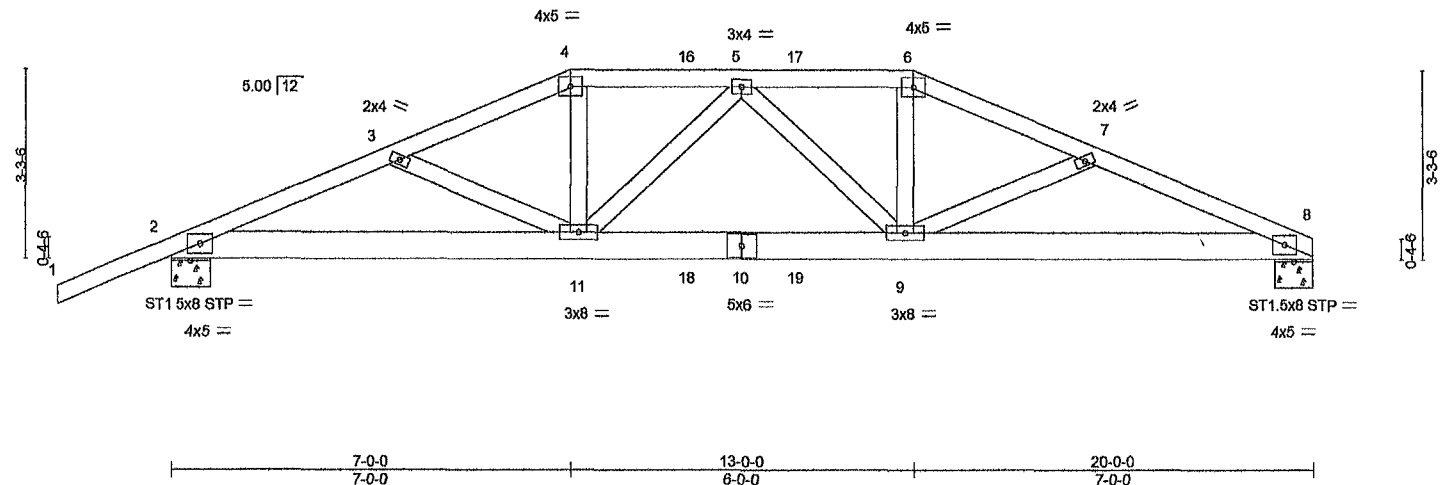
Builders FirstSource (Lake City, FL), Lake City, FL - 32055,

8.830 s Nov 8 2024 MiTek Industries, Inc. Tue Feb 4 16:41 55 2025 Page 1

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Scale = 1:37.9



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 20 0	Plate Grip DOL 1 25	TC 0.54	Vert(LL) 0.26	9-11	>929	240	MT20	244/190
TCDL 7 0	Lumber DOL 1 25	BC 0.74	Vert(CT) -0.25	9-11	>954	180		
BCLL 0 0 *	Rep Stress Incr NO	WB 0.34	Horz(CT) 0.06	8	n/a	n/a		
BCDL 10 0	Code FBC2023/TPI2014	Matrix-MS					Weight. 110 lb	FT = 20%

#### LUMBER-

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x6 SP No.2  
WEBS 2x4 SP No.3

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-2-6 oc purlins  
BOT CHORD Rigid ceiling directly applied or 4-8-14 oc bracing

#### REACTIONS.

(size) 8=0-8-0, 2=0-8-0  
Max Horz 2=114(LC 8)  
Max Uplift 8=-1015(LC 9), 2=-1095(LC 8)  
Max Grav 8=1346(LC 1), 2=1442(LC 1)

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

TOP CHORD 2-3=-3033/2405, 3-4=-2842/2291, 4-5=-2645/2185, 5-6=-2714/2226, 6-7=-2921/2339,  
7-8=-3119/2468  
BOT CHORD 2-11=-2223/2768, 9-11=-2162/2766, 8-9=-2212/2859  
WEBS 3-11=-187/259, 4-11=-722/902, 6-9=-660/860, 7-9=-210/279

#### NOTES-

- Unbalanced roof live loads have been considered for this design
- Wind ASCE 7-22, Vult=140mph (3-second gust) Vasd=108mph, TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II Exp C, Encl, GCpi=0.18, MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=1015, 2=1095
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 29 lb down and 58 lb up at 7-0-0, 19 lb down and 58 lb up at 9-0-12, and 19 lb down and 58 lb up at 10-11-4, and 133 lb down and 191 lb up at 13-0-0 on top chord and 382 lb down and 427 lb up at 7-0-0, 161 lb down and 186 lb up at 9-0-12, and 161 lb down and 186 lb up at 10-11-4, and 382 lb down and 427 lb up at 12-11-4 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)

#### LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-4=-54, 4-6=-54, 6-8=-54, 2-8=-20

Concentrated Loads (lb)

Vert: 4=-10(B) 6=-86(B) 11=-382(B) 9=-382(B) 16=-10(B) 17=-10(B) 18=-161(B) 19=-161(B)

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

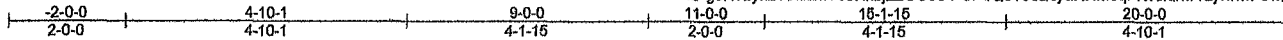
February 5, 2025

Job 4461086	Truss T02	Truss Type Hip	Qty 1	Ply 1	188 SW BIRCH GLEN T36279628
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8.830 s Nov 8 2024 MiTek Industries, Inc. Tue Feb 4 16:41 55 2025 Page 1

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Scale = 1.37 3

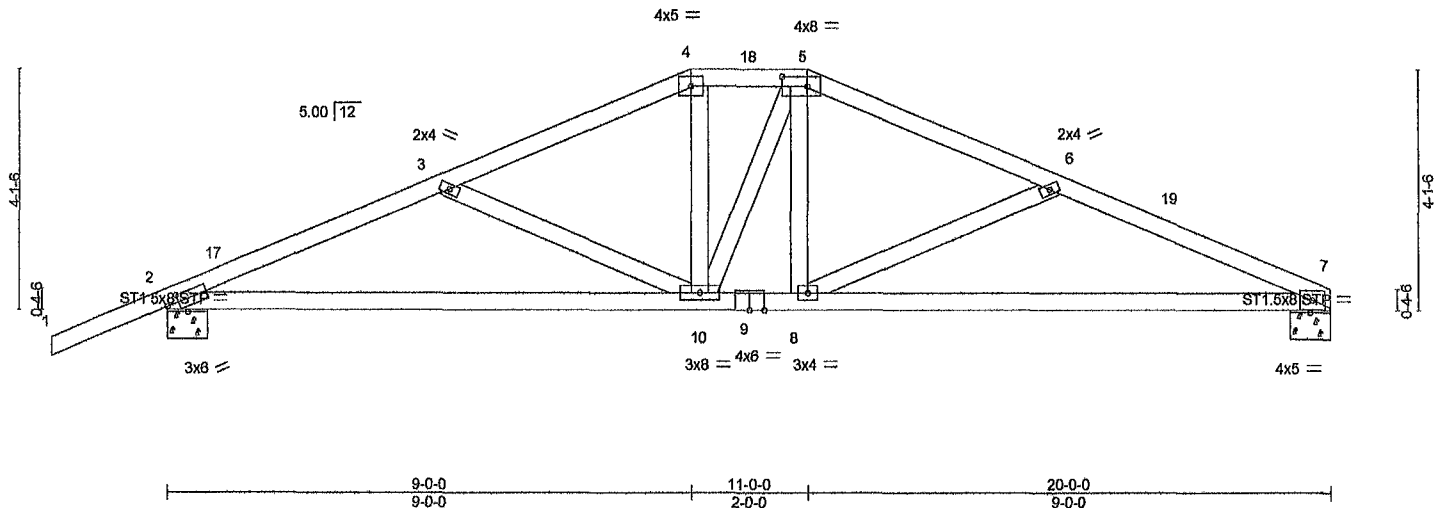


Plate Offsets (X,Y) — [2-0-2-6, 0-1-8], [5-0-5-4, 0-2-0]													
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.		in (loc)		L/defl	L/d	PLATES	GRIP
TCLL	20 0	Plate Grip DOL 1.25		TC 0.45		Vert(LL)		-0.14	8-13	>999	240	MT20	244/190
TCDL	7 0	Lumber DOL 1.25		BC 0.69		Vert(CT)		-0.30	8-13	>800	180		
BCLL	0 0 *	Rep Stress Incr YES		WB 0.18		Horz(CT)		0.04	7	n/a	n/a		
BCDL	10 0	Code FBC2023/TP12014		Matrix-MS								Weight. 95 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 4-6-8 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 7-3-1 oc bracing

#### REACTIONS.

(size) 7=0-8-0, 2=0-8-0  
Max Horz 2=135(LC 16)  
Max Uplift 7=360(LC 13), 2=449(LC 12)  
Max Grav 7=735(LC 1), 2=853(LC 1)

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

TOP CHORD 2-3=-1414/724, 3-4=-1102/549, 4-5=-979/550, 5-6=-1109/555, 6-7=-1443/730  
BOT CHORD 2-10=-663/1284, 8-10=-364/984, 7-8=-615/1317  
WEBS 3-10=-348/328, 4-10=-107/282, 5-8=-126/287, 6-8=-380/356

#### NOTES-

- 1) Unbalanced roof live loads have been considered for this design
- 2) Wind. ASCE 7-22, Vult=140mph (3-second gust) Vasd=108mph, TCDL=4 2psf; BCDL=3 0psf; h=20ft; Cat. II, Exp C, Encl, GCpl=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, Zone3 9-0-0 to 11-0-0, Zone2 11-0-0 to 15-4-3 Zone1 15-4-3 to 20-0-0 zone; C-C for members and forces & MWFRS for reactions shown, Lumber DOL=1.60 plate grip DOL=1.60
- 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 4) Provide adequate drainage to prevent water ponding
- 5) This truss has been designed for a 10 0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (if=lb) 7=360, 2=449

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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:

February 5, 2025

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<b>LUMBER-</b>		<b>BRACING-</b>	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 4-3-0 oc purlins.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 6-1-11 oc bracing
WEBS	2x4 SP No.3		
WEDGE			
Right. 2x4 SP No.3			

**REACTIONS.** (size) 6=0-3-8, 2=0-8-0  
 Max Horz 2=150(LC 12)  
 Max Uplift 6=-419(LC 13), 2=-510(LC 12)  
 Max Grav 6=842(LC 1), 2=956(LC 1)

**FORCES** (lb) - Max. Comp./Max. Ten - All forces 250 (lb) or less except when shown  
**TOP CHORD** 2-3=-1716/1043, 3-4=-1532/863, 4-5=-1490/959, 5-6=-1661/1028  
**BOT CHORD** 2-9=-902/1544, 7-9=-533/1047, 6-7=-865/1482  
**WEBS** 4-9=-293/510, 5-7=-242/279, 4-9=-318/563, 3-9=-271/289

NOTES.

- 1) Unbalanced roof live loads have been considered for this design
- 2) Wind ASCE 7-22, Vult=140mph (3-second gust) Vasd=108mph, TCDF=4 2psf; BCDL=3.0psf; h=20ft; Cat. II, Exp C, Encl., GCp1=0.18, MWFRS (envelope) gable end zone and C-C Zone3 -2.0-0 to 1-0-0, Zone1 1-0-0 to 10-0-0, Zone2 10-0-0 to 14-2-15, Zone1 14-2-15 to 19-7-8 zone; C-C for members and forces & MWFRS for reactions shown, Lumber DOL=1.60 plate grip DOL=1.60
- 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=419, 2=510
- 7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

## LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced). Lumber Increase=1 25, Plate Increase=1 25  
Uniform Loads (plf)  
Vert: 1-4=-54, 4-6=-54, 9-13=-20, 7-9=-60(F=40), 7-10=-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:

February 5, 2025



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

**WARNING** – Verify design parameters and READ NOTES ON THIS AND INCLUDED WALKER REFERENCE PAGE 11-413 Rev. 1/2/2023 BEFORE USE.

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# Mitek

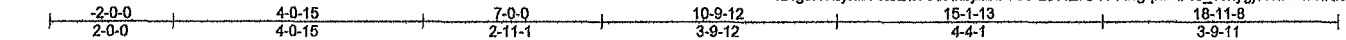
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Job 4461086	Truss T04	Truss Type Half Hip Girder	Qty 1	Ply 1	188 SW BIRCH GLEN	T38279630
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Builders FirstSource (Lake City FL), Lake City, FL - 32055,

8.830 s Nov 8 2024 MiTek Industries, Inc. Tue Feb 4 16:41 57 2025 Page 1

ID:g5X7LynzTatcEw796RxbjZzGC8o-LsWZrUVPArigqalAFlo\_Wnygi9IQPPfahru9lzoSr8



Scale = 1:35.2

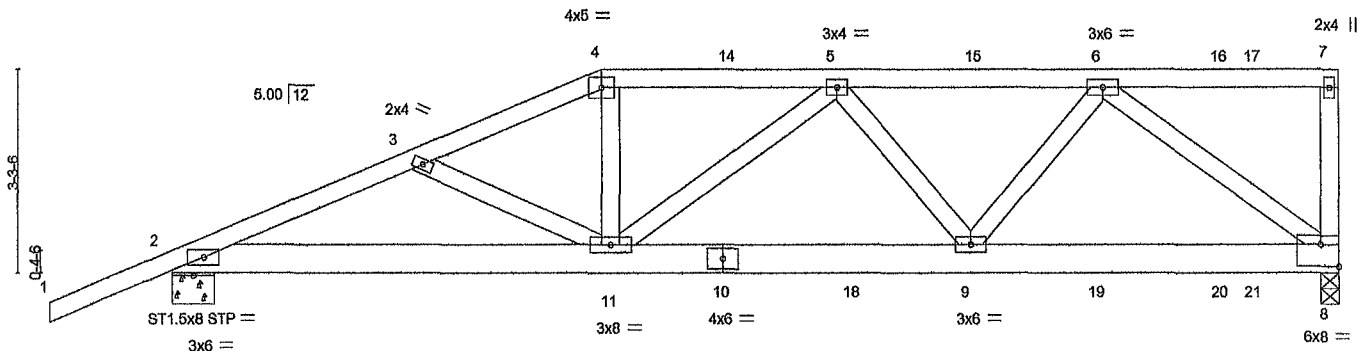


Plate Offsets (X,Y)--	[8 Edge,0-4-4]	7-0-0 7-0-0	12-11-13 5-11-13	18-11-8 5-11-11
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LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 20 0	Plate Grip DOL 1.25	TC 0.48	Vert(LL) 0 18	9-11	>999	240	MT20	244/190
TCDL 7 0	Lumber DOL 1.25	BC 0.70	Vert(CT) -0 17	9-11	>999	180		
BCLL 0 0 *	Rep Stress Incr NO	WB 0.82	Horz(CT) -0 04	8	n/a	n/a		
BCDL 10 0	Code FBC2023/TP12014	Matrix-MS						
							Weight: 112 lb	FT = 20%

#### LUMBER-

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x6 SP No.2  
WEBS 2x4 SP No.3

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-5-8 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 5-0-10 oc bracing

#### REACTIONS.

(size) 8=0-3-8, 2=0-8-0  
Max Horz 2=210(LC 8)  
Max Uplift 8=-1342(LC 4), 2=-1013(LC 8)  
Max Grav 8=1590(LC 1), 2=1326(LC 1)

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

TOP CHORD 2-3=-2720/2180, 3-4=-2527/2064, 4-5=-2348/1970, 5-6=-2213/1850  
BOT CHORD 2-11=-2113/2481, 9-11=-2001/2381, 8-9=-1279/1523  
WEBS 4-11=-615/772, 5-9=-281/252, 6-9=-978/1153, 6-8=-1890/1585

#### NOTES-

- Unbalanced roof live loads have been considered for this design
- Wind ASCE 7-22 Vult=140mph (3-second gust) Vasd=108mph, TCDL=4.2psf, BCDL=3.0psf, h=20ft, Cat. II, Exp C, Encl, GCpi=0.18, MWFRS (envelope) gable end zone Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20 Opsf 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) 8=1342, 2=1013.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 29 lb down and 58 lb up at 7-0-0, 19 lb down and 58 lb up at 9-0-12, 19 lb down and 58 lb up at 11-0-12, 19 lb down and 58 lb up at 13-0-12, 19 lb down and 58 lb up at 15-0-12, and 19 lb down and 58 lb up at 17-0-12, and 19 lb down and 58 lb up at 17-7-4 on top chord, and 382 lb down and 427 lb up at 7-0-0, 161 lb down and 186 lb up at 9-0-12, 161 lb down and 186 lb up at 11-0-12, 161 lb down and 186 lb up at 13-0-12, 161 lb down and 186 lb up at 15-0-12, and 161 lb down and 186 lb up at 17-0-12, and 161 lb down and 186 lb up at 17-7-4 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).

#### LOAD CASE(S) Standard

- Dead + Roof Live (balanced) Lumber Increase=1.25, Plate Increase=1.25  
Uniform Loads (plf)  
Vert. 1-4=-54, 4-7=-54, 2-8=-20

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:

February 5,2025

Continued on page 2



**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITTEK REFERENCE PAGE MII-7473 rev 11/2023 BEFORE USE.**

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**MiTek®**

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Chesterfield, MO 63017  
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	188 SW BIRCH GLEN	T36279630
4461086	T04	Half Hip Girder	1	1	Job Reference (optional)	

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

8.830 s Nov 8 2024 MiTek Industries, Inc. Tue Feb 4 16:41:57 2025 Page 2  
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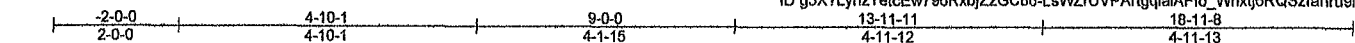
**LOAD CASE(S)** Standard  
Concentrated Loads (lb)  
Vert. 4=-10(B) 10=-161(B) 11=-382(B) 5=-10(B) 9=-161(B) 6=-10(B) 14=-10(B) 15=-10(B) 16=-10(B) 17=-10(B) 18=-161(B) 19=-161(B) 20=-161(B) 21=-161(B)



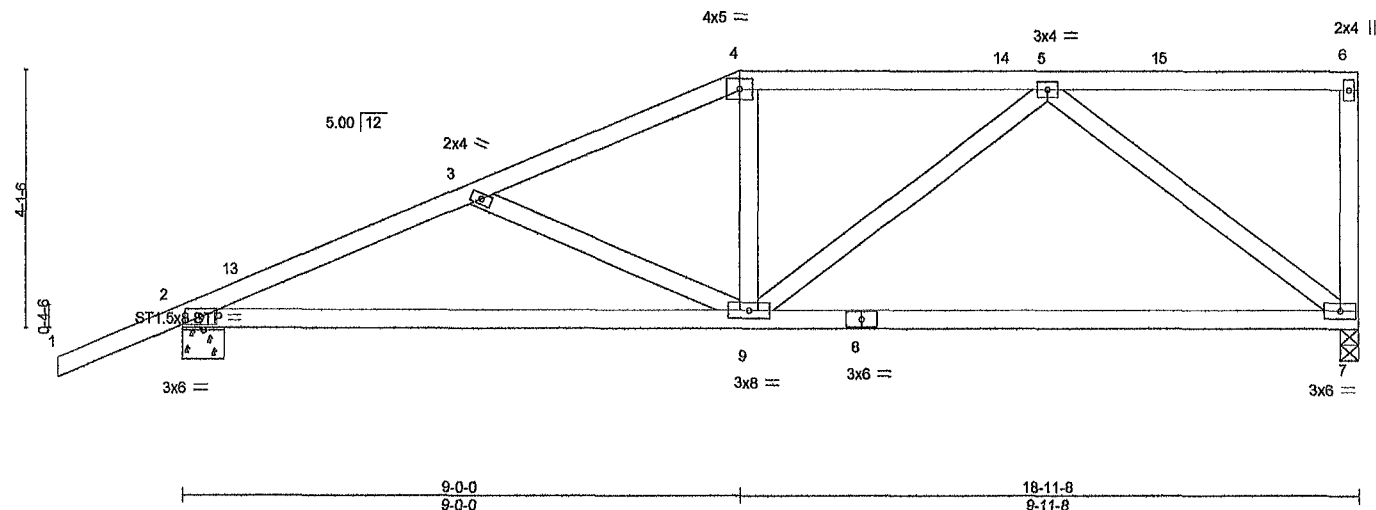
Job	Truss	Truss Type	Qty	Ply	188 SW BIRCH GLEN	T36279631
4481086	T05	Half Hip	1	1		

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

8.830 s Nov 8 2024 MiTek Industries, Inc. Tue Feb 4 16:41 57 2025 Page 1  
ID g5X7LynzTetcEw798RxbjZzGCBo-LsWZrUVPArqglalAFlo\_Wnxtj6RQSZfahru9lzoSr8



Scale = 1/34.9



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20 0	Plate Grip DOL 1.25	TC 0.53	Vert(LL) -0.21	7-9	>999	240	MT20	244/190
TCDL 7 0	Lumber DOL 1.25	BC 0.88	Vert(CT) -0.44	7-9	>518	180		
BCLL 0 0 *	Rep Stress Incr YES	WB 0.59	Horz(CT) 0.03	7	n/a	n/a		
BCDL 10 0	Code FBC2023/TPI2014	Matrix-MS					Weight: 96 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 5-0-7 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 6-6-11 oc bracing

#### REACTIONS.

(size) 2=0-8-0, 7=0-3-8  
Max Horz 2=258(LC 12)  
Max Uplift 2=457(LC 12), 7=383(LC 8)  
Max Grav 2=810(LC 1), 7=690(LC 1)

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

TOP CHORD 2-3=-1313/707, 3-4=-1013/499, 4-5=-895/504  
BOT CHORD 2-9=-800/1188, 7-9=-393/652  
WEBS 3-9=-327/323, 5-9=-156/372, 5-7=-797/497

#### NOTES-

- Unbalanced roof live loads have been considered for this design
- Wind ASCE 7-22, Vult=140mph (3-second gust) Vasd=108mph, TCDL=4.2psf, BCDL=3 0psf, h=20ft, Cat. II, Exp C, Encl., GCpl=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 18-9-12 zone; C-C for members and forces & MWFRS for reactions shown, Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 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=457, 7=383.

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:

February 5, 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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314.434.1200 / MiTek-USA.com

Job 4461086	Truss T06	Truss Type Half Hip	Qty 1	Ply 1	188 SW BIRCH GLEN	T36279632
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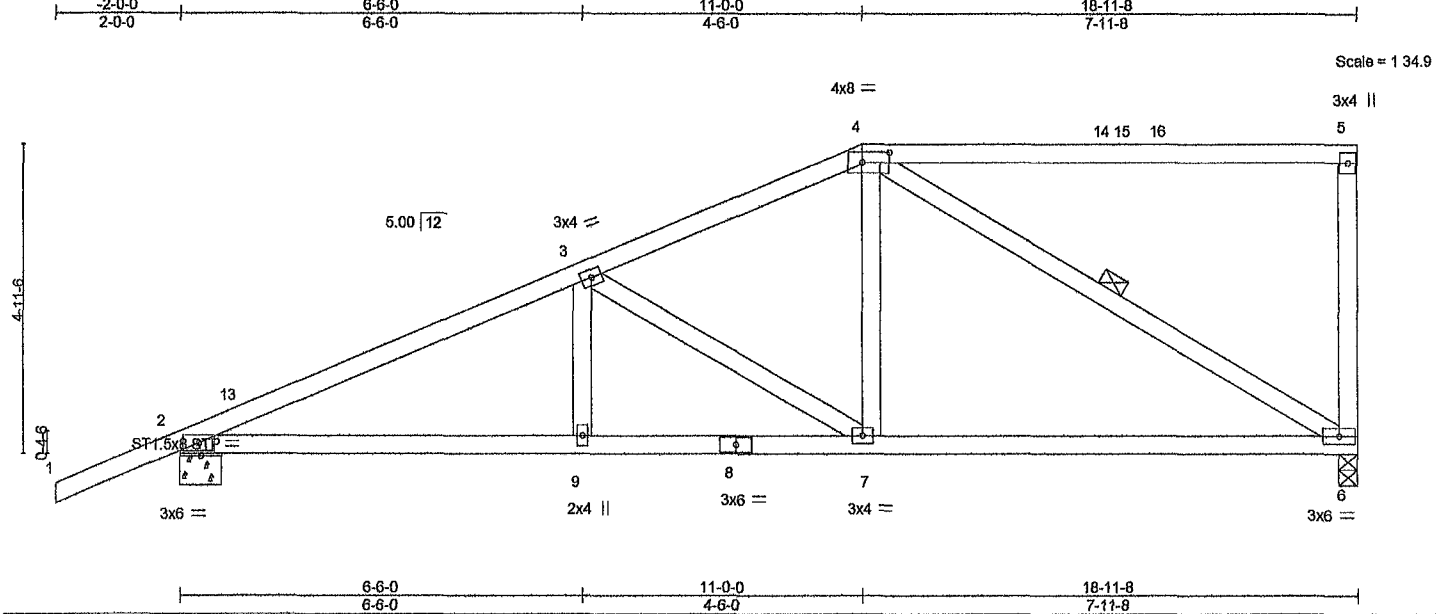


Plate Offsets (X,Y)-- [4:0-5-4,0-2-0]							
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d
TCLL 20 0	Plate Grip DOL	1.25	TC 0.74	Vert(LL)	-0 11 6-7	>999	240
TGDL 7 0	Lumber DOL	1.25	BC 0.56	Vert(CT)	-0.22 6-7	>999	180
BCLL 0 0 *	Rep Stress Incr	YES	WB 0.34	Horz(CT)	0 03 6	n/a	n/a
BCDL 10 0	Code FBC2023/TPI2014		Matrix-MS				
						Weight: 98 lb	FT = 20%

<b>LUMBER-</b>		<b>BRACING-</b>	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 4-7-7 oc purlins, except end verticals.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 6-8-1 oc bracing
WEBS	2x4 SP No.3	WEBS	1 Row at midpt 4-6

**REACTIONS.** (size) 2=0-8-0, 6=0-3-8  
Max Horz 2=307(LC 12)  
Max Uplift 2=452(LC 12), 6=373(LC 8)  
Max Grav 2=810(LC 1), 6=690(LC 1)

**FORCES.** (lb) - Max. Comp./Max Ten - All forces 250 (lb) or less except when shown  
TOP CHORD 2-3=-1261/621, 3-4=-817/421  
BOT CHORD 2-9=-746/1111, 7-9=-746/1111, 6-7=-437/722  
WEBS 3-7=-466/365, 4-7=-135/453, 4-6=-795/489

- NOTES-**
- Unbalanced roof live loads have been considered for this design
  - Wind ASCE 7-22, Vult=140mph (3-second gust) Vasd=108mph, TCCL=4.2psf, BCDL=3.0psf, h=20ft; Cat. II, Exp C, Encl , GCpl=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 18-9-12 zone;C-C for members and forces & MWFRS for reactions shown, Lumber DOL=1.60 plate grip DOL=1.60
  - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - Provide adequate drainage to prevent water ponding
  - This truss has been designed for a 10 0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20 0psf on the bottom chord in all areas where a rectangle 3-6-0 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=452, 6=373

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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: February 5,2025

Job	Truss	Truss Type	Qty	Ply	188 SW BIRCH GLEN	T36279833
4461088	T07	Hip	1	1		

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8.830 s Nov 8 2024 MiTek Industries, Inc. Tue Feb 4 16:41:58 2025 Page 1

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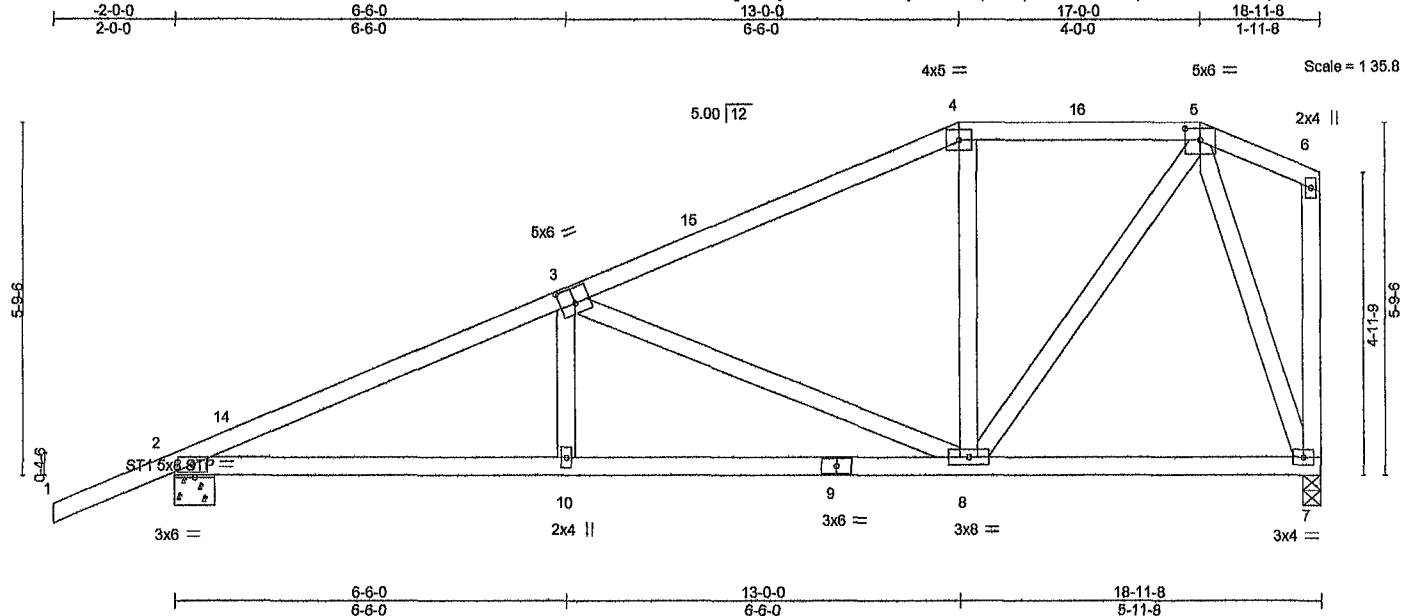


Plate Offsets (X,Y)- [3-0-3-0,0-3-0], [5-0-3-0,0-2-4]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.45	Vert(LL)	0.07 10-13	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.46	Vert(CT)	-0.10 10-13	>999	180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.66	Horz(CT)	0.03 7	n/a	n/a		
BCDL 10.0	Code FBC2023/TP12014	Matrix-MS					Weight: 108 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 4-10-5 oc purlins except end verticals.  
BOT CHORD Rigid ceiling directly applied or 6-7-9 oc bracing

#### REACTIONS.

(size) 2=0-8-0, 7=0-3-8  
Max Horz 2=330(LC 12)  
Max Uplift 2=-446(LC 12), 7=-356(LC 12)  
Max Grav 2=810(LC 1), 7=690(LC 1)

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

TOP CHORD 2-3=-1288/619, 3-4=-641/305, 4-5=-521/338  
BOT CHORD 2-10=-772/1140, 8-10=-773/1135  
WEBS 3-10=0/271, 3-8=-867/498, 5-8=-344/556, 5-7=-634/375

#### NOTES-

- Unbalanced roof live loads have been considered for this design
- Wind ASCE 7-22, Vult=140mph (3-second gust) Vasd=108mph, TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II, Exp C, Encl, GCpl=0.18, MWFRS (envelope) gable end zone and C-C Zone3 -2-0-0 to 1-0-0, Zone1 1-0-0 to 13-0-0, Zone3 13-0-0 to 18-9-12 zone C-C for members and forces & MWFRS for reactions shown, Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0 psf 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=446, 7=356

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

February 5, 2025

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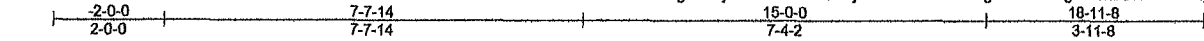
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Chesterfield, MO 63017  
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Job	Truss	Truss Type	Qty	Ply	188 SW BIRCH GLEN	T36279634
4461086	T08	Common	3	1		

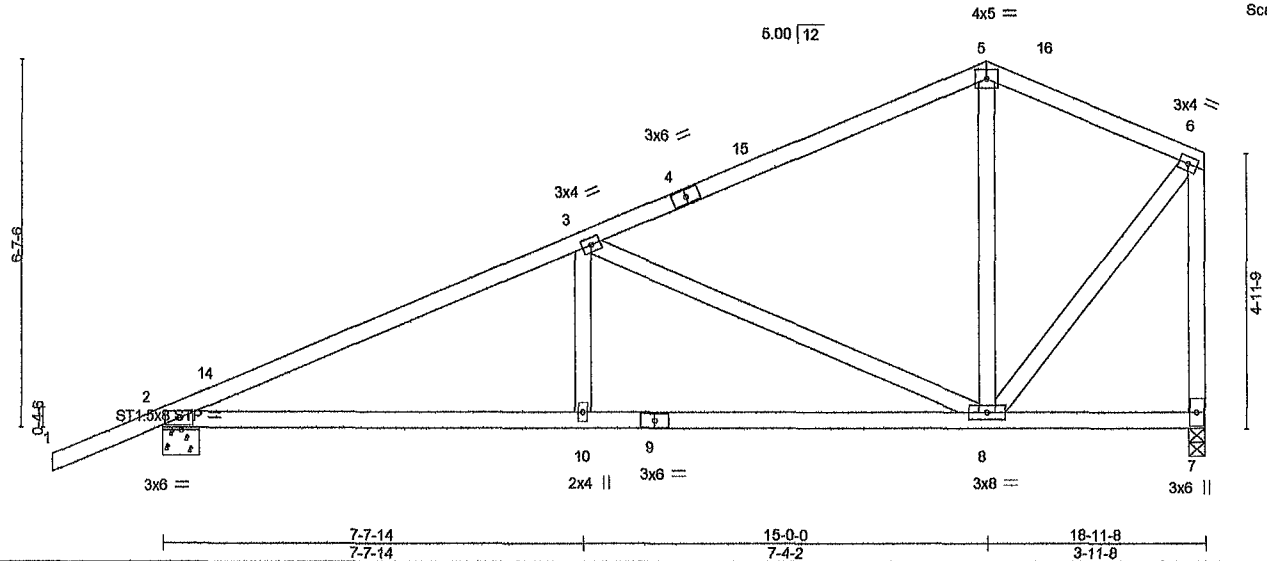
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8.830 s Nov 8 2024 MiTek Industries, Inc. Tue Feb 4 16:41 59 2025 Page 1

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Scale = 1:39.3



LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 20 0	Plate Grip DOL 1 25	TC 0.59	Vert(LL)	0.11 10-13	>999	240	MT20	244/190
TCDL 7 0	Lumber DOL 1 25	BC 0.59	Vert(CT)	-0.17 10-13	>999	180		
BCLL 0 0 *	Rep Stress Incr YES	WB 0.98	Horz(CT)	0.03 7	n/a	n/a		
BCDL 10 0	Code FBC2023/TP12014	Matrix-MS					Weight* 102 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 4-8-8 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 6-7-13 oc bracing

#### REACTIONS.

(size) 2=0-8-0, 7=0-3-8  
Max Horz 2=350(LC 12)  
Max Uplift 2=439(LC 12), 7=363(LC 12)  
Max Grav 2=810(LC 1), 7=690(LC 1)

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

TOP CHORD 2-3=-1232/590, 3-5=-473/271, 5-6=-418/292, 6-7=-666/468  
BOT CHORD 2-10=-736/1080, 8-10=-736/1080  
WEBS 3-10=0/324, 3-8=-795/582, 6-8=-335/561

#### NOTES-

- Unbalanced roof live loads have been considered for this design
- Wind ASCE 7-22, Vult=140mph (3-second gust) Vasd=108mph, TCDL=4 2psf; BCDL=3 0psf; h=20ft; Cat. II, Exp C, Encl, GCpi=0.18, MVFRS (envelope) gable end zone and C-C Zone3 -2-0-0 to 1-0-0, Zone1 1-0-0 to 15-0-0, Zone3 15-0-0 to 18-9-12 zone, C-C for members and forces & MVFRS for reactions shown, Lumber DOL=1 60 plate grip DOL=1 60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- This truss has been designed for a 10 0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20 0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=439 7=363

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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:

February 5, 2025

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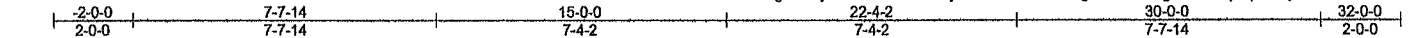
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Job	Truss	Truss Type	Qty	Ply	188 SW BIRCH GLEN	T36279635
4481086	T09	Common	4	1		

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

8.830 s Nov 8 2024 MiTek Industries, Inc. Tue Feb 4 16:41:59 2025 Page 1  
ID:g5X7LynzTetCw796RxbjZzGC8o-lFeJGAXgiT7O32k7lgKG3xsGjXqouHry1?K?EezoSr6



Scale = 1/4" = 1' 54.6"

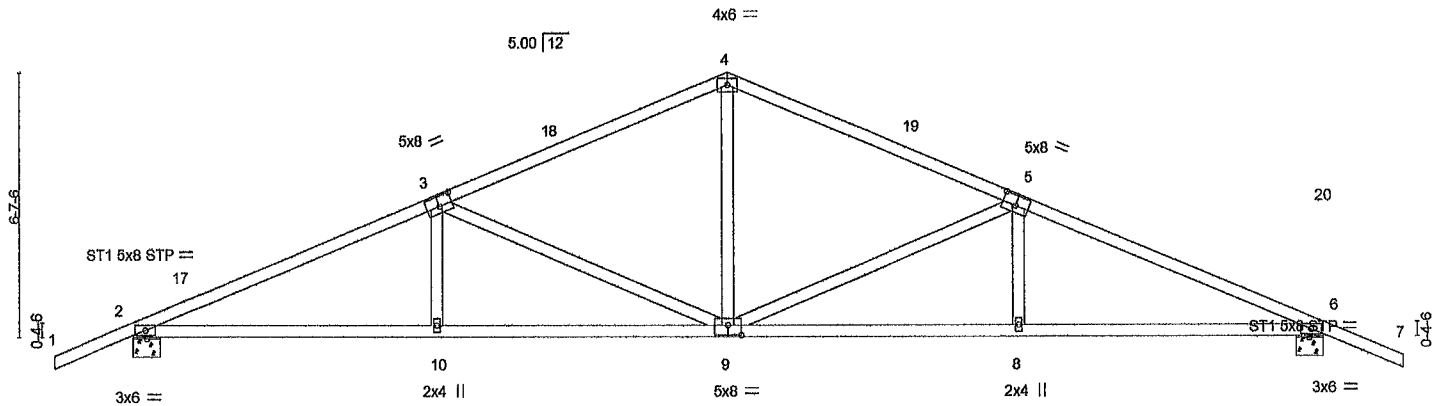


Plate Offsets (X,Y) -	[3'-0-4-0,0-3-0], [5'-0-4-0,0-3-0], [9'-0-4-0,0-3-0]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20 0	2-0-0	TC 0.64	in (loc) l/defl L/d	MT20	244/190
TCDL 7 0	Plate Grip DOL 1.25	BC 0.70	Vert(LL) 0 16 10-13 >999 240		
BCLL 0 0 *	Lumber DOL 1.25	WB 0.95	Vert(CT) -0.26 9-10 >999 180		
BCDL 10 0	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0 09 6 n/a n/a		
	Code FBC2023/TP12014			Weight: 140 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 3-3-12 oc purlins  
BOT CHORD Rigid ceiling directly applied or 5-9-1 oc bracing

#### REACTIONS.

(size) 2=0-8-0, 6=0-8-0  
Max Horz 2=-177(LC 13)  
Max Uplift 2=-624(LC 12), 6=-624(LC 13)  
Max Grav 2=1218(LC 1), 6=1218(LC 1)

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

TOP CHORD 2-3=-2260/1038, 3-4=-1531/790, 4-5=-1531/790, 5-6=-2260/1038  
BOT CHORD 2-10=-992/2026, 9-10=-992/2026, 8-9=-844/2026, 6-8=-843/2026  
WEBS 4-9=-287/757, 5-9=-774/573, 5-8=0/308, 3-9=-774/572, 3-10=0/308

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind ASCE 7-22, Vult=140mph (3-second gust) Vasd=108mph, TCDL=4.2psf; BCDL=3.0psf; h=20ft, Cat. II, Exp C, 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 15-0-0, Zone2 15-0-0 to 19-2-15, Zone1 19-2-15 to 32-0-0 zone; C-C for members and forces & MWFRS for reactions shown, Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3'-6" tall by 2'-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=624, 6=624.

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Joaquin Velez PE No.69182  
MiTek Inc. DBA MiTek USA FL Cert 6634  
16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
Date:

February 5, 2025

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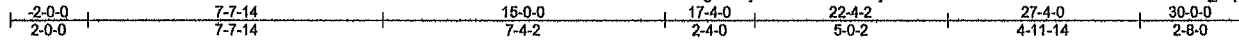
16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
314.434.1200 / MiTek-US.com

Job 4461086	Truss T10	Truss Type Roof Special	Qty 2	Ply 1	168 SW BIRCH GLEN Job Reference (optional)	T36279636
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Builders FirstSource (Lake City, FL), Lake City, FL - 32055,

8.830 s Nov 8 2024 MiTek Industries, Inc. Tue Feb 4 16:42:00 2025 Page 1

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Scale = 1/8" = 1'-0"

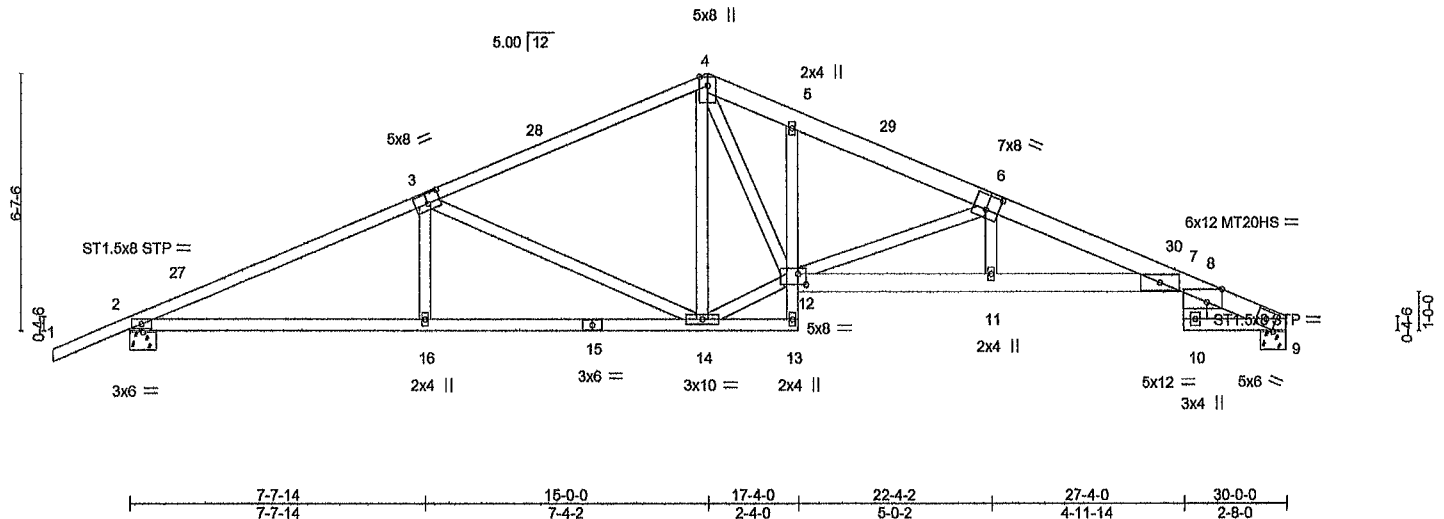


Plate Offsets (X,Y) - [3.0-4.0,0-3-0], [6.0-4.0,0-4-8], [8.0-4-12,Edge], [12.0-2-8,0-3-4]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.84	Vert(LL) 0.32	11-22	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.70	Vert(CT) -0.48	11-22	>747	180	MT20HS	187/143
BCLL 0.0 *	Rep Stress Incr YES	WB 0.90	Horz(CT) 0.26	9	n/a	n/a		
BCDL 10.0	Code FBC2023/TP12014	Matrix-MS						
							Weight: 174 lb	FT = 20%

#### LUMBER-

TOP CHORD 2x4 SP No.2 \*Except\*  
4-6 2x6 SP No.2, 6-9 2x6 SP 2400F 2.0E or 2x6 SP M 26  
BOT CHORD 2x4 SP No.2 \*Except\*  
5-13 2x4 SP No.3, 7-12 2x6 SP 2400F 2.0E or 2x6 SP M 26  
8-10 2x8 SP 2400F 2.0E  
WEBS 2x4 SP No.3

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-8-10 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 5-8-8 oc bracing

#### REACTIONS.

(size) 2=0-8-0, 9=0-8-0  
Max Horz 2=199(LC 12)  
Max Uplift 2=621(LC 12), 9=530(LC 13)  
Max Grav 2=1209(LC 1), 9=1094(LC 1)

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

TOP CHORD 2-3=-2237/1049, 3-4=-1514/790, 4-5=-2002/1080, 5-6=-2070/1038, 6-7=-3308/1577,  
7-8=-361/234, 8-9=-1707/899  
BOT CHORD 2-16=-1005/2006, 14-16=-1005/2005, 11-12=-1360/3102, 7-11=-1364/3113,  
9-10=-706/1393  
WEBS 3-16=0/313, 3-14=-762/561, 12-14=-484/1337, 4-12=-643/1307, 6-12=-1360/774,  
6-11=-156/479

#### NOTES-

- Unbalanced roof live loads have been considered for this design
- Wind. ASCE 7-22, Vult=140mph (3-second gust) Vasd=108mph, TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II, Exp C, 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 15-0-0, Zone2 15-0-0 to 19-2-15, Zone1 19-2-15 to 29-8-0 zone, C-C for members and forces & MWFRS for reactions shown, Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- All plates are MT20 plates unless otherwise indicated
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20 psf on the bottom chord in all areas where a rectangle 3'-6" tall by 2'-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 (if=lb) 2=621, 9=530

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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:

February 5, 2025



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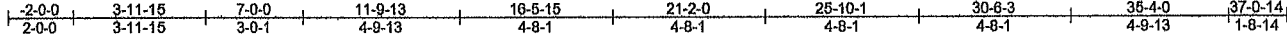
16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	188 SW BIRCH GLEN	T38279637
4461086	T11	Hip Girder	1	2	Job Reference (optional)	

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

8.830 s Nov 8 2024 MiTek Industries, Inc. Tue Feb 4 16:42 02 2025 Page 1

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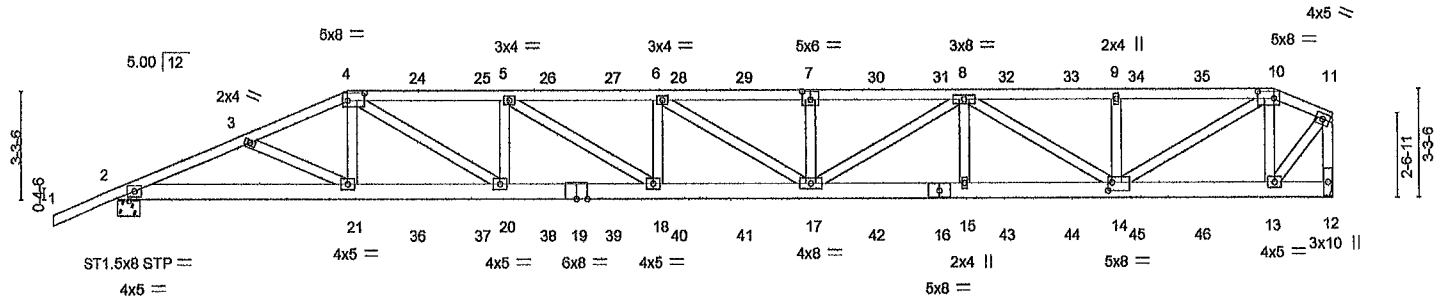


Plate Offsets (X,Y)--	[4.0-6.4,0-2-12], [7.0-3.0,0-3-0], [10.0-6.0,0-2-8], [14.0-1-8,0-3-0]
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LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 20 0	Plate Grip DOL 1 25	TC 0 77	Vert(LL) 0 78 17-18	>566	240		MT20	244/190
TCDL 7 0	Lumber DOL 1 25	BC 0 92	Vert(CT) -0 76 17-18	>581	180			
BCLL 0 0 *	Rep Stress Incr NO	WB 0 83	Horz(CT) -0 12 12	n/a	n/a			
BCDL 10 0	Code FBC2023/TP12014	Matrix-MS					Weight: 459 lb	FT = 20%

<b>LUMBER-</b>		<b>BRACING-</b>	
TOP CHORD 2x4 SP No.2		TOP CHORD	Structural wood sheathing directly applied or 3-9-12 oc purlins, except end verticals.
BOT CHORD 2x6 SP No 2		BOT CHORD	Rigid ceiling directly applied or 5-7-10 oc bracing
WEBS 2x4 SP No.3			

<b>REACTIONS.</b>	(size) 2=0-8-0 12=Mechanical
	Max Horz 2=188(LC 29)
	Max Uplift 2=2183(LC 8), 12=2366(LC 5)
	Max Grav 2=2754(LC 1), 12=2868(LC 1)

<b>FORCES.</b>	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown
TOP CHORD	2-3=-6391/5187, 3-4=-6243/5107, 4-5=-8155/6802, 5-6=-9253/7732, 6-7=-9133/7648, 7-8=-9133/7648, 8-9=-5380/4522, 9-10=-5380/4522, 10-11=-1890/1575, 11-12=-2935/2435
BOT CHORD	2-21=-4857/5858, 20-21=-4761/5782, 18-20=-6776/8155, 17-18=-7706/9253, 15-17=-6607/7909, 14-15=-6807/7909, 13-14=-1366/1644
WEBS	4-21=-559/741, 4-20=-2386/2814, 5-20=-990/841, 5-18=-1097/1332, 7-17=-265/243, 8-17=-1249/1443, 8-15=-423/554, 8-14=-2978/2487, 9-14=-286/262, 10-14=-3653/4365, 10-13=-1720/1446, 11-13=-2294/2757

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.  
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - Unbalanced roof live loads have been considered for this design.
  - Wind ASCE 7-22, Vult=140mph (3-second gust) Vasd=108mph, TCDL=4 2psf; BCDL=3.0psf; h=20ft; Cat. II, Exp C, Encl , GCpf=0.18, MWFRS (envelope) gable end zone, Lumber DOL=1.60 plate grip DOL=1.60
  - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (Jt=lb) 2=2183, 12=2366

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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: February 5, 2025

Continued on page 2

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Job	Truss	Truss Type	Qty	Ply	188 SW BIRCH GLEN	T38270637
4461086	T11	Hip Girder	1	2	Job Reference (optional)	

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

8.830 s Nov 8 2024 MiTek Industries, Inc. Tue Feb 4 16:42:02 2025 Page 2  
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#### NOTES-

- 11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 29 lb down and 56 lb up at 7-0-0, 19 lb down and 56 lb up at 9-0-12, 19 lb down and 56 lb up at 11-0-12, 19 lb down and 56 lb up at 13-0-12, 19 lb down and 56 lb up at 15-0-12, 19 lb down and 56 lb up at 17-0-12, 19 lb down and 56 lb up at 19-0-12, 19 lb down and 56 lb up at 21-0-12, 19 lb down and 56 lb up at 23-0-12, 19 lb down and 56 lb up at 25-0-12, 19 lb down and 56 lb up at 27-0-12, 19 lb down and 56 lb up at 29-0-12, 19 lb down and 56 lb up at 31-0-12, and 19 lb down and 56 lb up at 33-0-12, and 25 lb down and 57 lb up at 35-4-0 on top chord and 382 lb down and 427 lb up at 7-0-0, 161 lb down and 186 lb up at 9-0-12, 161 lb down and 186 lb up at 11-0-12, 161 lb down and 186 lb up at 13-0-12, 161 lb down and 186 lb up at 15-0-12, 161 lb down and 186 lb up at 17-0-12, 161 lb down and 186 lb up at 19-0-12, 161 lb down and 186 lb up at 21-0-12, 161 lb down and 186 lb up at 23-0-12, 161 lb down and 186 lb up at 25-0-12, 161 lb down and 186 lb up at 27-0-12, 161 lb down and 186 lb up at 29-0-12, 161 lb down and 186 lb up at 31-0-12, and 161 lb down and 186 lb up at 33-0-12, and 161 lb down and 186 lb up at 35-0-12 on bottom chord The design/selecion of such connection device(s) is the responsibility of others.

#### LOAD CASE(S) Standard

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

##### Uniform Loads (plf)

Vert: 1-4=-54, 4-10=-54, 10-11=-54, 2-12=-20

##### Concentrated Loads (lb)

Vert. 4=-10(F) 10=-10(F) 21=-382(F) 7=-10(F) 17=-161(F) 13=-161(F) 16=-161(F) 24=-10(F) 25=-10(F) 26=-10(F) 27=-10(F) 28=-10(F) 29=-10(F) 30=-10(F) 31=-10(F) 32=-10(F) 33=-10(F) 34=-10(F) 35=-10(F) 36=-161(F) 37=-161(F) 38=-161(F) 39=-161(F) 40=-161(F) 41=-161(F) 42=-161(F) 43=-161(F) 44=-161(F) 45=-161(F) 46=-161(F)

#### 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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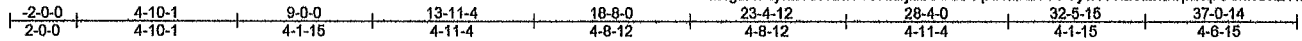


Job	Truss	Truss Type	Qty	Ply	188 SW BIRCH GLEN	T36279638
4461086	T12	Hip	1	1		

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

8.830 s Nov 8 2024 MiTek Industries, Inc. Tue Feb 4 16:42:02 2025 Page 1

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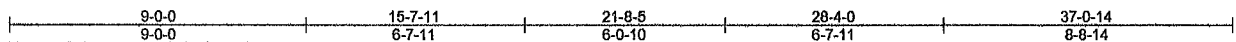
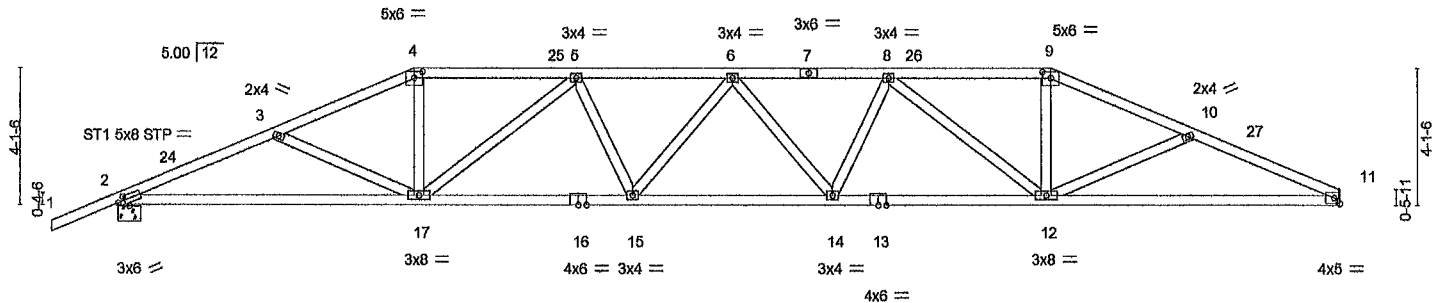


Plate Offsets (X,Y)-- [2-0-2-6,0-1-8], [4-0-3-0,0-2-4], [9-0-3-0,0-2-4]

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 20 0	Plate Grip DOL 1 25	TC 0.49	Vert(LL) 0.40	14-15	>999	240	MT20	244/190
TCDL 7 0	Lumber DOL 1 25	BC 0.90	Vert(CT) -0.58	14-15	>765	180		
BCLL 0 0 *	Rep Stress Incr YES	WB 0.67	Horz(CT) 0.17	11	n/a	n/a		
BCDL 10.0	Code FBC2023/TP12014	Matrix-MS					Weight 183 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 3-1-5 oc purlins  
BOT CHORD Rigid ceiling directly applied or 4-6-11 oc bracing

#### REACTIONS.

(size) 11=Mechanical, 2=0-8-0  
Max Horz 2=139(LC 12)  
Max Uplift 11=680(LC 13), 2=769(LC 12)  
Max Grav 11=1369(LC 1), 2=1483(LC 1)

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

TOP CHORD 2-3=-2995/1492, 3-4=-2709/1381, 4-5=-2487/1322, 5-6=-3229/1766, 6-8=-3220/1769,  
8-9=-2449/1318, 9-10=-2655/1377, 10-11=-2901/1467  
BOT CHORD 2-17=-1400/2726, 15-17=-1591/3124, 14-15=-1708/3322, 12-14=-1582/3107,  
11-12=-1294/2623  
WEBS 3-17=-297/302, 4-17=-348/786, 5-17=-889/533, 5-15=-158/300, 8-14=-165/320,  
8-12=-915/542, 9-12=-336/758, 10-12=-229/279

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind ASCE 7-22, Vult=140mph (3-second gust) Vasd=108mph, TCDL=4.2psf, BCDL=3 0psf; h=20ft, Cat. II, Exp C, Encl , GCpl=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 28-4-0, Zone2 28-4-0 to 32-8-3, Zone1 32-8-3 to 37-0-14 zone,C-C for members and forces & MWFRS for reactions shown, Lumber DOL=1 60 plate grip DOL=1 60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=680, 2=769

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

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

February 5,2025

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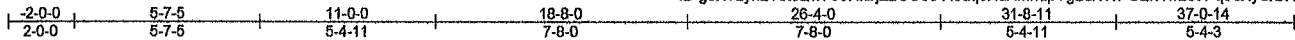
16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	188 SW BIRCH GLEN	T36279639
4461086	T13	Hip	1	1		

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

8.830 s Nov 8 2024 MITek Industries, Inc. Tue Feb 4 16:42:03 2025 Page 1

ID g5X7LynzTetcdEw796RxbjZzGC8o-A0uq6XaAmhdpYg2uXWPCEn1wz89Pq96XydlCNPzoSr2



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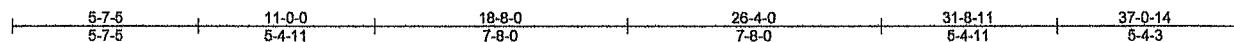
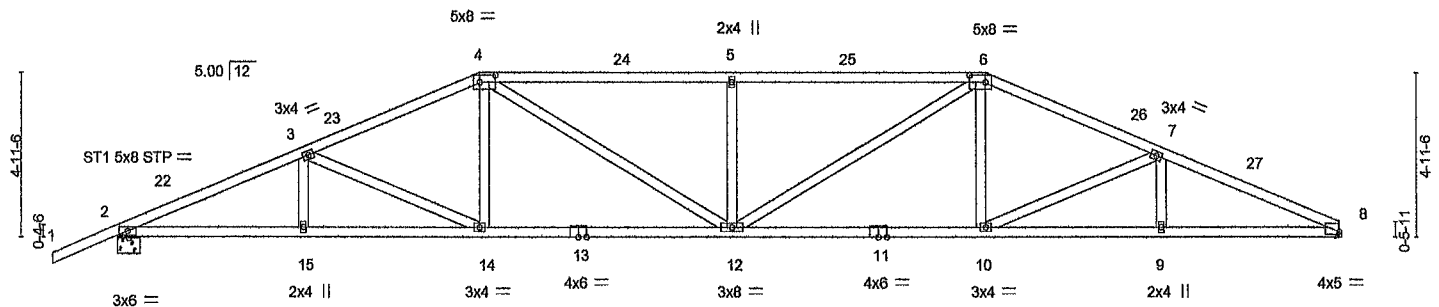


Plate Offsets (X,Y)-- [4-0-5-12,0-2-8], [6-0-5-12,0-2-8], [8-0-0-0,0-0-15]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.75	in (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Plate Grip DOL 1.25	BC 0.85	Vert(LL) 0.30 12 >999 240		
BCLL 0.0 *	Lumber DOL 1.25	WB 0.81	Vert(CT) -0.47 12-14 >944 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.15 8 n/a n/a		
	Code FBC2023/TP12014			Weight: 184 lb	FT = 20%

#### LUMBER-

TOP CHORD 2x4 SP No 2 \*Except\*  
4-6 2x4 SP No 1  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins  
BOT CHORD Rigid ceiling directly applied or 5-0-11 oc bracing

#### REACTIONS.

(size) 8=Mechanical, 2=0-8-0  
Max Horz 2=159(LC 12)  
Max Uplift 8=678(LC 13), 2=767(LC 12)  
Max Grav 8=1369(LC 1), 2=1483(LC 1)

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

TOP CHORD 2-3=-3005/1444, 3-4=-2545/1264, 4-5=-2807/1517, 5-6=-2807/1517, 6-7=-2522/1265,  
7-8=-2908/1413  
BOT CHORD 2-15=-1371/2725, 14-15=-1371/2725, 12-14=-1041/2307, 10-12=-1022/2287,  
9-10=-1227/2626, 8-9=-1227/2626  
WEBS 3-14=-472/363, 4-14=-110/411, 4-12=-408/716, 5-12=-475/434, 6-12=-416/738,  
6-10=-101/386, 7-10=-391/335

#### NOTES-

- Unbalanced roof live loads have been considered for this design
- Wind ASCE 7-22, Vult=140mph (3-second gust) Vasd=108mph, TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II, Exp C, 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 26-4-0, Zone2 26-4-0 to 30-6-15, Zone1 30-6-15 to 37-0-14 zone;C-C for members and forces & MWFRS for reactions shown, Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20 Opsf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=678, 2=767

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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:

February 5,2025

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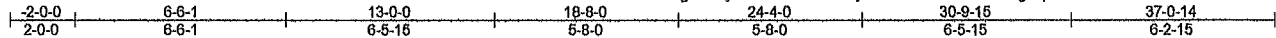
16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
314.434.1200 / MITek-US.com

Job 4461086	Truss T14	Truss Type Hip	Qty 1	Ply 1	188 SW BIRCH GLEN T36279640
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Builders FirstSource (Lake City, FL), Lake City, FL - 32055,

8.830 s Nov 8 2024 MiTek Industries, Inc. Tue Feb 4 16:42:04 2025 Page 1

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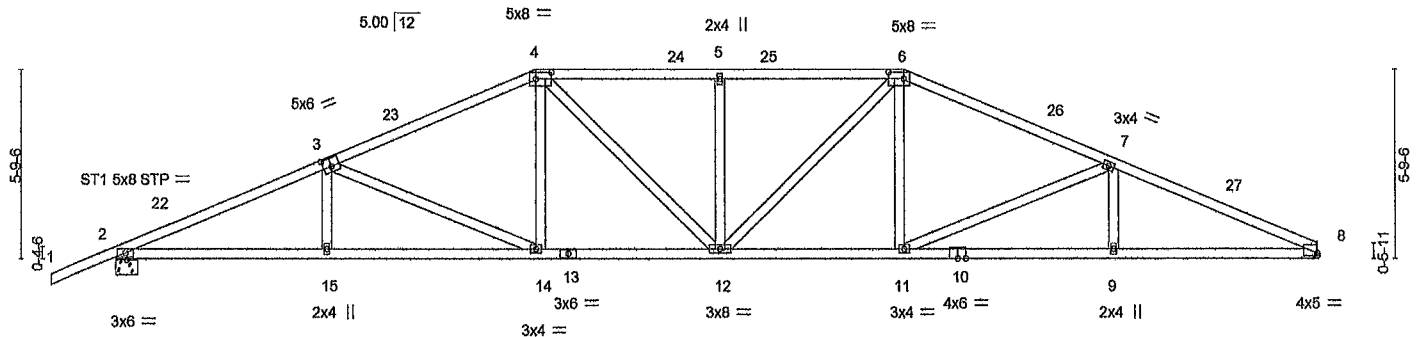


Plate Offsets (X,Y)--	[3-0-3-0,0-3-0], [4-0-5-12,0-2-8], [6-0-5-12,0-2-8], [8-0-0-0,0-0-15]
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LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 20 0	Plate Grip DOL 1.25	TC 0.78	Vert(LL) 0.26	12	>999	240	MT20	244/190
TCDL 7 0	Lumber DOL 1.25	BC 0.82	Vert(CT) -0.40	12-14	>999	180		
BCLL 0 0 *	Rep Stress Incr YES	WB 0.62	Horz(CT) 0.14	8	n/a	n/a		
BCDL 10 0	Code FBC2023/TP12014	Matrix-MS					Weight. 190 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 2-2-0 oc purlins  
BOT CHORD Rigid ceiling directly applied or 5-0-9 oc bracing

#### REACTIONS.

(size) 8=Mechanical, 2=0-8-0  
Max Horz 2=180(LC 12)  
Max Uplift 8=675(LC 13), 2=764(LC 12)  
Max Grav 8=1369(LC 1), 2=1483(LC 1)

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

TOP CHORD 2-3=-2981/1419, 3-4=-2368/1136, 4-5=-2340/1217, 5-6=-2340/1217, 6-7=-2356/1133,  
7-8=-2906/1398  
BOT CHORD 2-15=-1359/2698, 14-15=-1360/2694, 12-14=-928/2128, 11-12=-862/2118,  
9-11=-1206/2622, 8-9=-1206/2622  
WEBS 3-15=0/262 3-14=-632/474, 4-14=-152/435, 4-12=-267/437, 5-12=-340/308,  
6-12=-272/451, 6-11=-143/415, 7-11=-569/452

#### NOTES-

- Unbalanced roof live loads have been considered for this design
- Wind ASCE 7-22, Vult=140mph (3-second gust) Vasd=108mph, TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II, Exp C, 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 13-0-0, Zone2 13-0-0 to 17-2-15, Zone1 17-2-15 to 24-4-0, Zone2 24-4-0 to 28-6-15, Zone1 28-6-15 to 37-0-14 zone; C-C for members and forces & MWFRS for reactions shown, Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=ib) 8=675, 2=764

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:

February 5, 2025

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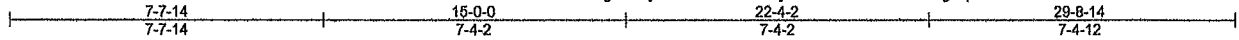
16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	188 SW BIRCH GLEN	T38279641
4461086	T15	Common	1	1		

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

8.830 s Nov 8 2024 MiTek Industries, Inc. Tue Feb 4 16:42 04 2025 Page 1

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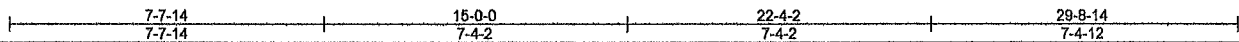
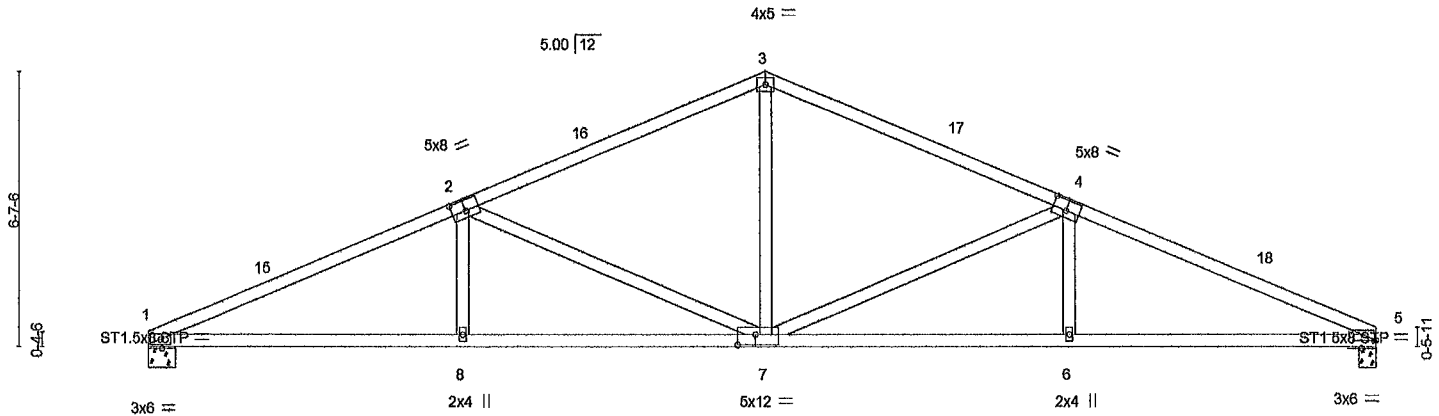


Plate Offsets (X,Y) - [2-0-4-0-0-3-0], [4-0-4-0-0-3-0], [5-0-0-8-0-0-3], [7-0-5-4-0-3-0]

LOADING (psf)	SPACING-	CSL	DEFL.	PLATES	GRIP
TCLL 20 0	2-0-0	TC 0.65	in (loc) l/defl L/d	MT20	244/190
TCDL 7 0	Plate Grip DOL 1.25	BC 0.74	Vert(LL) 0.19 8-11 >999 240		
BCLL 0 0 *	Lumber DOL 1.25	WB 0.98	Vert(CT) -0.27 6-7 >999 180		
BCDL 10 0	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.09 5 n/a n/a		
	Code FBC2023/TP12014			Weight: 133 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 3-2-5 oc purlins  
BOT CHORD Rigid ceiling directly applied or 5-5-13 oc bracing

#### REACTIONS.

(size) 1=0-8-0, 5=0-4-14  
Max Horz 1=159(LC 12)  
Max Uplift 1=537(LC 12), 5=533(LC 13)  
Max Grav 1=1100(LC 1), 5=1100(LC 1)

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

TOP CHORD 1-2=-2277/1096, 2-3=-1528/814, 3-4=-1525/813, 4-5=-2214/1068  
BOT CHORD 1-8=-1040/2045, 7-8=-1041/2044, 6-7=-887/1979, 5-6=-887/1979  
WEBS 3-7=-311/751, 4-7=-737/562, 4-6=0/289, 2-7=-800/596, 2-8=0/310

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind ASCE 7-22, Vult=140mph (3-second gust) Vasd=108mph, TCDL=4.2psf; BCDL=3 0psf; h=20ft; Cat. II, Exp C, Encl, GCp1=0.18, MWFRS (envelope) gable end zone and C-C Zone3 0-0-0 to 3-0-0, Zone1 3-0-0 to 15-0-0, Zone2 15-0-0 to 19-2-15, Zone1 19-2-15 to 29-8-14 zone; C-C for members and forces & MWFRS for reactions shown, Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=537, 5=533

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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

February 5, 2025

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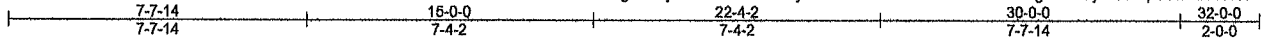
16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
314.434.1200 / MiTek-US.com

Job 4461086	Truss T16	Truss Type Common	Qty 1	Ply 1	188 SW BIRCH GLEN T36279642
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Builders FirstSource (Lake City, FL), Lake City, FL - 32055,

8.830 s Nov 8 2024 MiTek Industries, Inc. Tue Feb 4 16:42:05 2025 Page 1

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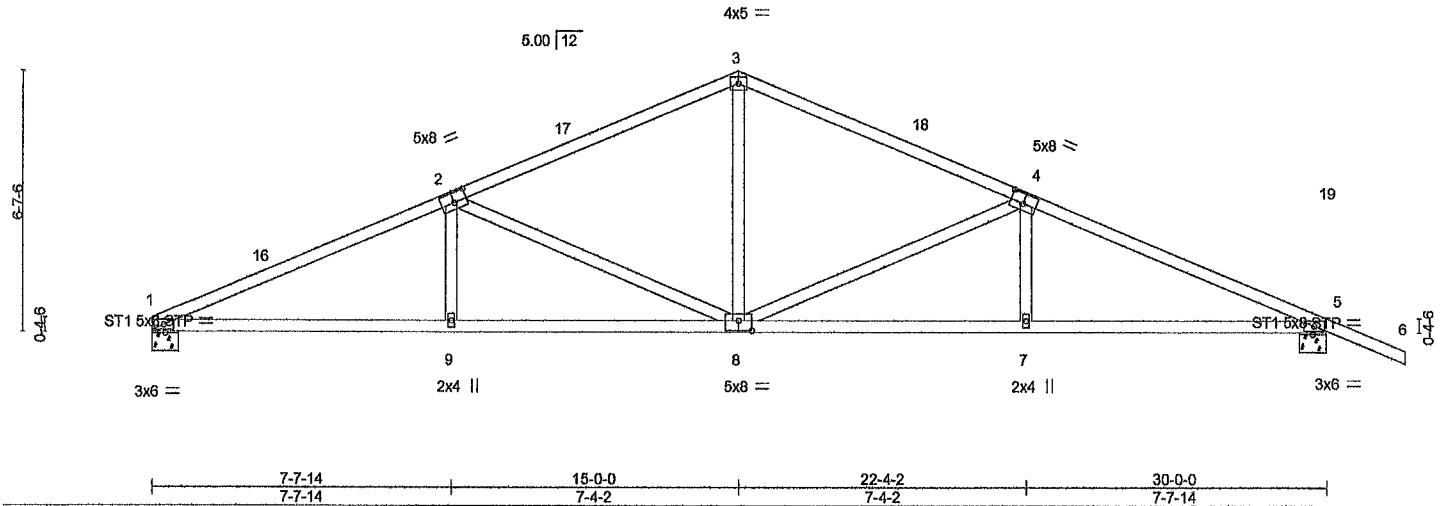


Plate Offsets (X,Y) -		[2-0-4-0,0-3-0], [4-0-4-0,0-3-0], [8-0-4-0,0-3-0]									
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 20 0		Plate Grip DOL	1 25	TC 0 66		Vert(LL)	0 19 9-12	>999	240	MT20	244/190
TCDL 7 0		Lumber DOL	1 25	BC 0 75		Vert(CT)	-0.27 7-8	>999	180		
BCLL 0 0 *		Rep Stress Incr	YES	WB 0 98		Horz(CT)	0 09 5	n/a	n/a		
BCDL 10 0		Code FBC2023/TP12014		Matrix-MS						Weight: 137 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 3-2-3 oc purlins  
BOT CHORD Rigid ceiling directly applied or 5-6-7 oc bracing.

#### REACTIONS.

(size) 1=0-8-0, 5=0-8-0  
Max Horz 1=-197(LC 13)  
Max Uplift 1=-539(LC 12), 5=-625(LC 13)  
Max Grav 1=1106(LC 1), 5=1222(LC 1)

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

TOP CHORD 1-2=-2293/1101, 2-3=-1540/819, 3-4=-1540/795, 4-5=-2269/1065  
BOT CHORD 1-9=-1022/2060, 8-9=-1022/2059, 7-8=-871/2034, 5-7=-871/2035  
WEBS 3-8=-315/766, 4-8=-774/574, 4-7=0/309, 2-8=-802/597, 2-9=0/311

#### NOTES-

- Unbalanced roof live loads have been considered for this design
- Wind ASCE 7-22, Vult=140mph (3-second gust) Vasd=108mph, TCDL=4.2psf, BCDL=3 0psf, h=20ft; Cat. II, Exp C, Encl , GCpl=0 18 MWFRS (envelope) gable end zone and C-C Zone3 0-0-0 to 3-0-0, Zone1 3-0-0 to 15-0-0, Zone2 15-0-0 to 19-2-15 Zone1 19-2-15 to 32-0-0 zone; C-C for members and forces & MWFRS for reactions shown, Lumber DOL=1 60 plate grip DOL=1 60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- This truss has been designed for a 10 0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=539, 5=625

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:

February 5,2025

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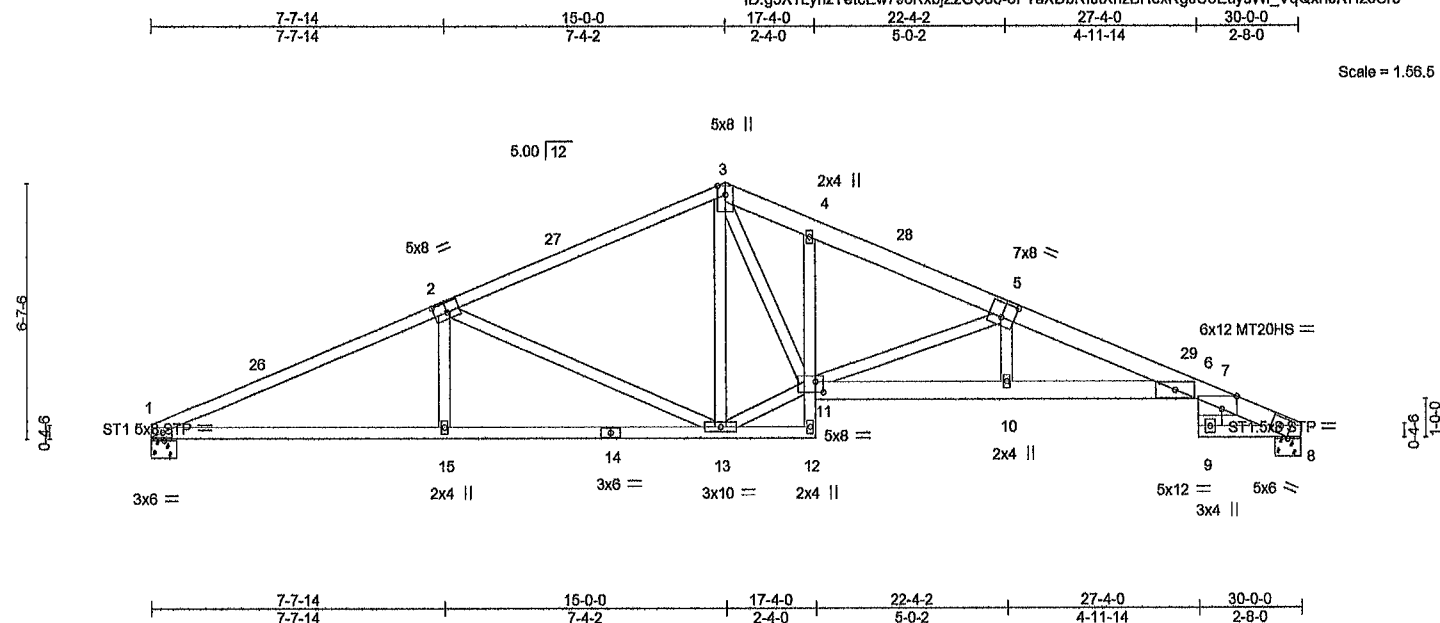


Plate Offsets (X,Y)- [2-0-4-0,0-3-0], [5-0-4-0,0-4-8], [7-0-4-12,Edge], [11-0-2-8,0-3-4]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP		
TCLL	20.0	Plate Grip DOL	1.25	TC	0.85	Vert(LL)	0.32	10-21	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.74	Vert(CT)	-0.48	10-21	>744	180	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.94	Horz(CT)	0.26	8	n/a	n/a		
BCDL	10.0	Code FBC2023/TPI2014		Matrix-MS							Weight: 171 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No 2 \*Except\*  
3-5 2x6 SP No 2, 5-8, 2x6 SP 2400F 2.0E or 2x6 SP M 26

BOT CHORD 2x4 SP No 2 \*Except\*  
4-12 2x4 SP No.3, 6-11 2x6 SP 2400F 2.0E or 2x6 SP M 26  
7-9 2x8 SP 2400F 2.0E

WEBS 2x4 SP No 3

**REACTIONS.** (size) 1=0-8-0, 8=0-8-0  
 Max Horz 1=158(LC 12)  
 Max Uplift 1=-536(LC 12), 8=-532(LC 13)  
 Max Grav 1=1097(LC 1), 8=1098(LC 1)

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

**TOP CHORD** 1-2=-2271/1096, 2-3=-1723/813, 3-4=-2015/1119, 4-5=-2082/1046, 5-6=-3322/1586,  
6-7=-363/235, 7-8=-1544/893

**BOT CHORD** 1-15=-1035/2040, 13-15=-1035/2039, 10-11=-1376/3115, 6-10=-1379/3126,  
8-9=-709/1398

**WEBS** 2-15=0/316, 2-13=-791/587, 11-13=-490/1343, 3-11=-671/1316, 5-11=-1363/775,  
5-10=-156/480

**NOTES.**

- 1) Unbalanced roof live loads have been considered for this design  
Wind ASCE 7-22, Vult=140mph (3-second gust) Vasd=108mph, TCDF=4.2psf; BCDL=3 Opsf; h=20ft, Cat II, Exp C, Encl ,  
GCp=0.18, MWFRS (envelope) gable end zone and C-C Zone3 0-0 to 3-0-0, Zone1 3-0-0 to 15-0-0, Zone2 15-0-0 to 19-2-15,  
Zone1 19-2-15 to 29-8-0 zone, C-C for members and forces & MWFRS for reactions shown, Lumber DOL=1 60 plate grip DOL=1 60
- 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 4) All plates are MT20 plates unless otherwise indicated
- 5) This truss has been designed for a 10 0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 20 Opsf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb)  
1=536. 8=532.

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

February 5, 2025



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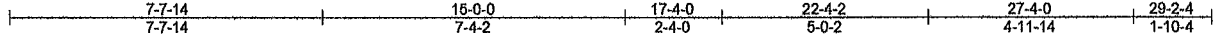
16023 Swingley Ridge Rd  
Chesterfield, MO 63017  
314.434.1200 / MITEK-US.com

Job	Truss	Truss Type	Qty	Ply	188 SW BIRCH GLEN	T36279644
4461088	T18	Roof Special	4	1		

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

8.830 s Nov 8 2024 MiTek Industries, Inc. Tue Feb 4 16:42 06 2025 Page 1

ID:g5X?LynzTetcEw796RxbjZzGC8o-bbZykZc33c?OP7mTCeyvrQfSGLCs1RI\_ebWVs\_kzoSr?



Scale = 1/2" = 1' 0"

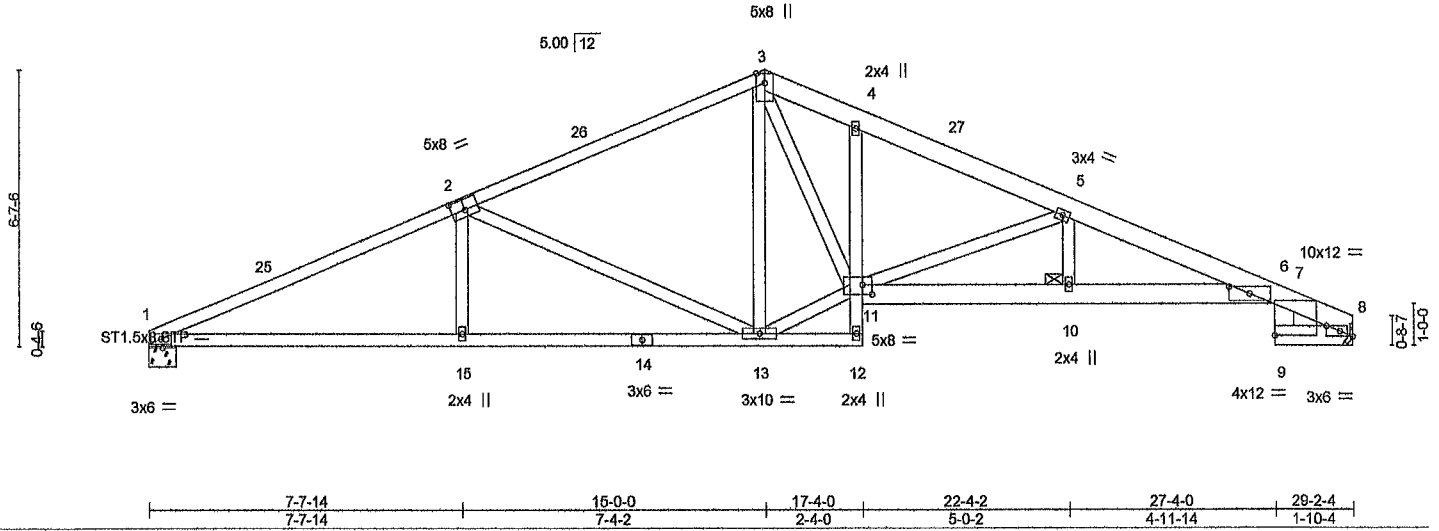


Plate Offsets (X,Y)-- [2:0-4-0,0-3-0], [6:0-5-14,0-2-0], [7:Edge,0-0-4], [8:0-3-14,Edge], [11:0-2-12,0-2-12]

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.68	Vert(LL) 0.23	10-24	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.73	Vert(CT) -0.35	10-24	>993	180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.94	Horz(CT) 0.18	8	n/a	n/a		
BCDL 10.0	Code FBC2023/TP12014	Matrix-MS					Weight: 168 lb	FT = 20%

**LUMBER-**  
**TOP CHORD** 2x4 SP No.2 \*Except\*  
3-8 2x6 SP 2400F 2.0E or 2x6 SP M 26  
**BOT CHORD** 2x4 SP No.2 \*Except\*  
4-12 2x4 SP No.3, 6-11 2x6 SP 2400F 2.0E or 2x6 SP M 26  
7-9,8-9 2x6 SP No.2  
**WEBS** 2x4 SP No 3

**BRACING-**  
**TOP CHORD** Structural wood sheathing directly applied or 3-3-0 oc purlins  
**BOT CHORD** Rigid ceiling directly applied or 5-6-3 oc bracing  
**JOINTS** 1 Brace at Jt(s): 10

**REACTIONS.** (size) 8=Mechanical, 1=0-8-0  
Max Horz 1=184(LC 12)  
Max Uplift 8=521(LC 13), 1=530(LC 12)  
Max Grav 8=1075(LC 1), 1=1080(LC 1)

**FORCES.** (lb) - Max. Comp./Max Ten. - All forces 250 (lb) or less except when shown  
**TOP CHORD** 1-2=2226/1075, 2-3=1478/792, 3-4=1939/1085, 4-5=2007/1014, 5-6=3102/1494,  
6-7=368/229, 7-8=1220/653  
**BOT CHORD** 1-15=1027/1999, 13-15=1027/1998, 10-11=1291/2909, 6-10=1291/2909, 7-9=142/288,  
8-9=384/750  
**WEBS** 2-15=0/317, 2-13=791/586, 11-13=487/1315, 3-11=644/1248, 5-11=1210/703,  
5-10=120/418

- NOTES-**
- Unbalanced roof live loads have been considered for this design
  - Wind ASCE 7-22, Vult=140mph (3-second gust) Vasd=108mph, TCCL=4.2psf, BCDL=3.0psf h=20ft; Cat. II, Exp C Encl, GCp1=0.18, MWFRS (envelope) gable end zone and C-C Zone3 0-0-0 to 3-0-0, Zone1 3-0-0 to 15-0-0, Zone2 15-0-0 to 19-2-15, Zone1 19-2-15 to 29-2-4 zone, C-C for members and forces & MWFRS for reactions shown, Lumber DOL=1.60 plate grip DOL=1.60
  - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (if=lb) 8=521, 1=530

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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:

February 5, 2025

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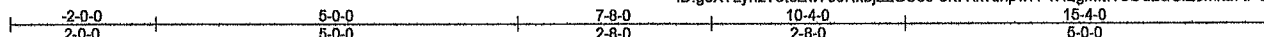
16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
314.434.1200 / MiTek-US.com

Job 4481086	Truss T19	Truss Type Hip Girder	Qty 1	Ply 2	188 SW BIRCH GLEN T36279645
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Builders FirstSource (Lake City, FL), Lake City, FL - 32055,

8.830 s Nov 8 2024 MiTek Industries, Inc. Tue Feb 4 16:42:07 2025 Page 1

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Scale = 1.29.8

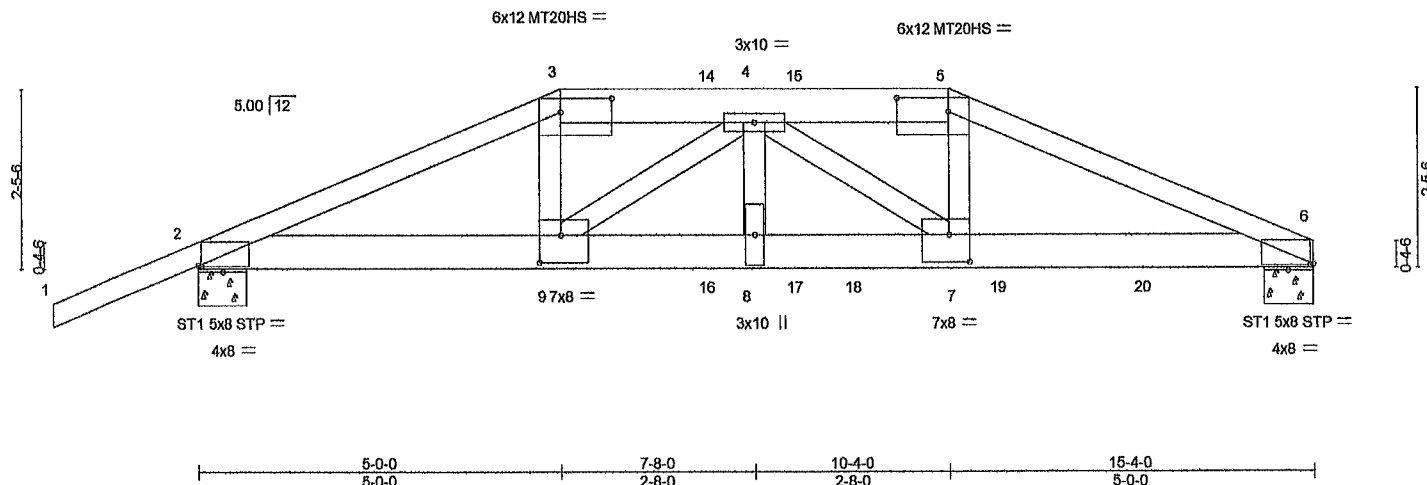


Plate Offsets (X,Y)--		[2.0-0-7.0-0-2], [3.0-8.8-0.2-4], [5.0-8.8-0.2-4], [6.0-0-7.0-0-2], [7.0-3-8.0-4-8], [9.0-3-8.0-4-8]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 20.0	Plate Grip DOL	1.25	TC 0.85
TCDL 7.0	Lumber DOL	1.25	BC 0.67
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.74
BCDL 10.0	Code	FBC2023/TP12014	Matrix-MS
			DEFL.
			in (loc) l/defl L/d
			Vert(LL) 0.22 8-9 >855 240
			Vert(CT) -0.25 8-9 >730 180
			Horz(CT) 0.06 6 n/a n/a
			PLATES GRIP
			MT20 244/190
			MT20HS 187/143
			Weight: 168 lb FT = 20%

#### LUMBER-

TOP CHORD 2x4 SP No.2 \*Except\*  
3-5 2x6 SP No.2  
BOT CHORD 2x6 SP 2400F 2.0E or 2x6 SP M 26  
WEBS 2x4 SP No.3

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-9-12 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 7-8-13 oc bracing

#### REACTIONS.

(size) 6=0-8-0, 2=0-8-0  
Max Horz 2=91(LC 33)  
Max Uplift 6=3007(LC 9), 2=2377(LC 8)  
Max Grav 6=4995(LC 1), 2=3549(LC 1)

#### FORCES.

(lb) - Max Comp./Max Ten - All forces 250 (lb) or less except when shown  
TOP CHORD 2-3=-8529/5723, 3-4=-7619/5180, 4-5=-9680/6040, 5-6=-10791/6665  
BOT CHORD 2-9=-5252/7834, 8-9=-7251/10930, 7-8=-7251/10930, 6-7=-6086/9955  
WEBS 3-9=-2023/3067, 4-9=-4117/2720, 4-8=-2240/2925, 4-7=-1617/1678, 5-7=-2349/3905

#### NOTES-

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows.  
Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.  
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-7-0 oc.  
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section Ply to ply connections have been provided to distribute only loads noted as (F) or (B) unless otherwise indicated
- Unbalanced roof live loads have been considered for this design.
- Wind ASCE 7-22, Vult=140mph (3-second gust) Vasd=108mph, TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II, Exp C, Encl , GCp=0.18, MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding
- All plates are MT20 plates unless otherwise indicated
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads
- \* This truss has been designed for a live load of 20 psf 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 (if=lb) 6=3007, 2=2377
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 73 lb down and 108 lb up at 5-0-0, 54 lb down and 103 lb up at 7-0-12, and 54 lb down and 103 lb up at 8-3-4, and 73 lb down and 108 lb up at 10-4-0 on top chord, and 137 lb down and 18 lb up at 5-0-0, 46 lb down and 18 lb up at 7-0-12, 2848 lb down and 2386 lb up at 7-1-9, 46 lb down and 18 lb up at 8-3-4, 1349 lb down and 700 lb up at 9-0-12, 137 lb down and 18 lb up at 10-3-4, and 1349 lb down and 698 lb up at 11-0-12, and 1349 lb down and 695 lb up at 13-0-12 on bottom chord The design/selection of such connection device(s) is the responsibility of others.

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Chesterfield, MO 63017  
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February 5,2025

Continued on page 2

LOAD CASE(S) - Standard

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Job	Truss	Truss Type	Qty	Ply	188 SW BIRCH GLEN	T36279645
4461086	T19	Hip Girder	1	2	Job Reference (optional)	

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

8.830 s Nov 8 2024 MiTek Industries, Inc. Tue Feb 4 16:42:07 2025 Page 2  
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**LOAD CASE(S) Standard**

1) Dead + Roof Live (balanced) Lumber Increase=1.25, Plate Increase=1 25

Uniform Loads (plf)

Vert: 1-3=-54, 3-5=-54, 5-6=-54, 2-6=-20

Concentrated Loads (lb)

Vert. 3=-54(F) 5=-54(F) 9=-63(F) 7=-63(F) 14=-54(F) 15=-54(F) 16=-2881(F=-33, B=-2848) 17=-33(F) 18=-1349(B) 19=-1349(B) 20=-1349(B)

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Job	Truss	Truss Type	Qty	Ply	188 SW BIRCH GLEN	T36279646
4461086	T20	Half Hip Girder	1	1		

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

8.830 s Nov 8 2024 MiTek Industries, Inc. Tue Feb 4 16:42 07 2025 Page 1

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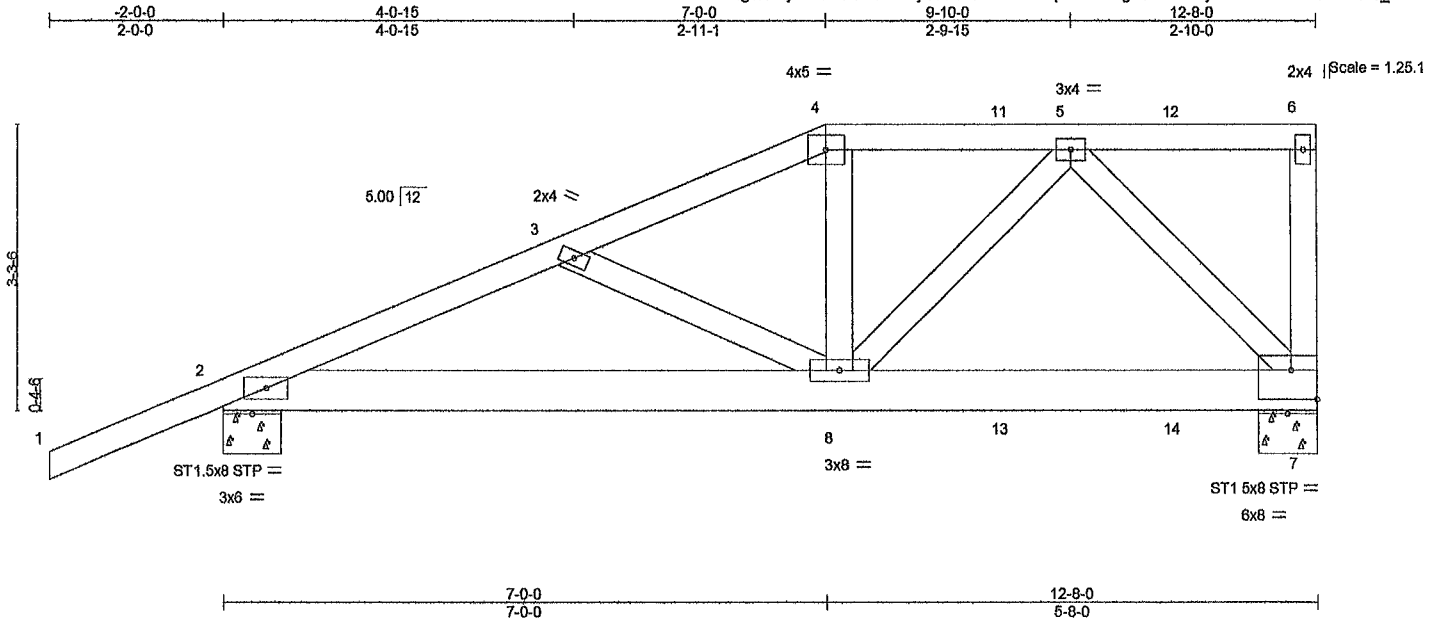


Plate Offsets (X,Y)-- [7-Edge,0-4-0]									
LOADING (psf)		SPACING- 2-0-0		CSI		DEFL. in (loc) l/defl L/d		PLATES GRIP	
TCLL	20.0	Plate Grip DOL	1 25	TC	0.29	Vert(LL)	0 07 7-8 >999	240	MT20 244/190
TCDL	7 0	Lumber DOL	1 25	BC	0.39	Vert(CT)	-0.06 7-8 >999	180	
BCLL	0 0 *	Rep Stress Incr	NO	WB	0.30	Horz(CT)	-0 01 7 n/a n/a		
BCDL	10.0	Code FBC2023/TP12014		Matrix-MS					
								Weight: 76 lb	FT = 20%

#### LUMBER-

TOP CHORD 2x4 SP No 2  
BOT CHORD 2x6 SP No 2  
WEBS 2x4 SP No.3

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-10-10 oc purlins, except end verticals  
BOT CHORD Rigid ceiling directly applied or 7-0-0 oc bracing

#### REACTIONS.

(size) 7=0-8-0, 2=0-8-0  
Max Horz 2=210(LC 8)  
Max Uplift 7=-813(LC 8), 2=-582(LC 8)  
Max Grav 7=979(LC 1), 2=815(LC 1)

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

TOP CHORD 2-3=-1421/1085, 3-4=-1222/959, 4-5=-1111/928  
BOT CHORD 2-8=-1104/1285, 7-8=-540/650  
WEBS 4-8=-219/351, 5-8=-571/678, 5-7=-918/762

#### NOTES-

- Unbalanced roof live loads have been considered for this design
- Wind ASCE 7-22, Vult=140mph (3-second gust) Vasd=108mph, TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II, Exp C, Encl , GCpi=0.18, MWFRS (envelope) gable end zone, Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (It=lb) 7=813 2=582
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 29 lb down and 58 lb up at 7-0-0, 19 lb down and 58 lb up at 9-0-12, and 19 lb down and 58 lb up at 11-0-12, and 27 lb down and 57 lb up at 12-8-4 on top chord, and 382 lb down and 427 lb up at 7-0-0, and 161 lb down and 186 lb up at 9-0-12, and 161 lb down and 186 lb up at 11-0-12 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).

#### LOAD CASE(S) Standard

- Dead + Roof Live (balanced) Lumber Increase=1.25, Plate Increase=1.25  
Uniform Loads (plf)  
Vert: 1-4=-54, 4-8=-54, 2-7=-20  
Concentrated Loads (lb)  
Vert: 4=-10(F) 6=-27(F) 8=-382(F) 11=-10(F) 12=-10(F) 13=-161(F) 14=-161(F)

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

February 5, 2025

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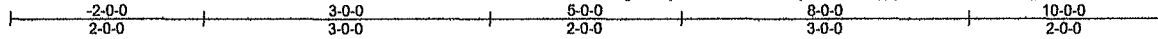
16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
314.434 1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	188 SW BIRCH GLEN	T38279647
4461086	T21	Hip Girder	1	1		

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

8.830 s Nov 8 2024 MiTek Industries, Inc. Tue Feb 4 16:42 08 2025 Page 1

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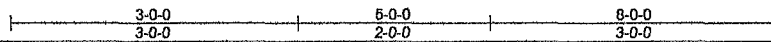
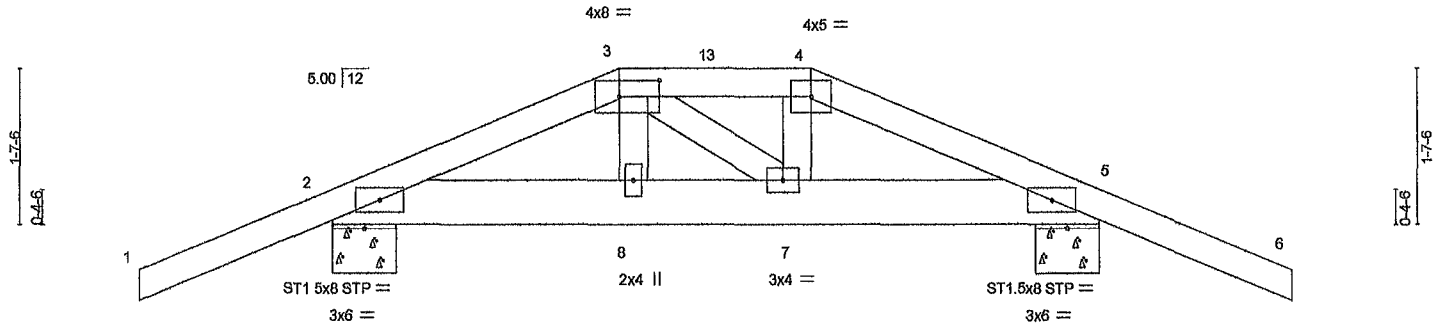


Plate Offsets (X,Y)-- [3.0-5.0,0-2.0]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20 0	Plate Grip DOL	2-0-0	TC 0.27	Vert(LL)	0 01	8	>999	240	MT20	244/190
TCDL 7 0	Lumber DOL	1.25	BC 0.15	Vert(CT)	-0.01	8	>999	180		
BCLL 0 0 *	Rep Stress Incr	NO	WB 0.04	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10 0	Code FBC2023/TPI2014		Matrix-MS						Weight 43 lb	FT = 20%

#### LUMBER-

TOP CHORD 2x4 SP No 2  
BOT CHORD 2x6 SP No 2  
WEBS 2x4 SP No.3

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing

#### REACTIONS.

(size) 2=0-8-0, 5=0-8-0  
Max Horz 2=52(LC 8)  
Max Uplift 2=-374(LC 4), 5=-374(LC 5)  
Max Grav 2=406(LC 1), 5=406(LC 1)

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

TOP CHORD 2-3=-465/403, 3-4=-446/389, 4-5=-502/399  
BOT CHORD 2-8=-289/481, 7-8=-294/491, 5-7=-308/513

#### NOTES-

- Unbalanced roof live loads have been considered for this design
- Wind ASCE 7-22, Vult=140mph (3-second gust) Vasd=108mph, TCDL=4.2psf, BCDL=3.0psf; h=20ft; Cat. II, Exp C Encl, GCpi=0.18, MWFRS (envelope) gable end zone; porch left and right exposed, Lumber DOL=1 60 plate grip DOL=1 60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=374, 5=374
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 29 lb down and 51 lb up at 3-0-0, and 165 lb down and 80 lb up at 5-0-0 on top chord, and 167 lb down and 82 lb up at 3-0-0, and 167 lb down and 82 lb up at 4-11-4 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)

#### LOAD CASE(S) Standard

- 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, 2-5=-20  
Concentrated Loads (lb)  
Vert. 3=-3(B) 4=-3(B) 8=2(B) 7=2(B)

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: February 5,2025

**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 D88-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbccomponents.com)

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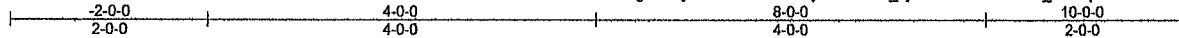
16023 Swingley Ridge Rd  
Chesterfield, MO 63017  
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	188 SW BIRCH GLEN	T38279648
4461086	T22	Common	1	1		

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

8.830 s Nov 8 2024 MiTek Industries, Inc. Tue Feb 4 16:42:08 2025 Page 1

ID: g5X7LynzTetEw796RxbjZzGC8o-X\_hj9EdJaEF6eRwsK3\_NnrkqP91IVZwG6v7z1czoSqz



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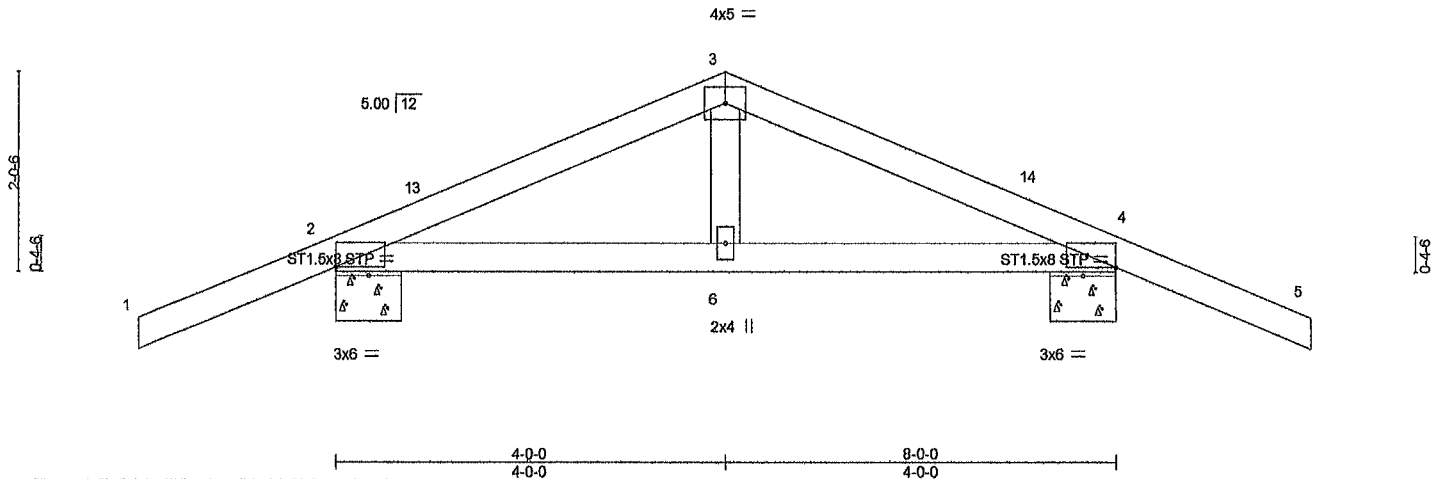


Plate Offsets (X,Y)-- [2-0-0,0-0-1], [4-0-3-8,Edge]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.25		TC 0.57	Vert(LL) 0 02	6-12	>999	240		MT20	244/190
TCDL 7 0	Lumber DOL 1.25		BC 0 16	Vert(CT) 0 02	6-12	>999	180			
BCLL 0.0 *	Rep Stress Incr YES		WB 0.06	Horz(CT) 0 00	4	n/a	n/a			
BCDL 10 0	Code FBC2023/TP12014		Matrix-MS						Weight 34 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  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing

#### REACTIONS.

(size) 2=0-8-0, 4=0-8-0  
Max Horz 2=62(LC 12)  
Max Uplift 2=-328(LC 8), 4=-328(LC 9)  
Max Grav 2=404(LC 1), 4=404(LC 1)

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

TOP CHORD 2-3=-375/544, 3-4=-375/544  
BOT CHORD 2-6=-316/312, 4-6=-316/312

#### NOTES-

- Unbalanced roof live loads have been considered for this design
- Wind ASCE 7-22, Vult=140mph (3-second gust) Vasd=108mph, TCDL=4.2psf, BCDL=3.0psf, h=20ft; Cat. II, Exp C, 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 4-0-0, Zone2 4-0-0 to 8-0-0, Zone1 8-0-0 to 10-0-0 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
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=328, 4=328

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:

February 5, 2025



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

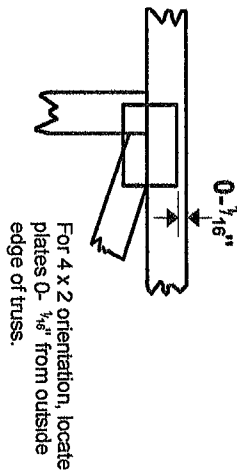
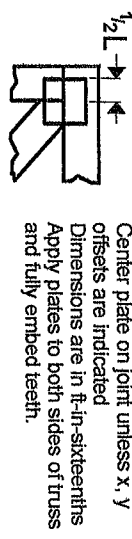
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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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# Symbols

## PLATE LOCATION AND ORIENTATION



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

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

## PLATE SIZE

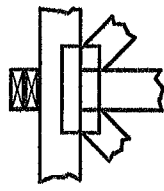
**4 X 4**  
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## 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.

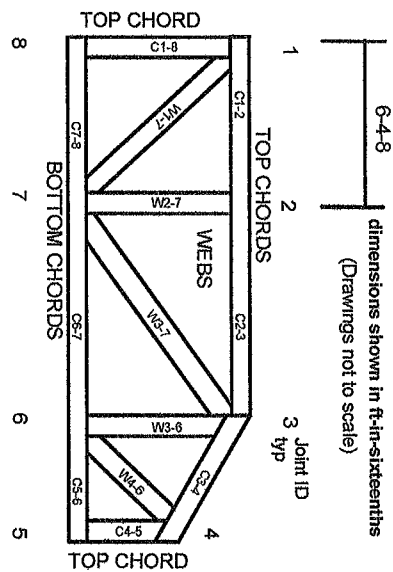
## BEARING



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/TTP1 National Design Specification for Metal Plate Connected Wood Truss Construction.  
DSB-22. 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 CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.**  
**CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.**

## Product Code Approvals

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

## Design General Notes

Trusses are designed for wind loads in the plane of the truss unless otherwise shown  
Lumber design values are in accordance with ANSI/TPI 1 section 6.3. These truss designs rely on lumber values established by others.

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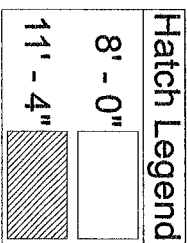
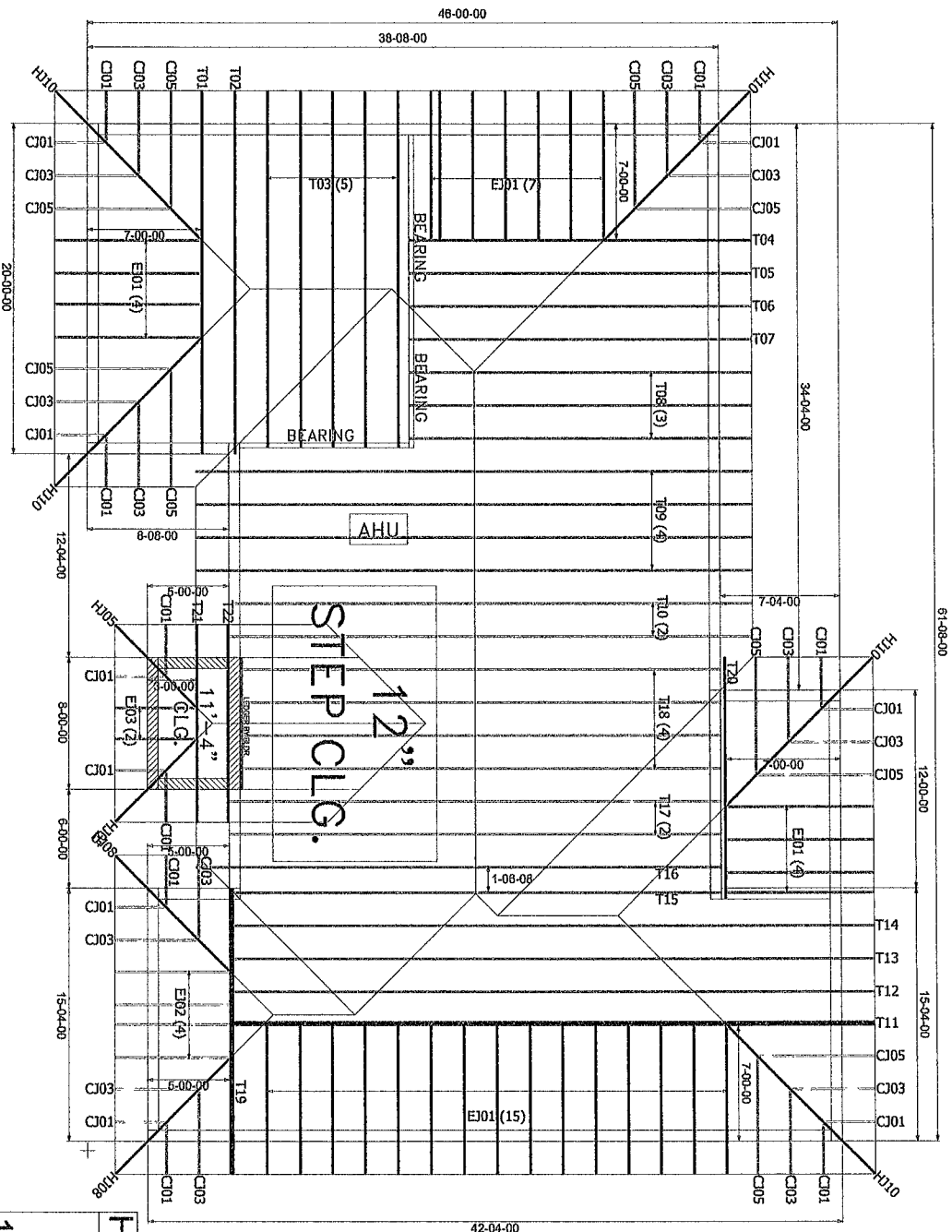
# General Safety Notes

## 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 1 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/TPI 1
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 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. Carmer 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/TPI 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.

# MITek®

# 5/12 PITCH - 24" O/H



Summaries of limited excerpts of the Code, ANSI/TPI 1-2014, and BCSI, and associated commentary, are provided within the truss submittal package in the Builders FirstSource Component Truss Responsibility and Liability Disclosure. These critical excerpts include, among other elements, critical safety information as well as specific Scope-of-Work assignments (and limitations of the same) for the Owner, Contractor, Building Designer, Truss Designer, and Truss Manufacturer. It is essential that ALL parties to the design and use of the Trusses review and become familiar with the information provided in the Builders FirstSource Component Truss Responsibility and Liability Disclosure, as well as the referenced sources, prior to performing work on the associated project.



**WARNING**  
This drawing is not to be used for construction of a building without the approval of the Designer. Any modification or alteration to the design without the approval of the Designer is prohibited. The Designer assumes no responsibility for the safety or soundness of the design or the construction of the building.

**IMPORTANT**  
This Drawing Must Be Approved And Returned Before Production. The Designer's approval is required for all modifications and conditions prior to production. All notes and dimensions have been accepted.

By: \_\_\_\_\_ Date: \_\_\_\_\_

**FINAL LAYOUT FOR PRODUCTION**  
Note: \_\_\_\_\_  
Revised: \_\_\_\_\_  
Revised: \_\_\_\_\_

**GENERAL NOTES**  
1. ALL DIMENSIONS ARE IN FEET AND INCHES.  
2. ALL DIMENSIONS ARE TO CENTER UNLESS NOTED OTHERWISE.  
3. ALL DIMENSIONS ARE TO BE VERIFIED BY THE FABRICATOR.  
4. ALL DIMENSIONS ARE TO BE VERIFIED BY THE FABRICATOR.  
5. ALL DIMENSIONS ARE TO BE VERIFIED BY THE FABRICATOR.

**CEILING PITCH:** 5/12  
**TOP CHORD SIZE:** 2X4  
**BOTTOM CHORD SIZE:** 2X4  
**OVERHANG LENGTH:** 24"  
**END CUT:** PLUMB  
**CANTILEVER:** N/A  
**TRUSS SPACING:** 24"  
**BUILDING CODE:** IRC 2021

**BEARING HEIGHT SCHEDULE**

**BUILDER:** Yasmanis Reyes  
**MODEL:** 1826  
**ELEV:** HIP  
**ADDRESS:** 912 NW Falmouth Drive  
**LOT / BLDG:** N/A  
**SUBDIVISION:** SPEC RES  
**CITY:** \_\_\_\_\_  
**DRAWN BY:** Madeline Kim  
**JOB #:** 461033  
**DATE:** 2/24/2022  
**SCALE:** N.T.S.

**REVISIONS:**