



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

73

RE: 3981505 - AARON BUTLER RES.

**Site Information:**

Customer Info: AARON BUTLER Project Name: Butler Res. Model: Custom  
Lot/Block: N/A Subdivision: N/A  
Address: TBD, TBD  
City: Columbia Cty State: FL

MiTek, Inc.

16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
314.434.1200

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

Name: License #:  
Address: State:  
City:

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

Design Code: FBC2023/TPI2014 Design Program: MiTek 20/20 8.7  
Wind Code: ASCE 7-22 Wind Speed: 130 mph  
Roof Load: 37.0 psf Floor Load: N/A psf

This package includes 39 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	T34036538	EJ01	5/31/24	15	T34036552	T16	5/31/24
2	T34036539	PB01	5/31/24	16	T34036553	T17	5/31/24
3	T34036540	PB02	5/31/24	17	T34036554	T18	5/31/24
4	T34036541	PB03	5/31/24	18	T34036555	T18G	5/31/24
5	T34036542	T01	5/31/24	19	T34036556	T19	5/31/24
6	T34036543	T01G	5/31/24	20	T34036557	T19G	5/31/24
7	T34036544	T02	5/31/24	21	T34036558	T21	5/31/24
8	T34036545	T03	5/31/24	22	T34036559	T21G	5/31/24
9	T34036546	T09	5/31/24	23	T34036560	T22	5/31/24
10	T34036547	T10	5/31/24	24	T34036561	T23	5/31/24
11	T34036548	T12	5/31/24	25	T34036562	T25	5/31/24
12	T34036549	T13	5/31/24	26	T34036563	T25G	5/31/24
13	T34036550	T14	5/31/24	27	T34036564	T26G	5/31/24
14	T34036551	T15	5/31/24	28	T34036565	T28	5/31/24



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, 2025.



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

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

May 31,2024

Velez, Joaquin

1 of 2



RE: 3981505 - AARON BUTLER RES.

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

**Site Information:**

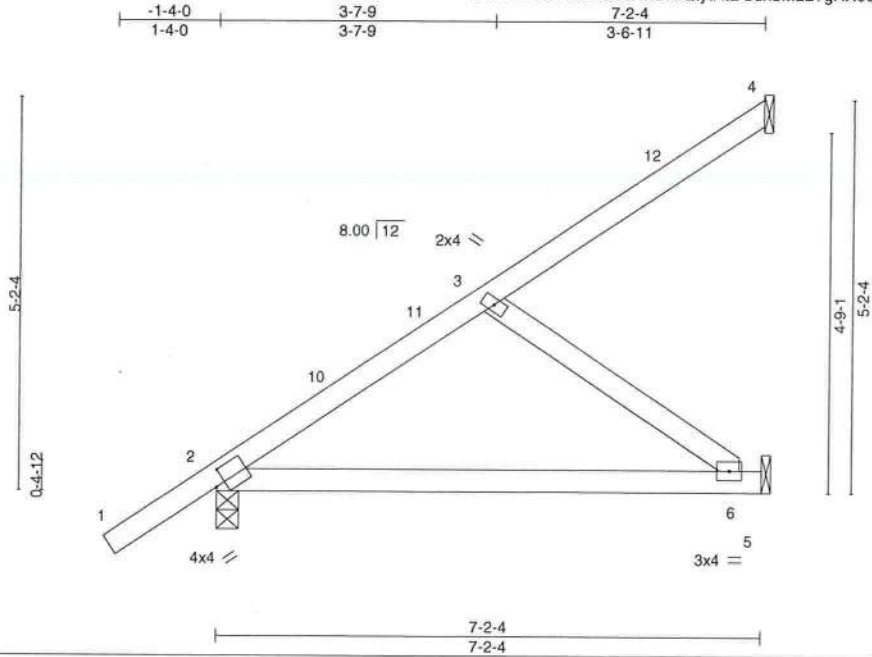
Customer Info: AARON BUTLER   Project Name: Butler Res.   Model: Custom  
Lot/Block: N/A   Subdivision: N/A  
Address: TBD, TBD  
City: Columbia Cty   State: FL

No.	Seal#	Truss Name	Date
29	T34036566	V01	5/31/24
30	T34036567	V02	5/31/24
31	T34036568	V03	5/31/24
32	T34036569	V04	5/31/24
33	T34036570	V05	5/31/24
34	T34036571	V06	5/31/24
35	T34036572	V07	5/31/24
36	T34036573	V08	5/31/24
37	T34036574	V09	5/31/24
38	T34036575	V10	5/31/24
39	T34036576	V11	5/31/24



Job	Truss	Truss Type	Qty	Ply	AARON BUTLER RES.
3981505	EJ01	JACK-PARTIAL	14	1	
					T34036538
					Job Reference (optional)

Builders FirstSource (Lake City,FL). Lake City, FL - 32055, 8.730 s Apr 25 2024 MiTek Industries, Inc. Thu May 30 16:14:00 2024 Page 1  
ID:7WKr8toudn35dxwKwBAfQytHta-bdnbMLLTgHX0ql1cVYRyxoUWayUlkoRUQHptO\_zBFzb



Scale = 1:30.5

Plate Offsets (X,Y)-- [2:0-1-9,0-2-5]											
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc)		l/defl L/d		PLATES GRIP	
TCLL	20.0	Plate Grip DOL	1.25	TC	0.37	Vert(LL)	-0.09	6-9	>989	240	MT20 244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.47	Vert(CT)	-0.18	6-9	>486	180	
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	2	n/a	n/a	
BCDL	10.0	Code	FBC2023/TP12014	Matrix-MS							Weight: 32 lb FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	

REACTIONS. (size) 4=Mechanical, 2=0-3-8, 5=Mechanical  
Max Horz 2=206(LC 12)  
Max Uplift 4=54(LC 12), 2=68(LC 12), 5=72(LC 12)  
Max Grav 4=80(LC 19), 2=348(LC 1), 5=194(LC 19)

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

- NOTES-
- 1) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 1-5-0 to 1-7-0, Zone1 1-7-0 to 7-1-8 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, 2, 5.

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:

May 31,2024

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.**  
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcsccomponents.com)

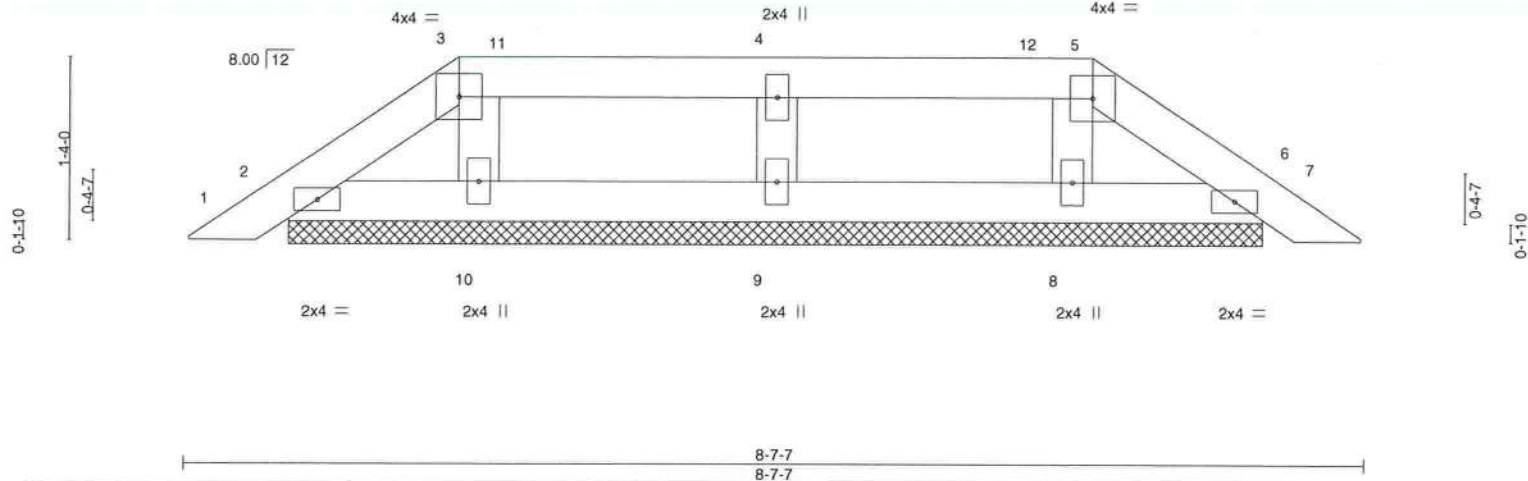
**MiTek®**  
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314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	AARON BUTLER RES.	T34036539
3981505	PB01	Piggyback	1	1	Job Reference (optional)	

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

8.730 s Apr 25 2024 MiTek Industries, Inc. Thu May 30 16:14:01 2024 Page 1  
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Scale = 1:16.8



LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.06	Vert(LL)	-0.00	6	n/r	120	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.03	Vert(CT)	0.00	6	n/r	120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.03	Horz(CT)	0.00	6	n/a	n/a		
BCDL 10.0	Code FBC2023/TPI2014	Matrix-S							
								Weight: 27 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	

**REACTIONS.** All bearings 7-1-3.  
(lb) - Max Horz 2--29(LC 10)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 6, 10, 8, 9  
Max Grav All reactions 250 lb or less at joint(s) 2, 6, 10, 8, 9

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 0-3-5 to 2-0-0, Zone2 2-0-0 to 6-2-15, Zone1 6-2-15 to 6-7-7, Zone3 6-7-7 to 8-4-2 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.
  - Gable requires continuous bottom chord bearing.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6, 10, 8, 9.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

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:

May 31,2024

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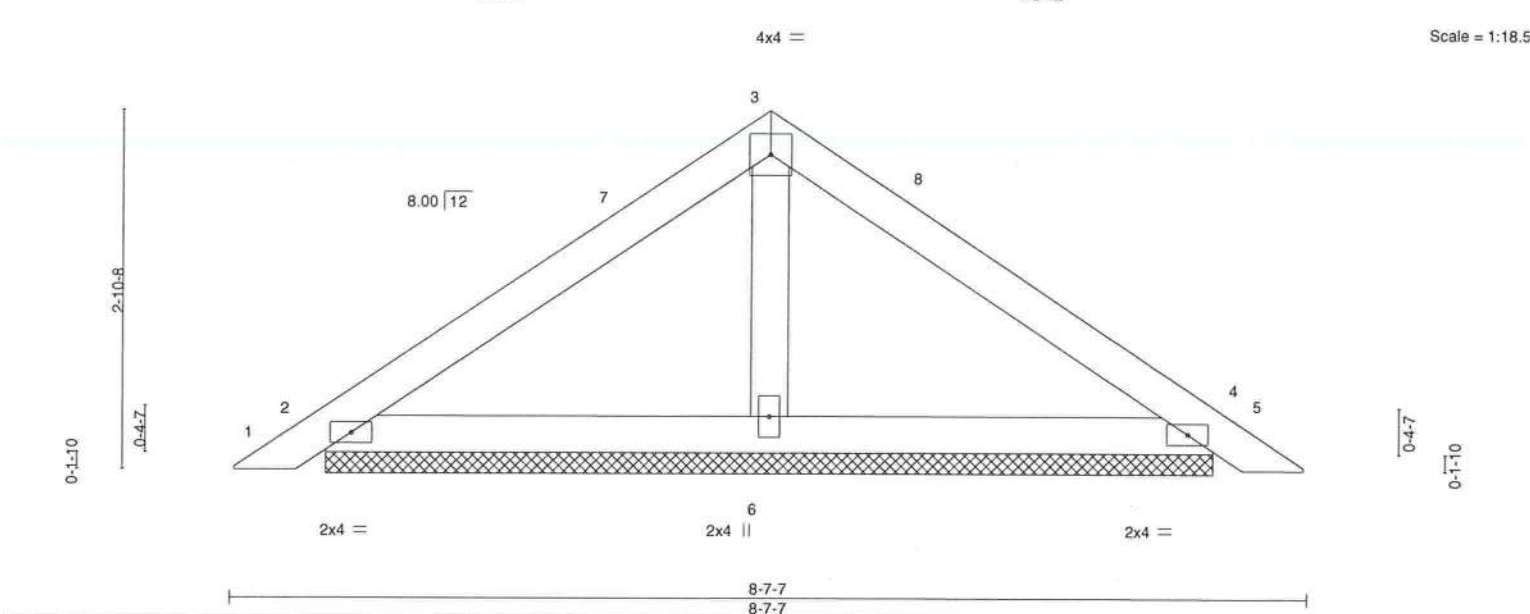


$4-0-0$        $4-7-7$        $8-7-7$   
 $4-0-0$        $0-7-7$        $4-0-0$   
 $4 \times 4 =$

Structural drawing of a roof truss. The truss consists of two main rafters (members 1 and 2 on the left, 4 and 5 on the right) meeting at a peak. A central vertical member (6) connects the peak to the base. The base is supported by a cross-hatched foundation. Dimensions include a height of 28.0, a base width of 8.00, and a slope of 0.4:7. Labels like '2x4 =', '8-7-7', and '0-1:10' are present.

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Job	Truss	Truss Type	Qty	Ply	AARON BUTLER RES.	T34036541
3981505	PB03	Piggyback	12	1	Job Reference (optional)	
Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.730 s Apr 25 2024 MiTek Industries, Inc. Thu May 30 16:14:02 2024 Page 1						
ID:7Wkr8toudn35dxwKwBAIQytHta-Y0vMn1MkCunk4bB?dzUQ0DZvTmGcCjmntbl_SszBFzZ						



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.16	in (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.12	Vert(LL) 0.00 5 n/r 120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.03	Vert(CT) 0.01 5 n/r 120		
BCDL 10.0	Code FBC2023/TPI2014	Matrix-S	Horz(CT) 0.00 4 n/a n/a		
				Weight: 29 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.
OTHERS 2x4 SP No.3	

<b>REACTIONS.</b>	(size) 2=7-1-3, 4=7-1-3, 6=7-1-3
	Max Horz 2=-66(LC 10)
	Max Uplift 2=-54(LC 12), 4=-63(LC 13), 6=-45(LC 12)
	Max Grav 2=156(LC 1), 4=156(LC 1), 6=265(LC 1)

<b>FORCES.</b>	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
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- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 0-3-5 to 3-3-5, Zone1 3-3-5 to 4-3-12, Zone3 4-3-12 to 8-4-2 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.
  - Gable requires continuous bottom chord bearing.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4, 6.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

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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:

May 31,2024

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Job	Truss	Truss Type	Qty	Ply	AARON BUTLER RES.	T34036542
3981505	T01	COMMON	10	1		

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

8.730 s Apr 25 2024 MiTek Industries, Inc. Thu May 30 16:14:02 2024 Page 1  
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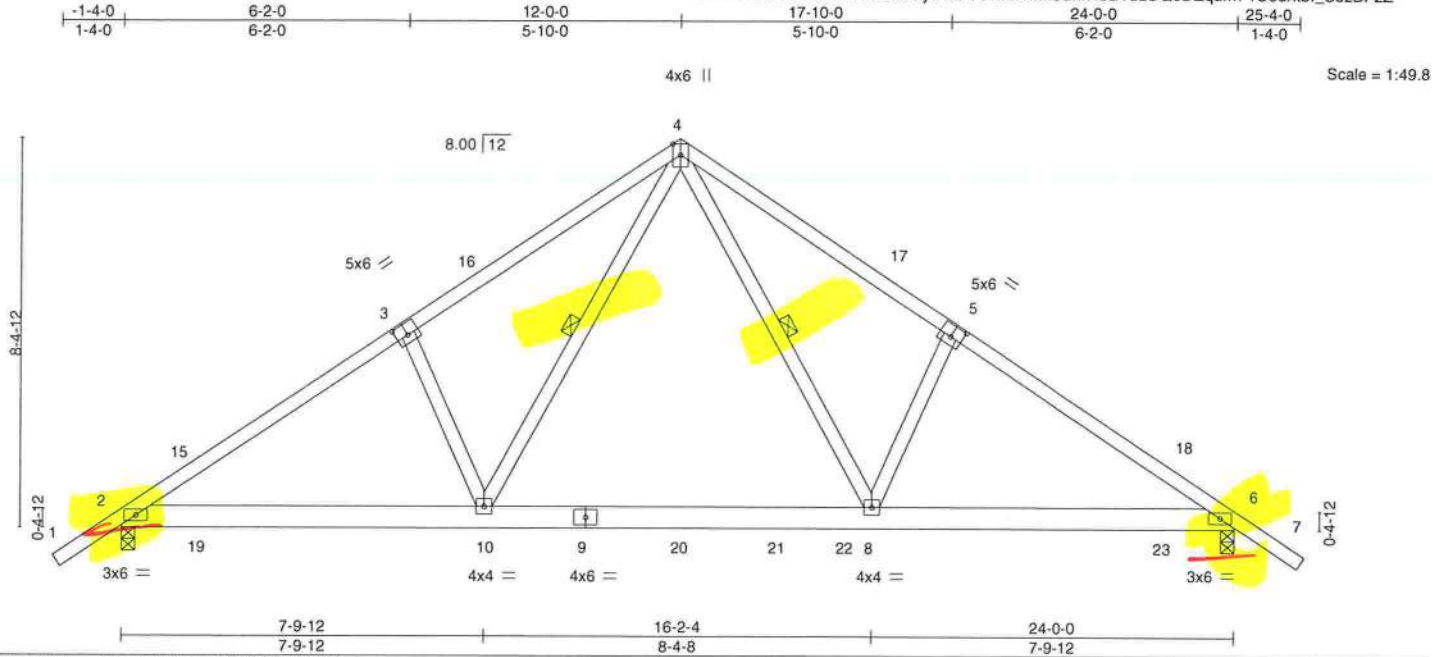


Plate Offsets (X,Y)--		[3:0-3-0,0-3-0], [5:0-3-0,0-3-0]									
<b>LOADING</b> (psf)		<b>SPACING-</b>	2'-0"	<b>CSI.</b>		<b>DEFL.</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>
TCLL 20.0		Plate Grip DOL	1.25	TC 0.45		Vert(LL)	0.24	8-10	>999	240	MT20
TCDL 7.0		Lumber DOL	1.25	BC 0.67		Vert(CT)	-0.25	8-10	>999	180	
BCLL 0.0 *		Rep Stress Incr	NO	WB 0.36		Horz(CT)	0.03	6	n/a	n/a	
BCDL 10.0		Code FBC2023/TPI2014		Matrix-MS							
											<b>GRIP</b>
											244/190
											Weight: 142 lb FT = 20%

<b>LUMBER-</b>		<b>BRACING-</b>	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 4-2-6 oc purlins.
BOT CHORD	2x6 SP No.2	BOT CHORD	Rigid ceiling directly applied or 6-8-8 oc bracing.
WEBS	2x4 SP No.3	WEBS	1 Row at midpt 4-8, 4-10

**REACTIONS.** (size) 2=0-3-8, 6=0-3-8  
Max Horz 2=-221(LC 10)  
Max Uplift 2=-332(LC 12), 6=-328(LC 13)  
Max Grav 2=1247(LC 2), 6=1237(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1830/1403, 3-4=-1739/1462, 4-5=-1721/1442, 5-6=-1812/1383  
BOT CHORD 2-10=-1067/1516, 8-10=-611/972, 6-8=-1066/1459  
WEBS 4-8=-832/889, 5-8=-313/253, 4-10=-868/922, 3-10=-313/253

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 1-4-15 to 1-7-1, Zone1 1-7-1 to 12-0-0, Zone2 12-0-0 to 16-2-15, Zone1 16-2-15 to 25-4-15 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, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=332, 6=328.
  - 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, 2-10=-20, 10-22=-80(F=-60), 6-22=-20

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MiTek Inc. DBA MiTek USA FL Cert 6634  
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Date:

May 31,2024

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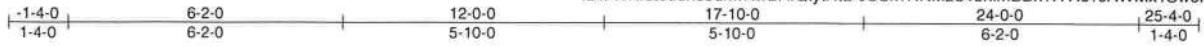
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Job 3981505	Truss T01G	Truss Type GABLE	Qty 1	Ply 1	AARON BUTLER RES. Job Reference (optional)	T34036543
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Builders FirstSource (Lake City, FL), Lake City, FL - 32055,

8.730 s Apr 25 2024 MiTek Industries, Inc. Thu May 30 16:14:03 2024 Page 1  
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4x6 ||

Scale = 1:51.8

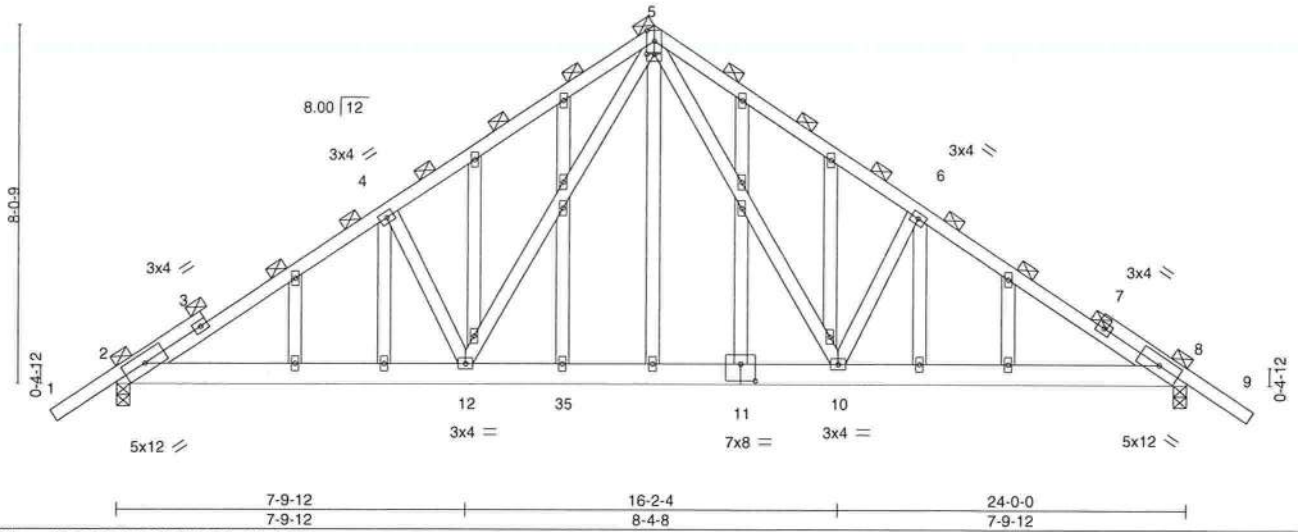


Plate Offsets (X,Y)--		[5:0-2-0,0-0-0], [11:0-4-0,0-4-8]					
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc) l/defl L/d
TCLL 20.0		Plate Grip DOL	1.25	TC 0.47		Vert(LL)	-0.08 10-12 >999 240
TCDL 7.0		Lumber DOL	1.25	BC 0.47		Vert(CT)	-0.14 10-12 >999 180
BCLL 0.0 *		Rep Stress Incr	YES	WB 0.58		Horz(CT)	0.02 8 n/a n/a
BCDL 10.0		Code	FBC2023/TPI2014	Matrix-MS			
						PLATES	GRIP
						MT20	244/190
						Weight: 201 lb FT = 20%	

**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x6 SP No.2  
WEBS 2x4 SP No.3  
OTHERS 2x4 SP No.3

**BRACING-**  
TOP CHORD 2-0-0 oc purlins (4-2-5 max.).  
BOT CHORD Rigid ceiling directly applied or 9-11-10 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 8=0-3-8  
Max Horz 2=-212(LC 10)  
Max Uplift 2=-257(LC 12), 8=-257(LC 13)  
Max Grav 2=1035(LC 2), 8=1035(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-4=-1448/697, 4-5=-1389/759, 5-6=-1389/759, 6-8=-1448/697  
BOT CHORD 2-12=-489/1199, 10-12=-209/752, 8-10=-494/1199  
WEBS 5-10=-402/700, 6-10=-341/252, 5-12=-402/700, 4-12=-341/252

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=257, 8=257.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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:

May 31, 2024

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314.434.1200 / MiTek-US.com



Job 3981505	Truss T02	Truss Type COMMON	Qty 6	Ply 1	AARON BUTLER RES.	T34036544
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.730 s Apr 25 2024 MiTek Industries, Inc. Thu May 30 16:14:03 2024 Page 1  
ID:7WKr8toudn35dxwKwBAfQytHta-0CSk?NNMzCvblmBBh?fYR6?cATKx5tw6F2X?IzBFzY

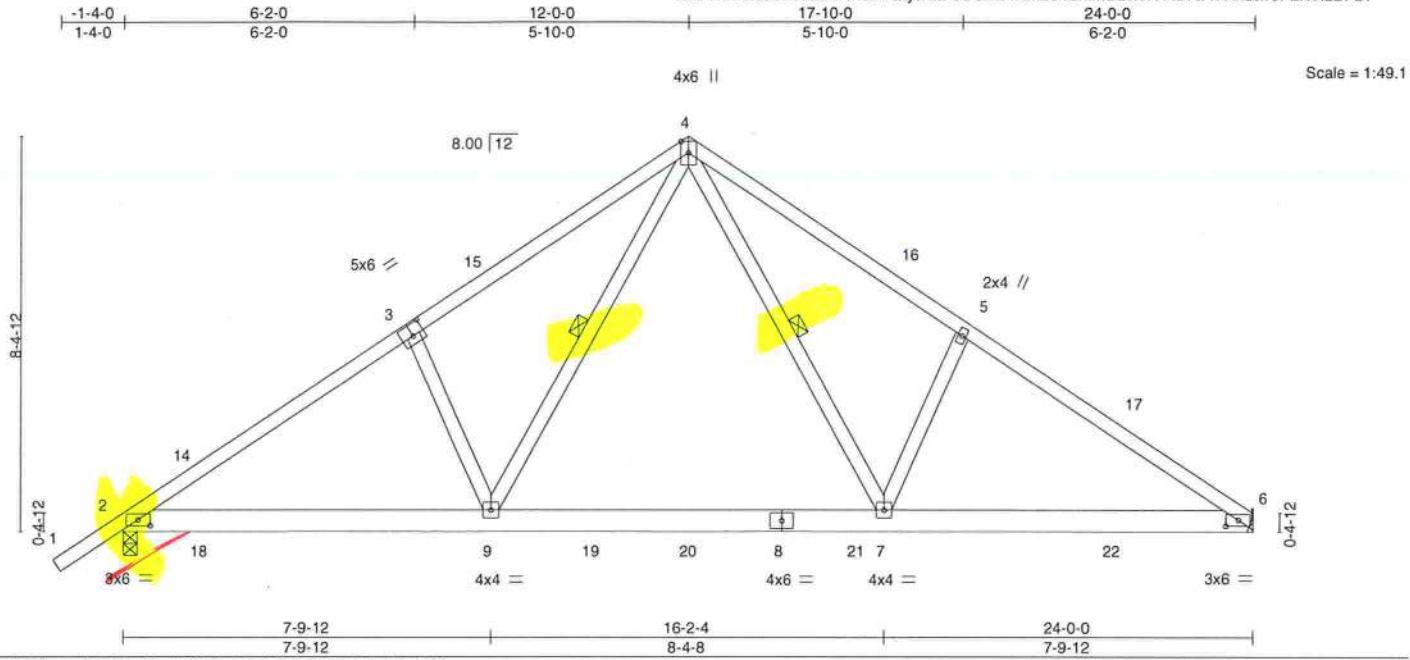


Plate Offsets (X,Y)-- [2:0-3-1,0-1-8], [3:0-3-0,0-3-0], [6:0-3-1,0-1-8]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP		
TCLL	20.0	Plate Grip DOL	1.25	TC	0.45	Vert(LL)	0.24	7-9	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.67	Vert(CT)	-0.25	7-9	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.36	Horz(CT)	0.03	6	n/a	n/a		
BCDL	10.0	Code FBC2023/TPI2014		Matrix-MS							Weight: 140 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 4-1-15 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 6-6-15 oc bracing.  
WEBS 1 Row at midpt 4-7, 4-9

**REACTIONS.** (size) 6=Mechanical, 2=0-3-8  
Max Horz 2=213(LC 9)  
Max Uplift 6=292(LC 13), 2=333(LC 12)  
Max Grav 6=1173(LC 2), 2=1249(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1834/1410, 3-4=-1743/1469, 4-5=-1730/1458, 5-6=-1820/1399  
BOT CHORD 2-9=-1114/1506, 7-9=-643/961, 6-7=-1090/1466  
WEBS 4-7=-839/900, 5-7=-316/255, 4-9=-865/923, 3-9=-313/253

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 1-4-15 to 1-7-1, Zone1 1-7-1 to 12-0-0, Zone2 12-0-0 to 16-2-15, Zone1 16-2-15 to 24-0-0 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, with BCDL = 10.0psf.
  - 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) 6=292, 2=333.
  - 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, 2-9=-20, 9-21=-80(F=60), 6-21=-20

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Joaquin Velez PE No.68182  
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Chesterfield, MO 63017  
Date:

May 31,2024

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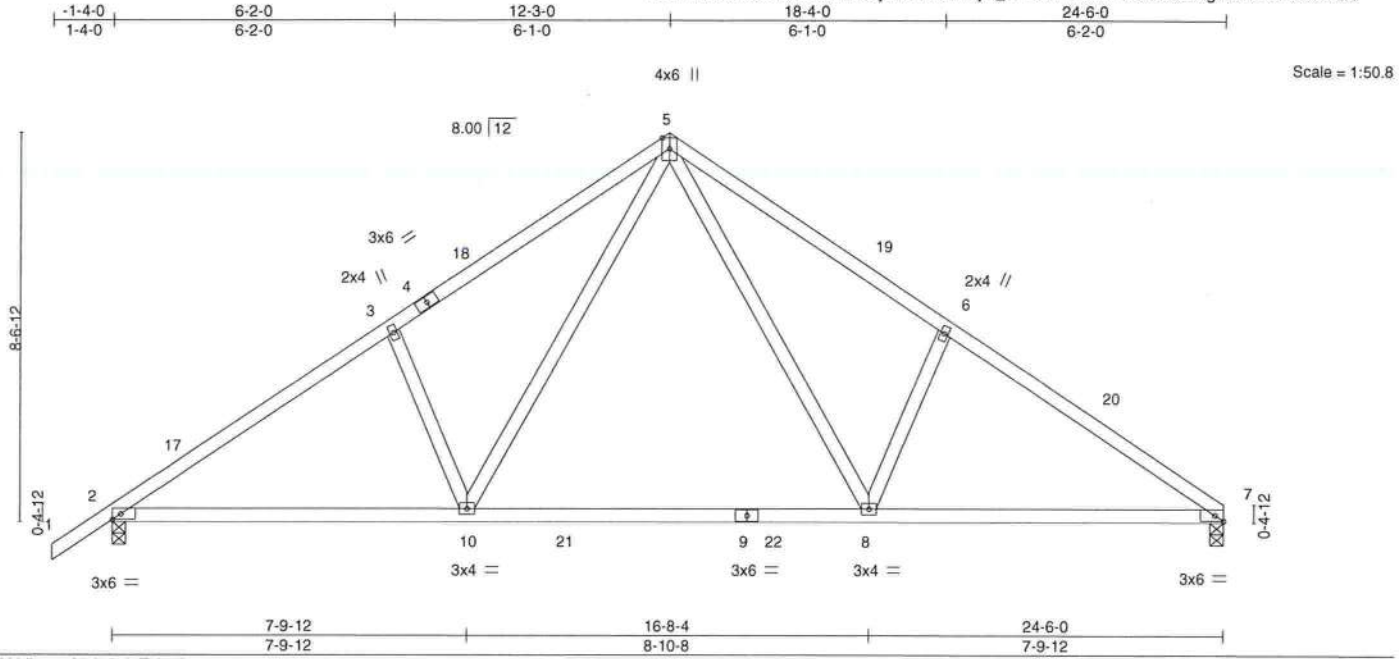
**MiTek®**

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Job	Truss	Truss Type	Qty	Ply	AARON BUTLER RES.	T34036545
3981505	T03	Common	10	1		

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

8.730 s Apr 25 2024 MiTek Industries, Inc. Thu May 30 16:14:04 2024 Page 1  
ID:7WKr8toudn35dxwKwBAIQtytHta-UO06CjO\_kv1SJvLokOWu5eeArZnUgWO4Lvn4XlZBFzX



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	20.0	Plate Grip DOL	1.25	TC	0.42	in	(loc)	MT20		244/190	
TCDL	7.0	Lumber DOL	1.25	BC	0.80	in	(loc)				
BCLL	0.0	Rep Stress Incr	YES	WB	0.41	l/defl	L/d				
BCDL	10.0	Code FBC2023/TPJ2014		Matrix-MS							

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 4-6-4 oc purlins.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.3		

**REACTIONS.** (size) 7=0-3-8, 2=0-3-8  
Max Horz 2=216(LC 11)  
Max Uplift 7=222(LC 13), 2=257(LC 12)  
Max Grav 7=1047(LC 20), 2=1117(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1477/315, 3-5=-1419/397, 5-6=-1427/403, 6-7=-1484/320  
BOT CHORD 2-10=-312/1326, 8-10=-99/831, 7-8=-182/1184  
WEBS 5-8=-241/779, 6-8=-352/274, 5-10=-234/768, 3-10=-347/270

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCCL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 -1-4-0 to 1-8-0, Zone1 1-8-0 to 12-3-0, Zone2 12-3-0 to 16-5-15, Zone1 16-5-15 to 24-6-0 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, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=222, 2=257.

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:

May 31,2024

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Job	Truss	Truss Type	Qty	Ply	AARON BUTLER RES.	T34036546
3981505	T09	PIGGYBACK BASE	7	1	Job Reference (optional)	

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

8.730 s Apr 25 2024 MiTek Industries, Inc. Thu May 30 16:14:05 2024 Page 1

ID:7Wkr8toudn35dxwKwBAfQtytHta-ybaUP2PcVp9Jx3wal517esBFgz7XPqUDaZXe3BzBFzW

1-4-0 7-8-0 15-2-4 19-6-0 23-9-11 28-0-0 35-5-15 38-7-4 43-9-0 45-1-0  
1-4-0 7-8-0 7-6-4 4-3-12 4-3-12 4-2-5 7-5-15 3-1-5 5-1-12 1-4-0

Scale = 1:79.0

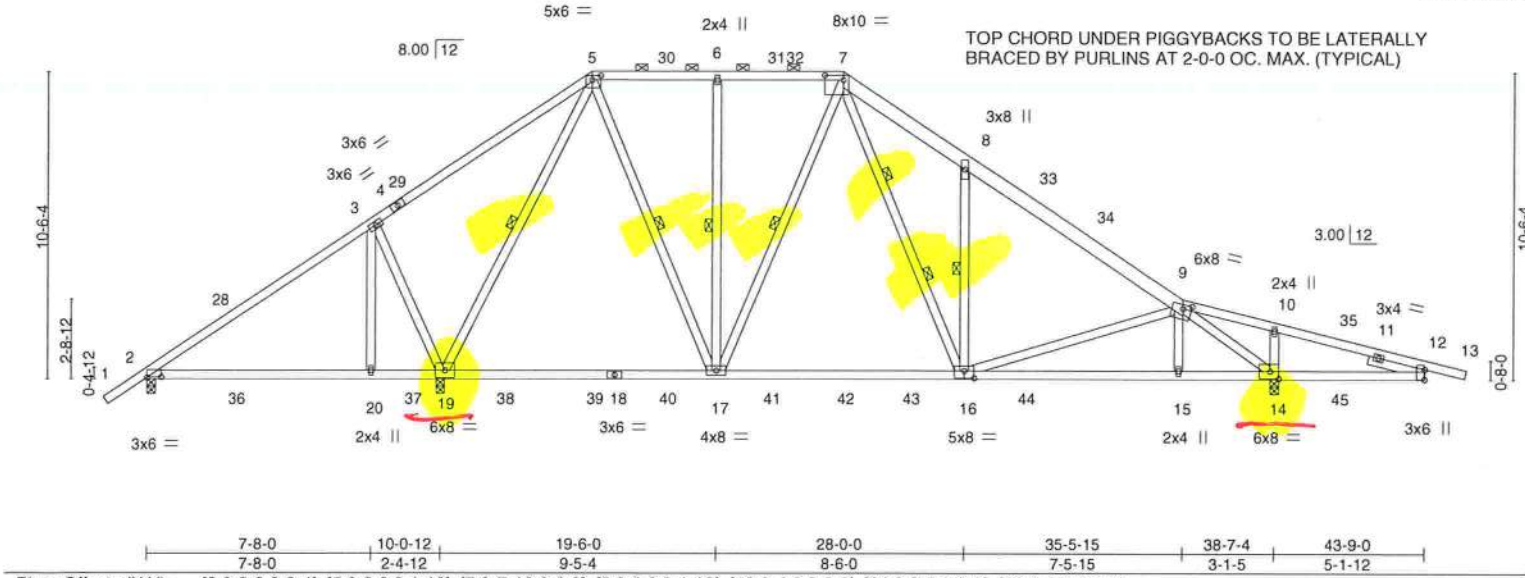


Plate Offsets (X,Y)--										[2:0-6-0,0-0-4], [5:0-3-8,0-1-12], [7:0-7-12,0-2-0], [9:0-3-8,0-1-12], [12:0-4-2,0-0-3], [14:0-3-8,0-3-0], [16:0-4-0,0-3-0]									
LOADING (psf)		SPACING-		2-0-0		CSI.		DEFL.		in (loc)		l/defl		L/d		PLATES		GRIP	
TCLL 20.0		Plate Grip DOL		1.25		TC 0.80		Vert(LL)		0.26 17-19		>999		240		MT20		244/190	
TCDL 7.0		Lumber DOL		1.25		BC 0.81		Vert(CT)		-0.40 17-19		>865		180					
BCLL 0.0 *		Rep Stress Incr		NO		WB 0.99		Horz(CT)		-0.05 14		n/a		n/a					
BCDL 10.0		Code FBC2023/TPI2014				Matrix-MS													
																Weight: 285 lb		FT = 20%	

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 *Except* 7-9: 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 3-11-13 oc purlins, except 2-0-0 oc purlins (5-5-3 max.): 5-7.
BOT CHORD 2x4 SP No.2 *Except* 16-18: 2x4 SP No.1	BOT CHORD Rigid ceiling directly applied or 4-1-7 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 5-19, 6-17, 7-17, 8-16, 5-17 2 Rows at 1/3 pts 7-16
SLIDER Right 2x4 SP No.3 1-11-8	

REACTIONS.	(size) 2=0-3-8, 19=0-3-8, 14=0-3-8
	Max Horz 2=-268(LC 10)
	Max Uplift 2=-81(LC 12), 19=-760(LC 9), 14=-935(LC 9)
	Max Grav 2=400(LC 27), 19=2043(LC 2), 14=2172(LC 2)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-252/93, 3-5=-61/258, 5-6=-1018/1266, 6-7=-1018/1266, 7-8=-2252/2833, 8-9=-2087/2426, 9-10=-830/697, 10-12=-893/730
BOT CHORD	17-19=-415/666, 16-17=-1206/1229, 15-16=-1827/1606, 14-15=-1818/1601, 12-14=-664/901
WEBS	3-19=-525/430, 5-19=-1499/1486, 6-17=-298/182, 7-17=-609/694, 7-16=-1738/1406, 8-16=-1105/1266, 9-16=-320/213, 9-14=-2718/2877, 10-14=-306/229, 5-17=-1344/1172

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 -1-4-15 to 2-11-9, Zone1 2-11-9 to 15-2-4, Zone2 15-2-4 to 21-4-8, Zone1 21-4-8 to 23-9-11, Zone2 23-9-11 to 29-11-15, Zone1 29-11-15 to 45-1-7 zone; cantilever right exposed ; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 19=760, 14=935.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25

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Joaquin Velez PE No.68182  
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Chesterfield, MO 63017  
Date:

May 31,2024

Continued on page 2

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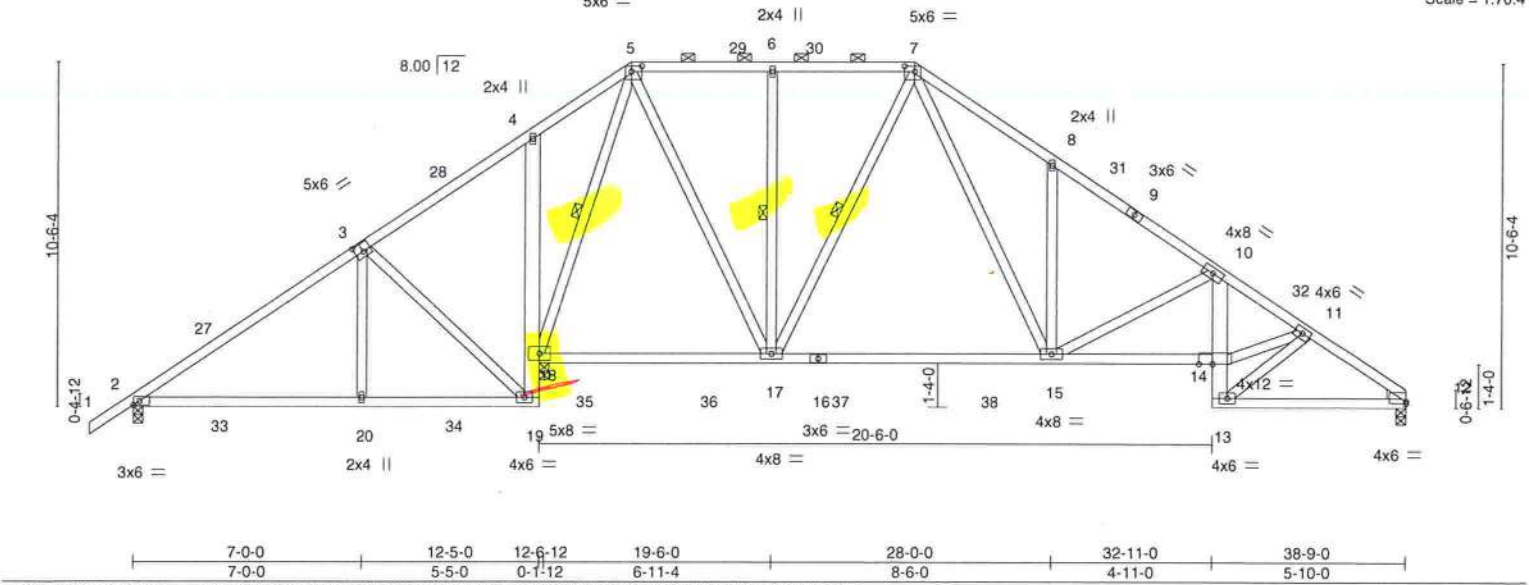
Job	Truss	Truss Type	Qty	Ply	AARON BUTLER RES.
3981505	T09	PIGGYBACK BASE	7	1	T34036546
					Job Reference (optional)

**LOAD CASE(S)** Standard  
Uniform Loads (plf)  
Vert: 1-5=-54, 5-32=-54, 7-32=-154, 7-34=-154, 9-34=-54, 9-13=-54, 21-24=-20



Job	Truss	Truss Type	Qty	Ply	AARON BUTLER RES.	T34036547
3981505	T10	Piggyback Base	3	1	Job Reference (optional)	

Builders FirstSource (Lake City, FL), Lake City, FL - 32055, 8.730 s Apr 25 2024 MiTek Industries, Inc. Thu May 30 16:14:06 2024 Page 1  
ID:7Wkr8toudn35dxwKwBAfQlytHta-Qn8sdOQEG7HAYDUmspYMA3jWBNS\_8MYMoDGBbdzBFzV  
1-4-0 7-0-0 12-5-0 15-2-4 19-6-0 23-9-11 28-0-0 32-11-0 35-9-4 38-9-0  
1-4-0 7-0-0 5-5-0 2-9-4 4-3-12 4-3-12 4-2-5 4-11-0 2-10-4 2-11-12  
Scale = 1:70.4



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 0.43	Vert(LL)	-0.20 15-17	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.80	Vert(CT)	-0.34 15-17	>939	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.69	Horz(CT)	0.05 12	n/a	n/a		
BCDL 10.0	Code FBC2023/TPI2014		Matrix-MS					Weight: 266 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-1-9 oc purlins, except
BOT CHORD 2x4 SP No.2 *Except	2-0-0 oc purlins (6-0-0 max.): 5-7.
4-19,10-13: 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
WEBS 2x4 SP No.3	8-10-8 oc bracing: 14-15.
WEDGE	WEBS 1 Row at midpt 5-18, 6-17, 7-17
Right: 2x4 SP No.3	

REACTIONS. (size) 2=0-3-8, 18=0-3-8, 12=0-3-8  
Max Horz 2=290(LC 9)  
Max Uplift 2=-144(LC 13), 18=-396(LC 12), 12=-312(LC 13)  
Max Grav 2=445(LC 25), 18=1819(LC 2), 12=1087(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-363/284, 3-4=-109/405, 4-5=-38/424, 5-6=-575/339, 6-7=-575/339, 7-8=-1475/620,  
8-10=-1434/468, 10-11=-1987/597, 11-12=-1566/481  
BOT CHORD 18-19=-226/389, 15-17=-32/706, 14-15=-441/1754, 13-14=-198/822, 10-14=-82/436,  
12-13=-346/1238  
WEBS 3-20=-146/293, 3-19=-504/297, 5-18=-1203/113, 6-17=-267/154, 7-17=-365/128,  
8-15=-299/238, 10-15=-753/306, 11-14=-336/1388, 11-13=-1205/351, 5-17=-180/945,  
7-15=-374/1073

- NOTES-
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCCL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 1-4-0 to 2-6-8, Zone1 2-6-8 to 15-2-4, Zone2 15-2-4 to 20-8-0, Zone1 20-8-0 to 23-9-11, Zone2 23-9-11 to 29-3-7, Zone1 29-3-7 to 38-9-0 zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=144, 18=396, 12=312.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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

May 31,2024

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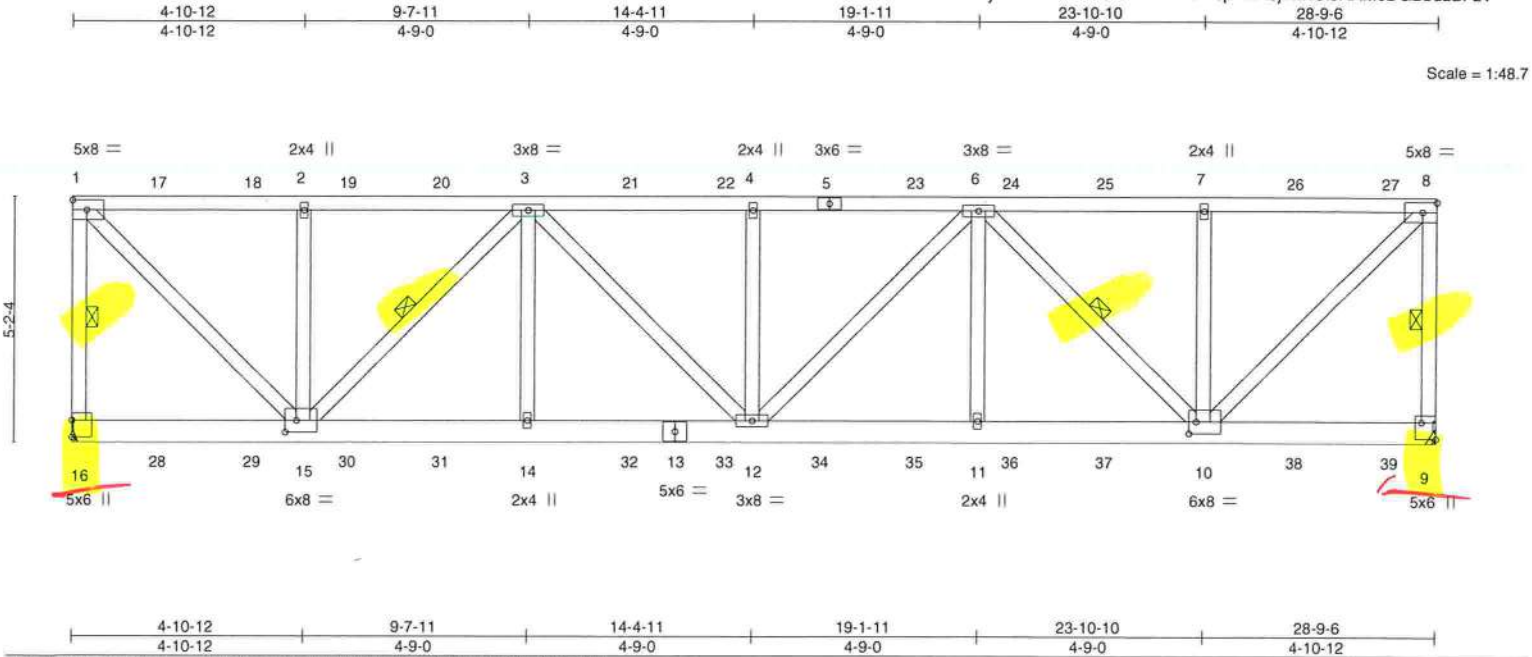


Job 3981505	Truss T12	Truss Type Flat Girder	Qty 1	Ply 1	AARON BUTLER RES. Job Reference (optional)	T34036548
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.730 s Apr 25 2024 MiTek Industries, Inc. Thu May 30 16:14:06 2024 Page 1  
ID:7Wkr8toudn35dxwKwBAIQytHta-Qn8sdOQEG7HAYDUmspYMA3jVnNUi8HAMoDGBbdzBFzV

Scale = 1:48.7



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.46	in (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Plate Grip DOL 1.25	BC 0.69	Vert(LL) 0.18 11-12 >999 240		
BCLL 0.0 *	Lumber DOL 1.25	WB 0.97	Vert(CT) -0.27 11-12 >999 180		
BCDL 10.0	Rep Stress Incr NO	Matrix-MS	Horz(CT) 0.06 9 n/a n/a		
	Code FBC2023/TPI2014			Weight: 212 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-11-2 oc purlins, except end verticals.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 6-1-15 oc bracing.
WEBS 2x4 SP No.3 *Except*	WEBS 1 Row at midpt 1-16, 8-9, 3-15, 6-10
1-15,3-15,3-12,6-12,6-10,8-10: 2x4 SP No.2	

**REACTIONS.** (size) 16=Mechanical, 9=Mechanical  
Max Uplift 16=-1040(LC 4), 9=-1084(LC 4)  
Max Grav 16=2292(LC 1), 9=2371(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-16=-2130/992, 1-2=-1993/910, 2-3=-1993/910, 3-4=-3525/1608, 4-6=-3525/1608, 6-7=-1995/910, 7-8=-1995/910, 8-9=-2142/1004  
BOT CHORD 14-15=-1436/3143, 12-14=-1436/3143, 11-12=-1436/3143, 10-11=-1436/3143  
WEBS 1-15=-1281/2811, 2-15=-323/216, 3-15=-1638/749, 3-14=-160/512, 3-12=-246/543, 4-12=-298/198, 6-12=-246/544, 6-11=-158/509, 6-10=-1635/748, 7-10=-323/216, 8-10=-1281/2812

- NOTES-**
- Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; 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.
  - Refer to girder(s) for truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 16=1040, 9=1084.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 74 lb down and 37 lb up at 1-9-10, 74 lb down and 37 lb up at 3-9-10, 74 lb down and 37 lb up at 5-9-10, 74 lb down and 37 lb up at 7-9-10, 74 lb down and 37 lb up at 9-9-10, 74 lb down and 37 lb up at 11-9-10, 74 lb down and 37 lb up at 13-9-10, 74 lb down and 37 lb up at 15-9-10, 74 lb down and 37 lb up at 17-9-10, 74 lb down and 37 lb up at 19-9-10, 74 lb down and 37 lb up at 21-9-10, 74 lb down and 37 lb up at 23-9-10, and 74 lb down and 37 lb up at 25-9-10, and 71 lb down and 40 lb up at 27-9-10 on top chord, and 163 lb down and 92 lb up at 1-9-10, 163 lb down and 92 lb up at 3-9-10, 163 lb down and 92 lb up at 5-9-10, 163 lb down and 92 lb up at 7-9-10, 163 lb down and 92 lb up at 9-9-10, 163 lb down and 92 lb up at 11-9-10, 163 lb down and 92 lb up at 13-9-10, 163 lb down and 92 lb up at 15-9-10, 163 lb down and 92 lb up at 17-9-10, 163 lb down and 92 lb up at 19-9-10, 163 lb down and 92 lb up at 21-9-10, 163 lb down and 92 lb up at 23-9-10, and 163 lb down and 92 lb up at 25-9-10, and 165 lb down and 91 lb up at 27-9-10 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).

Continued on page 2

**LOAD CASE(S)** Standard

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

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Date: May 31,2024

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Job	Truss	Truss Type	Qty	Ply	AARON BUTLER RES.
3981505	T12	Flat Girder	1	1	

T34036548

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

8.730 s Apr 25 2024 MiTek Industries, Inc. Thu May 30 16:14:07 2024 Page 2  
ID:7WKr8toudn35dxwKwBAfQytlHta-uziFqkQs0QP0AM3zQW4bjHGgXnqxtkQW1t0lB4zBFzU

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-8=-54, 9-16=-20

Concentrated Loads (lb)

Vert: 5=-20(B) 3=-20(B) 14=-163(B) 7=-20(B) 10=-163(B) 17=-20(B) 18=-20(B) 19=-20(B) 20=-20(B) 21=-20(B) 22=-20(B) 23=-20(B) 24=-20(B) 25=-20(B) 26=-20(B) 27=-24(B) 28=-163(B) 29=-163(B) 30=-163(B) 31=-163(B) 32=-163(B) 33=-163(B) 34=-163(B) 35=-163(B) 36=-163(B) 37=-163(B) 38=-163(B) 39=-164(B)

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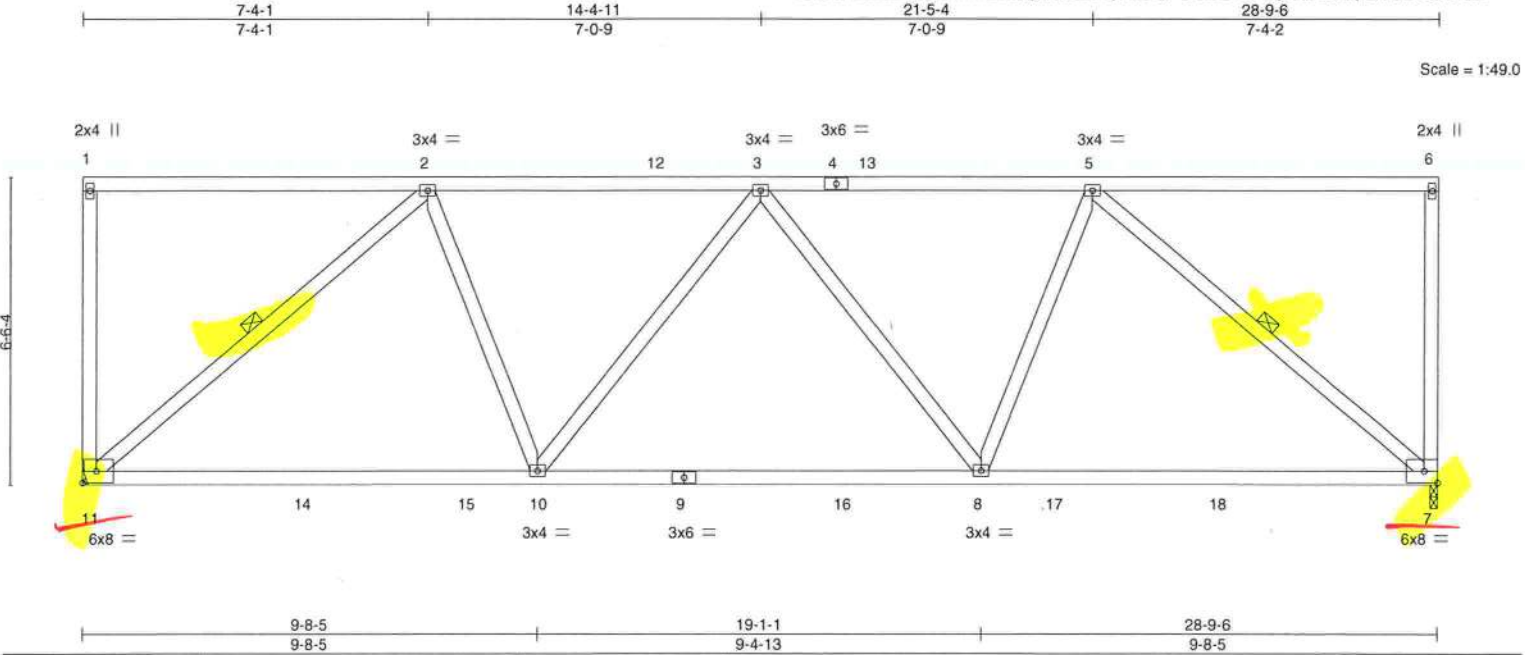
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Job	Truss	Truss Type	Qty	Ply	AARON BUTLER RES.	T34036549
3981505	T13	Flat	1	1	Job Reference (optional)	

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

8.730 s Apr 25 2024 MiTek Industries, Inc. Thu May 30 16:14:07 2024 Page 1  
ID:7WKR8toudn35dxwKwBAfQlyHta-uziFqkQs0QP0AM3zQW4bjHGfznoKtp8W1t0l84zBFzU



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 0.56	Vert(LL)	-0.29 10-11	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.79	Vert(CT)	-0.50 10-11	>683	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.66	Horz(CT)	0.05 7	n/a	n/a		
BCDL 10.0	Code FBC2023/TPI2014		Matrix-MS						
								Weight: 172 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-9-10 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1	BOT CHORD Rigid ceiling directly applied or 8-1-7 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 2-11, 5-7

**REACTIONS.** (size) 11=Mechanical, 7=0-2-0  
Max Uplift 11=-345(LC 8), 7=-345(LC 8)  
Max Grav 11=1203(LC 2), 7=1203(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1287/497, 3-5=-1287/497  
BOT CHORD 10-11=-471/1074, 8-10=-597/1398, 7-8=-471/1074  
WEBS 2-11=-1384/614, 2-10=-75/603, 5-8=-75/603, 5-7=-1385/614

- NOTES-**
- 1) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 0-1-12 to 12-1-12, Zone2 12-1-12 to 16-7-10, Zone3 16-7-10 to 28-7-10 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) Provide adequate drainage to prevent water ponding.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 6) Refer to girder(s) for truss to truss connections.
  - 7) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 7.
  - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=345, 7=345.

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Chesterfield, MO 63017

Date: May 31,2024

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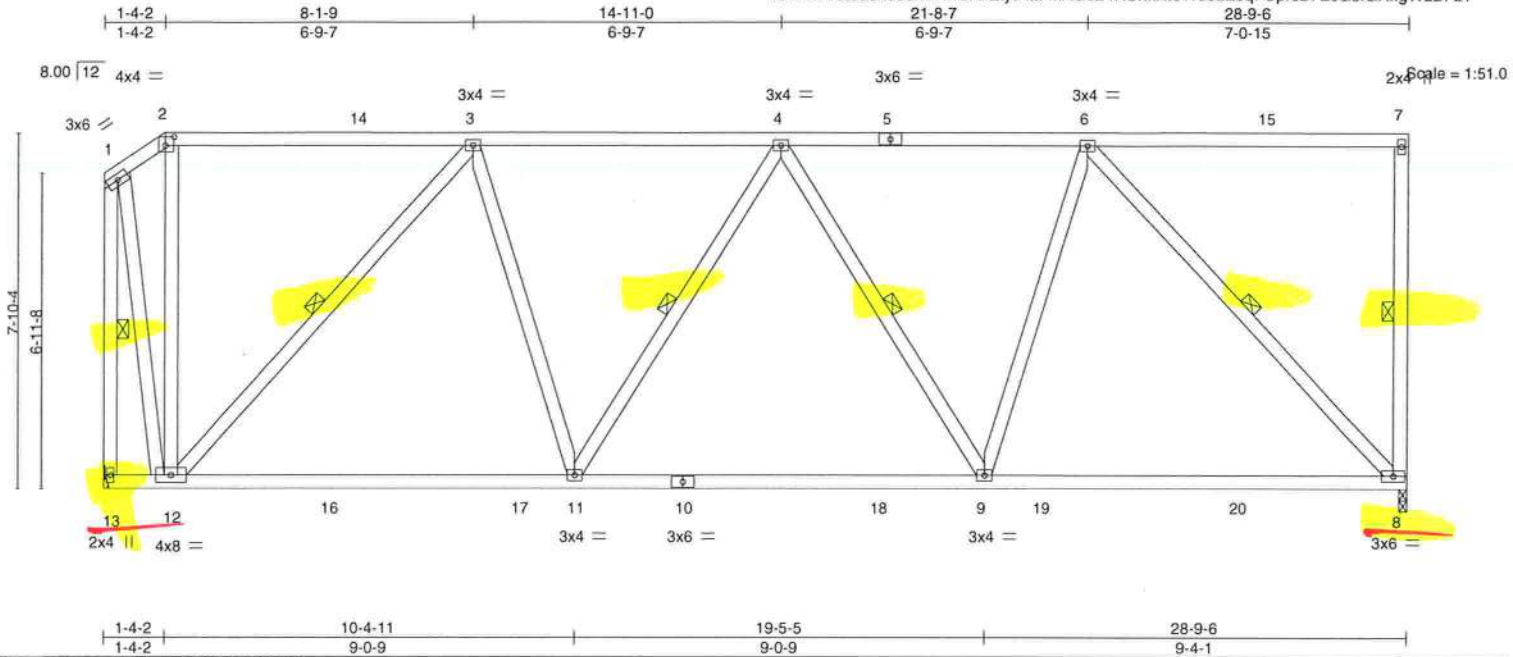
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Job 3981505	Truss T14	Truss Type Half Hip	Qty 1	Ply 1	AARON BUTLER RES. Job Reference (optional)	T34036550
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.730 s Apr 25 2024 MiTek Industries, Inc. Thu May 30 16:14:08 2024 Page 1  
ID:7WKr8toudn35dxwKwBAfQtytHta-MAGd24RUnkXtoWe9zEbqFUprcB7EcGstGXllgWzBFzT



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 0.50	Vert(LL)	-0.27	8-9	>999	240	MT20
TCDL 7.0	Lumber DOL	1.25	BC 0.88	Vert(CT)	-0.45	8-9	>761	180	244/190
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.70	Horz(CT)	0.04	8	n/a	n/a	
BCDL 10.0	Code FBC2023/TPI2014		Matrix-MS						
									Weight: 205 lb FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 5-3-4 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2 *Except*	BOT CHORD Rigid ceiling directly applied or 9-11-14 oc bracing.
WEBS 8-10: 2x4 SP No.1	WEBS 1 Row at midpt 7-8, 3-12, 4-11, 4-9, 6-8, 1-13
2x4 SP No.3	

<b>REACTIONS.</b>	(size) 8=0-2-0, 13=Mechanical
	Max Horz 13=32(LC 12)
	Max Uplift 8=-349(LC 9), 13=-321(LC 9)
	Max Grav 8=1226(LC 2), 13=1217(LC 2)

<b>FORCES.</b>	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	1-2=-282/61, 3-4=-1106/300, 4-6=-1062/279, 1-13=-1349/289
BOT CHORD	11-12=-292/959, 9-11=-347/1169, 8-9=-263/880
WEBS	3-12=-1086/340, 3-11=-43/513, 6-9=-68/635, 6-8=-1274/384, 1-12=-279/1224

- NOTES-**
- 1) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 0-1-12 to 1-4-2, Zone2 1-4-2 to 5-7-1, Zone1 5-7-1 to 28-7-10 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) Provide adequate drainage to prevent water ponding.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 6) Refer to girder(s) for truss to truss connections.
  - 7) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 8.
  - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=349, 13=321.

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May 31,2024

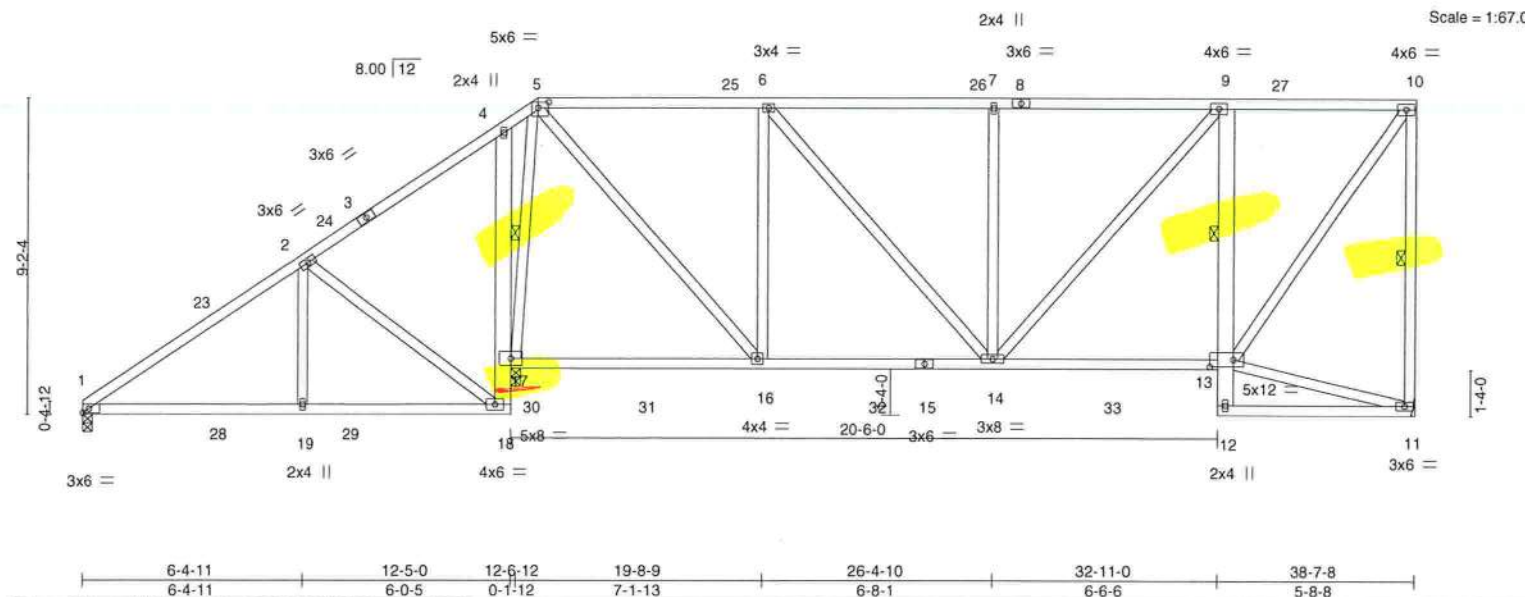
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ID:7WKr8toudn35dxwKwBAIQlytHta-MAGd24RUnkXtoWe9zEbqfUpsfBCycGhfGXlglWzBFzT

6-4-11	12-5-0	13-2-4	19-8-9	26-4-10	32-11-0	38-7-8
6-4-11	6-0-5	0-9-4	6-6-5	6-8-1	6-6-6	5-8-8



<b>LUMBER-</b>		<b>BRACING-</b>	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 5-9-4 oc purlins, except end verticals.
BOT CHORD	2x4 SP No.2 *Except* 4-18,9-12: 2x6 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 6-0-0 oc bracing: 16-17.
WEBS	2x4 SP No.3		1 Row at midpt 9-13
		WEBS	1 Row at midpt 10-11, 5-17

**REACTIONS.** (size) 11=Mechanical, 1=0-3-8, 17=0-3-8  
 Max Horiz 1=341(LC 12)  
 Max Uplift 11=-316(LC 8), 1=-70(LC 9), 17=-562(LC 12)  
 Max Grav 11=1061(LC 28), 1=387(LC 2), 17=1749(LC 2)

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

**TOP CHORD** 1-2=-403/111, 5-6=-754/233, 6-7=-939/282, 7-9=-939/282, 9-10=-624/188,  
10-11=-967/327

**BOT CHORD** 1-19=-259/273, 18-19=-259/273, 17-18=-225/374, 4-17=-253/171, 14-16=-233/754,  
13-14=-192/639, 9-13=-658/302

**WEBS** 2-19=-145/284, 2-18=-502/311, 5-17=-1060/360, 5-16=-303/1118, 6-16=-582/275,  
6-14=-103/291, 7-14=-355/199, 9-14=-135/452, 10-13=-323/1068

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 0-0-0 to 3-10-6, Zone1 3-10-6 to 13-2-4, Zone2 13-2-4 to 18-7-13, Zone1 18-7-13 to 38-5-12 zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 4) Provide adequate drainage to prevent water ponding.
- 5) 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, with BCDL = 10.0psf.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 11=316, 17=562.

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Date:

May 31, 2024



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Chesterfield, MO 63017  
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Job	Truss	Truss Type	Qty	Ply	AARON BUTLER RES.	T34036552
3981505	T16	Half Hip	1	1	Job Reference (optional)	

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

8.730 s Apr 25 2024 MiTek Industries, Inc. Thu May 30 16:14:09 2024 Page 1  
ID:7Wkr8toudn35dxwKwBAIQyIHla-qMq?FQS7Y2fkPgDLXx63oIL?paRjLkRpUBVrCyzBFzS

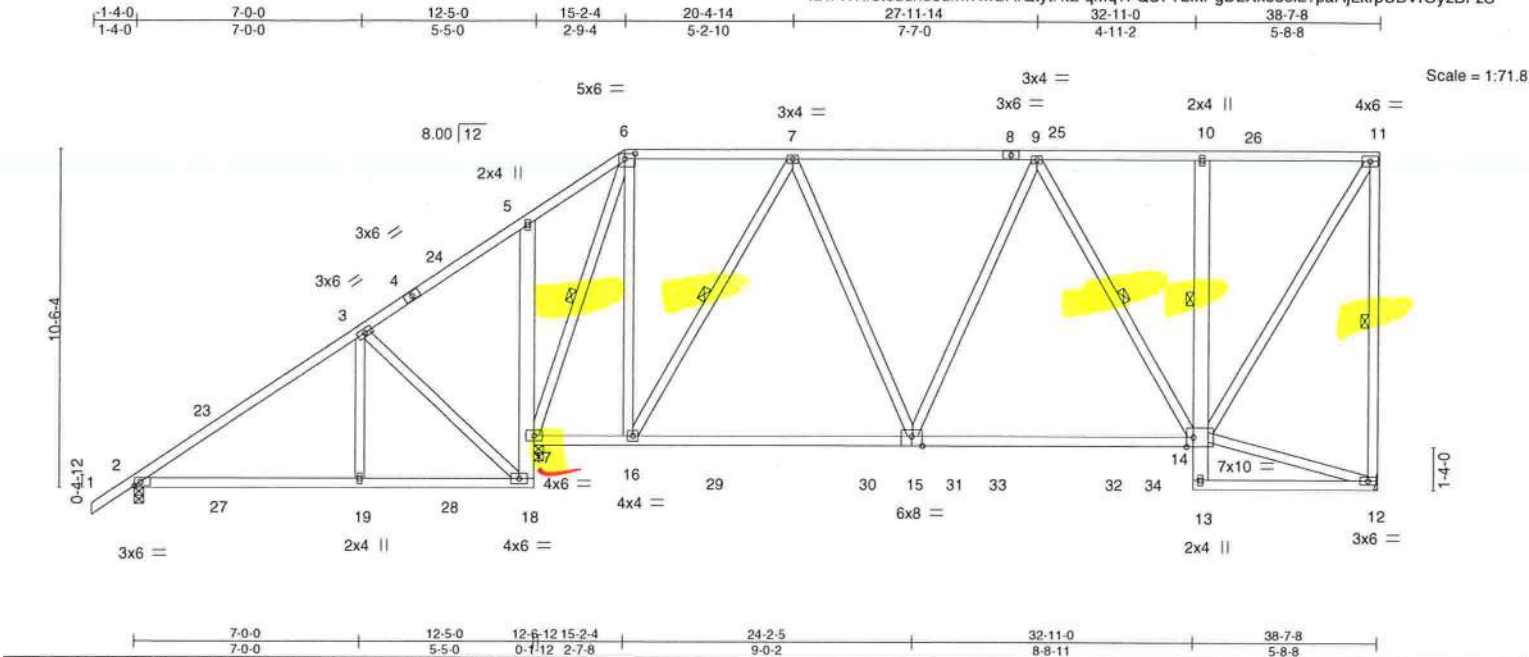


Plate Offsets (X,Y)-- [6:0-3-12,0-2-0], [14:0-2-8,Edge], [15:0-4-0,Edge]											
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc)		l/defl L/d		PLATES GRIP	
TCLL	20.0	Plate Grip DOL	1.25	TC	0.53	Vert(LL)	-0.22 14-15	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.99	Vert(CT)	-0.37 14-15	>863	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.59	Horz(CT)	0.03 12	n/a	n/a		
BCDL	10.0	Code FBC2023/TPI2014		Matrix-MS						Weight: 301 lb	FT = 20%

LUMBER-	BRACING-		
TOP CHORD	TOP CHORD	Structural wood sheathing directly applied or 5-9-8 oc purlins, except end verticals.	
BOT CHORD	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 2-2-0 oc bracing: 15-16 6-0-0 oc bracing: 12-13.	
WEBS	WEBS	1 Row at midpt	10-14
		1 Row at midpt	11-12, 6-17, 7-16, 9-14

REACTIONS.	(size) 12=Mechanical, 2=0-3-8, 17=0-3-8		
	Max Horz 2=421(LC 12)		
	Max Uplift 12=311(LC 9), 2=65(LC 9), 17=586(LC 12)		
	Max Grav 12=1092(LC 28), 2=513(LC 2), 17=1639(LC 2)		

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.		
TOP CHORD	2-3=-483/74, 6-7=-338/81, 7-9=-839/206, 9-10=-555/152, 10-11=-550/154, 11-12=-1012/323		
BOT CHORD	2-19=-236/329, 18-19=-236/329, 17-18=-231/392, 16-17=-79/323, 15-16=-204/702, 14-15=-233/790, 10-14=-284/173		
WEBS	3-19=-144/287, 3-18=-497/298, 6-17=-1145/291, 6-16=-179/917, 7-16=-735/262, 7-15=-27/361, 9-14=-469/162, 11-14=-298/1060		

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 -1-4-0 to 2-6-6, Zone1 2-6-6 to 15-2-4, Zone2 15-2-4 to 20-4-14, Zone1 20-4-14 to 38-5-12 zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 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) 2 except (jt=lb) 12=311, 17=586.

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

Joaquin Velez PE No.68182  
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Date:

May 31,2024

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Job	Truss	Truss Type	Qty	Ply	AARON BUTLER RES.	T34036553
3981505	T17	Piggyback Base	4	1		
Job Reference (optional)						

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

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ID:7WKr8toudn35dxwKwBAfQtytHta-JYONTmTlJLnb1qoX5fdLvuCB\_qw4AeyjrEPIOzBFzR

1-4-0	7-0-0	12-5-0	15-2-4	19-6-0	23-9-11	28-0-0	32-11-0	35-7-8	38-7-8
1-4-0	7-0-0	5-5-0	2-9-4	4-3-12	4-3-12	4-2-5	4-11-0	2-8-8	3-0-0

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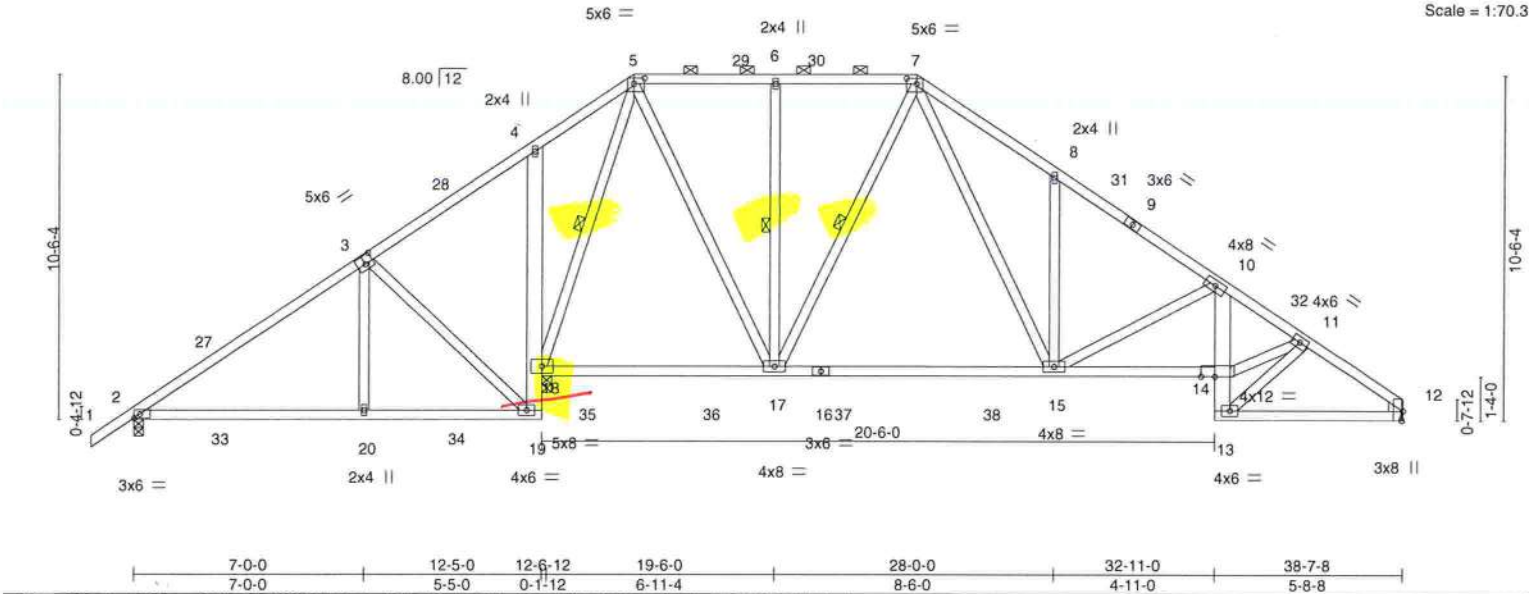


Plate Offsets (X,Y)-- [3:0-3-0,0-3-0], [5:0-3-12,0-2-0], [7:0-3-12,0-2-0], [12:0-3-8,Edge], [14:0-5-0,Edge]													
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.		in (loc)		I/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL 1.25		TC	0.43	Vert(LL)		-0.20	15-17	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL 1.25		BC	0.80	Vert(CT)		-0.34	15-17	>941	180		
BCLL	0.0 *	Rep Stress Incr YES		WB	0.68	Horz(CT)		0.05	12	n/a	n/a		
BCDL	10.0	Code FBC2023/TPI2014		Matrix-MS								Weight: 265 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-2-1 oc purlins, except
BOT CHORD 2x4 SP No.2 *Except*	2-0-0 oc purlins (6-0-0 max.): 5-7.
4-19,10-13: 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
WEBS 2x4 SP No.3	8-11-7 oc bracing: 14-15.
WEDGE	WEBS 1 Row at midpt 5-18, 6-17, 7-17
Right: 2x4 SP No.3	

REACTIONS. (size) 2=0-3-8, 18=0-3-8, 12=Mechanical  
Max Horz 2=289(LC 9)  
Max Uplift 2=145(LC 13), 18=395(LC 12), 12=310(LC 13)  
Max Grav 2=448(LC 25), 18=1807(LC 2), 12=1083(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-367/284, 3-4=-110/397, 4-5=-41/415, 5-6=-576/339, 6-7=-576/339, 7-8=-1463/617,  
8-10=-1423/465, 10-11=-1935/583, 11-12=-1509/465  
BOT CHORD 18-19=-226/389, 15-17=-32/704, 14-15=-433/1714, 13-14=-206/857, 10-14=-73/396,  
12-13=-326/1184  
WEBS 3-20=-146/292, 3-19=-504/297, 5-18=-1189/115, 5-17=-178/938, 6-17=-267/154,  
7-17=-357/126, 7-15=-370/1058, 8-15=-299/238, 10-15=-717/297, 11-14=-334/1384,  
11-13=-1196/340

- NOTES-
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCCL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 -1-4-0 to 2-6-6, Zone1 2-6-6 to 15-2-4, Zone2 15-2-4 to 20-7-13, Zone1 20-7-13 to 23-9-11, Zone2 23-9-11 to 29-3-4, Zone1 29-3-4 to 38-7-8 zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 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=145, 18=395, 12=310.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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Date:

May 31,2024

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Job	Truss	Truss Type	Qty	Ply	AARON BUTLER RES.	T34036554
3981505	T18	COMMON	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.730 s Apr 25 2024 MiTek Industries, Inc. Thu May 30 16:14:10 2024 Page 1 - ID:7WKr8toudn35dxwKwBAfQlyHta-JYONTmTIJLnb1qoX5fdLvuAy\_ul4JHyjrEPIOzBFzR

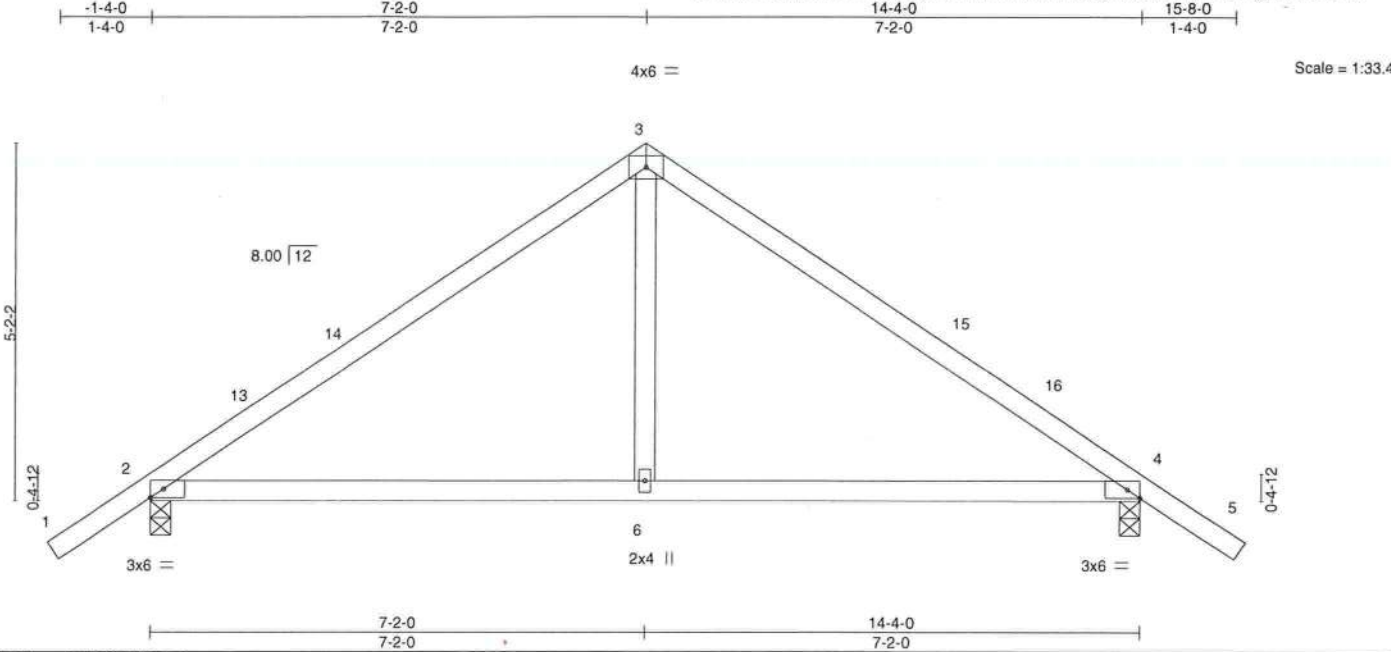


Plate Offsets (X,Y)--		[4:0-2-3,Edge]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 20.0	Plate Grip DOL	1.25	TC 0.57
TCDL 7.0	Lumber DOL	1.25	BC 0.52
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.13
BCDL 10.0	Code FBC2023/TPI2014		Matrix-MS
			DEFL. in (loc) l/defl L/d
			Vert(LL) 0.09 6-9 >999 240
			Vert(CT) -0.14 6-9 >999 180
			Horz(CT) 0.01 2 n/a n/a
			PLATES GRIP
			MT20 244/190
			Weight: 59 lb FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	

REACTIONS. (size) 2=0-3-8, 4=0-3-8  
Max Horz 2=-141(LC 10)  
Max Uplift 2=-166(LC 12), 4=-166(LC 13)  
Max Grav 2=607(LC 1), 4=607(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-636/194, 3-4=-636/194  
BOT CHORD 2-6=-55/450, 4-6=-55/450  
WEBS 3-6=-2/333

- NOTES-
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 -1-5-0 to 1-7-0, Zone1 1-7-0 to 7-2-0, Zone2 7-2-0 to 11-4-15, Zone1 11-4-15 to 15-9-0 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=166, 4=166.

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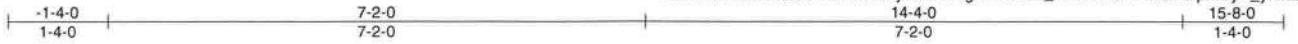
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Job	Truss	Truss Type	Qty	Ply	AARON BUTLER RES.	T34036555
3981505	T18G	COMMON SUPPORTED GAB	1	1	Job Reference (optional)	

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8.730 s Apr 25 2024 MiTek Industries, Inc. Thu May 30 16:14:11 2024 Page 1  
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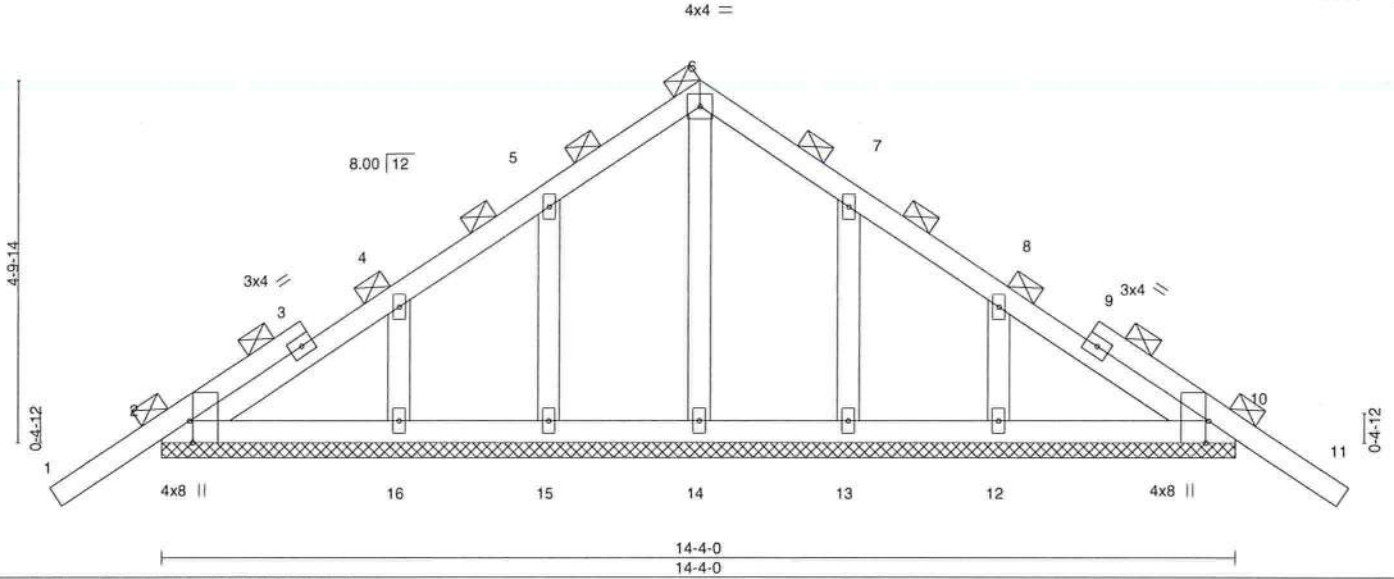


Plate Offsets (X,Y)--		[2:0-3-8,Edge], [10:0-3-8,Edge]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 20.0	Plate Grip DOL	1.25	TC 0.13
TCDL 7.0	Lumber DOL	1.25	BC 0.06
BCLL 0.0	Rep Stress Incr	YES	WB 0.04
BCDL 10.0	Code FBC2023/TPI2014		Matrix-S
DEFL.	in (loc)	l/defl	L/d
Vert(LL)	-0.00	11	n/r
Vert(CT)	-0.00	11	n/r
Horz(CT)	0.00	10	n/a
PLATES	GRIP		
MT20	244/190		
Weight: 77 lb	FT = 20%		

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD 2-0-0 oc purlins (6-0-0 max.).
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
OTHERS 2x4 SP No.3	

**REACTIONS.** All bearings 14-4-0.  
(lb) - Max Horz 2=-133(LC 10)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 10, 15, 16, 13, 12  
Max Grav All reactions 250 lb or less at joint(s) 2, 10, 14, 15, 16, 13, 12

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

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- Truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 10, 15, 16, 13, 12.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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<b>LUMBER-</b>		<b>BRACING-</b>	
TOP CHORD	2x4 SP No.2 *Except" 1-3: 2x6 SP M 26	TOP CHORD	Structural wood sheathing directly applied or 4-8-13 oc purlins.
BOT CHORD	2x4 SP No.2 *Except" 2-11: 2x6 SP No.2, 2-9: 2x4 SP No.1, 4-8: 2x4 SP No.3	BOT CHORD	Rigid ceiling directly applied or 9-3-0 oc bracing.
WEBS	2x4 SP No.3		

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

TOP CHORD	2-18=607/224, 2-3=1593/406, 3-4=1037/283, 4-5=1019/303, 5-6=1345/319
BOT CHORD	2-10=428/1448, 9-10=427/1455, 4-9=188/737, 6-7=180/1058
WEBS	3-10=0/256, 3-9=775/356, 7-9=182/1011, 5-9=391/256

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) cable end zone and C-C Zone3 0-1-12 to 3-1-12, Zone1 3-1-12 to 12-3-0, Zone2 12-3-0 to 16-5-15, Zone1 16-5-15 to 24-6-0 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) 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=221, 1=218.

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May 31, 2024

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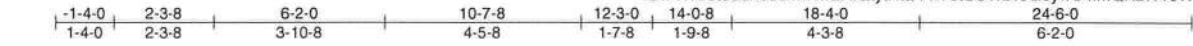
16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
314.434.1200 / MiTek-US.com

Job 3981505	Truss T19G	Truss Type GABLE	Qty 1	Ply 1	AARON BUTLER RES. Job Reference (optional)	T34036557
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Builders FirstSource (Lake City, FL), Lake City, FL - 32055,

8.730 s Apr 25 2024 MiTek Industries, Inc. Thu May 30 16:14:12 2024 Page 1

ID:7WKr8toudn35dxwKwBAfQlyHta-FxV8tSU?rz1JG8ywC4fmQKzW1oW?Y?dFB9jVpHzBFzP



3x6 =

Scale = 1:52.5

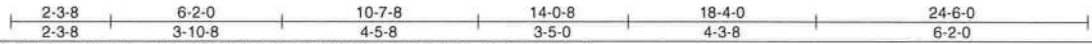
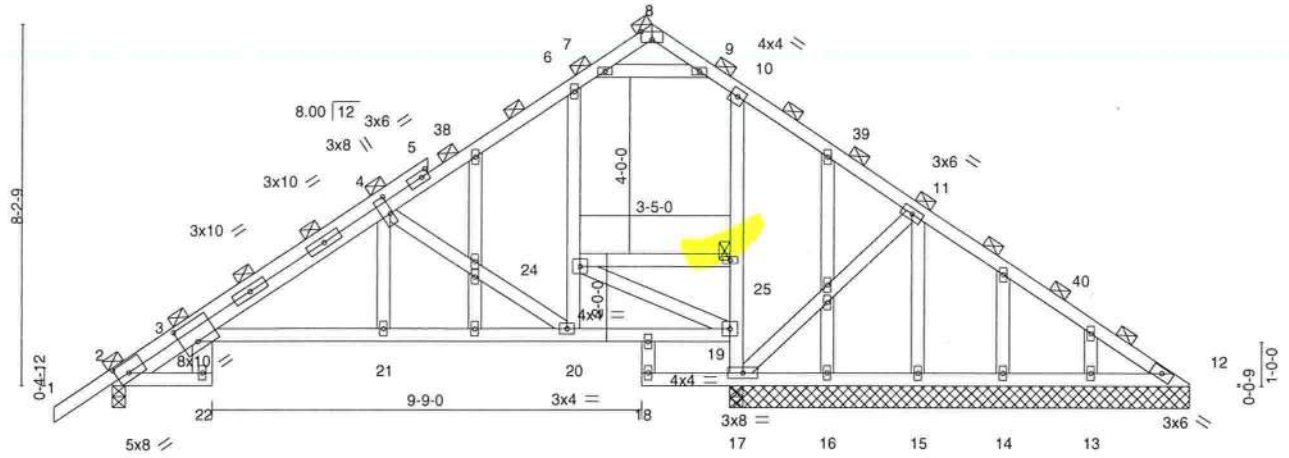


Plate Offsets (X,Y)-- [2:0-3-5,0-3-0], [3:0-4-4,0-5-12], [4:0-5-0,0-0-12], [5:0-2-0,0-1-8], [8:0-3-0,Edge]

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 0.54	Vert(LL)	0.14	20-21	>999	240	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.82	Vert(CT)	-0.25	20-21	>665	180	
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.97	Horz(CT)	0.15	12	n/a	n/a	
BCDL 10.0	Code FBC2023/TPI2014		Matrix-MS						
								Weight: 175 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2 \*Except\*  
3-22: 2x6 SP No.2  
WEBS 2x4 SP No.3 \*Except\*  
18-23: 2x4 SP No.2  
OTHERS 2x4 SP No.3

**BRACING-**  
TOP CHORD 2-0-0 oc purlins (6-0-0 max.).  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. Except:  
6-0-0 oc bracing: 17-19  
JOINTS 1 Brace at Jt(s): 8, 25

**REACTIONS.** All bearings 10-5-8 except (jt=length) 2=0-3-8.  
(lb) - Max Horz 2=211(LC 11)  
Max Uplift All uplift 100 lb or less at joint(s) 12, 14 except 2=171(LC 12),  
17=172(LC 12), 15=147(LC 13), 16=123(LC 19), 13=119(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 12, 16, 14, 13 except 2=593(LC 1),  
17=815(LC 19), 17=814(LC 1), 15=351(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 3-34=395/177, 3-4=789/226, 4-6=310/157  
BOT CHORD 3-21=251/788, 20-21=251/789, 19-20=75/354, 17-19=636/156, 19-25=311/53,  
10-25=308/52  
WEBS 4-20=694/311, 11-15=265/164, 20-24=114/375, 24-25=142/394, 19-24=645/222

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 -1-4-0 to 1-9-8, Zone1 1-9-8 to 12-3-0, Zone2 12-3-0 to 16-5-15, Zone1 16-5-15 to 24-6-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12, 14 except (jt=lb) 2=171, 17=172, 15=147, 16=123, 13=119.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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:

May 31,2024

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Chesterfield, MO 63017  
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Job 3981505	Truss T21	Truss Type COMMON	Qty 1	Ply 1	AARON BUTLER RES. Job Reference (optional)	T34036558
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.730 s Apr 25 2024 MiTek Industries, Inc. Thu May 30 16:14:13 2024 Page 1  
ID:7WKr8toudn35dxwKwBAfQtytHta-j73W5oVdcGAAulX6mnA?yYVj9CxCxQHgDOPpT3LjzBFzO

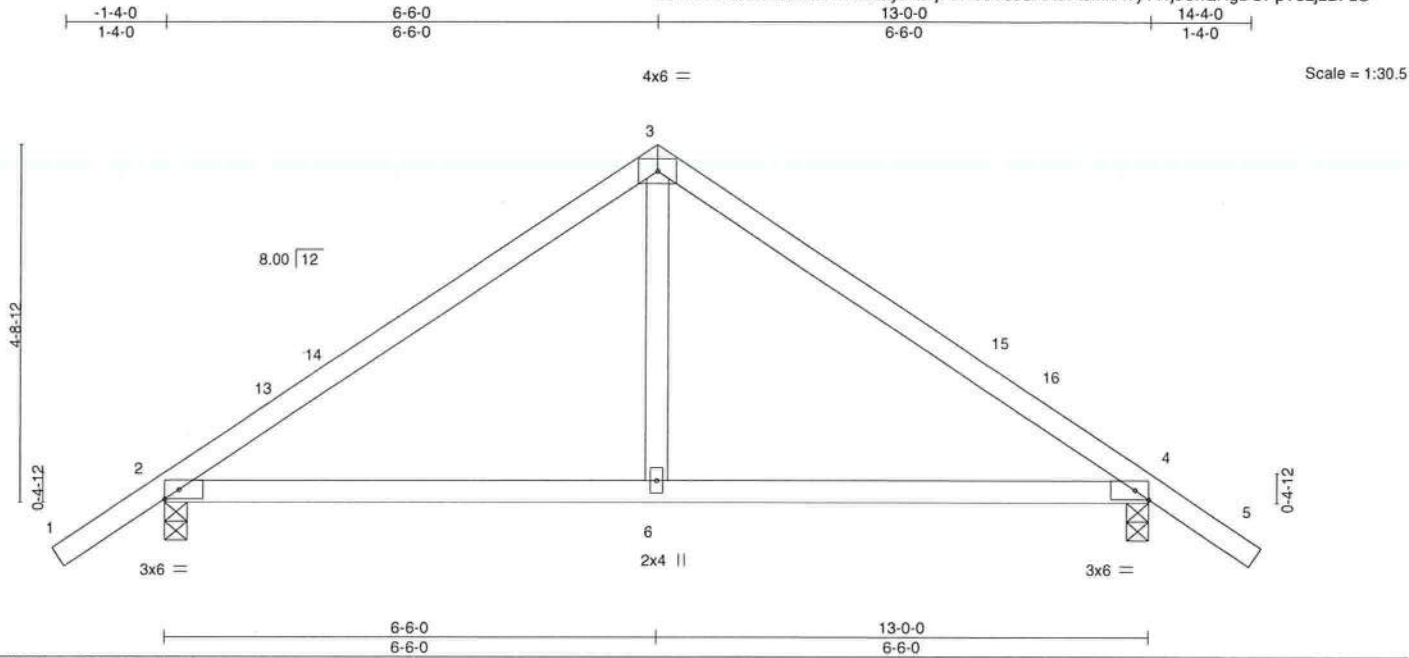


Plate Offsets (X,Y)--		[4:0-2-3,Edge]								
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL	1.25	TC 0.45	Vert(LL)	0.06	6-9	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.43	Vert(CT)	-0.10	6-9	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.11	Horz(CT)	0.01	4	n/a	n/a		
BCDL 10.0	Code FBC2023/TPI2014		Matrix-MS						Weight: 54 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	

REACTIONS.	(size) 2=0-3-8, 4=0-3-8
	Max Horz 2=130(LC 11)
	Max Uplift 2=154(LC 12), 4=154(LC 13)
	Max Grav 2=557(LC 1), 4=557(LC 1)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-572/190, 3-4=-572/190
BOT CHORD	2-6=-47/406, 4-6=-47/406
WEBS	3-6=-4/300

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 -1-5-0 to 1-7-0, Zone1 1-7-0 to 6-6-0, Zone2 6-6-0 to 10-8-15, Zone1 10-8-15 to 14-5-0 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) 2=154, 4=154.

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: May 31,2024

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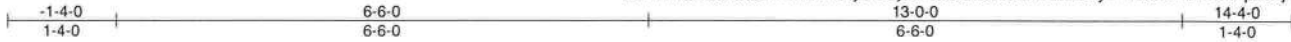
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Job	Truss	Truss Type	Qty	Ply	AARON BUTLER RES.	T34036559
3981505	T21G	COMMON SUPPORTED GAB	1	1	Job Reference (optional)	

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

8.730 s Apr 25 2024 MiTek Industries, Inc. Thu May 30 16:14:13 2024 Page 1  
ID:7Wkr8toudn35dxwKwBAfQlytHta-j73W5oVdcGAAuIX6mnA?yYWnzC1RHhOOPpT3LjzBFzO



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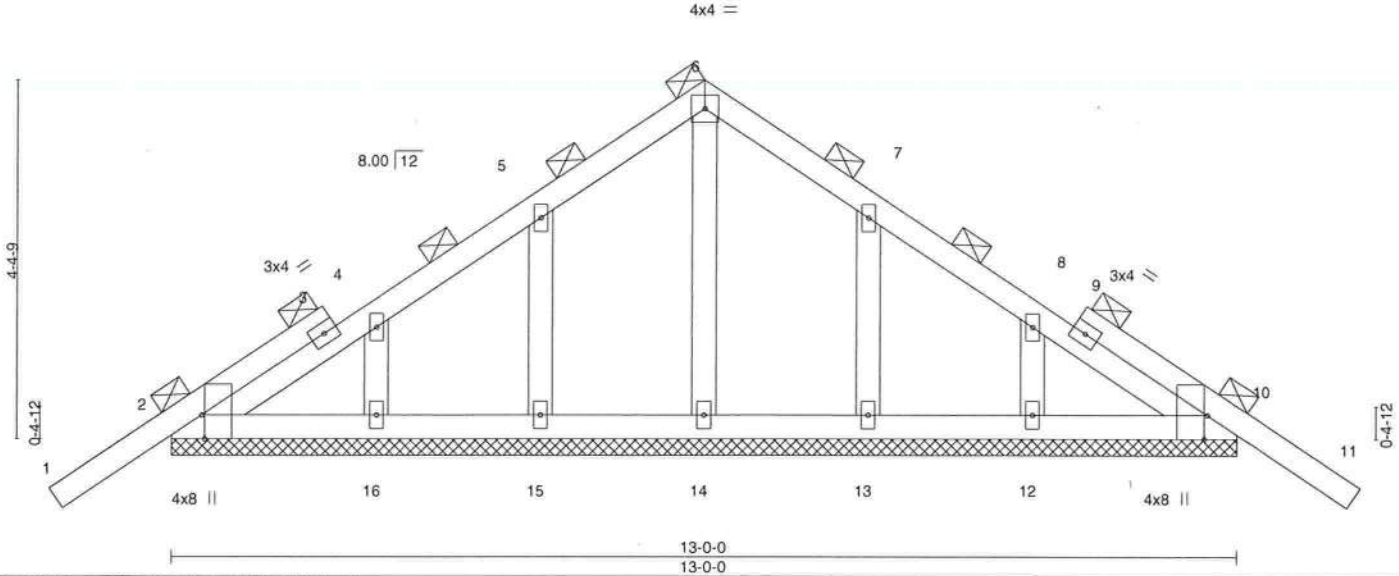


Plate Offsets (X,Y)-- [2:0-3-8,Edge], [10:0-3-8,Edge]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES GRIP	
TCLL	20.0	Plate Grip DOL	1.25	TC	0.14	Vert(LL)	-0.00 11 n/r	120	MT20 244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.04	Vert(CT)	-0.01 11 n/r	120	
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00 10 n/a	n/a	
BCDL	10.0	Code FBC2023/TPI2014		Matrix-S					Weight: 70 lb FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD 2-0-0 oc purlins (6-0-0 max.).
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.3	

**REACTIONS.** All bearings 13-0-0.  
(lb) - Max Horz 2--122(LC 10)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 10, 15, 16, 13, 12  
Max Grav All reactions 250 lb or less at joint(s) 2, 10, 14, 15, 16, 13, 12

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

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 10, 15, 16, 13, 12.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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

Date:

May 31,2024

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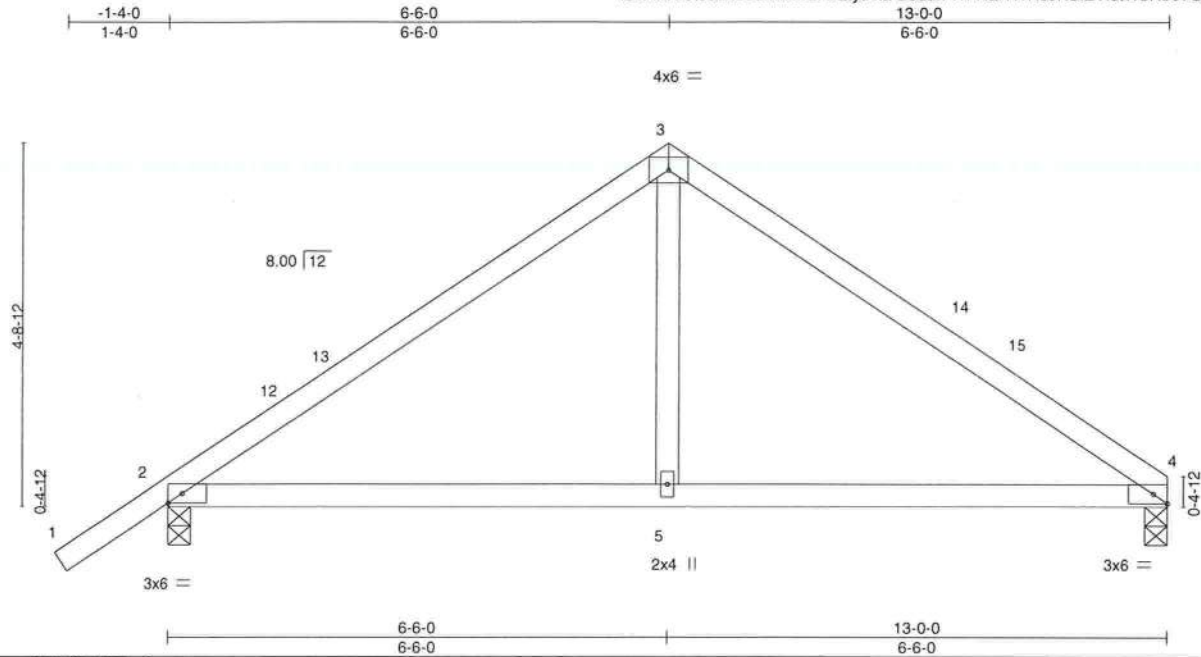
**MiTek®**  
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Chesterfield, MO 63017  
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Job 3981505	Truss T22	Truss Type COMMON	Qty 4	Ply 1	AARON BUTLER RES. Job Reference (optional)	T34036560
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Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.730 s Apr 25 2024 MiTek Industries, Inc. Thu May 30 16:14:14 2024 Page 1  
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Scale = 1:30.1

Plate Offsets (X,Y)--		[4:0-2-3,Edge]	
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>
TCLL 20.0	Plate Grip DOL	1.25	TC 0.47
TCDL 7.0	Lumber DOL	1.25	BC 0.43
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.12
BCDL 10.0	Code	FBC2023/TPI2014	Matrix-MS
			<b>DEFL.</b>
			in (loc) l/defl L/d
			Vert(LL) 0.07 5-8 >999 240
			Vert(CT) -0.11 5-8 >999 180
			Horz(CT) 0.00 4 n/a n/a
			<b>PLATES</b>
			MT20
			<b>GRIP</b>
			244/190
			Weight: 52 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.
WEBS 2x4 SP No.3	

**REACTIONS.** (size) 4=0-3-8, 2=0-3-8  
Max Horz 2=123(LC 9)  
Max Uplift 4=117(LC 13), 2=156(LC 12)  
Max Grav 4=477(LC 1), 2=562(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-582/198, 3-4=-580/212  
BOT CHORD 2-5=-65/410, 4-5=-65/410  
WEBS 3-5=-21/302

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 -1-5-0 to 1-7-0, Zone1 1-7-0 to 6-6-0, Zone2 6-6-0 to 10-8-15, Zone1 10-8-15 to 13-0-0 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) 4=117, 2=156.

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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:

May 31,2024

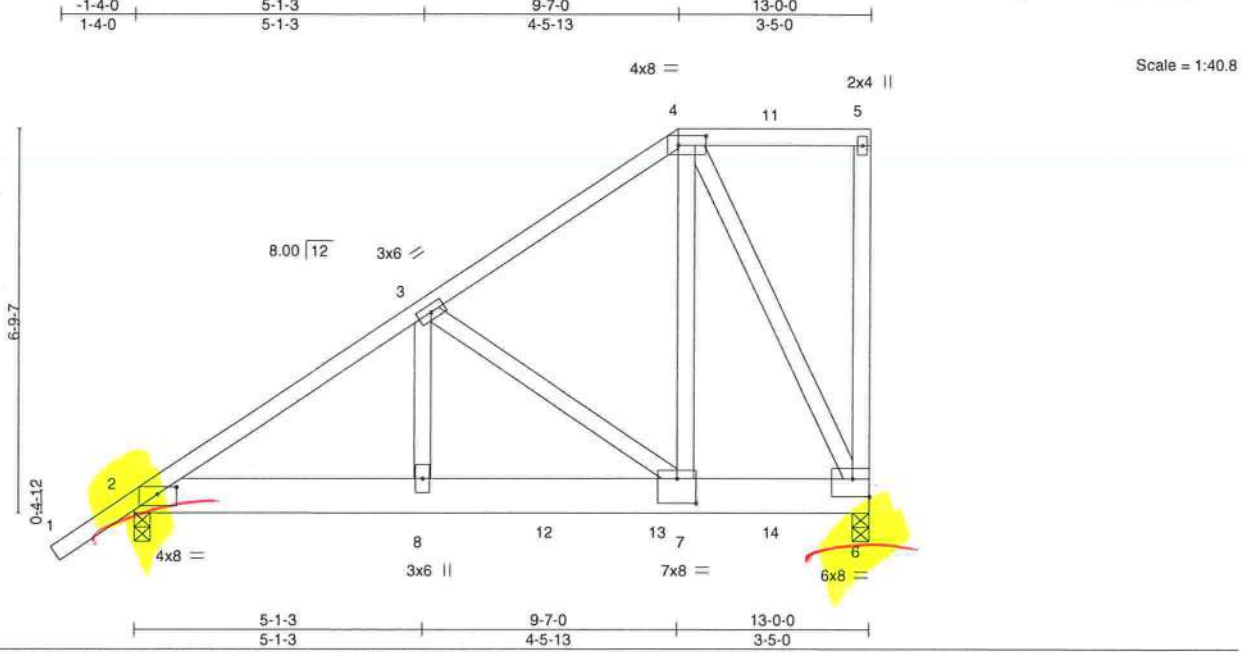
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Chesterfield, MO 63017  
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Job	Truss	Truss Type	Qty	Ply	AARON BUTLER RES.	T34036561
3981505	T23	HALF HIP GIRDER	1	2	Job Reference (optional)	

Builders FirstSource (Lake City, FL), Lake City, FL - 32055, 8.730 s Apr 25 2024 MiTek Industries, Inc. Thu May 30 16:14:14 2024 Page 1  
ID:7WKr8toudn35dxwKwBAfQtytHta-BJdul7WFNa1WR6JKUieVI3y5bl40ztYeTCcuAzBFzN



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 0.18	Vert(LL)	-0.05	7-8	>999	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.34	Vert(CT)	-0.09	7-8	>999		
BCLL 0.0	Rep Stress Incr	NO	WB 0.73	Horz(CT)	0.01	6	n/a		
BCDL 10.0	Code FBC2023/TP12014		Matrix-MS						
								Weight: 209 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6'-0-0 oc purlins, except end verticals.
BOT CHORD 2x8 SP 2400F 2.0E	BOT CHORD Rigid ceiling directly applied or 10'-0-0 oc bracing.
WEBS 2x4 SP No.3	

REACTIONS. (size) 2=0-3-8, 6=0-3-8  
Max Horz 2=279(LC 29)  
Max Uplift 2=-725(LC 8), 6=-1318(LC 8)  
Max Grav 2=1966(LC 1), 6=3415(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-3418/1291, 3-4=-1864/685  
BOT CHORD 2-8=-1239/2790, 7-8=-1239/2790, 6-7=-648/1576  
WEBS 3-8=-641/1554, 3-7=-1602/771, 4-7=-1514/3826, 4-6=-3413/1404

- 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: 2x8 - 2 rows staggered at 0-5-0 oc.  
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCdL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; 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) 2=725, 6=1318.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 2272 lb down and 1060 lb up at 7-3-0, and 1183 lb down and 365 lb up at 9-3-0, and 1197 lb down and 341 lb up at 11-3-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard  
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25

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Date:

May 31,2024

Continued on page 2

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Job	Truss	Truss Type	Qty	Ply	AARON BUTLER RES.	T34036561
3981505	T23	HALF HIP GIRDER	1	2	Job Reference (optional)	

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

8.730 s Apr 25 2024 MiTek Industries, Inc. Thu May 30 16:14:14 2024 Page 2  
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**LOAD CASE(S)** Standard  
Uniform Loads (plf)  
Vert: 1-4=-54, 4-5=-54, 2-6=-20  
Concentrated Loads (lb)  
Vert: 12=-2272(B) 13=-1034(B) 14=-1034(B)

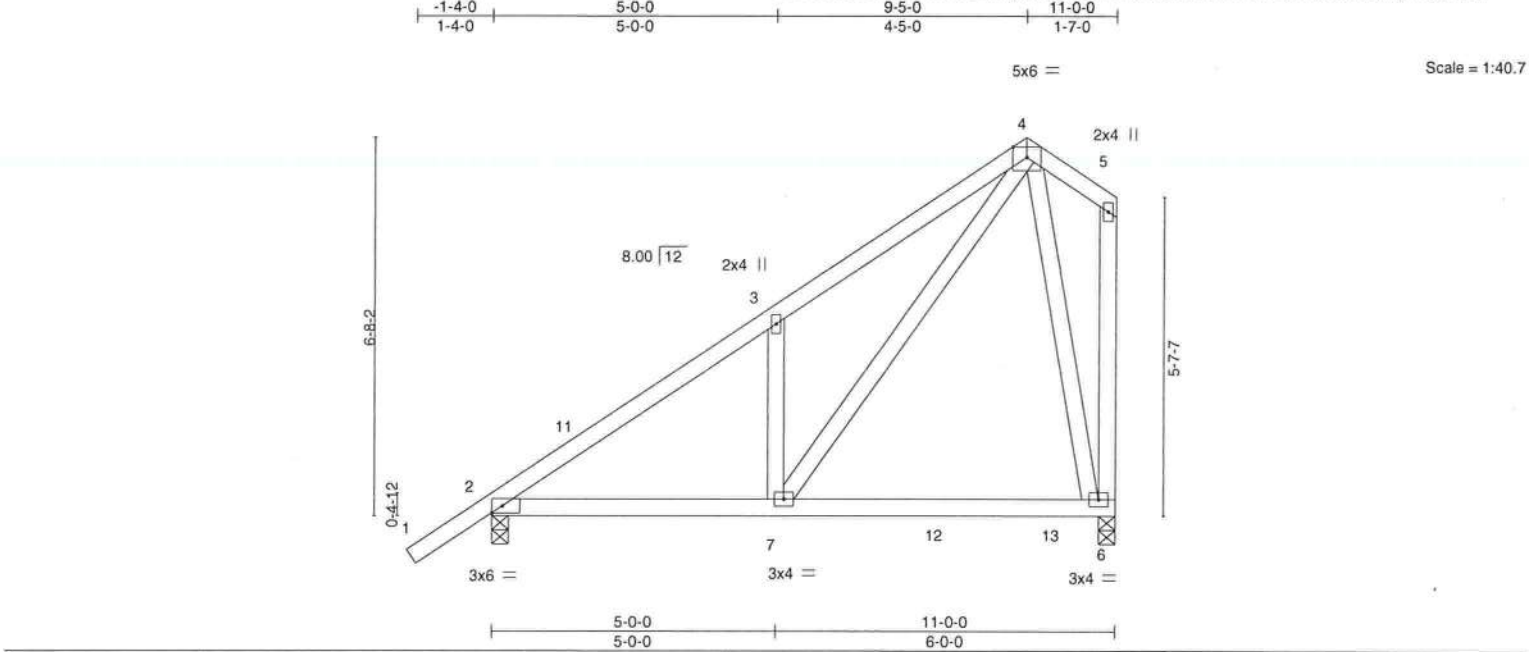
 **WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.**  
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Job	Truss	Truss Type	Qty	Ply	AARON BUTLER RES.	T34036562
3981505	T25	COMMON	2	1		

Builders FirstSource (Lake City,FL),
Lake City, FL - 32055,
8.730 s Apr 25 2024 MiTek Industries, Inc. Thu May 30 16:14:15 2024 Page 1

ID:7WKr8toudn35dxwKwBAfQyHta-fWBGWtXt8uQu7bhVuCDT2zb6K?e8lWOht7yAQczBFzM



LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.21	Vert(LL)	-0.05	6-7	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.35	Vert(CT)	-0.09	6-7	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.33	Horz(CT)	0.00	6	n/a	n/a		
BCDL 10.0	Code FBC2023/TPI2014		Matrix-MS						Weight: 71 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, except end verticals.
BOT CHORD	2x4 SP No.2		BOT CHORD	Rigid ceiling directly applied or 10'-0-0 oc bracing.
WEBS	2x4 SP No.3			

**REACTIONS.** (size) 2=0-3-8, 6=0-3-8  
Max Horz 2=253(LC 12)  
Max Uplift 2=-108(LC 12), 6=-166(LC 12)  
Max Grav 2=542(LC 19), 6=504(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-554/87, 3-4=-609/255  
BOT CHORD 2-7=-214/476  
WEBS 3-7=-303/266, 4-7=-289/665, 4-6=-396/225

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCCL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 -1-5-0 to 1-7-0, Zone1 1-7-0 to 9-5-0, Zone3 9-5-0 to 10-10-4 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, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=108, 6=166.

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Date: May 31,2024



Job	Truss	Truss Type	Qty	Ply	AARON BUTLER RES.	T34036563
3981505	T25G	GABLE	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.730 s Apr 25 2024 MiTek Industries, Inc. Thu May 30 16:14:15 2024 Page 1  
ID:7WKr8toudn35dxwKwBAfQtytHta-fWBGWTxt8uQu7bhVuCDT2zb7H?iPlbWht7yAQczBFzM

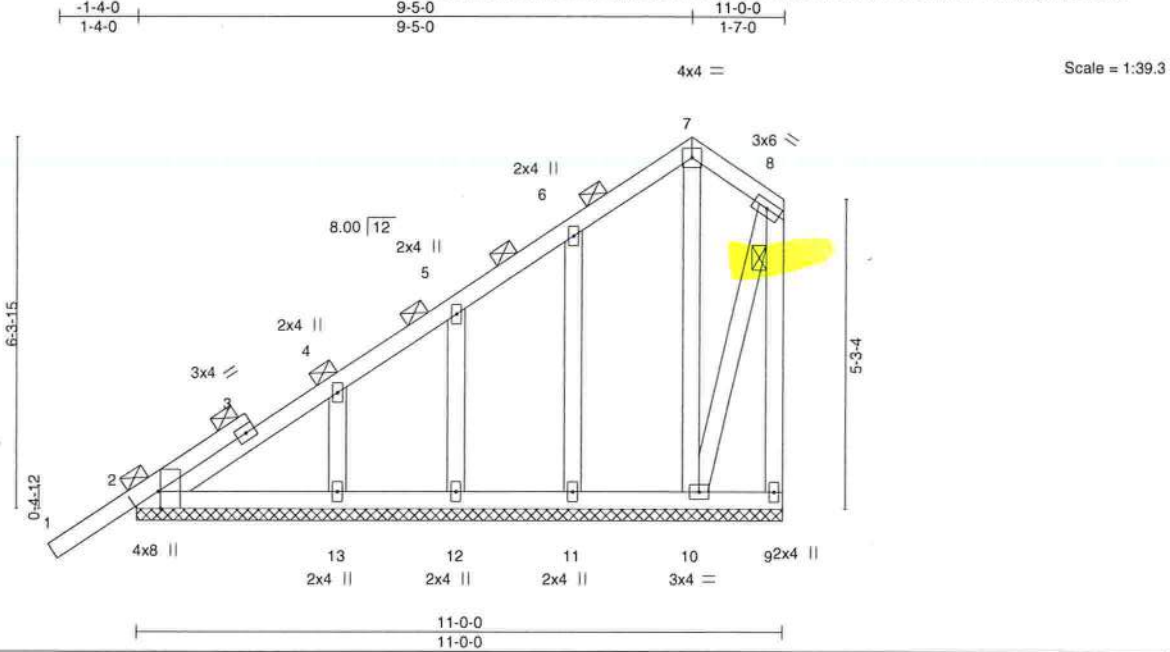


Plate Offsets (X,Y)-- [2:0-3-8,Edge]											
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d			PLATES GRIP		
TCLL	20.0	Plate Grip DOL	1.25	TC	0.15	Vert(LL)	-0.00	1	n/r	120	MT20 244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.07	Vert(CT)	-0.00	1	n/r	120	
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	-0.00	10	n/a	n/a	
BCDL	10.0	Code FBC2023/TPI2014		Matrix-S							Weight: 79 lb FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD 2-0-0 oc purlins (6-0-0 max.), except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing, Except:
WEBS 2x4 SP No.3	10-0-0 oc bracing: 9-10.
OTHERS 2x4 SP No.3	

**REACTIONS.** All bearings 11-0-0.  
(lb) - Max Horz 2=239(LC 12)  
Max Uplift All uplift 100 lb or less at joint(s) 9, 10, 11, 12, 13  
Max Grav All reactions 250 lb or less at joint(s) 2, 9, 10, 11, 12, 13

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-4=-256/134

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - 4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - 5) Gable requires continuous bottom chord bearing.
  - 6) Gable studs spaced at 2-0-0 oc.
  - 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 10, 11, 12, 13.
  - 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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Job	Truss	Truss Type	Qty	Ply	AARON BUTLER RES.	T34036564
3981505	T26G	GABLE	1	1		
Job Reference (optional)						

Builders FirstSource (Lake City, FL), Lake City, FL - 32055, 8.730 s Apr 25 2024 MiTek Industries, Inc. Thu May 30 16:14:17 2024 Page 1  
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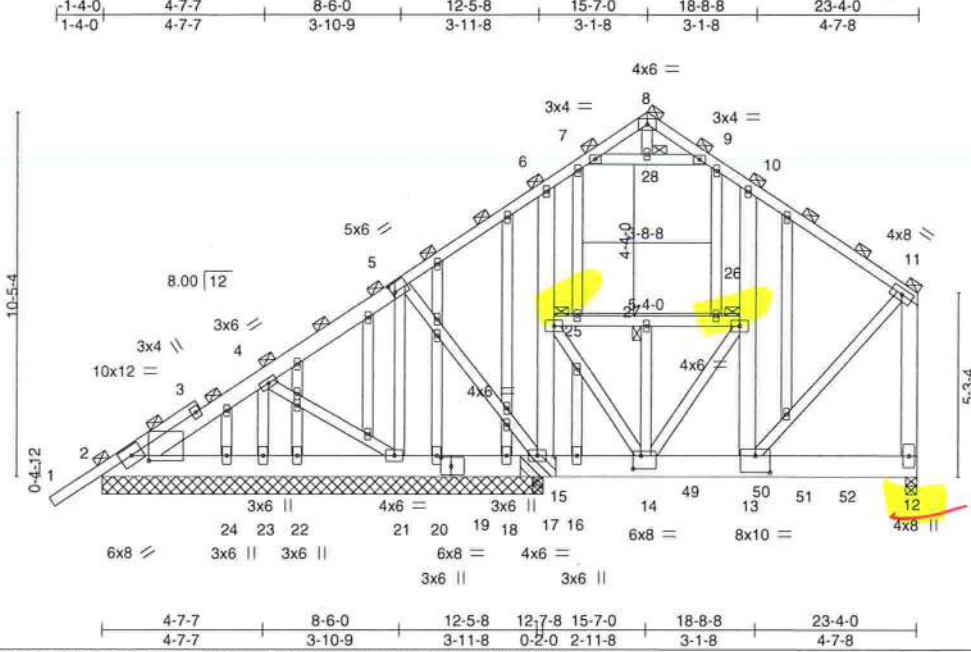


Plate Offsets (X,Y)--										[2:0-6-0,0-1-13], [5:0-1-0,0-3-0], [13:0-5-0,0-5-12], [14:0-2-12,0-4-8], [19:0-3-8,0-3-0]									
LOADING (psf)		SPACING-		2-0-0		CSI.		DEFL.		in (loc)		l/defl		L/d		PLATES		GRIP	
TCLL 20.0		Plate Grip DOL		1.25		TC 0.92		Vert(LL)		-0.09 12-13		>999		240		MT20		244/190	
TCDL 7.0		Lumber DOL		1.25		BC 0.39		Vert(CT)		-0.15 12-13		>832		180					
BCLL 0.0 *		Rep Stress Incr		NO		WB 0.75		Horz(CT)		0.00 12		n/a		n/a					
BCDL 10.0		Code FBC2023/TPI2014				Matrix-MS										Weight: 300 lb		FT = 20%	

LUMBER-	BRACING-
TOP CHORD	2x4 SP No.1 *Except*
	2-5: 2x6 SP No.2, 1-3: 2x4 SP No.2
BOT CHORD	2x8 SP 2400F 2.0E
WEBS	2x4 SP No.3 *Except*
	6-16,10-13,11-12: 2x6 SP No.2
OTHERS	2x4 SP No.3

**REACTIONS.** All bearings 12-7-8 except (jt=length) 12=0-3-12.  
(lb) - Max Horz 2=309(LC 8)  
Max Uplift All uplift 100 lb or less at joint(s) 22 except 23=167(LC 9), 21=119(LC 8), 16=1164(LC 8), 12=962(LC 9), 18=1826(LC 2), 20=101(LC 9), 24=172(LC 8)  
Max Grav All reactions 250 lb or less at joint(s) 21, 22 except 23=544(LC 1), 16=3294(LC 2), 16=3017(LC 1), 12=3144(LC 2), 18=645(LC 9), 20=341(LC 2), 24=785(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-4=-203/386, 4-5=-881/325, 5-6=-1278/461, 6-7=-977/391, 7-8=-150/320, 8-9=-169/356, 9-10=-957/373, 10-11=-1584/498, 11-12=-2244/684  
BOT CHORD 2-24=-315/143, 23-24=-315/143, 22-23=-315/143, 21-22=-315/143, 20-21=-253/688, 18-20=-253/688, 16-18=-253/688, 14-16=-246/894, 13-14=-388/1369  
WEBS 4-23=-1241/317, 4-21=-238/1001, 5-21=-830/260, 5-16=-153/469, 16-25=-396/200, 6-25=-348/626, 14-25=-337/1059, 13-26=-267/602, 10-26=-338/805, 11-13=-461/1685, 25-27=-424/128, 26-27=-424/128, 7-28=-1487/606, 9-28=-1487/606

- NOTES-**
- 1) 2x8 SP 2400F 2.0E bearing block 12" long at jt. 16 attached to front face with 4 rows of 10d (0.131"x3") nails spaced 3" o.c. 16 Total fasteners. Bearing is assumed to be SP No.2.
  - 2) Unbalanced roof live loads have been considered for this design.
  - 3) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCCL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
  - 4) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - 5) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - 6) All plates are 2x4 MT20 unless otherwise indicated.
  - 7) Gable studs spaced at 2-0-0 oc.
  - 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 9) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

Continued on page 2

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May 31,2024

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Job	Truss	Truss Type	Qty	Ply	AARON BUTLER RES.	T34036564
3981505	T26G	GABLE	1	1	Job Reference (optional)	

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

8.730 s Apr 25 2024 MiTek Industries, Inc. Thu May 30 16:14:17 2024 Page 2  
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- NOTES-**
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 22 except (jt=lb) 23=167, 21=119, 16=1164, 12=962, 18=1826, 20=101, 24=172.
  - 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - 12) This truss has large uplift reaction(s) from gravity load case(s). Proper connection is required to secure truss against upward movement at the bearings. Building designer must provide for uplift reactions indicated.
  - 13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1033 lb down and 336 lb up at 13-3-0, 1071 lb down and 331 lb up at 15-3-0, 1000 lb down and 330 lb up at 17-3-0, and 1000 lb down and 330 lb up at 19-3-0, and 1000 lb down and 330 lb up at 21-3-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
  - 14) 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: 1-8=-54, 8-11=-54, 12-46=-20
    - Concentrated Loads (lb)
      - Vert: 15=-917(F) 49=-935(F) 50=-905(F) 51=-905(F) 52=-905(F)

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Job	Truss	Truss Type	Qty	Ply	AARON BUTLER RES.	T34036565
3981505	T28	MONOPITCH GIRDER	1	2	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.730 s Apr 25 2024 MiTek Industries, Inc. Thu May 30 16:14:17 2024 Page 1  
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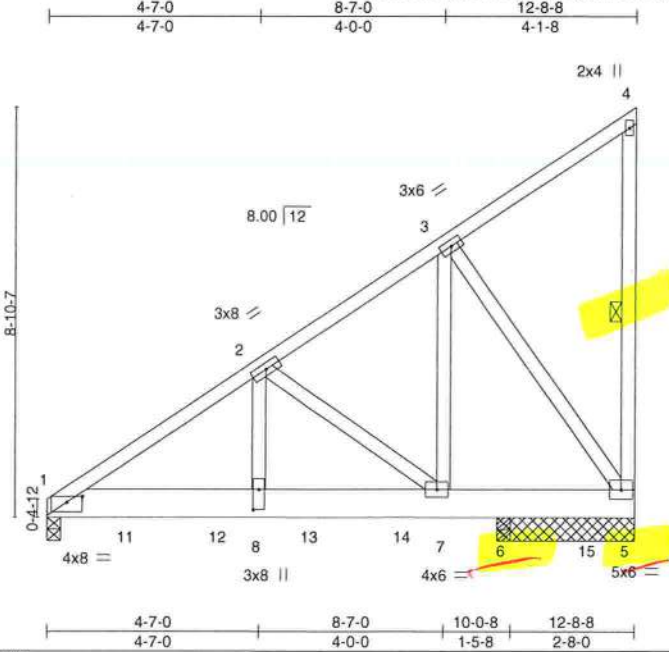


Plate Offsets (X,Y)-- [1:0-4-0,0-1-9], [8:0-5-4,0-1-8]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES GRIP	
TCLL	20.0	Plate Grip DOL	1.25	TC	0.17	Vert(LL)	-0.03 7-8 >999	240	MT20 244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.24	Vert(CT)	-0.05 7-8 >999	180	
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.59	Horz(CT)	0.01 5 n/a	n/a	
BCDL	10.0	Code FBC2023/TPI2014		Matrix-MS					
									Weight: 204 lb FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x8 SP 2400F 2.0E	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 4-5
REACTIONS.	
(size) 1=0-3-8, 5=2-11-8, 6=0-3-8	
Max Horz 1=323(LC 8)	
Max Uplift 1=-665(LC 5), 5=-374(LC 8), 6=-1062(LC 8)	
Max Grav 1=2779(LC 2), 5=903(LC 2), 6=4039(LC 2)	

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-3487/811, 2-3=-707/145  
BOT CHORD 1-8=-909/2884, 7-8=-909/2884, 6-7=-215/549, 5-6=-215/549  
WEBS 2-8=-807/3102, 2-7=-2910/864, 3-7=-266/945, 3-5=-953/371

- 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: 2x8 - 2 rows staggered at 0-8-0 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.
  - Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - 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=665, 5=374, 6=1062.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1153 lb down and 312 lb up at 1-7-12, 1153 lb down and 312 lb up at 3-7-12, 1153 lb down and 312 lb up at 5-7-12, 1153 lb down and 312 lb up at 7-7-12, and 1153 lb down and 312 lb up at 9-7-12, and 1154 lb down and 311 lb up at 11-7-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard  
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25  
Uniform Loads (plf)  
Vert: 1-4=-54, 1-5=-20

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Date:

May 31,2024

Continued on page 2

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



Job	Truss	Truss Type	Qty	Ply	AARON BUTLER RES.	T34036565
3981505	T28	MONOPITCH GIRDER	1	2	Job Reference (optional)	

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

8.730 s Apr 25 2024 MiTek Industries, Inc. Thu May 30 16:14:17 2024 Page 2  
ID:7WKR8toudn35dxwKwBAfQtyHta-buJ1x9Y8gVgcNvqu?dFx7OhTQpMJDMm\_KQRGUUzBFzK

**LOAD CASE(S)** Standard  
Concentrated Loads (lb)  
Vert: 6=-1092(F) 11=-1092(F) 12=-1092(F) 13=-1092(F) 14=-1092(F) 15=-1093(F)

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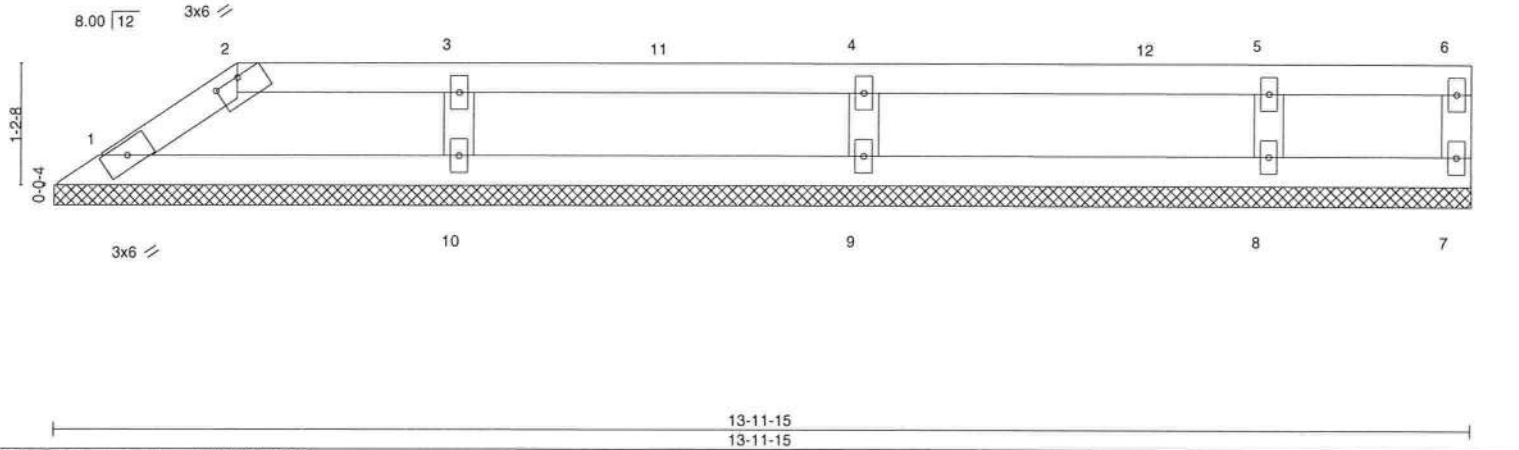


Plate Offsets (X,Y)--		[2:0-3-0,0-0-2]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 20.0	Plate Grip DOL	1.25	TC 0.15
TCDL 7.0	Lumber DOL	1.25	BC 0.12
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.04
BCDL 10.0	Code	FBC2023/TPI2014	Matrix-S
			DEFL.
			in (loc) l/defl L/d
			Vert(LL) n/a - n/a 999
			Vert(CT) n/a - n/a 999
			Horz(CT) 0.00 7 n/a n/a
			PLATES GRIP
			MT20 244/190
			Weight: 45 lb FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	
OTHERS 2x4 SP No.3	

REACTIONS. All bearings 13-11-15.  
(lb) - Max Horz 1=35(LC 12)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 7, 8 except 10=104(LC 12), 9=103(LC 8)  
Max Grav All reactions 250 lb or less at joint(s) 1, 7, 8 except 10=296(LC 1), 9=308(LC 26)

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

- NOTES-
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 0-5-12 to 1-9-11, Zone2 1-9-11 to 6-0-10, Zone1 6-0-10 to 13-10-3 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.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - 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) 1, 7, 8 except (jt=lb) 10=104, 9=103.

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: May 31,2024



Job 3981505	Truss V02	Truss Type GABLE	Qty 1	Ply 1	AARON BUTLER RES.	T34036567
Builders FirstSource (Lake City,FL), Lake City, FL - 32055,						Job Reference (optional)

8.730 s Apr 25 2024 MiTek Industries, Inc. Thu May 30 16:14:18 2024 Page 1  
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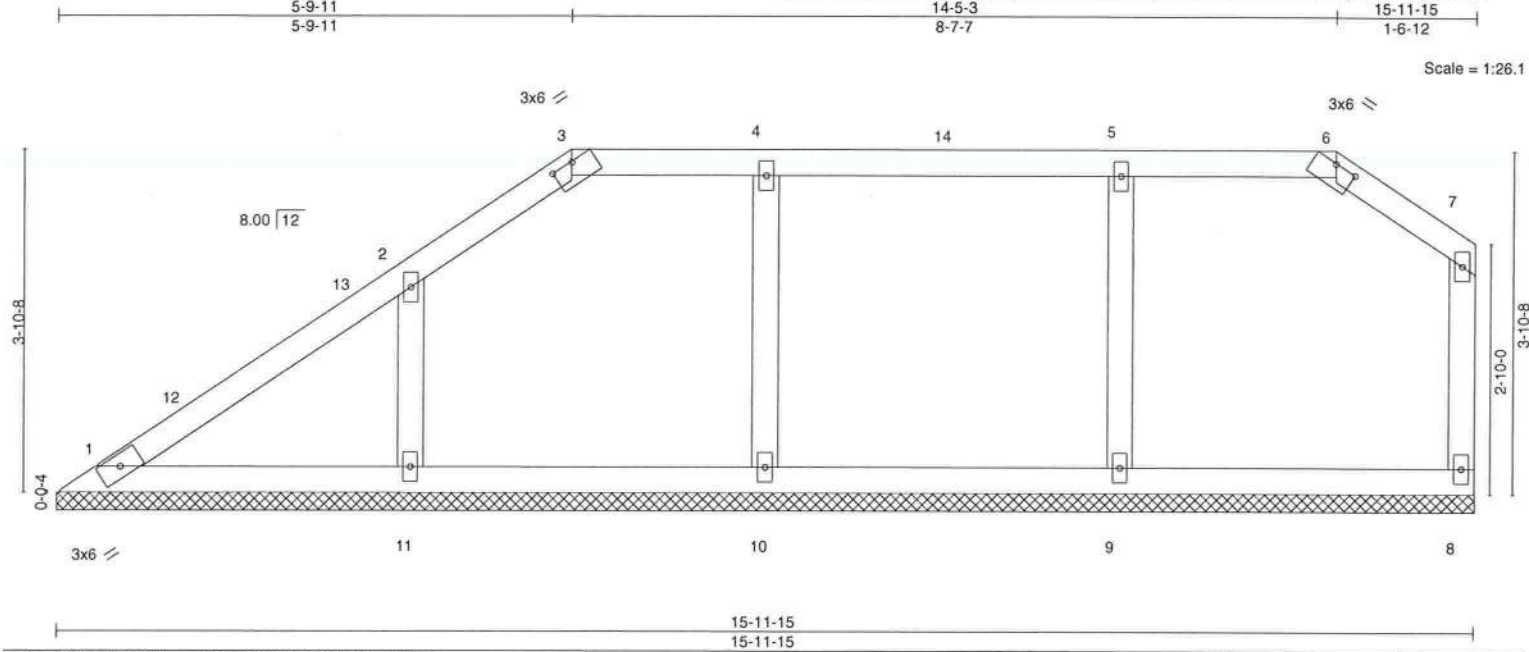


Plate Offsets (X,Y)-- [3:0-3-0,0-0-2], [6:0-3-0,0-0-2]											
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d			PLATES GRIP		
TCLL	20.0	Plate Grip DOL	1.25	TC	0.15	Vert(LL)	n/a	-	n/a	999	MT20 244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.12	Vert(CT)	n/a	-	n/a	999	
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	8	n/a	n/a	
BCDL	10.0	Code FBC2023/TPI2014		Matrix-S							Weight: 66 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, except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	
OTHERS 2x4 SP No.3	

**REACTIONS.** All bearings 15-11-15.  
(lb) - Max Horz 1=117(LC 12)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 8, 10, 9 except 11=-158(LC 12)  
Max Grav All reactions 250 lb or less at joint(s) 1, 8 except 11=316(LC 19), 10=289(LC 25), 9=303(LC 26)

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 0-5-12 to 3-5-12, Zone1 3-5-12 to 5-9-11, Zone2 5-9-11 to 10-0-10, Zone1 10-0-10 to 14-5-3, Zone3 14-5-3 to 15-10-3 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.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - 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) 1, 8, 10, 9 except (jt=lb) 11=158.

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Chesterfield, MO 63017

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Job	Truss	Truss Type	Qty	Ply	AARON BUTLER RES.	T34036568
3981505	V03	GABLE	1	1	Job Reference (optional)	

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

8.730 s Apr 25 2024 MiTek Industries, Inc. Thu May 30 16:14:19 2024 Page 1

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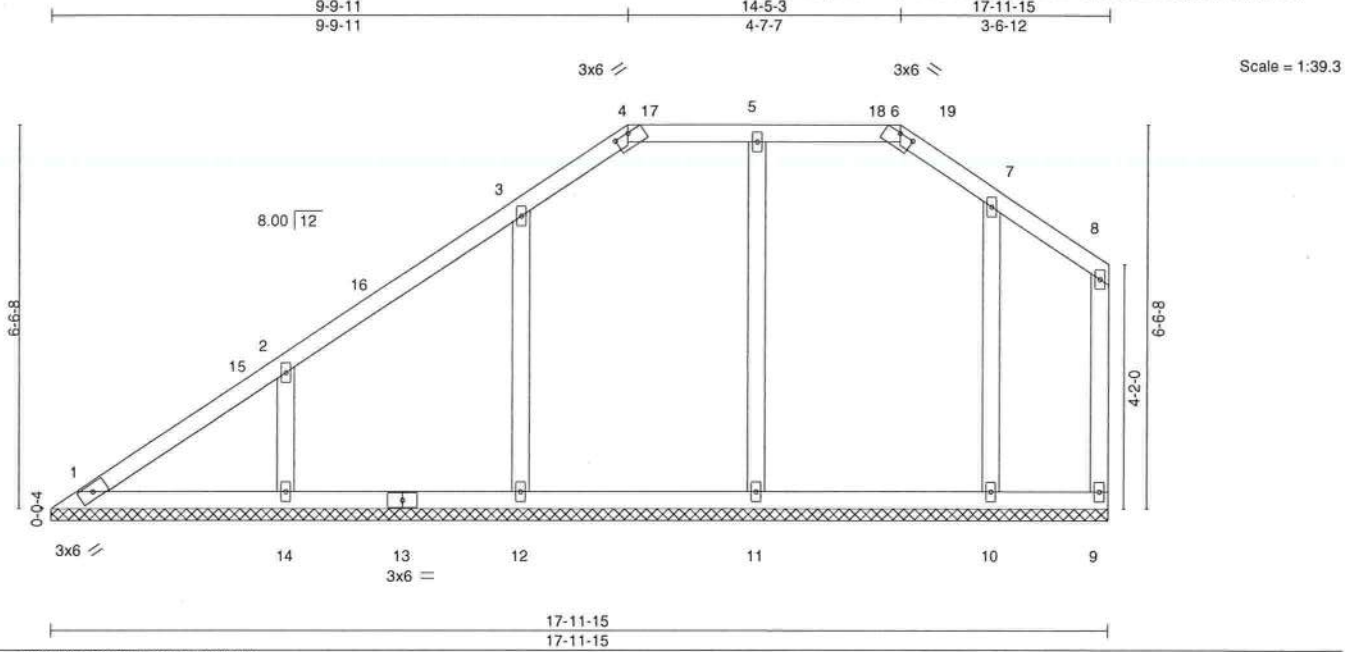


Plate Offsets (X,Y)-- [4:0-3-0,0-0-2], [6:0-3-0,0-0-2]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES GRIP	
TCLL	20.0	Plate Grip DOL	1.25	TC	0.16	Vert(LL)	n/a - n/a	999	MT20 244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.18	Vert(CT)	n/a - n/a	999	
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.00 9 n/a	n/a	
BCDL	10.0	Code FBC2023/TPI2014		Matrix-S					Weight: 89 lb FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	
OTHERS 2x4 SP No.3	

**REACTIONS.** All bearings 17-11-15.  
(lb) - Max Horz 1=191(LC 12)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 9, 11, 10 except 14=178(LC 12), 12=141(LC 12)  
Max Grav All reactions 250 lb or less at joint(s) 1, 9 except 14=393(LC 19), 12=389(LC 19), 11=395(LC 2), 10=309(LC 20)

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCCL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 0-5-12 to 3-5-12, Zone1 3-5-12 to 9-9-11, Zone2 9-9-11 to 14-0-10, Zone1 14-0-10 to 14-5-3, Zone3 14-5-3 to 17-10-3 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.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 9, 11, 10 except (jt=lb) 14=178, 12=141.

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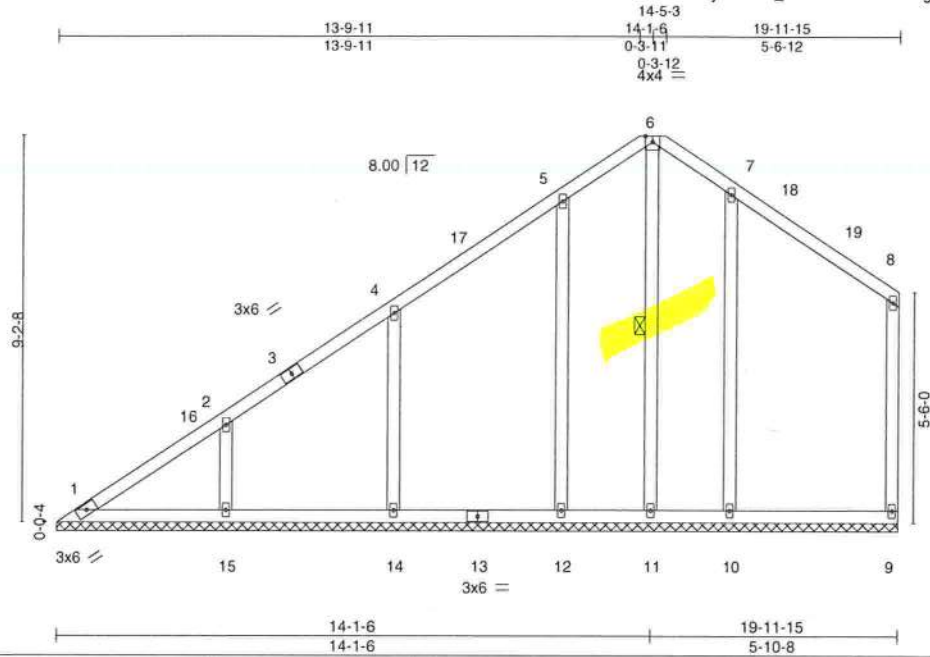
Joaquin Velez PE No.68182  
MiTek Inc. DBA MiTek USA FL Cert 6634  
16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
Date: May 31,2024



Job	Truss	Truss Type	Qty	Ply	AARON BUTLER RES.
3981505	V04	GABLE	1	1	
					Job Reference (optional)

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

8.730 s Apr 25 2024 MiTek Industries, Inc. Thu May 30 16:14:20 2024 Page 1  
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Scale = 1:55.0

LOADING (psf)	SPACING-	CSL	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.16	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 7.0	Plate Grip DOL 1.25	BC 0.16	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Lumber DOL 1.25	WB 0.25	Horz(CT)	0.00	9	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S							
	Code FBC2023/TPI2014								
								Weight: 118 lb	FT = 20%

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

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
WEBS 1 Row at midpt 6-11

**REACTIONS.** All bearings 19-11-15.  
(lb) - Max Horz 1=267(LC 12)  
Max Uplift All uplift 100 lb or less at joint(s) 9, 1, 11 except 15=172(LC 12), 14=170(LC 12), 12=138(LC 12), 10=147(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 9, 1, 11 except 15=388(LC 19), 14=416(LC 19), 12=370(LC 19), 10=399(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-281/200

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 0-5-12 to 3-5-12, Zone1 3-5-12 to 14-1-6, Zone2 14-1-6 to 18-4-5, Zone1 18-4-5 to 19-10-3 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 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 1, 11 except (jt=lb) 15=172, 14=170, 12=138, 10=147.

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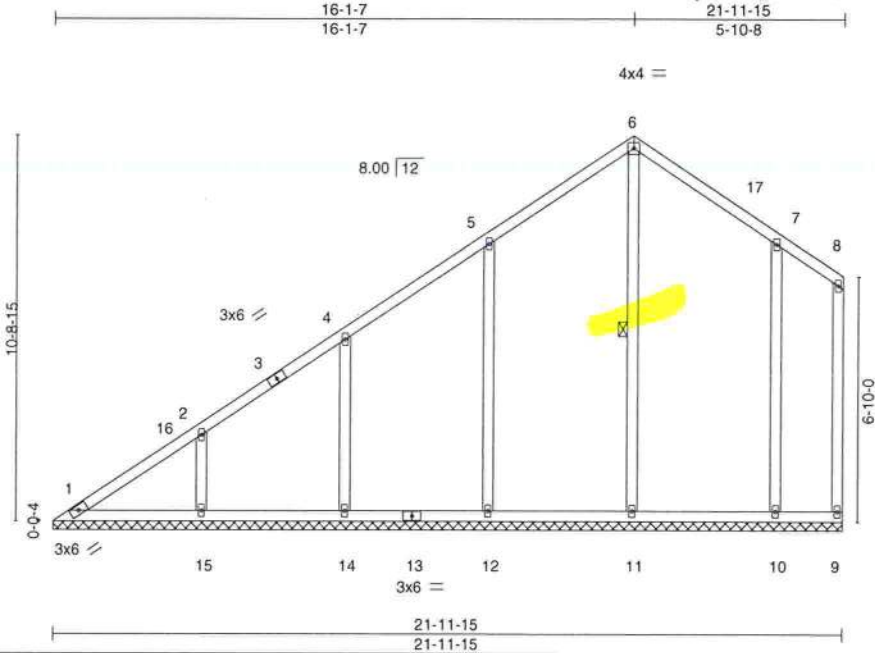
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Job	Truss	Truss Type	Qty	Ply	AARON BUTLER RES.	T34036570
3981505	V05	GABLE	1	1		
Job Reference (optional)						

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

8.730 s Apr 25 2024 MiTek Industries, Inc. Thu May 30 16:14:20 2024 Page 1  
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.17	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.17	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.29	Horz(CT)	-0.00	9	n/a	n/a		
BCDL 10.0	Code FBC2023/TPI2014		Matrix-S						Weight: 129 lb	FT = 20%

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

**REACTIONS.** All bearings 21-11-15.  
(lb) - Max Horz 1=319(LC 12)  
Max Uplift All uplift 100 lb or less at joint(s) 9, 1, 11 except 12=180(LC 12), 14=160(LC 12), 15=178(LC 12), 10=157(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 9, 1 except 11=414(LC 19), 12=458(LC 19), 14=396(LC 19), 15=400(LC 19), 10=376(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=343/224  
WEBS 5-12=255/203, 2-15=250/197

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 0-5-12 to 3-5-12, Zone1 3-5-12 to 16-1-7, Zone2 16-1-7 to 20-1-7, Zone1 20-1-7 to 21-10-3 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 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 1, 11 except (jt=lb) 12=180, 14=160, 15=178, 10=157.

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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Chesterfield, MO 63017  
Date:

May 31,2024

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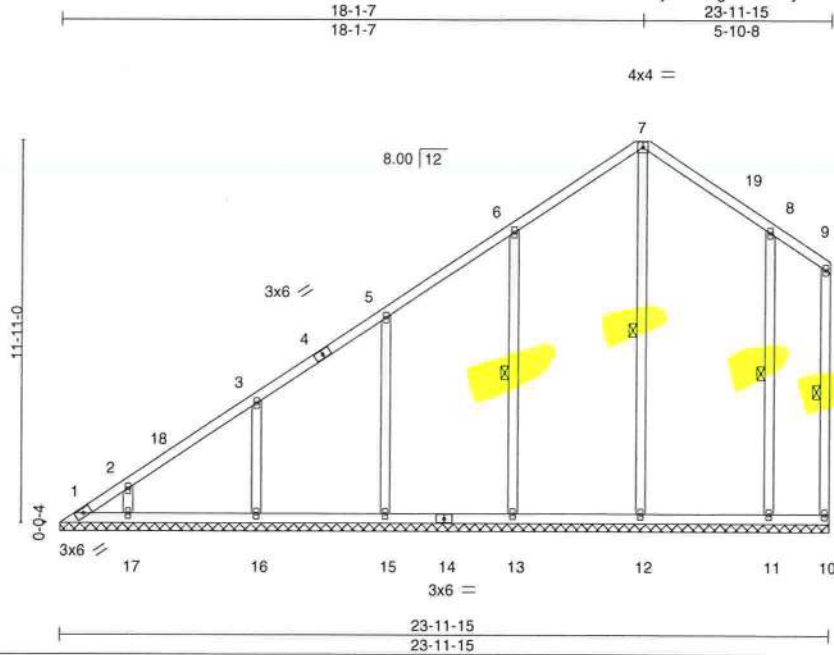
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Job	Truss	Truss Type	Qty	Ply	AARON BUTLER RES.	T34036571
3981505	V06	GABLE	1	1	Job Reference (optional)	

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

8.730 s Apr 25 2024 MiTek Industries, Inc. Thu May 30 16:14:21 2024 Page 1  
ID:7WKr8toudn35dxwKwBAfQtytHta-UgYXmXbejkA1sW8fETKiHEr8RQkH9HAaF2PUdGzBFzG



Scale = 1:72.0

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.17	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.17	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.18	Horz(CT)	-0.00	10	n/a	n/a		
BCDL 10.0	Code FBC2023/TPI2014		Matrix-S							
										Weight: 148 lb FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	2x4 SP No.3	WEBS	1 Row at midpt 9-10, 7-12, 6-13, 8-11
OTHERS	2x4 SP No.3		

**REACTIONS.** All bearings 23-11-15.  
(lb) - Max Horz 1=370(LC 12)  
Max Uplift All uplift 100 lb or less at joint(s) 10, 12 except 1=125(LC 10), 13=179(LC 12), 15=161(LC 12), 16=172(LC 12), 17=138(LC 12), 11=155(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 10, 1 except 12=416(LC 19), 13=452(LC 19), 15=433(LC 19), 16=420(LC 19), 17=308(LC 19), 11=374(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-439/255, 2-3=-344/223  
WEBS 6-13=-255/203

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 0-5-12 to 3-5-12, Zone1 3-5-12 to 18-1-7, Zone2 18-1-7 to 22-1-7, Zone1 22-1-7 to 23-10-3 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 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 12 except (jt=lb) 1=125, 13=179, 15=161, 16=172, 17=138, 11=155.

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:

May 31,2024

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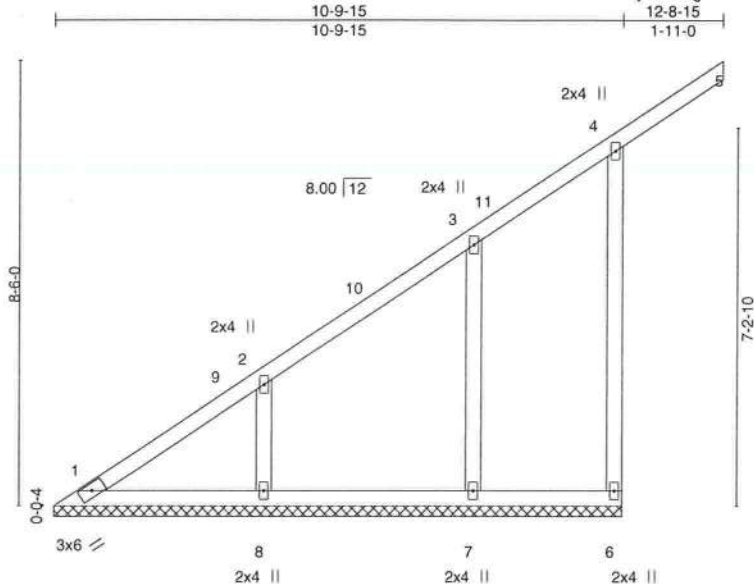
Job	Truss	Truss Type	Qty	Ply	AARON BUTLER RES.
3981505	V07	GABLE	1	1	T34036572
Job Reference (optional)					

Builders FirstSource (Lake City,FL),

Lake City, FL - 32055,

8.730 s Apr 25 2024 MiTek Industries, Inc. Thu May 30 16:14:21 2024 Page 1

ID:7WKr8toudn35dxwKwBAfQlytHta-UgYXmXbejKA1sW8fETKiHEr7KQl89lkaF2PUdGzBFzG



Scale = 1:44.1

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 0.24	Vert(LL)	0.02	5	n/r	120	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.12	Vert(CT)	-0.00	4	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.08	Horz(CT)	0.00	6	n/a	n/a		
BCDL 10.0	Code FBC2023/TP12014		Matrix-S						Weight: 58 lb	FT = 20%

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

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

**REACTIONS.** All bearings 10-9-15.  
(lb) - Max Horz 1=256(LC 12)  
Max Uplift All uplift 100 lb or less at joint(s) 7 except 6=136(LC 9), 8=174(LC 12)  
Max Grav All reactions 250 lb or less at joint(s) 1 except 6=260(LC 19), 8=408(LC 19), 7=318(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-347/164  
WEBS 2-8=-257/201

- NOTES-**
- 1) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 0-5-12 to 3-5-12, Zone1 3-5-12 to 12-8-15 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) Gable requires continuous bottom chord bearing.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7 except (jt=lb) 6=136, 8=174.

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

May 31,2024

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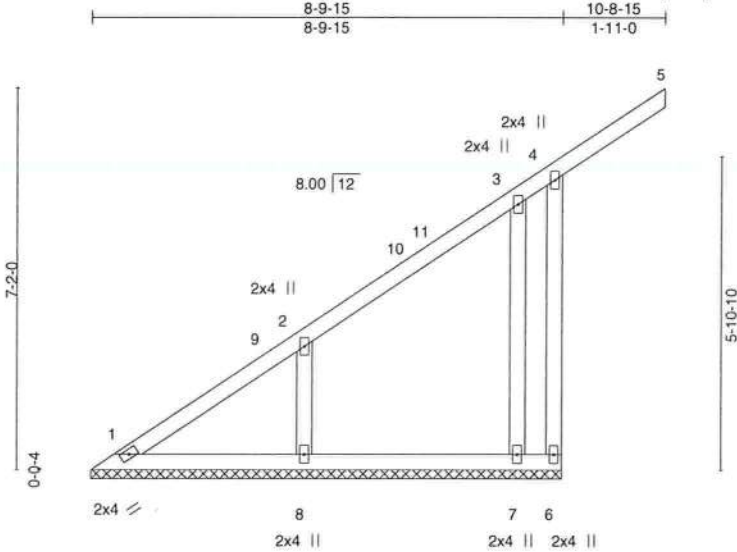
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Job	Truss	Truss Type	Qty	Ply	AARON BUTLER RES.
3981505	V08	GABLE	1	1	T34036573
Job Reference (optional)					

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

8.730 s Apr 25 2024 MiTek Industries, Inc. Thu May 30 16:14:22 2024 Page 1  
ID:7WKr8toudn35dxwKwBAfQtytHta-ys6w\_scGU1luTgjroAr6qROHqp5Nul5jUi81AizBFzF



Scale = 1:43.3

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.26	Vert(LL)	0.01	5	n/r	120	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.12	Vert(CT)	-0.00	5	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.07	Horz(CT)	-0.00	6	n/a	n/a		
BCDL 10.0	Code FBC2023/TPI2014		Matrix-S						Weight: 50 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3	
OTHERS 2x4 SP No.3	

**REACTIONS.** All bearings 8-9-15.  
(lb) - Max Horz 1=220(LC 12)  
Max Uplift All uplift 100 lb or less at joint(s) 7 except 6=177(LC 9), 8=172(LC 12)  
Max Grav All reactions 250 lb or less at joint(s) 1, 6, 7 except 8=340(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-319/149, 4-6=-197/306

- NOTES-**
- 1) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCCL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 0-5-12 to 3-5-12, Zone1 3-5-12 to 10-8-15 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) Gable requires continuous bottom chord bearing.
  - 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) 7 except (jt=lb) 6=177, 8=172.

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

Date:

May 31,2024

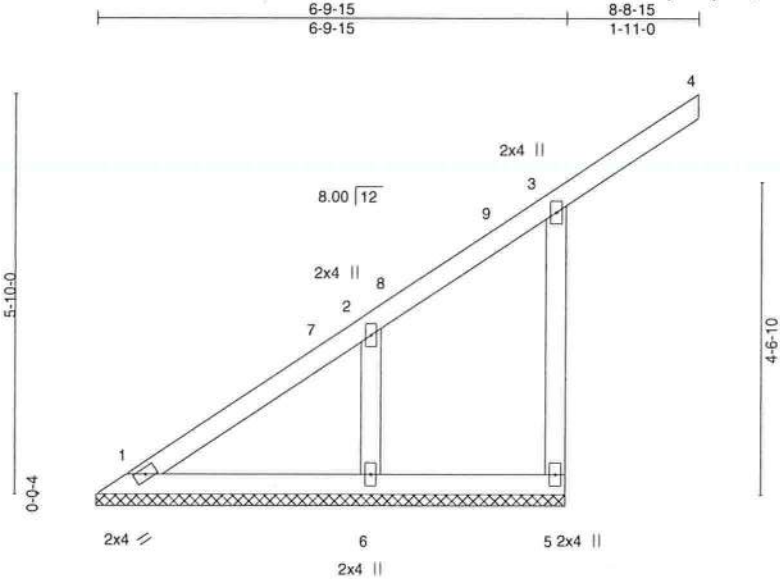
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Job	Truss	Truss Type	Qty	Ply	AARON BUTLER RES.
3981505	V09	GABLE	1	1	T34036574
Job Reference (optional)					

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.730 s Apr 25 2024 MiTek Industries, Inc. Thu May 30 16:14:22 2024 Page 1  
ID:7Wkr8toudn35dxwKwBAfQtytHta-ys6w\_scGU1luTgjrAr6qROHPq5cumUjUi81AizBFzF



Scale = 1:33.6

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.29	Vert(LL)	0.02	4	n/r	120	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.10	Vert(CT)	-0.00	4	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.00		n/a	n/a		
BCDL 10.0	Code FBC2023/TP12014		Matrix-P						Weight: 34 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	
OTHERS 2x4 SP No.3	

**REACTIONS.** (size) 1=6-9-15, 5=6-9-15, 6=6-9-15  
Max Horz 1=184(LC 12)  
Max Uplift 5=141(LC 9), 6=136(LC 12)  
Max Grav 1=119(LC 21), 5=229(LC 19), 6=253(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-279/126, 3-5=-212/283

- NOTES-**
- 1) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 0-5-12 to 3-5-12, Zone1 3-5-12 to 8-8-15 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) Gable requires continuous bottom chord bearing.
  - 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) 5=141, 6=136.

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

May 31,2024

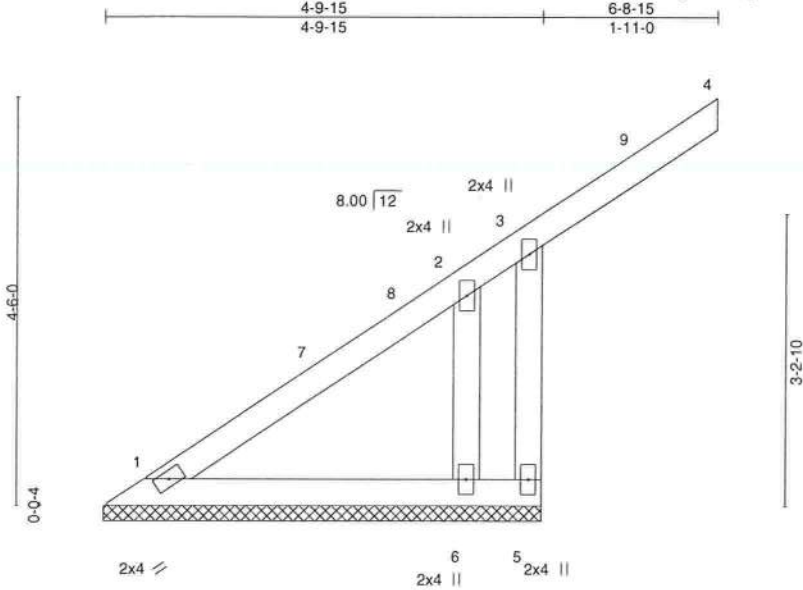
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Job	Truss	Truss Type	Qty	Ply	AARON BUTLER RES.
3981505	V10	GABLE	1	1	T34036575
Builders FirstSource (Lake City, FL), Lake City, FL - 32055,					Job Reference (optional)

8.730 s Apr 25 2024 MiTek Industries, Inc. Thu May 30 16:14:23 2024 Page 1  
ID:7Wkr8toudn35dxwKwBAfQtytHta-Q2glBCdvFLQl5ql1MtMLMfxSpERodCytIlMubi8zBFzE



Scale = 1:25.5

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 0.31	Vert(LL)	0.01	4	n/r	120	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.10	Vert(CT)	-0.00	4	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00		n/a	n/a		
BCDL 10.0	Code FBC2023/TP12014		Matrix-P						Weight: 25 lb	FT = 20%

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

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 4-9-15 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=4-9-15, 5=4-9-15, 6=4-9-15  
Max Horz 1=148(LC 12)  
Max Uplift 5=194(LC 9), 6=79(LC 12)  
Max Grav 1=106(LC 21), 5=173(LC 1), 6=190(LC 3)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 3-5=-204/332

- NOTES-**
- 1) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 0-5-12 to 3-5-12, Zone1 3-5-12 to 6-8-15 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) Gable requires continuous bottom chord bearing.
  - 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) 6 except (jt=lb) 5=194.

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Date:

May 31,2024

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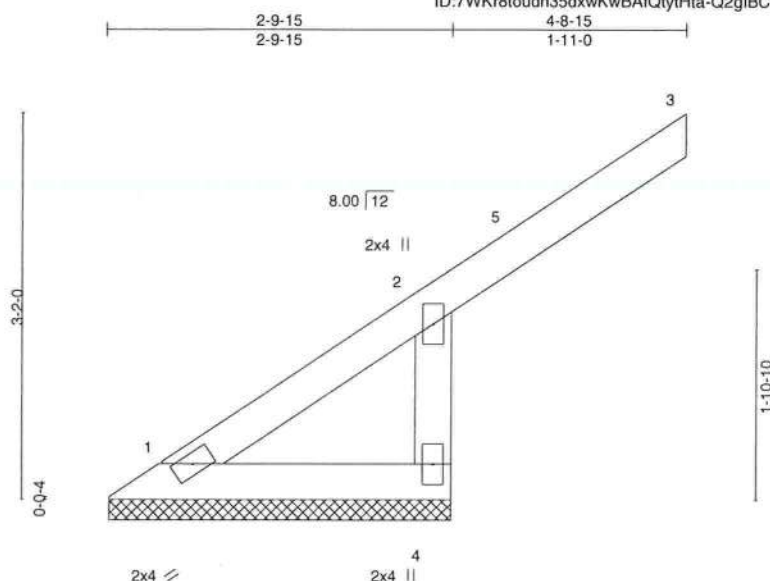
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Job	Truss	Truss Type	Qty	Ply	AARON BUTLER RES.	T34036576
3981505	V11	Valley	1	1	Job Reference (optional)	

Builders FirstSource (Lake City, FL)	Lake City, FL - 32055
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8.730 s Apr 25 2024 MiTek Industries, Inc. Thu May 30 16:14:23 2024 Page 1

ID: 7WKr8toudn35dxwKwBAfQytHta-Q2gIBCdvFLOl5q1M1MLMfxBaEScdCTtiMubj8zBEzE



Scale = 1:18.9

<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.25	TC 0.32	Vert(LL) 0.02 3 n/r 120	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.05	Vert(CT) -0.00 2 n/r 120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.00 n/a n/a		
BCDL 10.0	Code FBC2023/TPI2014	Matrix-P		Weight: 14 lb	FT = 20%

<b>LUMBER-</b>		<b>BRACING-</b>	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 2-9-15 oc purlins, except end verticals.
BOT CHORD	2x4 SP No.2		
WEBS	2x4 SP No.3	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=2-9-9, 4=2-9-9  
 Max Horz 1=102(LC 12)  
 Max Uplift 1=-10(LC 8), 4=-165(LC 12)  
 Max Grav 1=84(LC 16), 4=248(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-4=226/384

NOTES-

- 1) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCdL=4.2psf; BCdL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 0-5-12 to 3-5-12, Zone1 3-5-12 to 4-8-15 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) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb)

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:

May 31, 2024



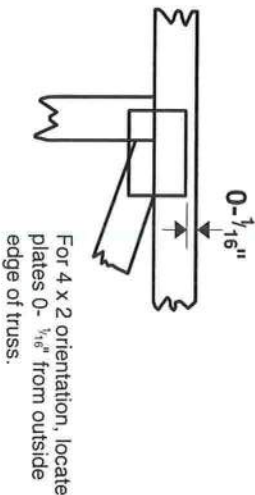
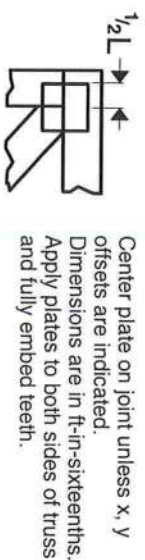
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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](http://www.tpinst.org)) and **BCSI Building Component Safety Information** available from the Structural Building Component Association ([www.sbsc-components.com](http://www.sbsc-components.com)).

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# Symbols

## PLATE LOCATION AND ORIENTATION



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

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

## PLATE SIZE

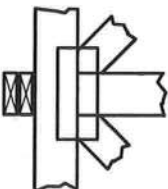
This symbol indicates the required direction of slots in connector plates.

## 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

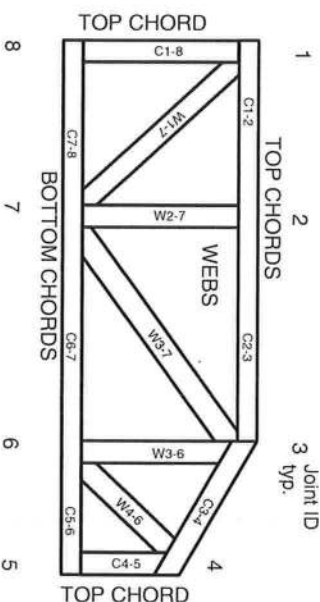


Indicated by symbol shown and/or (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

## BEARING

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

# Numbering System



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

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

## Product Code Approvals

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

## Design General Notes

Trusses are designed for wind loads in the plane of the truss unless otherwise shown.  
Lumber design values are in accordance with ANSI/TP1 section 6.3. These truss designs rely on lumber values established by others.

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# MITek®

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

# General Safety Notes

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

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TP1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TP1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.