## MiTek

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

RE: B230100 -

Site Information:

Customer Info: DON WALLACE Project Name: NA Model: NA

Lot/Block: NA

Address: COLUMBIA, NA

City: FORT WHITE

Subdivision: NA

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. License #:

Name:

Address:

City:

State:

General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special

Loading Conditions):

Design Code: FBC2020/TPI2014

Wind Code: ASCE 7-16 Roof Load: 37.0 psf

Design Program: MiTek 20/20 8.7

Wind Speed: 130 mph Floor Load: N/A psf

This package includes 10 individual, Truss Design Drawings and 0 Additional Drawings. With my seal affixed to this sheet, I hereby certify that I am the Truss Design Engineer and this index sheet conforms to 61G15-31.003, section 5 of the Florida Board of Professional Engineers Rules.

No.	Seal#	Truss Name	Date
1	T31564686	Α	9/14/23
2	T31564687	В	9/14/23
2 3 4 5 6 7	T31564688	B1	9/14/23
4	T31564689	CGE	9/14/23
5	T31564690	E	9/14/23
6	T31564691	E1	9/14/23
7	T31564692	F	9/14/23
8	T31564693	G	9/14/23
9	T31564694	PB	9/14/23
10	T31564695	PB1	9/14/23



This item has been electronically signed and sealed by Velez, Joaquin, PE using a Digital Signature. 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 American Truss of Chiefland.

Truss Design Engineer's Name: Velez, Joaquin

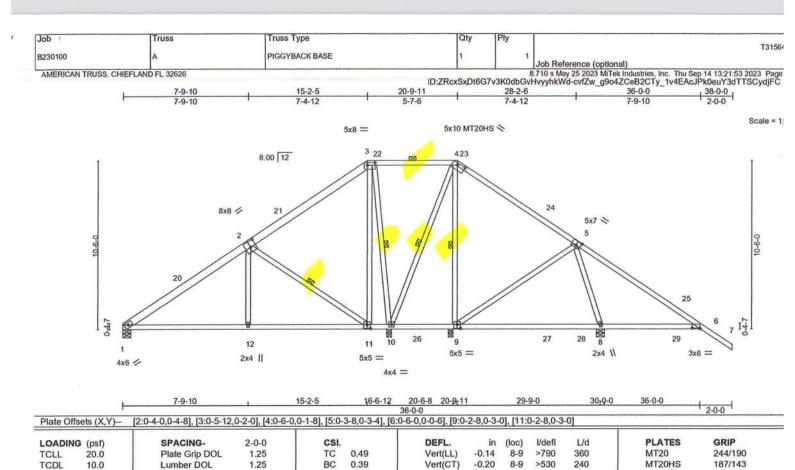
My license renewal date for the state of Florida is February 28, 2025.

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.



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

September 14,2023



LUMBER-

BCLL

BCDL

TOP CHORD

2x4 SP No.1 \*Except\* 2-3,1-2: 2x6 SP No.2

2x4 SP No.1 **BOT CHORD** 

0.0

7.0

2x4 SP No.1

WEBS

Wind(LL) BRACING-

Horz(CT)

0.01

-0.06

TOP CHORD

Structural wood sheathing directly applied, except

n/a

240

4-0-0 oc purlins (10-0-0 max.): 3-4.

n/a

>999

BOT CHORD Rigid ceiling directly applied.

8

8-9

WEBS 1 Row at midpt 2-11, 3-10, 4-10, 4-9

REACTIONS.

All bearings 0-6-0 except (jt=length) 10=0-3-8, 9=0-3-8.

YES

Max Horz 1=-332(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) 9 except 1=-130(LC 12), 10=-279(LC 12), 8=-403(LC 13)

All reactions 250 lb or less at joint(s) except 1=553(LC 23), 10=1209(LC 17), 9=483(LC 18), 8=1066(LC Max Grav

WB

Matrix-AS

0.43

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

TOP CHORD

1-20=-592/142, 2-20=-525/171, 3-21=-34/262, 3-22=0/254, 22-23=0/254, 4-23=0/254,

4-24=0/291, 5-25=-634/750, 6-25=-647/546

Rep Stress Incr

Code FBC2020/TPI2014

**BOT CHORD** 

1-12=-72/626, 11-12=-72/625, 10-11=-181/319, 10-26=-207/329, 9-26=-207/329,

9-27=-266/496, 27-28=-266/496, 8-28=-266/496, 8-29=-509/690, 6-29=-509/690

WEBS

2-12=0/271, 2-11=-753/321, 3-11=-98/566, 3-10=-1015/258, 4-9=-302/131, 5-8=-926/693

## NOTES-

Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; B=45ft; L=36ft; eave=5ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) 0-3-0 to 3-10-3, Interior(1) 3-10-3 to 15-2-5, Exterior(2R) 15-2-5 to 20-3-7, Interior(1) 20-3-7 to 20-9-11, Exterior(2R) 20-9-11 to 25-10-12, Interior(1) 25-10-12 to 38-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 4) Provide adequate drainage to prevent water ponding.
- 5) All plates are MT20 plates unless otherwise indicated.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* 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 = 7.0psf.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9 except (jt=lb) 1=130, 10=279, 8=403.
- 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 10) 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

This item has been electronically signed and sealed by Velez, Joaquin, Pl using a Digital Signature. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

FT = 0%

Weight: 237 lb

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

September 14,2023

🗥 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/TP11 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.sbcscomponents.com)

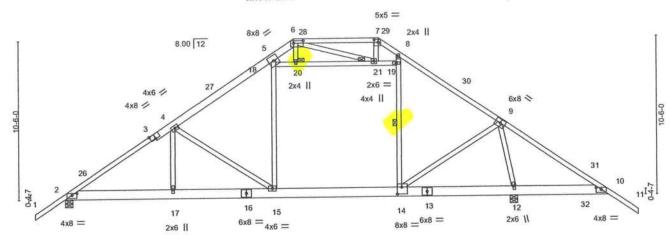


Truss Type Qty Ply Truss Job T31564687 13 В Attic B230100 Job Reference (optional)

8.720 s Aug 11 2023 MiTek Industries, Inc. Thu Sep 14 08:52:15 2023 Page 1
ID:ZRcxSxDt6G7v3K0dbGvHvyyhkWd-O\_5JT3iktrY3n6qZt9c8UdHcN2TSztgAlkcuzEydmJk Chiefland, FL - 32626 American Truss of Chiefland, 20-9-11 22-1-12 28-10-7 6-8-11 7-1-9 13-10-4 6-8-11

Scale = 1:76.5

5x10 MT20HS =



		7-1-9		6-8-11	8-3-8		F 01	7-7-4	0-3-0	6-0-0	
Plate Offse		[2:0-4-0,0-1-9], [3:0-4-0,E	dge], [6:0-7-12 2-0-0	csi.	DEFL.	:0-3-8,0- in	-5-8] (loc)	l/defl	L/d	PLATES	GRIP
TCLL TCDL	20.0	Plate Grip DOL Lumber DOL	1.25 1.25	TC 0.77 BC 0.82	Vert(LL) Vert(CT)	-0.25 -0.49		>999 >729	360 240	MT20 MT20HS	244/190 187/143
BCLL BCDL	0.0 * 7.0	Rep Stress Incr Code FBC2020/T	YES PI2014	WB 0.90 Matrix-AS	Horz(CT) Wind(LL)	0.03	12 15-17	n/a >999	n/a 240	Weight: 275 lb	FT = 0%

BRACING-

WEBS

JOINTS

TOP CHORD

**BOT CHORD** 

29-9-0

30,0-0

Structural wood sheathing directly applied.

Rigid ceiling directly applied.

1 Brace at Jt(s): 20, 21

1 Row at midpt

36-0-0

LUMBER-

2x4 SP No.1 \*Except\* TOP CHORD 3-6: 2x6 SP No.2

2x8 SP No.2 **BOT CHORD** 2x4 SP No.1 WEBS

REACTIONS.

(size) 2=0-6-0, 12=0-6-0

Max Horz 2=-344(LC 10)

Max Uplift 2=-246(LC 12), 12=-375(LC 12) Max Grav 2=1470(LC 18), 12=2072(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-4=-2212/186, 4-5=-1534/99, 5-6=-1026/179, 6-7=-640/85, 7-8=-761/122,

8-9=-1449/80, 9-10=-677/790

2-17=0/2042, 15-17=0/2042, 14-15=0/1263, 12-14=-197/612, 10-12=-565/730 BOT CHORD

4-17=-51/390, 4-15=-937/326, 15-18=0/647, 5-18=0/608, 19-21=-563/99, WEBS

14-19=-198/318, 8-19=-157/268, 9-14=-310/1449, 9-12=-2189/636, 7-21=-17/284,

6-21=-621/211

## NOTES-

Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; B=45ft; L=36ft; eave=5ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) -2-0-0 to 1-7-3, Interior(1) 1-7-3 to 15-2-5, Exterior(2R) 15-2-5 to 20-3-7, Interior(1) 20-3-7 to 20-9-11, Exterior(2R) 20-9-11 to 25-10-12, Interior(1) 25-10-12 to 38-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber
- DOL=1.60 plate grip DOL=1.60 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.
- Provide adequate drainage to prevent water ponding.
- 5) All plates are MT20 plates unless otherwise indicated.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Ceiling dead load (5.0 psf) on member(s). 18-20, 20-21, 19-21; Wall dead load (5.0psf) on member(s).15-18, 14-19
- 9) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 14-15
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=246, 12=375.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

  12) Attic room checked for L/360 deflection.

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

September 14,2023

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

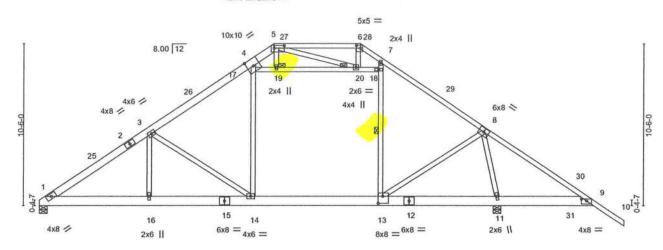
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing building design. Bracing indicated is to prevent collapse with possible personal injury and property damage. For general guildance regarding the is always required for stability and to prevent collapse with possible personal injury and property damage. For general guildance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TP11 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.sbcscomponents.com)



Truss Type Job Truss Qty Ply T3156468 B230100 **B**1 Attic Job Reference (optional) 8.720 s Aug 11 2023 MiTek Industries, Inc. Thu Sep 14 08:52:16 2023 Page 1 ID:ZRcxSxDt6G7v3K0dbGvHvyyhkWd-sAfhgPjMe9gvPGPlQs7N1rqnzRp?iKzK\_OLSWgydmJj American Truss of Chiefland. Chiefland, FL - 32626. 20-9-11 22-1-12 2-9-11 1-4-1

5x10 MT20HS =

Scale = 1:74



		7-1-9	13-1	ACRES CONTRACTOR OF THE PARTY O		22-1-12 8-3-8	+		-9-0 7-4	0-3-0	6-0-0	
Plate Offsets (X,Y) [4:0-5-0,Edge], [5:0-7-12,0-2-0], [6:0-3-4,0-2-4], [9:0-4-0,0-1-9], [13:0-3-8,0-5-8]												
LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.78	Vert(LL)	-0.23	14	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.80	Vert(CT)	-0.46	14-16	>770	240	MT20HS	187/143
BCLL	0.0	Rep Stress Incr	YES	WB	0.90	Horz(CT)	0.03	11	n/a	n/a		
BCDL	7.0	Code FBC2020/T	PI2014	Matri	x-AS	Wind(LL)	0.23	14-16	>999	240	Weight: 276 lb	FT = 0%

BRACING-

WEBS

JOINTS

TOP CHORD

**BOT CHORD** 

Structural wood sheathing directly applied.

Rigid ceiling directly applied.

1 Brace at Jt(s): 19, 20

1 Row at midpt

LUMBER-

TOP CHORD 2x4 SP No.1 \*Except\* 2-5,1-2: 2x6 SP No.2

BOT CHORD 2x8 SP No.2

2x4 SP No.1 WEBS

REACTIONS.

(size) 1=0-6-0, 11=0-6-0

Max Horz 1=-332(LC 10)

Max Uplift 1=-137(LC 12), 11=-379(LC 12)

Max Grav 1=1346(LC 18), 11=2064(LC 20)

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

1-3=-2192/212, 3-4=-1531/105, 4-5=-1022/180, 5-6=-642/87, 6-7=-763/123, TOP CHORD

7-8=-1437/86, 8-9=-677/788

1-16=0/2029, 14-16=0/2029, 13-14=0/1251, 11-13=-197/612, 9-11=-563/730 BOT CHORD WEBS

3-16=-61/372, 3-14=-934/353, 14-17=0/658, 4-17=0/623, 18-20=-549/103,

13-18=-202/312, 7-18=-161/266, 8-13=-311/1437, 8-11=-2174/638, 6-20=-18/283,

5-20=-616/213

## NOTES-

1) Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; B=45ft; L=36ft; eave=5ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) 0-3-0 to 3-10-3, Interior(1) 3-10-3 to 15-2-5, Exterior(2R) 15-2-5 to 20-3-7, Interior(1) 20-3-7 to 20-9-11, Exterior(2R) 20-9-11 to 25-10-12, Interior(1) 25-10-12 to 38-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 4) Provide adequate drainage to prevent water ponding.
- 5) All plates are MT20 plates unless otherwise indicated.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Ceiling dead load (5.0 psf) on member(s). 17-19, 19-20, 18-20; Wall dead load (5.0 psf) on member(s).14-17, 13-18
- 9) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 13-14
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=137 11=379
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 12) Attic room checked for L/360 deflection.

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

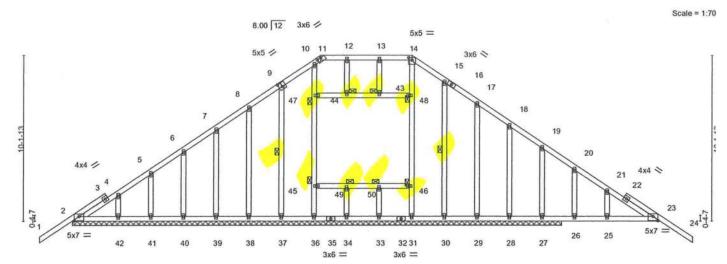
September 14,2023

MARNING - 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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| Dob | Truss | Truss Type | Qty | Ply | T3156468 | Diggyback Base Supported Gable | 1 | 1 | Job Reference (optional) | Job Reference (optional) | Diggyback Base Supported Gable | 1 | 1 | Job Reference (optional) | Diggyback Base Supported Gable | 1 | 1 | Job Reference (optional) | Diggyback Base Supported Gable | 1 | 1 | Job Reference (optional) | Diggyback Base Supported Gable | 1 | 1 | Job Reference (optional) | Diggyback Base Supported Gable | 1 | 1 | Job Reference (optional) | Diggyback Base Supported Gable | 1 | 1 | Job Reference (optional) | Diggyback Base Supported Gable | 1 | 1 | Job Reference (optional) | Diggyback Base Supported Gable | 1 | 1 | Job Reference (optional) | Job R



		1	16-7-15 16-7-15			18-7-15				36-0-0 17-4-1		
Plate Offsets (X,Y) [2:0-3-8,0-3-2], [9:0-2-8,0-3-0], [11:0-3-0,0-0-2], [14:0-2-8,0-1-13], [23:0-3-8,0-3-2]												
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.41	Vert(LL)	-0.02	23-24	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.40	Vert(CT)	-0.02	23-24	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.22	Horz(CT)	0.03	27	n/a	n/a		
BCDL	7.0	Code FBC2020/T	PI2014	Matri	x-S						Weight: 272 lb	FT = 0%

TOP CHORD 2x4 SP No.1 BOT CHORD 2x4 SP No.1 WEBS 2x4 SP No.1 TOP CHORD BOT CHORD WEBS JOINTS

BRACING-

Structural wood sheathing directly applied or 6-3-10 oc purlins.

Rigid ceiling directly applied or 6-0-0 oc bracing. 1 Row at midpt 9-37, 15-30 1 Brace at Jt(s): 43, 44, 45, 46, 47, 48, 49, 50

REACTIONS.

LUMBER-

**OTHERS** 

All bearings 30-0-0.

(lb) - Max Horz 2=-334(LC 10)

2x4 SP No.1

Max Uplift All uplift 100 lb or less at joint(s) 37, 38, 39, 40, 41, 30, 28 except 2=-218(LC 24), 31=-135(LC 9),

36=-170(LC 9), 29=-103(LC 12), 27=-233(LC 12)

Max Grav All reactions 250 lb or less at joint(s) 2, 37, 38, 39, 40, 41, 42, 30, 29, 28, 34, 33 except 31=691(LC 24), 36=742(LC 1), 27=542(LC 1)

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

TOP CHORD 2-4=-887/669, 4-5=-861/723, 5-6=-776/717, 6-7=-699/718, 7-8=-620/719, 8-9=-536/702,

9-10=-494/774, 10-11=-230/397, 11-12=-329/566, 12-13=-329/566, 13-14=-329/566, 14-15=-457/738, 15-17=-523/716, 17-18=-617/728, 18-19=-618/672, 19-20=-828/765,

20-21=-882/730, 21-23=-859/678

BOT CHORD 2-42=-570/913, 41-42=-570/913, 40-41=-570/913, 39-40=-570/913, 38-39=-570/913,

37-38=-570/913, 36-37=-570/913, 34-36=-567/910, 33-34=-567/910, 31-33=-567/910, 30-31=-570/913, 29-30=-570/913, 28-29=-570/913, 27-28=-570/913, 26-27=-570/913, 26-27=-570/913, 27-28=-570/913, 26-27=-570/913, 26-27=-570/913, 27-28=-570/913, 26-27=-570/913, 27-28=-570/913, 28-29=-570/910, 28-29=-570/910, 28-29=-570/910, 28-29=-570/910, 28-29=-570/910, 28-29=-570/910, 28-29=-570/910, 28-29=-570/910, 28-29=-570/910

25-26=-570/913, 23-25=-570/913

31-46=-661/415, 46-48=-662/416, 14-48=-615/387, 36-45=-714/456, 45-47=-715/457, 36-48=-661/415, 46-48=-662/416, 14-48=-615/387, 36-45=-714/456, 45-47=-715/457, 36-48=-615/387, 36=-615/387

10-47=-662/425, 19-27=-287/373

## NOTES-

WEBS

Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; B=45ft; L=36ft; eave=2ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Corner(3E) -2-0-0 to 1-7-3, Exterior(2N) 1-7-3 to 15-2-5, Corner(3R) 15-2-5 to 18-9-11, Exterior(2N) 18-9-11 to 20-9-11, Corner(3R) 20-9-11 to 24-4-14, Exterior(2N) 24-4-14 to 38-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) Provide adequate drainage to prevent water ponding.
- 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.

This item has been electronically signed and sealed by Velez, Joaquin, Plusing a Digital Signature. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Jonquin Velez PE No.68182 MITek Inc. DBA MITek USA FL Cert 6634 16023 Swingley Ridge Rd. Chesterfield, MO 63017

September 14,2023

🛦 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 MTek® 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/TPH 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.sbcscomponents.com)



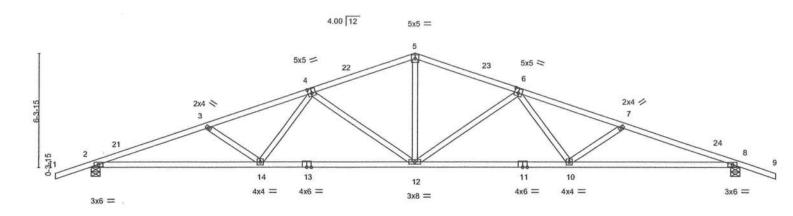
Job ,	Truss	Truss Type	Qty	Ply	Ta	15040
B230100	CGE	Piggyback Base Supported Gable	1	1	1 Job Reference (optional)	15646
American Truss of Chie	fland, Chiefland, FL - 32	2626,		8.720 s Au	ig 11 2023 MiTek Industries, Inc. Thu Sep 14 08:52:19 2023 Pa	ge 2

8.720 s Aug 11 2023 MiTek Industries, Inc. Thu Sep 14 08:52:19 2023 Page 2 ID:ZRcxSxDt6G7v3K0dbGvHvyyhkWd-GlKqlRlEx42UGj8K6?g4fTSO?fwuvsNmgLa67?ydmJg

10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 37, 38, 39, 40, 41, 30, 28 except (jt=lb) 2=218, 31=135, 36=170, 29=103, 27=233.

Job Truss Truss Type Qty Ply T3156469 B230100 E 11 Common Job Reference (optional) 8.720 s Aug 11 2023 MiTek Industries, Inc. Thu Sep 14 08:52:20 2023 Page 1 ID:ZRcxSxDt6G7v3K0dbGvHvyyhkWd-kxuCWnmsiNALttjWfiBJBh\_al3CJeDivv?JffSydmJf American Truss of Chiefland. Chiefland, FL - 32626. 18-0-0 5-8-12

Scale: 3/16"=



	1	9-4-14		18-0-0		26-	7-2		-1	36-0-0	
		9-4-14	'	8-7-2		8-	7-2			9-4-14	
Plate Offse	ets (X,Y)	[4:0-2-8,0-3-0], [6:0-2-8,0	)-3-0]	<u> </u>							
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 0.38	Vert(LL)	-0.25	12	>999	360	MT20	244/190
CDL	10.0	Lumber DOL	1.25	BC 0.64	Vert(CT)	-0.49	12-14	>887	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB 0.60	Horz(CT)	0.14	8	n/a	n/a		
BCDL	7.0	Code FBC2020/T	PI2014	Matrix-AS	Wind(LL)	0.25	12	>999	240	Weight: 170 lb	FT = 0%

LUMBER-TOP CHORD

2x4 SP No.1 2x4 SP No.1

**BOT CHORD** 2x4 SP No.1 WEBS

BRACING-

TOP CHORD BOT CHORD Structural wood sheathing directly applied.

Rigid ceiling directly applied.

REACTIONS.

(size) 2=0-6-0, 8=0-6-0

Max Horz 2=-113(LC 10)

Max Uplift 2=-470(LC 12), 8=-470(LC 12) Max Grav 2=1452(LC 1), 8=1452(LC 1)

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

TOP CHORD 2-3=-3435/1428, 3-4=-3091/1288, 4-5=-2168/995, 5-6=-2168/995, 6-7=-3091/1288,

7-8=-3435/1428

BOT CHORD 2-14=-1237/3225, 12-14=-952/2623, 10-12=-973/2623, 8-10=-1258/3225 WEBS

5-12=-384/1003, 6-12=-775/407, 6-10=-106/505, 7-10=-426/277, 4-12=-775/407,

4-14=-106/505, 3-14=-426/277

## NOTES-

1) Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; B=45ft; L=36ft; eave=5ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) -2-0-0 to 1-7-3, Interior(1) 1-7-3 to 18-0-0, Exterior(2R) 18-0-0 to 21-7-3, Interior(1) 21-7-3 to 38-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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=470, 8=470.
- 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

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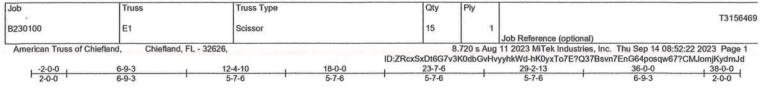
Joaquin Velez PE No.68182 MITek Inc. DBA MITek USA FL Cert 6634 16023 Swingley Ridge Rd. Chesterfield, MO 63017

September 14,2023

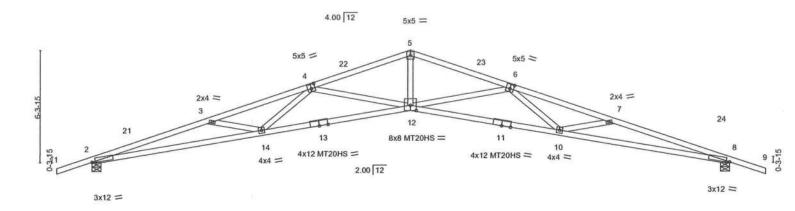
MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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Scale = 1:65



<u> </u>		9-6-14		18-0 8-5		26-5-2				36-0-0 9-6-14		
Plate Offse	ets (X,Y)-	9-6-14	2:0-4-0,0-3-9]	8-5-2 0-4-0.0-3-91								
				T								
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	0.82	Vert(LL)	-0.86	12-14	>502	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.95	Vert(CT)	-1.63	12-14	>264	240	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.61	Horz(CT)	0.78	8	n/a	n/a		
BCDL	7.0	Code FBC2020/T	PI2014	Matri	x-AS	Wind(LL)	0.84	12-14	>515	240	Weight: 158 lb	FT = 0%

BRACING-

TOP CHORD

BOT CHORD

Structural wood sheathing directly applied.

Rigid ceiling directly applied.

LUMBER-TOP CHORD

2x4 SP No.1 2x4 SP No.1

**BOT CHORD** 2x4 SP No.1 **WEBS** 

REACTIONS. (size) 2=0-6-0, 8=0-6-0

Max Horz 2=-113(LC 10)

Max Uplift 2=-470(LC 12), 8=-470(LC 12) Max Grav 2=1452(LC 1), 8=1452(LC 1)

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

TOP CHORD 2-3=-6095/2440, 3-4=-5606/2166, 4-5=-4139/1634, 5-6=-4139/1624, 6-7=-5606/2186,

7-8=-6095/2458

BOT CHORD 2-14=-2221/5800, 12-14=-1831/5042, 10-12=-1871/5042, 8-10=-2259/5800 **WEBS** 

5-12=-798/2266, 6-12=-1156/606, 6-10=-68/588, 7-10=-483/344, 4-12=-1156/607,

4-14=-69/588, 3-14=-483/345

## NOTES-

1) Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; B=45ft; L=36ft; eave=5ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) -2-0-0 to 1-7-3, Interior(1) 1-7-3 to 18-0-0, Exterior(2R) 18-0-0 to 21-7-3, Interior(1) 21-7-3 to 38-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.

4) All plates are MT20 plates unless otherwise indicated.

- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Bearing at joint(s) 2, 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb)
- 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

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

September 14,2023

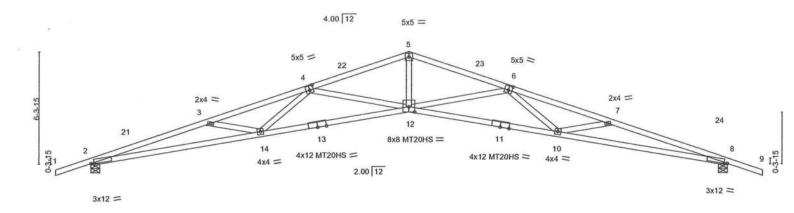
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Job Truss Truss Type Qty T31564692 B230100 SCISSORS Job Reference (optional) 8.720 s Aug 11 2023 MiTek Industries, Inc. Thu Sep 14 08:52:24 2023 Page 1 ID:ZRcxSxDt6G7v3K0dbGvHvyyhkWd-di8jM8pNmchnMv0luYGFMX98IgVOa1VVpdHtoDydmJb American Truss of Chiefland, Chiefland, FL - 32626

Scale = 1:65.



	9-6-14 9-6-14			18-0-0 26-5-2 8-5-2 8-5-2				36-0-0 9-6-14				
Plate Offse	ets (X,Y)-	[2:0-2-3,0-0-7], [4:0-2-8,0	-3-0], [6:0-2-8,								5-0-14	
LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.82	Vert(LL)	-0.86	12-14	>502	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.95	Vert(CT)	-1.63	12-14	>264	240	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.61	Horz(CT)	0.78	8	n/a	n/a		
BCDL	7.0	Code FBC2020/T	PI2014	Matri	x-AS	Wind(LL)	0.84	12-14	>515	240	Weight: 158 lb	FT = 0%

**BRACING-**

TOP CHORD

**BOT CHORD** 

Structural wood sheathing directly applied.

Rigid ceiling directly applied.

LUMBER-

REACTIONS.

TOP CHORD 2x4 SP No.1

**BOT CHORD** 2x4 SP No.1

WEBS 2x4 SP No.1

(size) 2=0-6-0, 8=0-6-0

Max Horz 2=113(LC 11)

Max Uplift 2=-470(LC 12), 8=-470(LC 12) Max Grav 2=1452(LC 1), 8=1452(LC 1)

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

TOP CHORD 2-3=-6095/2440, 3-4=-5606/2166, 4-5=-4139/1634, 5-6=-4139/1624, 6-7=-5606/2186,

7-8=-6095/2458 BOT CHORD

2-14=-2221/5800, 12-14=-1831/5042, 10-12=-1871/5042, 8-10=-2259/5800 5-12=-798/2266, 6-12=-1156/606, 6-10=-68/588, 7-10=-483/344, 4-12=-1156/607, WEBS

4-14=-69/588. 3-14=-483/345

## NOTES-

1) Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; B=45ft; L=36ft; eave=5ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) -2-0-0 to 1-7-3, Interior(1) 1-7-3 to 18-0-0, Exterior(2R) 18-0-0 to 21-7-3, Interior(1) 21-7-3 to 38-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.

4) All plates are MT20 plates unless otherwise indicated.

- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Bearing at joint(s) 2, 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb)
- 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

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

September 14,2023

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Job Truss Truss Type Qty T31564693 G 2 B230100 Roof Special Job Reference (optional) 8.720 s Aug 11 2023 MiTek Industries, Inc. Thu Sep 14 08:52:25 2023 Page 1 ID:ZRcxSxDt6G7v3K0dbGvHvyyhkWd-5vi5ZUq?Xwpe\_ebUSFnUukiKk4ycJVqe2H1QKfydmJa Chiefland, FL - 32626. American Truss of Chiefland. Scale = 1:61. 5x5 || 8.00 12 5x8 > 12 13 14 4x8 = 4x4 = 6-0-0 [1:0-3-3,Edge], [2:0-4-0,0-3-0] Plate Offsets (X,Y)--SPACING-CSI. DEFL I/defi **PLATES** GRIP LOADING (psf) (loc) 20.0 Plate Grip DOL 1.25 TC 0.72 Vert(LL) -0.24 5-6 >480 360 MT20 244/190 TCLL 0.51 1.25 -0.35 >325 240 TCDL 10.0 Lumber DOL Vert(CT) 5-6 BCLL 0.0 Rep Stress Incr YES WB 0.54 Horz(CT) 0.01 5 n/a n/a

Wind(LL)

BRACING-TOP CHORD

WEBS

BOT CHORD

-0.17

5-6

1 Row at midpt

>652

Rigid ceiling directly applied.

240

Weight: 92 lb

Structural wood sheathing directly applied, except end verticals.

FT = 0%

LUMBER-

BCDL

TOP CHORD 2x4 SP No.1 **BOT CHORD** 2x4 SP No.1

2x4 SP No.1 WEBS REACTIONS.

6=0-3-8, 5=0-6-0 (size) Max Horz 6=-547(LC 10)

Max Uplift 6=-295(LC 8), 5=-471(LC 13) Max Grav 6=315(LC 18), 5=1249(LC 17)

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

Code FBC2020/TPI2014

TOP CHORD

1-6=-284/238, 1-2=-327/288, 2-3=-745/749

**BOT CHORD** 

5-6=-205/515, 3-5=-504/802

WEBS

2-6=-399/386, 2-5=-1059/964

## NOTES-

1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 17-9-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific

Matrix-AS

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, with BCDL = 7.0psf. 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb)

6=295, 5=471.

6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

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September 14,2023

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Truss Type Qty Job Truss T3156469 PB Piggyback 15 B230100 Job Reference (optional) 8.720 s Aug 11 2023 MiTek Industries, Inc. Thu Sep 14 08:52:26 2023 Page 1 American Truss of Chiefland, Chiefland, FL - 32626 ID:ZRcxSxDt6G7v3K0dbGvHvyyhkWd-Z5GTnqrdlDxVcoAg0zljRyEfYTPL24MoHxm\_s5ydmJZ Scale = 1:13. 4x4 = 8.00 12 0-4-7 I ... 1.1.8 2x4 || 2x4 = 2x4 = SPACING-2-0-0 CSI. DEFL **V**defi PLATES GRIP LOADING (loc) (psf) Plate Grip DOL 0.00 120 MT20 244/190 20.0 1.25 TC 0.07 Vert(LL) n/r TCLL TCDL 10.0 Lumber DOL 1.25 BC 0.03 Vert(CT) 0.00 5 n/r 120 Rep Stress Incr WB 0.01 Horz(CT) 0.00 BCLL 0.0 YES n/a n/a Weight: 18 lb FT = 0%BCDL 7.0 Code FBC2020/TPI2014 Matrix-P

LUMBER-

2x4 SP No.1 TOP CHORD 2x4 SP No 1 BOT CHORD 2x4 SP No.1 **OTHERS** 

BRACING-

TOP CHORD BOT CHORD Structural wood sheathing directly applied or 5-7-6 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 2=4-1-8, 4=4-1-8, 6=4-1-8

Max Horz 2=-48(LC 10)

Max Uplift 2=-64(LC 12), 4=-64(LC 12), 6=-4(LC 12) Max Grav 2=115(LC 1), 4=115(LC 1), 6=132(LC 1)

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.
- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) 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) Gable requires continuous bottom chord bearing.

- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4, 6.
- 8) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

This item has been electronically signed and sealed by Velez, Joaquin, Pf using a Digital Signature. 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

September 14,2023

🗥 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 properly damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TP11 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.sbcscomponents.com)



T3156469 B230100 PR1 Piggyback Job Reference (optional) 8.720 s Aug 11 2023 MiTek Industries, Inc. Thu Sep 14 08:52:27 2023 Page 1 American Truss of Chiefland, Chiefland, FL - 32626, ID:ZRcxSxDt6G7v3K0dbGvHvyyhkWd-1Hpr\_AsF3X3MDyltagpyz9nqHtlanXbxWbWXPYydmJY 2-9-11 Scale = 1:13 4x4 = 8.00 12 2 0-4-7 0-1-8 2x4 || 2x4 = 2x4 = LOADING (psf) SPACING-2-0-0 CSI. DEFL I/defl PLATES GRIP 20.0 Plate Grip DOL 1.25 TC 0.07 Vert(LL) 0.00 n/r 120 MT20 244/190 TCLL TCDL 10.0 Lumber DOL 1.25 BC 0.03 Vert(CT) 0.00 5 n/r 120 BCLL 0.0 Rep Stress Incr YES WB 0.01 Horz(CT) 0.00 4 n/a n/a Weight: 18 lb FT = 0% Code FBC2020/TPI2014 **BCDI** 7.0 Matrix-P BRACING-LUMBER-

Qty

Job

TOP CHORD 2x4 SP No.1 BOT CHORD 2x4 SP No.1 2x4 SP No.1 **OTHERS** 

TOP CHORD **BOT CHORD**  Structural wood sheathing directly applied or 5-7-6 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 2=4-1-8, 4=4-1-8, 6=4-1-8

Max Horz 2=-48(LC 10)

Truss

Truss Type

Max Uplift 2=-64(LC 12), 4=-64(LC 12), 6=-4(LC 12) Max Grav 2=115(LC 1), 4=115(LC 1), 6=132(LC 1)

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.

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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September 14,2023

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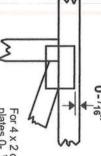
## Symbols

## 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- 1/16" from outside edge of truss.

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

Plate location details available in MiTek software or upon request.

## PLATE SIZE

4 x 4

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

## LATERAL BRACING LOCATION



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

## BEARING



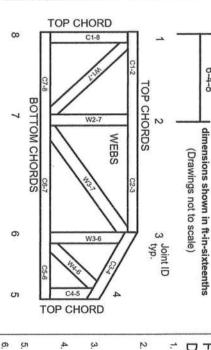
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

## Industry Standards:

National Design Specification for Metal Plate Connected Wood Truss Construction. Design Standard for Bracing.
Building Component Safety Information, Guide to Good Practice for Handling,

Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses. ANSI/TPI1: DSB-22:

## Numbering System



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

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

# Product Code Approvals

ICC-ES Reports:

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

# Design General Notes

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

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

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## 

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

## **General Safety Notes**

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

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI
- Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
- Never exceed the design loading shown and never stack materials on inadequately braced trusses.
- Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
- Cut members to bear tightly against each other
- Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
- Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.

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



## **Truss Design Modifications**

Reviewing Engineer: Darius Anderson

Telephone: 813-675-1160

American Truss of Chiefland

6760 NW 138th Place

Chiefland, FL+32626

Job Name: B230100

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T31564686,A.TRE

A truss designed as a PIGGYBACK BASE must have purlin bracing on the flat top chord.

Please check for plate and/or lumber changes.

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