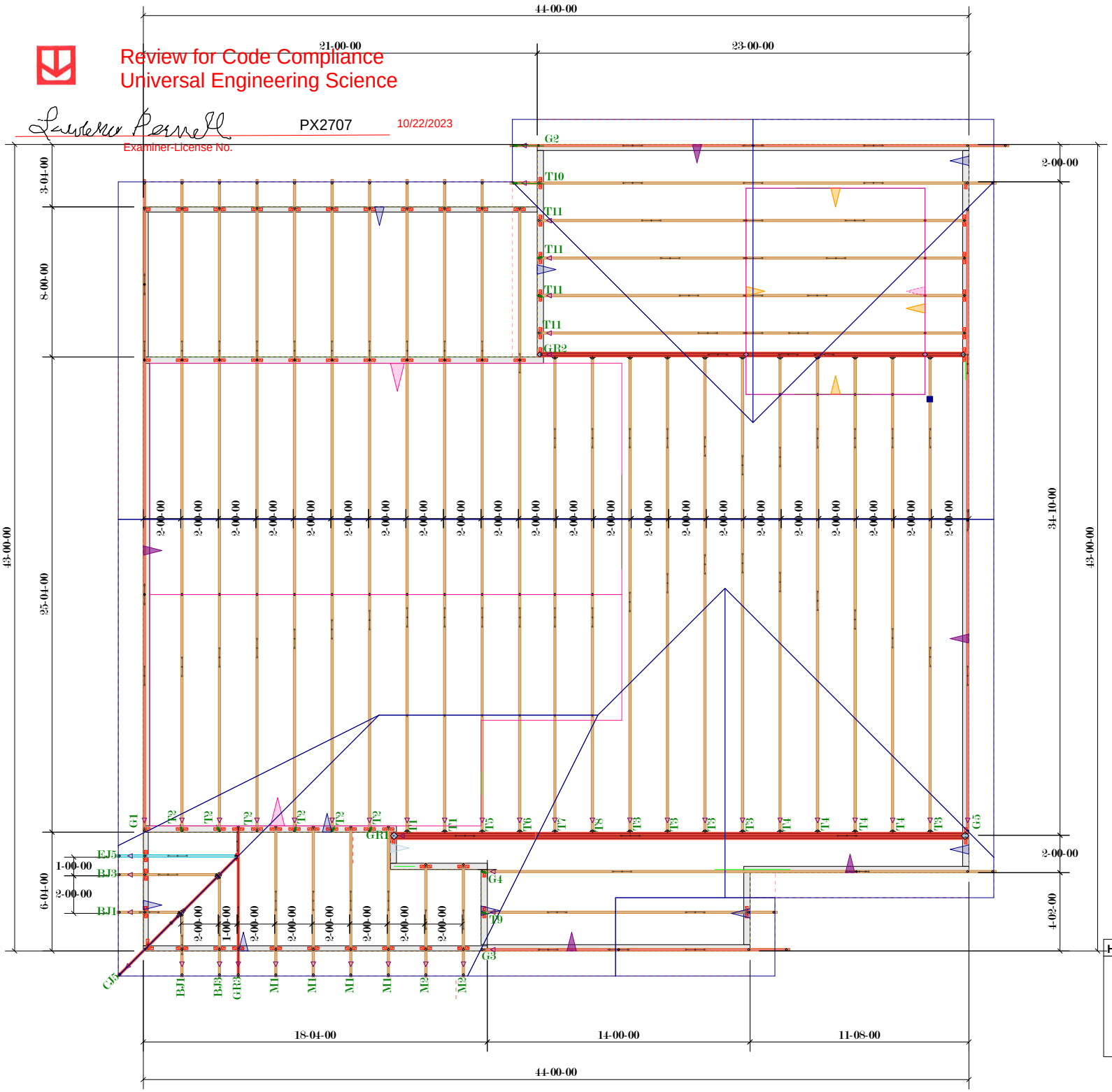
Review for Code Compliance
Universal Engineering Science

Lawrence Parnell PX2707 10/22/2023
Examiner-License No.



HANGER LIST

JOB NAME: Anderson Home
CUSTOMER NAME: Live Well Homes
ADDRESS:
DATE: 9/22/2023 JOB#1187

PITCH: 6/12
OVERHANG: 1-04-00
ROOF SPACING: 24"

WALL HEIGHT: 9'

*The General Contractor is Reponsible For All Connections Other Than Truss to Truss,unless specified otherwise.

Roof loading
TCLL:20.0 lb/ft²
TCDL:10.0 lb/ft²
BCDL:10.0 lb/ft²
Floor Loading
TCLL:40.0 lb/ft²
TCDL:10.0 lb/ft²
BCDL:5.0 lb/ft²

***THIS DRAWING MUST BE APPROVED AND RETURNED BEFORE FABRICATION WILL BEGIN. For Your Protection Check All Dimensions and Conditions Prior to Approval Of Plan**

***SIGNATURE BELOW INDICATES ALL NOTES AND DEMENSIONS HAVE BEEN ACCEPTED**

By: _____
Date: _____

NOTES:
*ALL DEMENSIONS ARE FEET-INCHES-SIXTEENTHS
*DO NOT CUT OR ALTER TRUSSES IN ANY WAY
*ONLY TRUSS TO TRUSS CONNECTIONS SUPPLIED WITH TRUSS PACKAGES
*NO BACKCHARGES will be accepted

19 LUMBER INC.
25221 SE Hwy 19
Old Town,FL 32680
P:(352)469-5008
19Lumberinc@gmail.com

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: 1187-A - Anderson Home

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

Site Information:

Customer Info: Live Well Homes Project Name: Anderson Model: .
Lot/Block: . Subdivision: .
Address: ., .
City: . State: FL

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

Name: License #:
Address:
City: State:

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

Design Code: FBC2020/TPI2014 Design Program: MiTek 20/20 8.6
Wind Code: ASCE 7-16 Wind Speed: 140 mph
Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 25 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	T31656386	BJ1	9/26/23	23	T31656408	T9	9/26/23
2	T31656387	BJ3	9/26/23	24	T31656409	T10	9/26/23
3	T31656388	CJ5	9/26/23	25	T31656410	T11	9/26/23
4	T31656389	EJ5	9/26/23				
5	T31656390	G1	9/26/23				
6	T31656391	G2	9/26/23				
7	T31656392	G3	9/26/23				
8	T31656393	G4	9/26/23				
9	T31656394	G5	9/26/23				
10	T31656395	GR1	9/26/23				
11	T31656396	GR2	9/26/23				
12	T31656397	GR3	9/26/23				
13	T31656398	M1	9/26/23				
14	T31656399	M2	9/26/23				
15	T31656400	T1	9/26/23				
16	T31656401	T2	9/26/23				
17	T31656402	T3	9/26/23				
18	T31656403	T4	9/26/23				
19	T31656404	T5	9/26/23				
20	T31656405	T6	9/26/23				
21	T31656406	T7	9/26/23				
22	T31656407	T8	9/26/23				

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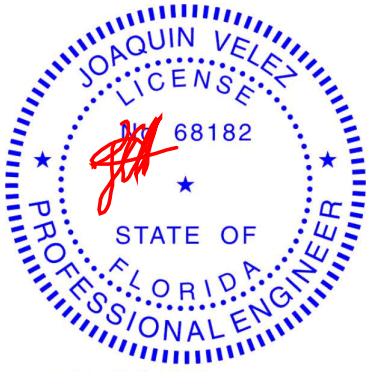
The truss drawing(s) referenced above have been prepared by MiTek USA, Inc. under my direct supervision based on the parameters provided by 19 Lumber, Inc..

Truss Design Engineer's Name: Velez, Joaquin
My license renewal date for the state of Florida is February 28, 2025.



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

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.

September 26,2023

Job	Truss	Truss Type	Qty	Ply	Anderson Home
1187-A	BJ1	Corner Jack	2	1	T31656386
					Job Reference (optional)

19 Lumber, Inc., Old Town, FL - 32680, Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Mon Sep 25 17:10:49 Page: 1
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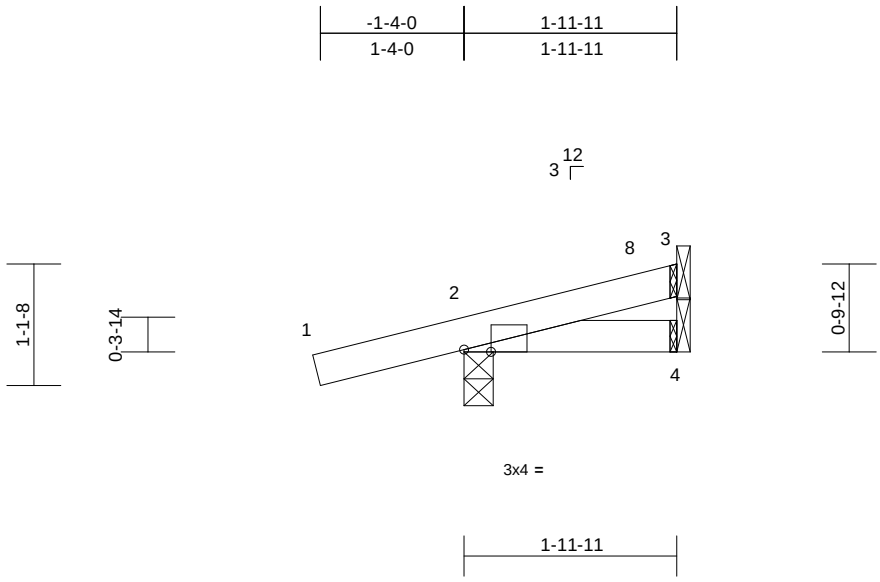

Scale = 1:21.4

Plate Offsets (X, Y): [2:0-3-0,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.16	Vert(LL)	0.00	7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.04	Vert(CT)	0.00	7	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MP							Weight: 8 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 1-11-11 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-3-4, 3= Mechanical, 4= Mechanical
Max Horiz 2=57 (LC 8)
Max Uplift 2=-168 (LC 8), 3=-23 (LC 12)
Max Grav 2=189 (LC 1), 3=32 (LC 1), 4=28 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/20, 2-3=-60/12
BOT CHORD 2-4=-11/58

NOTES
1) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=108mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-4-7 to 1-7-9, Interior (1) 1-7-9 to 1-11-9 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 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
5) Bearings are assumed to be: , Joint 2 SP No.2 crushing capacity of 565 psi.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 168 lb uplift at joint 2 and 23 lb uplift at joint 3.

LOAD CASE(S) Standard

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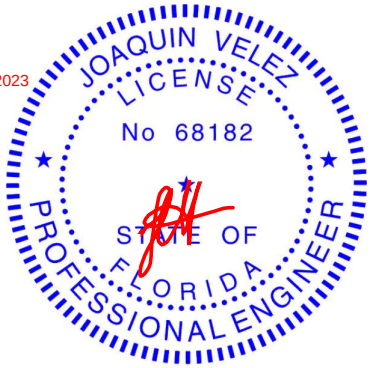

Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:
September 26,2023

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

Job	Truss	Truss Type	Qty	Ply	Anderson Home	
1187-A	BJ3	Corner Jack	2	1	Job Reference (optional)	T31656387

19 Lumber, Inc., Old Town, FL - 32680, Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Mon Sep 25 17:10:51 Page: 1
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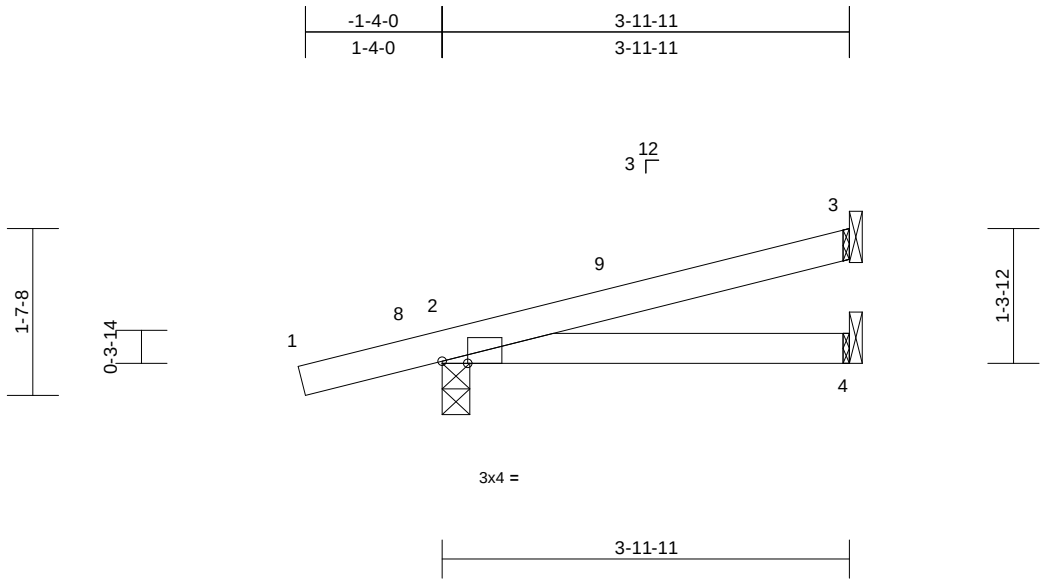

Scale = 1:22.5

Plate Offsets (X, Y): [2:0-3-0,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.21	Vert(LL)	0.02	4-7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.23	Vert(CT)	-0.02	4-7	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MP							Weight: 14 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-11-11 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-3-4, 3= Mechanical, 4= Mechanical
Max Horiz 2=87 (LC 8)
Max Uplift 2=-186 (LC 8), 3=-73 (LC 12), 4=-3 (LC 12)
Max Grav 2=253 (LC 1), 3=92 (LC 1), 4=67 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/20, 2-3=-124/51
BOT CHORD 2-4=-98/135

NOTES
1) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=108mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-4-7 to 1-7-9, Interior (1) 1-7-9 to 3-10-15 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 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
5) Bearings are assumed to be: , Joint 2 SP No.2 crushing capacity of 565 psi.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 73 lb uplift at joint 3, 186 lb uplift at joint 2 and 3 lb uplift at joint 4.

LOAD CASE(S) Standard

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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

September 26,2023

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314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Anderson Home	
1187-A	CJ5	Diagonal Hip Girder	1	1	Job Reference (optional)	T31656388

19 Lumber, Inc., Old Town, FL - 32680, Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Mon Sep 25 17:10:52 Page: 1
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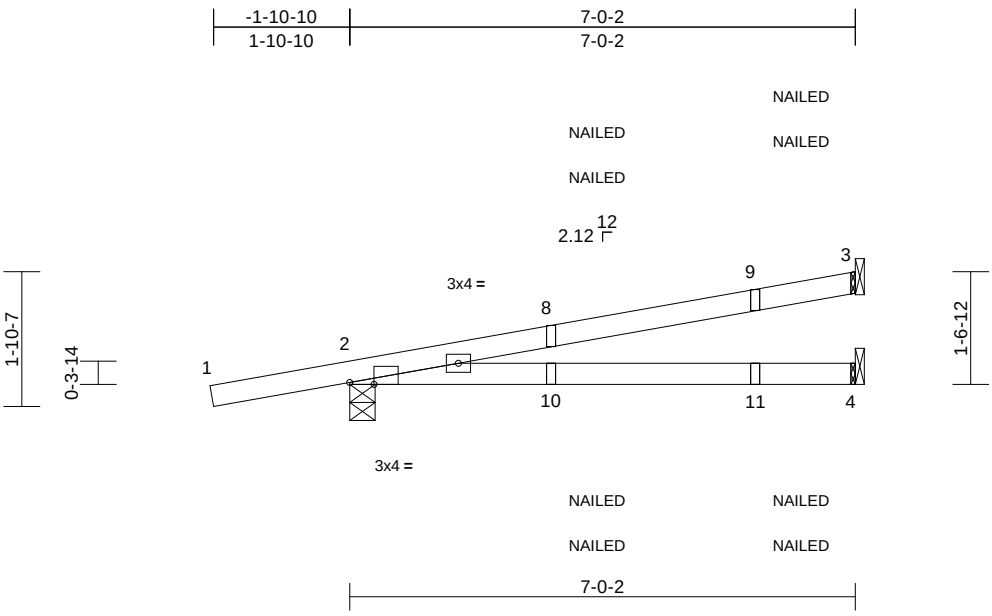

Scale = 1:31.9

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.75	Vert(LL)	0.18	4-7	>456	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.62	Vert(CT)	-0.25	4-7	>329	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MP							Weight: 24 lb	FT = 20%

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

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

REACTIONS (size) 2=0-4-4, 3= Mechanical, 4= Mechanical
Max Horiz 2=101 (LC 4)
Max Uplift 2=-296 (LC 4), 3=-141 (LC 8), 4=-29 (LC 8)
Max Grav 2=424 (LC 1), 3=191 (LC 1), 4=146 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/20, 2-3=-208/47
BOT CHORD 2-4=-77/196

NOTES
1) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=108mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
5) Bearings are assumed to be: , Joint 2 SP No.2 crushing capacity of 565 psi.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 141 lb uplift at joint 3, 296 lb uplift at joint 2 and 29 lb uplift at joint 4.
8) "NAILED" indicates Girder: 3-16d (0.162" x 3.5") toe-nails per NDS guidelines.
9) 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 (lb/ft)
Vert: 1-3=-60, 4-5=-20
Concentrated Loads (lb)
Vert: 9=-20 (F=-10, B=-10), 10=-6 (F=-3, B=-3), 11=-45 (F=-22, B=-22)

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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:
September 26,2023

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

Job	Truss	Truss Type	Qty	Ply	Anderson Home	
1187-A	EJ5	Jack-Open	1	1	Job Reference (optional)	T31656389

19 Lumber, Inc., Old Town, FL - 32680, Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Mon Sep 25 17:10:52 Page: 1
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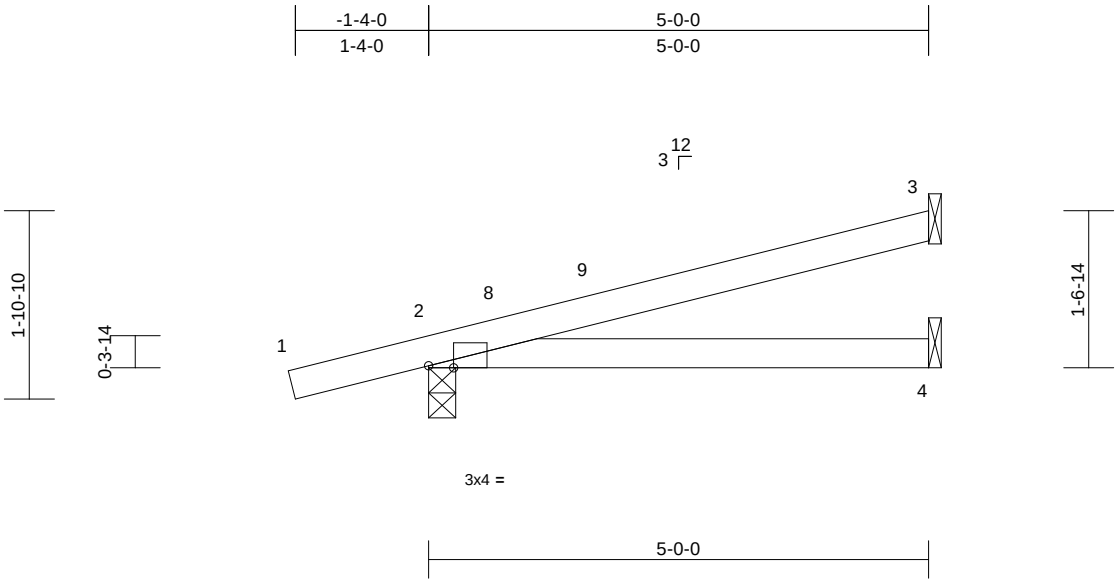

Scale = 1:23

Plate Offsets (X, Y): [2:0-3-0,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.39	Vert(LL)	0.06	4-7	>950	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.39	Vert(CT)	-0.06	4-7	>996	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MP							Weight: 17 lb	FT = 20%

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

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

REACTIONS (size) 2=0-3-4, 3= Mechanical, 4= Mechanical
Max Horiz 2=102 (LC 8)
Max Uplift 2=-201 (LC 8), 3=-98 (LC 12), 4=-4 (LC 12)
Max Grav 2=291 (LC 1), 3=122 (LC 1), 4=87 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/20, 2-3=-158/75
BOT CHORD 2-4=-140/175

NOTES
1) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=108mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-4-7 to 1-7-9, Interior (1) 1-7-9 to 4-11-4 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 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
5) Bearings are assumed to be: , Joint 2 SP No.2 crushing capacity of 565 psi.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 98 lb uplift at joint 3, 201 lb uplift at joint 2 and 4 lb uplift at joint 4.

LOAD CASE(S) Standard

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Job	Truss	Truss Type	Qty	Ply	Anderson Home	
1187-A	G1	Common Supported Gable	1	1	Job Reference (optional)	T31656390

19 Lumber, Inc., Old Town, FL - 32680, Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Mon Sep 25 17:10:52 Page: 1

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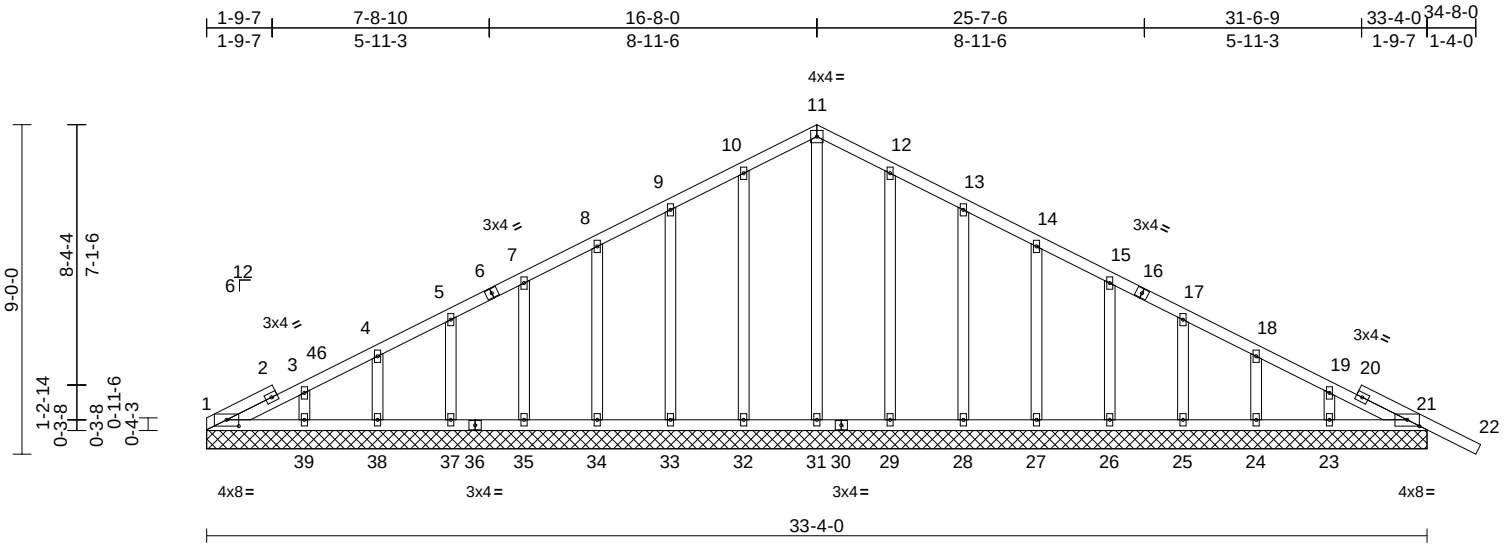


Scale = 1:62.9

Plate Offsets (X, Y): [1:0-4-0,0-2-1], [21:0-4-0,0-2-1]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.19	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.09	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.27	Horz(CT)	0.01	43	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MS							Weight: 203 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS (size) 1=33-4-0, 21=33-4-0, 23=33-4-0, 24=33-4-0, 25=33-4-0, 26=33-4-0, 27=33-4-0, 28=33-4-0, 29=33-4-0, 31=33-4-0, 32=33-4-0, 33=33-4-0, 34=33-4-0, 35=33-4-0, 37=33-4-0, 38=33-4-0, 39=33-4-0, 40=33-4-0, 43=33-4-0
Max Horiz 1=-245 (LC 17), 40=-245 (LC 17)
Max Uplift 1=-33 (LC 13), 21=-68 (LC 13), 23=-93 (LC 13), 24=-114 (LC 13), 25=-110 (LC 13), 26=-111 (LC 13), 27=-110 (LC 13), 28=-115 (LC 13), 29=-107 (LC 13), 32=-111 (LC 12), 33=-114 (LC 12), 34=-111 (LC 12), 35=-111 (LC 12), 37=-113 (LC 12), 38=-105 (LC 12), 39=-114 (LC 12), 40=-33 (LC 13), 43=-68 (LC 13)
Max Grav 1=104 (LC 21), 21=204 (LC 1), 23=181 (LC 1), 24=156 (LC 24), 25=161 (LC 1), 26=160 (LC 24), 27=160 (LC 24), 28=159 (LC 1), 29=168 (LC 24), 31=224 (LC 22), 32=168 (LC 23), 33=159 (LC 1), 34=160 (LC 23), 35=159 (LC 23), 37=164 (LC 1), 38=144 (LC 23), 39=218 (LC 1), 40=104 (LC 21), 43=204 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-3=-250/103, 3-4=-200/122, 4-5=-135/141, 5-7=-88/174, 7-8=-66/212, 8-9=-91/256, 9-10=-117/333, 10-11=-143/404, 11-12=-143/404, 12-13=-117/333, 13-14=-91/256, 14-15=-65/182, 15-17=-39/107, 17-18=-50/43, 18-19=-103/38, 19-21=-154/70, 21-22=0/38
BOT CHORD 1-39=-65/239, 38-39=-65/239, 37-38=-65/239, 35-37=-65/239, 34-35=-65/239, 33-34=-65/239, 32-33=-65/239, 31-32=-65/239, 29-31=-65/239, 28-29=-65/239, 27-28=-65/239, 26-27=-65/239, 25-26=-65/239, 24-25=-65/239, 23-24=-65/239, 21-23=-65/239
WEBS 11-31=-237/35, 10-32=-128/139, 9-33=-119/152, 8-34=-120/146, 7-35=-120/146, 5-37=-121/147, 4-38=-115/146, 3-39=-143/199, 12-29=-128/139, 13-28=-119/152, 14-27=-120/146, 15-26=-120/147, 17-25=-120/146, 18-24=-119/152, 19-23=-129/129

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=108mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) 0-0-0 to 3-4-0, Exterior(2N) 3-4-0 to 16-8-0, Corner(3R) 16-8-0 to 20-0-0, Exterior (2N) 20-0-0 to 34-8-13 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) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.

Review for Code Compliance
Universal Engineering Science

PX2707 10/22/2023
Examiner-License No.

JOAQUIN VELEZ LICENSE No 68182 STATE OF FLORIDA PROFESSIONAL ENGINEER

Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date: September 26,2023

Continued on page 2

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

11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 33 lb uplift at joint 1, 68 lb uplift at joint 21, 111 lb uplift at joint 32, 114 lb uplift at joint 33, 111 lb uplift at joint 34, 111 lb uplift at joint 35, 113 lb uplift at joint 37, 105 lb uplift at joint 38, 114 lb uplift at joint 39, 107 lb uplift at joint 29, 115 lb uplift at joint 28, 110 lb uplift at joint 27, 111 lb uplift at joint 26, 110 lb uplift at joint 25, 114 lb uplift at joint 24, 93 lb uplift at joint 23, 33 lb uplift at joint 1 and 68 lb uplift at joint 21.

LOAD CASE(S) Standard

Review for Code Compliance
Universal Engineering Science

PX2707 10/22/2023

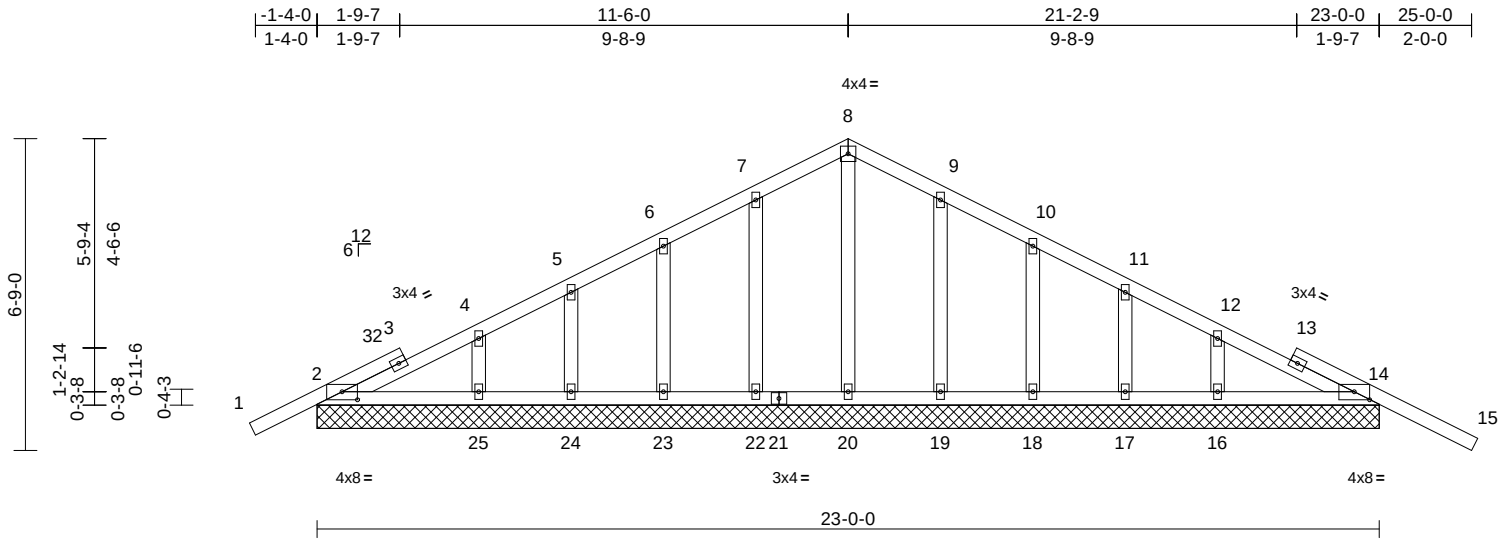
Examiner-License No.

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

Job	Truss	Truss Type	Qty	Ply	Anderson Home
1187-A	G2	Common Supported Gable	1	1	T31656391
					Job Reference (optional)

19 Lumber, Inc., Old Town, FL - 32680, Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Mon Sep 25 17:10:53 Page: 1

ID:wW3EFryyvpDlmnYHGwj3RdybRrT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:49.9

Plate Offsets (X, Y): [2:0-4-0,0-2-1], [14:0-4-0,0-2-1]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.45	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.11	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.01	29	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MS							Weight: 123 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS (size) 2=23-0-0, 14=23-0-0, 16=23-0-0, 17=23-0-0, 18=23-0-0, 19=23-0-0, 20=23-0-0, 22=23-0-0, 23=23-0-0, 24=23-0-0, 25=23-0-0, 26=23-0-0, 29=23-0-0
Max Horiz 2=-177 (LC 17), 26=-177 (LC 17)
Max Uplift 2=-78 (LC 12), 14=-155 (LC 13), 16=-114 (LC 13), 17=-112 (LC 13), 18=-112 (LC 13), 19=-114 (LC 13), 22=-115 (LC 12), 23=-114 (LC 12), 24=-101 (LC 12), 25=-140 (LC 12), 26=-78 (LC 12), 29=-155 (LC 13)
Max Grav 2=221 (LC 1), 14=287 (LC 24), 16=208 (LC 24), 17=146 (LC 24), 18=162 (LC 1), 19=168 (LC 24), 20=194 (LC 22), 22=167 (LC 23), 23=166 (LC 1), 24=131 (LC 23), 25=245 (LC 1), 26=221 (LC 1), 29=287 (LC 24)

FORCES (lb) - Maximum Compression/Maximum Tension

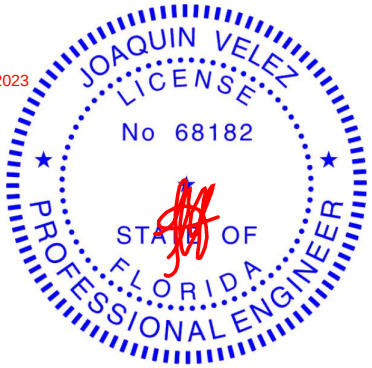
TOP CHORD 1-2=0/38, 2-4=-147/103, 4-5=-75/118, 5-6=-42/148, 6-7=-62/215, 7-8=-89/289, 8-9=-89/289, 9-10=-62/215, 10-11=-35/140, 11-12=-27/62, 12-14=-135/64, 14-15=0/55
BOT CHORD 2-25=-59/202, 24-25=-59/202, 23-24=-59/202, 22-23=-59/202, 20-22=-59/202, 19-20=-59/202, 18-19=-59/202, 17-18=-59/202, 16-17=-59/202, 14-16=-59/219
WEBS 8-20=-154/0, 7-22=-128/147, 6-23=-122/151, 5-24=-105/140, 4-25=-169/180, 9-19=-129/147, 10-18=-120/149, 11-17=-112/155, 12-16=-151/159

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=108mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -1-4-13 to 1-7-3, Exterior(2N) 1-7-3 to 11-6-0, Corner(3R) 11-6-0 to 14-6-0, Exterior (2N) 14-6-0 to 25-0-13 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) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 78 lb uplift at joint 2, 155 lb uplift at joint 14, 115 lb uplift at joint 22, 114 lb uplift at joint 23, 101 lb uplift at joint 24, 140 lb uplift at joint 25, 114 lb uplift at joint 19, 112 lb uplift at joint 18, 112 lb uplift at joint 17, 114 lb uplift at joint 16, 78 lb uplift at joint 2 and 155 lb uplift at joint 14.

LOAD CASE(S) Standard

Joaquin Velez PX2707 10/22/2023
Examiner License No.



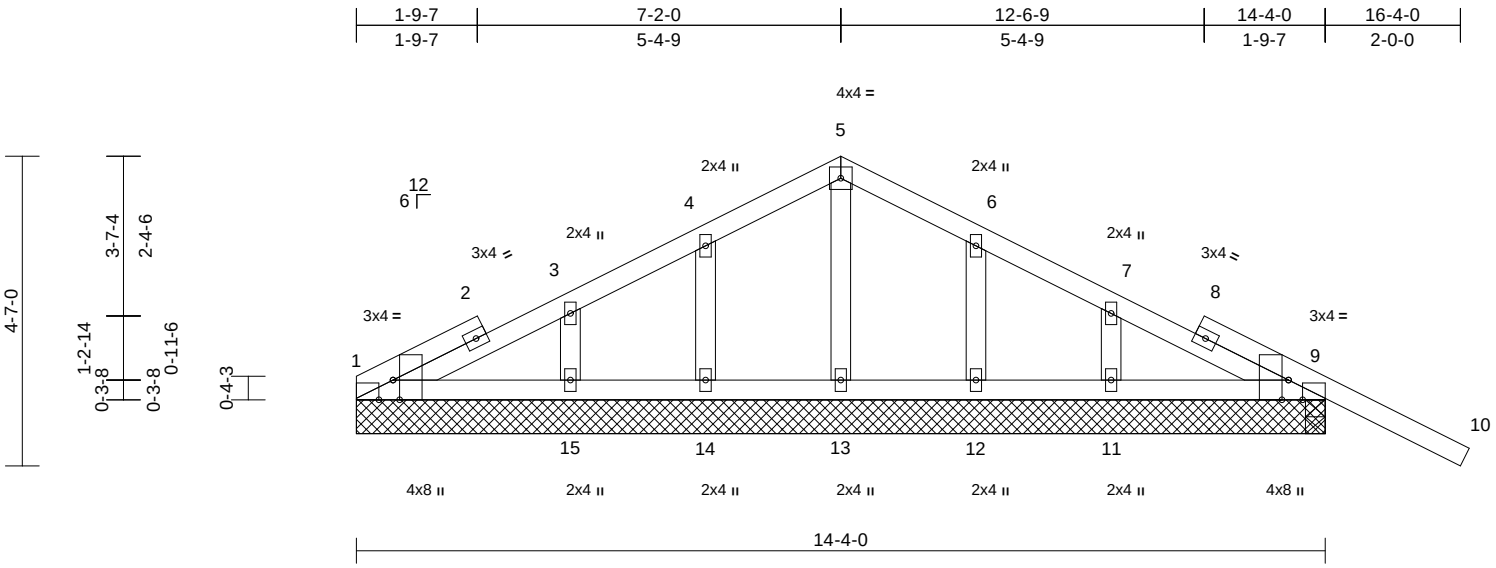
Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

September 26,2023

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

Job	Truss	Truss Type	Qty	Ply	Anderson Home	
1187-A	G3	Common	1	1	Job Reference (optional)	T31656392

19 Lumber, Inc., Old Town, FL - 32680, Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Mon Sep 25 17:10:53 Page: 1
ID:wW3EFryyvpDlmnYHGwj3RdybRrT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:34.1

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.52	Vert(LL)	0.01	15-18	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.15	Vert(CT)	-0.01	15-18	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	19	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MS							Weight: 67 lb	FT = 20%

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

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

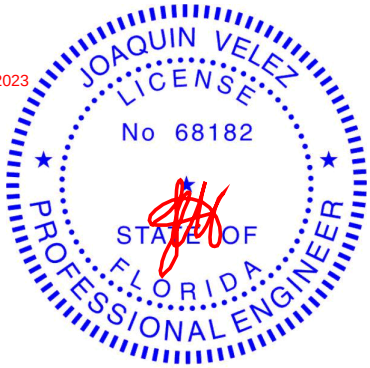
REACTIONS (size) 1=14-4-0, 9=14-4-0, 11=14-4-0, 12=14-4-0, 13=14-4-0, 14=14-4-0, 15=14-4-0, 16=14-4-0, 19=14-4-0
Max Horiz 1=-139 (LC 17), 16=-139 (LC 17)
Max Uplift 1=-36 (LC 13), 9=-184 (LC 13), 11=-86 (LC 13), 12=-127 (LC 13), 14=-103 (LC 12), 15=-158 (LC 12), 16=-36 (LC 13), 19=-184 (LC 13)
Max Grav 1=106 (LC 1), 9=294 (LC 24), 11=156 (LC 1), 12=172 (LC 24), 13=161 (LC 22), 14=140 (LC 23), 15=249 (LC 1), 16=106 (LC 1), 19=294 (LC 24)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-3=-73/81, 3-4=-38/117, 4-5=-63/209, 5-6=-63/211, 6-7=-32/107, 7-9=-293/125, 9-10=0/59
BOT CHORD 1-15=-43/174, 14-15=-43/174, 13-14=-43/174, 12-13=-43/174, 11-12=-43/174, 9-11=-135/398
WEBS 5-13=-117/0, 4-14=-117/187, 3-15=-163/253, 6-12=-130/213, 7-11=-141/177

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=108mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) 0-0-0 to 3-2-0, Exterior(2N) 3-2-0 to 7-2-0, Corner(3R) 7-2-0 to 10-2-0, Exterior(2N) 10-2-0 to 16-4-13 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) Gable studs spaced at 2-0-0 oc.
6) Th has been designed for a 10.0psf bottom ch 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 36 lb uplift at joint 1, 184 lb uplift at joint 9, 103 lb uplift at joint 14, 158 lb uplift at joint 15, 127 lb uplift at joint 12, 86 lb uplift at joint 11, 36 lb uplift at joint 1 and 184 lb uplift at joint 9.

LOAD CASE(S) Standard

PX2707 10/22/2023



Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date: September 26,2023

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

Job	Truss	Truss Type	Qty	Ply	Anderson Home	T31656393
1187-A	G4	Common Structural Gable	1	1	Job Reference (optional)	

19 Lumber, Inc., Old Town, FL - 32680, Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Mon Sep 25 17:10:54 Page: 1
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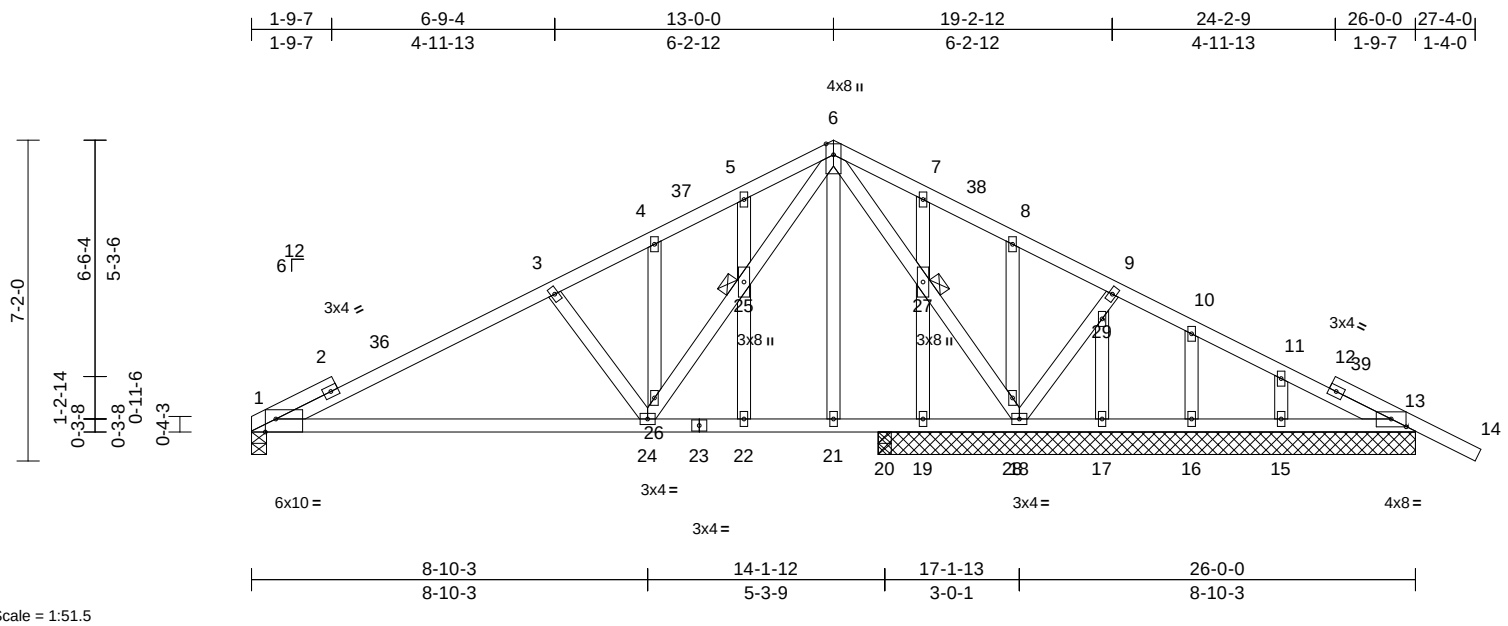


Scale = 1:51.5

Plate Offsets (X, Y): [1:0-2-13,Edge], [13:0-4-0,0-2-1]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.64	Vert(LL)	0.16	24-32	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.60	Vert(CT)	-0.27	24-32	>622	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.29	Horz(CT)	0.01	1	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MS							Weight: 163 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-1-1 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing, Except:
9-9-6 oc bracing: 1-24.
JOINTS 1 Brace at Jt(s): 25, 27

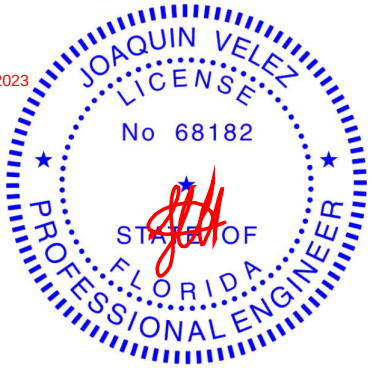
REACTIONS (size) 1=0-4-0, 13=12-0-0, 15=12-0-0, 16=12-0-0, 17=12-0-0, 18=12-0-0, 19=12-0-0, 20=0-3-8, 33=12-0-0
Max Horiz 1=-199 (LC 13)
Max Uplift 1=-224 (LC 12), 13=-83 (LC 13), 15=-121 (LC 13), 16=-82 (LC 13), 17=-75 (LC 23), 18=-427 (LC 12), 19=-131 (LC 23), 20=-187 (LC 12), 33=-83 (LC 13)
Max Grav 1=514 (LC 1), 13=162 (LC 24), 15=195 (LC 24), 16=127 (LC 24), 17=90 (LC 12), 18=883 (LC 1), 19=65 (LC 24), 20=442 (LC 1), 33=162 (LC 24)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-3=-689/327, 3-4=-518/295, 4-5=-451/335, 5-6=-451/392, 6-7=-94/427, 7-8=-140/455, 8-9=-175/445, 9-10=-137/319, 10-11=-167/312, 11-13=-197/314, 13-14=0/38
BOT CHORD 1-24=-319/613, 22-24=-84/240, 21-22=-84/240, 20-21=-85/241, 19-20=-85/241, 18-19=-85/241, 17-18=-273/251, 16-17=-273/251, 15-16=-273/251, 13-15=-273/251
WEBS 6-27=-656/324, 27-28=-663/326, 18-28=-740/370, 18-29=-210/167, 9-29=-139/136, 24-26=-351/672, 25-26=-420/686, 6-25=-440/715, 3-24=-388/333, 6-21=-147/70, 5-25=-122/106, 22-25=-87/82, 4-26=-1/69, 7-27=-185/161, 19-27=-176/166, 8-28=-113/134, 17-29=-68/107, 10-16=-92/104, 11-15=-137/133

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=108mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-2-0 to 3-2-0, Interior (1) 3-2-0 to 12-10-14, Exterior(2R) 12-10-14 to 15-10-14, Interior (1) 15-10-14 to 27-4-13 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) All plates are 2x4 MT20 unless otherwise indicated.
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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 224 lb uplift at joint 1, 427 lb uplift at joint 18, 131 lb uplift at joint 19, 75 lb uplift at joint 17, 82 lb uplift at joint 16, 121 lb uplift at joint 15, 83 lb uplift at joint 13, 187 lb uplift at joint 20 and 83 lb uplift at joint 13.

LOAD CASE(S) Standard

Signature PE-2707 10/22/2023
Examiner License No.



Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date: September 26,2023

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

Job	Truss	Truss Type	Qty	Ply	Anderson Home	
1187-A	G5	Common Supported Gable	1	1	Job Reference (optional)	T31656394

19 Lumber, Inc., Old Town, FL - 32680, Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Mon Sep 25 17:10:54 Page: 1
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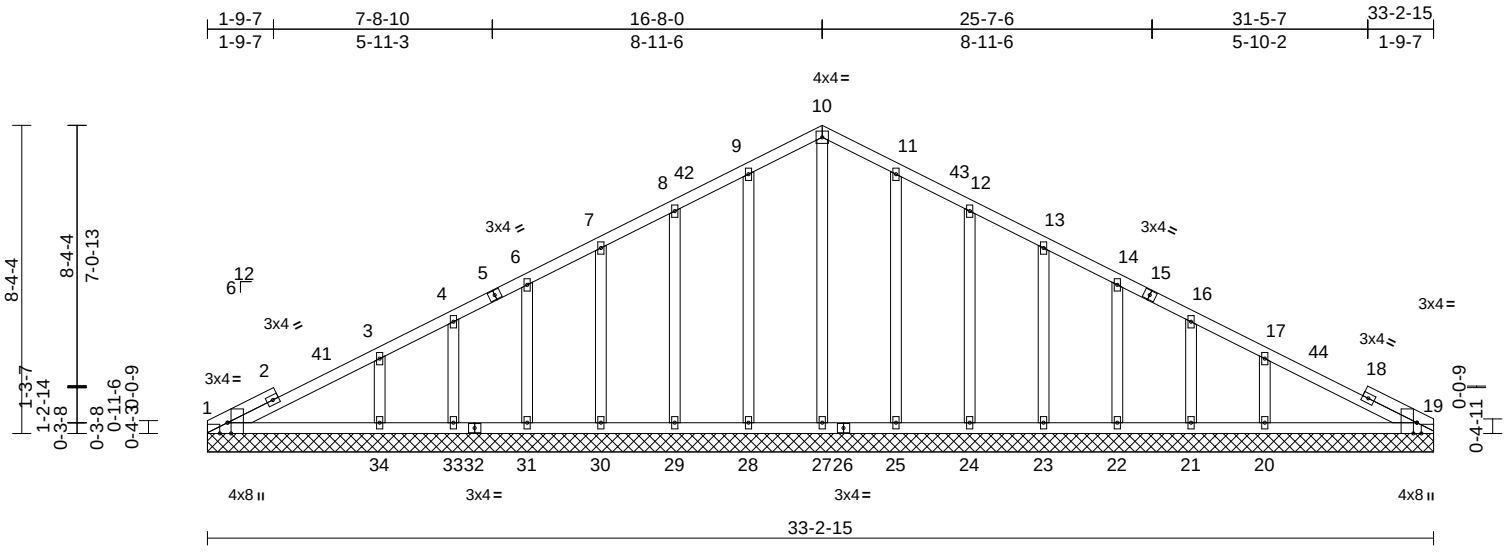

Scale = 1:62.5

Plate Offsets (X, Y): [1:0-3-8,Edge], [1:0-2-8,Edge], [19:0-3-8,Edge], [19:0-1-7,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.20	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.18	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.22	Horiz(TL)	0.01	19	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MS							Weight: 198 lb	FT = 20%

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

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

REACTIONS (size) 1=33-2-15, 19=33-2-15, 20=33-2-15, 21=33-2-15, 22=33-2-15, 23=33-2-15, 24=33-2-15, 25=33-2-15, 27=33-2-15, 28=33-2-15, 29=33-2-15, 30=33-2-15, 31=33-2-15, 33=33-2-15, 34=33-2-15, 35=33-2-15, 38=33-2-15
Max Horiz 1=211 (LC 12), 35=211 (LC 12)
Max Uplift 1=-35 (LC 13), 19=-2 (LC 13), 20=-234 (LC 13), 21=-56 (LC 13), 22=-125 (LC 13), 23=-107 (LC 13), 24=-115 (LC 13), 25=-108 (LC 13), 28=-112 (LC 12), 29=-114 (LC 12), 30=-108 (LC 12), 31=-124 (LC 12), 33=-59 (LC 12), 34=-226 (LC 12), 35=-35 (LC 13), 38=-2 (LC 13)
Max Grav 1=140 (LC 23), 19=139 (LC 24), 20=369 (LC 24), 21=66 (LC 1), 22=183 (LC 24), 23=155 (LC 1), 24=159 (LC 24), 25=169 (LC 24), 27=237 (LC 22), 28=170 (LC 23), 29=159 (LC 23), 30=154 (LC 1), 31=185 (LC 23), 33=61 (LC 1), 34=377 (LC 23), 35=140 (LC 23), 38=139 (LC 24)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-3=-270/150, 3-4=-155/121, 4-6=-103/148, 6-7=-47/168, 7-8=-41/205, 8-9=-68/246, 9-10=-95/280, 10-11=-95/268, 11-12=-68/201, 12-13=-41/138, 13-14=-17/92, 14-16=-15/81, 16-17=-66/57, 17-19=-183/109
BOT CHORD 1-34=-98/216, 33-34=-98/216, 31-33=-98/216, 30-31=-98/216, 29-30=-98/216, 28-29=-98/216, 27-28=-98/216, 25-27=-98/216, 24-25=-98/216, 23-24=-98/216, 22-23=-98/216, 21-22=-98/216, 20-21=-98/216, 19-20=-98/216
WEBS 10-27=-197/0, 9-28=-130/146, 8-29=-119/133, 7-30=-118/129, 6-31=-133/140, 4-33=-66/96, 3-34=-247/218, 11-25=-130/146, 12-24=-119/135, 13-23=-119/129, 14-22=-130/140, 16-21=-68/93, 17-20=-244/224

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=108mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 3-5-1, Interior (1) 3-5-1 to 16-8-0, Exterior(2R) 16-8-0 to 20-1-1, Interior (1) 20-1-1 to 33-2-15 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) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 35 lb uplift at joint 1, 2 lb uplift at joint 19, 112 lb uplift at joint 28, 114 lb uplift at joint 29, 108 lb uplift at joint 30, 124 lb uplift at joint 31, 59 lb uplift at joint 33, 226 lb uplift at joint 34, 108 lb uplift at joint 25, 115 lb uplift at joint 24, 107 lb uplift at joint 23, 125 lb uplift at joint 22, 56 lb uplift at joint 21, 234 lb uplift at joint 20, 35 lb uplift at joint 1 and 2 lb uplift at joint 19.

LOAD CASE(S) Standard

Signature Joaquin Velez PX2707 10/22/2023
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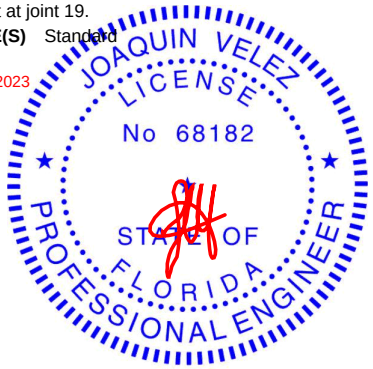

Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date: September 26,2023

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Chesterfield, MO 63017
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Job	Truss	Truss Type	Qty	Ply	Anderson Home	
1187-A	GR1	Roof Special Girder	1	3	Job Reference (optional)	T31656395

19 Lumber, Inc., Old Town, FL - 32680, Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Mon Sep 25 17:10:55 Page: 1
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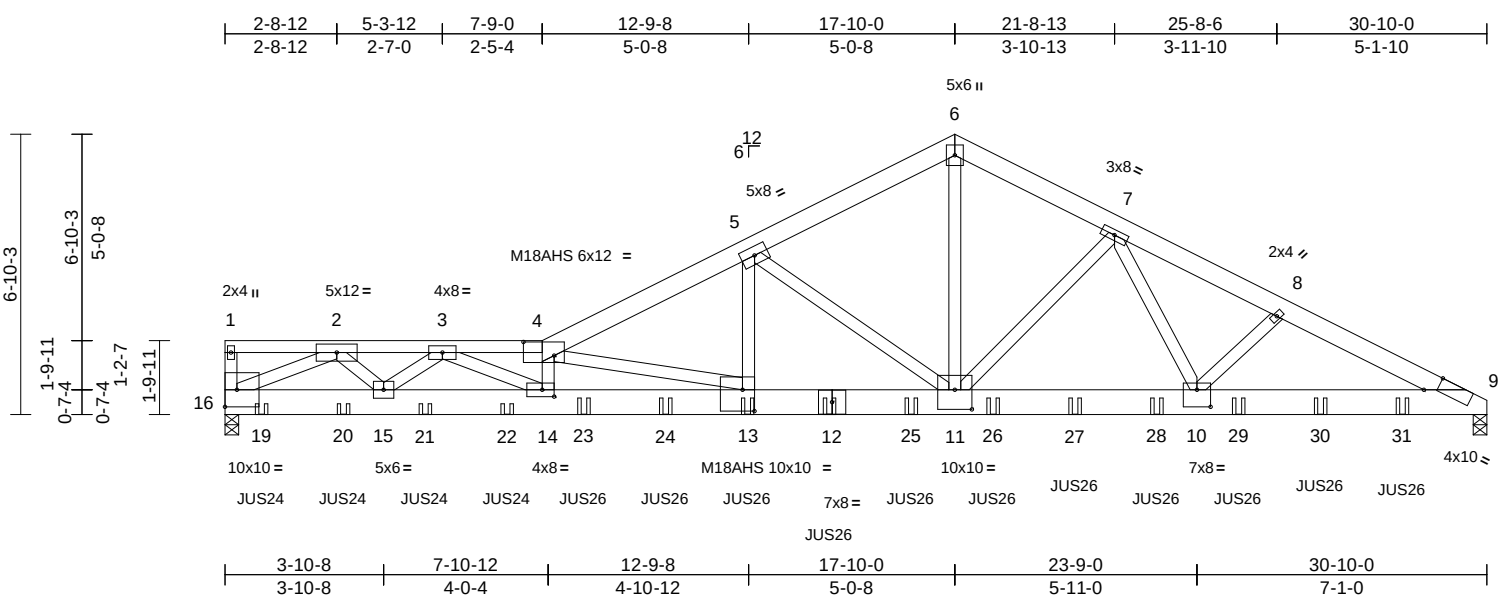

Scale = 1:56.3

Plate Offsets (X, Y): [4:0-9-0,0-4-0], [9:0-3-8,Edge], [10:0-4-0,0-5-0], [11:0-5-0,0-5-12], [13:0-3-8,0-6-4], [14:0-3-8,0-2-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.90	Vert(LL)	0.55	13-14	>666	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.87	Vert(CT)	-0.79	13-14	>461	180	M18AHS	186/179
BCLL	0.0*	Rep Stress Incr	NO	WB	0.76	Horz(CT)	0.12	9	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MS							Weight: 685 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2 *Except* 1-4:2x4 SP DSS
BOT CHORD 2x8 SP DSS
WEBS 2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-1-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 9=0-4-0, 16=0-4-0
Max Horiz 16=-183 (LC 23)
Max Uplift 9=-3595 (LC 9), 16=-3472 (LC 8)
Max Grav 9=8417 (LC 2), 16=7714 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-16=-280/151, 1-2=-407/190, 2-3=-18511/8263, 3-4=-31237/13943, 4-5=-18672/8294, 5-6=-11705/5121, 6-7=-11669/5141, 7-8=-16218/6951, 8-9=-16461/7047
BOT CHORD 15-16=-5839/12823, 14-15=-10599/23489, 13-14=-13821/30800, 11-13=-7508/16845, 10-11=-5250/12475, 9-10=-6263/14822
WEBS 4-14=-4270/1872, 4-13=-14452/6538, 5-13=-3273/7444, 5-11=-8220/3848, 6-11=-4361/10057, 7-11=-3041/1450, 7-10=-1958/4678, 8-10=-562/394, 2-15=-3879/8818, 2-16=-14027/6315, 3-15=-6848/3106, 3-14=-3866/8753

NOTES
1) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 2 rows staggered at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-7-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) 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.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=108mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
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) Provide adequate drainage to prevent water ponding.
7) Al[illegible] are MT20 plates unless otherwise indicated.
8) Th[illegible] 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) All bearings are assumed to be SP DSS crushing capacity of 660 psi.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 3472 lb uplift at joint 16 and 3595 lb uplift at joint 9.
12) Use MiTek JUS24 (With 4-10d nails into Girder & 2-10d nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 0-10-12 from the left end to 6-10-12 to connect truss(es) to back face of bottom chord.
13) Use MiTek JUS26 (With 4-10d nails into Girder & 4-10d nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 8-9-4 from the left end to 28-9-4 to connect truss(es) to back face of bottom chord.
14) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (lb/ft)
Vert: 1-4=-60, 4-6=-60, 6-9=-60, 9-16=-20
Concentrated Loads (lb)
Vert: 12=-988 (B), 13=-988 (B), 19=-650 (B), 20=-648 (B), 21=-652 (B), 22=-652 (B), 23=-973 (B), 24=-973 (B), 25=-988 (B), 26=-988 (B), 27=-988 (B), 28=-988 (B), 29=-988 (B), 30=-988 (B), 31=-988 (B)

Review for Code Compliance
Universal Engineering Science
PX2707
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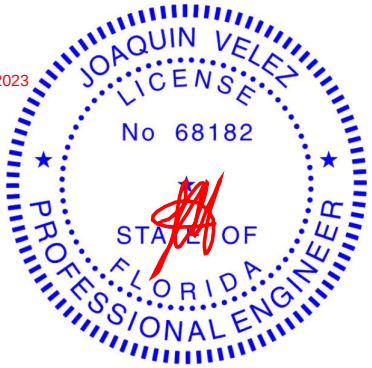
10/22/2023



Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:
September 26,2023

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/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.sbcscomponents.com)

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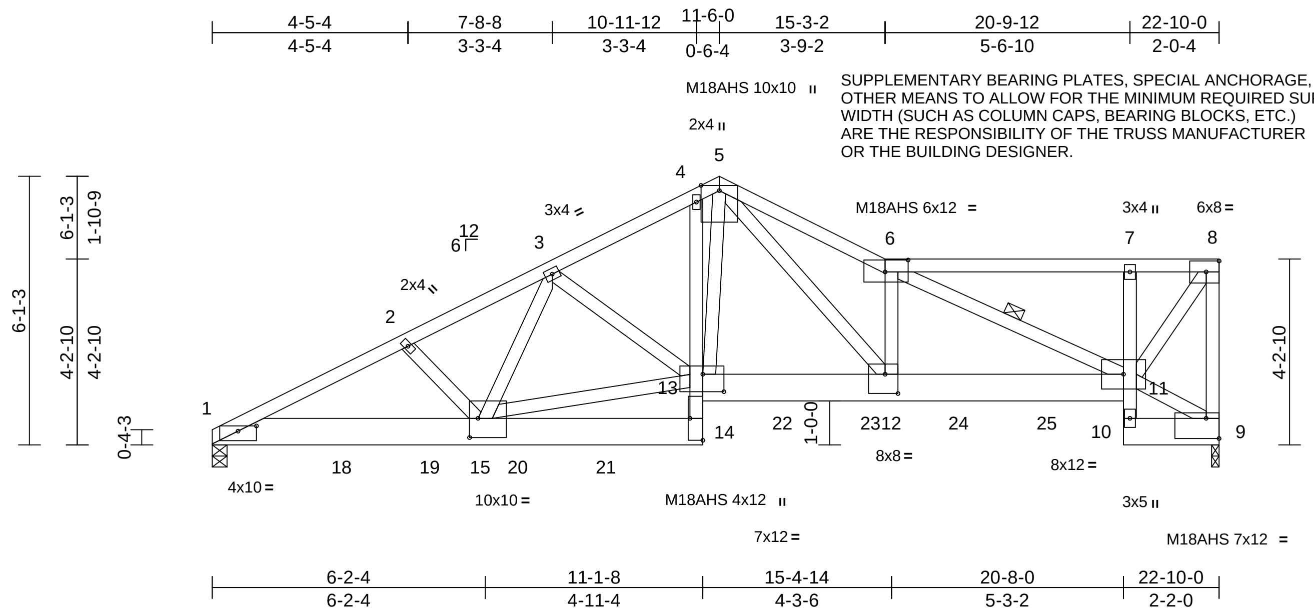
Job	Truss	Truss Type	Qty	Ply	Anderson Home
1187-A	GR2	Roof Special Girder	1	2	T31656396 Job Reference (optional)



Scale = 1:52.3

Plate Offsets (X, Y): [1:0-5-0,0-1-7], [6:0-6-4,0-3-4], [9:Edge,0-5-8], [12:0-3-8,0-5-4], [13:0-5-12,0-4-12], [14:Edge,0-3-8], [15:0-2-5,0-5-4]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.79	Vert(LL)	0.25	12-13	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.98	Vert(CT)	-0.43	12-13	>629	180	M18AHS	186/179
BCLL	0.0*	Rep Stress Incr	NO	WB	0.97	Horz(CT)	0.17	9	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MS							Weight: 358 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2 *Except* 5-6:2x4 SP DSS
BOT CHORD 2x8 SP DSS *Except* 14-4,7-10:2x4 SP No.2
WEBS 2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-1-7 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 10-11,9-10.
WEBS 1 Row at midpt 6-11

REACTIONS (lb/size) 1=6564/0-4-0, 9=6102/0-2-0, (req. 0-3-4)
Max Horiz 1=269 (LC 5)
Max Uplift 1=-2500 (LC 8), 9=-2354 (LC 9)
Max Grav 1=6636 (LC 2), 9=6466 (LC 2)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-11758/4279, 2-3=-11652/4244, 3-4=-9791/3528, 4-5=-9401/3454, 5-6=-13942/5034, 6-7=-4573/1654, 7-8=-4366/1570, 8-9=-6464/2370
BOT CHORD 1-18=-3918/10500, 18-19=-3918/10500, 15-19=-3918/10500, 15-20=-484/1351, 20-21=-484/1351, 14-21=-484/1351, 13-14=-635/1996, 4-13=-275/828, 13-22=-2962/8228, 22-23=-2962/8228, 12-23=-2962/8228, 12-24=-4481/12367, 24-25=-4481/12367, 11-25=-4481/12367, 7-11=-276/258
WEBS 13-15=-3123/8585, 6-12=-2396/1048, 6-11=-8709/3073, 8-11=-2849/7731, 5-13=-1707/4508, 5-12=-2443/6616, 3-15=-601/1660, 3-13=-1433/672

NOTES

1) 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 - 3 rows staggered at 0-5-0 oc, 2x4 - 1 row at 0-9-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) 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.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=108mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
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) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates unless otherwise indicated.
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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) WARNING: Required bearing size at joint(s) 9 greater than input bearing size.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 2500 lb uplift at joint 1 and 2354 lb uplift at joint 9.
12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 990 lb down and 372 lb up at 0-11-4, 987 lb down and 373 lb up at 2-11-4, 1106 lb down and 373 lb up at 4-11-4, 1106 lb down and 373 lb up at 6-11-4, 1106 lb down and 373 lb up at 8-11-4, 1106 lb down and 373 lb up at 10-11-12, 1068 lb down and 373 lb up at 12-11-4, 1068 lb down and 373 lb up at 14-11-4, 1068 lb down and 373 lb up at 16-11-4, and 1068 lb down and 373 lb up at 18-11-4, and 1106 lb down and 373 lb up at 20-9-12 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 (lb/ft)
Vert: 1-5=-60, 5-6=-60, 6-8=-60, 1-14=-20, 11-13=-20, 9-10=-20
Concentrated Loads (lb)
Vert: 14=-988 (F), 11=-988 (F), 17=-990 (F), 18=-987 (F), 19=-988 (F), 20=-988 (F), 21=-988 (F), 22=-988 (F), 23=-988 (F), 24=-988 (F), 25=-988 (F)

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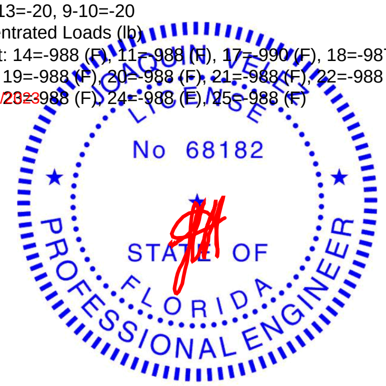
10/2/2023 PX2707
Examiner License No



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

September 26,2023

Job	Truss	Truss Type	Qty	Ply	Anderson Home	
1187-A	GR3	Half Hip Girder	1	1	Job Reference (optional)	T31656397

19 Lumber, Inc., Old Town, FL - 32680, Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Mon Sep 25 17:10:56 Page: 1
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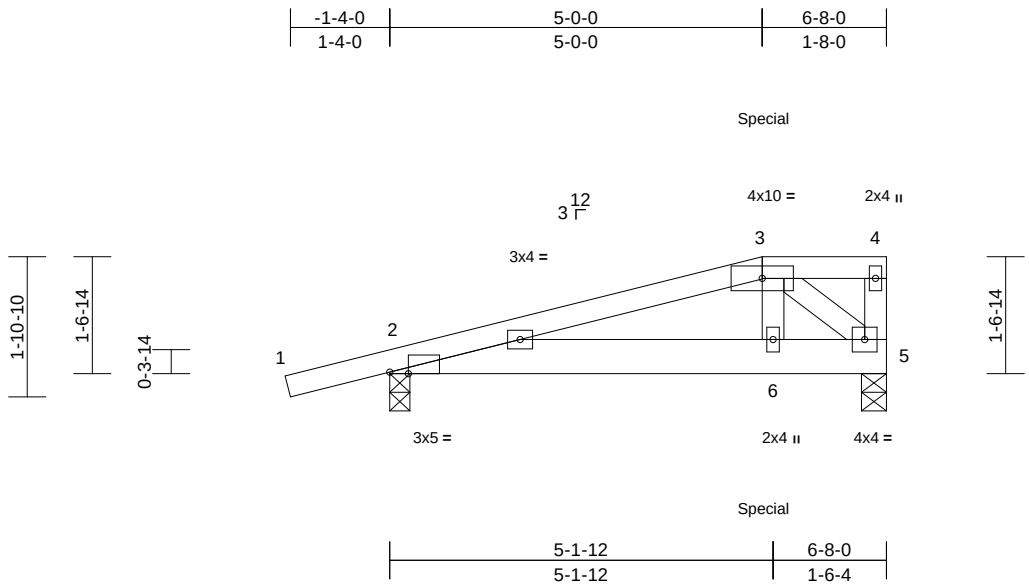

Scale = 1:30.9

Plate Offsets (X, Y): [2:0-3-0,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.19	Vert(LL)	0.02	6-8	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.28	Vert(CT)	-0.03	6-8	>999	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.08	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MP							Weight: 32 lb	FT = 20%

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

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

REACTIONS (size) 2=0-3-4, 5=0-4-0
Max Horiz 2=89 (LC 5)
Max Uplift 2=-285 (LC 4), 5=-252 (LC 4)
Max Grav 2=427 (LC 1), 5=484 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/22, 2-3=-588/309, 3-4=-25/19, 4-5=-46/38
BOT CHORD 2-6=-284/546, 5-6=-293/581
WEBS 3-6=-81/320, 3-5=-739/396

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=108mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 285 lb uplift at joint 2 and 252 lb uplift at joint 5.
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 216 lb down and 179 lb up at 5-0-0 on top chord, and 141 lb down and 57 lb up at 5-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
10) 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 (lb/ft)
L-3=-60, 3-4=-60, 2-5=-20
Concentrated Loads (lb)
Vert: 6=-141 (B), 3=-169 (B)

"Special" indicates special hanger(s) or other connection device(s) required at location(s) shown. The design/selection of such special connection device(s) is the responsibility of others. This applies to all applicable truss designs in this job.

Review for Code Compliance
Universal Engineering Science

PX2707 10/22/2023
Examiner-License No.

JOAQUIN VELEZ LICENSE No 68182 STATE OF FLORIDA PROFESSIONAL ENGINEER

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

September 26,2023

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

Job	Truss	Truss Type	Qty	Ply	Anderson Home	
1187-A	M1	Monopitch	4	1	Job Reference (optional)	T31656398

19 Lumber, Inc., Old Town, FL - 32680, Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Mon Sep 25 17:10:56 Page: 1
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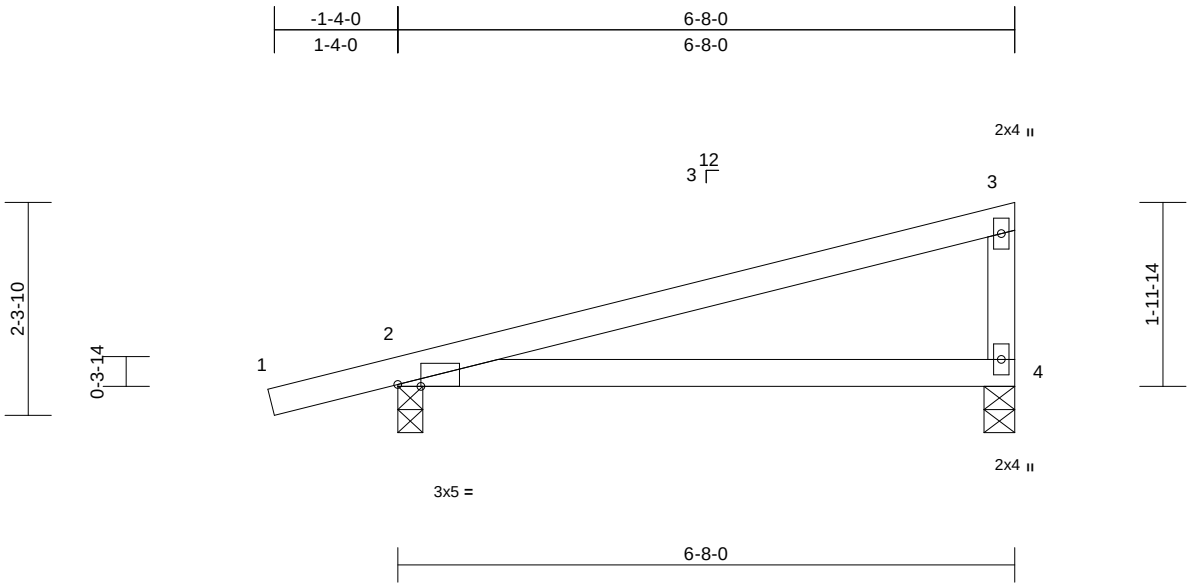

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Plate Offsets (X, Y): [2:0-3-0,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.63	Vert(LL)	0.16	4-7	>494	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.60	Vert(CT)	-0.18	4-7	>433	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MP							Weight: 24 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-8-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-3-4, 4=0-4-0
Max Horiz 2=115 (LC 11)
Max Uplift 2=-233 (LC 8), 4=-132 (LC 12)
Max Grav 2=352 (LC 1), 4=252 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/20, 2-3=-182/78, 3-4=-186/267
BOT CHORD 2-4=-161/242

NOTES
1) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=108mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-4-7 to 1-7-9, Interior (1) 1-7-9 to 6-6-4 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 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
5) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 132 lb uplift at joint 4 and 233 lb uplift at joint 2.

LOAD CASE(S) Standard

Review for Code Compliance
Universal Engineering Science

PX2707 10/22/2023
Examiner-License No.

JOAQUIN VELEZ LICENSE No 68182 STATE OF FLORIDA PROFESSIONAL ENGINEER

Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:
September 26,2023

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

Job	Truss	Truss Type	Qty	Ply	Anderson Home	
1187-A	M2	Monopitch	2	1	Job Reference (optional)	T31656399

19 Lumber, Inc., Old Town, FL - 32680, Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Mon Sep 25 17:10:56 Page: 1
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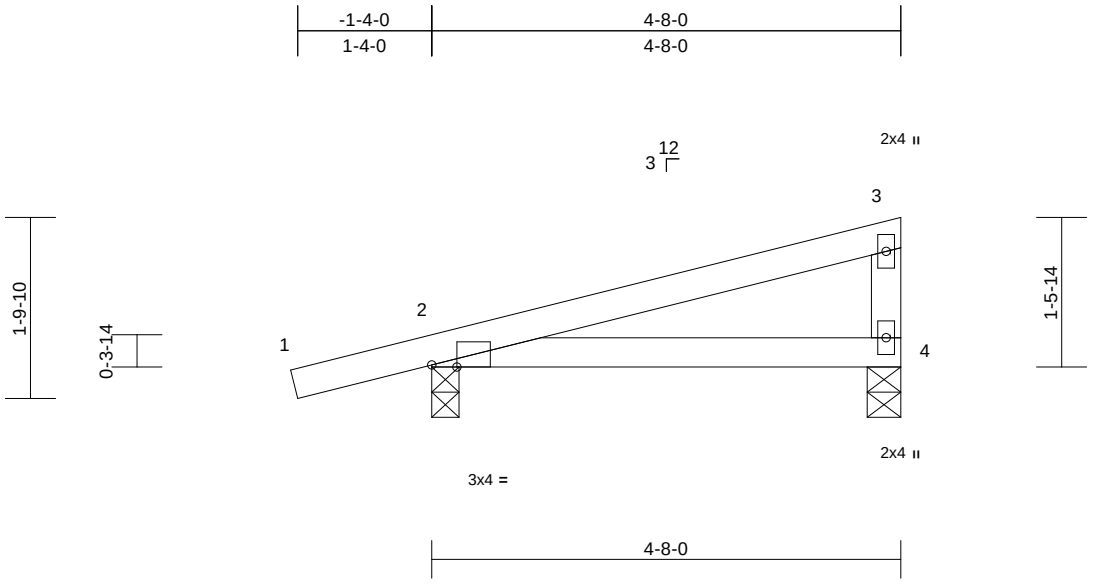

Scale = 1:22.9

Plate Offsets (X, Y): [2:0-3-0,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.24	Vert(LL)	0.03	4-7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.24	Vert(CT)	-0.04	4-7	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MP							Weight: 18 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-8-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-3-4, 4=0-4-0
Max Horiz 2=83 (LC 11)
Max Uplift 2=-199 (LC 8), 4=-87 (LC 12)
Max Grav 2=275 (LC 1), 4=168 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/20, 2-3=-132/56, 3-4=-134/174
BOT CHORD 2-4=-75/173

NOTES
1) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=108mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-4-7 to 1-7-9, Interior (1) 1-7-9 to 4-6-4 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 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
5) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 87 lb uplift at joint 4 and 199 lb uplift at joint 2.

LOAD CASE(S) Standard

Review for Code Compliance
Universal Engineering Science

Lawrence Pennell PX2707 10/22/2023
Examiner-License No.

JOAQUIN VELEZ LICENSE No 68182 STATE OF FLORIDA PROFESSIONAL ENGINEER

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

September 26,2023

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

Job	Truss	Truss Type	Qty	Ply	Anderson Home	
1187-A	T1	Roof Special	2	1	Job Reference (optional)	T31656400

19 Lumber, Inc., Old Town, FL - 32680, Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Mon Sep 25 17:10:57 Page: 1
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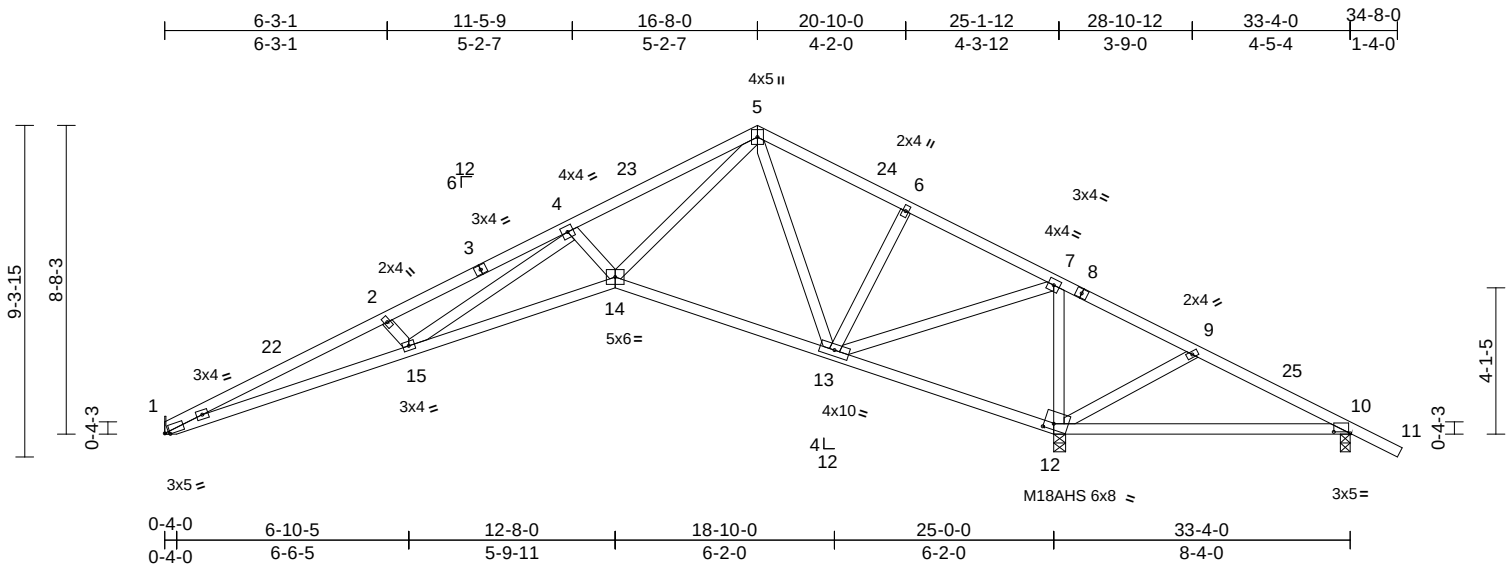

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Plate Offsets (X, Y): [1:0-1-12,0-0-12], [10:0-5-8,0-0-8], [12:0-3-4,0-2-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.83	Vert(LL)	0.29	14-15	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.70	Vert(CT)	-0.41	14-15	>736	180	M18AHS	186/179
BCLL	0.0*	Rep Stress Incr	YES	WB	0.73	Horz(CT)	0.23	12	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MS							Weight: 168 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-1-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 3-10-14 oc bracing.

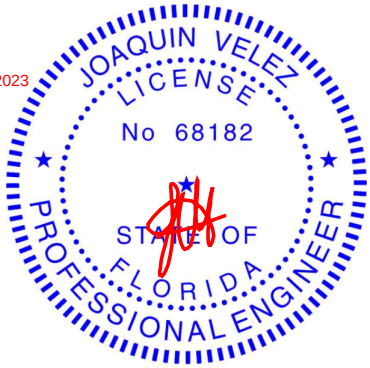
REACTIONS (size) 1= Mechanical, 10=0-3-4, 12=0-4-0
Max Horiz 1=-254 (LC 17)
Max Uplift 1=-284 (LC 12), 10=-696 (LC 23), 12=-1012 (LC 12)
Max Grav 1=668 (LC 1), 10=361 (LC 12), 12=2655 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-2601/1271, 2-4=-2415/1238, 4-5=-1095/465, 5-6=-119/456, 6-7=-137/367, 7-9=-942/2208, 9-10=-877/1899, 10-11=0/38
BOT CHORD 1-15=-1299/2404, 14-15=-522/1341, 13-14=-148/321, 12-13=-2123/1048, 10-12=-1624/835
WEBS 2-15=-270/307, 4-15=-702/1093, 4-14=-549/491, 5-14=-572/1312, 5-13=-960/457, 6-13=-246/265, 7-13=-707/1899, 7-12=-1679/678, 9-12=-354/275

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=108mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 3-4-1, Interior (1) 3-4-1 to 16-8-0, Exterior(2R) 16-8-0 to 20-0-1, Interior (1) 20-0-1 to 34-8-13 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-[illegible]all by 2-0-0 wide will fit between the bottom ch[illegible]l any other members.
7) Bearings are assumed to be: , Joint 12 SP No.2 crushing capacity of 565 psi, Joint 10 SP No.2 crushing capacity of 565 psi.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1012 lb uplift at joint 12, 696 lb uplift at joint 10 and 284 lb uplift at joint 1.

LOAD CASE(S) Standard

Review for Code Compliance
Universal Engineering Science
Signature PX2707 10/22/2023
Examiner License No.



Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:
September 26,2023

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

Job	Truss	Truss Type	Qty	Ply	Anderson Home	T31656401
1187-A	T2	Roof Special	6	1	Job Reference (optional)	

19 Lumber, Inc., Old Town, FL - 32680, Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Mon Sep 25 17:10:57 Page: 1

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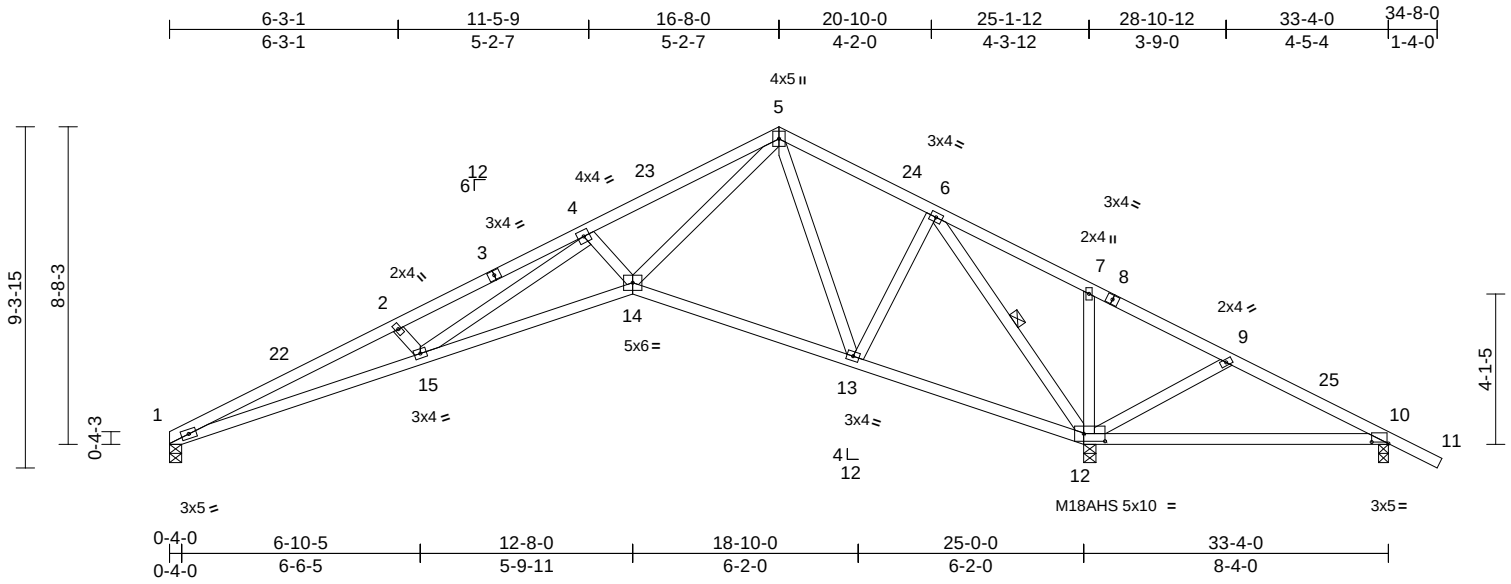


Scale = 1:63

Plate Offsets (X, Y): [10:0-5-8,0-0-8], [12:0-7-0,0-2-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.83	Vert(LL)	0.29	14-15	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.70	Vert(CT)	-0.41	14-15	>725	180	M18AHS	186/179
BCLL	0.0*	Rep Stress Incr	YES	WB	0.72	Horz(CT)	0.25	12	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MS							Weight: 169 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-1-12 oc purlins.
BOT CHORD Rigid ceiling directly applied or 3-11-6 oc bracing.
WEBS 1 Row at midpt 6-12

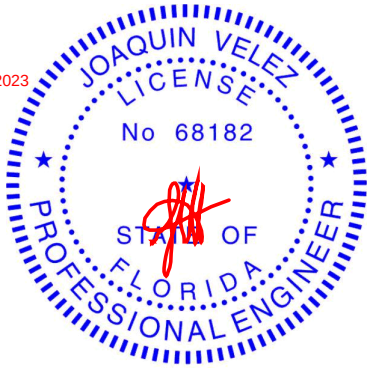
REACTIONS (size) 1=0-4-0, 10=0-3-4, 12=0-4-0
Max Horiz 1=-254 (LC 17)
Max Uplift 1=-284 (LC 12), 10=-682 (LC 23), 12=-1011 (LC 12)
Max Grav 1=672 (LC 1), 10=359 (LC 12), 12=2637 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-2626/1273, 2-4=-2440/1240, 4-5=-1123/468, 5-6=-117/436, 6-7=-865/2196, 7-9=-939/2177, 9-10=-876/1873, 10-11=0/38
BOT CHORD 1-15=-1301/2427, 14-15=-524/1367, 13-14=-141/331, 12-13=-775/539, 10-12=-1601/834
WEBS 2-15=-269/307, 4-15=-701/1090, 4-14=-549/491, 5-14=-574/1330, 5-13=-953/457, 6-13=-303/894, 6-12=-2239/839, 7-12=-228/260, 9-12=-346/276

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=108mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 3-4-0, Interior (1) 3-4-0 to 16-8-0, Exterior(2R) 16-8-0 to 20-0-0, Interior (1) 20-0-0 to 34-8-13 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-[illegible] all by 2-0-0 wide will fit between the bottom chord and any other members.
7) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
8) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 284 lb uplift at joint 1, 1011 lb uplift at joint 12 and 682 lb uplift at joint 10.

LOAD CASE(S) Standard

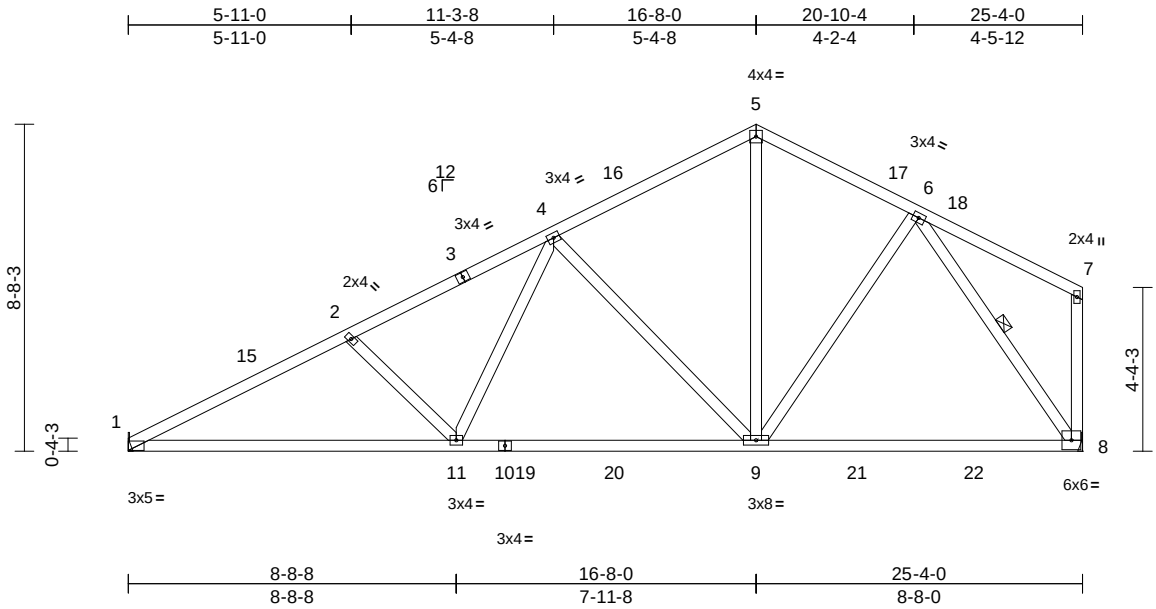


Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

September 26,2023

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

Job	Truss	Truss Type	Qty	Ply	Anderson Home	T31656402
1187-A	T3	Common	5	1	Job Reference (optional)	



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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.51	Vert(LL)	-0.22	8-9	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.84	Vert(CT)	-0.37	8-9	>808	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.69	Horz(CT)	0.05	8	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MS							Weight: 145 lb	FT = 20%

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

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

REACTIONS (size) 1= Mechanical, 8= Mechanical
Max Horiz 1=334 (LC 11)
Max Uplift 1=-434 (LC 12), 8=-363 (LC 12)
Max Grav 1=1097 (LC 2), 8=1126 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-1922/816, 2-4=-1722/749, 4-5=-952/541, 5-6=-937/535, 6-7=-200/210, 7-8=-170/167
BOT CHORD 1-11=-943/1716, 9-11=-687/1259, 8-9=-390/620
WEBS 2-11=-346/347, 4-11=-196/592, 4-9=-649/485, 5-9=-259/569, 6-9=-53/362, 6-8=-1039/547

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=108mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 3-5-10, Interior (1) 3-5-10 to 16-8-0, Exterior(2R) 16-8-0 to 20-1-10, Interior (1) 20-1-10 to 25-2-4 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 3-06-00 tall by 2-00-00 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 capable of withstanding 434 lb uplift at joint 1 and 363 lb uplift at joint 8.

LOAD CASE(S) Standard

Review for Code Compliance
Universal Engineering Science

PX2707 10/22/2023
Examiner-License No.

JOAQUIN VELEZ LICENSE No 68182 STATE OF FLORIDA PROFESSIONAL ENGINEER

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

September 26,2023

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

Job	Truss	Truss Type	Qty	Ply	Anderson Home
1187-A	T4	Roof Special	4	1	T31656403 Job Reference (optional)

19 Lumber, Inc., Old Town, FL - 32680, Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Mon Sep 25 17:10:58 Page: 1
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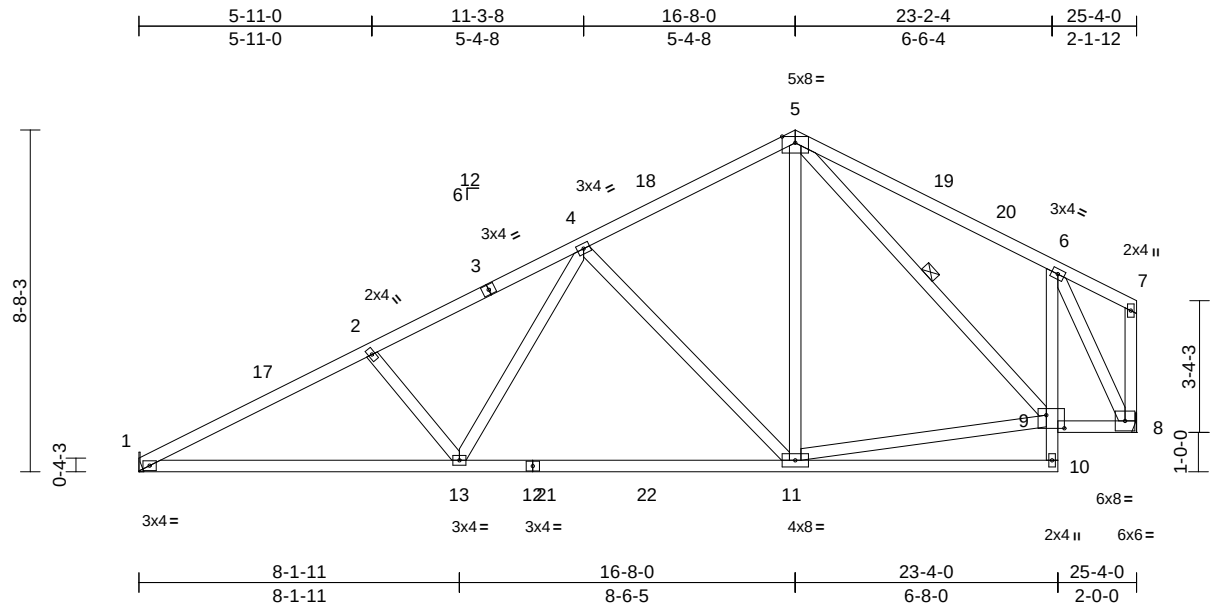


Scale = 1:58.5

Plate Offsets (X, Y): [9:0-5-8,0-4-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.47	Vert(LL)	-0.17	11-13	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.85	Vert(CT)	-0.28	11-13	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.69	Horz(CT)	0.04	8	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MS							Weight: 159 lb	FT = 20%

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

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

REACTIONS (size) 1= Mechanical, 8= Mechanical
Max Horiz 1=309 (LC 9)
Max Uplift 1=-434 (LC 12), 8=-363 (LC 12)
Max Grav 1=1091 (LC 2), 8=1088 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-1934/808, 2-4=-1770/775, 4-5=-936/544, 5-6=-691/543, 6-7=-98/102, 7-8=-62/57
BOT CHORD 1-13=-901/1712, 11-13=-650/1224, 10-11=-6/71, 9-10=0/110, 6-9=-86/564, 8-9=-330/534
WEBS 2-13=-331/339, 4-13=-225/647, 4-11=-641/482, 5-11=-231/659, 9-11=-371/726, 5-9=-402/103, 6-8=-1198/611

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=108mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 3-5-10, Interior (1) 3-5-10 to 16-8-0, Exterior(2R) 16-8-0 to 20-1-10, Interior (1) 20-1-10 to 25-2-4 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 3-06-00 tall by 2-00-00 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 capable of withstanding 434 lb uplift at joint 1 and 363 lb uplift at joint 8.

LOAD CASE(S) Standard

Review for Code Compliance
Universal Engineering Science

Examiner-License No. PX2707 10/22/2023

JOAQUIN VELEZ LICENSE No 68182 STATE OF FLORIDA PROFESSIONAL ENGINEER

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

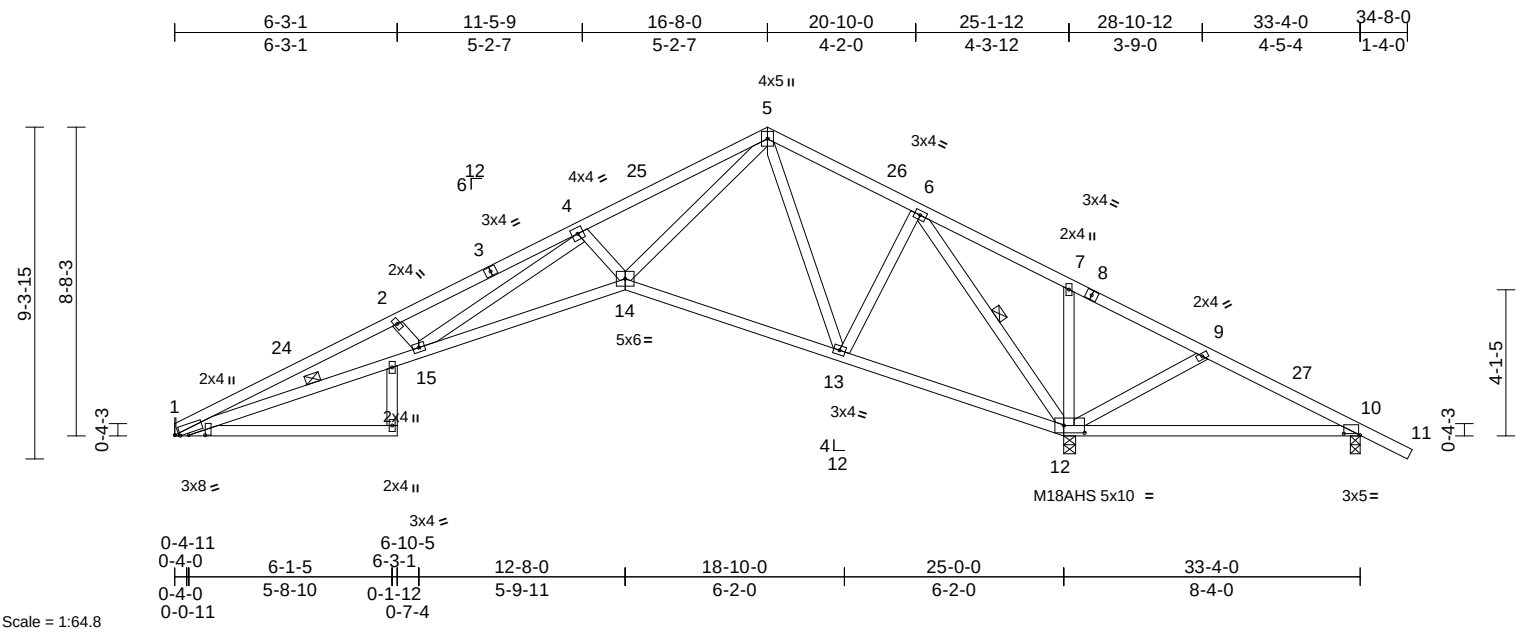
September 26,2023

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/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.sbcscomponents.com)

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

Job	Truss	Truss Type	Qty	Ply	Anderson Home
1187-A	T5	Roof Special	1	1	T31656404 Job Reference (optional)

19 Lumber, Inc., Old Town, FL - 32680, Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Mon Sep 25 17:10:58 Page: 1
ID:WCwXBd7kc7_mRwdz4szL?ZybRrF-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:64.8

Plate Offsets (X, Y): [1:0-1-12,0-0-12], [1:Edge,0-5-9], [10:0-5-8,0-0-8], [12:0-7-0,0-2-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.83	Vert(LL)	0.29	14-15	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.78	Vert(CT)	-0.41	14-15	>725	180	M18AHS	186/179
BCLL	0.0*	Rep Stress Incr	YES	WB	0.72	Horz(CT)	0.25	12	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MS							Weight: 180 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-1-12 oc purlins.
BOT CHORD Rigid ceiling directly applied or 3-11-6 oc bracing. Except:
5-1-0 oc bracing: 1-15
WEBS 1 Row at midpt 6-12

REACTIONS (size) 1= Mechanical, 10=0-3-4, 12=0-4-0
Max Horiz 1=-254 (LC 17)
Max Uplift 1=-284 (LC 12), 10=-682 (LC 23), 12=-1011 (LC 12)
Max Grav 1=672 (LC 1), 10=359 (LC 12), 12=2637 (LC 1)

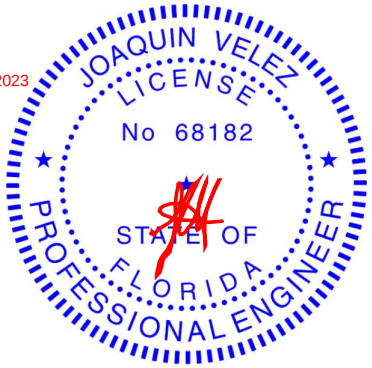
FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-2626/1273, 2-4=-2440/1240, 4-5=-1123/468, 5-6=-117/436, 6-7=-865/2196, 7-9=-939/2177, 9-10=-876/1873, 10-11=0/38
BOT CHORD 1-15=-1301/2427, 14-15=-524/1367, 13-14=-141/331, 12-13=-775/539, 10-12=-1601/834
WEBS 2-15=-269/307, 4-15=-701/1090, 4-14=-549/491, 5-14=-574/1330, 5-13=-953/457, 6-13=-303/894, 6-12=-2239/839, 7-12=-228/260, 9-12=-346/276

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=108mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 3-4-1, Interior (1) 3-4-1 to 16-8-0, Exterior(2R) 16-8-0 to 20-0-1, Interior (1) 20-0-1 to 34-8-13 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-[illegible]all by 2-[illegible] wide will fit between the bottom ch[illegible]l any other members.
7) Bearings are assumed to be: , Joint 12 SP No.2 crushing capacity of 565 psi, Joint 10 SP No.2 crushing capacity of 565 psi.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1011 lb uplift at joint 12, 682 lb uplift at joint 10 and 284 lb uplift at joint 1.

LOAD CASE(S) Standard

Review for Code Compliance
Universal Engineering Science

PX2707 10/22/2023
Examiner License No. Date



Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:
September 26,2023

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/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.sbcscomponents.com)

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

Job	Truss	Truss Type	Qty	Ply	Anderson Home
1187-A	T6	Roof Special	1	1	T31656405 Job Reference (optional)

19 Lumber, Inc., Old Town, FL - 32680, Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Mon Sep 25 17:10:58 Page: 1
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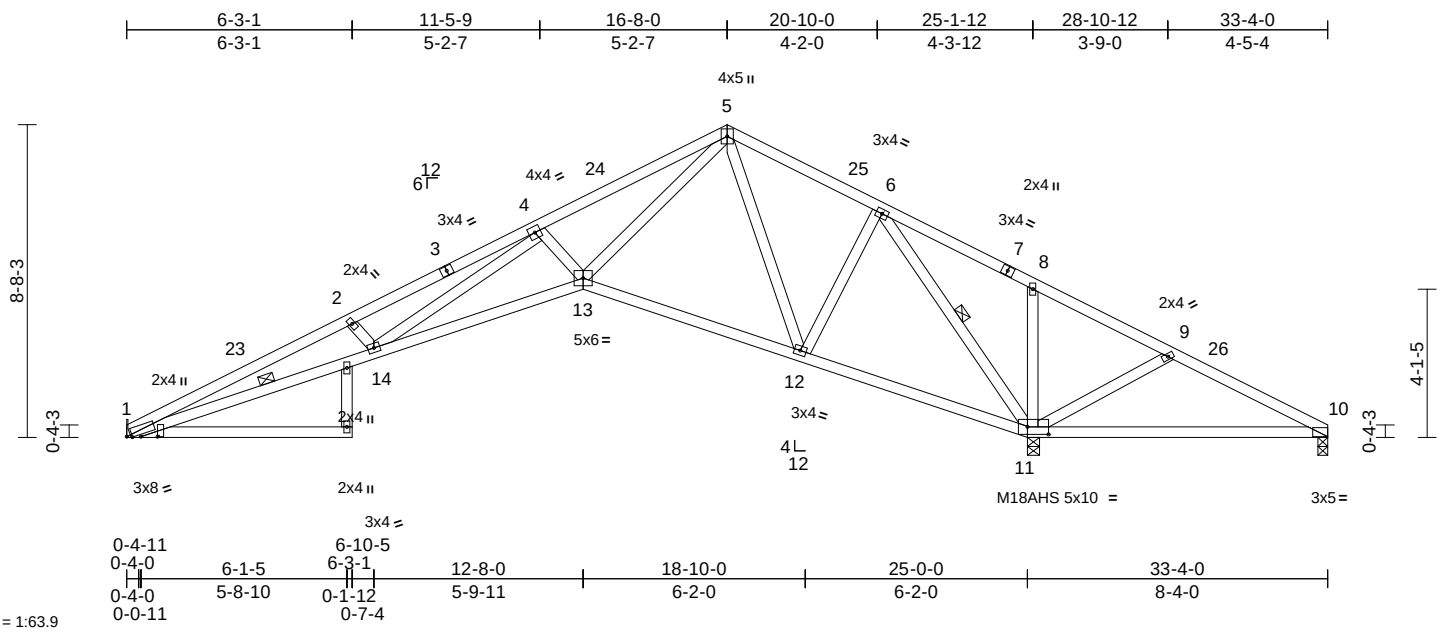


Scale = 1:63.9

Plate Offsets (X, Y): [1:0-1-12,0-0-12], [1:Edge,0-5-9], [11:0-7-0,0-2-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.85	Vert(LL)	0.29	13-14	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.78	Vert(CT)	-0.41	13-14	>726	180	M18AHS	186/179
BCLL	0.0*	Rep Stress Incr	YES	WB	0.72	Horz(CT)	0.25	11	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MS							Weight: 178 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-1-12 oc purlins.
BOT CHORD Rigid ceiling directly applied or 3-11-2 oc bracing. Except:
5-0-0 oc bracing: 1-14
WEBS 1 Row at midpt 6-11

REACTIONS (size) 1= Mechanical, 10=0-3-4, 11=0-4-0
Max Horiz 1=218 (LC 12)
Max Uplift 1=-280 (LC 12), 10=-713 (LC 23), 11=-1031 (LC 12)
Max Grav 1=672 (LC 1), 10=397 (LC 12), 11=2645 (LC 1)

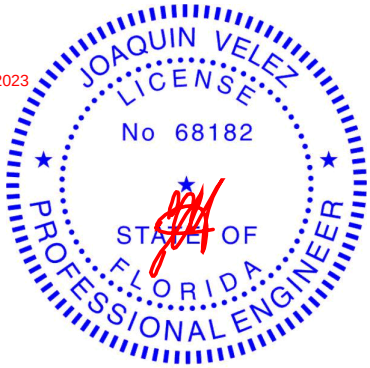
FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-2625/1281, 2-4=-2440/1249, 4-5=-1123/477, 5-6=-127/422, 6-8=-893/2197, 8-9=-967/2176, 9-10=-900/1862
BOT CHORD 1-14=-1327/2427, 13-14=-552/1367, 12-13=-133/301, 11-12=-775/535, 10-11=-1587/836
WEBS 2-14=-269/306, 4-14=-700/1090, 4-13=-549/491, 5-13=-592/1330, 5-12=-953/471, 6-12=-314/893, 6-11=-2240/861, 8-11=-223/257, 9-11=-363/291

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=108mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 3-4-1, Interior (1) 3-4-1 to 16-8-0, Exterior(2R) 16-8-0 to 20-0-1, Interior (1) 20-0-1 to 33-4-0 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-[illegible] all by 2-[illegible] wide will fit between the bottom chord and any other members.
7) Bearings are assumed to be: , Joint 11 SP No.2 crushing capacity of 565 psi, Joint 10 SP No.2 crushing capacity of 565 psi.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1031 lb uplift at joint 11, 713 lb uplift at joint 10 and 280 lb uplift at joint 1.

LOAD CASE(S) Standard

Review for Code Compliance
Universal Engineering Science

PX2707 10/22/2023
Examiner License No. Date



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

September 26,2023

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

Job	Truss	Truss Type	Qty	Ply	Anderson Home	T31656406
1187-A	T7	Scissor	1	1	Job Reference (optional)	

19 Lumber, Inc., Old Town, FL - 32680, Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Mon Sep 25 17:10:59 Page: 1

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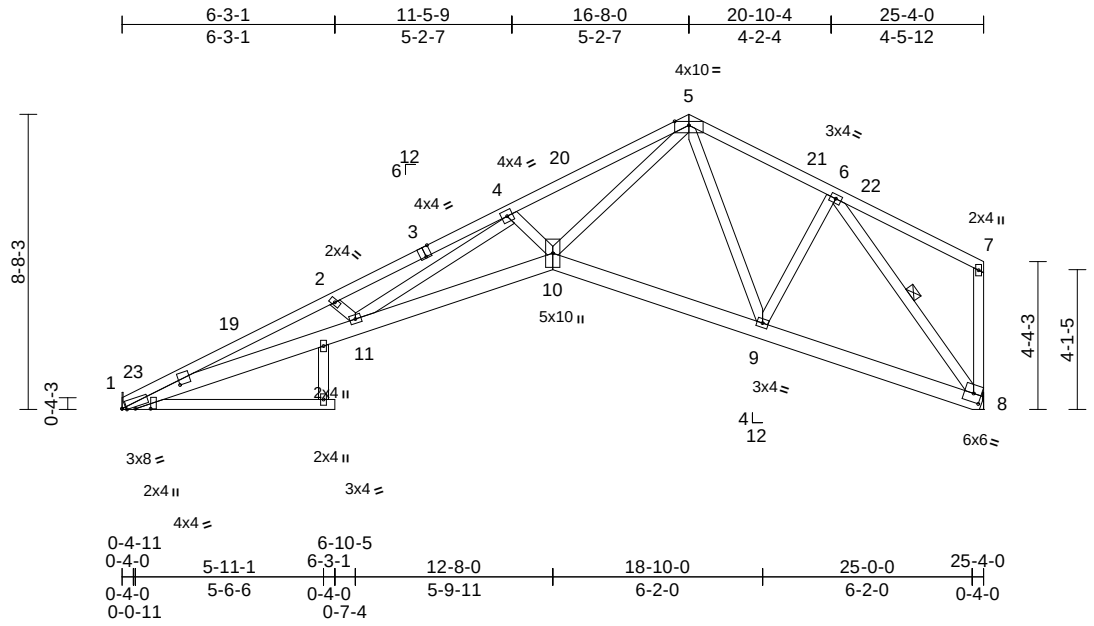

Scale = 1:67.8

Plate Offsets (X, Y): [1:0-1-9,Edge], [1:1-10-1,0-1-8], [3:0-2-0,Edge], [8:0-2-11,0-3-0], [12:Edge,0-5-6]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.64	Vert(LL)	0.47	10-11	>639	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.91	Vert(CT)	-0.65	10-11	>468	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.91	Horz(CT)	0.42	8	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MS							Weight: 168 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP DSS *Except* 13-15:2x4 SP No.2
WEBS 2x4 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-2-12 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 5-10-0 oc bracing.
WEBS 1 Row at midpt 6-8

REACTIONS (size) 1= Mechanical, 8= Mechanical
Max Horiz 1=333 (LC 11)
Max Uplift 1=-441 (LC 12), 8=-363 (LC 12)
Max Grav 1=993 (LC 1), 8=1007 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-4533/2354, 2-4=-4363/2323, 4-5=-3325/1906, 5-6=-1110/642, 6-7=-181/206, 7-8=-160/165
BOT CHORD 1-11=-2516/4245, 10-11=-2086/3429, 9-10=-667/1104, 8-9=-532/834
WEBS 2-11=-240/275, 4-11=-552/842, 4-10=-496/465, 5-10=-1563/2695, 5-9=-324/224, 6-9=-106/408, 6-8=-1320/720

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=108mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 3-5-10, Interior (1) 3-5-10 to 16-8-0, Exterior(2R) 16-8-0 to 20-1-10, Interior (1) 20-1-10 to 25-2-4 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 441 lb uplift at joint 1 and 363 lb uplift at joint 8.

LOAD CASE(S) Standard

Review for Code Compliance
Universal Engineering Science

PX2707 10/22/2023
Examiner-License No.

JOAQUIN VELEZ LICENSE No 68182 STATE OF FLORIDA PROFESSIONAL ENGINEER

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

September 26,2023

Job	Truss	Truss Type	Qty	Ply	Anderson Home	T31656407
1187-A	T8	Scissor	1	1	Job Reference (optional)	

19 Lumber, Inc., Old Town, FL - 32680, Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Mon Sep 25 17:10:59 Page: 1

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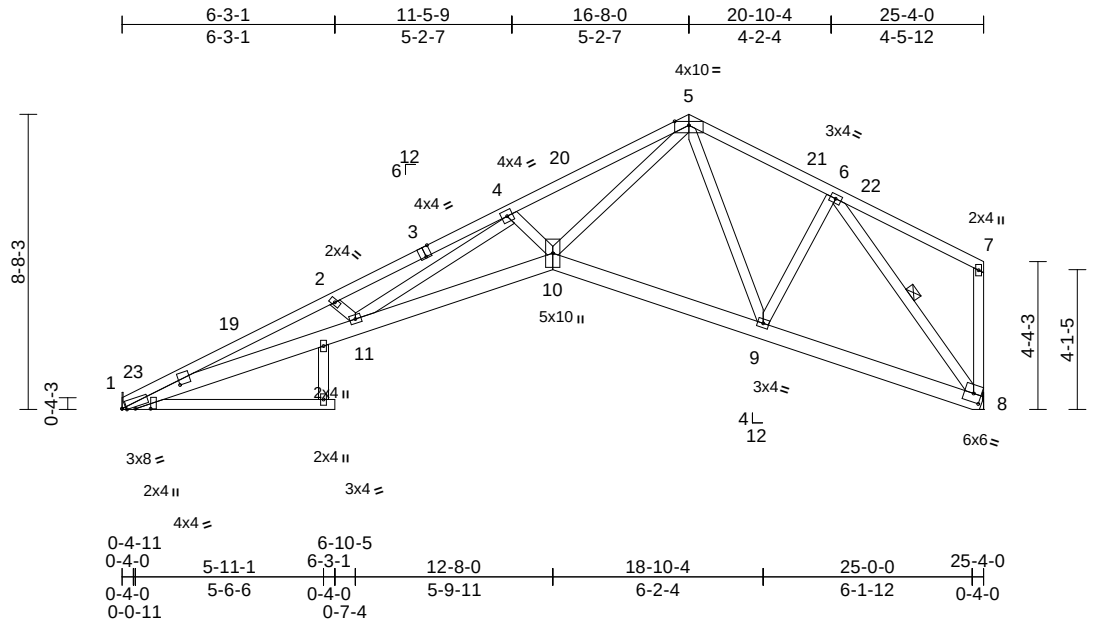

Scale = 1:67.8

Plate Offsets (X, Y): [1:0-1-9,Edge], [1:1-10-1,0-1-8], [3:0-2-0,Edge], [8:0-2-11,0-3-0], [12:Edge,0-5-6]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.64	Vert(LL)	0.47	10-11	>639	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.91	Vert(CT)	-0.65	10-11	>468	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.91	Horz(CT)	0.42	8	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MS							Weight: 168 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP DSS *Except* 13-15:2x4 SP No.2
WEBS 2x4 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-2-12 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 5-10-0 oc bracing.
WEBS 1 Row at midpt 6-8

REACTIONS (size) 1= Mechanical, 8= Mechanical
Max Horiz 1=333 (LC 11)
Max Uplift 1=-441 (LC 12), 8=-363 (LC 12)
Max Grav 1=993 (LC 1), 8=1007 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-4533/2354, 2-4=-4363/2323, 4-5=-3325/1906, 5-6=-1109/641, 6-7=-181/206, 7-8=-160/165
BOT CHORD 1-11=-2516/4245, 10-11=-2086/3429, 9-10=-667/1103, 8-9=-532/834
WEBS 2-11=-240/275, 4-11=-552/841, 4-10=-496/465, 5-10=-1563/2695, 5-9=-325/225, 6-9=-106/409, 6-8=-1321/720

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=108mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 3-5-10, Interior (1) 3-5-10 to 16-8-0, Exterior(2R) 16-8-0 to 20-1-10, Interior (1) 20-1-10 to 25-2-4 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 441 lb uplift at joint 1 and 363 lb uplift at joint 8.

LOAD CASE(S) Standard

Review for Code Compliance
Universal Engineering Science

PX2707 10/22/2023
Examiner-License No.

JOAQUIN VELEZ LICENSE No 68182 STATE OF FLORIDA PROFESSIONAL ENGINEER

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

September 26,2023

Job	Truss	Truss Type	Qty	Ply	Anderson Home	
1187-A	T9	Common	1	1	Job Reference (optional)	T31656408

19 Lumber, Inc., Old Town, FL - 32680,

Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Mon Sep 25 17:10:59
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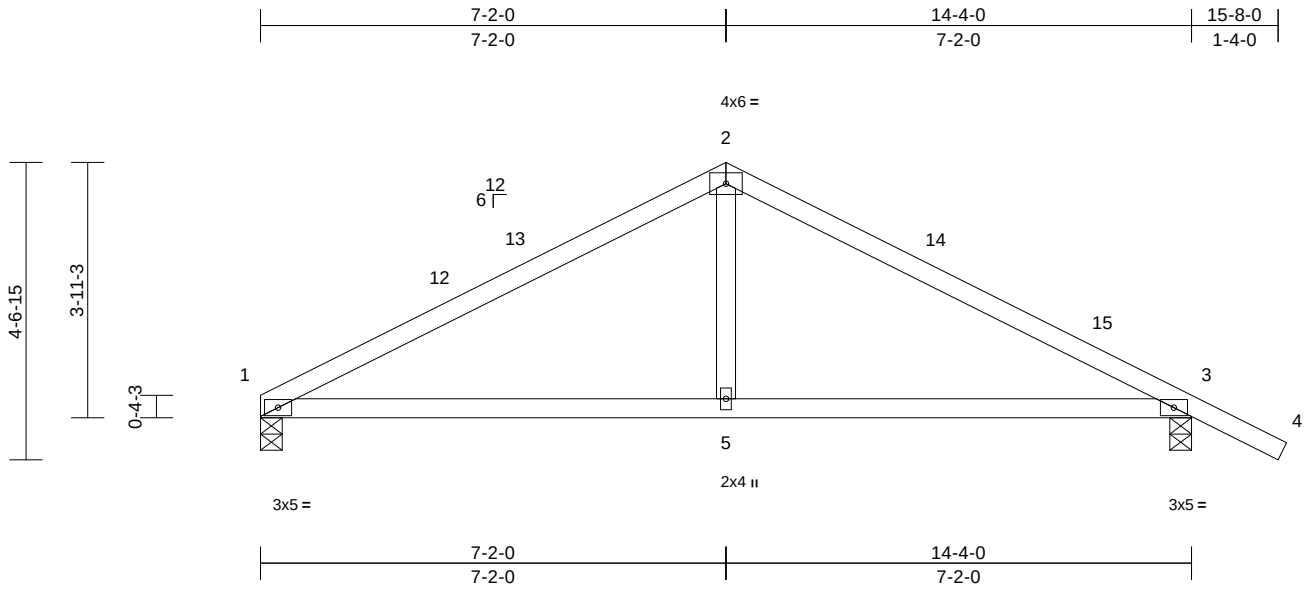

Scale = 1:35.5

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.66	Vert(LL)	0.15	5-8	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.59	Vert(CT)	-0.18	5-8	>965	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.01	3	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MS							Weight: 53 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-10-5 oc purlins.
BOT CHORD Rigid ceiling directly applied or 9-4-10 oc bracing.

REACTIONS (size) 1=0-4-0, 3=0-4-0
Max Horiz 1=-130 (LC 17)
Max Uplift 1=-230 (LC 12), 3=-293 (LC 13)
Max Grav 1=569 (LC 1), 3=661 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-819/532, 2-3=-820/518, 3-4=0/38
BOT CHORD 1-5=-271/658, 3-5=-271/658
WEBS 2-5=-31/341

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=108mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior (1) 3-0-0 to 7-2-0, Exterior(2R) 7-2-0 to 10-2-0, Interior (1) 10-2-0 to 15-8-13 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
6) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 230 lb uplift at joint 1 and 293 lb uplift at joint 3.

LOAD CASE(S) Standard

Review for Code Compliance
Universal Engineering Science

PX2707 10/22/2023
Examiner-License No.

JOAQUIN VELEZ LICENSE No 68182 STATE OF FLORIDA PROFESSIONAL ENGINEER

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

September 26,2023

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

Job	Truss	Truss Type	Qty	Ply	Anderson Home
1187-A	T10	Common	1	1	T31656409
					Job Reference (optional)

19 Lumber, Inc., Old Town, FL - 32680, Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Mon Sep 25 17:11:00 Page: 1
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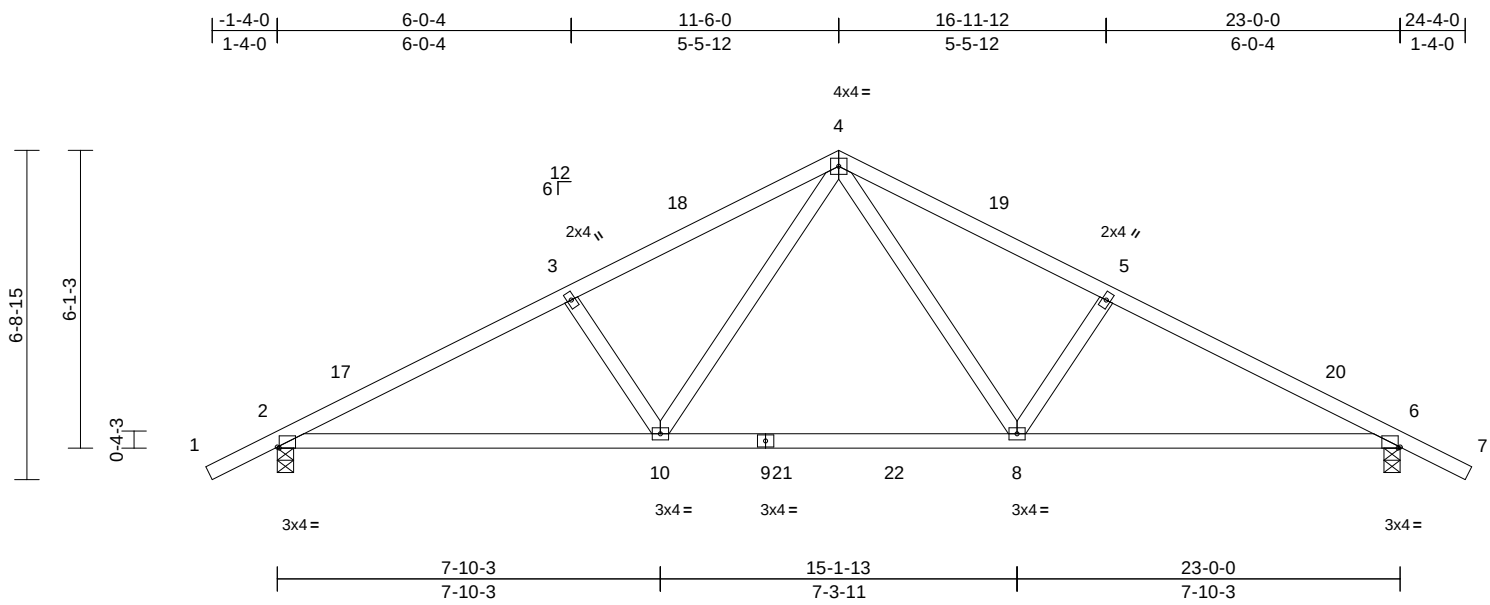

Scale = 1:47.2

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.40	Vert(LL)	-0.11	8-10	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.71	Vert(CT)	-0.21	10-13	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.24	Horz(CT)	0.05	6	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MS							Weight: 107 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-1-7 oc purlins.
BOT CHORD Rigid ceiling directly applied or 7-6-4 oc bracing.

REACTIONS (size) 2=0-4-0, 6=0-4-0
Max Horiz 2=-168 (LC 17)
Max Uplift 2=-431 (LC 12), 6=-431 (LC 13)
Max Grav 2=1065 (LC 2), 6=1065 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/38, 2-3=-1703/740, 3-4=-1564/731, 4-5=-1564/731, 5-6=-1703/740, 6-7=0/38
BOT CHORD 2-10=-592/1495, 8-10=-245/990, 6-8=-539/1495
WEBS 4-8=-287/656, 5-8=-353/364, 4-10=-287/656, 3-10=-353/364

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=108mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-4-13 to 1-7-3, Interior (1) 1-7-3 to 11-6-0, Exterior(2R) 11-6-0 to 14-6-0, Interior (1) 14-6-0 to 24-4-13 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 431 lb uplift at joint 2 and 431 lb uplift at joint 6.

LOAD CASE(S) Standard

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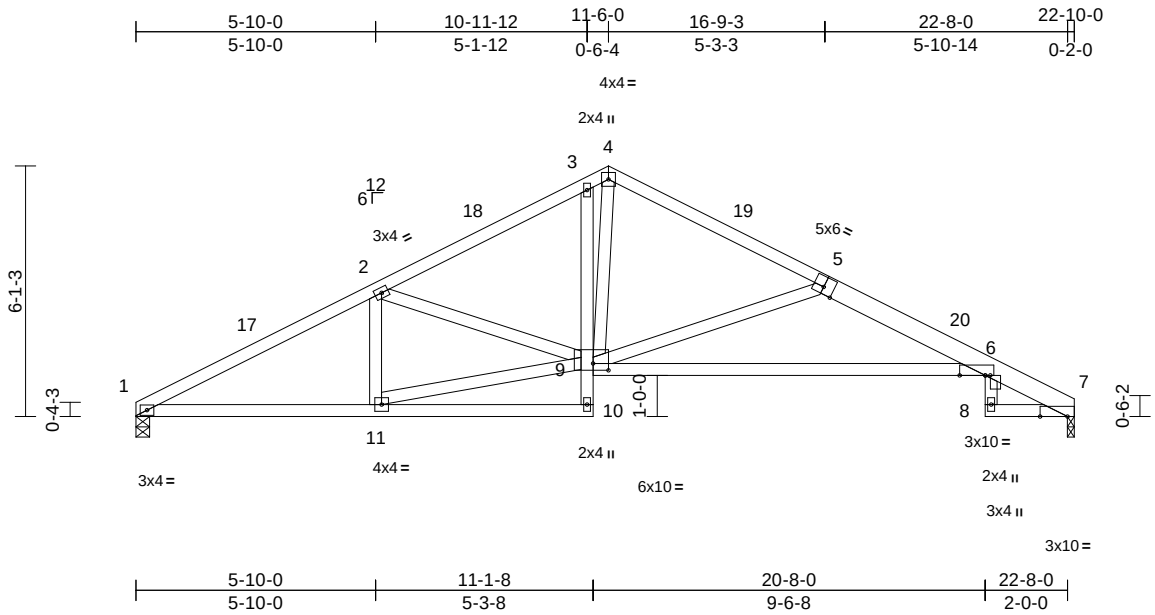
Job	Truss	Truss Type	Qty	Ply	Anderson Home
1187-A	T11	Roof Special	4	1	T31656410
					Job Reference (optional)

19 Lumber, Inc., Old Town, FL - 32680, Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Mon Sep 25 17:11:00 Page: 1

ID:CJEFLB1j?63mAaEEZ?71hbya82n-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:56.1

Plate Offsets (X, Y): [6:0-7-8,Edge], [6:0-0-0,0-1-8], [7:0-8-0,Edge], [9:0-4-8,0-2-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.65	Vert(LL)	0.29	6-9	>955	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.51	Vert(CT)	-0.65	6-9	>420	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.60	Horz(CT)	0.22	7	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MS							Weight: 121 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2 *Except* 4-5:2x4 SP DSS, 5-7:2x6 SP DSS

BOT CHORD 2x4 SP No.2 *Except* 9-6:2x4 SP DSS

WEBS 2x4 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-2-6 oc purlins.

BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size) 1=0-4-0, 7=0-2-0
Max Horiz 1=151 (LC 12)
Max Uplift 1=-368 (LC 12), 7=-365 (LC 13)
Max Grav 1=910 (LC 1), 7=910 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-1627/760, 2-3=-1386/686, 3-4=-1303/755, 4-6=-2003/994, 6-7=-788/372

BOT CHORD 1-11=-617/1415, 10-11=-74/0, 9-10=0/89, 3-9=-180/197, 6-9=-834/1914, 6-8=-103/249, 7-8=-268/582

WEBS 2-11=-144/151, 9-11=-604/1473, 2-9=-319/282, 4-9=-506/947, 5-9=-895/578

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=108mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior (1) 3-0-0 to 11-6-0, Exterior(2R) 11-6-0 to 14-6-0, Interior (1) 14-6-0 to 22-9-0 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
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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
6) Bearings are assumed to be: Joint 1 SP No.2 crushing capacity of 565 psi, Joint 7 SP DSS crushing capacity of 660 psi.
7) Bearing at joint(s) 7 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 at joint(s) 7.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 368 lb uplift at joint 1 and 365 lb uplift at joint 7.
10) Ga[illegible]een inside ends of top chord bearing and first di[illegible]or vertical web shall not exceed 0.500in.

LOAD CASE(S) Standard

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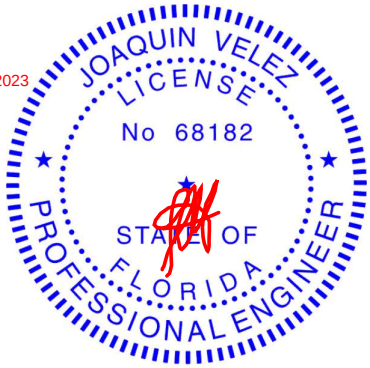

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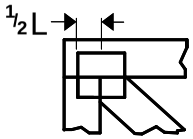
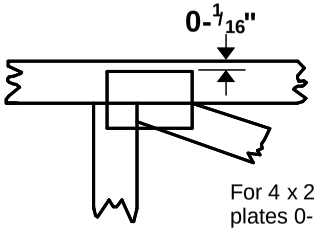
Symbols

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.

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

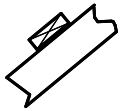
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 x 4

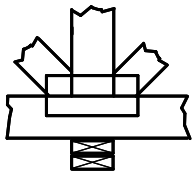
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

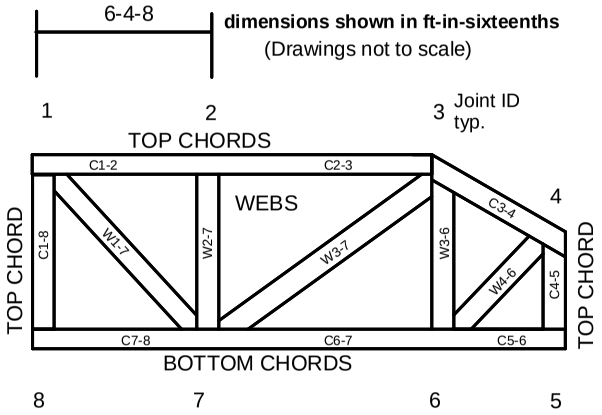


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: 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/TPI 1 section 6.3 These truss designs rely on lumber values established by others.

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/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. 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/TPI 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.