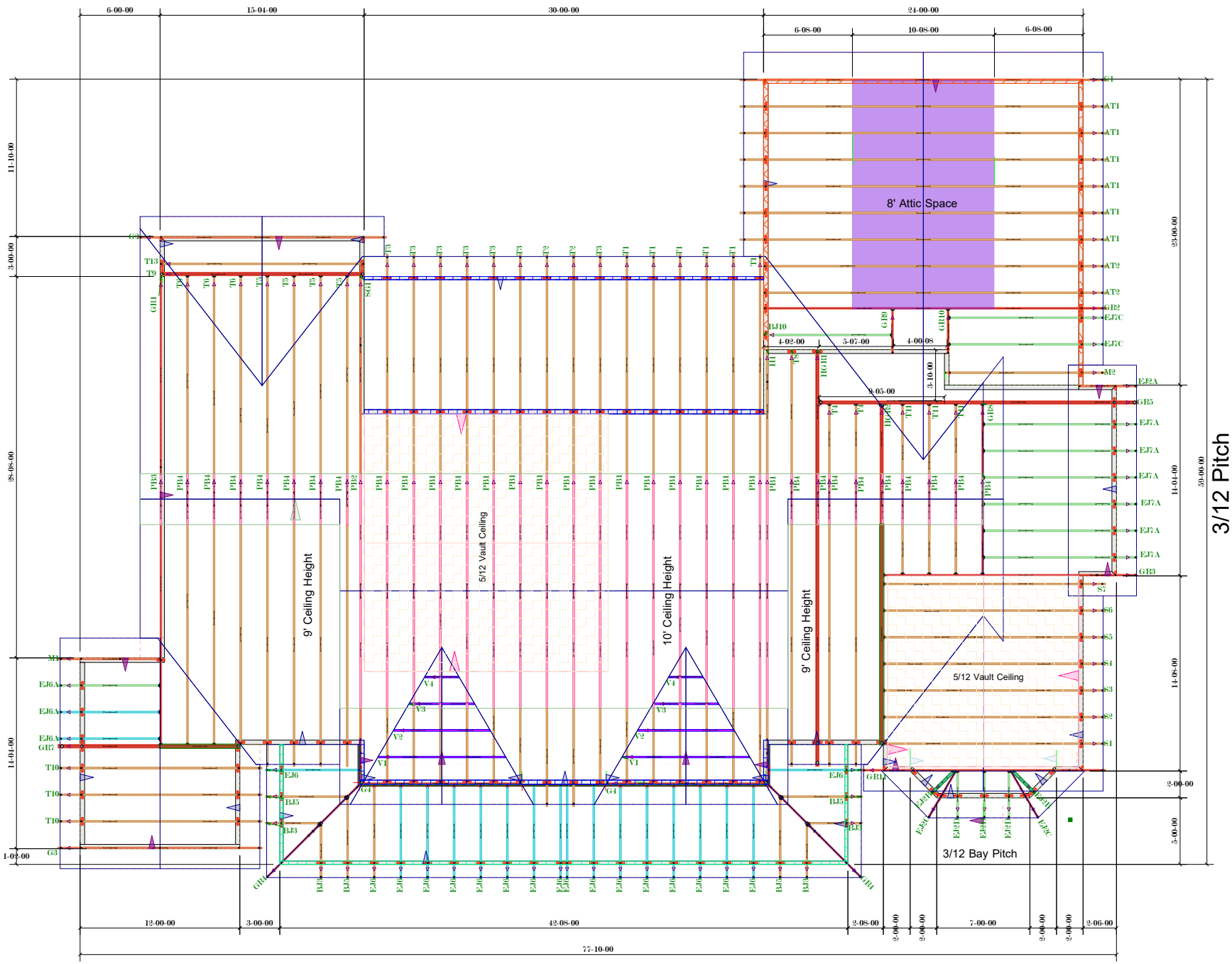


12/12 Dormer Pitch
3/12 Porch Pitch

10' Wall Height
8' Wall Height
10-06-00 Wall Height

APPROVAL OF THIS TRUSS LAYOUT IS REQUIRED BEFORE FABRICATION CAN BEGIN. VERIFY ALL SPANS, PITCHES, OVERHANGS, ELEVATION HEIGHTS,BEARING DETAILS AND TRUSS DETAILS. ACCEPTANCE OF THIS LAYOUT ASSUMES TOTAL RESPONSIBILITY. THE TRUSSES WILL BE BUILT IN ACCORDANCE WITH THIS LAYOUT

APPROVED BY: _____
DATE: _____

JOB NAME: Bootle Residence

CUSTOMER NAME: JBC Builders

ADDRESS:

JOB# 1678

DATE: 9/17/2024

PITCH: 7/12
OVERHANG: 1-06-00
ROOF SPACING: 24"

WALL HEIGHT: 9'

LOADING CRITERIA

BUILDING CODE: FBC 2023
WIND STANDARD: ASCE722
WIND VELOCITY: 130 mph
EXPOSURE CATEGORY: B

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

WARNING

IT IS THE RESPONSIBLITY OF THE BUILDING DESIGNER OR ARCHITECT TO PROVIDE ALL CONNECTIONS OTHER THAN TRUSS TO TRUSS , UNLESS SPECIFIED OTHERWISE.

CONVENTIONAL FRAMING,ERECTION OR PERMANENT BRACING IS NOT THE RESPONSIBLITY OF THE TRUSS DESIGNER OR TRUSS MANUFACTURER.

TRUSSES SHALL BE HANDLED WITH REASONABLE CARE DURING ERECTION TO PREVENT DAMAGE

DO NOT CUT OR ALTER TRUSSES IN ANY WAY

NOTES:

*ALL DEMENSIONS ARE FEET-INCHES- SIXTEENTHS

*NO BACKCHARGES WILL BE ACCEPTED

19 LUMBER INC.

25221 SE HWY 19
Old Town Florida 32680
United States
19lumberinc@gmail.com
(352) 469-5008

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: 1678-A - Bootle Residence

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

Site Information:

Customer Info: JBC Builders Project Name: Bootle Residence Model: .
Lot/Block: . Subdivision: .
Address: 5801 SE Country Club Road, .
City: Lake City State: FL

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

Name: License #:
Address:
City: State:

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

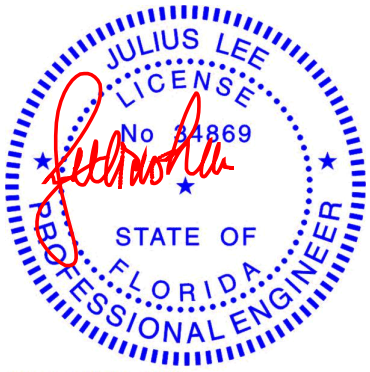
Design Code: FBC2023/TPI2014 Design Program: MiTek 20/20 8.8
Wind Code: ASCE 7-22 Wind Speed: 130 mph
Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 59 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	T35470337	AT1	11/6/24	23	T35470359	GR7	11/6/24
2	T35470338	AT2	11/6/24	24	T35470360	GR8	11/6/24
3	T35470339	BJ3	11/6/24	25	T35470361	GR9	11/6/24
4	T35470340	BJ5	11/6/24	26	T35470362	GR10	11/6/24
5	T35470341	BJ10	11/6/24	27	T35470363	GR11	11/6/24
6	T35470342	EJ2A	11/6/24	28	T35470364	H1	11/6/24
7	T35470343	EJ2B	11/6/24	29	T35470365	HGR1	11/6/24
8	T35470344	EJ2C	11/6/24	30	T35470366	HGR2	11/6/24
9	T35470345	EJ2D	11/6/24	31	T35470367	M1	11/6/24
10	T35470346	EJ6	11/6/24	32	T35470368	M2	11/6/24
11	T35470347	EJ6A	11/6/24	33	T35470369	PB1	11/6/24
12	T35470348	EJ7A	11/6/24	34	T35470370	PB2	11/6/24
13	T35470349	EJ7C	11/6/24	35	T35470371	PB3	11/6/24
14	T35470350	G1	11/6/24	36	T35470372	PB4	11/6/24
15	T35470351	G2	11/6/24	37	T35470373	S1	11/6/24
16	T35470352	G3	11/6/24	38	T35470374	S2	11/6/24
17	T35470353	G4	11/6/24	39	T35470375	S3	11/6/24
18	T35470354	GR1	11/6/24	40	T35470376	S4	11/6/24
19	T35470355	GR2	11/6/24	41	T35470377	S5	11/6/24
20	T35470356	GR3	11/6/24	42	T35470378	S6	11/6/24
21	T35470357	GR4	11/6/24	43	T35470379	S7	11/6/24
22	T35470358	GR5	11/6/24	44	T35470380	SG1	11/6/24

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



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date: November 6,2024

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.

RE: 1678-A - Bootle Residence

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

Site Information:

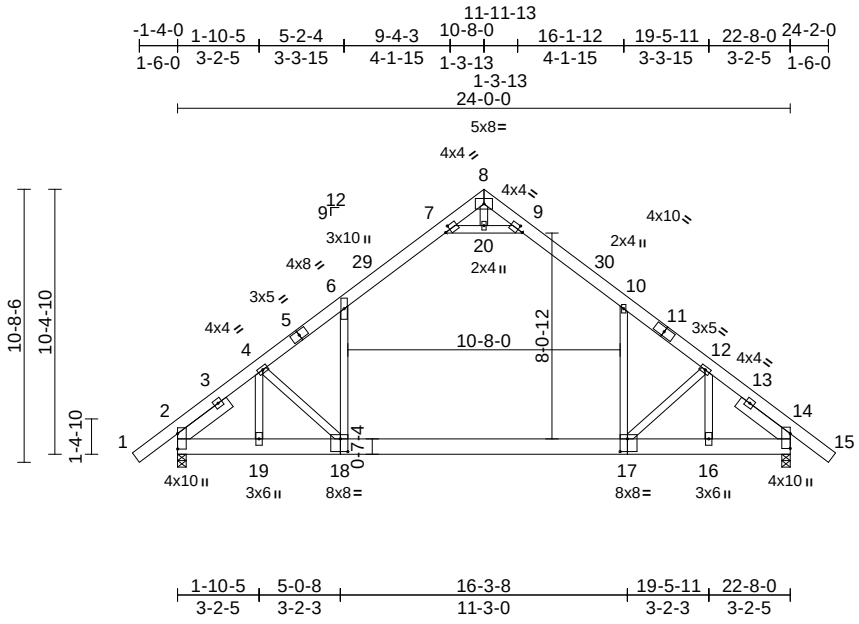
Customer Info: JBC Builders Project Name: Bootle Residence Model: .
Lot/Block: . Subdivision: .
Address: 5801 SE Country Club Road, .
City: Lake City State: FL

No.	Seal#	Truss Name	Date
45	T35470381	T1	11/6/24
46	T35470382	T2	11/6/24
47	T35470383	T3	11/6/24
48	T35470384	T4	11/6/24
49	T35470385	T5	11/6/24
50	T35470386	T6	11/6/24
51	T35470387	T8	11/6/24
52	T35470388	T9	11/6/24
53	T35470389	T10	11/6/24
54	T35470390	T11	11/6/24
55	T35470391	T13	11/6/24
56	T35470392	V1	11/6/24
57	T35470393	V2	11/6/24
58	T35470394	V3	11/6/24
59	T35470395	V4	11/6/24

Job	Truss	Truss Type	Qty	Ply	Bootle Residence	T35470337
1678-A	AT1	Attic	6	1	Job Reference (optional)	

19 Lumber, Inc., Old Town, FL - 32680, Run: 8.82 S Oct 10 2024 Print: 8.820 S Oct 10 2024 MiTek Industries, Inc. Tue Nov 05 13:22:17 Page: 1

ID:7BwREQT65bpcmcLqsQ1xi3z08lF-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:77.2

Plate Offsets (X, Y): [7:0-2-7,0-2-0], [9:0-2-7,0-2-0], [17:0-3-8,0-6-0], [18:0-3-8,0-6-0]

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	0.71	Vert(LL)	-0.31	17-18	>931	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.48	Vert(CT)	-0.54	17-18	>535	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.29	Horz(CT)	0.03	2	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS		Attic	-0.16	17-18	>869	360	Weight: 207 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP 2400F 2.0E *Except* 11-15:2x6 SP No.2

BOT CHORD 2x8 SP DSS

WEBS 2x4 SP No.2

SLIDER Left 2x6 SP No.2 -- 2-6-0, Right 2x6 SP No.2 -- 2-6-0

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-8-11 oc purlins.

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

REACTIONS (size) 2=0-4-0, 14=0-4-0
Max Horiz 2=-253 (LC 10)
Max Uplift 2=-45 (LC 12), 14=-45 (LC 13)
Max Grav 2=1525 (LC 20), 14=1525 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/59, 2-4=-1609/33, 4-6=-1913/12, 6-7=-1237/107, 7-8=-38/797, 8-9=-39/795, 9-10=-1239/107, 10-12=-1907/11, 12-14=-1589/35, 14-15=0/59

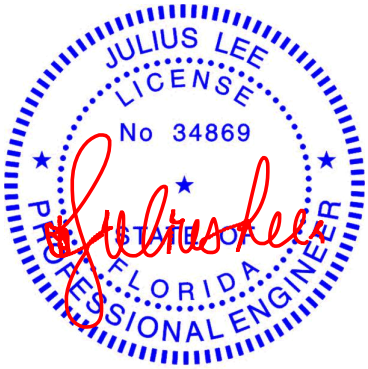
BOT CHORD 2-19=-126/1429, 16-19=-105/1429, 14-16=0/1230

WEBS 6-18=0/1013, 10-17=0/999, 7-20=-2280/127, 9-20=-2280/127, 8-20=0/255, 4-18=-209/280, 4-19=-647/34, 12-17=-204/282, 12-16=-669/32

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 -0-3-10 to 2-8-6, Zone1 2-8-6 to 13-4-0, Zone2 13-4-0 to 17-6-15, Zone1 17-6-15 to 26-11-10 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) Ceiling dead load (10.0 psf) on member(s). 6-7, 9-10, 7-20, 9-20
7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 17-18
8) All bearings are assumed to be SP DSS .
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 45 lb uplift at joint 2 and 45 lb uplift at joint 14.
10) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

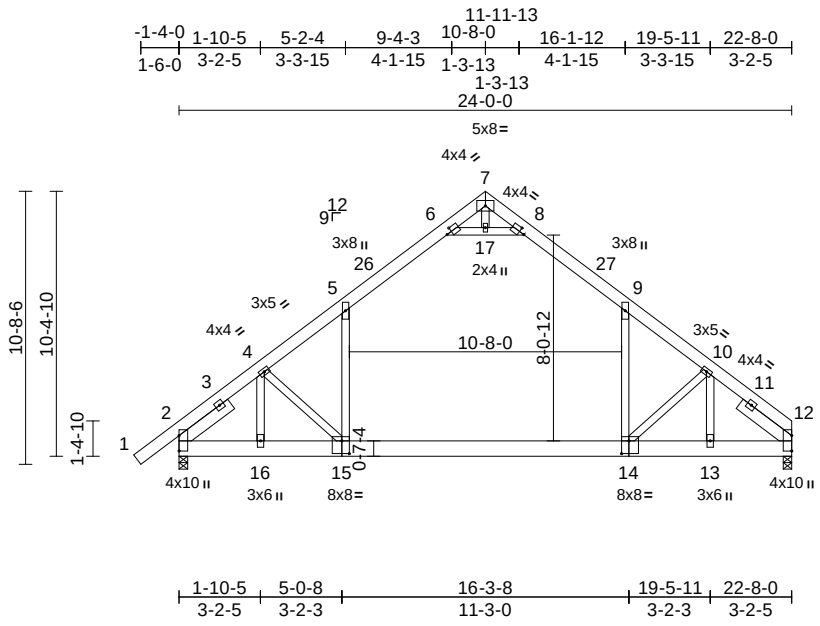
November 6,2024

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

Job	Truss	Truss Type	Qty	Ply	Bootle Residence	T35470338
1678-A	AT2	Attic	2	1	Job Reference (optional)	

19 Lumber, Inc., Old Town, FL - 32680, Run: 8.82 S Oct 10 2024 Print: 8.820 S Oct 10 2024 MiTek Industries, Inc. Tue Nov 05 13:22:18 Page: 1

ID:v41blEbSC9XQQvyioSClzgz08jo-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:77.2

Plate Offsets (X, Y): [2:0-0-0,0-0-0], [6:0-2-7,0-2-0], [8:0-2-7,0-2-0], [14:0-3-8,0-6-0], [15:0-3-8,0-6-0]

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	0.64	Vert(LL)	-0.31	14-15	>938	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.48	Vert(CT)	-0.53	14-15	>539	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.29	Horz(CT)	0.03	2	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS		Attic	-0.15	14-15	>872	360	Weight: 203 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP 2400F 2.0E
BOT CHORD 2x8 SP DSS
WEBS 2x4 SP No.2
SLIDER Left 2x6 SP No.2 -- 2-6-0, Right 2x6 SP No.2 -- 2-6-0

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.

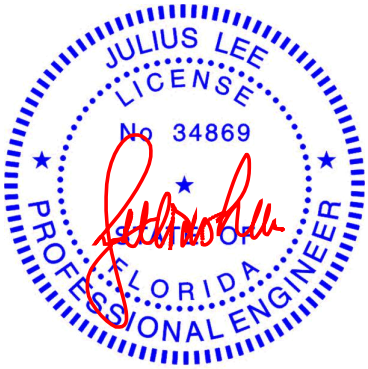
REACTIONS (size) 2=0-4-0, 12=0-4-0
Max Horiz 2=243 (LC 9)
Max Uplift 2=-46 (LC 12), 12=-7 (LC 13)
Max Grav 2=1527 (LC 20), 12=1430 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/59, 2-4=-1612/33, 4-5=-1919/14, 5-6=-1242/108, 6-7=-38/794, 7-8=-40/797, 8-9=-1240/107, 9-10=-1919/12, 10-12=-1635/41
BOT CHORD 2-16=-145/1416, 13-16=-125/1416, 12-13=0/1275
WEBS 5-15=0/1011, 9-14=0/1014, 6-17=-2284/130, 8-17=-2284/130, 7-17=0/256, 10-14=-226/291, 4-15=-209/280, 10-13=-634/38, 4-16=-649/35

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 -0-3-10 to 2-8-6, Zone1 2-8-6 to 13-4-0, Zone2 13-4-0 to 17-6-15, Zone1 17-6-15 to 25-4-0 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) 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) Ceiling dead load (10.0 psf) on member(s). 5-6, 8-9, 6-17, 8-17
7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 14-15
8) All bearings are assumed to be SP DSS .
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 7 lb uplift at joint 12 and 46 lb uplift at joint 2.
10) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard



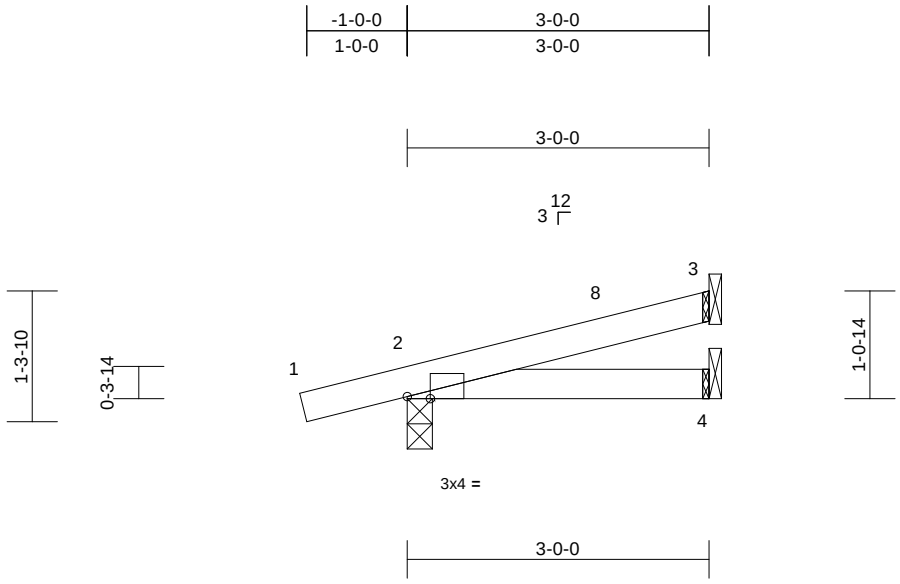
Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

November 6,2024

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

Job	Truss	Truss Type	Qty	Ply	Bootle Residence	
1678-A	BJ3	Corner Jack	4	1	Job Reference (optional)	T35470339

19 Lumber, Inc., Old Town, FL - 32680, Run: 8.82 S Oct 10 2024 Print: 8.820 S Oct 10 2024 MiTek Industries, Inc. Tue Nov 05 13:22:18 Page: 1
ID:2rFbuLtoJc2DxBKgRsvqAhz03tZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:15.5

Plate Offsets (X, Y): [2:0-2-12,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	0.08	Vert(LL)	0.00	4-7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.08	Vert(CT)	-0.01	4-7	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MP							Weight: 11 lb	FT = 20%

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

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

REACTIONS (size) 2=0-3-0, 3= Mechanical, 4= Mechanical
Max Horiz 2=42 (LC 8)
Max Uplift 2=-74 (LC 8), 3=-28 (LC 12)
Max Grav 2=191 (LC 1), 3=67 (LC 1), 4=50 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/15, 2-3=-56/14
BOT CHORD 2-4=-26/58

NOTES
1) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 -1-0-7 to 1-11-9, Zone1 1-11-9 to 2-11-4 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 .
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 28 lb uplift at joint 3 and 74 lb uplift at joint 2.

LOAD CASE(S) Standard

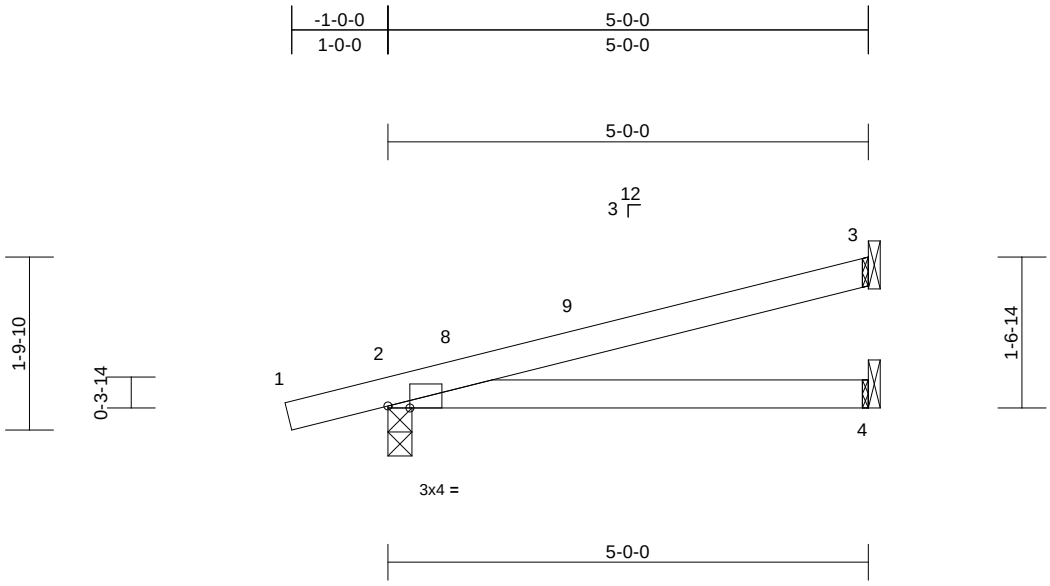
Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

November 6,2024

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

Job	Truss	Truss Type	Qty	Ply	Bootle Residence	
1678-A	BJ5	Corner Jack	4	1	Job Reference (optional)	T35470340

19 Lumber, Inc., Old Town, FL - 32680, Run: 8.82 S Oct 10 2024 Print: 8.820 S Oct 10 2024 MiTek Industries, Inc. Tue Nov 05 13:22:19 Page: 1
ID:2rFbuLtoJc2DxBKgRsvqAhz03tZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:17.6

Plate Offsets (X, Y): [2:0-2-12,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	0.30	Vert(LL)	0.04	4-7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.26	Vert(CT)	-0.06	4-7	>989	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MP							Weight: 17 lb	FT = 20%

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

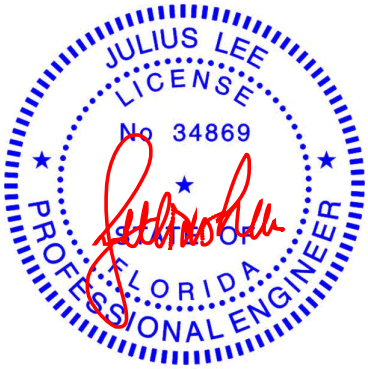
BRACING
TOP CHORD Structural wood sheathing directly applied or 5-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-3-0, 3= Mechanical, 4= Mechanical
Max Horiz 2=61 (LC 8)
Max Uplift 2=-87 (LC 8), 3=-55 (LC 12)
Max Grav 2=266 (LC 1), 3=124 (LC 1), 4=88 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/15, 2-3=-119/45
BOT CHORD 2-4=-85/116

NOTES
1) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 -1-0-7 to 1-11-9, Zone1 1-11-9 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 .
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 55 lb uplift at joint 3 and 87 lb uplift at joint 2.

LOAD CASE(S) Standard



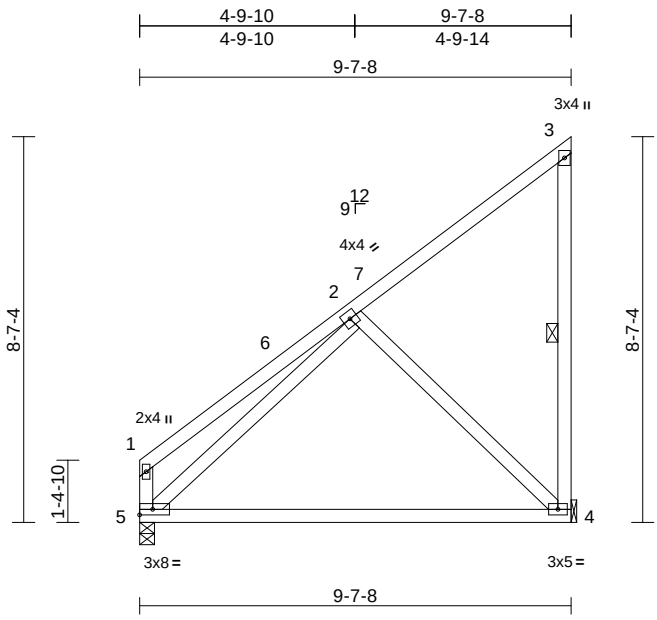
Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

November 6,2024

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

Job	Truss	Truss Type	Qty	Ply	Bootle Residence	
1678-A	BJ10	Jack-Closed	1	1	Job Reference (optional)	T35470341

19 Lumber, Inc., Old Town, FL - 32680, Run: 8.82 S Oct 10 2024 Print: 8.820 S Oct 10 2024 MiTek Industries, Inc. Tue Nov 05 13:22:19 Page: 1
ID:H0eA2tvu_9jASPeb2nenl9z08go-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Bracing

Scale = 1:42.6

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	0.51	Vert(LL)	-0.27	4-5	>417	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.81	Vert(CT)	-0.54	4-5	>209	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.22	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 64 lb	FT = 20%

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

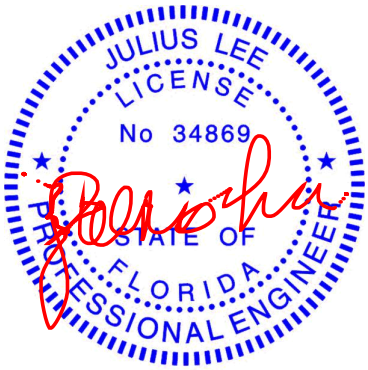
BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 9-11-14 oc bracing.
WEBS 1 Row at midpt 3-4

REACTIONS (size) 4= Mechanical, 5=0-4-0
Max Horiz 5=306 (LC 11)
Max Uplift 4=-154 (LC 12), 5=-20 (LC 12)
Max Grav 4=438 (LC 19), 5=390 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-5=-220/145, 1-2=-249/117, 2-3=-208/162, 3-4=-156/177
BOT CHORD 4-5=-299/308
WEBS 2-5=-212/208, 2-4=-298/291

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 0-1-12 to 3-1-12, Zone1 3-1-12 to 9-5-12 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 5 SP No.2 .
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 20 lb uplift at joint 5 and 154 lb uplift at joint 4.

LOAD CASE(S) Standard

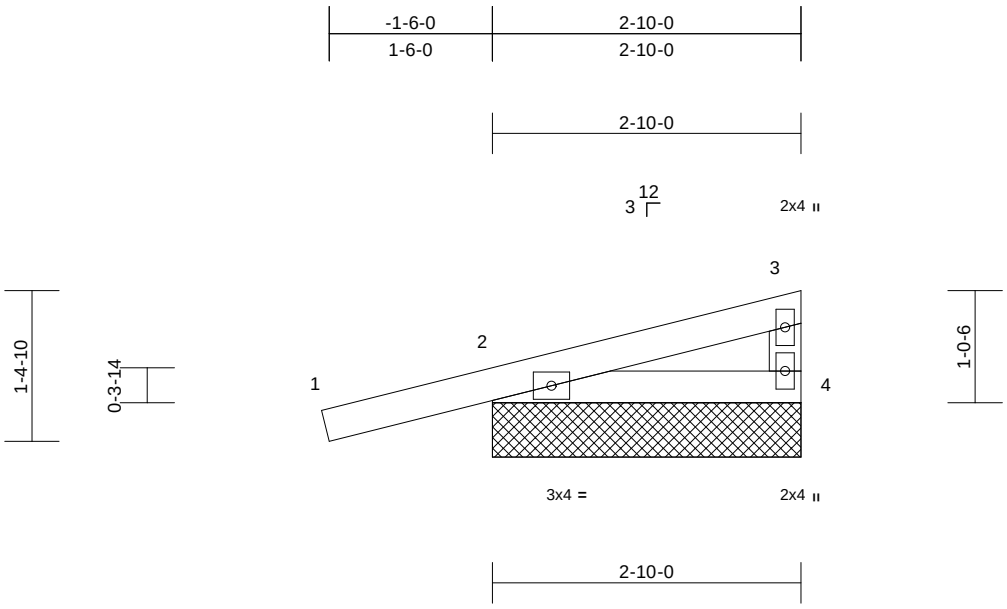


Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

November 6,2024

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

Job	Truss	Truss Type	Qty	Ply	Bootle Residence	
1678-A	EJ2A	Monopitch Supported Gable	1	1	Job Reference (optional)	T35470342



Scale = 1:15.1

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	0.24	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.05	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MP							Weight: 12 lb	FT = 20%

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

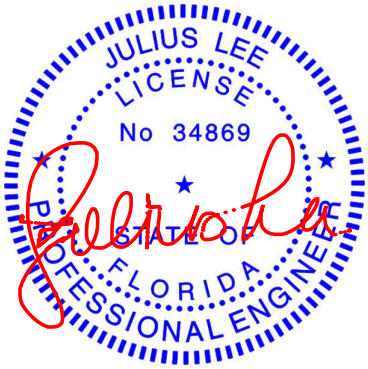
BRACING
TOP CHORD Structural wood sheathing directly applied or 2-10-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=2-10-0, 4=2-10-0, 5=2-10-0
Max Horiz 2=35 (LC 11), 5=35 (LC 11)
Max Uplift 2=-106 (LC 8), 4=-14 (LC 12), 5=-106 (LC 8)
Max Grav 2=226 (LC 1), 4=84 (LC 1), 5=226 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/22, 2-3=-85/24, 3-4=-54/82
BOT CHORD 2-4=-16/80

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 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 requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 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 .
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 106 lb uplift at joint 2, 14 lb uplift at joint 4 and 106 lb uplift at joint 2.

LOAD CASE(S) Standard



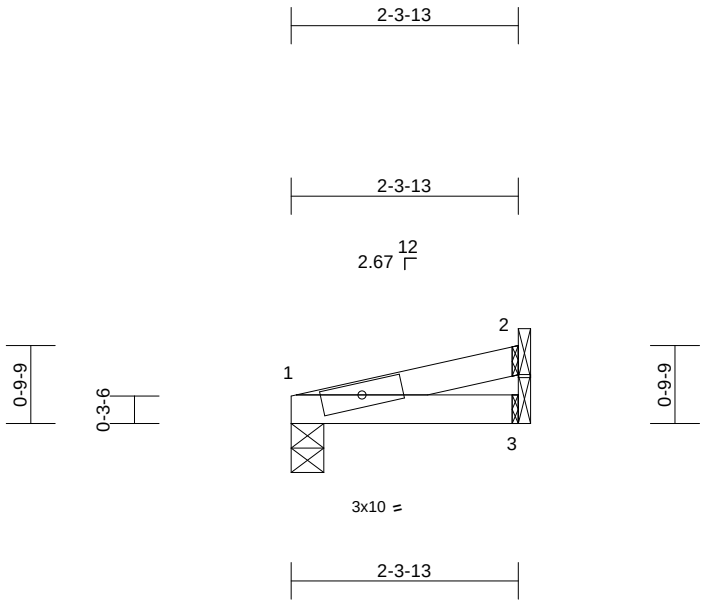
Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

November 6,2024

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

Job	Truss	Truss Type	Qty	Ply	Bootle Residence	
1678-A	EJ2B	Jack-Open	2	1	Job Reference (optional)	T35470343

19 Lumber, Inc., Old Town, FL - 32680, Run: 8.82 S Oct 10 2024 Print: 8.820 S Oct 10 2024 MiTek Industries, Inc. Tue Nov 05 13:22:19 Page: 1
ID:rWRH7_yv4DLrr1tgorU569z?pka-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:22.4

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	0.03	Vert(LL)	0.00	5	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.05	Vert(CT)	0.00	5	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MP							Weight: 7 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 2-3-13 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=0-4-0, 2= Mechanical, 3= Mechanical
Max Horiz 1=18 (LC 8)
Max Uplift 1=-16 (LC 8), 2=-17 (LC 8), 3=-5 (LC 8)
Max Grav 1=86 (LC 1), 2=47 (LC 1), 3=37 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-12/9
BOT CHORD 1-3=-12/4

NOTES
1) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 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 1 SP No.2 .
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 16 lb uplift at joint 1, 17 lb uplift at joint 2 and 5 lb uplift at joint 3.

LOAD CASE(S) Standard

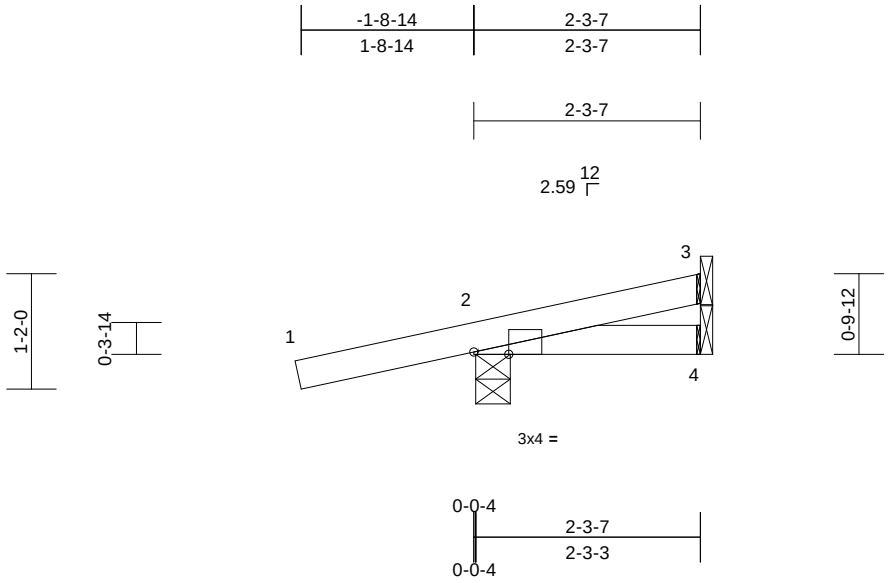
Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

November 6,2024

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

Job	Truss	Truss Type	Qty	Ply	Bootle Residence	
1678-A	EJ2C	Jack-Open Girder	2	1	Job Reference (optional)	T35470344

19 Lumber, Inc., Old Town, FL - 32680, Run: 8.82 S Oct 10 2024 Print: 8.820 S Oct 10 2024 MiTek Industries, Inc. Tue Nov 05 13:22:19 Page: 1
ID:rWRH7_yv4DLrr1tgorU569z?pka-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:16.5

Plate Offsets (X, Y): [2:0-4-4,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	0.22	Vert(LL)	0.00	7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.02	Vert(CT)	0.00	7	>999	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MP							Weight: 10 lb	FT = 20%

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

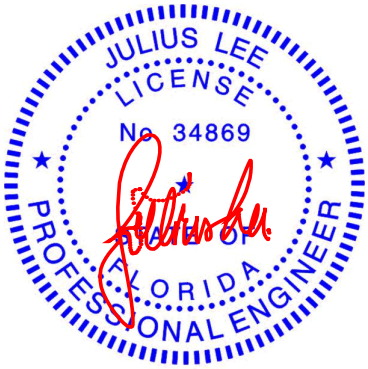
BRACING
TOP CHORD Structural wood sheathing directly applied or 2-3-7 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-4-3, 3= Mechanical, 4= Mechanical
Max Horiz 2=38 (LC 4)
Max Uplift 2=-123 (LC 4), 3=-11 (LC 8)
Max Grav 2=238 (LC 1), 3=32 (LC 1), 4=29 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/22, 2-3=-52/35
BOT CHORD 2-4=-34/47

NOTES
1) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) 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 .
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 11 lb uplift at joint 3 and 123 lb uplift at joint 2.

LOAD CASE(S) Standard



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

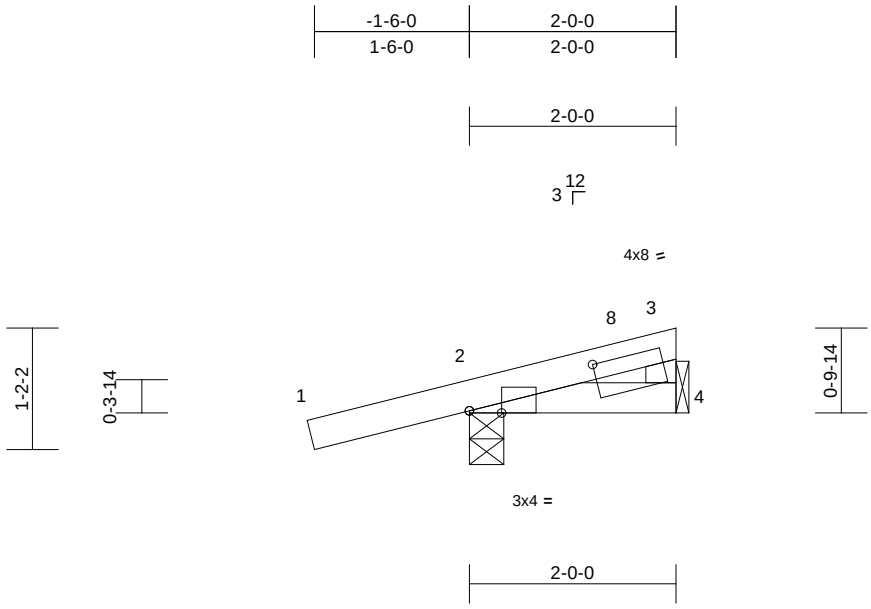
November 6,2024

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

Job	Truss	Truss Type	Qty	Ply	Bootle Residence	
1678-A	EJ2D	Jack-Closed	3	1	Job Reference (optional)	T35470345

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

Run: 8.82 S Oct 10 2024 Print: 8.820 S Oct 10 2024 MiTek Industries, Inc. Tue Nov 05 13:22:19 Page: 1
ID:nqSKHQ9Vdx1Cwuq_w_IdRFz?plc-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:14.7

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

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	0.18	Vert(LL)	0.00	7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.02	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	FBC2023/TPI2014	Matrix-MP							Weight: 9 lb	FT = 20%

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

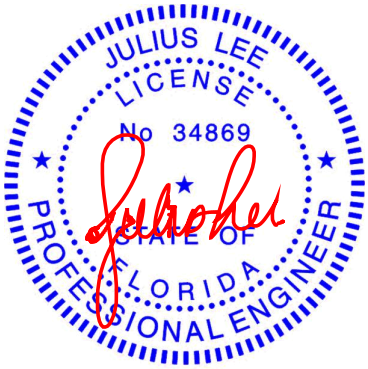
BRACING
TOP CHORD Structural wood sheathing directly applied or 2-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-4-0, 4= Mechanical
Max Horiz 2=28 (LC 8)
Max Uplift 2=-108 (LC 8), 4=-3 (LC 12)
Max Grav 2=204 (LC 1), 4=43 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/22, 2-3=-73/27, 3-4=-33/22
BOT CHORD 2-4=-26/76

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 -1-6-7 to 1-5-9, Zone1 1-5-9 to 1-10-4 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) Bearings are assumed to be: Joint 2 SP No.2 .
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 3 lb uplift at joint 4 and 108 lb uplift at joint 2.

LOAD CASE(S) Standard



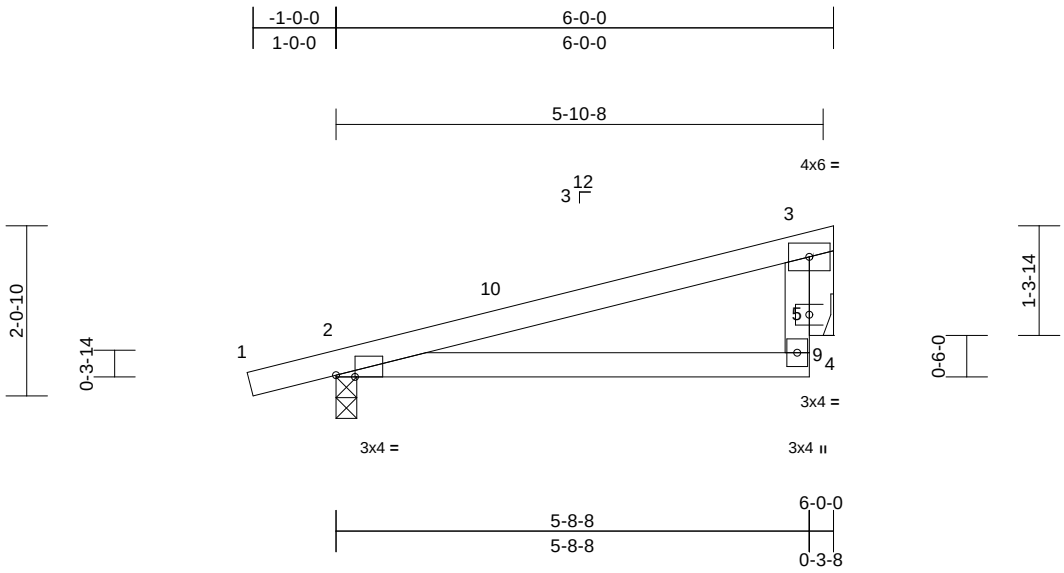
Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

November 6,2024

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

Job	Truss	Truss Type	Qty	Ply	Bootle Residence	
1678-A	EJ6	Jack-Open	18	1	Job Reference (optional)	T35470346

19 Lumber, Inc., Old Town, FL - 32680, Run: 8.82 S Oct 10 2024 Print: 8.820 S Oct 10 2024 MiTek Industries, Inc. Tue Nov 05 13:22:19 Page: 1
ID:L63X4U8XhtNt7p9yMYJWCqz03uW-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:20.2

Plate Offsets (X, Y): [2:0-2-12,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	0.31	Vert(LL)	0.02	4-8	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.27	Vert(CT)	-0.05	4-8	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	9	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MR							Weight: 23 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 5-10-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-3-0, 9= Mechanical
Max Horiz 2=60 (LC 8)
Max Uplift 2=-95 (LC 8), 9=-54 (LC 12)
Max Grav 2=300 (LC 1), 9=207 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/15, 2-3=-242/87, 4-5=-2/120, 3-5=-100/143
BOT CHORD 2-4=-115/219
WEBS 3-9=-95/0

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 -1-0-7 to 1-11-9, Zone1 1-11-9 to 5-6-12 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 2 SP No.2 .
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 95 lb uplift at joint 2 and 54 lb uplift at joint 9.

LOAD CASE(S) Standard

Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

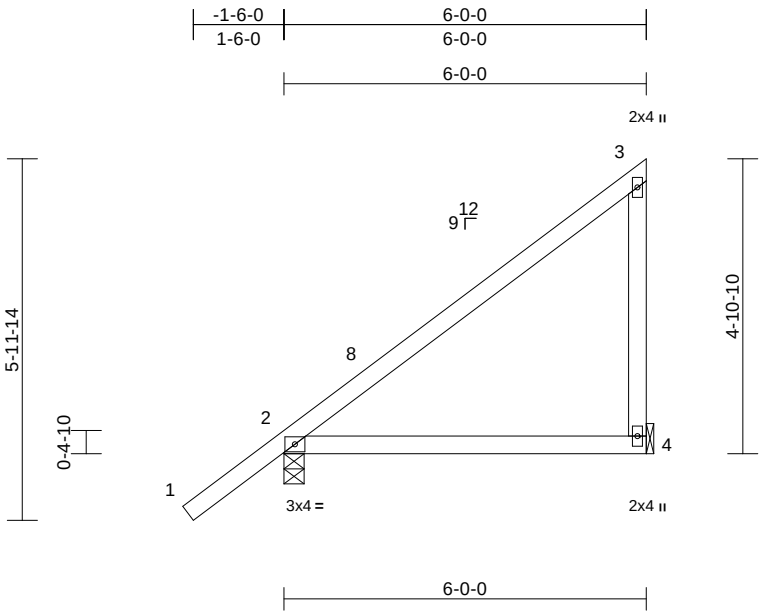
November 6,2024

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

Job	Truss	Truss Type	Qty	Ply	Bootle Residence	
1678-A	EJ6A	Jack-Closed	3	1	Job Reference (optional)	T35470347

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

Run: 8.82 S Oct 10 2024 Print: 8.820 S Oct 10 2024 MiTek Industries, Inc. Tue Nov 05 13:22:19
ID:cDnRz8UaWTUaOu73lDKokUz24dv-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:32.4

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	0.47	Vert(LL)	0.07	4-7	>972	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.38	Vert(CT)	-0.12	4-7	>596	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MP							Weight: 29 lb	FT = 20%

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

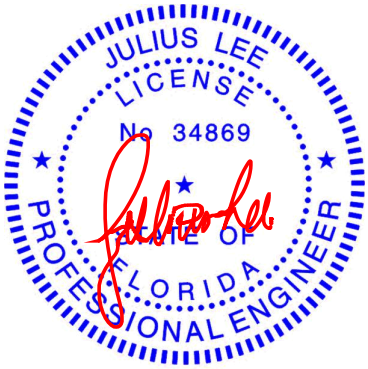
BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-4-0, 4= Mechanical
Max Horiz 2=186 (LC 11)
Max Uplift 2=-66 (LC 12), 4=-79 (LC 12)
Max Grav 2=342 (LC 1), 4=252 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/57, 2-3=-280/158, 3-4=-195/227
BOT CHORD 2-4=-84/131

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 -1-7-1 to 1-4-15, Zone1 1-4-15 to 5-10-4 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) Bearings are assumed to be: Joint 2 SP No.2 .
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 79 lb uplift at joint 4 and 66 lb uplift at joint 2.

LOAD CASE(S) Standard



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

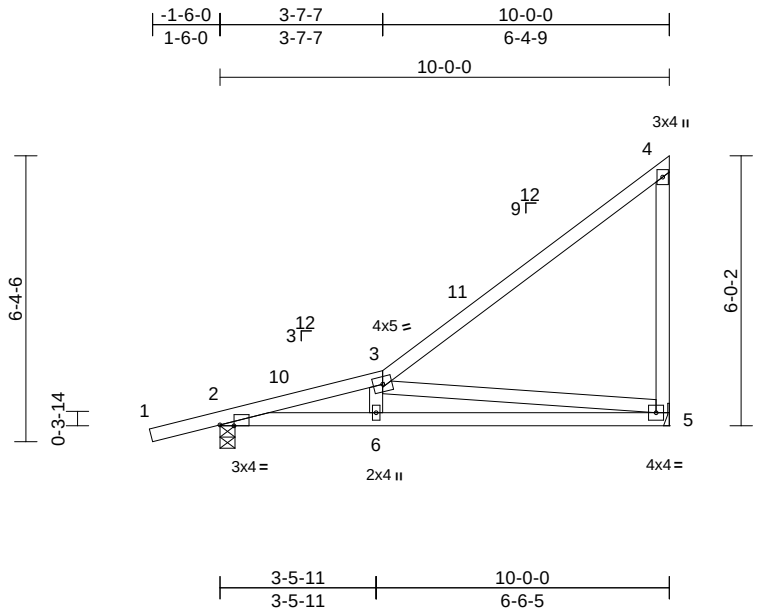
November 6,2024

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

Job	Truss	Truss Type	Qty	Ply	Bootle Residence	
1678-A	EJ7A	Jack-Closed	6	1	Job Reference (optional)	T35470348

19 Lumber, Inc., Old Town, FL - 32680, Run: 8.82 S Oct 10 2024 Print: 8.820 S Oct 10 2024 MiTek Industries, Inc. Tue Nov 05 13:22:20 Page: 1

ID:cDnRz8UaWTUaOu73lDKokUz24dv-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:46.9

Plate Offsets (X, Y): [2:0-3-12,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	0.58	Vert(LL)	-0.06	5-6	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.50	Vert(CT)	-0.14	5-6	>841	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.73	Horz(CT)	0.02	5	n/a	n/a		
BCDL	10.0	Code	FBC2023/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

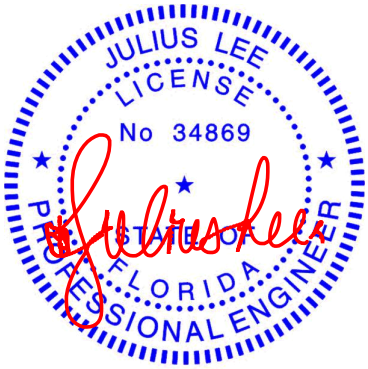
BRACING
TOP CHORD Structural wood sheathing directly applied or 5-7-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 9-10-6 oc bracing.

REACTIONS (size) 2=0-4-0, 5= Mechanical
Max Horiz 2=220 (LC 11)
Max Uplift 2=-114 (LC 8), 5=-120 (LC 12)
Max Grav 2=493 (LC 1), 5=399 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/22, 2-3=-1078/263, 3-4=-242/157, 4-5=-200/284
BOT CHORD 2-6=-329/1041, 5-6=-345/1027
WEBS 3-6=0/234, 3-5=-1015/388

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 -1-6-7 to 1-5-9, Zone1 1-5-9 to 9-10-4 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) Bearings are assumed to be: Joint 2 SP No.2 .
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 120 lb uplift at joint 5 and 114 lb uplift at joint 2.

LOAD CASE(S) Standard



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

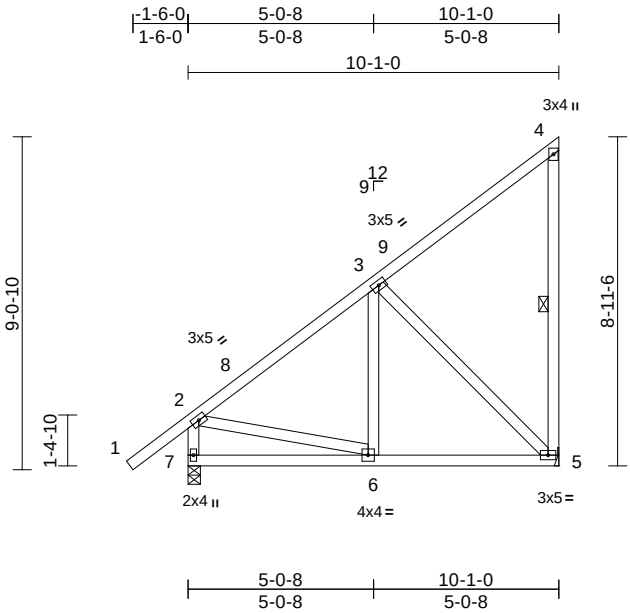
November 6,2024

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

Job	Truss	Truss Type	Qty	Ply	Bootle Residence	
1678-A	EJ7C	Jack-Closed	2	1	Job Reference (optional)	T35470349

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

Run: 8.82 S Oct 10 2024 Print: 8.820 S Oct 10 2024 MiTek Industries, Inc. Tue Nov 05 13:22:20
ID:5PLqAUVCHncR01iGJwr1Hiz24du-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Bracing

Scale = 1:57.6

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	0.51	Vert(LL)	-0.02	5-6	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.24	Vert(CT)	-0.04	5-6	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.29	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 74 lb	FT = 20%

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

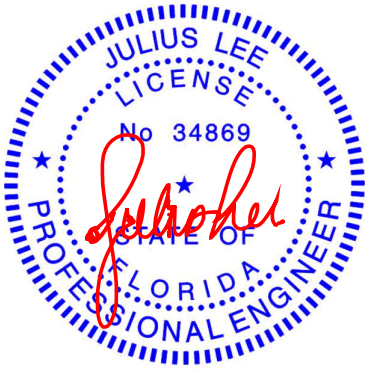
BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 8-1-0 oc bracing.
WEBS 1 Row at midpt 4-5

REACTIONS (size) 5= Mechanical, 7=0-4-0
Max Horiz 7=340 (LC 9)
Max Uplift 5=-159 (LC 12), 7=-63 (LC 12)
Max Grav 5=450 (LC 19), 7=505 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-7=-462/233, 1-2=0/62, 2-3=-419/103, 3-4=-205/170, 4-5=-160/175
BOT CHORD 6-7=-528/418, 5-6=-267/346
WEBS 2-6=-75/279, 3-6=0/194, 3-5=-362/239

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 -1-7-1 to 1-4-15, Zone1 1-4-15 to 9-11-4 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
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 7 SP No.2 .
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 63 lb uplift at joint 7 and 159 lb uplift at joint 5.

LOAD CASE(S) Standard



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

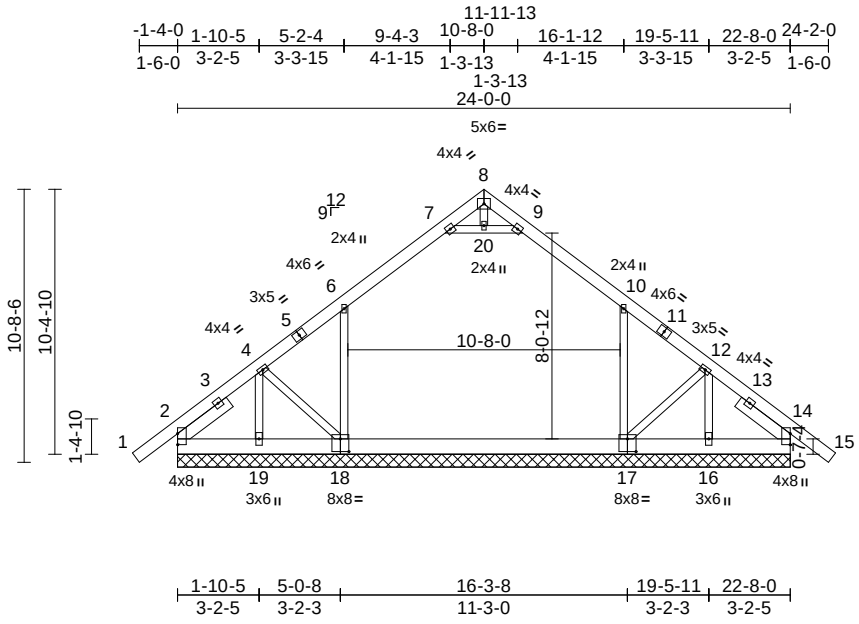
November 6,2024

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

Job	Truss	Truss Type	Qty	Ply	Bootle Residence	T35470350
1678-A	G1	Attic Supported Gable	1	1	Job Reference (optional)	

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

Run: 8.82 S Oct 10 2024 Print: 8.820 S Oct 10 2024 MiTek Industries, Inc. Tue Nov 05 13:22:20 Page: 1
ID:OyqMdLZZEklZhGZIsYsDB1z08Ma-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:77.2

Plate Offsets (X, Y): [14:0-0-0,0-0-0], [17:0-4-0,0-6-0], [18:0-4-0,0-6-0]

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	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.13	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	14	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 207 lb	FT = 20%

LUMBER

TOP CHORD	2x6 SP No.2
BOT CHORD	2x8 SP DSS
WEBS	2x4 SP No.2
SLIDER	Left 2x6 SP No.2 -- 2-6-0, Right 2x6 SP No.2 -- 2-6-0

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=24-0-0, 14=24-0-0, 16=24-0-0, 17=24-0-0, 18=24-0-0, 19=24-0-0
Max Horiz 2=-182 (LC 10)
Max Uplift 2=-12 (LC 13), 14=-20 (LC 13), 16=-78 (LC 18), 17=-66 (LC 13), 18=-59 (LC 12), 19=-78 (LC 18)
Max Grav 2=355 (LC 1), 14=358 (LC 21), 16=147 (LC 1), 17=671 (LC 21), 18=663 (LC 20), 19=147 (LC 1)

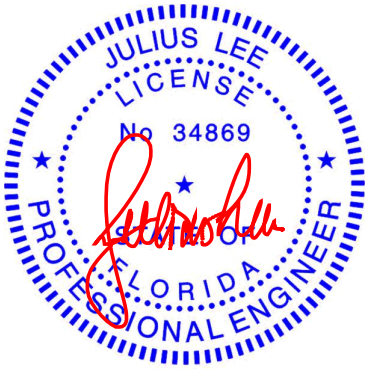
FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/59, 2-4=-149/30, 4-6=-198/43, 6-7=-149/65, 7-8=-125/47, 8-9=-125/48, 9-10=-149/65, 10-12=-198/41, 12-14=-139/17, 14-15=0/59
BOT CHORD	2-19=-73/194, 16-19=-73/204, 14-16=-12/159
WEBS	6-18=-125/83, 10-17=-123/81, 12-17=-73/134, 7-20=-33/38, 9-20=-33/38, 8-20=-3/2, 12-16=-174/27, 4-18=-76/122, 4-19=-174/33

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Ceiling dead load (10.0 psf) on member(s). 6-7, 9-10, 7-20, 9-20
8) All bearings are assumed to be SP DSS .
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 12 lb uplift at joint 2, 59 lb uplift at joint 18, 66 lb uplift at joint 17, 20 lb uplift at joint 14, 78 lb uplift at joint 16 and 78 lb uplift at joint 19.
10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.
11) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

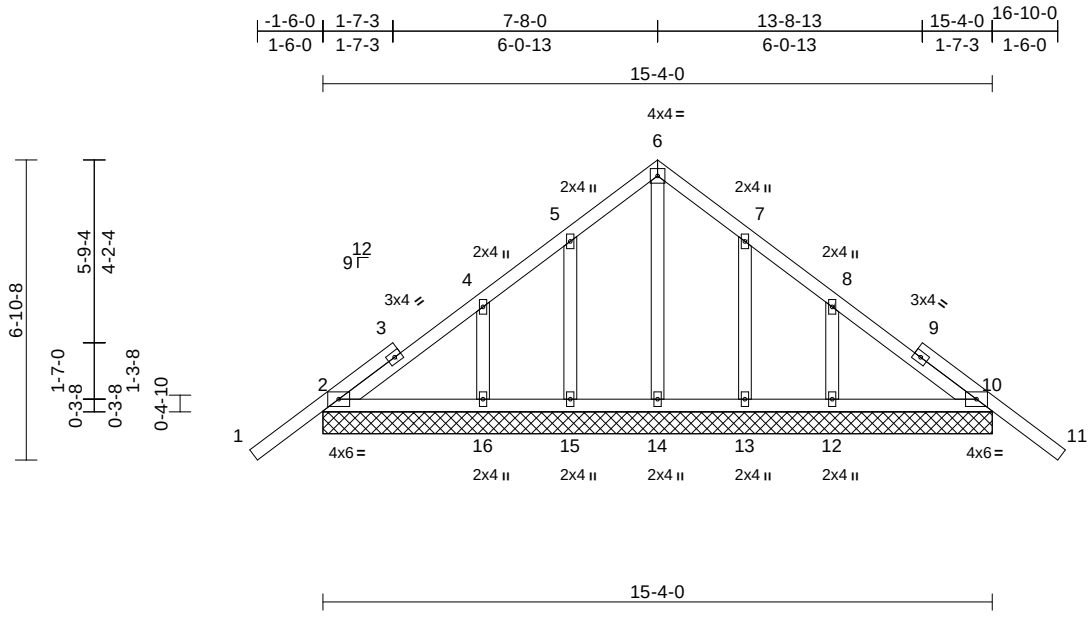
November 6,2024

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

Job	Truss	Truss Type	Qty	Ply	Bootle Residence	
1678-A	G2	Common Supported Gable	1	1	Job Reference (optional)	T35470351

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

Run: 8.82 S Oct 10 2024 Print: 8.820 S Oct 10 2024 MiTek Industries, Inc. Tue Nov 05 13:22:20
ID:5PLqAUVCHncR01iGJwr1Hiz24du-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:47.5

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	0.19	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.07	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00	10	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 87 lb	FT = 20%

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

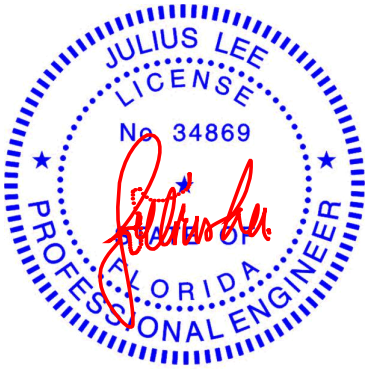
BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size) 2=15-4-0, 10=15-4-0, 12=15-4-0, 13=15-4-0, 14=15-4-0, 15=15-4-0, 16=15-4-0, 17=15-4-0, 20=15-4-0
Max Horiz 2=-163 (LC 10), 17=-163 (LC 10)
Max Uplift 2=-26 (LC 13), 10=-41 (LC 13), 12=-105 (LC 13), 13=-76 (LC 13), 15=-78 (LC 12), 16=-100 (LC 12), 17=-26 (LC 13), 20=-41 (LC 13)
Max Grav 2=237 (LC 25), 10=237 (LC 26), 12=265 (LC 20), 13=147 (LC 20), 14=200 (LC 22), 15=150 (LC 19), 16=260 (LC 19), 17=237 (LC 25), 20=237 (LC 26)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/57, 2-4=-123/137, 4-5=-67/88, 5-6=-59/158, 6-7=-59/158, 7-8=-30/72, 8-10=-118/97, 10-11=0/57
BOT CHORD 2-16=-92/180, 15-16=-92/180, 14-15=-92/180, 13-14=-92/180, 12-13=-92/180, 10-12=-92/180
WEBS 6-14=-154/0, 5-15=-125/124, 4-16=-185/165, 7-13=-123/124, 8-12=-189/164

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 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 requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 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 .
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 26 lb uplift at joint 2, 41 lb uplift at joint 10, 78 lb uplift at joint 15, 100 lb uplift at joint 16, 76 lb uplift at joint 13, 105 lb uplift at joint 12, 26 lb uplift at joint 2 and 41 lb uplift at joint 10.

LOAD CASE(S) Standard



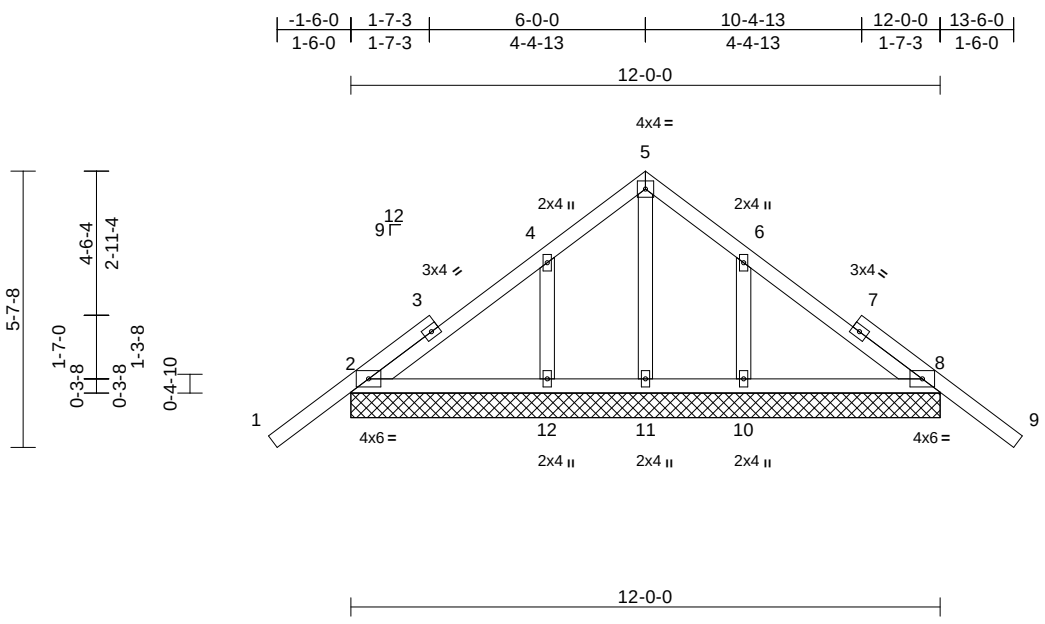
Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

November 6,2024

Job	Truss	Truss Type	Qty	Ply	Bootle Residence	
1678-A	G3	Common Supported Gable	1	1	Job Reference (optional)	T35470352

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

Run: 8.82 S Oct 10 2024 Print: 8.820 S Oct 10 2024 MiTek Industries, Inc. Tue Nov 05 13:22:20
ID:ZbvCOpWr25kIeBHSteMGpvz24dt-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:42.7

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	0.22	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	0.04	Horz(CT)	0.00	16	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 64 lb	FT = 20%

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

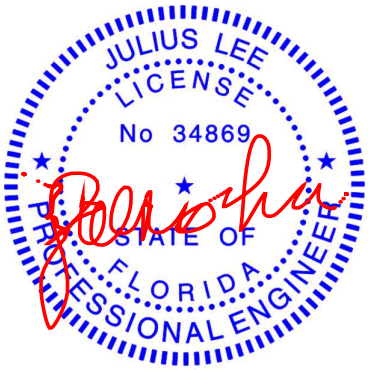
BRACING
TOP CHORD Structural wood sheathing directly applied or 10-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size) 2=12-0-0, 8=12-0-0, 10=12-0-0, 11=12-0-0, 12=12-0-0, 13=12-0-0, 16=12-0-0
Max Horiz 2=-132 (LC 10), 13=-132 (LC 10)
Max Uplift 2=-36 (LC 12), 8=-51 (LC 13), 10=-125 (LC 13), 12=-123 (LC 12), 13=-36 (LC 12), 16=-51 (LC 13)
Max Grav 2=227 (LC 25), 8=227 (LC 26), 10=307 (LC 20), 11=149 (LC 22), 12=304 (LC 19), 13=227 (LC 25), 16=227 (LC 26)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/57, 2-4=-140/163, 4-5=-12/111, 5-6=-10/109, 6-8=-136/132, 8-9=0/57
BOT CHORD 2-12=-124/202, 11-12=-124/202, 10-11=-124/202, 8-10=-124/202
WEBS 5-11=-140/0, 4-12=-216/219, 6-10=-217/219

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 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 requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 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 .
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 36 lb uplift at joint 2, 51 lb uplift at joint 8, 123 lb uplift at joint 12, 125 lb uplift at joint 10, 36 lb uplift at joint 2 and 51 lb uplift at joint 8.

LOAD CASE(S) Standard



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

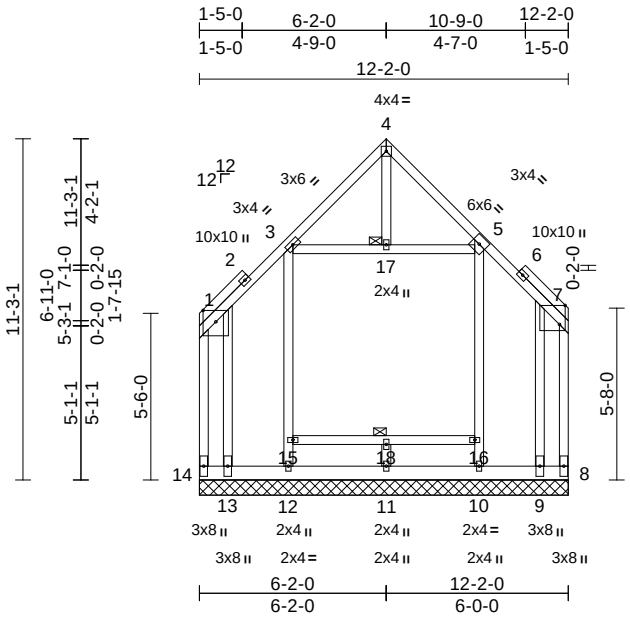
November 6,2024

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

Job	Truss	Truss Type	Qty	Ply	Bootle Residence	
1678-A	G4	Common Girder	2	1	Job Reference (optional)	T35470353

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

Run: 8.82 S Oct 10 2024 Print: 8.820 S Oct 10 2024 MiTek Industries, Inc. Tue Nov 05 13:22:20 Page: 1
ID:h1DaXwSIbgV_VkoNGRgtnwz08Mk-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:66.4

Plate Offsets (X, Y): [1:0-4-8,0-5-0], [7:0-7-8,0-2-4]

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	0.25	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.08	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.32	Horiz(TL)	0.00	8	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 137 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x6 SP No.2
WEBS	2x4 SP No.2
OTHERS	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.
JOINTS	1 Brace at Jt(s): 17, 18

REACTIONS (size) 8=12-2-0, 9=12-2-0, 10=12-2-0, 11=12-2-0, 12=12-2-0, 13=12-2-0, 14=12-2-0
Max Horiz 14=329 (LC 5)
Max Uplift 8=-775 (LC 5), 9=-747 (LC 4), 10=-106 (LC 9), 12=-114 (LC 8), 13=-800 (LC 5), 14=-824 (LC 4)
Max Grav 8=790 (LC 6), 9=815 (LC 7), 10=337 (LC 1), 11=133 (LC 3), 12=346 (LC 1), 13=856 (LC 6), 14=851 (LC 7)

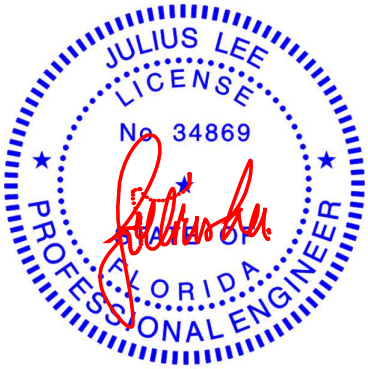
FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-14=-785/753, 1-3=-134/116, 3-4=-198/75, 4-5=-195/78, 5-7=-117/115, 7-8=-727/703
BOT CHORD	13-14=-265/247, 12-13=-185/167, 11-12=-183/165, 10-11=-183/165, 9-10=-182/164, 8-9=-106/89
WEBS	12-15=-294/140, 3-15=-294/140, 10-16=-284/131, 5-16=-284/131, 3-17=-13/93, 5-17=-13/93, 15-18=-5/2, 16-18=-5/2, 1-13=-729/726, 7-9=-684/673, 4-17=-10/1, 11-18=0/0

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
5) Gable requires continuous bottom chord bearing.
6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
7) Vertical gable studs spaced at 2-0-0 oc and horizontal gable studs spaced at 6-3-8 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 .
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 824 lb uplift at joint 14, 775 lb uplift at joint 8, 114 lb uplift at joint 12, 106 lb uplift at joint 10, 800 lb uplift at joint 13 and 747 lb uplift at joint 9.

LOAD CASE(S) Standard



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

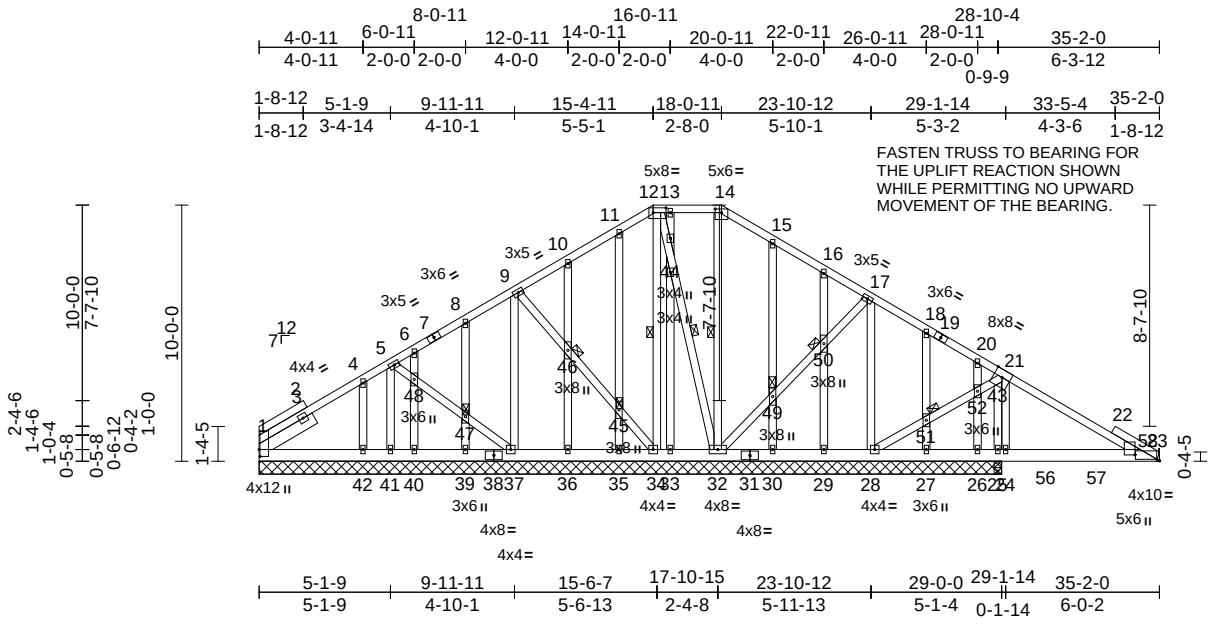
November 6,2024

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

Job	Truss	Truss Type	Qty	Ply	Bootle Residence	
1678-A	GR1	Piggyback Base Girder	1	1	Job Reference (optional)	T35470354

19 Lumber, Inc., Old Town, FL - 32680, Run: 8.82 S Sep 12 2024 Print: 8.820 S Sep 12 2024 MiTek Industries, Inc. Wed Nov 06 08:08:41 Page: 1

ID:GWV_UEe6h9_tqk2NSkYcD0z24dj-UZSwodpK9SioFmx3J4AUb62rB1ymSfEvkIzKVVyLzua



Scale = 1:73.6

Plate Offsets (X, Y): [1:0-3-4,0-0-6], [12:0-6-0,0-2-4], [14:0-3-0,0-1-12], [23:0-1-4,0-0-10], [23:0-2-12,0-11-8]

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	0.41	Vert(LL)	0.05	24-55	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.57	Vert(CT)	-0.07	24-55	>999	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.21	Horz(CT)	0.01	23	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 354 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x6 SP No.2
WEBS	2x4 SP No.2
OTHERS	2x4 SP No.2
SLIDER	Left 2x6 SP No.2 -- 2-6-0

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.
WEBS	1 Row at midpt 12-34, 12-32, 14-32
JOINTS	1 Brace at Jt(s): 45, 46, 47, 49, 50, 51

REACTIONS All bearings 29-0-0. except 23= Mechanical, 25=0-3-8

(lb) - Max Horiz 1=-236 (LC 4)

Max Uplift All uplift 100 (lb) or less at joint(s) 1, 27, 28, 29, 30, 32, 33, 34, 35, 36, 37, 39, 40 except 23=-109 (LC 9), 25=-609 (LC 9), 26=-1121 (LC 16), 41=-127 (LC 15), 42=-151 (LC 8)

Max Grav All reactions 250 (lb) or less at joint (s) 1, 28, 29, 30, 32, 33, 34, 35, 36, 37, 39, 40, 41 except 23=438 (LC 16), 25=1930 (LC 16), 26=381 (LC 9), 27=268 (LC 16), 42=383 (LC 15)

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

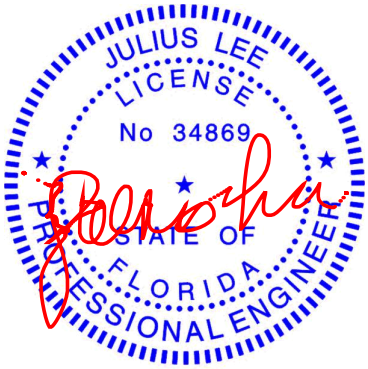
TOP CHORD	21-22=-143/360, 22-23=-159/264
BOT CHORD	33-34=-153/256, 32-33=-153/256, 27-28=-260/186, 26-27=-260/186, 25-26=-260/186, 24-25=-260/186, 24-56=-260/186, 56-57=-260/186, 23-57=-260/186
WEBS	25-43=-378/125

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
5) Provide adequate drainage to prevent water ponding.
6) All plates are 2x4 (||) MT20 unless otherwise indicated.
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) Refer to girder(s) for truss to truss connections.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint (s) 1, 37, 34, 32, 28, 33, 35, 36, 39, 40, 30, 29, 27 except (jt=lb) 23=109, 41=127, 42=151, 26=1121, 25=609.
12) This truss has large uplift reaction(s) from gravity load case(s). Proper connection is required to secure truss against upward movement at the bearings. Building designer must provide for uplift reactions indicated.
13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 236 lb down and 89 lb up at 30-8-12, and 236 lb down and 89 lb up at 32-8-12, and 243 lb down and 86 lb up at 34-8-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
14) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (lb/ft)
   Vert: 1-12=-60, 12-14=-60, 14-23=-60, 1-53=-20
   Concentrated Loads (lb)
   Vert: 56=-201 (F), 57=-201 (F), 58=-208 (F)



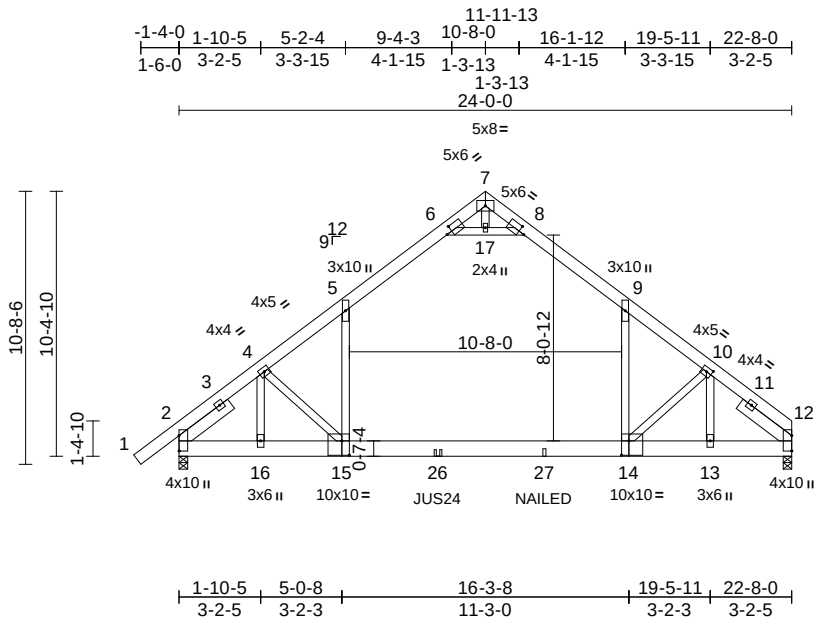
Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

November 6,2024

Job	Truss	Truss Type	Qty	Ply	Bootle Residence	T35470355
1678-A	GR2	Attic Girder	1	1	Job Reference (optional)	

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

Run: 8.82 S Oct 10 2024 Print: 8.820 S Oct 10 2024 MiTek Industries, Inc. Tue Nov 05 13:22:21 Page: 1
ID:K8OD3Zcs9YkAbQu_LJV88bz24dl-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:77.2

Plate Offsets (X, Y): [2:0-0-0,0-0-0], [6:0-2-11,0-2-12], [8:0-2-11,0-2-12], [10:0-0-0,0-0-0], [14:0-3-8,0-6-12], [15:0-3-8,0-6-12]

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	0.88	Vert(LL)	-0.39	14-15	>742	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.65	Vert(CT)	-0.73	14-15	>396	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.35	Horz(CT)	0.04	2	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS		Attic	-0.18	14-15	>730	360	Weight: 203 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP 2400F 2.0E
BOT CHORD 2x8 SP DSS
WEBS 2x4 SP No.2
SLIDER Left 2x6 SP No.2 -- 2-6-0, Right 2x6 SP No.2 -- 2-6-0

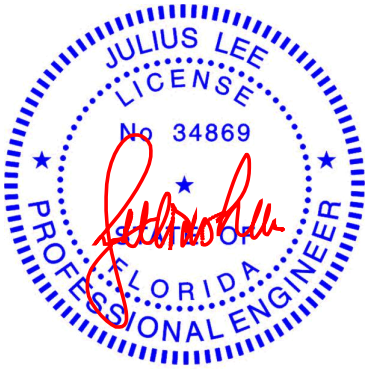
BRACING
TOP CHORD Structural wood sheathing directly applied or 4-9-14 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
8-0-8 oc bracing: 14-15.

REACTIONS (size) 2=0-4-0, 12=0-4-0
Max Horiz 2=243 (LC 5)
Max Uplift 2=-295 (LC 8), 12=-301 (LC 9)
Max Grav 2=1913 (LC 16), 12=1827 (LC 17)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/59, 2-4=-2004/304, 4-5=-2622/489, 5-6=-1594/358, 6-7=-313/1197, 7-8=-327/1202, 8-9=-1589/343, 9-10=-2628/514, 10-12=-2044/383
BOT CHORD 2-16=-349/1773, 13-16=-349/1773, 12-13=-265/1645
WEBS 4-16=-1070/346, 4-15=-265/402, 5-15=-294/1497, 9-14=-358/1514, 6-17=-3264/808, 8-17=-3264/808, 7-17=-52/349, 10-14=-190/370, 10-13=-1040/295

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) 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) 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) Ceiling dead load (10.0 psf) on member(s). 5-6, 8-9, 6-17, 8-17
7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 14-15
8) All bearings are assumed to be SP DSS .
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 301 lb uplift at joint 12 and 295 lb uplift at joint 2.
10) Use MiTek JUS24 (With 4-10d nails into Girder & 2-10d nails into Truss) or equivalent at 11-5-12 from the left end to connect truss(es) to back face of bottom chord.
11) Fill all nail holes where hanger is in contact with lumber.
12) "NAILED" indicates Girder: 3-16d (0.162" x 3.5") toe-nails per NDS guidelines.
13) Attic room checked for L/360 deflection.
14) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (lb/ft)
Vert: 1-5=-60, 5-6=-80, 6-7=-60, 7-8=-60, 8-9=-80, 9-12=-60, 15-22=-20, 14-15=-40, 14-18=-20, 6-17=-20, 8-17=-20
Concentrated Loads (lb)
Vert: 26=-384 (B), 27=-237 (B)



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

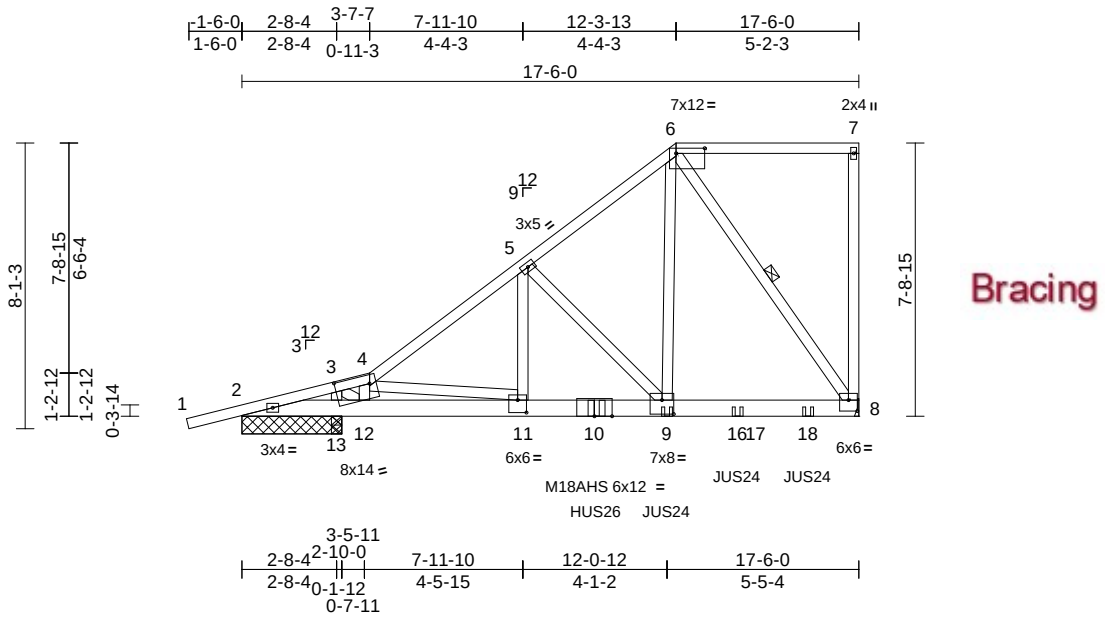
November 6,2024

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

Job	Truss	Truss Type	Qty	Ply	Bootle Residence	
1678-A	GR3	Half Hip Girder	1	1	Job Reference (optional)	T35470356

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

Run: 8.82 S Oct 10 2024 Print: 8.820 S Oct 10 2024 MiTek Industries, Inc. Tue Nov 05 13:22:22
ID:0u?mOuCJvjDernDBdKmL10z08JA-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:55.8

Plate Offsets (X, Y): [6:0-9-12,0-1-12], [8:0-3-0,0-3-12], [9:0-4-0,0-4-12], [11:0-3-0,0-4-4], [12:0-11-12,0-3-0]

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	0.38	Vert(LL)	0.07	9-11	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.60	Vert(CT)	-0.13	9-11	>999	180	M18AHS	186/179
BCLL	0.0*	Rep Stress Incr	NO	WB	0.91	Horz(CT)	0.01	8	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 128 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP 2400F 2.0E
WEBS 2x4 SP No.2

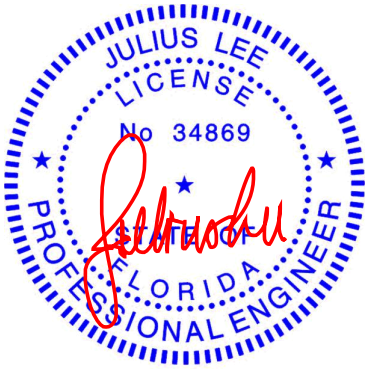
BRACING
TOP CHORD Structural wood sheathing directly applied or 3-5-7 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 6-8

REACTIONS (size) 2=2-10-0, 8= Mechanical, 13=2-10-0
Max Horiz 2=289 (LC 5)
Max Uplift 2=-271 (LC 25), 8=-688 (LC 5), 13=-565 (LC 8)
Max Grav 2=75 (LC 20), 8=2731 (LC 15), 13=2361 (LC 15)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/22, 2-3=-266/876, 3-4=-725/140, 4-5=-2702/648, 5-6=-2009/523, 6-7=-98/77, 7-8=-150/81
BOT CHORD 2-13=-886/192, 12-13=-886/183, 11-12=-304/1004, 9-11=-620/2197, 8-9=-429/1463
WEBS 4-12=-1811/522, 4-11=-322/1215, 5-11=-181/761, 5-9=-888/346, 6-9=-766/3024, 6-8=-2523/649, 3-13=-1469/313, 3-12=-400/1820

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) 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) All plates are MT20 plates unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) Bearings are assumed to be: Joint 13 SP 2400F 2.0E , Joint 13 SP 2400F 2.0E .
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 688 lb uplift at joint 8, 271 lb uplift at joint 2 and 565 lb uplift at joint 13.
11) Use MiTek HUS26 (With 14-16d nails into Girder & 6-16d nails into Truss) or equivalent at 10-0-12 from the left end to connect truss(es) to front face of bottom chord.
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 12-0-12 from the left end to 16-0-12 to connect truss(es) to front face of bottom chord.
13) Fill all nail holes where hanger is in contact with lumber.
14) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (lb/ft)
Vert: 1-4=-60, 4-6=-60, 6-7=-60, 2-8=-20
Concentrated Loads (lb)
Vert: 10=-1602 (F), 9=-480 (F), 16=-480 (F), 18=-480 (F)



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

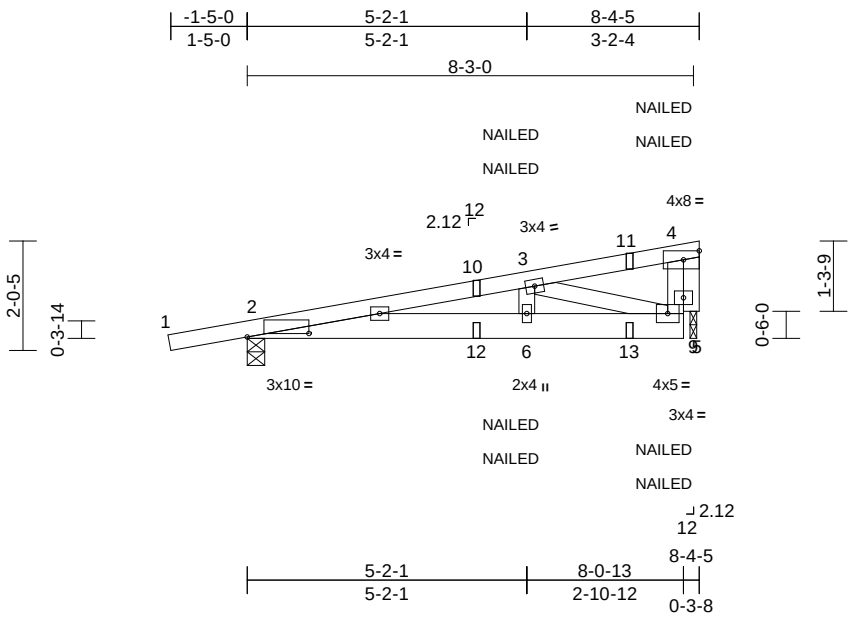
November 6,2024

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

Job	Truss	Truss Type	Qty	Ply	Bootle Residence	
1678-A	GR4	Roof Special Girder	2	1	Job Reference (optional)	T35470357

19 Lumber, Inc., Old Town, FL - 32680, Run: 8.82 S Oct 10 2024 Print: 8.820 S Oct 10 2024 MiTek Industries, Inc. Tue Nov 05 13:22:22 Page: 1

ID:awDeEp3qYX3ysfYlNDCaq3z03tJ-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:24.6

Plate Offsets (X, Y): [2:1-1-11,0-0-12]

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	0.28	Vert(LL)	-0.03	6-8	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.34	Vert(CT)	-0.05	6-8	>999	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.13	Horz(CT)	0.00	9	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MP							Weight: 41 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 5-11-5 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-3-14, 9=0-1-8
Max Horiz 2=68 (LC 4)
Max Uplift 2=-148 (LC 4), 9=-94 (LC 8)
Max Grav 2=467 (LC 1), 9=456 (LC 1)

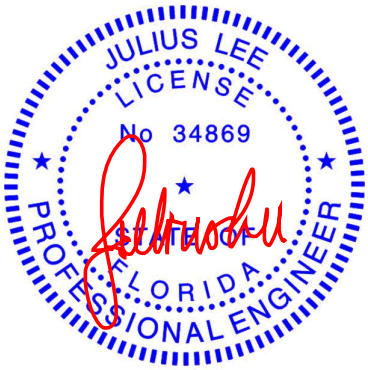
FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/17, 2-3=-951/174, 3-4=-165/26, 4-5=-35/348
BOT CHORD 2-6=-199/930, 5-6=-202/943
WEBS 3-6=0/125, 3-5=-809/174, 4-9=-477/98

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) 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) 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 2 SP No.2 , Joint 9 SP No.2 .
7) Bearing at joint(s) 9 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) 9.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 148 lb uplift at joint 2 and 94 lb uplift at joint 9.
10) "NAILED" indicates Girder: 3-16d (0.162" x 3.5") toe-nails per NDS guidelines.
11) 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: 1-4=-60, 2-5=-20
Concentrated Loads (lb)
Vert: 11=-104 (F=-52, B=-52), 12=-23 (F=-12, B=-12), 13=-79 (F=-40, B=-40)



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

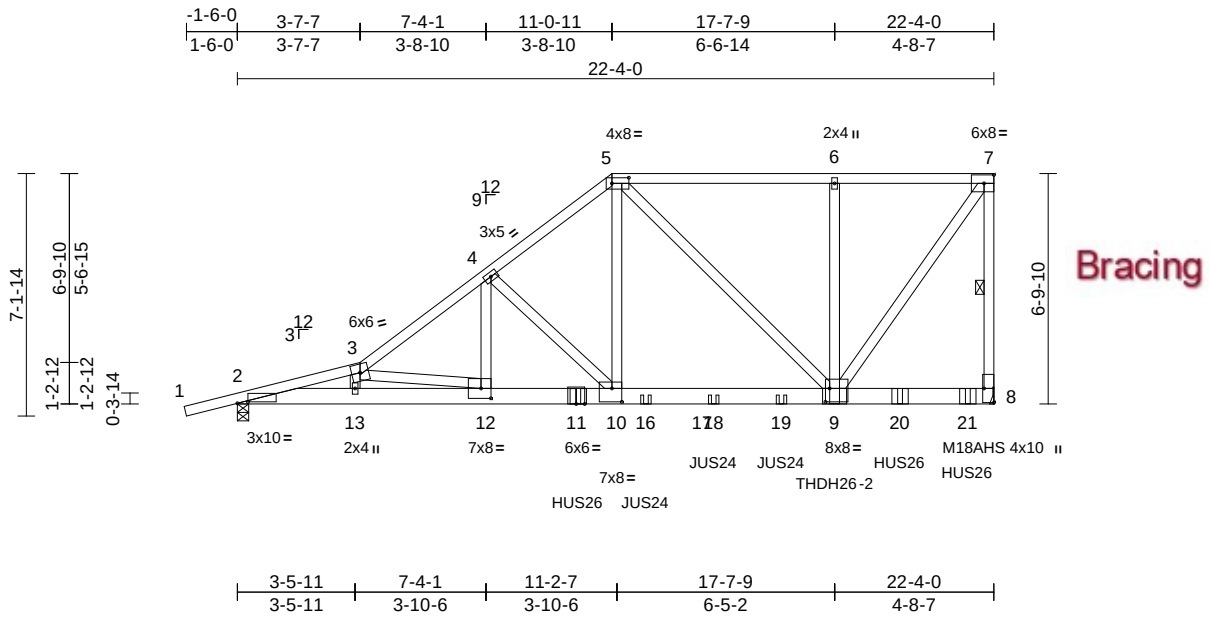
November 6,2024

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

Job	Truss	Truss Type	Qty	Ply	Bootle Residence	
1678-A	GR5	Half Hip Girder	1	**2**	Job Reference (optional)	T35470358

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

Run: 8.82 S Oct 10 2024 Print: 8.820 S Oct 10 2024 MiTek Industries, Inc. Tue Nov 05 13:22:22 Page: 1
ID:dhtmWQgD7VuIHfl1txWL3xz08MR-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:62

Plate Offsets (X, Y): [2:0-3-12,0-0-8], [5:0-6-0,0-2-0], [8:Edge,0-3-8], [9:0-1-8,0-4-12], [10:0-3-8,0-4-12], [12:0-3-8,0-3-8]

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	0.77	Vert(LL)	-0.17	12-13	>999	240	M18AHS	186/179
TCDL	10.0	Lumber DOL	1.25	BC	0.93	Vert(CT)	-0.33	12-13	>809	180	MT20	244/190
BCLL	0.0*	Rep Stress Incr	NO	WB	0.80	Horz(CT)	0.05	8	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 320 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP 2400F 2.0E *Except* 11-8:2x6 SP No.2
WEBS 2x4 SP No.2

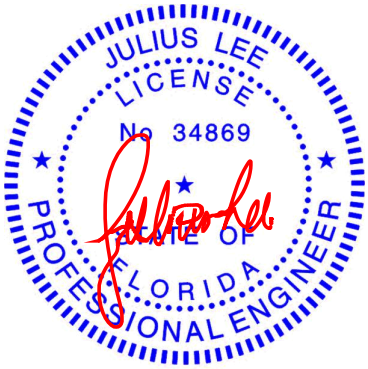
BRACING
TOP CHORD Structural wood sheathing directly applied or 3-5-10 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 7-8

REACTIONS (size) 2=0-4-0, 8= Mechanical
Max Horiz 2=253 (LC 5)
Max Uplift 2=-756 (LC 8), 8=-1505 (LC 5)
Max Grav 2=3370 (LC 18), 8=7329 (LC 18)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/25, 2-3=-11140/2358, 3-4=-7647/1674, 4-5=-5950/1328, 5-6=-4307/926, 6-7=-4307/926, 7-8=-6044/1337
BOT CHORD 2-13=-2390/10887, 12-13=-2432/11027, 10-12=-1434/6222, 9-10=-1145/4818, 8-9=-77/80
WEBS 3-13=-824/252, 3-12=-4928/1071, 4-12=-450/2105, 4-10=-2040/562, 5-10=-899/3885, 5-9=-770/269, 6-9=-375/212, 7-9=-1589/7297

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: 2x6 - 3 rows staggered at 0-5-0 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 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) 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, with BCDL = 10.0psf.
10) Bearings are assumed to be: Joint 2 SP 2400F 2.0E .
11) Refer to girder(s) for truss to truss connections.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1505 lb uplift at joint 8 and 756 lb uplift at joint 2.
13) Use MiTek HUS26 (With 14-16d nails into Girder & 6-16d nails into Truss) or equivalent spaced at 9-6-0 oc max. starting at 10-0-12 from the left end to 21-6-12 to connect truss(es) to back face of bottom chord.
14) 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 12-0-12 from the left end to 16-0-12 to connect truss(es) to back face of bottom chord.
15) Use MiTek THDH26-2 (With 22-16d nails into Girder & 8-16d nails into Truss) or equivalent at 17-7-9 from the left end to connect truss(es) to back face of bottom chord.
16) 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: 1-3=-60, 3-5=-60, 5-7=-60, 2-8=-20
Concentrated Loads (lb)
Vert: 11=-1560 (B), 9=-3132 (B), 16=-480 (B), 18=-480 (B), 19=-480 (B), 20=-994 (B), 21=-998 (B)



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

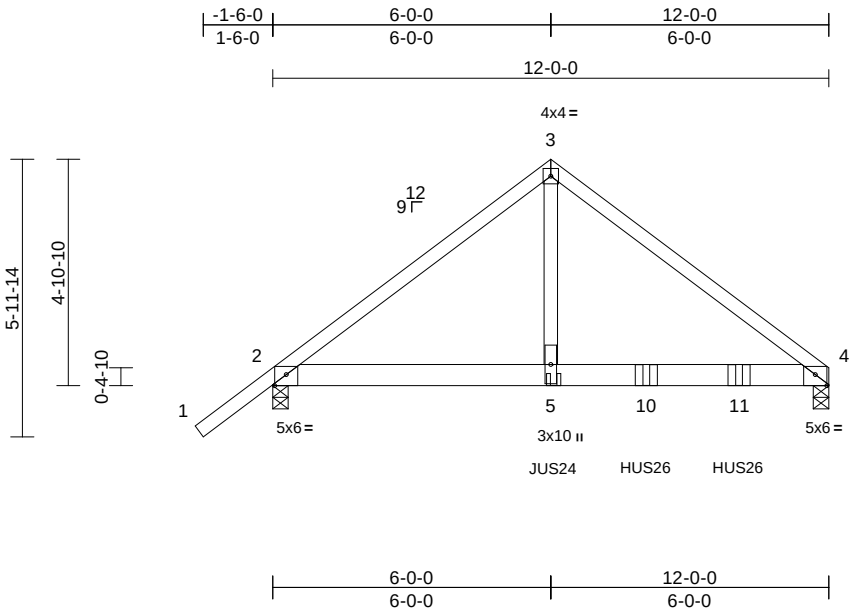
November 6,2024

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

Job	Truss	Truss Type	Qty	Ply	Bootle Residence	
1678-A	GR7	Common Girder	1	**2**	Job Reference (optional)	T35470359

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

Run: 8.82 S Oct 10 2024 Print: 8.820 S Oct 10 2024 MiTek Industries, Inc. Tue Nov 05 13:22:22
ID:kj3MhaekST6kSudZ0S3rmEz24di-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:45.4

Plate Offsets (X, Y): [2:0-3-0,Edge], [4:0-3-0,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	0.56	Vert(LL)	-0.10	5-7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.65	Vert(CT)	-0.19	5-7	>746	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.28	Horz(CT)	0.01	4	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 120 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP 2400F 2.0E
WEBS 2x4 SP No.2

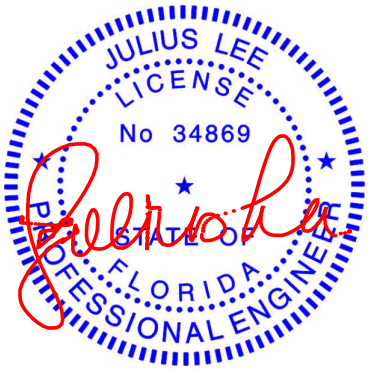
BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-4-0, 4=0-4-0
Max Horiz 2=131 (LC 5)
Max Uplift 2=-287 (LC 8), 4=-481 (LC 9)
Max Grav 2=1507 (LC 15), 4=3001 (LC 16)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/57, 2-3=-2545/463, 3-4=-2808/450
BOT CHORD 2-5=-298/1984, 4-5=-298/1984
WEBS 3-5=-403/2590

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: 2x6 - 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 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) All bearings are assumed to be SP 2400F 2.0E .
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 481 lb uplift at joint 4 and 287 lb uplift at joint 2.
10) Use MiTek JUS24 (With 4-10d nails into Girder & 2-10d nails into Truss) or equivalent at 6-0-12 from the left end to connect truss(es) to back face of bottom chord.
11) Use MiTek HUS26 (With 14-16d nails into Girder & 6-16d nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 8-0-12 from the left end to 10-0-12 to connect truss(es) to back face of bottom chord.
12) 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: 1-3=-60, 3-4=-60, 2-4=-20
Concentrated Loads (lb)
Vert: 5=-382 (B), 10=-1383 (B), 11=-1383 (B)

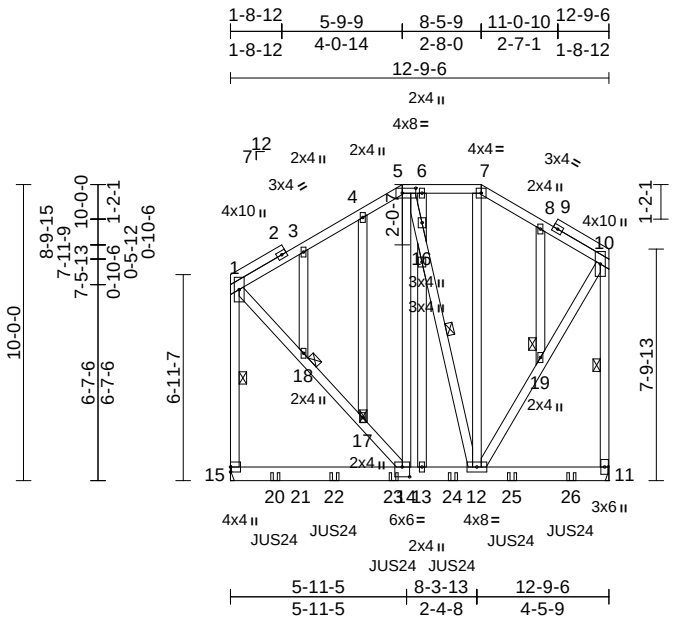


Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

November 6,2024

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

Job	Truss	Truss Type	Qty	Ply	Bootle Residence	
1678-A	GR8	Piggyback Base Girder	1	1	Job Reference (optional)	T35470360



Bracing

Scale = 1:61.4

Plate Offsets (X, Y): [5:0-5-8,0-2-0], [14:0-3-0,0-4-0]

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	0.38	Vert(LL)	0.07	14-15	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.67	Vert(CT)	-0.13	14-15	>999	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.42	Horz(CT)	0.00	11	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 179 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x6 SP No.2
WEBS	2x4 SP No.2
OTHERS	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.
WEBS	1 Row at midpt 5-12, 1-15, 10-11
JOINTS	1 Brace at Jt(s): 17, 18, 19

REACTIONS (size) 11= Mechanical, 15= Mechanical
Max Horiz 15=323 (LC 7)
Max Uplift 11=-512 (LC 9), 15=-486 (LC 8)
Max Grav 11=1734 (LC 15), 15=1716 (LC 16)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-3=-773/219, 3-4=-751/236, 4-5=-692/243, 5-6=-568/231, 6-7=-568/231, 7-8=-643/250, 8-10=-672/236, 1-15=-1190/362, 10-11=-1325/404
BOT CHORD	14-15=-281/272, 13-14=-311/717, 12-13=-311/717, 11-12=-92/79
WEBS	5-14=-196/501, 5-16=-377/179, 12-16=-508/257, 7-12=-99/227, 1-18=-329/998, 17-18=-325/946, 14-17=-335/965, 12-19=-375/1087, 10-19=-376/1118, 6-16=-102/60, 13-16=-81/182, 4-17=-13/26, 3-18=-82/49, 8-19=-44/30

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
5) Provide adequate drainage to prevent water ponding.
6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
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, with BCDL = 10.0psf.
10) Refer to girder(s) for truss to truss connections.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 486 lb uplift at joint 15 and 512 lb uplift at joint 11.
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 1-6-2 from the left end to 11-6-2 to connect truss(es) to back face of bottom chord.
13) Fill all nail holes where hanger is in contact with lumber.
14) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (lb/ft)
Vert: 1-5=-60, 5-7=-60, 7-10=-60, 11-15=-20
Concentrated Loads (lb)
Vert: 20=-367 (B), 22=-367 (B), 23=-367 (B), 24=-367 (B), 25=-367 (B), 26=-367 (B)

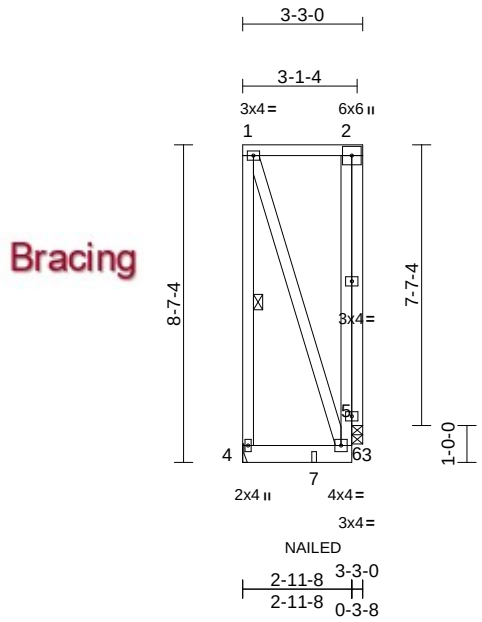
JULIUS LEE LICENSE No 34869 STATE OF FLORIDA PROFESSIONAL ENGINEER

Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

November 6,2024

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

Job	Truss	Truss Type	Qty	Ply	Bootle Residence	
1678-A	GR9	Flat Girder	1	1	Job Reference (optional)	T35470361



Scale = 1:54.1

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	0.58	Vert(LL)	0.01	3-4	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.23	Vert(CT)	-0.01	3-4	>999	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.38	Horz(CT)	-0.01	6	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MP							Weight: 58 lb	FT = 20%

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

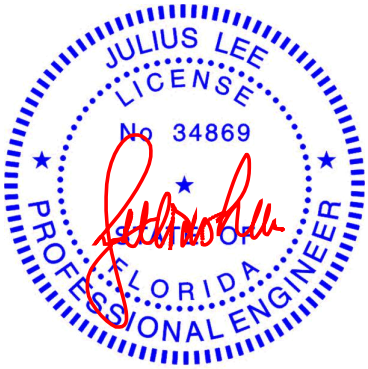
BRACING
TOP CHORD Structural wood sheathing directly applied or 3-0-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 1-4

REACTIONS (size) 4= Mechanical, 6=0-3-8
Max Horiz 4=-228 (LC 6)
Max Uplift 4=-274 (LC 4), 6=-356 (LC 5)
Max Grav 4=336 (LC 26), 6=544 (LC 15)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-4=-216/296, 1-2=-20/13, 3-5=-314/525, 2-5=-314/525
BOT CHORD 3-4=-96/118
WEBS 1-3=-301/263, 2-6=-544/357

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) 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) Bearings are assumed to be: , Joint 6 SP No.2 .
8) Refer to girder(s) for truss to truss connections.
9) Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 274 lb uplift at joint 4 and 356 lb uplift at joint 6.
11) "NAILED" indicates Girder: 3-16d (0.162" x 3.5") toe-nails per NDS guidelines.
12) 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: 1-2=-60, 3-4=-20
Concentrated Loads (lb)
Vert: 7=-353 (F)



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

November 6,2024

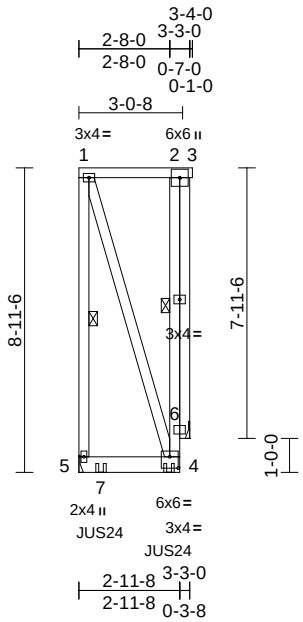
MiTek®
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Bootle Residence	
1678-A	GR10	Roof Special Girder	1	1	Job Reference (optional)	T35470362

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

Run: 8.82 S Oct 10 2024 Print: 8.820 S Oct 10 2024 MiTek Industries, Inc. Tue Nov 05 13:22:23 Page: 1
ID:AEiygmxOuZy8iAdeHXTt1nz08RG-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Bracing



Scale = 1:47.6

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

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	0.14	Vert(LL)	0.00	4-5	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.15	Vert(CT)	-0.01	4-5	>999	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.01	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 60 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD	Structural wood sheathing directly applied or 3-0-8 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 1-5, 2-4

REACTIONS (size) 5= Mechanical, 6= Mechanical
Max Uplift 5=-160 (LC 4), 6=-247 (LC 5)
Max Grav 5=419 (LC 16), 6=605 (LC 15)

FORCES (lb) - Maximum Compression/Maximum Tension

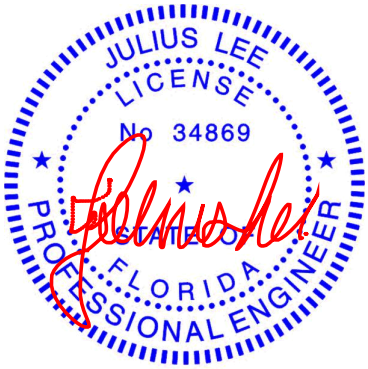
TOP CHORD	1-5=-81/38, 1-2=-5/2, 2-3=0/0, 4-6=-186/547, 2-6=-119/64
BOT CHORD	4-5=-1/2
WEBS	1-6=-4/9

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) zone; cantilever 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) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 160 lb uplift at joint 5 and 247 lb uplift at joint 6.
9) 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 0-7-12 from the left end to 2-7-12 to connect truss(es) to back face of bottom chord.
10) Fill all nail holes where hanger is in contact with lumber.
11) 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: 1-2=-60, 2-3=-60, 4-5=-20
   Concentrated Loads (lb)
   Vert: 4=-366 (B), 7=-367 (B)



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

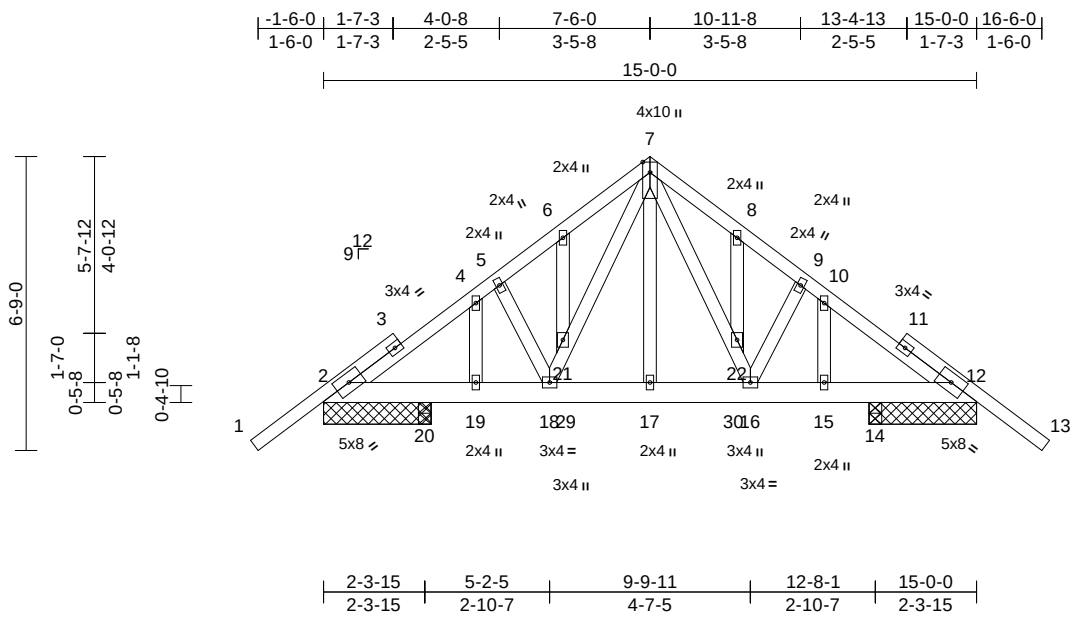
November 6,2024

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

Job	Truss	Truss Type	Qty	Ply	Bootle Residence	
1678-A	GR11	Common Girder	1	1	Job Reference (optional)	T35470363

19 Lumber, Inc., Old Town, FL - 32680, Run: 8.82 E Oct 10 2024 Print: 8.820 E Oct 10 2024 MiTek Industries, Inc. Wed Nov 06 09:25:13 Page: 1

ID:c3wJpj2wCgLioGUDGXdzRrz?pkS-R0uMpqSSb3hDMiXPV9t3YFUvCVr1o1z?c?vptqyM7Jr



Scale = 1:48.4

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	0.19	Vert(LL)	-0.01	16-17	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.25	Vert(CT)	-0.02	16-17	>999	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.15	Horz(CT)	0.01	12	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 117 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 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 (lb/size) 2=382/2-5-11, 12=379/2-5-11, 14=432/0-3-8, 20=433/0-3-8
Max Horiz 2=157 (LC 7)
Max Uplift 2=-72 (LC 8), 12=-78 (LC 9), 14=-87 (LC 9), 20=-91 (LC 8)

FORCES (lb) - Maximum Compression/Maximum Tension

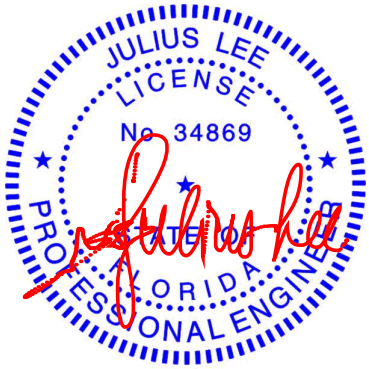
TOP CHORD 1-2=0/57, 2-3=-523/72, 3-4=-459/87, 4-5=-595/118, 5-6=-560/130, 6-7=-556/168, 7-8=-529/171, 8-9=-553/126, 9-10=-589/109, 10-11=-452/72, 11-12=-517/58, 12-13=0/57
BOT CHORD 2-20=-62/441, 19-20=-62/441, 18-19=-62/441, 18-29=-36/403, 17-29=-36/403, 17-30=-36/408, 16-30=-36/408, 15-16=-23/401, 14-15=-23/401, 12-14=-23/401
WEBS 7-22=-87/164, 16-22=-38/67, 9-16=-21/101, 18-21=-33/118, 7-21=-95/202, 5-18=-16/94, 7-17=-23/157, 6-21=-98/66, 4-19=-242/82, 8-22=-70/58, 10-15=-243/77

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed; 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 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 72 lb uplift at joint 2, 78 lb uplift at joint 12, 91 lb uplift at joint 20 and 87 lb uplift at joint 14.
10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 15 lb down and 16 lb up at 5-3-5, 26 lb down and 13 lb up at 5-6-14, 19 lb down and 13 lb up at 7-6-14, and 26 lb down and 13 lb up at 9-5-2, and 15 lb down and 16 lb up at 9-8-11 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
11) 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: 1-7=-60, 7-13=-60, 23-26=-20
Concentrated Loads (lb)
Vert: 18=-94 (F), 17=-16 (F), 22=-47 (F), 29=-16 (F), 30=-63 (F)

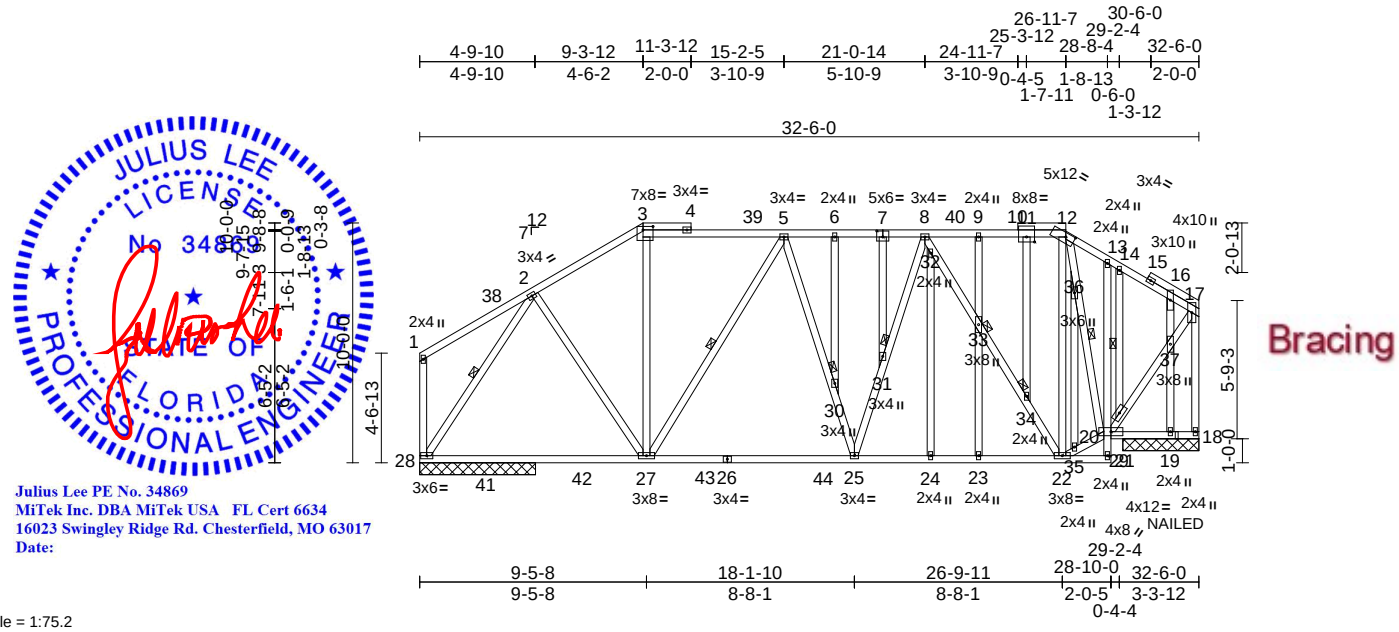


Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

November 6,2024

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

Job	Truss	Truss Type	Qty	Ply	Bootle Residence	
1678-A	H1	Piggyback Base	1	1	Job Reference (optional)	T35470364



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

Bracing

Plate Offsets (X, Y): [3:0-5-0,0-1-12], [7:0-3-0,0-3-0], [11:0-4-0,0-2-8], [12:0-4-8,0-2-0]

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	0.67	Vert(LL)	-0.21	27-28	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.68	Vert(CT)	-0.35	27-28	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.45	Horz(CT)	0.03	19	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 354 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except* 28-26:2x4 SP 2400F 2.0E
WEBS 2x4 SP No.2
OTHERS 2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-0-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. Except:
6-0-0 oc bracing: 14-29
WEBS 1 Row at midpt 5-27, 2-28, 12-20
JOINTS 1 Brace at Jt(s): 30, 31, 33, 34

REACTIONS (size) 18=3-2-0, 19=3-2-0, 28=4-10-0
Max Horiz 28=287 (LC 9)
Max Uplift 18=-120 (LC 9), 19=-118 (LC 13), 28=-149 (LC 12)
Max Grav 18=832 (LC 2), 19=779 (LC 2), 28=1443 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-161/142, 2-3=-1238/215, 3-5=-1028/212, 5-6=-1195/241, 6-8=-1195/241, 8-9=-658/213, 9-11=-658/213, 11-12=-671/216, 12-13=-625/222, 13-14=-680/188, 14-16=-674/174, 16-17=-515/145, 1-28=-181/102, 17-18=-887/103
BOT CHORD 27-28=-300/851, 25-27=-324/1214, 24-25=-273/1089, 23-24=-273/1089, 22-23=-273/1089, 21-22=-12/2, 14-29=-75/26, 20-21=-27/13, 13-20=-58/139, 19-20=-92/98, 18-19=-92/98
WEBS 2-27=-118/461, 3-27=-12/393, 5-27=-433/229, 5-30=-110/108, 25-30=-125/124, 25-31=-50/375, 8-31=-65/370, 8-32=-768/208, 32-33=-862/225, 33-34=-843/213, 22-34=-829/218, 12-22=-71/478, 2-28=-1376/220, 20-29=-157/922, 29-37=-156/981, 17-37=-158/964, 22-35=-189/792, 20-35=-176/729, 12-36=-433/115, 20-36=-558/140, 6-30=-16/17, 7-31=-18/19, 24-32=-17/107, 9-33=-33/52, 23-33=-60/63, 11-34=0/21, 35-36=-26/128, 16-37=-409/145, 19-37=-430/151

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 0-1-12 to 3-4-12, Zone1 3-4-12 to 9-3-12, Zone2 9-3-12 to 13-10-15, Zone1 13-10-15 to 26-11-7, Zone2 26-11-7 to 31-3-12, Zone1 31-3-12 to 32-4-4 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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
5) Provide adequate drainage to prevent water ponding.
6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
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, with BCDL = 10.0psf.
10) Bearings are assumed to be: Joint 28 SP 2400F 2.0E , Joint 19 SP No.2 .

November 6,2024

Continued on page 2

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

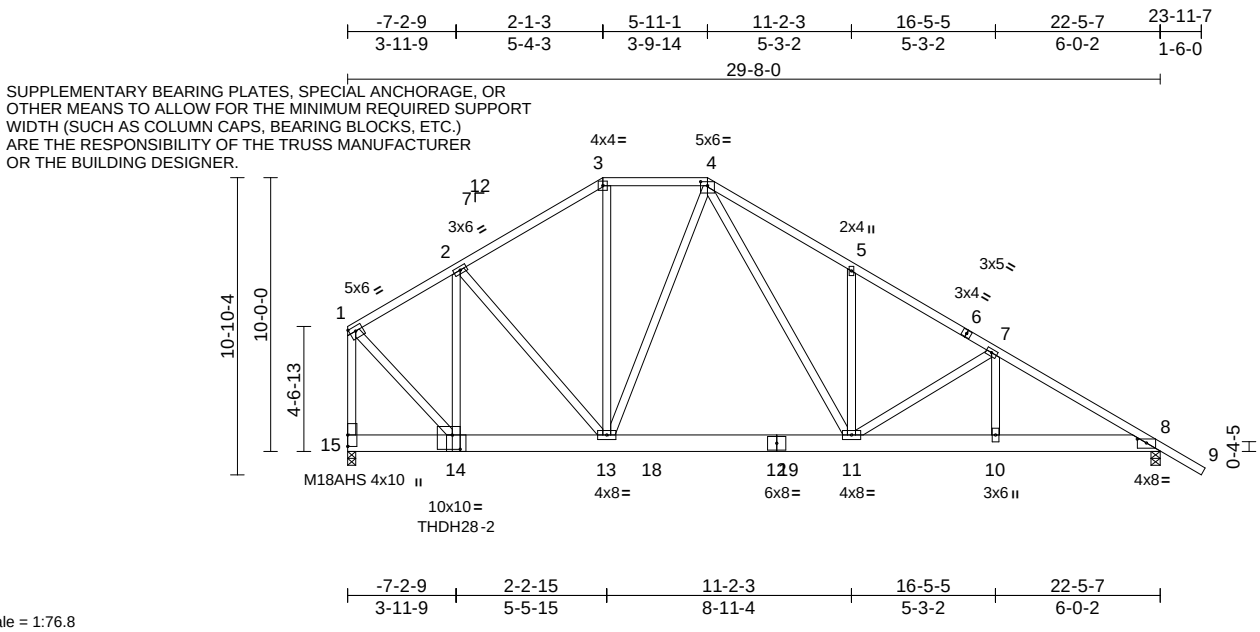
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 149 lb uplift at joint 28, 120 lb uplift at joint 18 and 118 lb uplift at joint 19.

12) "NAILED" indicates Girder: 3-16d (0.162" x 3.5") toe-nails per NDS guidelines.
13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) . The design/selection of such connection device(s) is the responsibility of others.
14) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (lb/ft)
   Vert: 1-3=-60, 3-12=-60, 12-17=-60, 21-28=-20, 18-20=-20
   Concentrated Loads (lb)
   Vert: 19=-207 (B)

Job	Truss	Truss Type	Qty	Ply	Bootle Residence	
1678-A	HGR1	Piggyback Base Girder	1	2	Job Reference (optional)	T35470365



Scale = 1:76.8

Plate Offsets (X, Y): [1:0-2-12,0-2-0], [4:0-3-0,0-1-12], [8:0-4-0,0-1-11], [14:0-3-8,0-6-4]

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	0.53	Vert(LL)	-0.07	11-13	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.51	Vert(CT)	-0.14	11-13	>999	180	M18AHS	186/179
BCLL	0.0*	Rep Stress Incr	NO	WB	0.71	Horz(CT)	0.03	8	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 489 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x8 SP No.2
WEBS 2x4 SP No.2

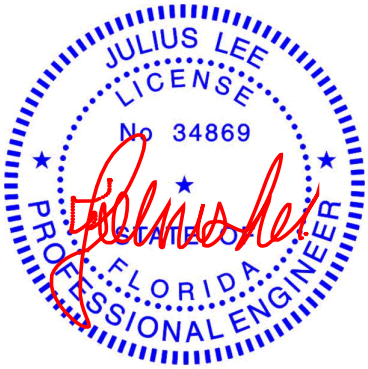
BRACING
TOP CHORD Structural wood sheathing directly applied or 5-6-10 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 8=0-4-0, 15=0-3-8, (req. 0-4-9)
Max Horiz 15=-307 (LC 4)
Max Uplift 8=-437 (LC 9), 15=-1464 (LC 8)
Max Grav 8=2407 (LC 16), 15=7744 (LC 15)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-5192/1030, 2-3=-3443/705, 3-4=-2934/634, 4-5=-3707/813, 5-7=-3650/665, 7-8=-4091/708, 8-9=0/53, 1-15=-7479/1433
BOT CHORD 14-15=-204/284, 13-14=-870/4585, 11-13=-321/2677, 10-11=-493/3455, 8-10=-493/3455
WEBS 7-11=-494/192, 7-10=0/202, 1-14=-1227/6534, 3-13=-302/1545, 2-14=-654/2517, 4-13=-340/976, 5-11=-374/240, 4-11=-304/1046, 2-13=-2432/660

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 - 4 rows staggered at 0-3-0 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 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) 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, with BCDL = 10.0psf.
10) WARNING: Required bearing size at joint(s) 15 greater than input bearing size.
11) All bearings are assumed to be SP No.2 .
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1464 lb uplift at joint 15 and 437 lb uplift at joint 8.
13) Use MiTek THDH28-2 (With 36-16d nails into Girder & 10-16d nails into Truss) or equivalent at 11-2-2 from the left end 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: 1-3=-60, 3-4=-60, 4-9=-60, 8-15=-20
Concentrated Loads (lb)
Vert: 14=-6790 (B)



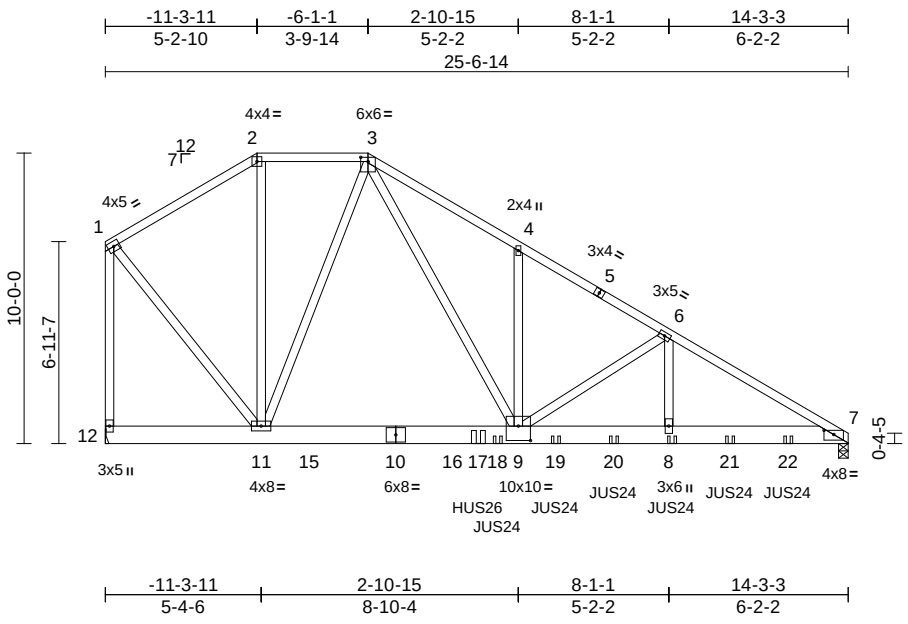
Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

November 6,2024

Job	Truss	Truss Type	Qty	Ply	Bootle Residence	
1678-A	HGR2	Piggyback Base Girder	1	2	Job Reference (optional)	T35470366

19 Lumber, Inc., Old Town, FL - 32680, Run: 8.82 S Oct 10 2024 Print: 8.820 S Oct 10 2024 MiTek Industries, Inc. Tue Nov 05 13:22:24 Page: 1

ID:hIl?6kfybuea1LbemWUt_Wz08MT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:73.4

Plate Offsets (X, Y): [3:0-3-0,0-1-12], [7:0-4-0,0-1-11], [9:0-5-0,0-6-0]

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	0.51	Vert(LL)	-0.14	9-11	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.58	Vert(CT)	-0.27	9-11	>999	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.92	Horz(CT)	0.03	7	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 418 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x8 SP No.2 *Except* 10-7:2x8 SP DSS
WEBS 2x4 SP No.2

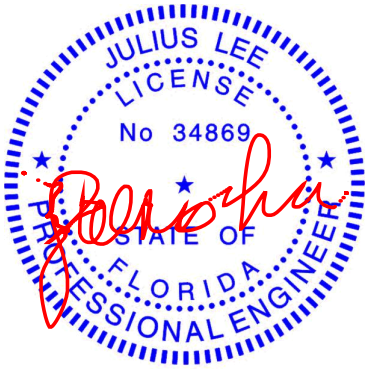
BRACING
TOP CHORD Structural wood sheathing directly applied or 4-1-5 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 7=0-4-0, 12= Mechanical
Max Horiz 12=-322 (LC 4)
Max Uplift 7=-1080 (LC 9), 12=-728 (LC 9)
Max Grav 7=4715 (LC 1), 12=3261 (LC 16)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-2089/563, 2-3=-1773/509, 3-4=-6374/1729, 4-6=-6326/1585, 6-7=-7862/1874, 1-12=-3340/788
BOT CHORD 11-12=-193/269, 9-11=-542/2649, 8-9=-1533/6745, 7-8=-1533/6745
WEBS 2-11=-234/859, 3-11=-2427/700, 3-9=-1623/5968, 4-9=-353/236, 6-9=-1756/445, 6-8=-242/1493, 1-11=-616/2834

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 - 4 rows staggered 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 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) 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) 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, with BCDL = 10.0psf.
9) Bearings are assumed to be: , Joint 7 SP DSS .
10) Refer to girder(s) for truss to truss connections.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 728 lb uplift at joint 12 and 1080 lb uplift at joint 7.
12) Use MiTek HUS26 (With 14-16d nails into Girder & 6-16d nails into Truss) or equivalent at 24-1-13 from the left end to connect truss(es) to back face of bottom chord.
13) 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 24-9-13 from the left end to 34-9-13 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: 1-2=-60, 2-3=-60, 3-7=-60, 7-12=-20
Concentrated Loads (lb)
Vert: 8=-569 (B), 17=-2426 (B), 18=-569 (B), 19=-569 (B), 20=-569 (B), 21=-569 (B), 22=-575 (B)



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

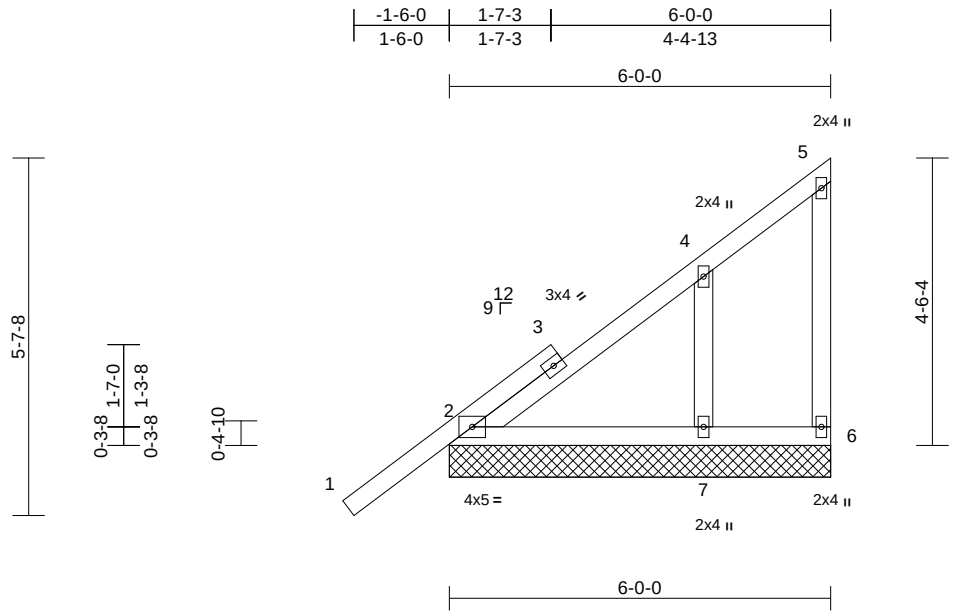
November 6,2024

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

Job	Truss	Truss Type	Qty	Ply	Bootle Residence	
1678-A	M1	Monopitch Supported Gable	1	1	Job Reference (optional)	T35470367

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

Run: 8.82 S Oct 10 2024 Print: 8.820 S Oct 10 2024 MiTek Industries, Inc. Tue Nov 05 13:22:24
ID:oXWVGNcSXf78YkHtXgPwpgz08MX-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:31

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	0.29	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	0.05	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MP							Weight: 35 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 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=6-0-0, 6=6-0-0, 7=6-0-0, 8=6-0-0
Max Horiz 2=173 (LC 11), 8=173 (LC 11)
Max Uplift 2=-33 (LC 12), 6=-42 (LC 11), 7=-121 (LC 12), 8=-33 (LC 12)
Max Grav 2=252 (LC 1), 6=40 (LC 19), 7=303 (LC 19), 8=252 (LC 1)

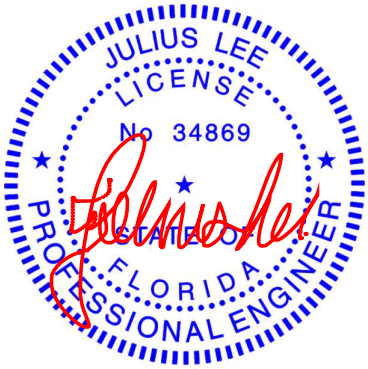
FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/57, 2-4=-309/218, 4-5=-109/105, 5-6=-83/98
BOT CHORD	2-7=-70/155, 6-7=-70/93
WEBS	4-7=-222/297

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 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 requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 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 .
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 33 lb uplift at joint 2, 42 lb uplift at joint 6, 121 lb uplift at joint 7 and 33 lb uplift at joint 2.

LOAD CASE(S) Standard



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

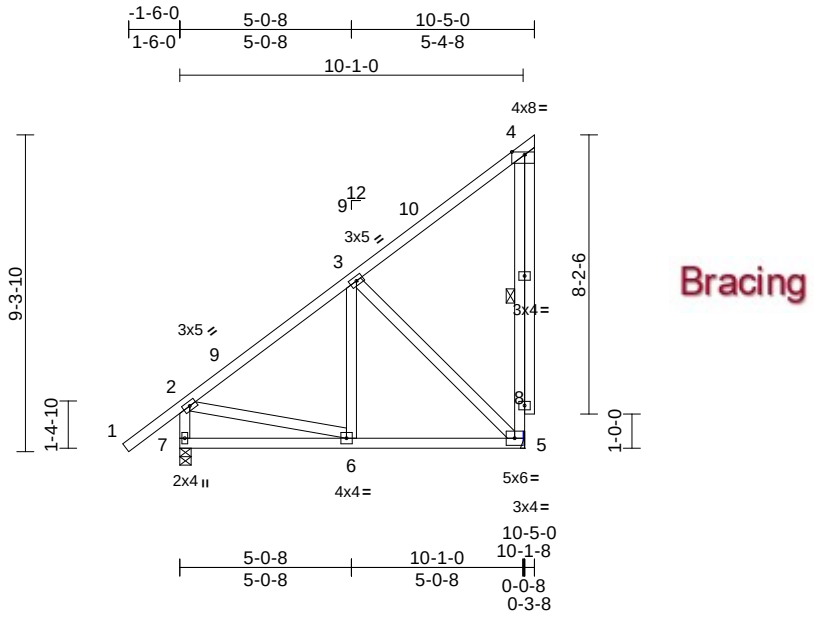
November 6,2024

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

Job	Truss	Truss Type	Qty	Ply	Bootle Residence	T35470368
1678-A	M2	Monopitch	1	1	Job Reference (optional)	

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

Run: 8.82 S Oct 10 2024 Print: 8.820 S Oct 10 2024 MiTek Industries, Inc. Tue Nov 05 13:22:24
ID:oPHUJZZd_dnzlkdgYnm4R7z08G7-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Bracing

Scale = 1:60.2

Plate Offsets (X, Y): [4:0-4-8,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	0.29	Vert(LL)	-0.02	5-6	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.24	Vert(CT)	-0.03	5-6	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.32	Horz(CT)	-0.01	5	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 87 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

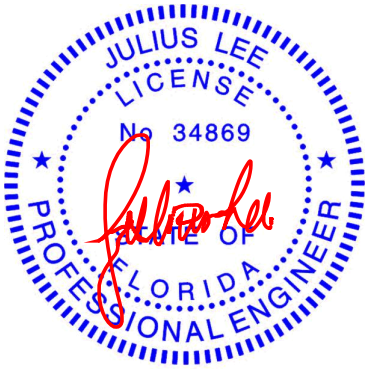
BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 7-7-12 oc bracing.
WEBS 1 Row at midpt 4-5

REACTIONS (size) 5= Mechanical, 7=0-4-0
Max Horiz 7=346 (LC 11)
Max Uplift 5=-163 (LC 12), 7=-61 (LC 12)
Max Grav 5=464 (LC 19), 7=506 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/62, 2-3=-422/98, 3-4=-248/199, 4-5=-209/247, 2-7=-464/256
BOT CHORD 6-7=-596/487, 5-6=-302/388
WEBS 3-6=-6/194, 3-5=-390/287, 2-6=-101/303

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 -1-7-1 to 1-4-15, Zone1 1-4-15 to 10-1-8 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 7 SP No.2 .
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 163 lb uplift at joint 5 and 61 lb uplift at joint 7.

LOAD CASE(S) Standard

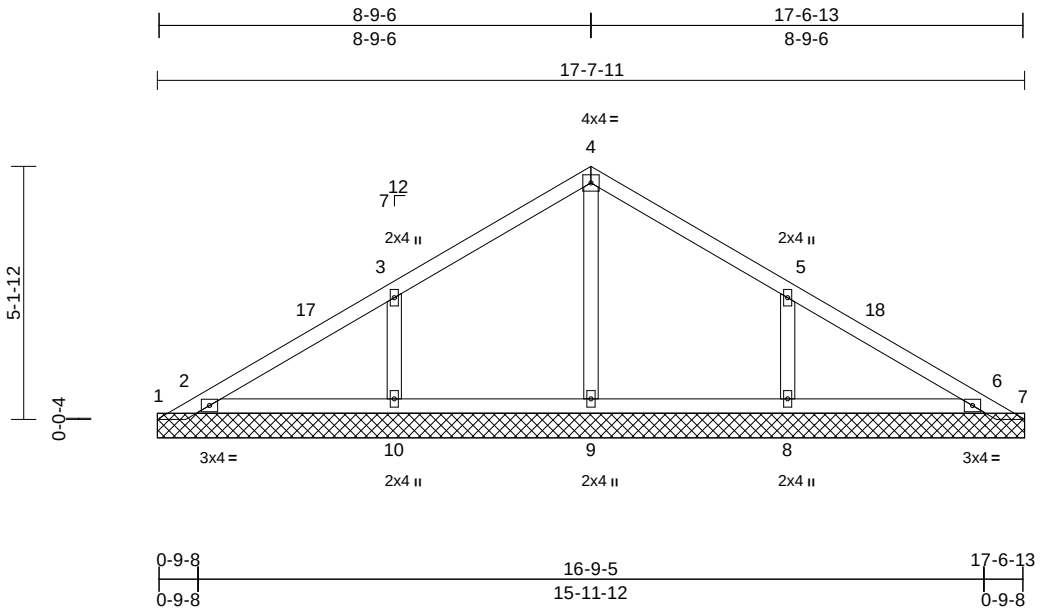


Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

November 6,2024

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

Job	Truss	Truss Type	Qty	Ply	Bootle Residence	
1678-A	PB1	Piggyback	16	1	Job Reference (optional)	T35470369



Scale = 1:42.6

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	0.19	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.11	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.07	Horiz(TL)	0.00	6	n/a	n/a		
BCDL	10.0	Code	FBC2023/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

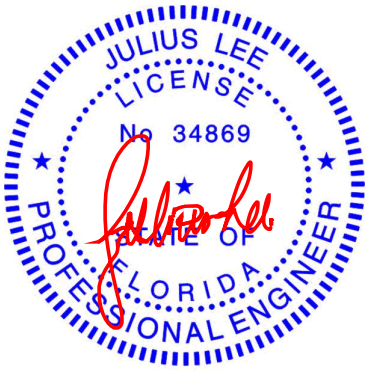
BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=17-7-11, 2=17-7-11, 6=17-7-11, 7=17-7-11, 8=17-7-11, 9=17-7-11, 10=17-7-11, 11=17-7-11, 14=17-7-11
Max Horiz 1=123 (LC 9)
Max Uplift 1=-197 (LC 19), 2=-105 (LC 12), 6=-84 (LC 13), 7=-145 (LC 20), 8=-144 (LC 13), 10=-144 (LC 12), 11=-105 (LC 12), 14=-84 (LC 13)
Max Grav 1=98 (LC 12), 2=390 (LC 19), 6=352 (LC 1), 7=55 (LC 13), 8=364 (LC 20), 9=253 (LC 1), 10=364 (LC 19), 11=390 (LC 19), 14=352 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-145/203, 2-3=-126/84, 3-4=-119/114, 4-5=-105/107, 5-6=-90/62, 6-7=-36/92
BOT CHORD 2-10=-64/76, 9-10=-30/76, 8-9=-30/76, 6-8=-68/76
WEBS 4-9=-177/10, 3-10=-276/177, 5-8=-275/177

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 0-3-11 to 3-3-11, Zone1 3-3-11 to 8-9-13, Zone2 8-9-13 to 12-9-13, Zone1 12-9-13 to 17-4-0 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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 4-0-0 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 .
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 105 lb uplift at joint 2, 84 lb uplift at joint 6, 197 lb uplift at joint 1, 145 lb uplift at joint 7, 144 lb uplift at joint 10, 144 lb uplift at joint 8, 105 lb uplift at joint 2 and 84 lb uplift at joint 6.
11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

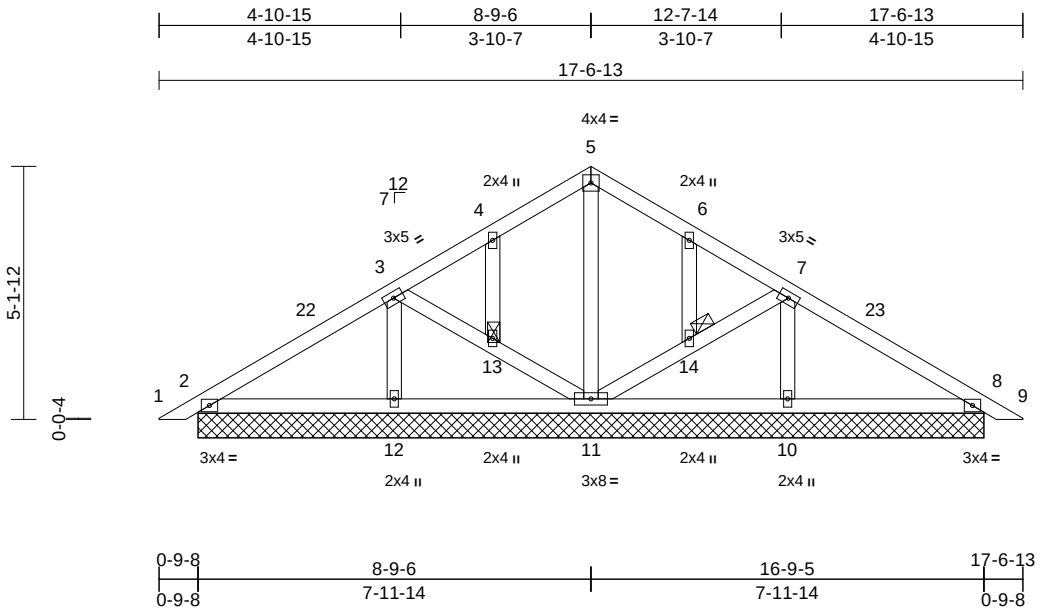
November 6,2024

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

Job	Truss	Truss Type	Qty	Ply	Bootle Residence	T35470370
1678-A	PB2	Piggyback	1	1	Job Reference (optional)	

19 Lumber, Inc., Old Town, FL - 32680, Run: 8.82 S Oct 10 2024 Print: 8.820 S Oct 10 2024 MiTek Industries, Inc. Tue Nov 05 13:22:25 Page: 1

ID:wRjbceiwsFZxstwII77J6Hz0910-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:42.6

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	0.17	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.13	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00	19	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 86 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 6-0-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
JOINTS	1 Brace at Jt(s): 13, 14

REACTIONS (size) 2=15-11-12, 8=15-11-12, 10=15-11-12, 11=15-11-12, 12=15-11-12, 15=15-11-12, 19=15-11-12

Max Horiz 2=-123 (LC 10), 15=-123 (LC 10)

Max Uplift 2=-33 (LC 13), 8=-52 (LC 13), 10=-47 (LC 13), 11=-66 (LC 13), 12=-68 (LC 12), 15=-33 (LC 13), 19=-52 (LC 13)

Max Grav 2=195 (LC 25), 8=195 (LC 26), 10=307 (LC 26), 11=337 (LC 1), 12=323 (LC 19), 15=195 (LC 25), 19=195 (LC 26)

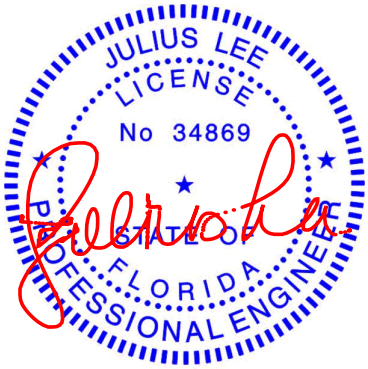
FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/16, 2-3=-122/68, 3-4=-81/53, 4-5=-40/68, 5-6=-40/64, 6-7=-67/48, 7-8=-100/51, 8-9=0/16
BOT CHORD	2-12=-45/98, 11-12=-44/96, 10-11=0/61, 8-10=-3/61
WEBS	5-11=-180/32, 11-14=-96/108, 7-14=-79/96, 3-13=-78/80, 11-13=-90/95, 4-13=-34/30, 3-12=-215/94, 6-14=-34/30, 7-10=-202/74

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 0-3-11 to 3-3-11, Zone1 3-3-11 to 8-9-13, Zone2 8-9-13 to 12-10-0, Zone1 12-10-0 to 17-4-0 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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 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 .
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 33 lb uplift at joint 2, 52 lb uplift at joint 8, 66 lb uplift at joint 11, 68 lb uplift at joint 12, 47 lb uplift at joint 10, 33 lb uplift at joint 2 and 52 lb uplift at joint 8.
11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

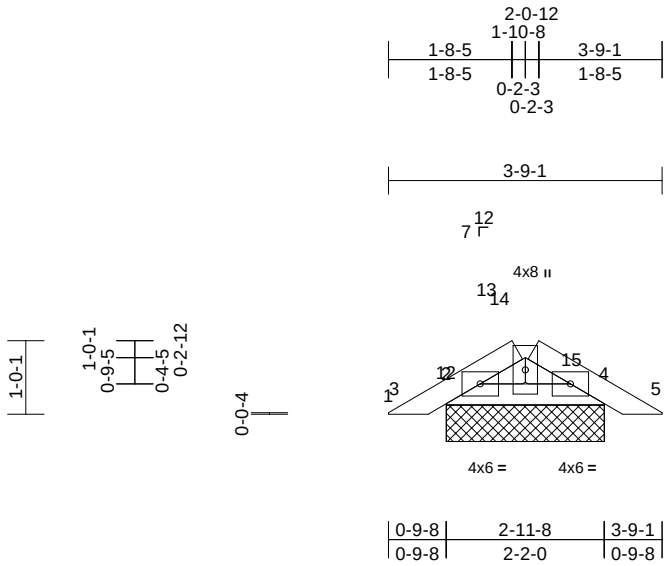
November 6,2024

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

Job	Truss	Truss Type	Qty	Ply	Bootle Residence	
1678-A	PB3	Piggyback	1	1	Job Reference (optional)	T35470371

19 Lumber, Inc., Old Town, FL - 32680, Run: 8.82 S Oct 10 2024 Print: 8.820 S Oct 10 2024 MiTek Industries, Inc. Tue Nov 05 13:22:25 Page: 1

ID:8di8M5PEIZQUM2WVnNBSc0z091P-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:18.1

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	0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.05	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	9	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MP							Weight: 11 lb	FT = 20%

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

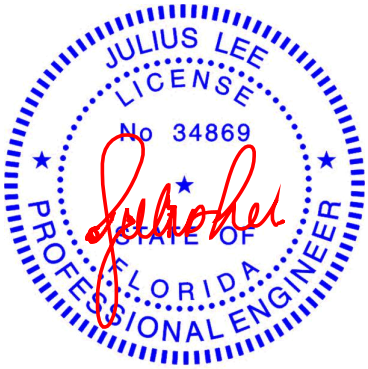
BRACING
TOP CHORD Structural wood sheathing directly applied or 3-9-14 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=2-2-0, 4=2-2-0, 6=2-2-0, 9=2-2-0
Max Horiz 2=-16 (LC 10), 6=-16 (LC 10)
Max Uplift 4=-20 (LC 13), 9=-20 (LC 13)
Max Grav 2=276 (LC 1), 4=102 (LC 20), 6=276 (LC 1), 9=102 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-3=0/16, 1-2=-47/107, 1-4=-86/32, 4-5=0/16
BOT CHORD 2-4=-8/77

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 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 requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 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 .
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 20 lb uplift at joint 4 and 20 lb uplift at joint 4.
11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

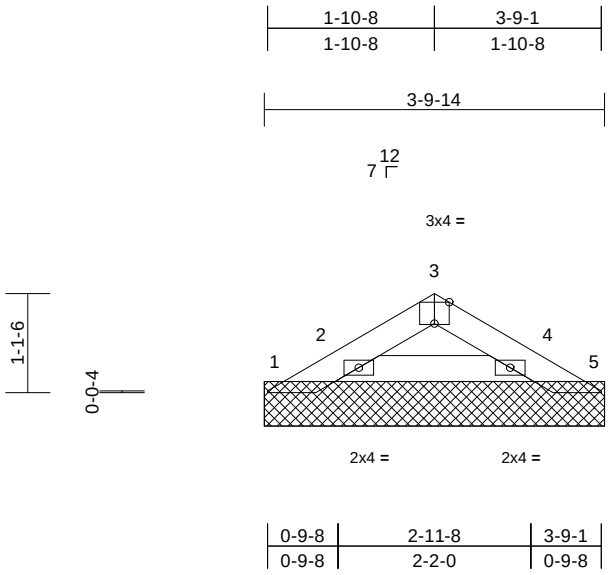
November 6,2024

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

Job	Truss	Truss Type	Qty	Ply	Bootle Residence	
1678-A	PB4	Piggyback	16	1	Job Reference (optional)	T35470372

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

Run: 8.82 S Oct 10 2024 Print: 8.820 S Oct 10 2024 MiTek Industries, Inc. Tue Nov 05 13:22:25
ID:vABA1qVFs0QLJG71F3KKwiz091H-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:16.1

Plate Offsets (X, Y): [3:0-2-0,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	0.03	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.02	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	9	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MP							Weight: 10 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 3-9-14 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=3-9-14, 2=3-9-14, 4=3-9-14, 5=3-9-14, 6=3-9-14, 9=3-9-14
Max Horiz 1=-23 (LC 8)
Max Uplift 1=-13 (LC 10), 2=-24 (LC 12), 4=-20 (LC 13), 5=-6 (LC 3), 6=-24 (LC 12), 9=-20 (LC 13)
Max Grav 1=10 (LC 9), 2=144 (LC 19), 4=131 (LC 1), 5=2 (LC 26), 6=144 (LC 19), 9=131 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-24/39, 2-3=-57/52, 3-4=-58/52, 4-5=0/22
BOT CHORD 2-4=-3/49

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 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 requires continuous bottom chord bearing.
6) Gable studs spaced at 4-0-0 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 .
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 24 lb uplift at joint 2, 20 lb uplift at joint 4, 13 lb uplift at joint 1, 6 lb uplift at joint 5, 24 lb uplift at joint 2 and 20 lb uplift at joint 4.
11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

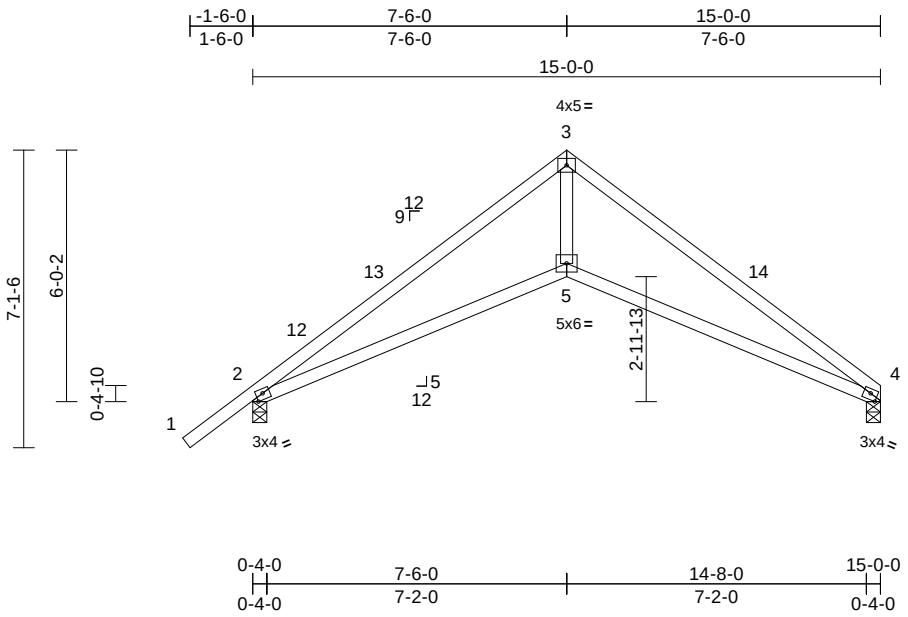
November 6,2024

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

Job	Truss	Truss Type	Qty	Ply	Bootle Residence	T35470373
1678-A	S1	Scissor	1	1	Job Reference (optional)	

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

Run: 8.82 S Oct 10 2024 Print: 8.820 S Oct 10 2024 MiTek Industries, Inc. Tue Nov 05 13:22:25 Page: 1
ID:GWV_UEe6h9_tqk2NSkYcD0z24dj-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:50.2

Plate Offsets (X, Y): [2:0-2-0,Edge], [4:0-2-0,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	0.83	Vert(LL)	0.16	5-8	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.60	Vert(CT)	-0.25	5-8	>723	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.21	Horz(CT)	0.06	4	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 59 lb	FT = 20%

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

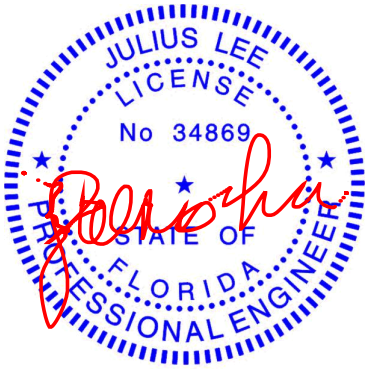
BRACING
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-4-0, 4=0-4-0
Max Horiz 2=159 (LC 9)
Max Uplift 2=-129 (LC 12), 4=-89 (LC 13)
Max Grav 2=700 (LC 1), 4=595 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/57, 2-3=-1276/174, 3-4=-1273/195
BOT CHORD 2-5=-91/1035, 4-5=-86/1033
WEBS 3-5=-21/952

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 -1-7-1 to 1-4-15, Zone1 1-4-15 to 7-6-0, Zone2 7-6-0 to 11-8-15, Zone1 11-8-15 to 15-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 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 .
7) Bearing at joint(s) 4, 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 89 lb uplift at joint 4 and 129 lb uplift at joint 2.

LOAD CASE(S) Standard



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

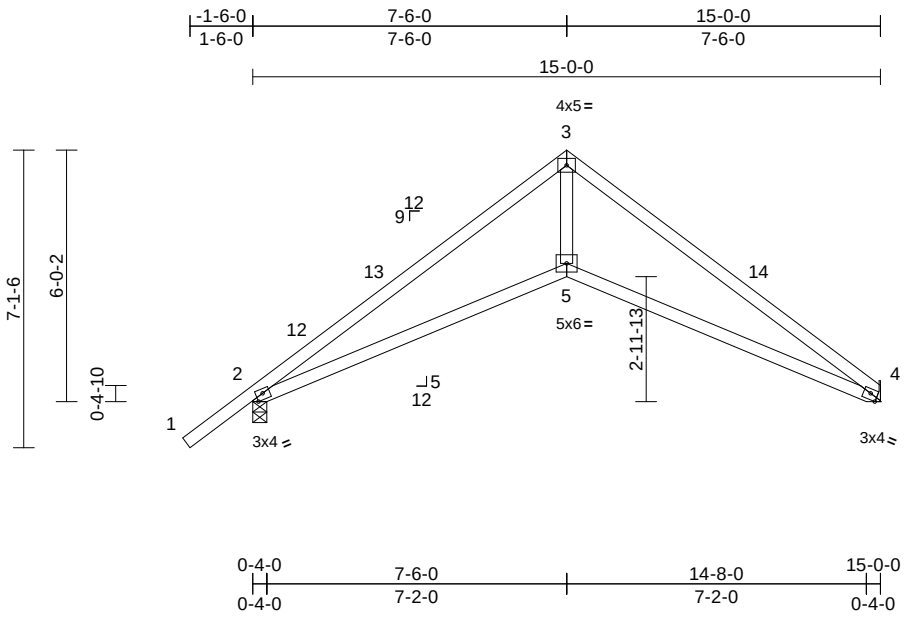
November 6,2024

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

Job	Truss	Truss Type	Qty	Ply	Bootle Residence	T35470374
1678-A	S2	Scissor	1	1	Job Reference (optional)	

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

Run: 8.82 S Oct 10 2024 Print: 8.820 S Oct 10 2024 MiTek Industries, Inc. Tue Nov 05 13:22:25 Page: 1
ID:lwdFh2di3HNso2RFe5SPu5z08MV-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:50.2

Plate Offsets (X, Y): [2:0-2-0,Edge], [4:0-2-0,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	0.83	Vert(LL)	0.16	5-8	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.60	Vert(CT)	-0.25	5-8	>723	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.21	Horz(CT)	0.06	4	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 59 lb	FT = 20%

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

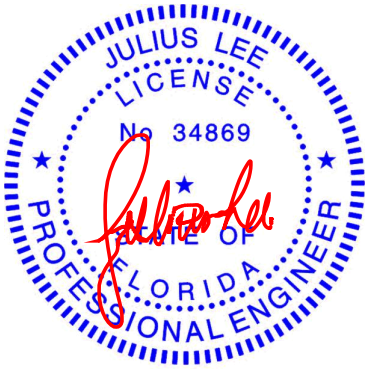
BRACING
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-4-0, 4= Mechanical
Max Horiz 2=159 (LC 11)
Max Uplift 2=-129 (LC 12), 4=-89 (LC 13)
Max Grav 2=700 (LC 1), 4=595 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/57, 2-3=-1276/174, 3-4=-1273/195
BOT CHORD 2-5=-91/1035, 4-5=-86/1033
WEBS 3-5=-21/952

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 -1-7-1 to 1-4-15, Zone1 1-4-15 to 7-6-0, Zone2 7-6-0 to 11-8-15, Zone1 11-8-15 to 15-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
6) Bearings are assumed to be: Joint 2 SP No.2 .
7) Refer to girder(s) for truss to truss connections.
8) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 89 lb uplift at joint 4 and 129 lb uplift at joint 2.

LOAD CASE(S) Standard



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

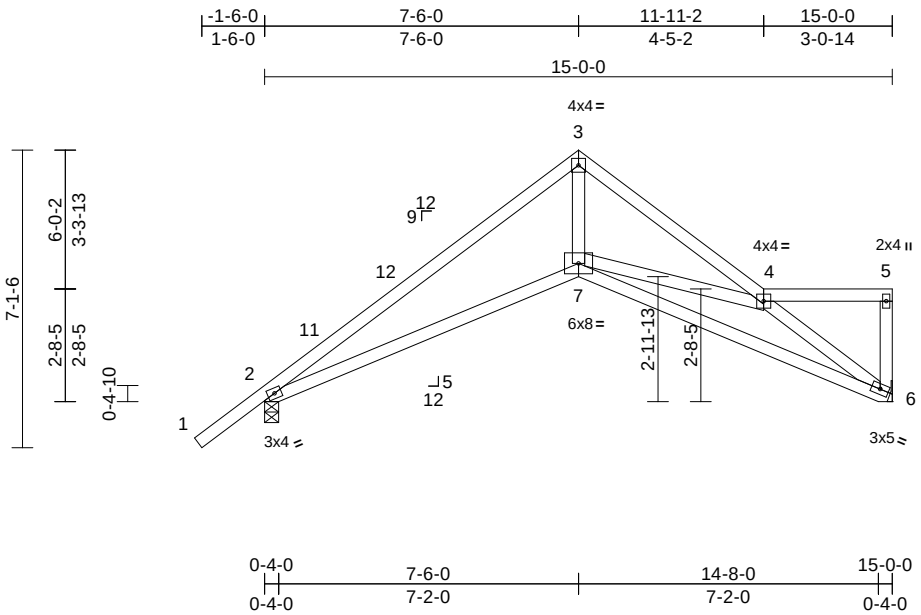
November 6,2024

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

Job	Truss	Truss Type	Qty	Ply	Bootle Residence	
1678-A	S3	Roof Special	1	1	Job Reference (optional)	T35470375

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

Run: 8.82 S Oct 10 2024 Print: 8.820 S Oct 10 2024 MiTek Industries, Inc. Tue Nov 05 13:22:25 ID:lwdFh2di3HNso2RFe5SPu5z08MV-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:50.2

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	0.80	Vert(LL)	0.15	7-10	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.60	Vert(CT)	-0.23	6-7	>762	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.35	Horz(CT)	0.10	6	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 73 lb	FT = 20%

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

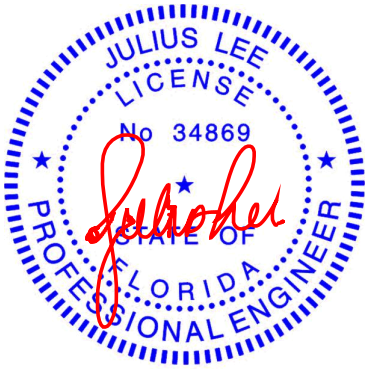
BRACING
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 8-5-11 oc bracing.

REACTIONS (size) 2=0-4-0, 6= Mechanical
Max Horiz 2=192 (LC 11)
Max Uplift 2=-128 (LC 12), 6=-98 (LC 13)
Max Grav 2=695 (LC 1), 6=589 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/57, 2-3=-1232/335, 3-4=-1146/381, 4-5=-68/35, 5-6=-91/53
BOT CHORD 2-7=-359/1010, 6-7=-458/1180
WEBS 3-7=-238/952, 4-7=-251/292, 4-6=-1352/508

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 -1-7-1 to 1-4-15, Zone1 1-4-15 to 7-6-0, Zone3 7-6-0 to 11-11-2, Zone1 11-11-2 to 14-10-4 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) 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) Bearings are assumed to be: Joint 2 SP No.2 .
8) Refer to girder(s) for truss to truss connections.
9) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 98 lb uplift at joint 6 and 128 lb uplift at joint 2.

LOAD CASE(S) Standard



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

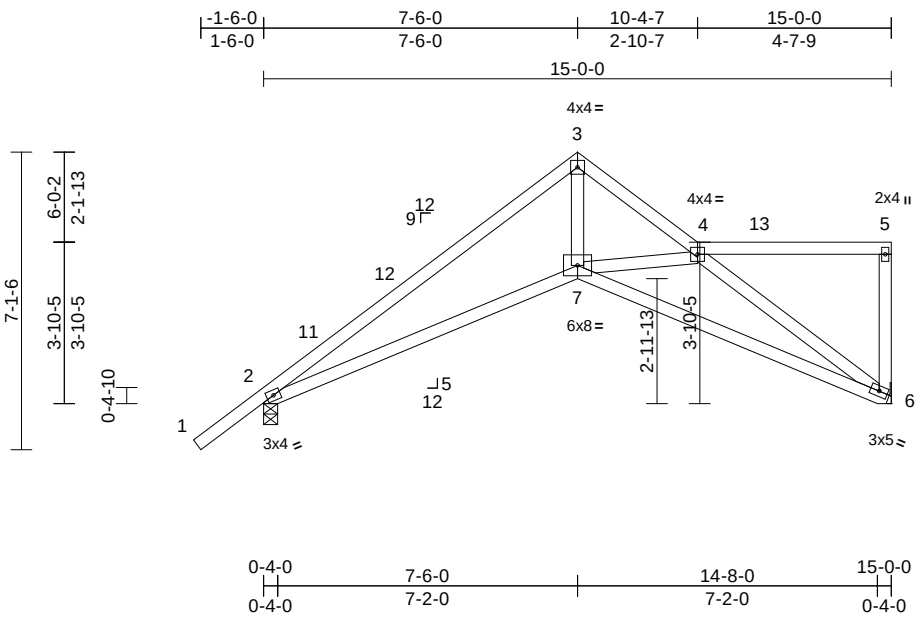
November 6,2024

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

Job	Truss	Truss Type	Qty	Ply	Bootle Residence	T35470376
1678-A	S4	Roof Special	1	1	Job Reference (optional)	

19 Lumber, Inc., Old Town, FL - 32680, Run: 8.82 S Oct 10 2024 Print: 8.820 S Oct 10 2024 MiTek Industries, Inc. Tue Nov 05 13:22:25 Page: 1

ID:lwdFh2di3HNso2RFe5SPu5z08MV-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:50.2

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	0.80	Vert(LL)	0.15	7-10	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.61	Vert(CT)	-0.24	6-7	>747	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.73	Horz(CT)	0.10	6	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 75 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 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 8-0-15 oc bracing.

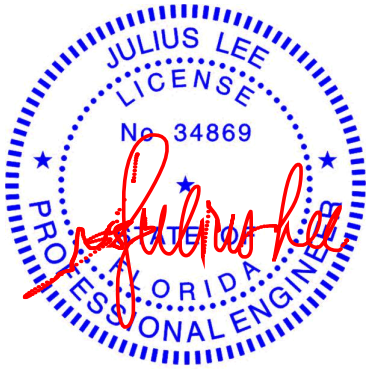
REACTIONS (size) 2=0-4-0, 6= Mechanical
Max Horiz 2=207 (LC 11)
Max Uplift 2=-127 (LC 12), 6=-110 (LC 13)
Max Grav 2=695 (LC 1), 6=589 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/57, 2-3=-1230/381, 3-4=-1123/437, 4-5=-85/66, 5-6=-142/83
BOT CHORD 2-7=-469/1022, 6-7=-494/1127
WEBS 3-7=-311/981, 4-7=-189/168, 4-6=-1270/515

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 -1-7-1 to 1-4-15, Zone1 1-4-15 to 7-6-0, Zone3 7-6-0 to 10-4-7, Zone1 10-4-7 to 14-10-4 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) 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) Bearings are assumed to be: Joint 2 SP No.2 .
8) Refer to girder(s) for truss to truss connections.
9) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 110 lb uplift at joint 6 and 127 lb uplift at joint 2.

LOAD CASE(S) Standard



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

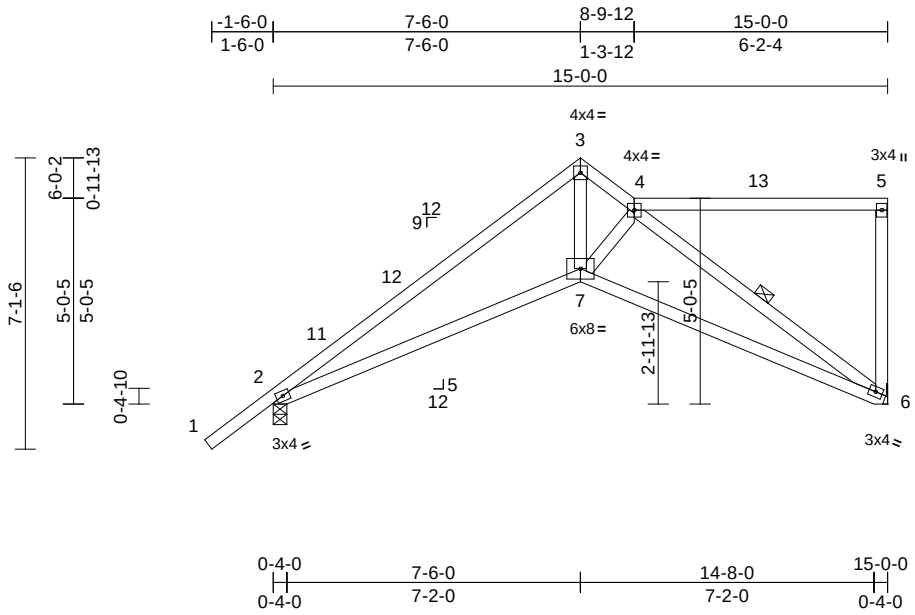
November 6,2024

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

Job	Truss	Truss Type	Qty	Ply	Bootle Residence	
1678-A	S5	Roof Special	1	1	Job Reference (optional)	T35470377

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

Run: 8.82 S Oct 10 2024 Print: 8.820 S Oct 10 2024 MiTek Industries, Inc. Tue Nov 05 13:22:26 Page: 1
ID:lwdFh2di3HNso2RFe5SPu5z08MV-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:50.2

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	0.78	Vert(LL)	0.14	7-10	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.61	Vert(CT)	-0.24	6-7	>735	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.33	Horz(CT)	0.10	6	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 77 lb	FT = 20%

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

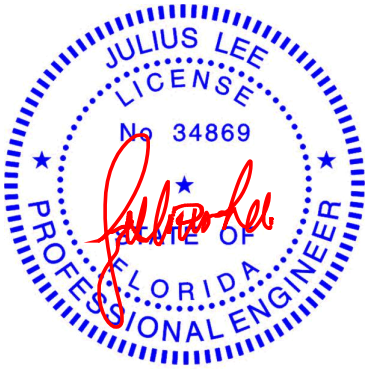
BRACING
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 7-4-11 oc bracing.
WEBS 1 Row at midpt 4-6

REACTIONS (size) 2=0-4-0, 6= Mechanical
Max Horiz 2=222 (LC 11)
Max Uplift 2=-126 (LC 12), 6=-128 (LC 13)
Max Grav 2=695 (LC 1), 6=589 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/57, 2-3=-1234/413, 3-4=-1083/469, 4-5=-104/91, 5-6=-182/101
BOT CHORD 2-7=-568/1112, 6-7=-545/1108
WEBS 3-7=-346/1010, 4-7=-180/125, 4-6=-1175/552

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 -1-7-1 to 1-4-15, Zone1 1-4-15 to 7-6-0, Zone3 7-6-0 to 8-9-12, Zone1 8-9-12 to 14-10-4 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) 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) Bearings are assumed to be: Joint 2 SP No.2 .
8) Refer to girder(s) for truss to truss connections.
9) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 128 lb uplift at joint 6 and 126 lb uplift at joint 2.

LOAD CASE(S) Standard



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

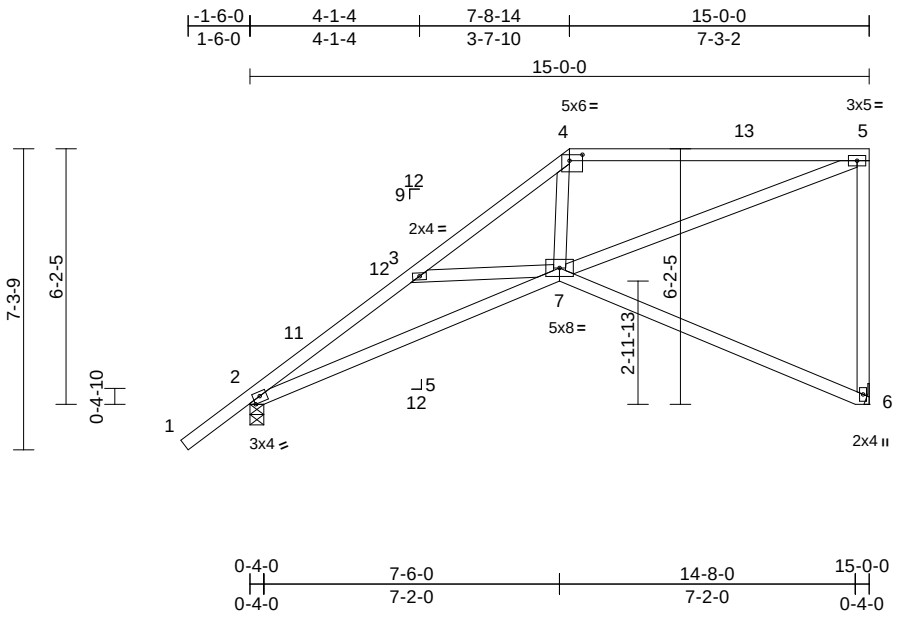
November 6,2024

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

Job	Truss	Truss Type	Qty	Ply	Bootle Residence	T35470378
1678-A	S6	Half Hip	1	1	Job Reference (optional)	

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

Run: 8.82 S Oct 10 2024 Print: 8.820 S Oct 10 2024 MiTek Industries, Inc. Tue Nov 05 13:22:26 Page: 1
ID:lwdFh2di3HNso2RFe5SPu5z08MV-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:50.9

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

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	0.78	Vert(LL)	-0.12	6-7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.49	Vert(CT)	-0.25	6-7	>709	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.53	Horz(CT)	0.09	6	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 81 lb	FT = 20%

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

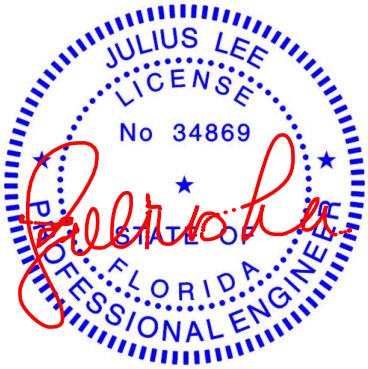
BRACING
TOP CHORD Structural wood sheathing directly applied or 3-4-5 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-5-11 oc bracing.

REACTIONS (size) 2=0-4-0, 6= Mechanical
Max Horiz 2=243 (LC 11)
Max Uplift 2=-125 (LC 12), 6=-150 (LC 9)
Max Grav 2=695 (LC 1), 6=589 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/57, 2-3=-1435/567, 3-4=-1119/421, 4-5=-825/391, 5-6=-525/288
BOT CHORD 2-7=-822/1407, 6-7=-107/134
WEBS 3-7=-317/241, 4-7=-78/386, 5-7=-489/946

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 -1-7-1 to 1-4-15, Zone1 1-4-15 to 7-8-14, Zone2 7-8-14 to 11-11-13, Zone1 11-11-13 to 14-10-4 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) 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) Bearings are assumed to be: Joint 2 SP No.2 .
8) Refer to girder(s) for truss to truss connections.
9) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 150 lb uplift at joint 6 and 125 lb uplift at joint 2.

LOAD CASE(S) Standard



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

November 6,2024

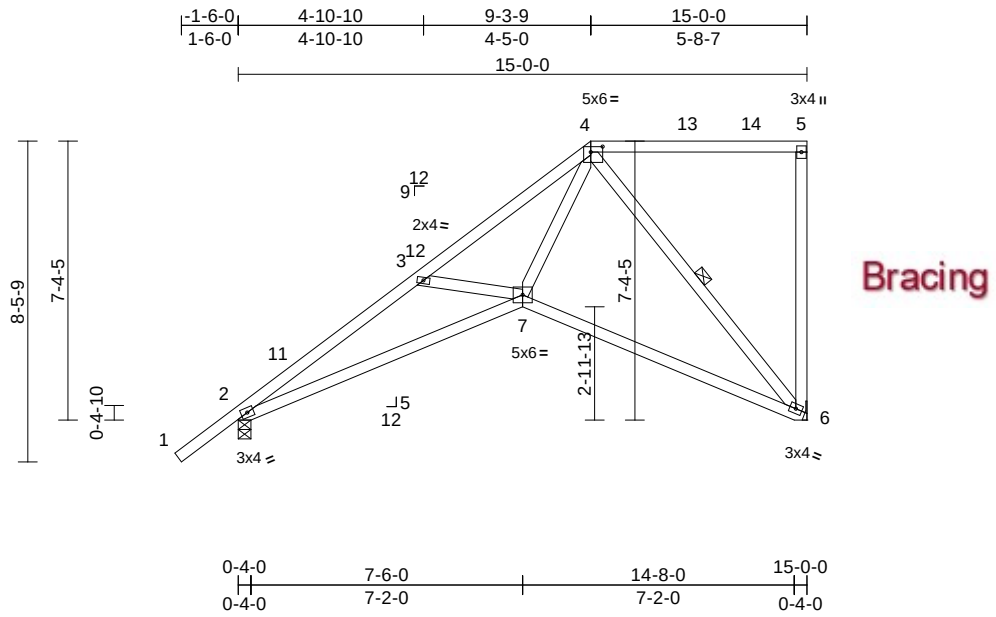
MiTek®
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Bootle Residence	
1678-A	S7	Half Hip	1	1	Job Reference (optional)	T35470379

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

Run: 8.82 S Oct 10 2024 Print: 8.820 S Oct 10 2024 MiTek Industries, Inc. Tue Nov 05 13:22:26

ID:lwdFh2di3HNso2RFe5SPu5z08MV-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Bracing

Scale = 1:55.5

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

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	0.41	Vert(LL)	-0.12	6-7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.55	Vert(CT)	-0.26	6-7	>698	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.29	Horz(CT)	0.09	6	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 87 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 4-10-12 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-4-6 oc bracing.
WEBS 1 Row at midpt 4-6

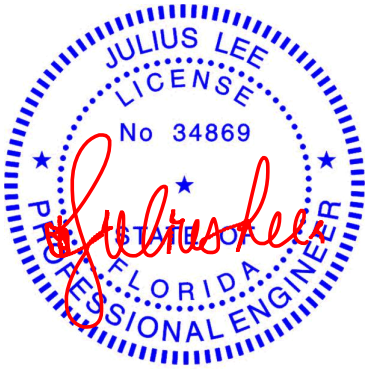
REACTIONS (size) 2=0-4-0, 6= Mechanical
Max Horiz 2=287 (LC 11)
Max Uplift 2=-126 (LC 12), 6=-154 (LC 9)
Max Grav 2=695 (LC 1), 6=589 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/57, 2-3=-1420/533, 3-4=-1078/412, 4-5=-130/131, 5-6=-165/88
BOT CHORD 2-7=-851/1428, 6-7=-401/652
WEBS 3-7=-337/254, 4-7=-474/1065, 4-6=-775/458

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 -1-7-1 to 1-4-15, Zone1 1-4-15 to 9-3-9, Zone2 9-3-9 to 13-6-8, Zone1 13-6-8 to 14-10-4 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) 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) Bearings are assumed to be: Joint 2 SP No.2 .
8) Refer to girder(s) for truss to truss connections.
9) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 154 lb uplift at joint 6 and 126 lb uplift at joint 2.

LOAD CASE(S) Standard



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

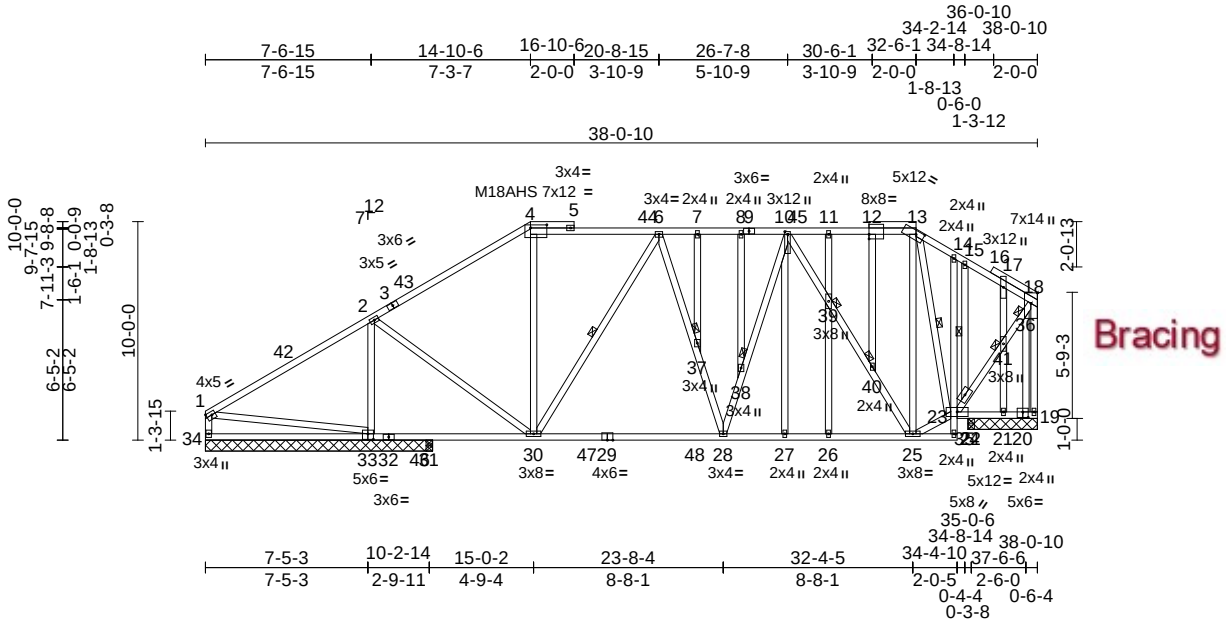
November 6,2024

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

Job	Truss	Truss Type	Qty	Ply	Bootle Residence	
1678-A	SG1	Piggyback Base Structural Gable	1	1	Job Reference (optional)	T35470380

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

Run: 8.82 S Oct 10 2024 Print: 8.820 S Oct 10 2024 MiTek Industries, Inc. Tue Nov 05 13:22:26 Page: 1
ID:1nSab9XTpOs9FLseQLtVM7z24ds-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:77.5

Plate Offsets (X, Y): [1:Edge,0-1-12], [4:0-9-0,0-1-12], [10:0-1-8,0-1-8], [12:Edge,0-2-8], [13:0-4-8,0-2-0], [18:Edge,0-3-8], [20:0-3-0,0-3-0], [33:0-3-0,0-3-0]

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	0.72	Vert(LL)	-0.23	28-30	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.82	Vert(CT)	-0.37	28-30	>794	180	M18AHS	186/179
BCLL	0.0*	Rep Stress Incr	YES	WB	0.75	Horz(CT)	0.02	22	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 370 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

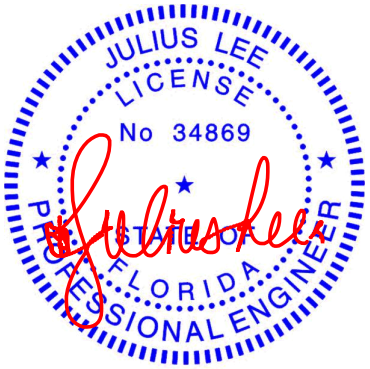
BRACING
TOP CHORD Structural wood sheathing directly applied or 5-5-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. Except:
6-0-0 oc bracing: 15-35
WEBS 1 Row at midpt 6-30, 13-23
JOINTS 1 Brace at Jt(s): 36, 37, 38, 39, 40, 41

REACTIONS (size) 19=3-2-0, 20=3-2-0, 21=3-2-0, 22=0-3-8, 31=0-3-8, 33=10-4-10, 34=10-4-10
Max Horiz 34=292 (LC 9)
Max Uplift 19=-103 (LC 9), 20=-111 (LC 8), 21=-75 (LC 13), 22=-55 (LC 8), 33=-245 (LC 9), 34=-18 (LC 12)
Max Grav 19=497 (LC 2), 20=330 (LC 22), 21=58 (LC 20), 22=509 (LC 2), 31=49 (LC 3), 33=1776 (LC 2), 34=208 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-153/262, 2-4=-902/215, 4-6=-693/215, 6-7=-956/247, 7-8=-956/247, 8-10=-956/247, 10-11=-489/211, 11-12=-492/214, 12-13=-500/215, 13-14=-410/217, 14-15=-429/180, 15-17=-437/167, 17-18=-372/140, 1-34=-90/79, 18-19=-532/76
BOT CHORD 31-34=-324/386, 30-31=-192/216, 28-30=-267/935, 27-28=-234/874, 26-27=-234/874, 25-26=-234/874, 24-25=-22/71, 15-35=-42/20, 22-23=-97/100, 21-22=-97/100, 19-21=-97/100, 23-24=-13/8, 14-23=-53/71, 20-36=-154/23
WEBS 2-33=-1470/307, 2-30=-138/974, 4-30=-25/201, 6-30=-509/218, 6-37=-10/120, 28-37=-17/129, 28-38=-6/298, 10-38=-32/305, 10-39=-721/189, 39-40=-757/186, 25-40=-740/194, 13-25=-83/595, 23-25=-139/463, 1-33=-336/185, 13-23=-629/134, 7-37=-7/10, 8-38=-37/27, 10-27=-28/82, 11-39=-58/59, 26-39=-29/79, 12-40=-1/25, 17-41=-263/116, 21-41=-224/115, 23-35=-113/598, 35-41=-109/628, 36-41=-116/665, 18-36=-103/533

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 0-1-12 to 3-11-9, Zone1 3-11-9 to 14-10-6, Zone2 14-10-6 to 20-3-3, Zone1 20-3-3 to 32-6-1, Zone3 32-6-1 to 37-10-14 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
5) Provide adequate drainage to prevent water ponding.
6) All plates are MT20 plates unless otherwise indicated.
7) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
8) Gable studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * 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.
11) All bearings are assumed to be SP No.2 .
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 245 lb uplift at joint 33, 111 lb uplift at joint 20, 103 lb uplift at joint 19, 18 lb uplift at joint 34, 75 lb uplift at joint 21 and 55 lb uplift at joint 22.

LOAD CASE(S) Standard



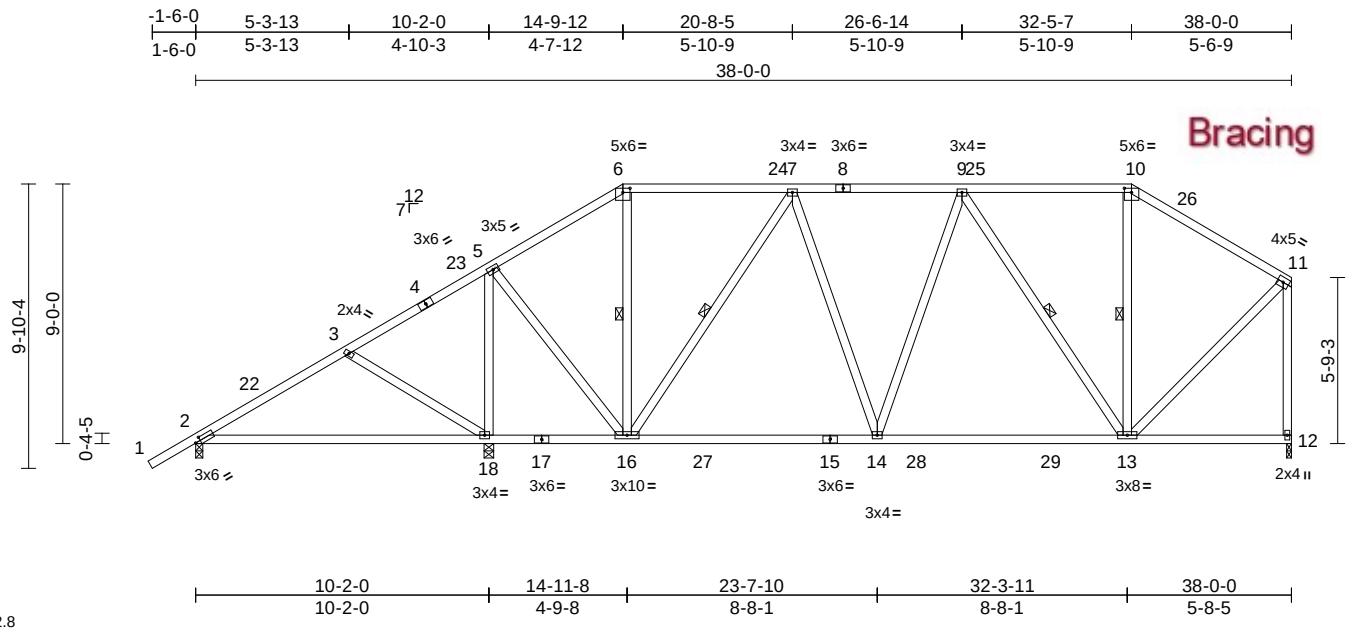
Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date: November 6,2024

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

Job	Truss	Truss Type	Qty	Ply	Bootle Residence	
1678-A	T1	Piggyback Base	6	1	Job Reference (optional)	T35470381

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

Run: 8.82 S Oct 10 2024 Print: 8.820 S Oct 10 2024 MiTek Industries, Inc. Tue Nov 05 13:22:27 ID:ZbvCOpWr25kIeBHSteMGpvz24dt-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:72.8

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

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	0.61	Vert(LL)	-0.23	18-21	>538	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.96	Vert(CT)	-0.46	18-21	>268	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.86	Horz(CT)	0.03	12	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 249 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 5-8-13 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS	1 Row at midpt 6-16, 7-16, 9-13, 10-13

REACTIONS (size) 2=0-3-0, 12=0-2-0, 18=0-4-0
Max Horiz 2=302 (LC 11)
Max Uplift 2=-67 (LC 12), 12=-146 (LC 8), 18=-261 (LC 9)
Max Grav 2=424 (LC 19), 12=1198 (LC 2), 18=1840 (LC 2)

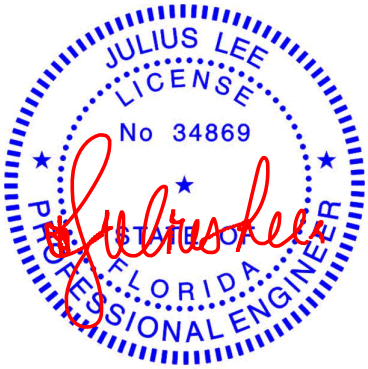
FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/48, 2-3=-268/77, 3-5=-164/272, 5-6=-615/188, 6-7=-479/187, 7-9=-971/233, 9-10=-644/217, 10-11=-809/205, 11-12=-1134/170
BOT CHORD	2-18=-145/265, 16-18=-219/162, 14-16=-241/874, 13-14=-231/928, 12-13=-84/96
WEBS	6-16=-53/115, 7-16=-727/194, 7-14=0/323, 9-14=0/198, 9-13=-544/182, 10-13=-9/175, 11-13=-129/890, 3-18=-406/190, 5-18=-1383/312, 5-16=-171/1009

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 -1-6-14 to 2-2-15, Zone1 2-2-15 to 14-9-12, Zone2 14-9-12 to 20-2-9, Zone1 20-2-9 to 32-5-7, Zone3 32-5-7 to 37-10-4 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) 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, with BCDL = 10.0psf.
7) All bearings are assumed to be SP No.2 .
8) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 12.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 67 lb uplift at joint 2, 146 lb uplift at joint 12 and 261 lb uplift at joint 18.

LOAD CASE(S) Standard



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

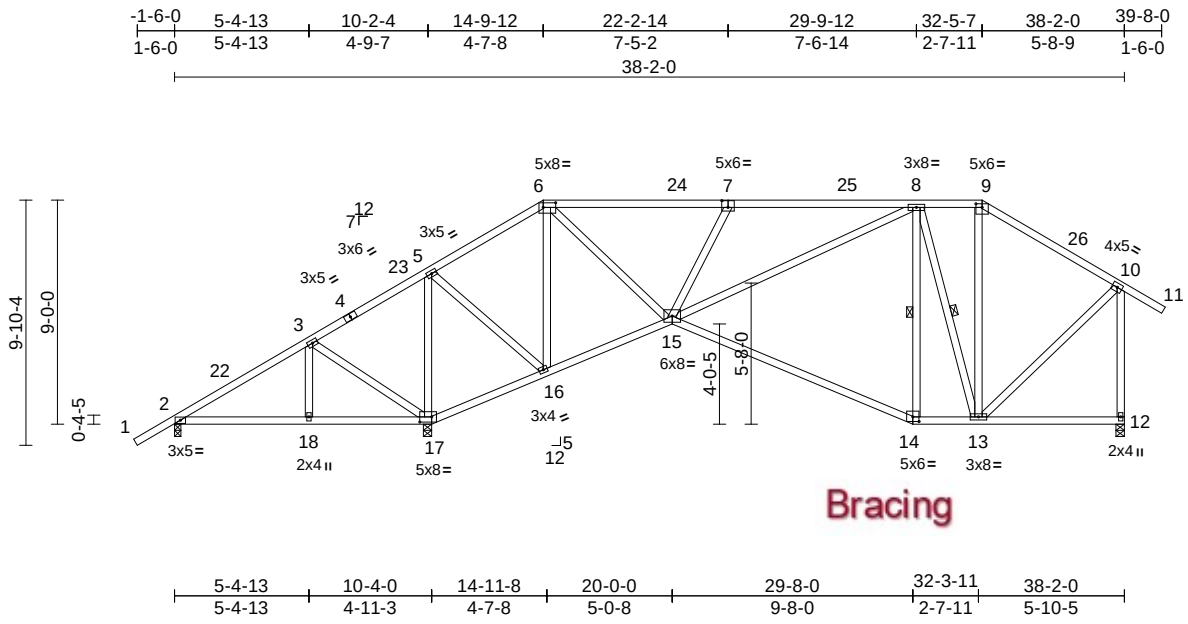
November 6,2024

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

Job	Truss	Truss Type	Qty	Ply	Bootle Residence	
1678-A	T2	Piggyback Base	2	1	Job Reference (optional)	T35470382

19 Lumber, Inc., Old Town, FL - 32680, Run: 8.82 S Oct 10 2024 Print: 8.820 S Oct 10 2024 MiTek Industries, Inc. Tue Nov 05 13:22:27 Page: 1

ID:1nSab9XTpOs9FLseQLtVM7z24ds-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:84.7

Plate Offsets (X, Y): [6:0-6-0,0-2-4], [7:0-3-0,0-3-4], [9:0-3-0,0-1-12], [14:0-3-0,0-2-4], [17:0-5-12,0-2-8]

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	0.67	Vert(LL)	-0.34	14-15	>966	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.95	Vert(CT)	-0.71	14-15	>468	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.91	Horz(CT)	0.06	12	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 256 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 4-10-12 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 8-14, 8-13

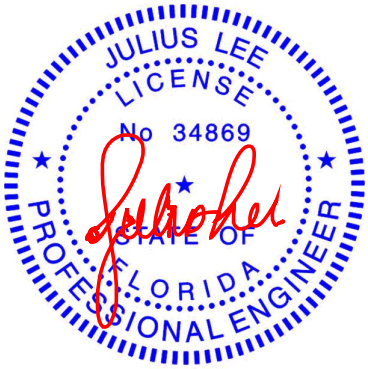
REACTIONS (size) 2=0-3-0, 12=0-4-0, 17=0-4-0
Max Horiz 2=309 (LC 11)
Max Uplift 2=-151 (LC 26), 12=-144 (LC 8), 17=-368 (LC 9)
Max Grav 2=177 (LC 20), 12=1053 (LC 26), 17=2104 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/48, 2-3=-325/563, 3-5=-299/890, 5-6=-193/142, 6-8=-1105/299, 8-9=-474/230, 9-10=-640/223, 10-11=0/52, 10-12=-997/213
BOT CHORD 2-18=-458/289, 17-18=-458/289, 16-17=-826/206, 15-16=-161/213, 14-15=-183/693, 13-14=-154/608, 12-13=-75/93
WEBS 3-18=0/237, 3-17=-461/163, 5-17=-1467/350, 5-16=-247/1111, 6-16=-974/280, 6-15=-229/1054, 7-15=-557/269, 8-15=-257/564, 8-14=-108/132, 8-13=-531/168, 9-13=-55/188, 10-13=-97/631

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 -1-6-14 to 2-2-15, Zone1 2-2-15 to 14-9-12, Zone2 14-9-12 to 20-2-9, Zone1 20-2-9 to 32-5-7, Zone2 32-5-7 to 38-0-4, Zone1 38-0-4 to 39-8-14 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) Provide adequate drainage to prevent water ponding.
5) 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 .
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 151 lb uplift at joint 2, 368 lb uplift at joint 17 and 144 lb uplift at joint 12.

LOAD CASE(S) Standard



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

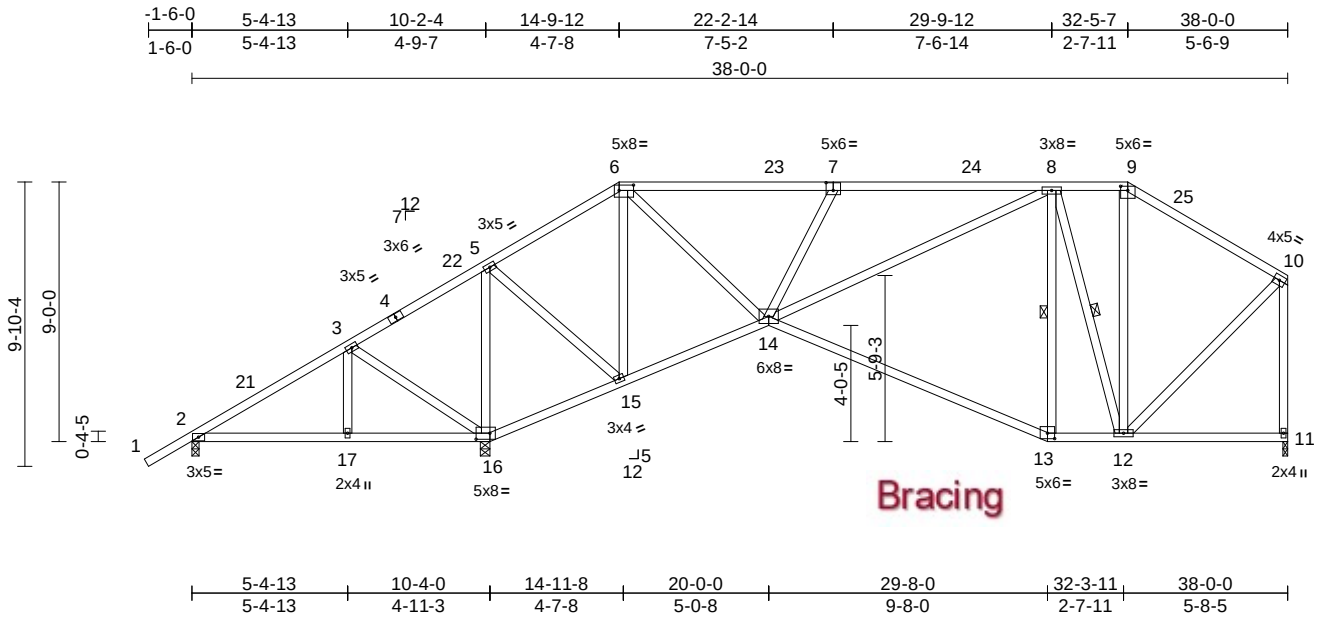
November 6,2024

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

Job	Truss	Truss Type	Qty	Ply	Bootle Residence	
1678-A	T3	Piggyback Base	7	1	Job Reference (optional)	T35470383

19 Lumber, Inc., Old Town, FL - 32680, Run: 8.82 S Oct 10 2024 Print: 8.820 S Oct 10 2024 MiTek Industries, Inc. Tue Nov 05 13:22:27 Page: 1

ID:1nSab9XTpOs9FLseQLtVM7z24ds-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:72.8

Plate Offsets (X, Y): [6:0-6-0,0-2-4], [7:0-3-0,0-3-4], [9:0-3-0,0-1-12], [13:0-3-0,0-2-4], [16:0-5-12,0-2-8]

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	0.67	Vert(LL)	-0.34	13-14	>961	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.95	Vert(CT)	-0.71	13-14	>466	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.91	Horz(CT)	0.06	11	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 253 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 4-10-12 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 8-13, 8-12

REACTIONS (size) 2=0-3-0, 11=0-2-0, 16=0-4-0
Max Horiz 2=302 (LC 11)
Max Uplift 2=-147 (LC 26), 11=-134 (LC 8), 16=-371 (LC 9)
Max Grav 2=178 (LC 20), 11=941 (LC 26), 16=2096 (LC 1)

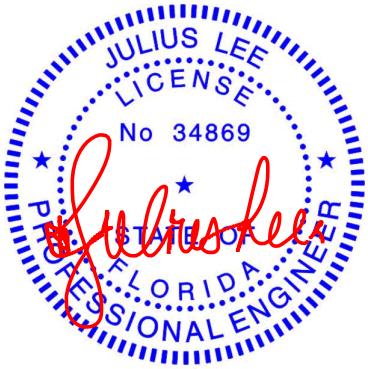
FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/48, 2-3=-333/556, 3-5=-307/883, 5-6=-197/134, 6-8=-1105/299, 8-9=-469/218, 9-10=-624/206, 10-11=-886/170
BOT CHORD 2-17=-452/282, 16-17=-452/282, 15-16=-819/196, 14-15=-155/195, 13-14=-188/689, 12-13=-159/603, 11-12=-81/97
WEBS 3-17=0/237, 3-16=-460/163, 5-16=-1462/355, 5-15=-252/1106, 6-15=-970/285, 6-14=-233/1050, 7-14=-558/269, 8-14=-264/568, 8-13=-105/134, 8-12=-535/169, 9-12=-52/178, 10-12=-101/638

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 -1-6-14 to 2-2-15, Zone1 2-2-15 to 14-9-12, Zone2 14-9-12 to 20-2-9, Zone1 20-2-9 to 32-5-7, Zone3 32-5-7 to 37-10-4 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) 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 .
8) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 11.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 147 lb uplift at joint 2, 371 lb uplift at joint 16 and 134 lb uplift at joint 11.

LOAD CASE(S) Standard

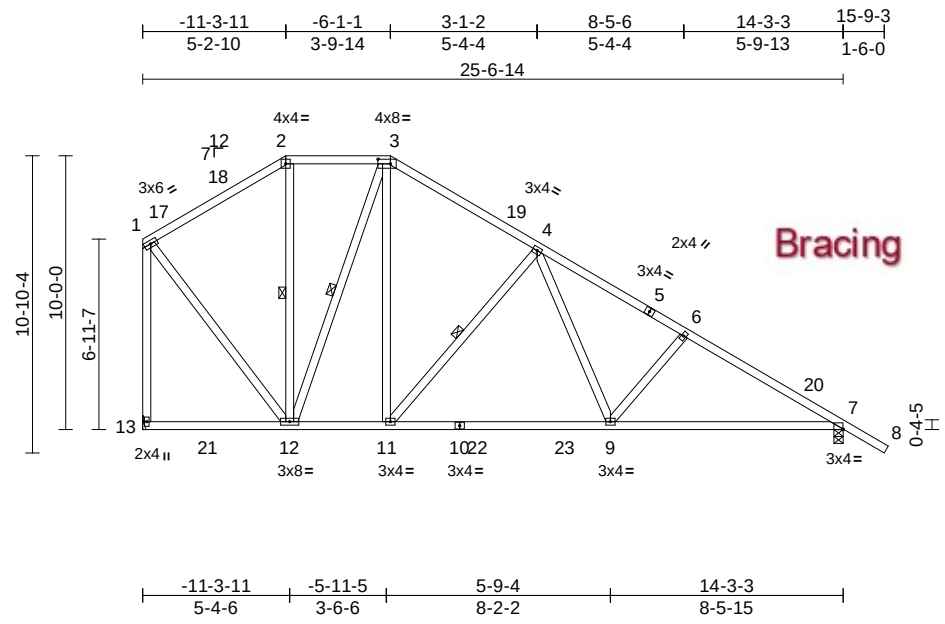


Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

November 6,2024

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

Job	Truss	Truss Type	Qty	Ply	Bootle Residence	
1678-A	T4	Piggyback Base	2	1	Job Reference (optional)	T35470384



Scale = 1:76.8

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

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	0.90	Vert(LL)	-0.17	9-11	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.83	Vert(CT)	-0.28	9-11	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.31	Horz(CT)	0.03	7	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 177 lb	FT = 20%

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

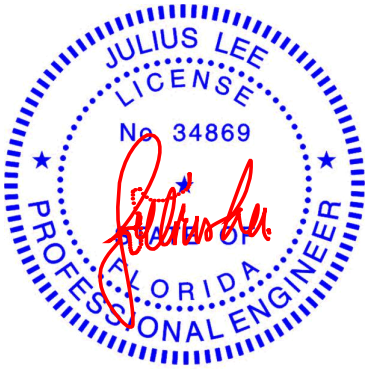
BRACING
TOP CHORD Structural wood sheathing directly applied or 4-0-10 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 2-12, 3-12, 4-11

REACTIONS (size) 7=0-4-0, 13= Mechanical
Max Horiz 13=-342 (LC 10)
Max Uplift 7=-215 (LC 13), 13=-146 (LC 13)
Max Grav 7=1256 (LC 20), 13=1132 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-626/218, 2-3=-496/224, 3-4=-859/236, 4-6=-1630/285, 6-7=-1802/288, 7-8=0/48, 1-13=-1019/213
BOT CHORD 12-13=-202/291, 11-12=0/742, 9-11=-3/1079, 7-9=-139/1503
WEBS 2-12=-92/121, 3-12=-652/136, 3-11=-133/797, 4-11=-731/261, 4-9=-75/663, 6-9=-335/196, 1-12=-155/804

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 11-5-7 to 14-5-7, Zone1 14-5-7 to 16-6-5, Zone3 16-6-5 to 20-4-4, Zone2 20-4-4 to 24-7-2, Zone1 24-7-2 to 38-5-7 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) Provide adequate drainage to prevent water ponding.
5) 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, with BCDL = 10.0psf.
7) Bearings are assumed to be: , Joint 7 SP No.2 .
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 146 lb uplift at joint 13 and 215 lb uplift at joint 7.

LOAD CASE(S) Standard



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

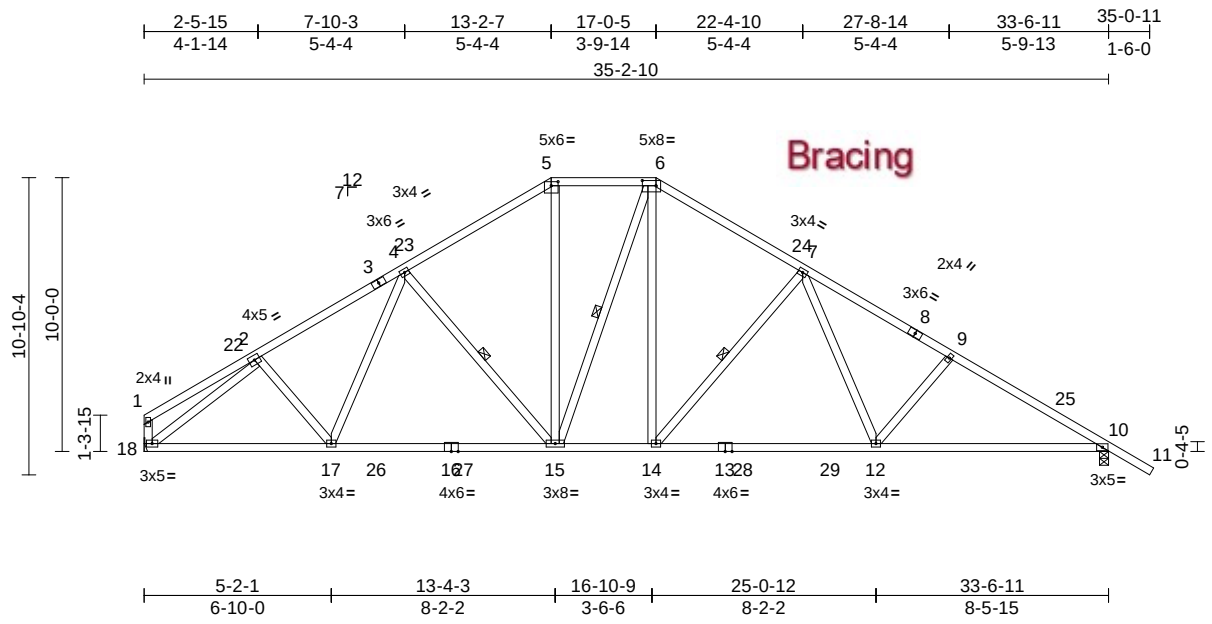
November 6,2024

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

Job	Truss	Truss Type	Qty	Ply	Bootle Residence	
1678-A	T5	Piggyback Base	4	1	Job Reference (optional)	T35470385

19 Lumber, Inc., Old Town, FL - 32680, Run: 8.82 S Oct 10 2024 Print: 8.820 S Oct 10 2024 MiTek Industries, Inc. Tue Nov 05 13:22:27 Page: 1

ID:zAaK0rYjL06tVf01YmwzRYz24dq-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:76.8

Plate Offsets (X, Y): [5:0-3-0,0-1-12], [6:0-6-0,0-2-4]

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	0.42	Vert(LL)	-0.23	12-14	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.97	Vert(CT)	-0.40	12-14	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.91	Horz(CT)	0.10	10	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 223 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 3-3-2 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
2-2-0 oc bracing: 10-12.
WEBS 1 Row at midpt 4-15, 6-15, 7-14

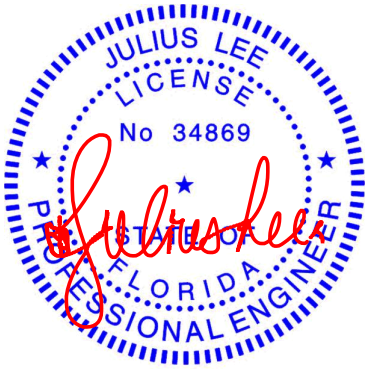
REACTIONS (size) 10=0-4-0, 18= Mechanical
Max Horiz 18=-269 (LC 10)
Max Uplift 10=-260 (LC 13), 18=-206 (LC 12)
Max Grav 10=1671 (LC 20), 18=1563 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-194/69, 2-4=-2046/309, 4-5=-1674/323, 5-6=-1386/312, 6-7=-1702/323, 7-9=-2442/372, 9-10=-2613/375, 10-11=0/48, 1-18=-182/66
BOT CHORD 17-18=-298/1784, 15-17=-208/1758, 14-15=-31/1436, 12-14=-114/1802, 10-12=-214/2201
WEBS 2-17=-22/223, 4-17=-17/254, 4-15=-499/231, 5-15=-93/634, 6-15=-210/129, 6-14=-143/762, 7-14=-732/261, 7-12=-73/657, 9-12=-328/195, 2-18=-1977/253

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 1-9-11 to 5-3-14, Zone1 5-3-14 to 16-6-5, Zone3 16-6-5 to 20-4-4, Zone2 20-4-4 to 25-3-15, Zone1 25-3-15 to 38-5-7 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) Provide adequate drainage to prevent water ponding.
5) 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, with BCDL = 10.0psf.
7) Bearings are assumed to be: , Joint 10 SP No.2 .
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 206 lb uplift at joint 18 and 260 lb uplift at joint 10.

LOAD CASE(S) Standard



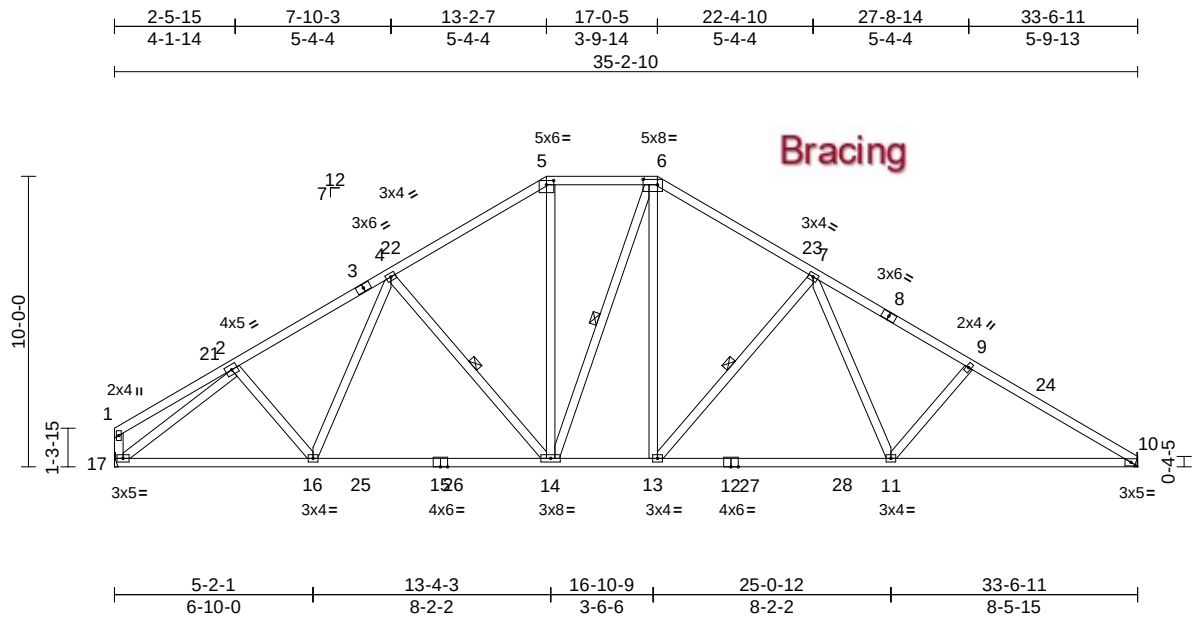
Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

November 6,2024

Job	Truss	Truss Type	Qty	Ply	Bootle Residence	
1678-A	T6	Piggyback Base	3	1	Job Reference (optional)	T35470386

19 Lumber, Inc., Old Town, FL - 32680, Run: 8.82 S Oct 10 2024 Print: 8.820 S Oct 10 2024 MiTek Industries, Inc. Tue Nov 05 13:22:28 Page: 1

ID:zAaK0rYjL06tVf01YmwzRYz24dq-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:73.4

Plate Offsets (X, Y): [5:0-3-0,0-1-12], [6:0-6-0,0-2-4]

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	0.48	Vert(LL)	-0.23	11-13	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.99	Vert(CT)	-0.40	11-13	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.91	Horz(CT)	0.10	10	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 221 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 3-1-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 4-14, 6-14, 7-13

REACTIONS (size) 10= Mechanical, 17= Mechanical
Max Horiz 17=-254 (LC 10)
Max Uplift 10=-222 (LC 13), 17=-206 (LC 12)
Max Grav 10=1580 (LC 20), 17=1564 (LC 19)

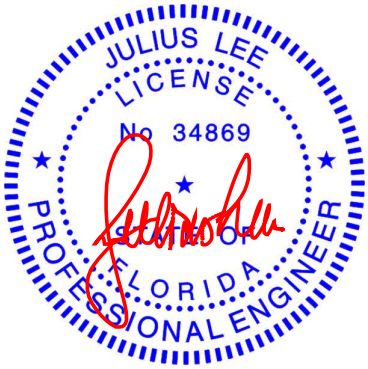
FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-195/69, 2-4=-2048/309, 4-5=-1677/324, 5-6=-1389/316, 6-7=-1705/329, 7-9=-2459/381, 9-10=-2631/386, 1-17=-182/66
BOT CHORD 16-17=-314/1774, 14-16=-223/1748, 13-14=-47/1427, 11-13=-138/1809, 10-11=-256/2226
WEBS 2-16=-22/224, 4-16=-17/253, 4-14=-499/231, 5-14=-94/636, 6-14=-212/129, 6-13=-145/764, 7-13=-738/264, 7-11=-82/672, 9-11=-338/201, 2-17=-1979/254

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 1-9-11 to 5-3-14, Zone1 5-3-14 to 16-6-5, Zone3 16-6-5 to 20-4-4, Zone2 20-4-4 to 25-3-15, Zone1 25-3-15 to 36-10-9 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
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, with BCDL = 10.0psf.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 206 lb uplift at joint 17 and 222 lb uplift at joint 10.

LOAD CASE(S) Standard

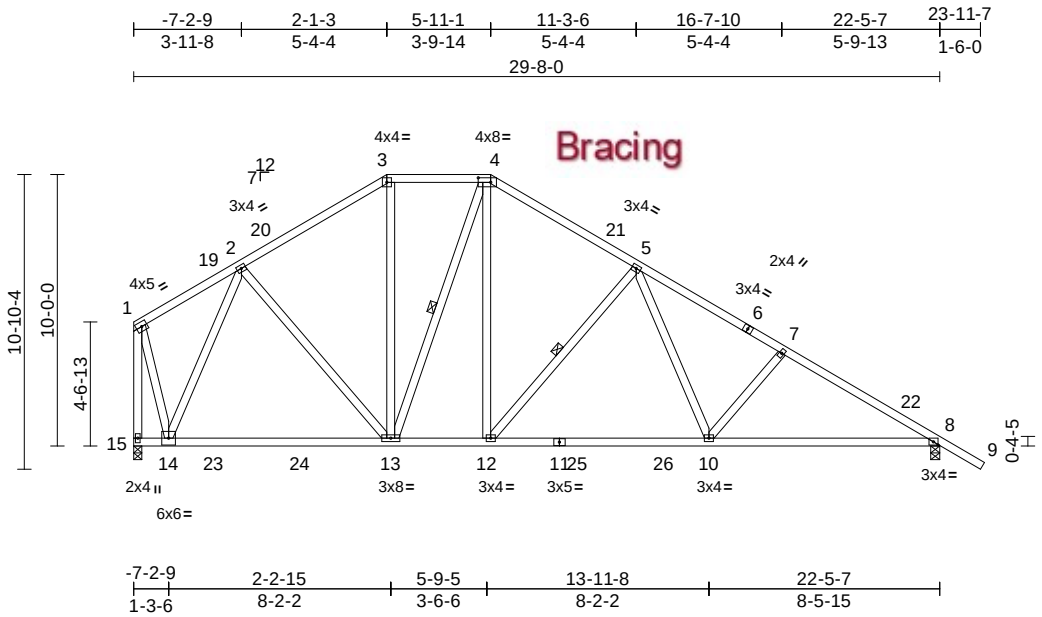


Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

November 6,2024

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

Job	Truss	Truss Type	Qty	Ply	Bootle Residence	
1678-A	T8	Piggyback Base	1	1	Job Reference (optional)	T35470387



Scale = 1:76.8

Plate Offsets (X, Y): [4:0-5-8,0-2-0], [8:0-2-0,0-1-6]

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	0.37	Vert(LL)	-0.19	10-12	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.89	Vert(CT)	-0.33	10-12	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.79	Horz(CT)	0.05	8	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 203 lb	FT = 20%

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

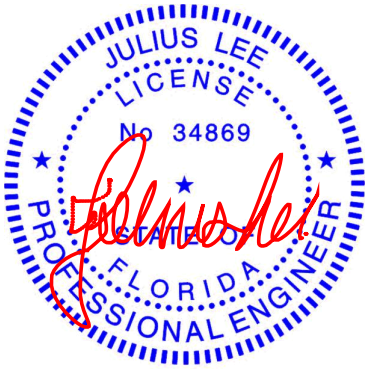
BRACING
TOP CHORD Structural wood sheathing directly applied or 3-8-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 4-13, 5-12

REACTIONS (size) 8=0-4-0, 15=0-3-8
Max Horiz 15=-311 (LC 10)
Max Uplift 8=-237 (LC 13), 15=-147 (LC 12)
Max Grav 8=1435 (LC 20), 15=1312 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-455/140, 2-3=-1085/242, 3-4=-877/246, 4-5=-1218/259, 5-7=-1981/328, 7-8=-2152/331, 8-9=0/48, 1-15=-1478/119
BOT CHORD 14-15=-217/275, 13-14=-115/808, 12-13=0/1025, 10-12=-31/1385, 8-10=-177/1804
WEBS 2-14=-900/217, 2-13=-84/364, 3-13=-63/343, 4-13=-425/122, 4-12=-143/762, 5-12=-733/261, 5-10=-74/663, 7-10=-332/196, 1-14=-75/1258

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 7-4-5 to 10-4-5, Zone1 10-4-5 to 16-6-5, Zone3 16-6-5 to 20-4-4, Zone2 20-4-4 to 24-7-2, Zone1 24-7-2 to 38-5-7 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) Provide adequate drainage to prevent water ponding.
5) 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, with BCDL = 10.0psf.
7) All bearings are assumed to be SP No.2 .
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 147 lb uplift at joint 15 and 237 lb uplift at joint 8.

LOAD CASE(S) Standard



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

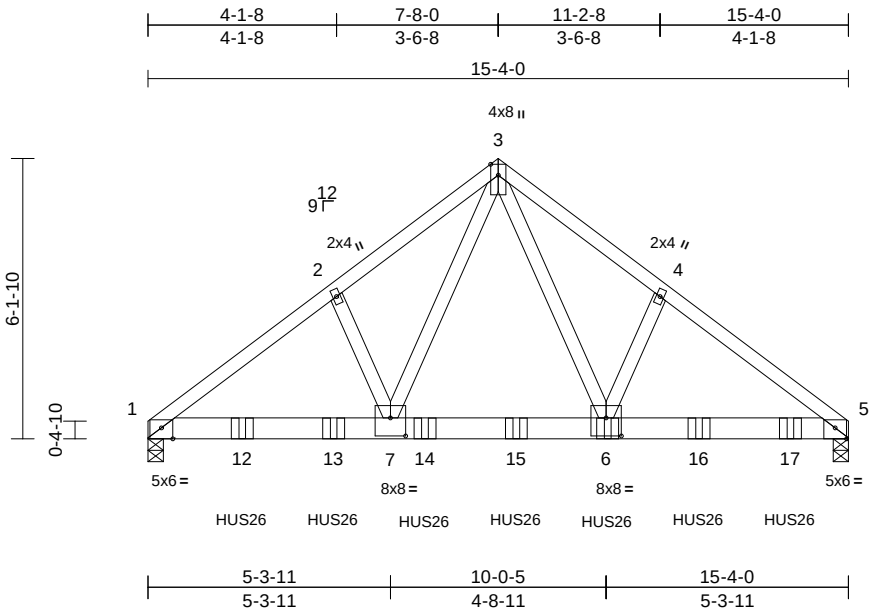
November 6,2024

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

Job	Truss	Truss Type	Qty	Ply	Bootle Residence	
1678-A	T9	Common Girder	1	2	Job Reference (optional)	T35470388

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

Run: 8.82 S Oct 10 2024 Print: 8.820 S Oct 10 2024 MiTek Industries, Inc. Tue Nov 05 13:22:28 Page: 1
ID:GWV_UEe6h9_tqk2NSkYcD0z24dj-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:46

Plate Offsets (X, Y): [1:0-3-0,Edge], [5:0-3-0,Edge], [6:0-4-0,0-4-12], [7:0-4-0,0-4-12]

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	0.68	Vert(LL)	-0.10	6-11	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.62	Vert(CT)	-0.18	6-11	>999	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.55	Horz(CT)	0.04	5	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 182 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP 2400F 2.0E
WEBS 2x4 SP No.2

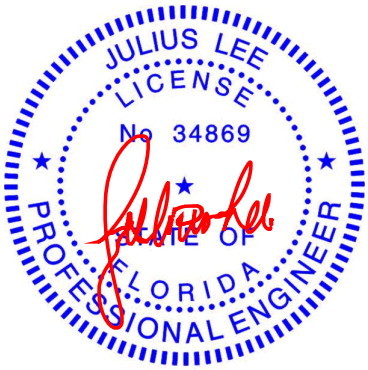
BRACING
TOP CHORD Structural wood sheathing directly applied or 3-8-2 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=0-4-0, 5=0-4-0
Max Horiz 1=-142 (LC 4)
Max Uplift 1=-811 (LC 8), 5=-888 (LC 9)
Max Grav 1=5688 (LC 15), 5=6237 (LC 16)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-7879/1101, 2-3=-7621/1167, 3-4=-7693/1176, 4-5=-8023/1110
BOT CHORD 1-7=-912/6217, 6-7=-559/4275, 5-6=-847/6200
WEBS 3-6=-770/4959, 4-6=-304/177, 3-7=-751/4812, 2-7=-283/174

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: 2x6 - 2 rows staggered at 0-6-0 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 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) All bearings are assumed to be SP 2400F 2.0E .
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 811 lb uplift at joint 1 and 888 lb uplift at joint 5.
10) Use MiTek HUS26 (With 14-16d nails into Girder & 6-16d nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 2-0-12 from the left end to 14-0-12 to connect truss(es) to front face of bottom chord.
11) 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: 1-3=-60, 3-5=-60, 1-5=-20
Concentrated Loads (lb)
Vert: 6=-1381 (F), 12=-1383 (F), 13=-1383 (F), 14=-1383 (F), 15=-1381 (F), 16=-1381 (F), 17=-1381 (F)

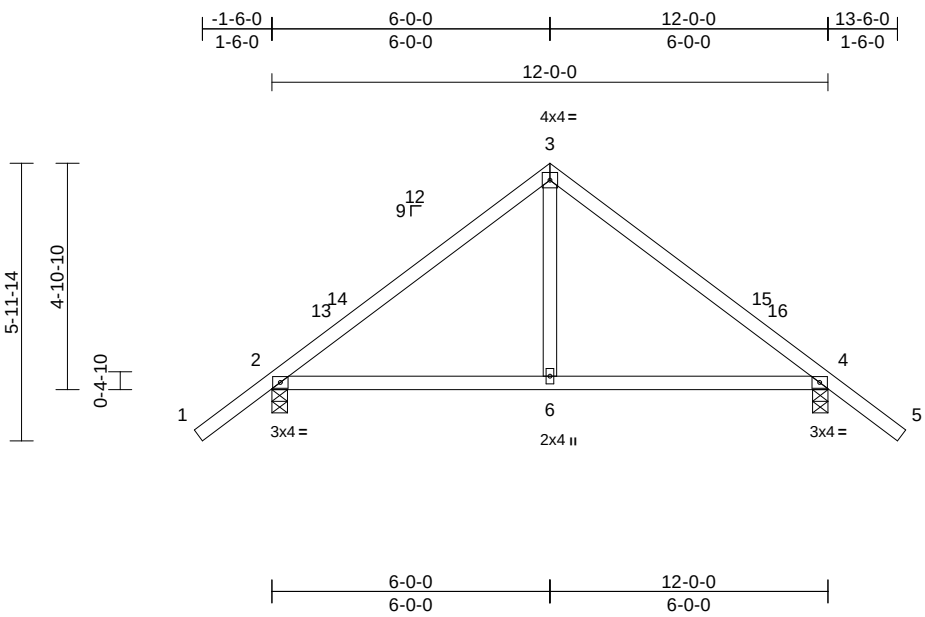


Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

November 6,2024

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

Job	Truss	Truss Type	Qty	Ply	Bootle Residence	
1678-A	T10	Common	3	1	Job Reference (optional)	T35470389



Scale = 1:45.4

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	0.40	Vert(LL)	0.04	6-9	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.38	Vert(CT)	-0.07	6-9	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	FBC2023/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

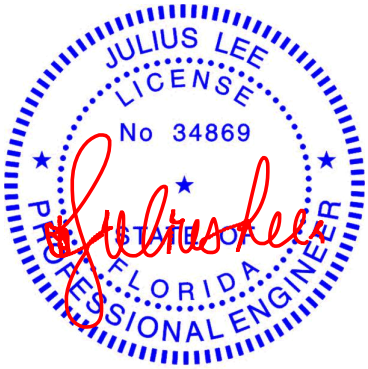
BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-4-0, 4=0-4-0
Max Horiz 2=-141 (LC 10)
Max Uplift 2=-111 (LC 12), 4=-111 (LC 13)
Max Grav 2=575 (LC 1), 4=575 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/57, 2-3=-538/159, 3-4=-538/159, 4-5=0/57
BOT CHORD 2-6=-13/369, 4-6=0/369
WEBS 3-6=0/282

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 -1-7-1 to 1-4-15, Zone1 1-4-15 to 6-0-0, Zone2 6-0-0 to 10-2-15, Zone1 10-2-15 to 13-7-1 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 .
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 111 lb uplift at joint 2 and 111 lb uplift at joint 4.

LOAD CASE(S) Standard

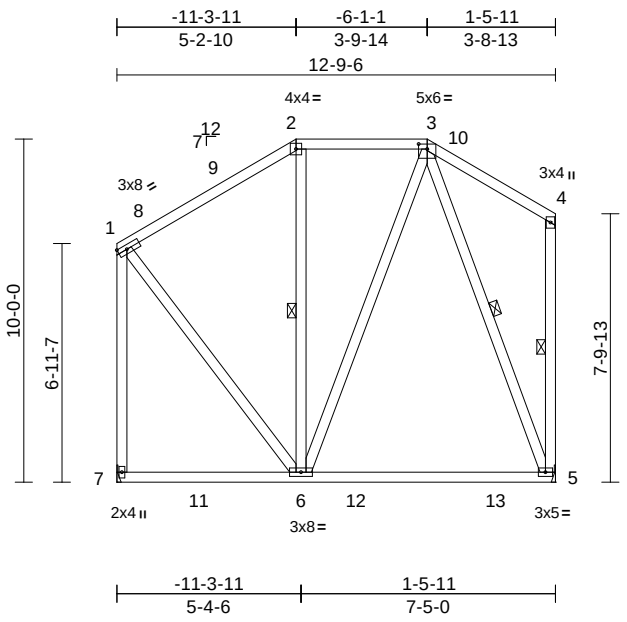


Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

November 6,2024

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

Job	Truss	Truss Type	Qty	Ply	Bootle Residence	
1678-A	T11	Piggyback Base	3	1	Job Reference (optional)	T35470390



Bracing

Scale = 1:61.4

Plate Offsets (X, Y): [3:0-3-0,0-1-12]

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	0.48	Vert(LL)	-0.15	5-6	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.60	Vert(CT)	-0.23	5-6	>665	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.25	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 117 lb	FT = 20%

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

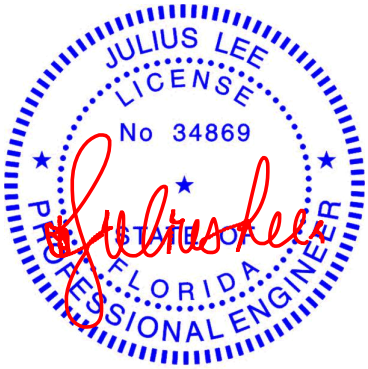
BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 2-6, 4-5, 3-5

REACTIONS (size) 5= Mechanical, 7= Mechanical
Max Horiz 7=328 (LC 9)
Max Uplift 5=-115 (LC 13), 7=-103 (LC 12)
Max Grav 5=604 (LC 19), 7=607 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-305/145, 2-3=-220/180, 3-4=-212/244, 4-5=-193/211, 1-7=-527/306
BOT CHORD 6-7=-324/332, 5-6=-195/265
WEBS 2-6=-191/118, 1-6=-186/385, 3-6=-132/288, 3-5=-475/320

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 11-5-7 to 14-5-7, Zone1 14-5-7 to 16-6-5, Zone3 16-6-5 to 23-11-5 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) Provide adequate drainage to prevent water ponding.
5) 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, with BCDL = 10.0psf.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 103 lb uplift at joint 7 and 115 lb uplift at joint 5.

LOAD CASE(S) Standard



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

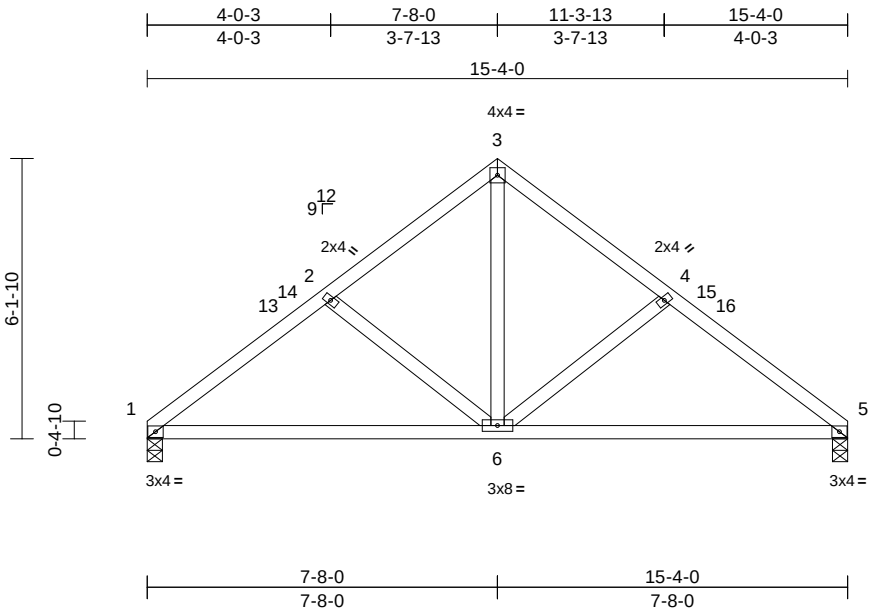
November 6,2024

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

Job	Truss	Truss Type	Qty	Ply	Bootle Residence	T35470391
1678-A	T13	Common	1	1	Job Reference (optional)	

19 Lumber, Inc., Old Town, FL - 32680, Run: 8.82 S Oct 10 2024 Print: 8.820 S Oct 10 2024 MiTek Industries, Inc. Tue Nov 05 13:22:29 Page: 1

ID:FcsAiyAseQNrRceT3QrdIPySp0M-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:46

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	0.25	Vert(LL)	-0.06	6-12	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.53	Vert(CT)	-0.12	6-12	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 73 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 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=0-4-0, 5=0-4-0
Max Horiz 1=-142 (LC 8)
Max Uplift 1=-92 (LC 12), 5=-92 (LC 13)
Max Grav 1=613 (LC 1), 5=613 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-789/220, 2-3=-617/204, 3-4=-617/204, 4-5=-789/220
BOT CHORD 1-6=-143/634, 5-6=-108/609
WEBS 3-6=-126/467, 4-6=-254/170, 2-6=-253/169

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 0-0-0 to 3-0-0, Zone1 3-0-0 to 7-8-0, Zone2 7-8-0 to 11-10-15, Zone1 11-10-15 to 15-4-0 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) 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 .
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 92 lb uplift at joint 1 and 92 lb uplift at joint 5.

LOAD CASE(S) Standard

Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

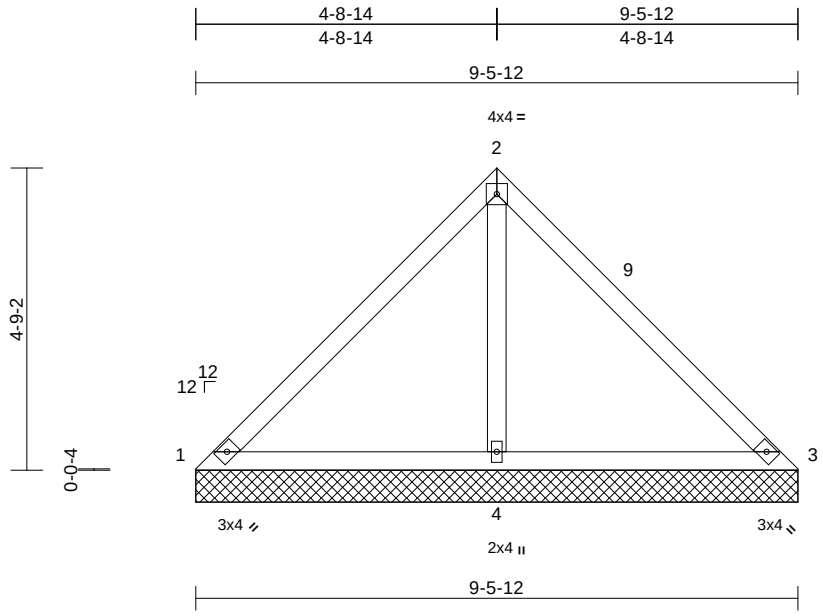
November 6,2024

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

Job	Truss	Truss Type	Qty	Ply	Bootle Residence	
1678-A	V1	Valley	2	1	Job Reference (optional)	T35470392

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

Run: 8.82 S Oct 10 2024 Print: 8.820 S Oct 10 2024 MiTek Industries, Inc. Tue Nov 05 13:22:29
ID:aHDfGMYtx8XGPUT5vWM26EySoy?-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:27.7

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)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.30	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.17	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 39 lb	FT = 20%

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

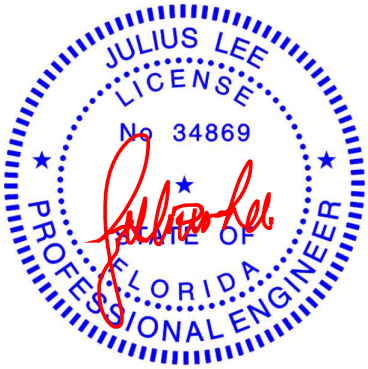
BRACING
TOP CHORD Structural wood sheathing directly applied or 9-5-12 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size) 1=9-5-12, 3=9-5-12, 4=9-5-12
Max Horiz 1=-113 (LC 8)
Max Uplift 1=-24 (LC 26), 3=-24 (LC 25), 4=-195 (LC 12)
Max Grav 1=71 (LC 25), 3=71 (LC 26), 4=692 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-155/284, 2-3=-163/278
BOT CHORD 1-4=-210/256, 3-4=-210/256
WEBS 2-4=-523/347

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone1 0-0-4 to 4-9-2, Zone2 4-9-2 to 8-9-13, Zone1 8-9-13 to 9-6-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 4-0-0 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 .
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 24 lb uplift at joint 1, 24 lb uplift at joint 3 and 195 lb uplift at joint 4.

LOAD CASE(S) Standard



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

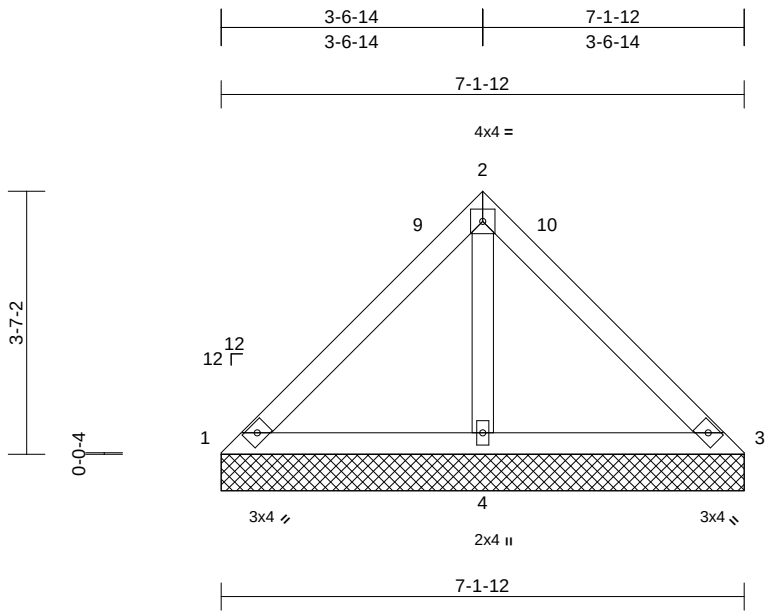
November 6,2024

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

Job	Truss	Truss Type	Qty	Ply	Bootle Residence	
1678-A	V2	Valley	2	1	Job Reference (optional)	T35470393

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

Run: 8.82 S Oct 10 2024 Print: 8.820 S Oct 10 2024 MiTek Industries, Inc. Tue Nov 05 13:22:29 Page: 1
ID:2Tm1TiYViSf71e2HTDtHeSySoy_-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:23.2

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	0.18	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.24	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.07	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MP							Weight: 29 lb	FT = 20%

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

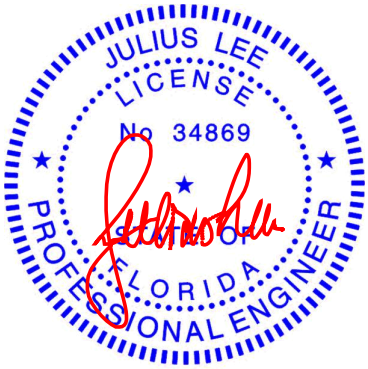
BRACING
TOP CHORD Structural wood sheathing directly applied or 7-1-12 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size) 1=7-1-12, 3=7-1-12, 4=7-1-12
Max Horiz 1=-84 (LC 8)
Max Uplift 1=-6 (LC 26), 3=-6 (LC 25), 4=-135 (LC 12)
Max Grav 1=66 (LC 25), 3=66 (LC 26), 4=490 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-144/183, 2-3=-157/175
BOT CHORD 1-4=-159/252, 3-4=-159/252
WEBS 2-4=-344/336

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 0-0-4 to 3-0-4, Zone1 3-0-4 to 3-7-2, Zone3 3-7-2 to 7-2-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 4-0-0 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 .
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 6 lb uplift at joint 1, 6 lb uplift at joint 3 and 135 lb uplift at joint 4.

LOAD CASE(S) Standard



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

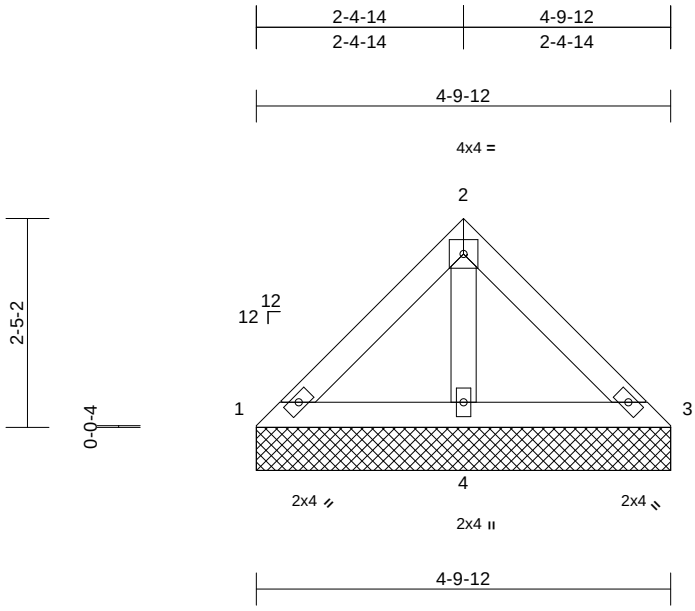
November 6,2024

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

Job	Truss	Truss Type	Qty	Ply	Bootle Residence	
1678-A	V3	Valley	2	1	Job Reference (optional)	T35470394

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

Run: 8.82 S Oct 10 2024 Print: 8.820 S Oct 10 2024 MiTek Industries, Inc. Tue Nov 05 13:22:29
ID:2Tm1TiYViSf71e2HTDtHeSySoy_-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:18.8

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	0.07	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.11	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.02	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MP							Weight: 19 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 4-9-12 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size) 1=4-9-12, 3=4-9-12, 4=4-9-12
Max Horiz 1=55 (LC 9)
Max Uplift 1=-1 (LC 13), 3=-4 (LC 13), 4=-65 (LC 12)
Max Grav 1=61 (LC 25), 3=61 (LC 26), 4=284 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-51/89, 2-3=-51/81
BOT CHORD 1-4=-80/140, 3-4=-80/140
WEBS 2-4=-175/128

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone1 0-0-4 to 2-5-2, Zone3 2-5-2 to 4-10-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 4-0-0 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 .
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1 lb uplift at joint 1, 4 lb uplift at joint 3 and 65 lb uplift at joint 4.

LOAD CASE(S) Standard

Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

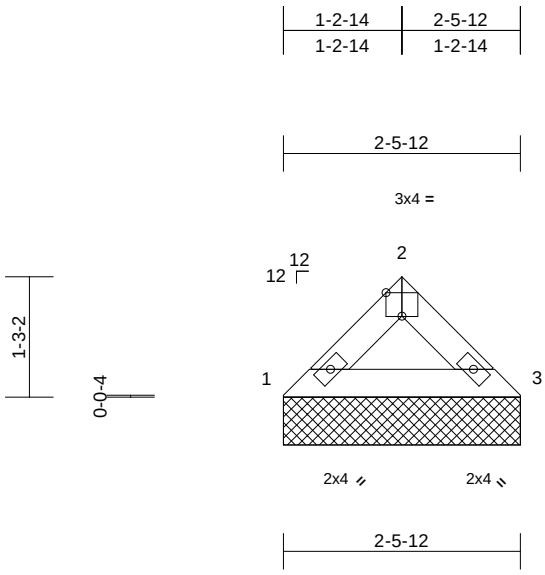
November 6,2024

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

Job	Truss	Truss Type	Qty	Ply	Bootle Residence	
1678-A	V4	Valley	2	1	Job Reference (optional)	T35470395

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

Run: 8.82 S Oct 10 2024 Print: 8.820 S Oct 10 2024 MiTek Industries, Inc. Tue Nov 05 13:22:29 ID:2Tm1TiYViSf71e2HTDtHeSySoy_-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:15.8

Plate Offsets (X, Y): [2:0-2-0,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	0.04	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.04	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MP							Weight: 8 lb	FT = 20%

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

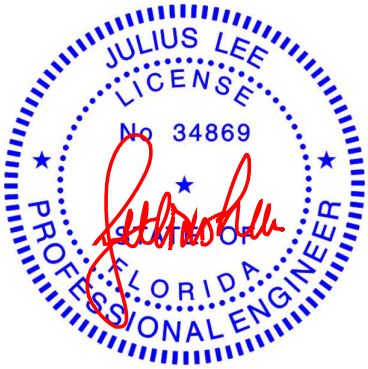
BRACING
TOP CHORD Structural wood sheathing directly applied or 2-5-12 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=2-5-12, 3=2-5-12
Max Horiz 1=-26 (LC 8)
Max Uplift 1=-14 (LC 12), 3=-14 (LC 13)
Max Grav 1=99 (LC 1), 3=99 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-116/64, 2-3=-116/61
BOT CHORD 1-3=-26/86

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone1 0-0-4 to 1-3-2, Zone3 1-3-2 to 2-6-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 4-0-0 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 .
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 14 lb uplift at joint 1 and 14 lb uplift at joint 3.

LOAD CASE(S) Standard



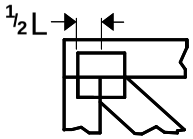
Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

November 6,2024

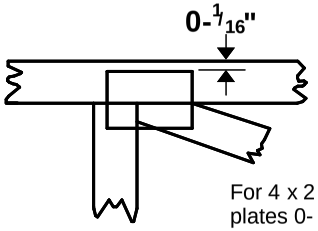
MiTek®
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

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.

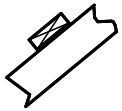
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 x 4

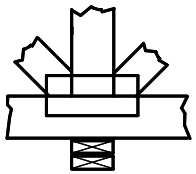
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

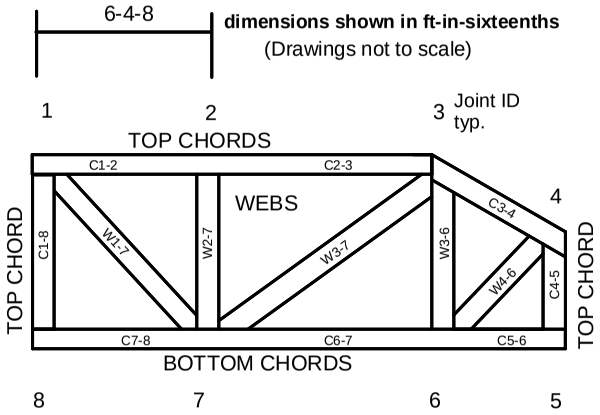


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

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®

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.