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: 1453-A - Tyre Residence

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

Site Information:

Customer Info: JBC Builders Project Name: Tyre Residence Model: .
Lot/Block: . Subdivision: .
Address: ., .
City: . State: FL

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

Name: License #:
Address:
City: State:

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

Design Code: FBC2023/TPI2014 Design Program: MiTek 20/20 8.7
Wind Code: ASCE 7-22 Wind Speed: 140 mph
Roof Load: 40.0 psf Floor Load: N/A psf

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

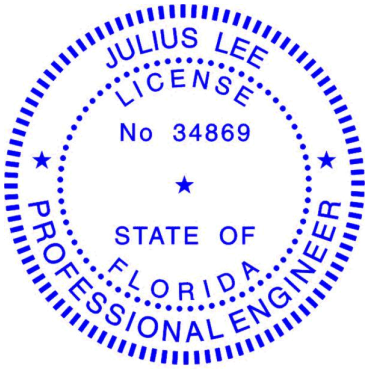
No.	Seal#	Truss Name	Date
1	T34408874	BJ3	7/10/24
2	T34408875	BJ5	7/10/24
3	T34408876	BJ7	7/10/24
4	T34408877	CJ9	7/10/24
5	T34408878	EJ7	7/10/24
6	T34408879	G1	7/10/24
7	T34408880	G2	7/10/24
8	T34408881	T1	7/10/24
9	T34408882	T2	7/10/24
10	T34408883	T3	7/10/24

This item has been digitally signed and sealed by Lee, Julius, PE on the date adjacent to the seal.
Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies

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

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

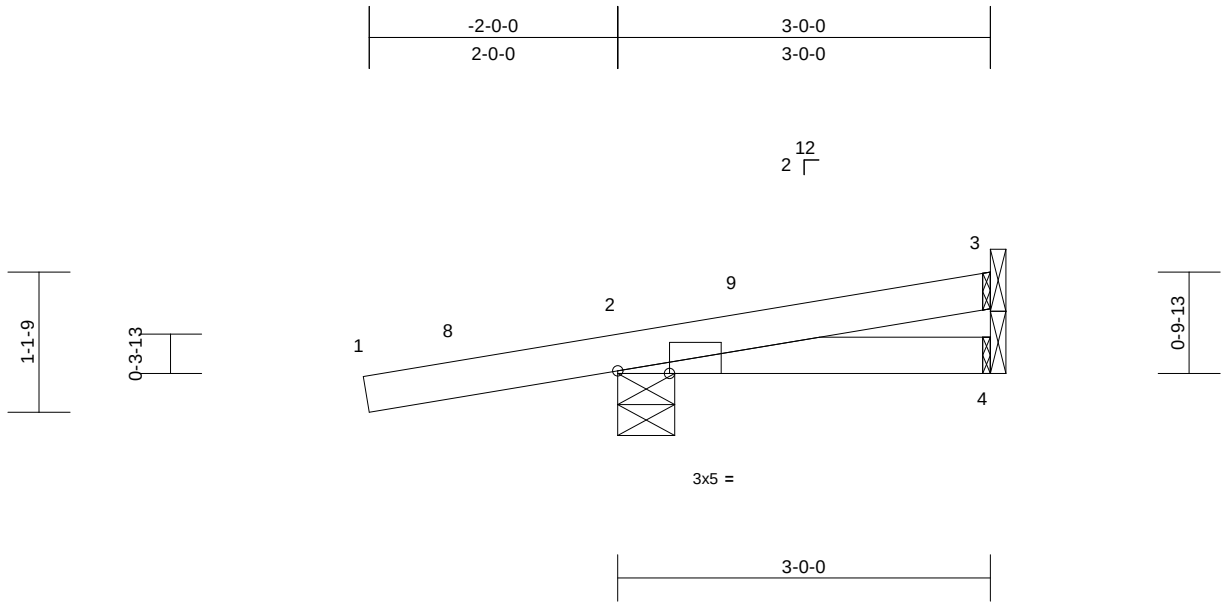
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which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



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

July 10,2024

Job	Truss	Truss Type	Qty	Ply	Tyre Residence
1453-A	BJ3	Corner Jack	4	1	T34408874
					Job Reference (optional)



Scale = 1:18.5

Plate Offsets (X, Y): [2:0-5-0,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	0.54	Vert(LL)	0.00	7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.07	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: 12 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=0-5-8, 3= Mechanical, 4= Mechanical
Max Horiz 2=57 (LC 8)
Max Uplift 2=-250 (LC 8), 3=-32 (LC 12)
Max Grav 2=281 (LC 1), 3=49 (LC 1), 4=42 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/20, 2-3=-205/21
BOT CHORD 2-4=-19/195

NOTES
1) Wind: ASCE 7-22; Vult=140mph (3-second gust) Vasd=108mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 -2-0-5 to 0-11-11, Zone1 0-11-11 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 32 lb uplift at joint 3 and 250 lb uplift at joint 2.

LOAD CASE(S) Standard

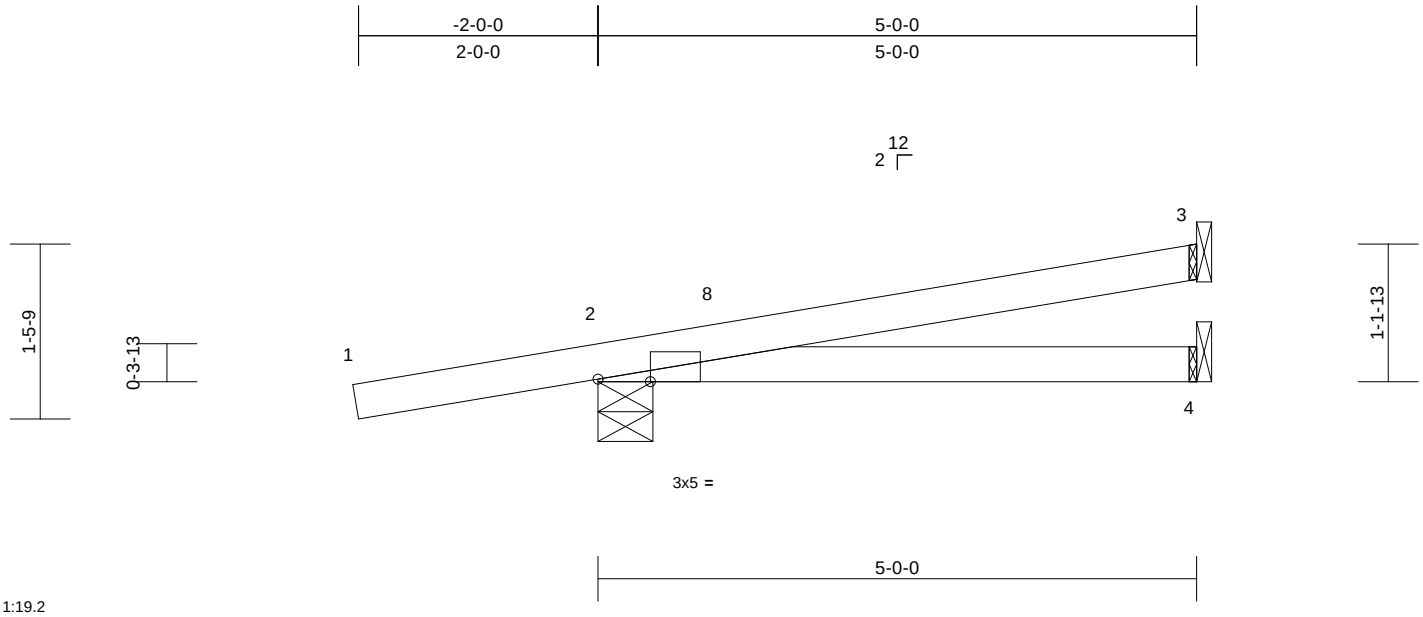
This item has been digitally signed and sealed by Lee, Julius, PE on the date indicated here. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

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

July 10,2024

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

Job	Truss	Truss Type	Qty	Ply	Tyre Residence
1453-A	BJ5	Corner Jack	4	1	T34408875
					Job Reference (optional)



Scale = 1:19.2

Plate Offsets (X, Y): [2:0-5-4,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	0.54	Vert(LL)	0.05	4-7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.31	Vert(CT)	-0.05	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: 18 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=0-5-8, 3= Mechanical, 4= Mechanical
Max Horiz 2=77 (LC 8)
Max Uplift 2=-268 (LC 8), 3=-83 (LC 12), 4=-4 (LC 12)
Max Grav 2=344 (LC 1), 3=112 (LC 1), 4=83 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/20, 2-3=-184/57
BOT CHORD 2-4=-91/191

NOTES
1) Wind: ASCE 7-22; Vult=140mph (3-second gust) Vasd=108mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 -2-0-5 to 0-11-11, Zone1 0-11-11 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 83 lb uplift at joint 3, 268 lb uplift at joint 2 and 4 lb uplift at joint 4.

LOAD CASE(S) Standard

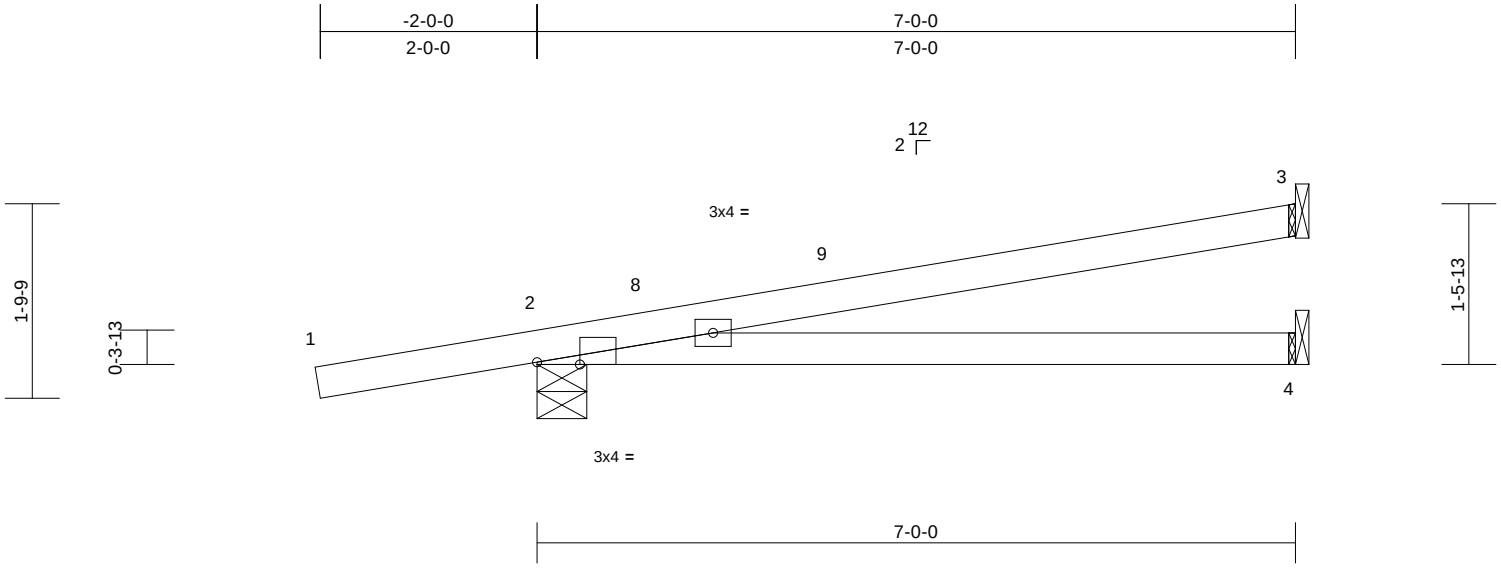
This item has been digitally signed and sealed by Lee, Julius, PE on the date indicated here. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

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

July 10,2024

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

Job	Truss	Truss Type	Qty	Ply	Tyre Residence
1453-A	BJ7	Corner Jack	4	1	T34408876
					Job Reference (optional)



Scale = 1:21.3

Plate Offsets (X, Y): [2:0-4-12,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	0.67	Vert(LL)	0.19	4-7	>434	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.64	Vert(CT)	-0.21	4-7	>390	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: 24 lb	FT = 20%

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

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

REACTIONS (size) 2=0-5-8, 3= Mechanical, 4= Mechanical
Max Horiz 2=97 (LC 8)
Max Uplift 2=-298 (LC 8), 3=-130 (LC 12), 4=-4 (LC 12)
Max Grav 2=417 (LC 1), 3=170 (LC 1), 4=122 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/20, 2-3=-281/114
BOT CHORD 2-4=-163/292

NOTES
1) Wind: ASCE 7-22; Vult=140mph (3-second gust) Vasd=108mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 -2-0-5 to 0-11-11, Zone1 0-11-11 to 6-11-4 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 130 lb uplift at joint 3, 298 lb uplift at joint 2 and 4 lb uplift at joint 4.

LOAD CASE(S) Standard

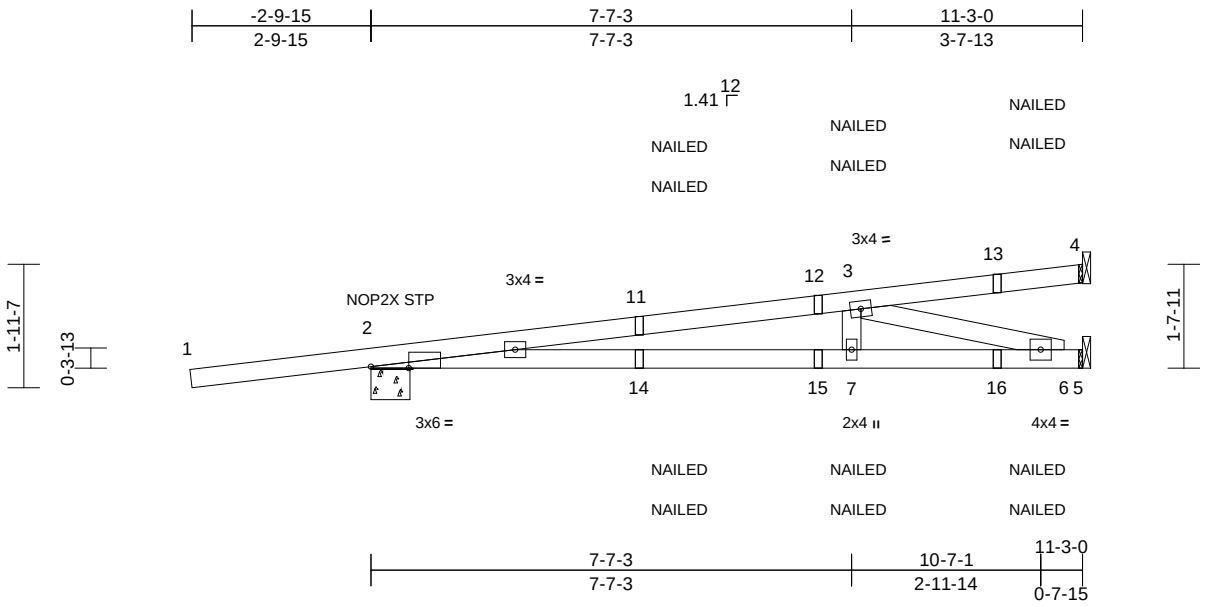
This item has been digitally signed and sealed by Lee, Julius, PE on the date indicated here. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

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

July 10,2024

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

Job	Truss	Truss Type	Qty	Ply	Tyre Residence
1453-A	CJ9	Diagonal Hip Girder	2	1	T34408877
					Job Reference (optional)



Scale = 1:36.4

Plate Offsets (X, Y): [2:0-7-3,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	0.64	Vert(LL)	0.21	7-10	>632	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.90	Vert(CT)	-0.28	7-10	>479	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.49	Horz(CT)	0.03	5	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 44 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 3-3-7 oc purlins.
BOT CHORD Rigid ceiling directly applied or 5-6-10 oc bracing.

REACTIONS (size) 2=0-7-6, 4= Mechanical, 5= Mechanical
Max Horiz 2=107 (LC 4)
Max Uplift 2=-501 (LC 4), 4=-139 (LC 9), 5=-270 (LC 8)
Max Grav 2=725 (LC 1), 4=172 (LC 1), 5=601 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/20, 2-3=-2045/1014, 3-4=-27/18
BOT CHORD 2-7=-1052/2021, 6-7=-1052/2021, 5-6=0/0
WEBS 3-6=-2095/1091, 3-7=-55/399

NOTES
1) Wind: ASCE 7-22; Vult=140mph (3-second gust) Vasd=108mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; 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) All plates are MT20 plates unless otherwise indicated.
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 139 lb uplift at joint 4, 501 lb uplift at joint 2 and 270 lb uplift at joint 5.
9) "NAILED" indicates Girder: 3-16d (0.162" x 3.5") toe-nails per NDS guidelines.
10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (lb/ft)
Vert: 1-4=-60, 5-8=-20
Concentrated Loads (lb)
Vert: 12=-54 (F=-27, B=-27), 13=-178 (F=-89, B=-89), 14=-10 (F=-5, B=-5), 15=-65 (F=-33, B=-33), 16=-125 (F=-63, B=-63)

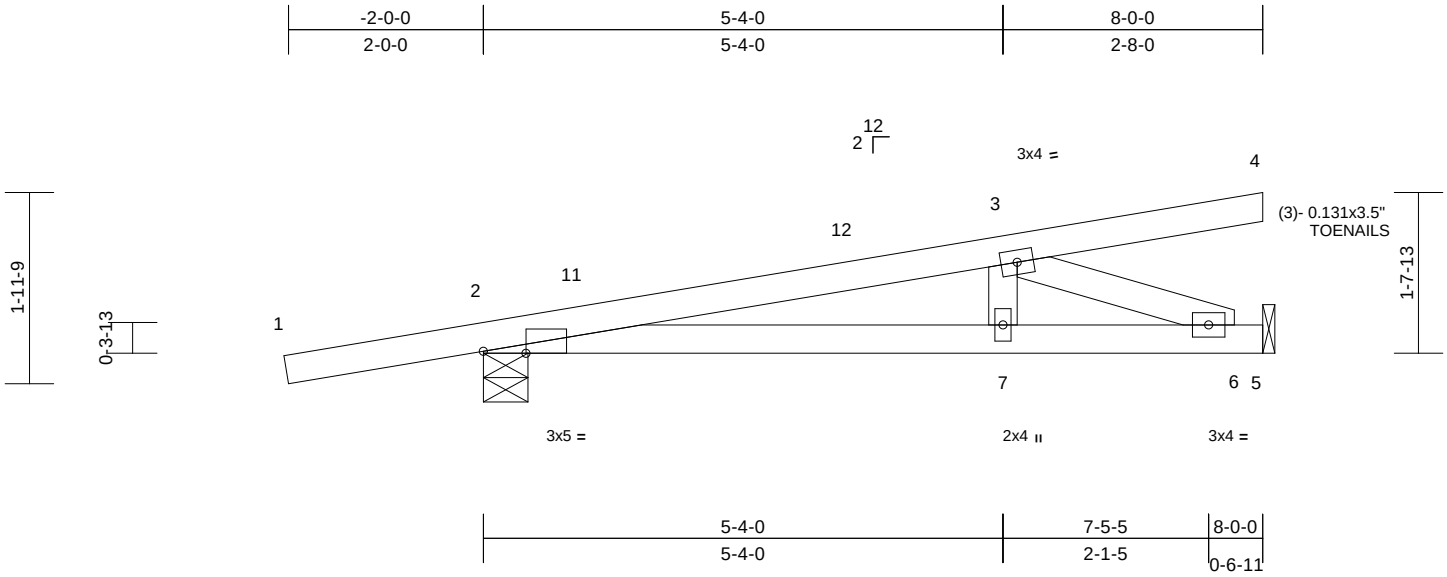
This item has been digitally signed and sealed by Lee, Julius, PE on the date indicated here. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

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

July 10,2024

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

Job	Truss	Truss Type	Qty	Ply	Tyre Residence
1453-A	EJ7	Jack-Open	9	1	T34408878
					Job Reference (optional)



Scale = 1:23.7

Plate Offsets (X, Y): [2:0-5-4,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	0.70	Vert(LL)	0.03	7-10	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.34	Vert(CT)	-0.06	7-10	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MP							Weight: 31 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 5-11-14 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-11 oc bracing.

REACTIONS (size) 2=0-5-8, 5= Mechanical
Max Horiz 2=104 (LC 8)
Max Uplift 2=-312 (LC 8), 5=-140 (LC 12)
Max Grav 2=454 (LC 1), 5=306 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/20, 2-3=-830/819, 3-4=-26/0
BOT CHORD 2-7=-898/816, 6-7=-898/816, 5-6=0/0
WEBS 3-6=-874/962, 3-7=0/193

NOTES
1) Wind: ASCE 7-22; Vult=140mph (3-second gust) Vasd=108mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 -2-0-5 to 0-11-11, Zone1 0-11-11 to 8-0-0 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
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 312 lb uplift at joint 2 and 140 lb uplift at joint 5.

LOAD CASE(S) Standard

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

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

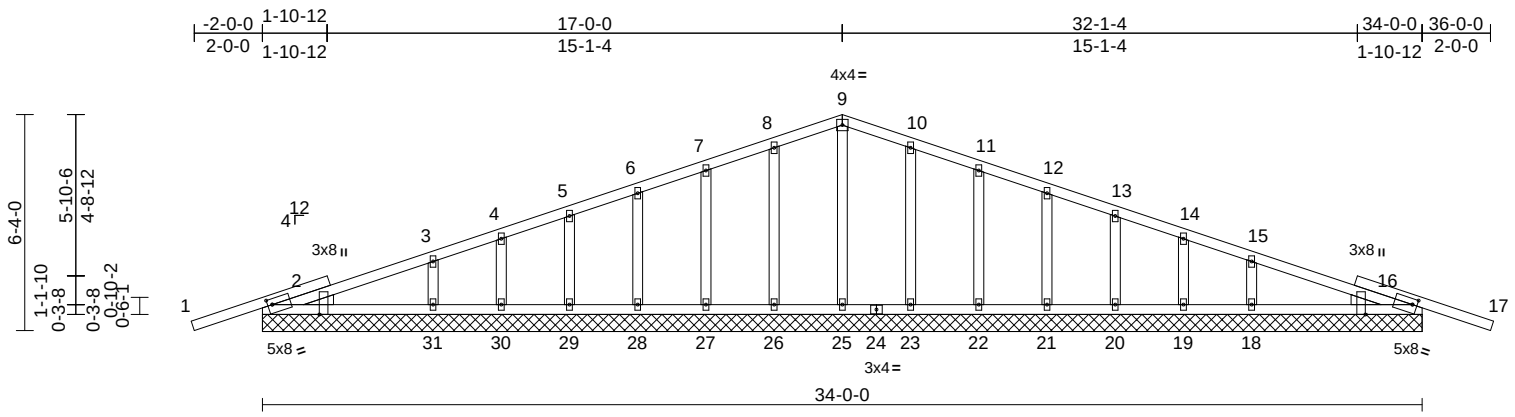
July 10,2024

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

Job	Truss	Truss Type	Qty	Ply	Tyre Residence
1453-A	G1	Common Supported Gable	1	1	T34408879
					Job Reference (optional)

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

Run: 8.73 S Jun 13 2024 Print: 8.730 S Jun 13 2024 MiTek Industries, Inc. Wed Jul 10 13:05:59 Page: 1
ID:1KH7EqGUCk1c8FBsGo7OM_zX0bH-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:67.5

Plate Offsets (X, Y): [2:0-1-10,0-2-0], [2:0-3-8,Edge], [16:0-1-10,0-2-0], [16:0-3-8,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	0.98	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.42	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.01	16	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 2x4 SP No.2
OTHERS 2x4 SP No.2
WEDGE Left: 2x4 SP No.2
Right: 2x4 SP No.2

BRACING

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

REACTIONS (size) 2=34-0-0, 16=34-0-0, 18=34-0-0, 19=34-0-0, 20=34-0-0, 21=34-0-0, 22=34-0-0, 23=34-0-0, 25=34-0-0, 26=34-0-0, 27=34-0-0, 28=34-0-0, 29=34-0-0, 30=34-0-0, 31=34-0-0
Max Horiz 2=158 (LC 12)
Max Uplift 2=-365 (LC 8), 16=-377 (LC 9), 18=-81 (LC 13), 19=-152 (LC 9), 20=-89 (LC 13), 21=-98 (LC 9), 22=-95 (LC 13), 23=-97 (LC 13), 26=-99 (LC 12), 27=-94 (LC 12), 28=-98 (LC 8), 29=-89 (LC 12), 30=-152 (LC 8), 31=-70 (LC 12)
Max Grav 2=409 (LC 1), 16=409 (LC 1), 18=194 (LC 3), 19=165 (LC 26), 20=158 (LC 1), 21=161 (LC 26), 22=158 (LC 1), 23=169 (LC 26), 25=161 (LC 22), 26=169 (LC 25), 27=158 (LC 1), 28=161 (LC 25), 29=158 (LC 1), 30=165 (LC 25), 31=194 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/50, 2-3=-122/102, 3-4=-78/112, 4-5=-48/134, 5-6=-50/195, 6-7=-65/262, 7-8=-82/330, 8-9=-99/398, 9-10=-99/398, 10-11=-82/330, 11-12=-65/262, 12-13=-49/195, 13-14=-32/129, 14-15=-25/57, 15-16=-59/41, 16-17=0/50
BOT CHORD 2-31=-44/194, 30-31=-38/195, 29-30=-38/195, 28-29=-38/195, 27-28=-38/195, 26-27=-38/195, 25-26=-38/195, 23-25=-38/195, 22-23=-38/195, 21-22=-38/195, 20-21=-38/195, 19-20=-38/195, 18-19=-38/195, 16-18=-41/191
WEBS 9-25=-121/0, 8-26=-129/195, 7-27=-119/194, 6-28=-120/193, 5-29=-122/195, 4-30=-112/205, 3-31=-176/236, 10-23=-129/195, 11-22=-119/194, 12-21=-120/193, 13-20=-122/195, 14-19=-112/205, 15-18=-175/236

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=140mph (3-second gust) Vasd=108mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; 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) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) All bearings are assumed to be SP No.2 .
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 365 lb uplift at joint 2, 377 lb uplift at joint 16, 99 lb uplift at joint 26, 94 lb uplift at joint 27, 98 lb uplift at joint 28, 89 lb uplift at joint 29, 152 lb uplift at joint 30, 70 lb uplift at joint 31, 97 lb uplift at joint 23, 95 lb uplift at joint 22, 98 lb uplift at joint 21, 89 lb uplift at joint 20, 152 lb uplift at joint 19 and 81 lb uplift at joint 18.

LOAD CASE(S) Standard

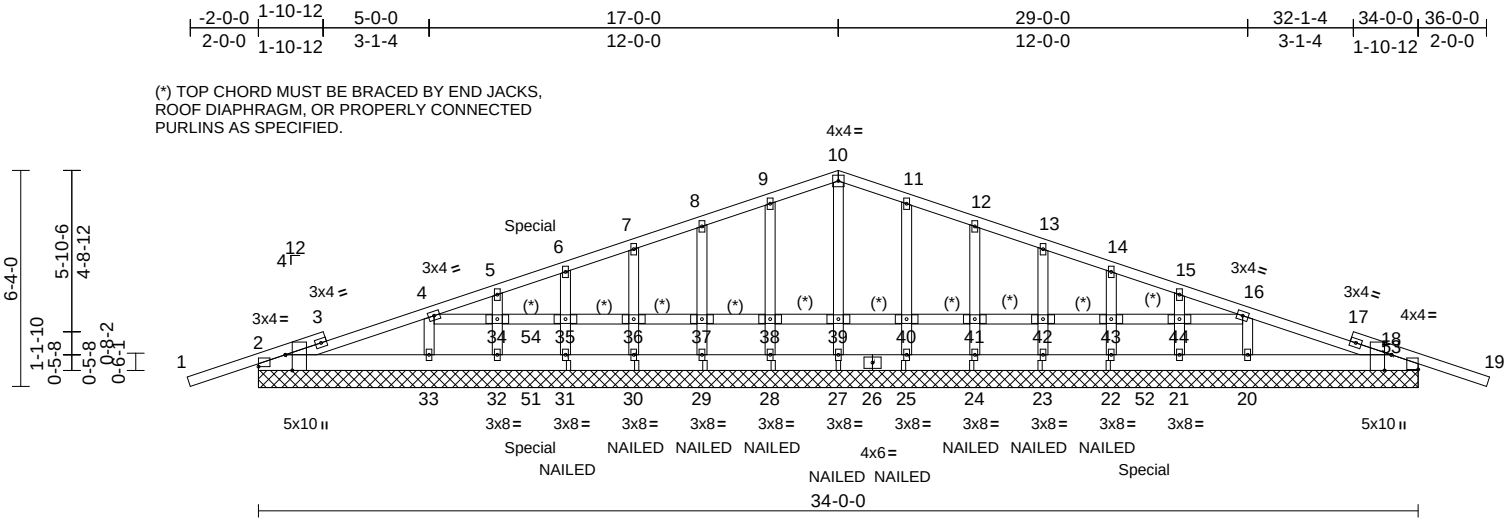
This item has been digitally signed and sealed by Lee, Julius, PE on the date indicated here. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

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

July 10,2024

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

Job	Truss	Truss Type	Qty	Ply	Tyre Residence
1453-A	G2	Common Girder	1	1	T34408880
					Job Reference (optional)



Scale = 1:67.5

Plate Offsets (X, Y): [2:0-5-8,Edge], [2:Edge,0-4-2], [18:0-5-8,Edge], [18:Edge,0-5-2]

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	0.61	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.08	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.21	Horz(CT)	0.00	18	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 231 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP 2400F 2.0E
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 6-0-0 oc bracing.

REACTIONS (size) 2=34-0-0, 18=34-0-0, 20=34-0-0, 21=34-0-0, 22=34-0-0, 23=34-0-0, 24=34-0-0, 25=34-0-0, 27=34-0-0, 28=34-0-0, 29=34-0-0, 30=34-0-0, 31=34-0-0, 32=34-0-0, 33=34-0-0, 45=34-0-0, 48=34-0-0
Max Horiz 2=159 (LC 27), 45=159 (LC 27)
Max Uplift 2=-233 (LC 4), 18=-267 (LC 5), 20=-190 (LC 28), 21=-232 (LC 5), 22=-427 (LC 9), 23=-205 (LC 5), 24=-254 (LC 9), 25=-246 (LC 9), 27=-134 (LC 8), 28=-246 (LC 8), 29=-254 (LC 8), 30=-206 (LC 4), 31=-459 (LC 8), 32=-270 (LC 4), 33=-196 (LC 27), 45=-233 (LC 4), 48=-267 (LC 5)
Max Grav 2=312 (LC 21), 18=297 (LC 22), 20=316 (LC 1), 21=397 (LC 1), 22=816 (LC 1), 23=366 (LC 1), 24=466 (LC 1), 25=449 (LC 22), 27=448 (LC 1), 28=449 (LC 21), 29=465 (LC 1), 30=367 (LC 1), 31=903 (LC 1), 32=485 (LC 1), 33=316 (LC 1), 45=312 (LC 21), 48=297 (LC 22)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/39, 2-4=-195/116, 4-5=-107/49, 5-6=-72/64, 6-7=-33/72, 7-8=-8/92, 8-9=-7/118, 9-10=-10/147, 10-11=-9/141, 11-12=-7/98, 12-13=-7/66, 13-14=-9/52, 14-15=-45/44, 15-16=-78/28, 16-18=-136/119, 18-19=0/46
BOT CHORD 2-33=-146/222, 32-33=-40/167, 31-32=-38/165, 30-31=-37/164, 29-30=-37/163, 28-29=-37/163, 27-28=-37/163, 25-27=-37/163, 24-25=-37/163, 23-24=-38/164, 22-23=-39/165, 21-22=-40/167, 20-21=-42/169, 18-20=-180/254
WEBS 27-39=-119/3, 10-39=-119/3, 28-38=-129/120, 9-38=-129/120, 29-37=-118/114, 8-37=-118/114, 30-36=-119/113, 7-36=-119/113, 31-35=-214/152, 6-35=-126/119, 32-34=-174/131, 5-34=-90/95, 4-33=-206/156, 25-40=-129/119, 11-40=-129/119, 24-41=-119/114, 12-41=-119/114, 23-42=-119/113, 13-42=-119/113, 22-43=-126/119, 14-43=-126/119, 21-44=-88/101, 15-44=-91/95, 16-20=-203/145, 4-34=0/62, 34-35=0/65, 35-36=0/67, 36-37=0/68, 37-38=0/69, 38-39=0/69, 39-40=0/69, 40-41=0/68, 41-42=0/67, 42-43=0/65, 43-44=0/62, 16-44=0/57

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=140mph (3-second gust) Vasd=108mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; 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) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) All bearings are assumed to be SP 2400F 2.0E .

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

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

July 10,2024

Continued on page 2

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

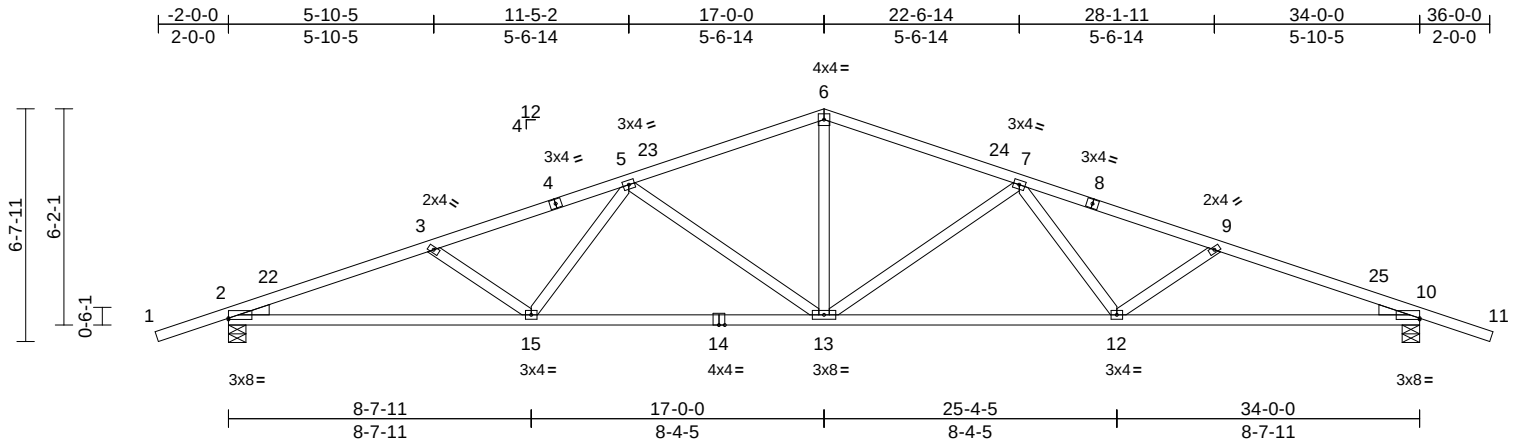
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 233 lb uplift at joint 2, 267 lb uplift at joint 18, 134 lb uplift at joint 27, 246 lb uplift at joint 28, 254 lb uplift at joint 29, 206 lb uplift at joint 30, 459 lb uplift at joint 31, 270 lb uplift at joint 32, 196 lb uplift at joint 33, 246 lb uplift at joint 25, 254 lb uplift at joint 24, 205 lb uplift at joint 23, 427 lb uplift at joint 22, 232 lb uplift at joint 21, 190 lb uplift at joint 20, 233 lb uplift at joint 2 and 267 lb uplift at joint 18.

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) 573 lb down and 284 lb up at 8-0-0, and 573 lb down and 284 lb up at 26-0-0 on bottom chord. The design/ selection of such connection device(s) is the responsibility of others.
14) Special hanger(s) or other connection device(s) shall be provided at 8-0-0 from the left end sufficient to connect trusses to front face of top chord, skewed 45.0 deg. to the left, sloping -6.7 deg down.. The design/selection of such special connection device(s) is the responsibility of others.
15) 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: 1-10=-60, 10-19=-60, 45-53=-20
   Concentrated Loads (lb)
   Vert: 27=-286 (F), 28=-286 (F), 29=-286 (F), 30=-286 (F), 31=-286 (F), 25=-286 (F), 24=-286 (F), 23=-286 (F), 22=-286 (F), 51=-573 (F), 52=-573 (F), 54=-175 (F)

Job	Truss	Truss Type	Qty	Ply	Tyre Residence	
1453-A	T1	Common	9	1	Job Reference (optional)	T34408881



Scale = 1:65.8

Plate Offsets (X, Y): [2:Edge,0-0-7], [10:Edge,0-0-7]

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	0.76	Vert(LL)	0.31	13-15	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.48	Vert(CT)	-0.49	12-13	>833	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.61	Horz(CT)	0.11	10	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 165 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP 2400F 2.0E
WEBS 2x4 SP No.2
WEDGE Left: 2x4 SP No.3
Right: 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-3-3 oc purlins.
BOT CHORD Rigid ceiling directly applied or 7-1-10 oc bracing.

REACTIONS (size) 2=0-6-0, 10=0-6-0
Max Horiz 2=166 (LC 12)
Max Uplift 2=-743 (LC 8), 10=-743 (LC 9)
Max Grav 2=1483 (LC 1), 10=1483 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/39, 2-3=-3239/1388, 3-5=-2962/1225, 5-6=-2154/978, 6-7=-2154/978, 7-9=-2962/1226, 9-10=-3239/1388, 10-11=0/39
BOT CHORD 2-15=-1324/3008, 13-15=-1030/2564, 12-13=-957/2564, 10-12=-1183/3008
WEBS 6-13=-369/1031, 7-13=-733/493, 7-12=-95/444, 9-12=-314/321, 5-13=-733/493, 5-15=-95/444, 3-15=-314/321

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=140mph (3-second gust) Vasd=108mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 -2-0-9 to 1-4-4, Zone1 1-4-4 to 17-0-0, Zone2 17-0-0 to 21-9-11, Zone1 21-9-11 to 36-0-9 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) 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 2400F 2.0E .
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 743 lb uplift at joint 2 and 743 lb uplift at joint 10.

LOAD CASE(S) Standard

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

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

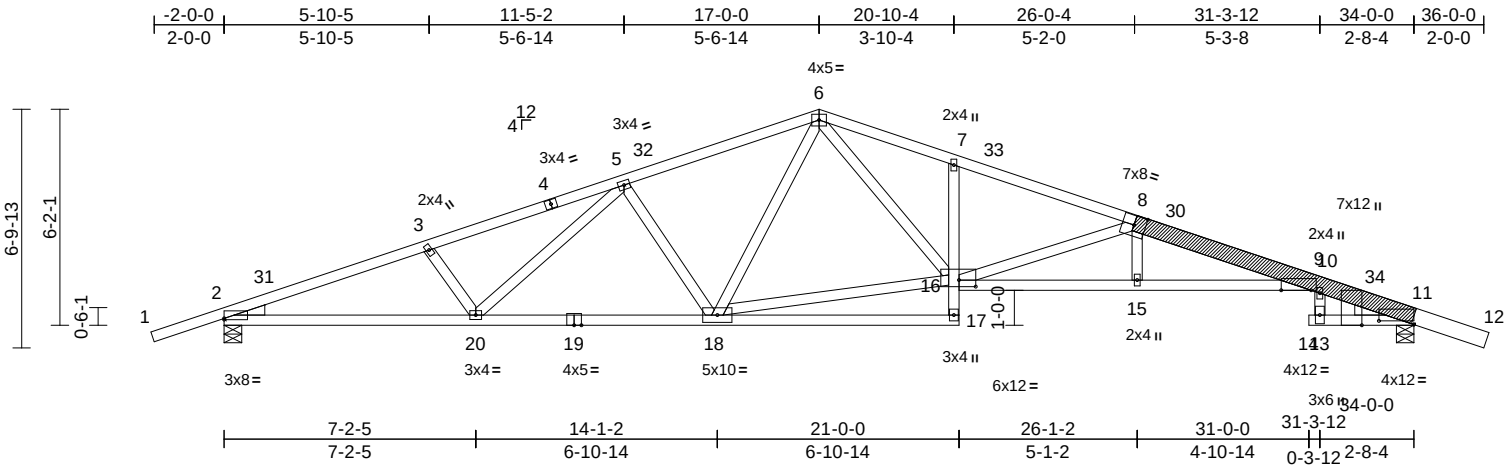
July 10,2024

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

Job	Truss	Truss Type	Qty	Ply	Tyre Residence
1453-A	T2	Roof Special	6	1	T34408882
					Job Reference (optional)

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

Run: 8.73 S Jun 13 2024 Print: 8.730 S Jun 13 2024 MiTek Industries, Inc. Wed Jul 10 13:06:00 Page: 1
ID:7_?Lf8B9kISU4VXd28fRirzX0kP-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:65.8

Plate Offsets (X, Y): [2:Edge,0-0-7], [8:0-4-0,0-3-4], [9:0-10-4,Edge], [11:1-0-0,0-1-4], [11:0-0-4,Edge], [16:0-5-12,0-2-4]

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	0.75	Vert(LL)	0.53	15-26	>770	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.77	Vert(CT)	-0.84	15-26	>488	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.86	Horz(CT)	0.33	11	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 205 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2 *Except* 8-12:2x6 SP DSS
BOT CHORD	2x4 SP No.2 *Except* 2-19,16-9:2x4 SP 2400F 2.0E
WEBS	2x4 SP No.2
LBR SCAB	11-8 SP 2400F 2.0E one side
WEDGE	Left: 2x4 SP No.3 Right: 2x4 SP No.2

BRACING

TOP CHORD	Structural wood sheathing directly applied or 2-3-11 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 5-10-2 oc bracing.

REACTIONS (size) 2=0-6-0, 11=0-6-0
Max Horiz 2=-172 (LC 13)
Max Uplift 2=-743 (LC 8), 11=-745 (LC 9)
Max Grav 2=1483 (LC 1), 11=1486 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/39, 2-3=-3236/1362, 3-5=-3065/1310, 5-6=-2457/1097, 6-7=-3192/1443, 7-9=-4684/1873, 9-10=-360/285, 10-11=-998/393, 11-12=0/39
BOT CHORD	2-20=-1297/3004, 18-20=-1027/2572, 17-18=-52/203, 16-17=0/123, 7-16=-254/267, 15-16=-1661/4547, 9-15=-1661/4553, 13-14=0/0, 11-13=-204/580
WEBS	3-20=-263/276, 5-20=-194/437, 5-18=-567/435, 6-18=-240/482, 16-18=-649/1911, 6-16=-654/1450, 8-16=-1603/747, 8-15=0/313, 10-13=-135/400

NOTES

1) Attached 8-4-15 scab 8 to 11, front face(s) 2x6 SP 2400F 2.0E with 2 row(s) of 10d (0.131"x3") nails spaced 9" o.c.except : starting at 0-5-8 from end at joint 11, nail 2 row(s) at 3" o.c. for 4-7-7.
2) Unbalanced roof live loads have been considered for this design.
3) Wind: ASCE 7-22; Vult=140mph (3-second gust) Vasd=108mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 -2-0-9 to 1-4-4, Zone1 1-4-4 to 17-0-0, Zone2 17-0-0 to 21-9-11, Zone1 21-9-11 to 36-0-14 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
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) 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 2400F 2.0E , Joint 11 SP No.2 .
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 743 lb uplift at joint 2 and 745 lb uplift at joint 11.

LOAD CASE(S) Standard

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

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

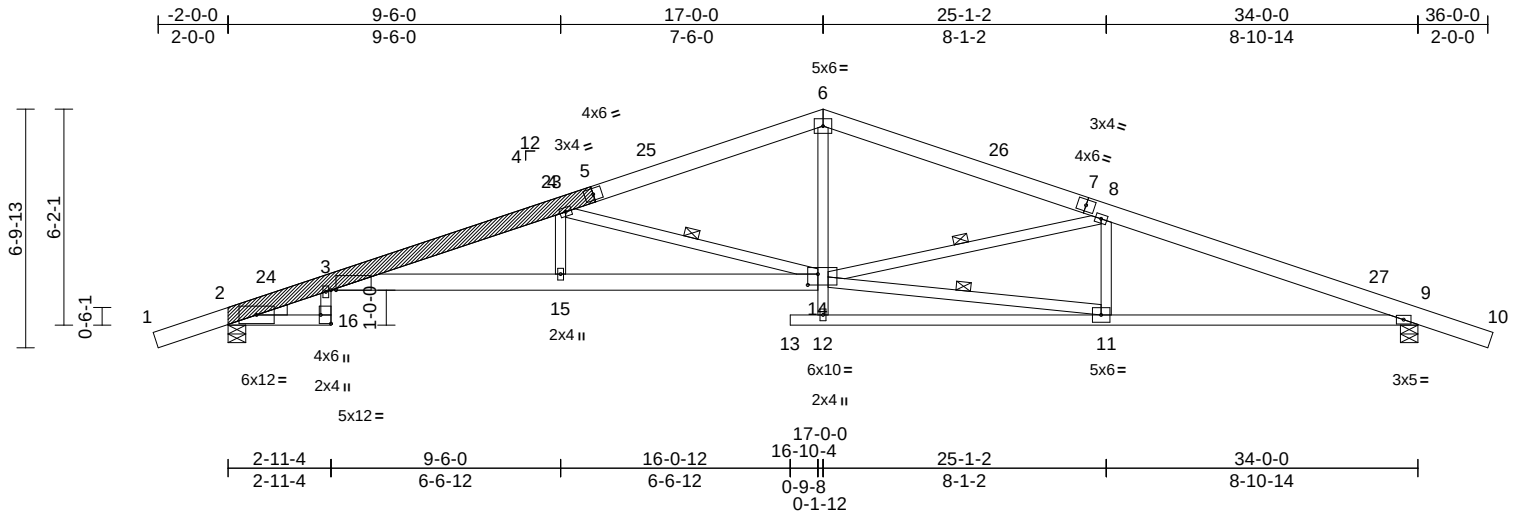
July 10,2024

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

Job	Truss	Truss Type	Qty	Ply	Tyre Residence	T34408883
1453-A	T3	Roof Special	8	1	Job Reference (optional)	

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

Run: 8.73 S Jun 13 2024 Print: 8.730 S Jun 13 2024 MiTek Industries, Inc. Wed Jul 10 13:06:00 Page: 1
ID:VWrVRAG6z29TmOm2pVfdvCzX0bG-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:65.8

Plate Offsets (X, Y): [3:0-1-12,Edge], [14:0-3-8,0-3-12], [16:Edge,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	0.60	Vert(LL)	0.54	3-15	>760	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	1.00	Vert(CT)	-0.81	3-15	>506	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.67	Horz(CT)	0.35	9	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 235 lb	FT = 20%

LUMBER

TOP CHORD	2x6 SP No.2 *Except* 1-5:2x6 SP 2400F 2.0E
BOT CHORD	2x4 SP No.2 *Except* 2-16:2x4 SP 2400F 2.0E, 3-14:2x6 SP 2400F 2.0E
WEBS	2x4 SP No.2
LBR SCAB	2-5 SP 2400F 2.0E one side
WEDGE	Left: 2x4 SP No.2

BRACING

TOP CHORD	Structural wood sheathing directly applied or 3-8-9 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS	1 Row at midpt 4-14, 11-14, 8-14

REACTIONS (size) 2=0-6-0, 9=0-6-0
Max Horiz 2=-166 (LC 13)
Max Uplift 2=-742 (LC 8), 9=-742 (LC 9)
Max Grav 2=1493 (LC 1), 9=1492 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/39, 2-3=-1301/492, 3-4=-4670/1914, 4-6=-2734/1143, 6-8=-2673/1108, 8-9=-3249/1319, 9-10=0/39
BOT CHORD	2-16=-395/952, 3-16=-277/675, 3-15=-1824/4489, 14-15=-1824/4488, 12-13=0/0, 11-12=-25/95, 9-11=-1098/3016
WEBS	4-15=-14/504, 4-14=-2059/1071, 8-11=-202/235, 12-14=0/179, 6-14=-392/1247, 11-14=-1082/2946, 8-14=-720/529

NOTES

1) Attached 11-0-14 scab 2 to 5, front face(s) 2x6 SP 2400F 2.0E with 2 row(s) of 10d (0.131"x3") nails spaced 9" o.c.except : starting at 2-0-6 from end at joint 2, nail 2 row(s) at 2" o.c. for 2-0-0; starting at 9-0-14 from end at joint 2, nail 2 row(s) at 7" o.c. for 2-0-0.
2) Unbalanced roof live loads have been considered for this design.
3) Wind: ASCE 7-22; Vult=140mph (3-second gust) Vasd=108mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 -2-0-14 to 1-3-15, Zone1 1-3-15 to 17-0-0, Zone2 17-0-0 to 21-9-11, Zone1 21-9-11 to 36-0-14 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
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) 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 2400F 2.0E , Joint 9 SP No.2 .
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 742 lb uplift at joint 2 and 742 lb uplift at joint 9.

LOAD CASE(S) Standard

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

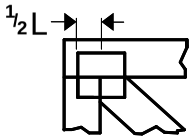
Julius Lee PE No.34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

July 10,2024

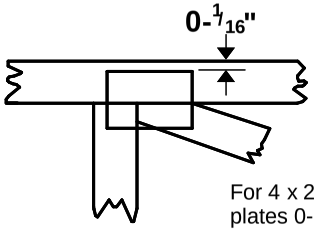
MiTek®
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

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.

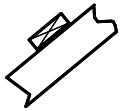
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 x 4

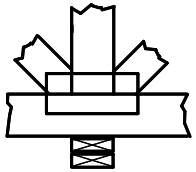
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

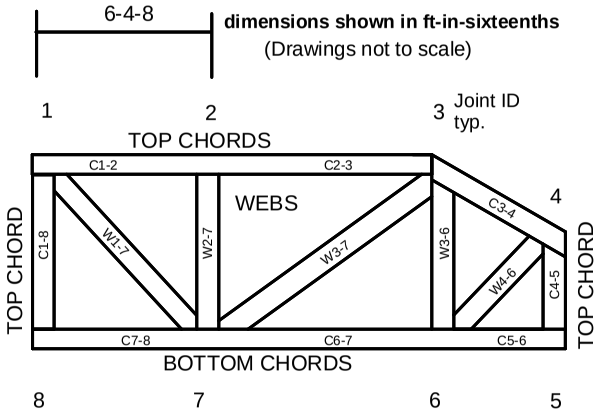


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

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.