

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.

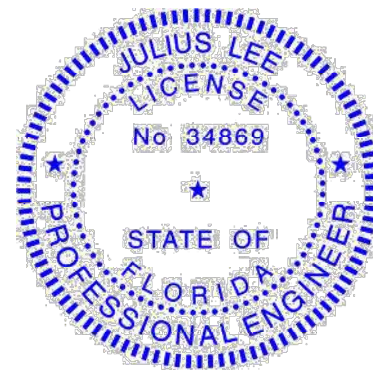
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The truss drawing(s) referenced above have been prepared by
MiTek USA, Inc. under my direct supervision based on the parameters
provided by 19 Lumber, Inc..

Truss Design Engineer's Name: 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.



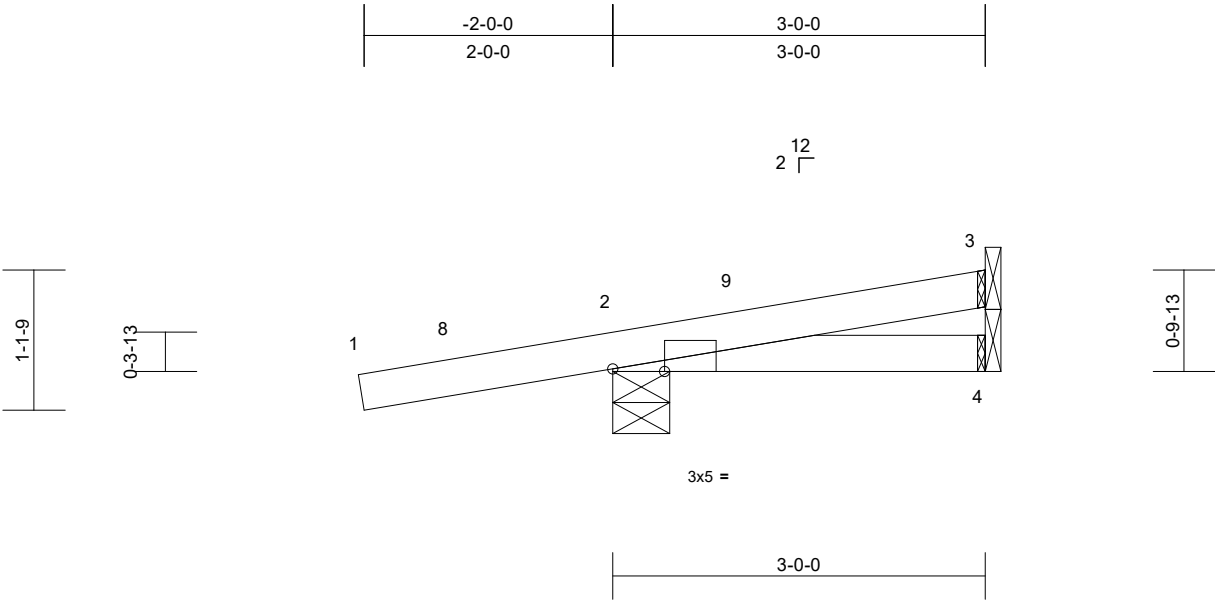
Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA, Inc. Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

July 10, 2024

Lee, Julius

1 of 1

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
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.54	Vert(LL)	0.00	7	>999	240	MT20
TCDL	10.0	Lumber DOL	1.25	BC	0.07	Vert(CT)	0.00	7	>999	180	GRIP
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a	244/190
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.

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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date: 7/10/2024

July 10,2024

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

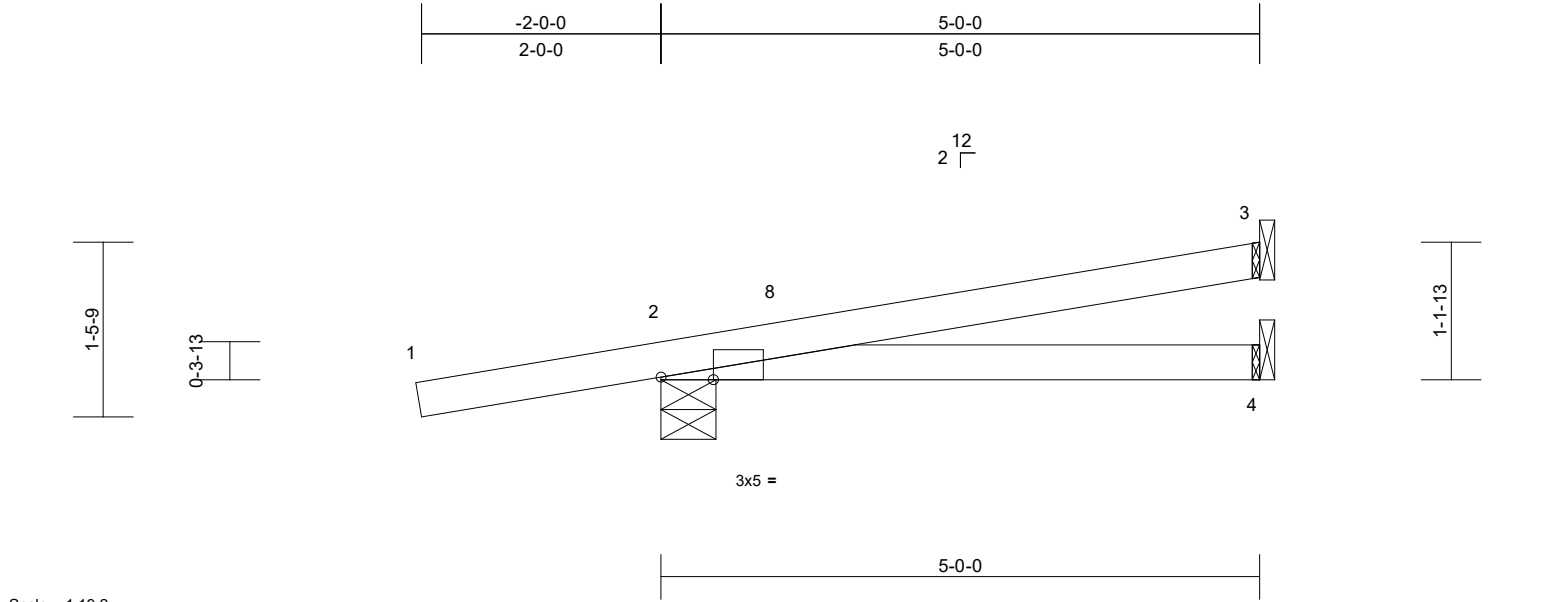


Plate Offsets (X, Y): [2:0-5-4,Edge]												
Loading		Spacing		CSI		DEFL					PLATES	GRIP
	(psf)		2-0-0			in	(loc)	l/defl	L/d			
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.54	Vert(LL)	0.05	4-7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.31	Vert(CT)	-0.05	4-7	>999	180		
BCLL	0.0*	Rep Stress 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%

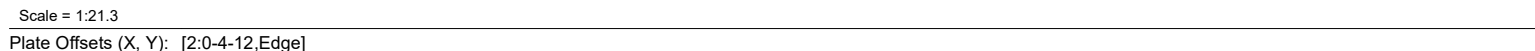
LUMBER		6) Refer to girder(s) for truss to truss connections.
TOP CHORD	2x4 SP No.2	7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 83 lb uplift at joint 3, 268 lb uplift at joint 2 and 4 lb uplift at joint 4.
BOT CHORD	2x4 SP No.2	
BRACING		LOAD CASE(S) Standard
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 .
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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date: 7/10/2024

July 10,2024

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
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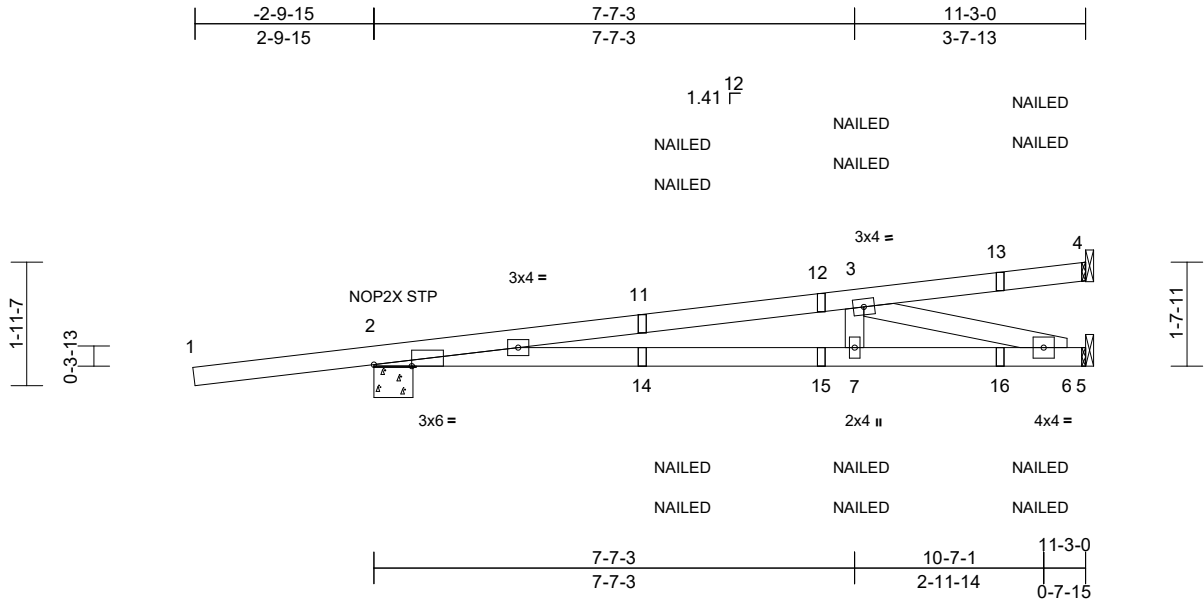


LUMBER		6) Refer to girder(s) for truss to truss connections.
TOP CHORD	2x4 SP No.2	7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 130 lb uplift at joint 3, 298 lb uplift at joint 2 and 4 lb uplift at joint 4.
BOT CHORD	2x4 SP No.2	
BRACING		
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.	LOAD CASE(S) Standard
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	

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Job	Truss	Truss Type	Qty	Ply	Tyre Residence	T34408877
1453-A	CJ9	Diagonal Hip Girder	2	1	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
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.64	Vert(LL)	0.21 7-10	>632	240
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		6) Bearings are assumed to be : Joint 2 SP No.2 .
TOP CHORD	2x4 SP No.2	7) Refer to girder(s) for truss to truss connections.
BOT CHORD	2x4 SP No.2	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.
WEBS	2x4 SP No.2	9) "NAILED" indicates Girder: 3-16d (0.162" x 3.5") toe-nails per NDS guidelines.
BRACING		10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
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.

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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date: 7/10/2024

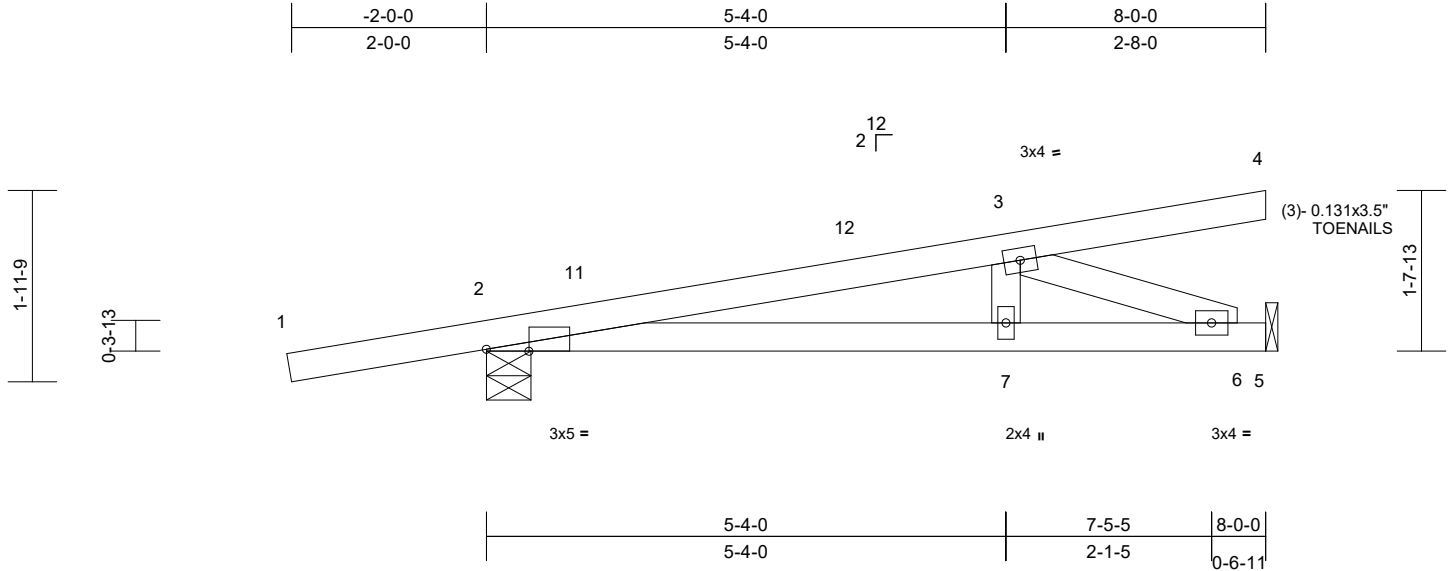
July 10,2024

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

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Page: 1



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

- 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

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

- 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
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Bearings are assumed to be: Joint 2 SP No.2 .
- Refer to girder(s) for truss to truss connections.

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.

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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date: 7/10/2024

July 10,2024

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

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

MiTek®

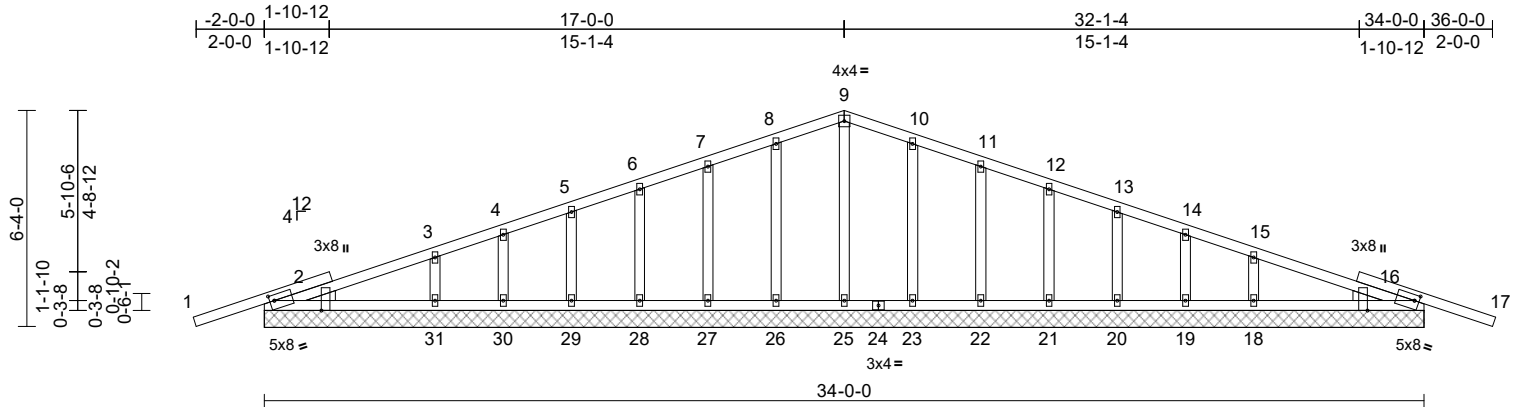
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

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,

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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	Ver(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.25	BC	0.42	Ver(CT)	n/a	-	n/a	999	244/190
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	
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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
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

WEBS

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

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

July 10,2024

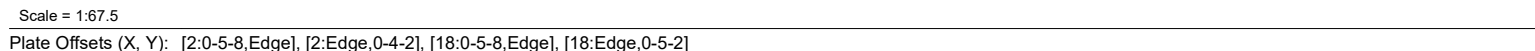
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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

MiTek®

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

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:1KH7EaGUcK1c8FBsGo7OM zX0bH-RfC?PsB70Ha3NSaPanL8w3uTXbGKWCrD0i7J4zJC?f



LUMBER		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	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.
TOP CHORD	2x4 SP No.2			
BOT CHORD	2x6 SP 2400F 2.0E			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
WEBS	2x4 SP No.2			5) All plates are 2x4 MT20 unless otherwise indicated.
OTHERS	2x4 SP No.2			6) Gable requires continuous bottom chord bearing.
BRACING		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	7) Gable studs spaced at 2-0-0 oc.
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.			8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.			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.
REACTIONS (size)		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	10) All bearings are assumed to be SP 2400F 2.0E .
	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		NOTES		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.
(lb) - Maximum Compression/Maximum Tension		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	

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

July 10, 2024

Continued on page 2

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

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

MiTek®
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Chesterfield, MO 63017
314.434.1200 / MiTek-LLS.com

Job	Truss	Truss Type	Qty	Ply	Tyre Residence
1453-A	G2	Common Girder	1	1	T34408880
					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

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- 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)

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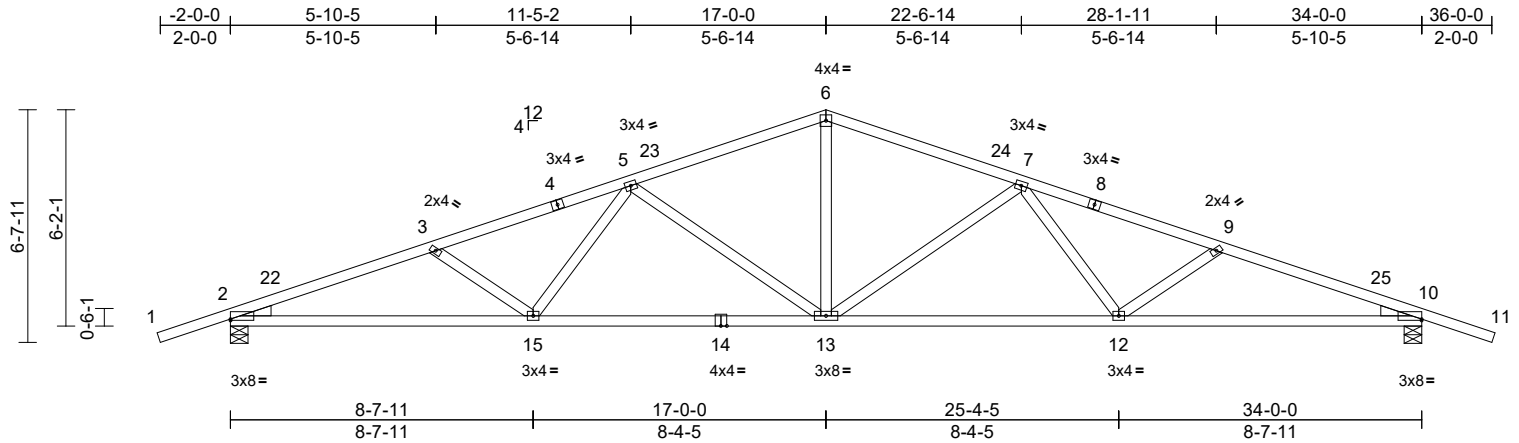
MiTek®
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Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Tyre Residence
1453-A	T1	Common	9	1	T34408881
					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
ID:VWVRAG6z29TmOm2pVfdvCzX0bG-RFC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



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
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.76	Vert(LL)	0.31	13-15	>999	240	GRIP
TCDL	10.0	Lumber DOL	1.25	BC	0.48	Vert(CT)	-0.49	12-13	>833	180	MT20
BCLL	0.0*	Rep Stress Incr	YES	WB	0.61	Horz(CT)	0.11	10	n/a	n/a	244/190
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**
- Unbalanced roof live loads have been considered for this design.
 - 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

- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP 2400F 2.0E .
- 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

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Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA, FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date: 7/10/2024

July 10,2024

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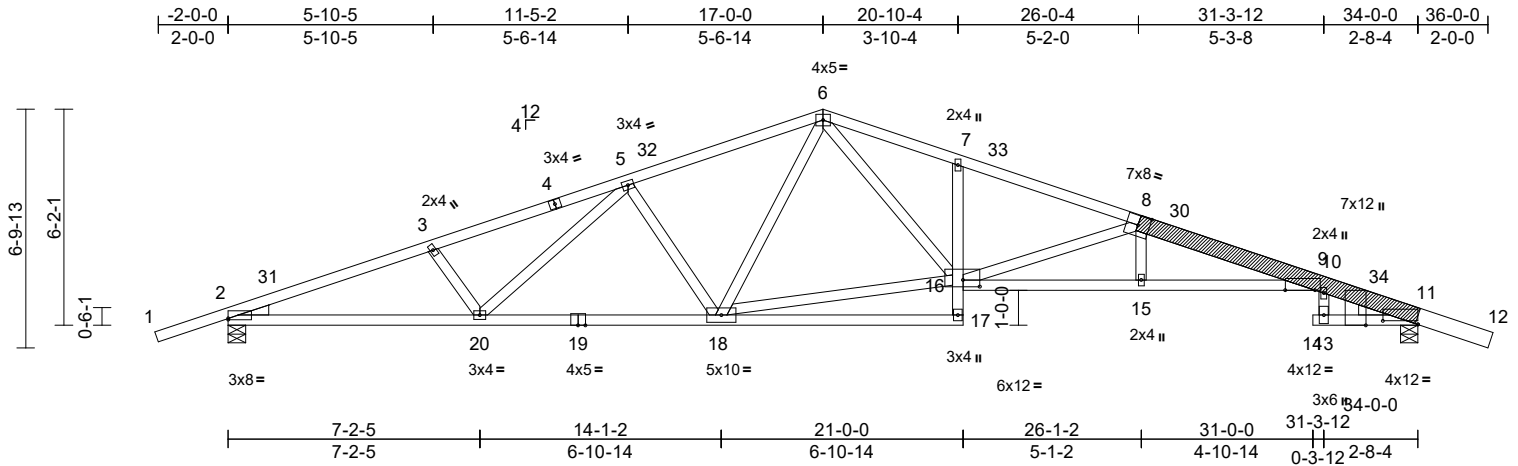
Job	Truss	Truss Type	Qty	Ply	Truss Residence	T34408882
1453-A	T2	Roof Special	6	1	Job Reference (optional)	

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

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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
TCDL	10.0	Lumber DOL	1.25	BC	0.77	Vert(CT)	-0.84	15-26	>488	180	244/190
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

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Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA, Inc. 63017
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date: 7/10/2024

July 10,2024

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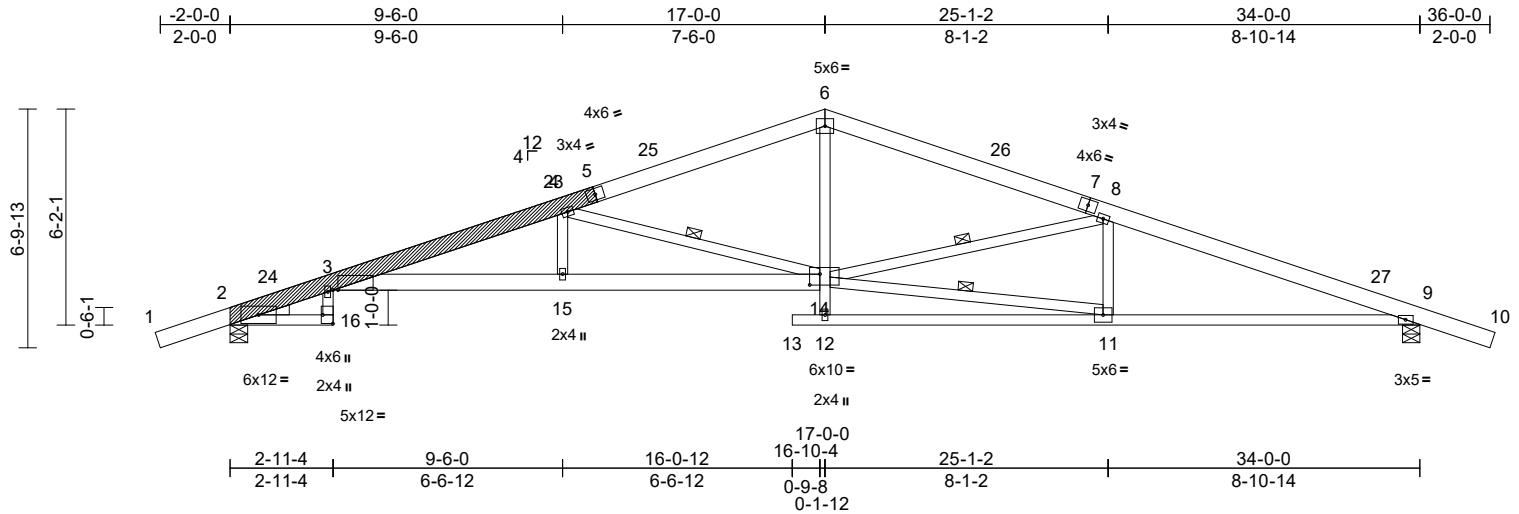
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Truss Residence
1453-A	T3	Roof Special	8	1	T34408883
					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
ID:VWVRAG6z29TmOm2pVfdvCzX0bG-RFC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



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
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.60	Vert(LL)	0.54	3-15	>760	240	GRIP
TCDL	10.0	Lumber DOL	1.25	BC	1.00	Vert(CT)	-0.81	3-15	>506	180	MT20
BCLL	0.0*	Rep Stress Incr	YES	WB	0.67	Horz(CT)	0.35	9	n/a	n/a	244/190
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
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**
- 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.
 - Unbalanced roof live loads have been considered for this design.

- 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
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Bearings are assumed to be: Joint 2 SP 2400F 2.0E , Joint 9 SP No.2 .
- 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: 7/10/2024

July 10,2024

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

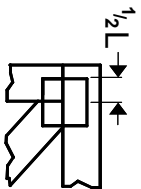
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

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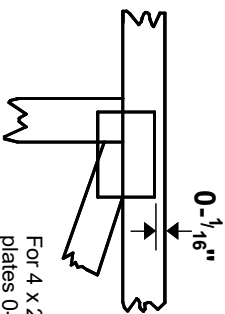
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

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- $\frac{1}{16}$ " 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

4x4

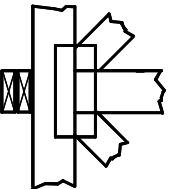
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

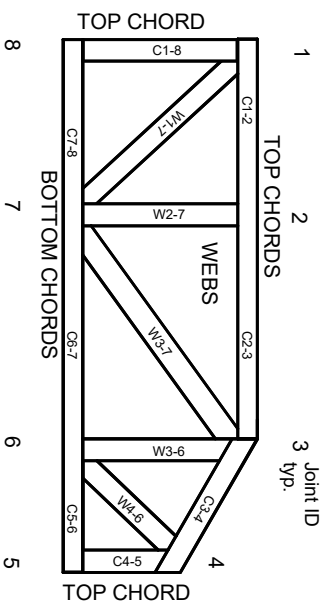


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI: 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 ANS/TP1 section 6.3. These truss designs rely on lumber values established by others.

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

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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 Torl 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.