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: 1024-054 - Remillet

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

Site Information:

Customer Info: Scott Rosenboom Project Name: . Model: .
Lot/Block: . Subdivision: .
Address: ., .
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 8.7
Wind Code: ASCE 7-22 Wind Speed: 130 mph
Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 34 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	T36298504	A01	2/6/25	23	T36298526	G01	2/6/25
2	T36298505	A02	2/6/25	24	T36298527	M01	2/6/25
3	T36298506	A03	2/6/25	25	T36298528	M02	2/6/25
4	T36298507	A04	2/6/25	26	T36298529	M03	2/6/25
5	T36298508	A05	2/6/25	27	T36298530	M04	2/6/25
6	T36298509	A06	2/6/25	28	T36298531	M05	2/6/25
7	T36298510	A07	2/6/25	29	T36298532	PB01	2/6/25
8	T36298511	A08	2/6/25	30	T36298533	PB02	2/6/25
9	T36298512	B01	2/6/25	31	T36298534	PB03	2/6/25
10	T36298513	B02	2/6/25	32	T36298535	PB04	2/6/25
11	T36298514	C01	2/6/25	33	T36298536	PB05	2/6/25
12	T36298515	C02	2/6/25	34	T36298537	T01	2/6/25
13	T36298516	C03	2/6/25				
14	T36298517	C04	2/6/25				
15	T36298518	C05	2/6/25				
16	T36298519	C06	2/6/25				
17	T36298520	C07	2/6/25				
18	T36298521	C08	2/6/25				
19	T36298522	C09	2/6/25				
20	T36298523	C10	2/6/25				
21	T36298524	D01	2/6/25				
22	T36298525	D02	2/6/25				

Review for Code Compliance
Universal Engineering Science

Lawrence Parnell PX2707 05/10/2025
Examiner-License No.

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

February 6,2025

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.

Job	Truss	Truss Type	Qty	Ply	Remillet
1024-054	A01	Piggyback Base Structural Gable	1	1	T36298504
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066,

Run: 8.73 S Dec 5 2024 Print: 8.730 S Dec 5 2024 MiTek Industries, Inc. Thu Feb 06 08:19:08 Page: 1
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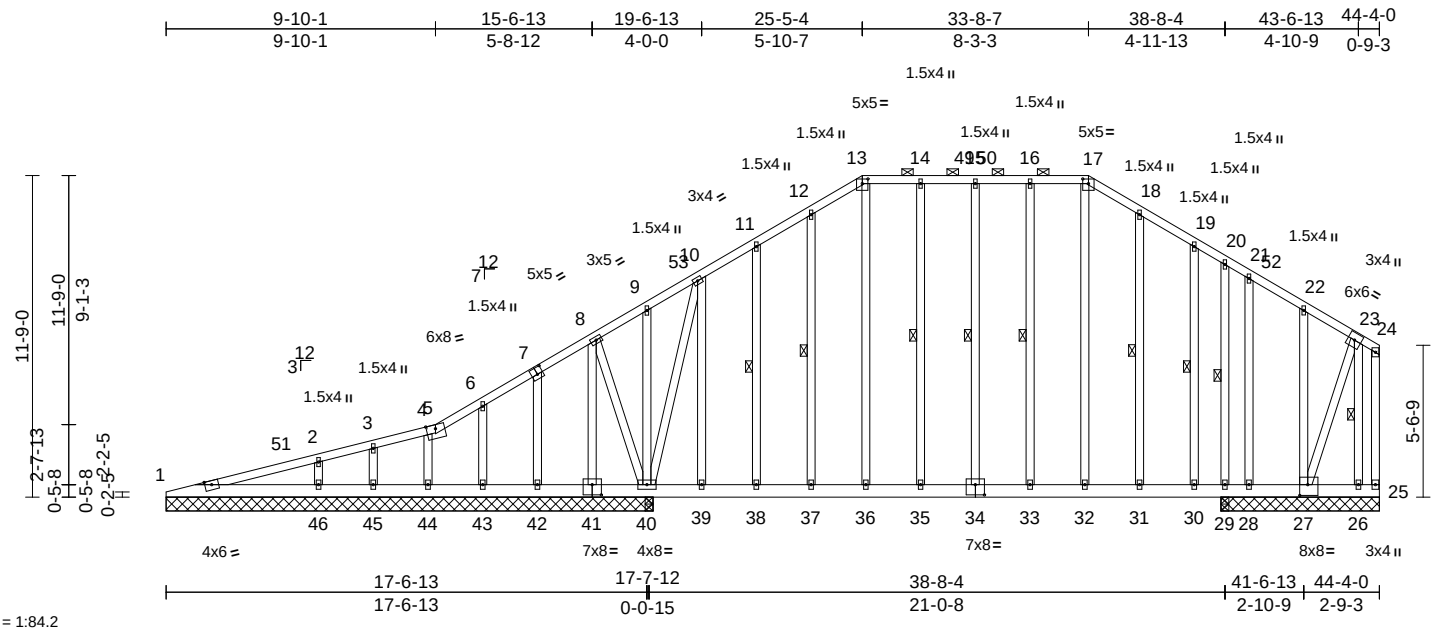


Scale = 1:84.2

Plate Offsets (X, Y): [7:0-2-8,0-3-0], [13:0-2-8,0-2-1], [17:0-2-8,0-2-1], [27:0-3-8,0-4-12], [34:0-4-0,0-4-8], [41:0-4-0,0-4-8]

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	0.36	Vert(LL)	-0.17	34-35	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.51	Vert(CT)	-0.34	34-35	>741	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.90	Horz(CT)	0.03	25	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 434 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, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 13-17.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 15-34, 16-33, 18-31, 19-30, 23-26, 14-35, 12-37, 11-38, 20-29

REACTIONS (size) 1=17-9-8, 25=5-9-8, 26=5-9-8, 27=5-9-8, 28=5-9-8, 29=0-3-8, 40=17-9-8, 41=17-9-8, 42=17-9-8, 43=17-9-8, 44=17-9-8, 45=17-9-8, 46=17-9-8
Max Horiz 1=267 (LC 11)
Max Uplift 27=-1815 (LC 1), 28=-687 (LC 24), 40=-155 (LC 12), 42=-16 (LC 12), 43=-11 (LC 12), 45=-47 (LC 1)
Max Grav 1=285 (LC 1), 25=693 (LC 1), 26=1992 (LC 1), 27=-121 (LC 9), 28=-79 (LC 9), 29=1027 (LC 24), 40=337 (LC 17), 41=646 (LC 1), 42=161 (LC 17), 43=169 (LC 1), 44=370 (LC 1), 45=-5 (LC 9), 46=524 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

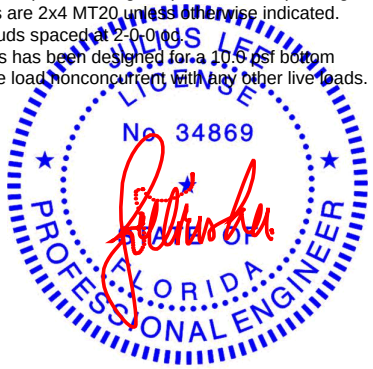
TOP CHORD 13-14=-839/173, 14-15=-839/173, 15-16=-839/173, 16-17=-839/173, 24-25=-519/48, 1-2=-597/35, 2-3=-572/0, 3-4=-554/0, 4-5=-597/0, 17-18=-992/180, 18-19=-1006/149, 19-20=-987/122, 20-21=-937/108, 21-22=-1020/70, 22-23=-930/12, 23-24=-296/94, 5-6=-616/0, 6-8=-628/48, 8-9=-776/57, 9-10=-737/90, 10-11=-1025/122, 11-12=-1001/156, 12-13=-981/185

BOT CHORD 1-46=-96/571, 45-46=-39/511, 44-45=-39/511, 43-44=-39/511, 42-43=-39/511, 40-42=-39/509, 39-40=-55/835, 38-39=-55/835, 37-38=-55/835, 36-37=-55/835, 35-36=-55/839, 33-35=-55/839, 32-33=-55/839, 31-32=-55/835, 30-31=-55/835, 29-30=-55/835, 28-29=-55/835, 27-28=-55/835, 26-27=-60/92, 25-26=-60/92

WEBS 15-34=-84/48, 16-33=-107/48, 17-32=-37/327, 18-31=-93/64, 19-30=-107/58, 21-28=0/67, 22-27=-300/125, 23-26=-2156/109, 14-35=-100/47, 13-36=-37/302, 12-37=-91/64, 11-38=-72/65, 10-39=-40/431, 9-40=-55/44, 8-41=-568/0, 7-42=-127/41, 6-43=-136/40, 4-44=-293/29, 3-45=-57/26, 2-46=-233/77, 8-40=0/405, 10-40=-816/156, 20-29=-160/39, 23-27=0/2362

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=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=44ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 0-0-0 to 4-5-3, Zone1 4-5-3 to 25-5-4, Zone2 25-5-4 to 31-6-13, Zone1 31-6-13 to 33-8-7, Zone2 33-8-7 to 39-11-10, Zone1 39-11-10 to 44-2-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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.



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

February 6,2025

Continued on page 2

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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 687 lb uplift at joint 28, 1815 lb uplift at joint 27, 155 lb uplift at joint 40, 16 lb uplift at joint 42, 11 lb uplift at joint 43 and 47 lb uplift at joint 45.
12) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
14) 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.

LOAD CASE(S) Standard

Review for Code Compliance
Universal Engineering Science

Lawrence Parnell PX2707 05/10/2025
Examiner-License No.

MiTek®
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
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Job	Truss	Truss Type	Qty	Ply	Remillet
1024-054	A02	Piggyback Base	6	1	T36298505
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066,

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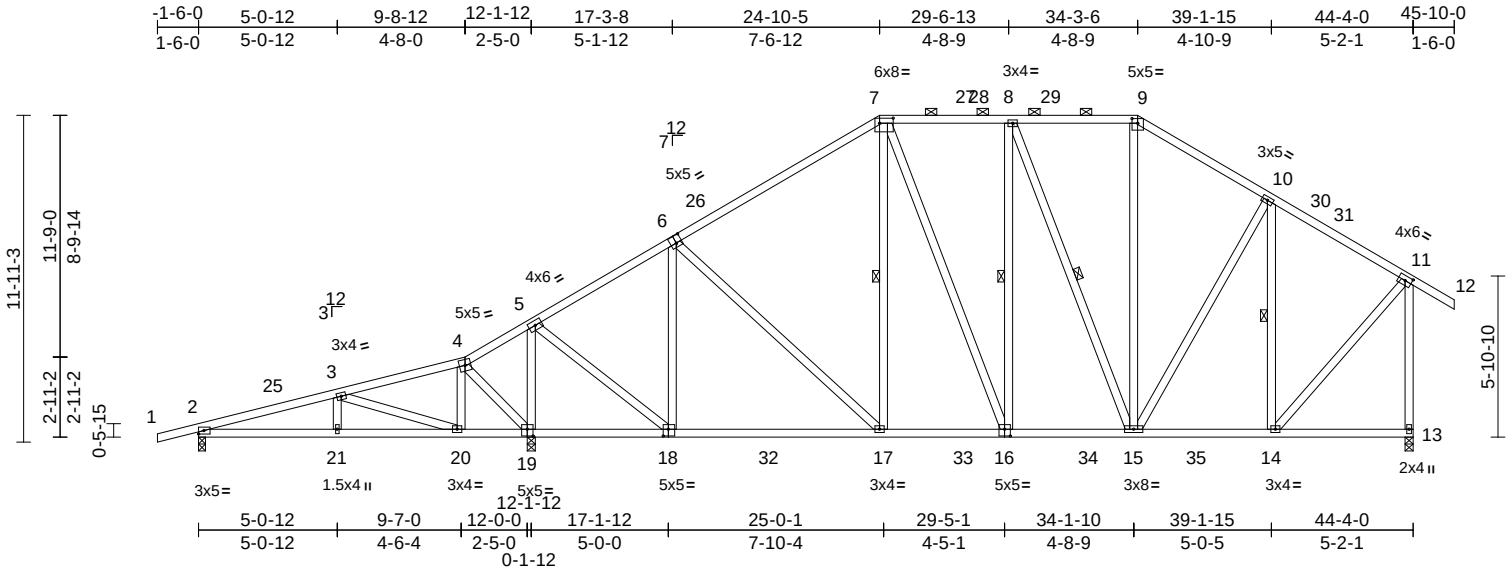


Scale = 1:84.1

Plate Offsets (X, Y): [6:0-2-8,0-3-4], [7:0-6-0,0-2-4], [9:0-2-8,0-2-1], [11:0-2-14,0-2-0], [16:0-2-8,0-3-0], [18:0-2-4,0-3-0], [19:0-2-8,0-3-0]

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	0.74	Vert(LL)	-0.13	17-18	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.58	Vert(CT)	-0.24	17-18	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.59	Horz(CT)	0.03	13	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 331 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, except end verticals, and 2-0-0 oc purlins (5-9-8 max.): 7-9.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 7-17, 8-15, 10-14, 8-16

REACTIONS (size) 2=0-3-0, 13=0-3-8, 19=0-3-8
Max Horiz 2=280 (LC 11)
Max Uplift 2=-40 (LC 12), 13=-37 (LC 12)
Max Grav 2=414 (LC 23), 13=1516 (LC 18), 19=2324 (LC 17)

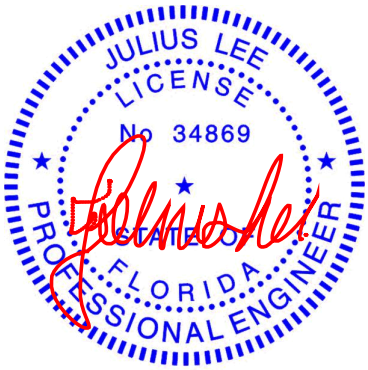
FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/22, 2-3=-595/89, 3-4=-120/395, 4-5=-92/741, 5-7=-1185/245, 7-8=-990/262, 8-9=-895/259, 9-10=-1087/256, 10-11=-939/196, 11-12=0/50, 11-13=-1444/261
BOT CHORD 2-21=-101/554, 20-21=-73/554, 17-20=-555/842, 15-17=-97/1026, 14-15=-88/742, 13-14=-72/90
WEBS 3-20=-809/53, 4-20=0/368, 4-19=-385/43, 7-17=-27/202, 8-15=-359/55, 9-15=-28/277, 10-15=0/315, 10-14=-584/111, 11-14=-48/1066, 8-16=-128/123, 7-16=-50/215, 5-18=-110/1579, 5-19=-1938/169, 6-18=-692/157, 6-17=0/269, 3-21=0/198

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=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=44ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -1-6-0 to 2-11-3, Zone1 2-11-3 to 24-10-5, Zone2 24-10-5 to 31-1-8, Zone1 31-1-8 to 34-3-6, Zone2 34-3-6 to 40-6-9, Zone1 40-6-9 to 45-10-0 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) 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 40 lb uplift at joint 2 and 37 lb uplift at joint 13.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

Review for Code Compliance
Universal Engineering Science

PX2707 05/10/2025
Examiner-License No.



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

February 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Remillet
1024-054	A03	Piggyback Base Girder	1	**2**	T36298506
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066,

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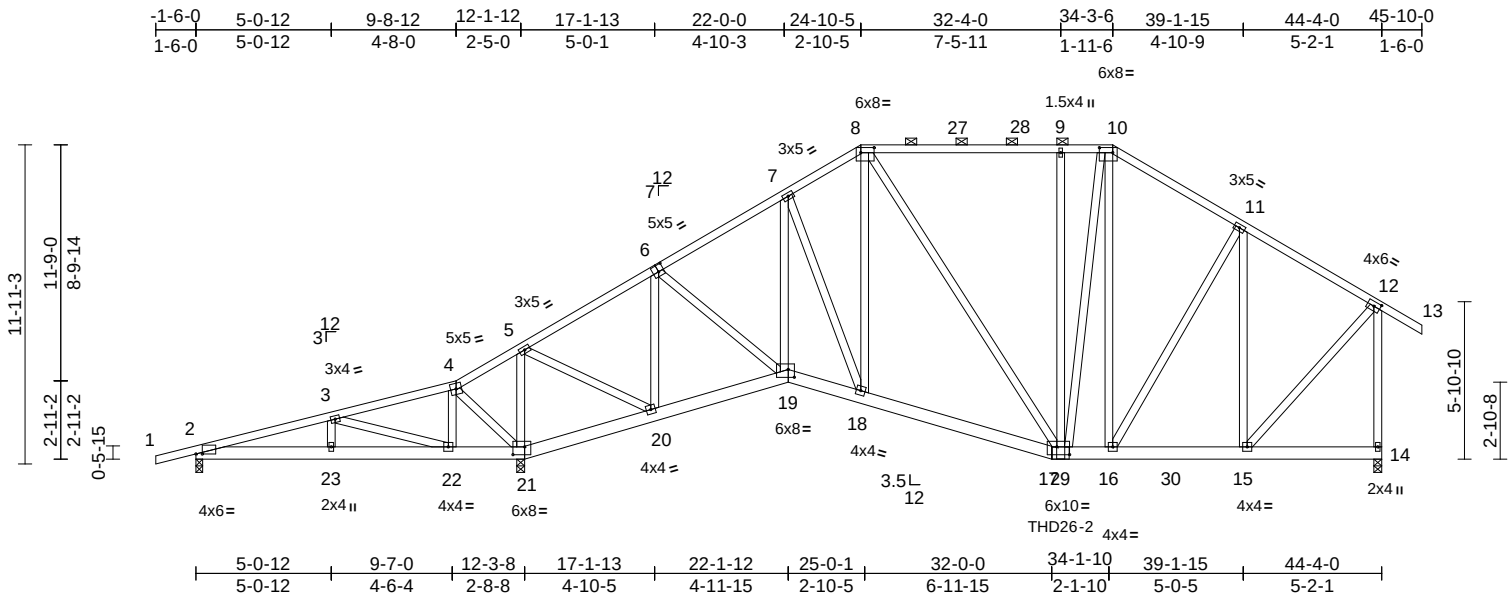

Scale = 1:86.1

Plate Offsets (X, Y): [2:0-2-14,0-0-1], [6:0-2-8,0-3-0], [8:0-6-0,0-2-4], [10:0-6-0,0-2-4], [12:0-2-14,0-2-0], [17:0-5-12,0-3-8], [19:0-2-12,0-3-8], [21:0-5-4,0-3-8]

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	0.38	Vert(LL)	-0.04	17-18	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.26	Vert(CT)	-0.08	17-18	>999	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.29	Horz(CT)	0.03	14	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 754 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 8-10.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size) 2=0-3-0, 14=0-3-8, 21=0-3-8
Max Horiz 2=278 (LC 7)
Max Uplift 2=-94 (LC 25), 14=-313 (LC 8), 21=-187 (LC 8)
Max Grav 2=278 (LC 19), 14=2257 (LC 14), 21=2995 (LC 13)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/22, 2-3=-227/258, 3-4=-150/1026, 8-9=-1727/423, 9-10=-1737/426, 10-11=-1856/424, 11-12=-1449/293, 12-13=0/50, 12-14=-2182/342, 4-5=-76/1331, 5-7=-2042/310, 7-8=-1869/353
BOT CHORD 2-23=-216/140, 22-23=-216/140, 21-22=-925/105, 20-21=-1231/121, 19-20=-176/1060, 18-19=-228/1878, 17-18=-204/1780, 16-17=-208/1540, 15-16=-126/1181, 14-15=-56/60
WEBS 4-22=0/378, 10-16=-247/80, 11-16=-163/734, 11-15=-1086/198, 12-15=-171/1717, 3-23=0/214, 3-22=-885/15, 8-18=0/561, 9-17=-432/89, 10-17=-210/1051, 8-17=-251/340, 7-19=-36/231, 7-18=-385/70, 6-19=-65/1028, 6-20=-1448/159, 5-21=-2415/197, 4-21=-227/71, 5-20=-124/2301

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 0-8-0 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=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=44ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional); 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) All bearings are assumed to be SP No.2 .
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 94 lb uplift at joint 2, 187 lb uplift at joint 21 and 313 lb uplift at joint 14.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
12) Use MiTek THD26-2 (With 18-16d nails into Girder & 12-10d nails into Truss) or equivalent at 32-4-0 from the left end to connect truss(es) to back face of bottom chord.
13) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (lb/ft)
Vert: 1-4=-60, 8-10=-60, 10-12=-60, 12-13=-60, 21-24=-20, 19-21=-20, 17-19=-20, 14-17=-20, 4-8=-60
Concentrated Loads (lb)
Vert: 29=-1215 (B)

Review for Code Compliance
Universal Engineering Science
Examiner-License No.
05/10/2025

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:

February 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Remillet
1024-054	A04	Piggyback Base	2	1	T36298507
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066,

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Page: 1

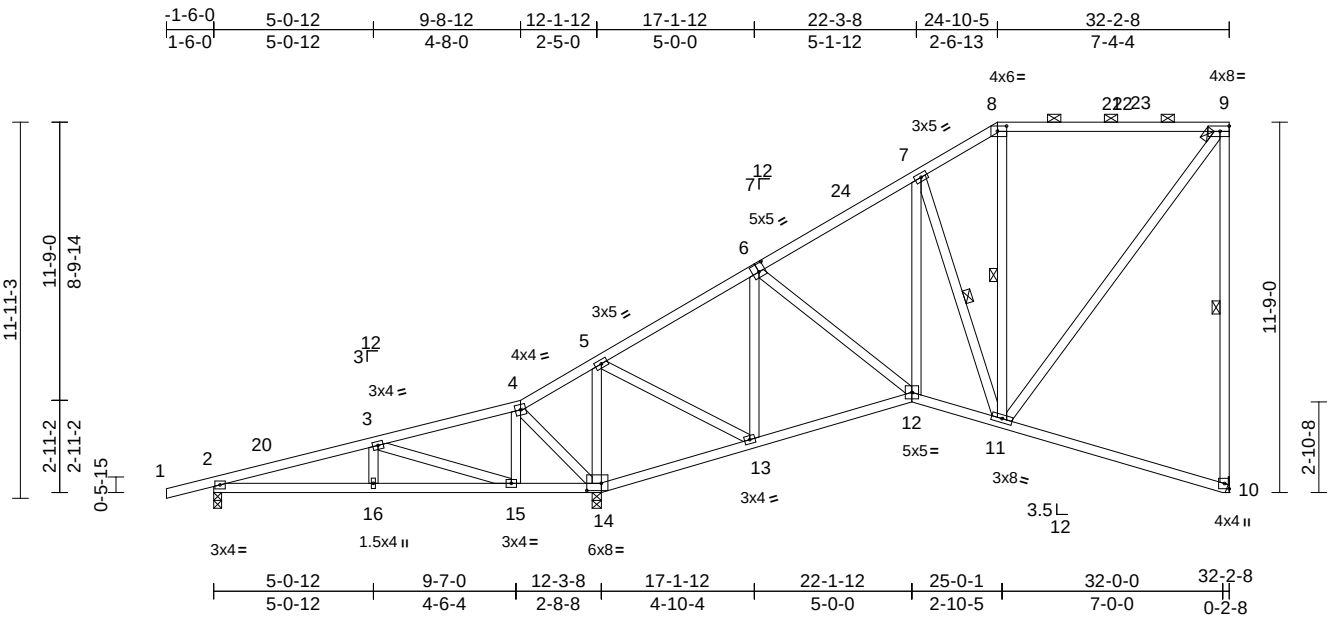

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Plate Offsets (X, Y): [6:0-2-8,0-3-0], [8:0-3-8,0-2-0], [14:0-5-8,0-2-12]

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	0.81	Vert(LL)	-0.08	10-11	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.39	Vert(CT)	-0.15	10-11	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.52	Horz(CT)	0.03	10	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 220 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, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 8-9.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 9-10, 7-11, 8-11

REACTIONS (size) 2=0-3-0, 10= Mechanical, 14=0-3-8
Max Horiz 2=342 (LC 11)
Max Uplift 2=-32 (LC 8), 10=-48 (LC 9)
Max Grav 2=403 (LC 1), 10=677 (LC 1), 14=1575 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/22, 2-3=-548/40, 3-4=-342/410, 8-9=-320/150, 9-10=-613/257, 4-5=-291/646, 5-7=-554/98, 7-8=-387/161
BOT CHORD 2-16=-257/459, 15-16=-202/459, 14-15=-314/59, 13-14=-608/92, 12-13=-316/413, 11-12=-334/520, 10-11=-158/176
WEBS 3-15=-733/60, 4-15=0/313, 4-14=-350/29, 5-14=-1090/185, 7-12=-152/228, 7-11=-295/217, 8-11=-185/147, 9-11=-216/520, 6-12=-23/191, 6-13=-549/152, 5-13=-114/913, 3-16=0/198

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=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=32ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -1-6-0 to 1-8-10, Zone1 1-8-10 to 24-10-5, Zone2 24-10-5 to 29-4-15, Zone1 29-4-15 to 32-0-12 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 respo 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 , Joint 14 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 48 lb uplift at joint 10 and 32 lb uplift at joint 2.
10) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
11) 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

Review for Code Compliance
Universal Engineering Science

Examiner-License No. PX2707 05/10/2025

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:

February 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Remillet
1024-054	A05	Piggyback Base	1	1	T36298508
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066,

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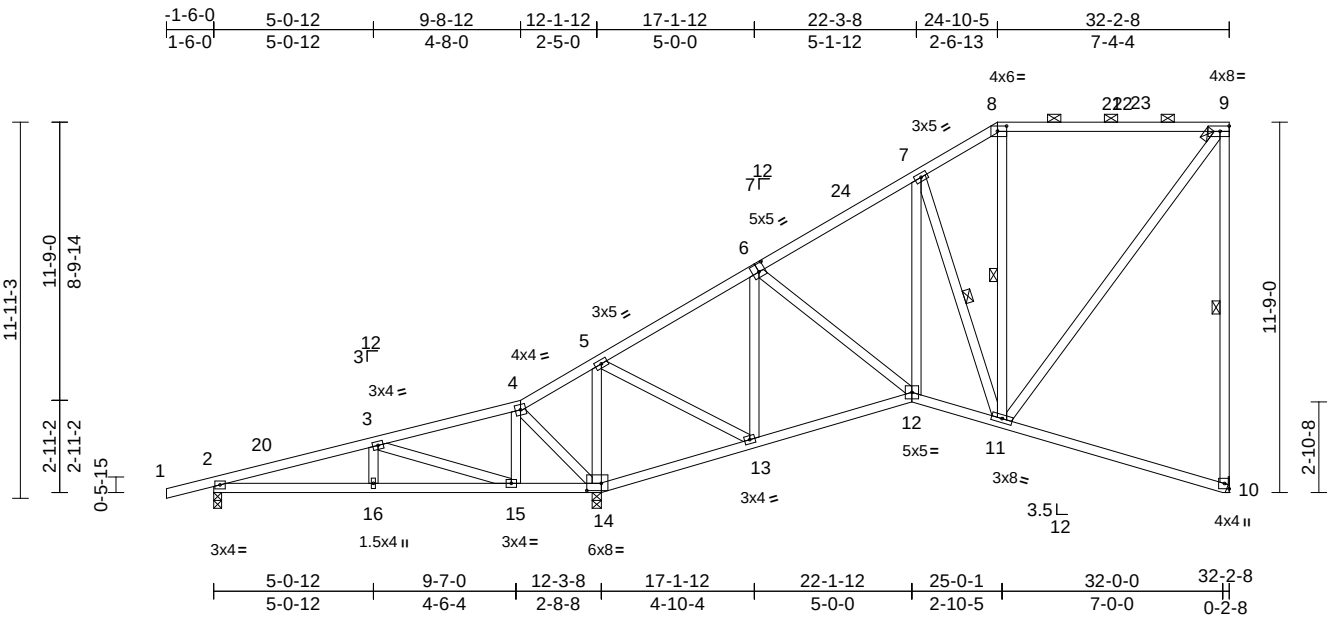
Page: 1



Scale = 1:73.1

Plate Offsets (X, Y): [6:0-2-8,0-3-0], [8:0-3-8,0-2-0], [14:0-5-8,0-2-12]

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	0.81	Vert(LL)	-0.08	10-11	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.39	Vert(CT)	-0.15	10-11	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.52	Horz(CT)	0.03	10	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 220 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, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 8-9.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 9-10, 7-11, 8-11

REACTIONS (size) 2=0-3-0, 10= Mechanical, 14=0-3-8
Max Horiz 2=342 (LC 11)
Max Uplift 2=-32 (LC 8), 10=-48 (LC 9)
Max Grav 2=403 (LC 1), 10=677 (LC 1), 14=1575 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/22, 2-3=-548/40, 3-4=-342/410, 8-9=-320/150, 9-10=-613/257, 4-5=-291/646, 5-7=-554/98, 7-8=-387/161
BOT CHORD 2-16=-257/459, 15-16=-202/459, 14-15=-314/59, 13-14=-608/92, 12-13=-316/413, 11-12=-334/520, 10-11=-158/176
WEBS 3-15=-733/60, 4-15=0/313, 4-14=-350/29, 5-14=-1090/185, 7-12=-152/228, 7-11=-295/217, 8-11=-185/147, 9-11=-216/520, 6-12=-23/191, 6-13=-549/152, 5-13=-114/913, 3-16=0/198

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=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=32ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -1-6-0 to 1-8-10, Zone1 1-8-10 to 24-10-5, Zone2 24-10-5 to 29-4-15, Zone1 29-4-15 to 32-0-12 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 respo 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 , Joint 14 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 48 lb uplift at joint 10 and 32 lb uplift at joint 2.
10) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
11) 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

Review for Code Compliance
Universal Engineering Science

Examiner-License No. PX2707 05/10/2025

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:

February 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Remillet
1024-054	A06	Piggyback Base Girder	1	**2**	T36298509
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066,

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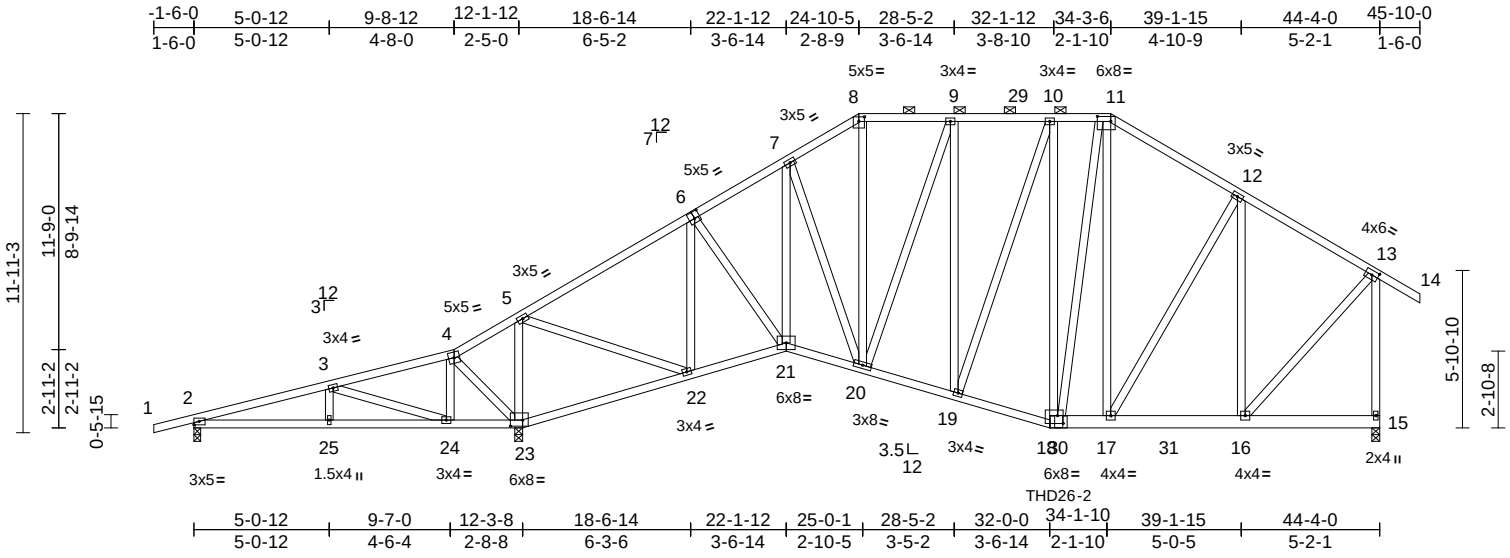

Scale = 1:86.1

Plate Offsets (X, Y): [6:0-2-8,0-3-0], [8:0-2-8,0-2-1], [11:0-6-0,0-2-4], [13:0-2-14,0-2-0], [18:0-2-8,0-3-8], [23:0-5-8,0-2-12]

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	0.32	Vert(LL)	-0.04	19	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.26	Vert(CT)	-0.07	19-20	>999	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.29	Horz(CT)	0.04	15	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 759 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except* 18-15:2x6 SP No.2
WEBS 2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 8-11.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size) 2=0-3-0, 15=0-3-8, 23=0-3-8
Max Horiz 2=278 (LC 7)
Max Uplift 2=-81 (LC 25), 15=-313 (LC 8), 23=-185 (LC 8)
Max Grav 2=304 (LC 21), 15=2270 (LC 14), 23=2954 (LC 13)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/22, 2-3=-221/197, 3-4=-150/895, 4-5=-79/1201, 5-7=-2053/322, 7-8=-1854/356, 8-9=-1596/322, 9-10=-1699/376, 10-11=-1715/422, 11-12=-1868/424, 12-13=-1458/294, 13-14=0/50, 13-15=-2195/343
BOT CHORD 2-25=-169/145, 24-25=-156/145, 23-24=-788/97, 22-23=-1095/112, 21-22=-190/1426, 20-21=-220/1887, 19-20=-229/1841, 18-19=-263/1809, 17-18=-211/1564, 16-17=-126/1188, 15-16=-56/60
WEBS 3-25=0/210, 3-24=-890/16, 4-24=0/382, 4-23=-227/50, 5-23=-2392/218, 5-22=-127/2416, 8-20=-140/763, 9-20=-393/180, 9-19=-162/271, 10-19=-222/200, 10-18=-250/250, 11-18=-197/878, 11-17=-210/81, 12-17=-163/741, 12-16=-1091/198, 13-16=-172/1727, 6-21=-57/776, 6-22=-1237/149, 7-21=-38/362, 7-20=-438/57

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: 2x4 - 1 row at 0-4-0 oc, 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=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=44ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional); 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 2 SP No.2 , Joint 23 SP No.2 , Joint 15 SP No.2 .
10) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 2.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 81 lb uplift at joint 2, 185 lb uplift at joint 23 and 313 lb uplift at joint 15.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
13) Use MiTek THD26-2 (With 18-16d nails into Girder & 12-10d nails into Truss) or equivalent at 32-4-0 from the left end to connect truss(es) to front 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)

Review for Code Compliance
Universal Engineering Science

Examiner-Licensed

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:

February 6,2025

Continued on page 2

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

Vert: 1-4=-60, 4-8=-60, 8-11=-60, 11-13=-60, 13-14=-60, 23-26=-20, 21-23=-20, 18-21=-20, 15-18=-20

Concentrated Loads (lb)

Vert: 30=-1215 (F)

Review for Code Compliance
Universal Engineering Science

Lawrence Parnell PX2707 05/10/2025

Examiner-License No.

MiTek®

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

Job	Truss	Truss Type	Qty	Ply	Remillet
1024-054	A07	Piggyback Base	6	1	T36298510
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066,

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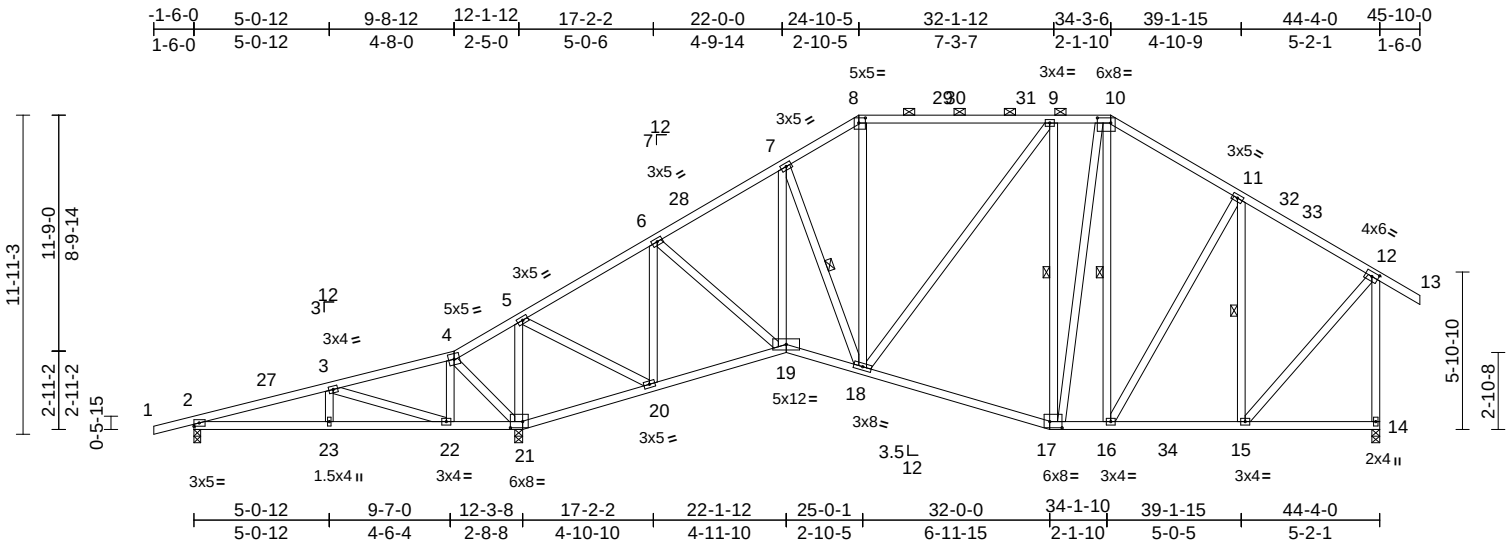
Page: 1



Scale = 1:86.1

Plate Offsets (X, Y): [8:0-3-0,0-2-4], [10:0-6-0,0-2-4], [12:0-2-14,0-2-0], [17:0-5-8,0-2-12], [21:0-5-8,0-2-12]

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	0.66	Vert(LL)	-0.09	17-18	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.46	Vert(CT)	-0.19	17-18	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.52	Horz(CT)	0.05	14	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 340 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, except end verticals, and 2-0-0 oc purlins (5-1-8 max.): 8-10.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 9-17, 10-16, 11-15, 7-18

REACTIONS (size) 2=0-3-0, 14=0-3-8, 21=0-3-8
Max Horiz 2=280 (LC 11)
Max Uplift 2=-42 (LC 12), 14=-38 (LC 12)
Max Grav 2=343 (LC 23), 14=1413 (LC 18), 21=2372 (LC 17)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/22, 2-3=-375/89, 3-4=-182/708, 4-5=-146/1047, 5-6=-728/128, 6-7=-1287/210, 7-8=-1115/237, 8-9=-953/229, 9-10=-866/266, 10-11=-981/256, 11-12=-871/195, 12-13=0/50, 12-14=-1344/253
BOT CHORD 2-23=-118/290, 22-23=-32/290, 21-22=-610/96, 20-21=-945/140, 19-20=-139/714, 18-19=-167/1202, 17-18=-98/940, 16-17=-68/786, 15-16=-84/681, 14-15=-73/90
WEBS 3-22=-852/54, 4-22=0/380, 4-21=-316/38, 5-21=-1808/216, 8-18=-23/274, 9-18=-27/260, 9-17=-573/173, 10-17=-87/487, 10-16=-144/39, 11-16=0/237, 11-15=-541/111, 12-15=-42/976, 7-19=-27/221, 7-18=-362/147, 5-20=-148/1659, 6-19=-36/616, 6-20=-995/174, 3-23=0/204

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=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=44ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -1-6-0 to 2-11-3, Zone1 2-11-3 to 24-10-5, Zone2 24-10-5 to 31-1-8, Zone1 31-1-8 to 34-3-6, Zone2 34-3-6 to 40-6-9, Zone1 40-6-9 to 45-10-0 zone; cantilever left and right exposed ; end vertical left and right exposed; 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 42 lb uplift at joint 2 and 38 lb uplift at joint 14.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

Review for Code Compliance
Universal Engineering Science

PX2707 05/10/2025
Examiner-License No.

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:

February 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Remillet
1024-054	A08	Piggyback Base	1	1	T36298511 Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066,

Run: 8.73 S Dec 5 2024 Print: 8.730 S Dec 5 2024 MiTek Industries, Inc. Thu Feb 06 08:19:10

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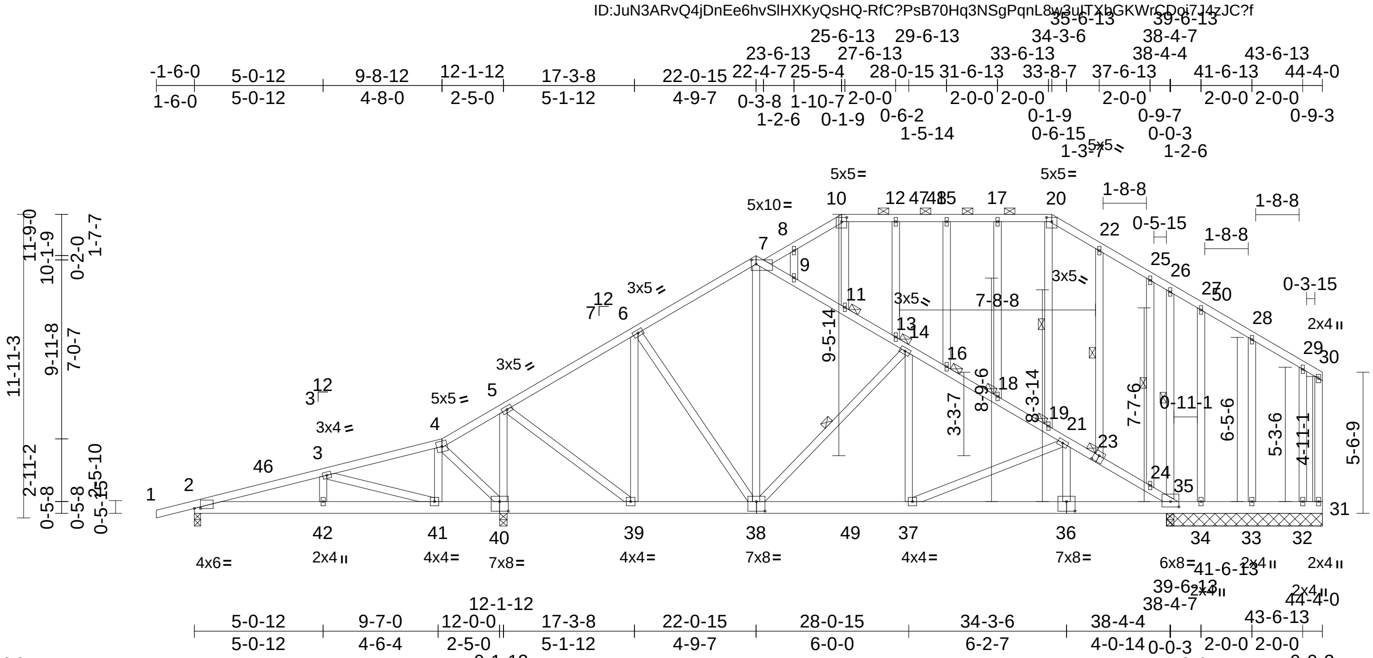

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Plate Offsets (X, Y): [2:0-2-14,0-0-1], [7:0-2-4,0-2-0], [10:0-2-8,0-2-1], [20:0-2-8,0-2-1], [23:0-2-8,0-3-0], [35:0-4-0,0-2-8], [36:0-4-0,0-4-8], [38:0-4-0,0-4-8], [40:0-4-0,0-4-8]

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	0.40	Vert(LL)	-0.05	36-37	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.40	Vert(CT)	-0.10	36-37	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.50	Horz(CT)	0.02	31	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 424 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 10-20, 7-35.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 26-35, 19-20, 22-23, 24-25, 14-38
JOINTS 1 Brace at Jt(s): 13, 11, 18, 19, 23, 16

REACTIONS (size) 2=0-3-0, 31=6-1-8, 32=6-1-8, 33=6-1-8, 34=6-1-8, 35=0-3-8, 40=0-3-8
Max Horiz 2=269 (LC 11)
Max Uplift 2=-46 (LC 12), 32=-91 (LC 12), 33=-8 (LC 12), 34=-86 (LC 17)
Max Grav 2=396 (LC 23), 31=167 (LC 17), 32=103 (LC 11), 33=230 (LC 18), 34=-1 (LC 9), 35=1309 (LC 17), 40=2036 (LC 17)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/22, 2-3=-537/110, 3-4=-79/474, 4-5=-56/786, 5-6=-618/166, 6-7=-779/215, 10-12=-153/274, 12-15=-153/274, 15-17=-153/274, 17-20=-153/274, 30-31=-124/88, 7-8=-170/262, 8-10=-169/293, 20-22=-178/284, 22-25=-170/251, 25-26=-136/220, 26-27=-136/182, 27-28=-133/154, 28-29=-116/120, 29-30=-131/113, 7-9=-754/35, 9-11=-753/58, 11-13=-786/40, 13-14=-891/70, 14-16=-1247/25, 16-18=-1301/43, 18-19=-1318/55, 19-21=-1374/48, 21-24=-1624/12, 24-35=-1685/26

BOT CHORD 2-42=-96/491, 41-42=-96/491, 39-41=-592/81, 37-39=-106/1160, 35-37=-64/1414, 34-35=-76/94, 33-34=-76/94, 32-33=-76/94, 31-32=-76/94

WEBS 3-41=-829/52, 4-41=0/327, 4-40=-321/48, 5-39=-38/1261, 5-40=-1622/127, 6-39=-614/85, 3-42=0/204, 26-35=-38/66, 12-13=-235/60, 10-11=-70/28, 8-9=-19/44, 17-18=-47/25, 19-20=-141/9, 22-23=-128/41, 24-25=-137/40, 27-34=-81/63, 28-33=-130/126, 29-32=-65/124, 15-16=-120/35, 7-38=0/459, 6-38=0/295, 14-37=0/396, 21-36=0/147, 21-37=-312/0, 14-38=-686/0

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=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=44ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -1-6-0 to 2-11-3, Zone1 2-11-3 to 25-5-4, Zone2 25-5-4 to 31-6-13, Zone1 31-6-13 to 33-8-7, Zone2 33-8-7 to 39-11-10, Zone1 39-11-10 to 44-2-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) Provide adequate drainage to prevent water ponding.
5) All plates are 1.5x4 MT20 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) All bearings are assumed to be SP No.2 .

Review for Code Compliance
Universal Engineering Science
Examiner License No.

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:

February 6,2025

Continued on page 2

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9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 46 lb uplift at joint 2, 86 lb uplift at joint 34, 8 lb uplift at joint 33 and 91 lb uplift at joint 32.
10) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
11) 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

Review for Code Compliance
Universal Engineering Science

Lawrence Parnell PX2707 05/10/2025
Examiner-License No.

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Chesterfield, MO 63017
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Job	Truss	Truss Type	Qty	Ply	Remillet
1024-054	B01	Roof Special	1	1	T36298512
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066,

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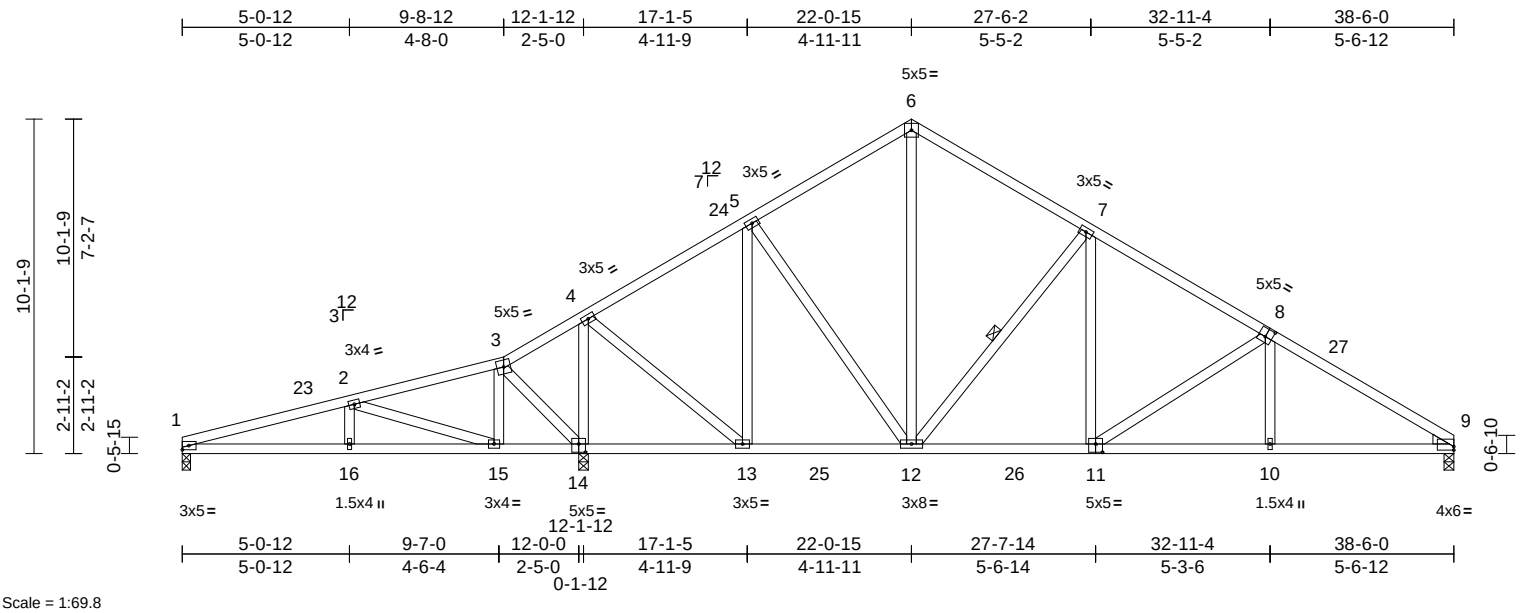

Scale = 1:69.8

Plate Offsets (X, Y): [8:0-2-8,0-3-0], [9:Edge,0-1-5], [11:0-2-8,0-3-0], [14:0-2-8,0-3-0]

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	0.31	Vert(LL)	-0.07	11-12	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.50	Vert(CT)	-0.12	11-12	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.51	Horz(CT)	0.04	9	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 226 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2
WEDGE Right: 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 7-12

REACTIONS (size) 1=0-3-0, 9=0-3-8, 14=0-3-8
Max Horiz 1=169 (LC 11)
Max Grav 1=322 (LC 25), 9=1118 (LC 18), 14=2032 (LC 17)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-552/110, 2-3=0/452, 3-4=0/782, 4-5=-613/118, 5-6=-814/178, 6-7=-802/191, 7-9=-1722/170
BOT CHORD 1-16=-54/507, 15-16=-54/507, 13-15=-590/88, 12-13=0/511, 10-12=-49/1407, 9-10=-145/1410
WEBS 2-15=-848/125, 3-15=0/359, 3-14=-355/40, 6-12=-73/492, 7-12=-716/116, 4-14=-1635/99, 2-16=0/206, 4-13=-15/1271, 5-12=0/327, 5-13=-617/72, 7-11=0/481, 8-10=0/201, 8-11=-452/118

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=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=38ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 0-0-0 to 3-10-3, Zone1 3-10-3 to 22-0-15, Zone2 22-0-15 to 27-6-2, Zone1 27-6-2 to 38-6-0 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) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL 10.0psf.
6) All bearings are assumed to be SP No.2 .
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

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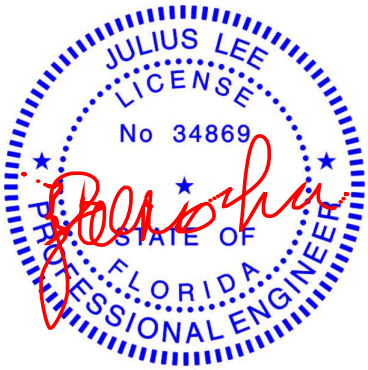

Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

February 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Remillet
1024-054	B02	Roof Special	4	1	T36298513
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066,

Run: 8.73 S Dec 5 2024 Print: 8.730 S Dec 5 2024 MiTek Industries, Inc. Thu Feb 06 08:19:11 Page: 1
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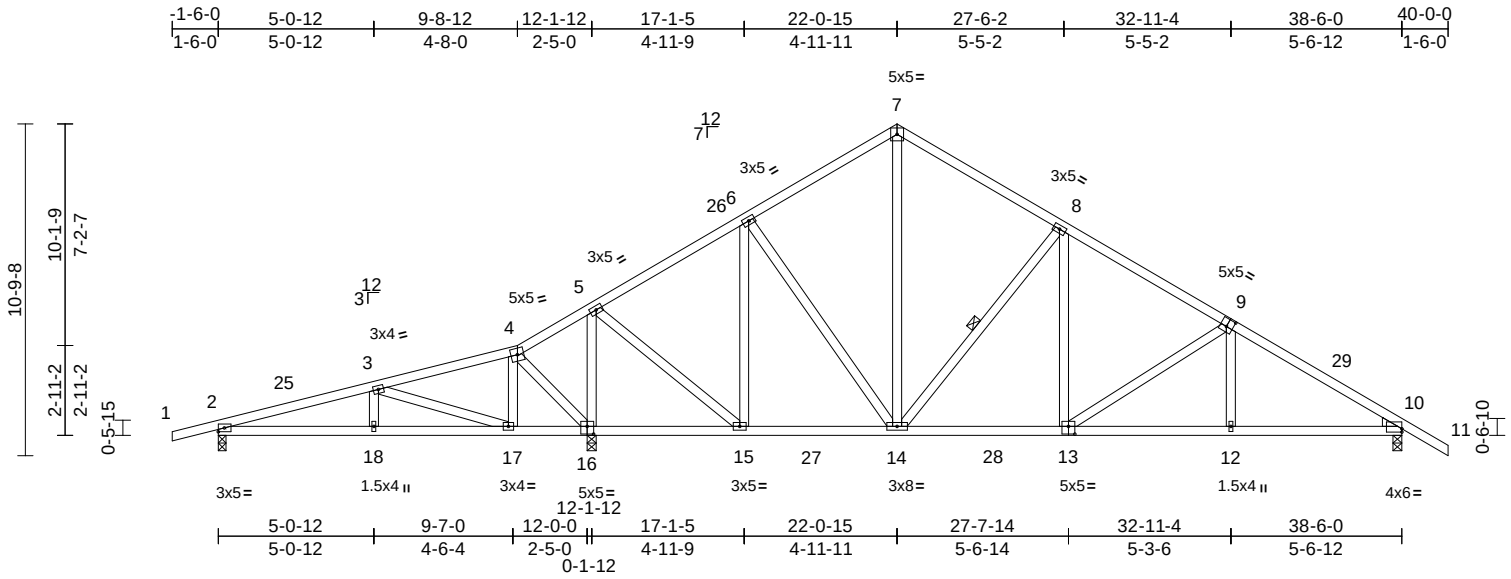

Scale = 1:74.9

Plate Offsets (X, Y): [9:0-2-8,0-3-0], [10:Edge,0-1-5], [13:0-2-8,0-3-0], [16:0-2-8,0-3-0]

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	0.36	Vert(LL)	-0.07	13-14	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.54	Vert(CT)	-0.12	13-14	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.52	Horz(CT)	0.04	10	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 231 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2
WEDGE Right: 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 8-14

REACTIONS (size) 2=0-3-0, 10=0-3-8, 16=0-3-8
Max Horiz 2=178 (LC 11)
Max Uplift 2=-40 (LC 12), 10=-37 (LC 12)
Max Grav 2=410 (LC 23), 10=1201 (LC 18), 16=2031 (LC 17)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/22, 2-3=-506/37, 3-4=0/469, 4-5=0/795, 5-6=-607/123, 6-7=-809/181, 7-8=-798/184, 8-10=-1702/146, 10-11=0/45
BOT CHORD 2-18=-61/472, 17-18=0/472, 15-17=-600/93, 14-15=0/513, 12-14=0/1383, 10-12=-53/1387
WEBS 3-17=-820/37, 4-17=0/353, 4-16=-349/30, 7-14=-67/488, 8-14=-713/115, 3-18=0/203, 5-16=-1641/87, 5-15=-1/1278, 6-14=0/328, 6-15=-620/63, 8-13=0/474, 9-12=0/198, 9-13=-435/63

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=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=38ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -1-6-0 to 2-4-3, Zone1 2-4-3 to 22-0-15, Zone2 22-0-15 to 27-6-2, Zone1 27-6-2 to 40-0-0 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, with BCDL 10.0psf.
6) All bearings are assumed to be SP No.2 .
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 40 lb uplift at joint 2 and 37 lb uplift at joint 10.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

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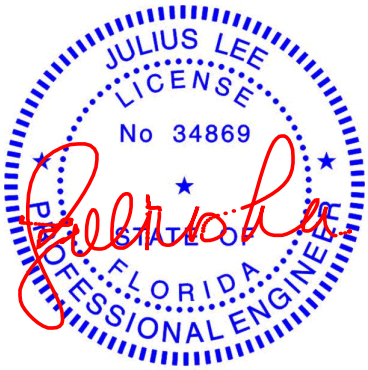

Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

February 6,2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcscomponents.com)

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Chesterfield, MO 63017
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Job	Truss	Truss Type	Qty	Ply	Remillet
1024-054	C01	Common Supported Gable	1	1	T36298514
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066,

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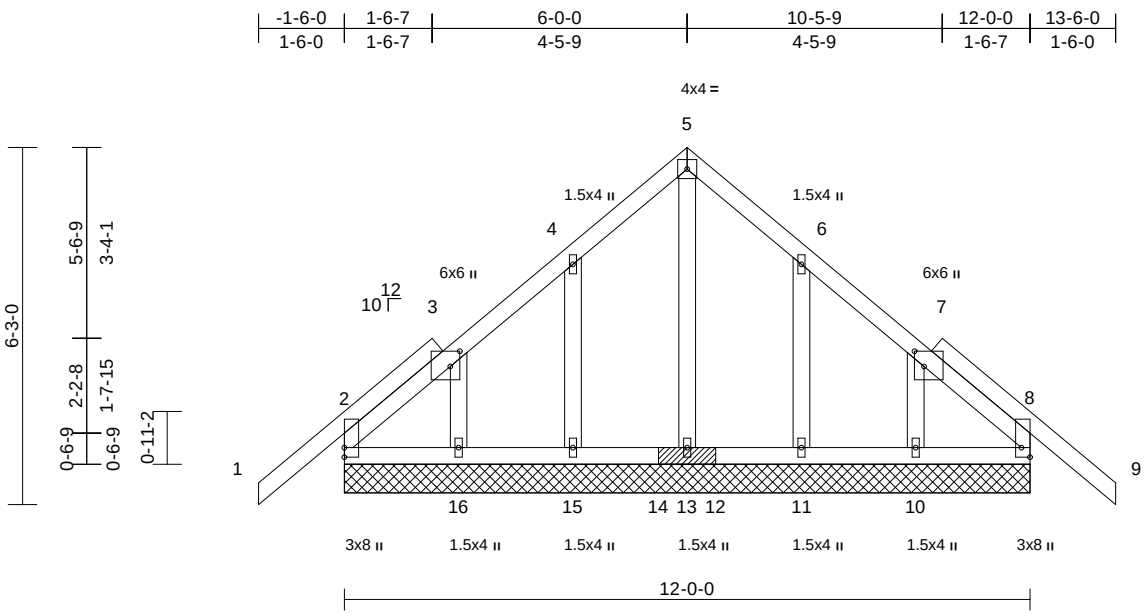
Page: 1



Scale = 1:40.3

Plate Offsets (X, Y): [3:0-3-3,0-2-0], [7:0-3-3,0-2-0], [8:Edge,0-1-13]

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	0.02	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	8	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 78 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

REACTIONS (size) 2=12-0-0, 8=12-0-0, 10=12-0-0, 11=12-0-0, 13=12-0-0, 15=12-0-0, 16=12-0-0
Max Horiz 2=116 (LC 11)
Max Uplift 2=-20 (LC 12), 8=-20 (LC 12), 10=-27 (LC 12), 11=-30 (LC 12), 15=-30 (LC 12), 16=-27 (LC 12)
Max Grav 2=188 (LC 23), 8=188 (LC 24), 10=157 (LC 18), 11=175 (LC 18), 13=165 (LC 1), 15=174 (LC 17), 16=161 (LC 17)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/58, 2-3=-72/77, 3-4=-52/67, 4-5=-84/146, 5-6=-85/146, 6-7=-38/52, 7-8=-62/62, 8-9=0/58
BOT CHORD 2-16=-50/156, 15-16=-50/156, 13-15=-50/156, 11-13=-50/156, 10-11=-50/156, 8-10=-50/156
WEBS 5-13=-126/16, 4-15=-134/134, 3-16=-119/132, 6-11=-135/135, 7-10=-117/133

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=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) 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 2400F 2.0E .
10) Solid blocking is required on both sides of the truss at joint(s), 2.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 20 lb uplift at joint 2, 20 lb uplift at joint 8, 30 lb uplift at joint 15, 27 lb uplift at joint 16, 30 lb uplift at joint 11, 27 lb uplift at joint 10, 20 lb uplift at joint 2 and 20 lb uplift at joint 8.
12) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2, 17.
13) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

Review for Code Compliance
Universal Engineering Science

PX2707 05/10/2025
Examiner-License No.

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:

February 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Remillet
1024-054	C02	Common Structural Gable	1	1	T36298515
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066,

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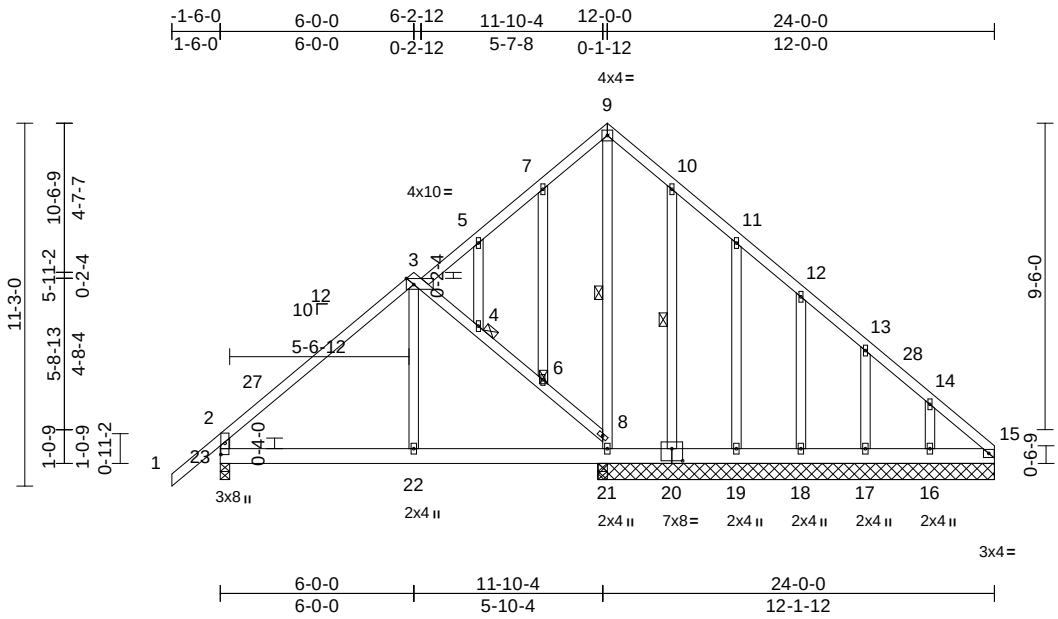
Page: 1



Scale = 1:71.4

Plate Offsets (X, Y): [3:0-2-12,Edge], [20:0-4-0,0-4-8], [23:0-4-3,0-1-8]

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	0.27	Vert(LL)	-0.02	22	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.15	Vert(CT)	-0.04	22-23	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.42	Horz(CT)	0.00	24	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 189 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, except end verticals.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 9-21, 10-20
JOINTS	1 Brace at Jt(s): 6, 4

REACTIONS (size) 15=12-3-8, 16=12-3-8, 17=12-3-8, 18=12-3-8, 19=12-3-8, 20=12-3-8, 21=12-3-8, 23=0-3-8
Max Horiz 23=-216 (LC 10)
Max Uplift 15=-61 (LC 11), 16=-49 (LC 12), 17=-29 (LC 12), 18=-34 (LC 12), 19=-36 (LC 12), 20=-60 (LC 23), 23=-42 (LC 12)
Max Grav 15=99 (LC 8), 16=202 (LC 18), 17=162 (LC 18), 18=165 (LC 18), 19=194 (LC 18), 20=89 (LC 24), 21=727 (LC 1), 23=536 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/63, 2-3=-409/42, 2-23=-468/111, 3-4=-341/74, 4-6=-381/99, 6-8=-404/111, 3-5=-49/72, 5-7=-63/95, 7-9=-61/153, 9-10=-86/140, 10-11=-78/111, 11-12=-56/105, 12-13=-75/123, 13-14=-103/142, 14-15=-154/159
BOT CHORD	22-23=-42/324, 21-22=-42/324, 19-21=-118/135, 18-19=-118/135, 17-18=-118/135, 16-17=-118/135, 15-16=-118/135
WEBS	8-21=-561/9, 8-9=-304/0, 6-7=-37/19, 4-5=-62/39, 10-20=-107/47, 11-19=-135/78, 12-18=-128/58, 13-17=-130/62, 14-16=-128/75, 3-22=0/227

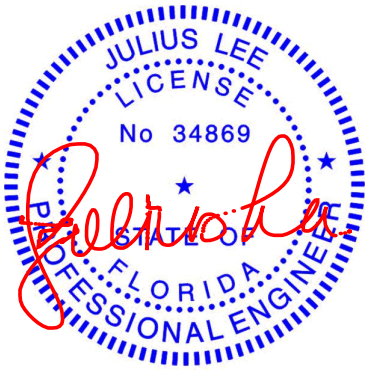
NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0p 15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Er d; MWFRS (directional) and C-C Zone3 -1-6-0 to 1-6-0, Zone1 1-6-0 to 12-0-0, Zone2 12-0-0 to 16-0-0, Zone1 16-0-0 to 24-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
5) All plates are 1.5x4 MT20 unless otherwise indicated.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) All bearings are assumed to be SP No.2 .
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 42 lb uplift at joint 23, 61 lb uplift at joint 15, 60 lb uplift at joint 20, 36 lb uplift at joint 19, 34 lb uplift at joint 18, 29 lb uplift at joint 17, 49 lb uplift at joint 16 and 61 lb uplift at joint 15.
11) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
12) 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

Review for Code Compliance
Universal Engineering Science

PX2707 05/10/2025
Examiner-License No.



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

February 6,2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcscomponents.com)

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

Job	Truss	Truss Type	Qty	Ply	Remillet
1024-054	C03	Common	10	1	T36298516
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066,

Run: 8.73 S Dec 5 2024 Print: 8.730 S Dec 5 2024 MiTek Industries, Inc. Thu Feb 06 08:19:11
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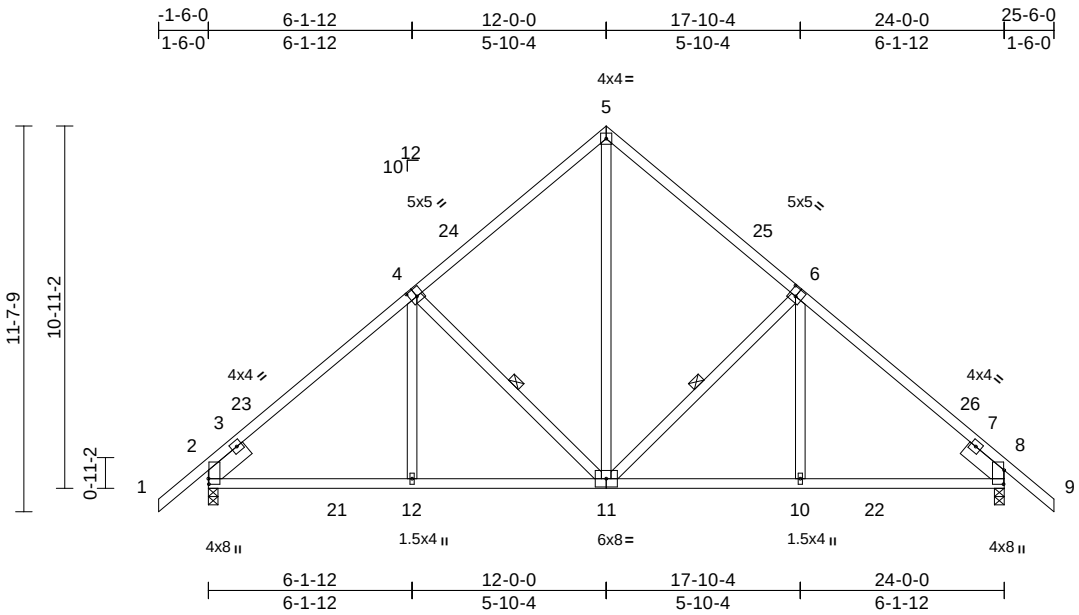
Page: 1



Scale = 1:69.5

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.39	Vert(LL)	-0.06	11-12	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.53	Vert(CT)	-0.11	11-12	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.04	8	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 151 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.2
SLIDER	Left 2x6 SP No.2 -- 1-6-0, Right 2x6 SP No.2 -- 1-6-0

BRACING

TOP CHORD	Structural wood sheathing directly applied.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 6-11, 4-11

REACTIONS (size) 2=0-3-8, 8=0-3-8
Max Horiz 2=-223 (LC 10)
Max Uplift 2=-35 (LC 12), 8=-35 (LC 12)
Max Grav 2=1161 (LC 17), 8=1161 (LC 18)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/58, 2-5=-1246/150, 5-8=-1246/150, 8-9=0/58
BOT CHORD	2-12=-58/1015, 10-12=0/1013, 8-10=-25/909
WEBS	4-12=0/252, 5-11=-75/736, 6-10=0/252, 6-11=-441/116, 4-11=-441/116

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=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -1-6-0 to 1-6-0, Zone1 1-6-0 to 12-0-0, Zone2 12-0-0 to 16-2-15, Zone1 16-2-15 to 25-6-0 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) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) All bearings are assumed to be SP No.2 .
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 35 lb uplift at joint 2 and 35 lb uplift at joint 8.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied direc[illegible]he top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

Review for Code Compliance
Universal Engineering Science

Examiner-License No. PX2707 05/10/2025

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

February 6,2025

Job	Truss	Truss Type	Qty	Ply	Remillet
1024-054	C04	Common	8	1	T36298517
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066,

Run: 8.73 S Dec 5 2024 Print: 8.730 S Dec 5 2024 MiTek Industries, Inc. Thu Feb 06 08:19:11
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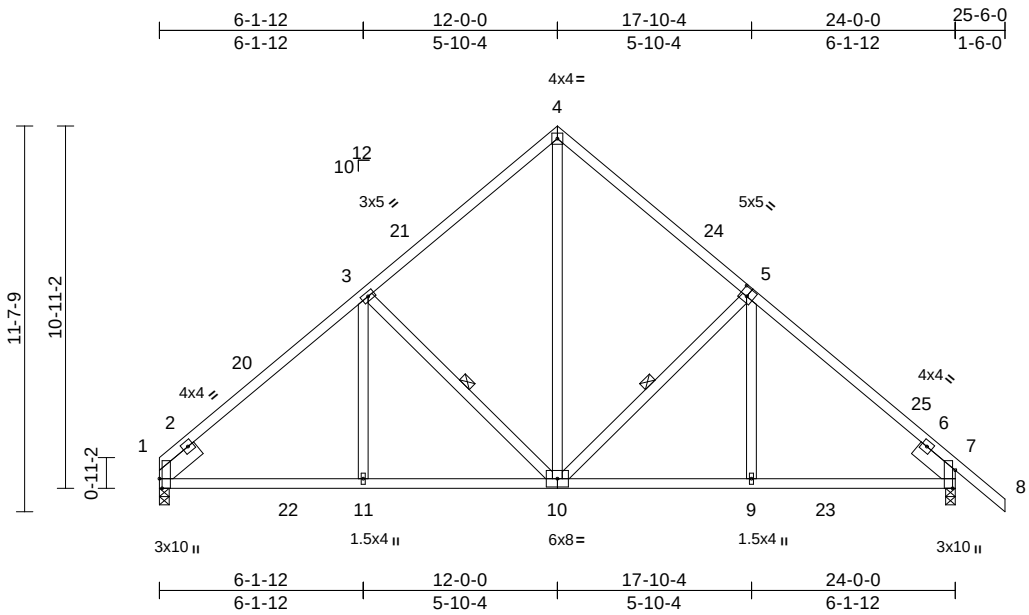


Scale = 1:69.5

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.39	Vert(LL)	-0.06	9-10	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.54	Vert(CT)	-0.11	9-10	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.04	7	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 148 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.2
SLIDER	Left 2x6 SP No.2 -- 1-6-0, Right 2x6 SP No.2 -- 1-6-0

BRACING

TOP CHORD	Structural wood sheathing directly applied.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 5-10, 3-10

REACTIONS (size) 1=0-3-8, 7=0-3-8
Max Horiz 1=-214 (LC 10)
Max Uplift 7=-37 (LC 12)
Max Grav 1=1076 (LC 17), 7=1163 (LC 18)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-3=-1254/87, 3-4=-923/155, 4-7=-1250/151, 7-8=0/58
BOT CHORD	1-11=-55/1027, 9-11=0/1027, 7-9=-26/912
WEBS	3-11=0/254, 4-10=-82/740, 5-9=0/252, 5-10=-441/116, 3-10=-453/117

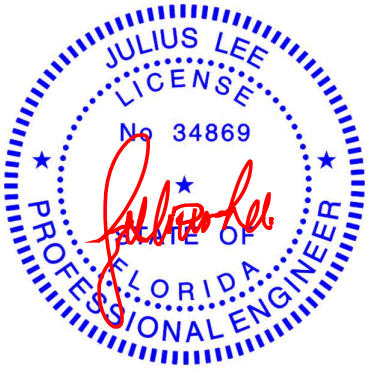
NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 0-0-0 to 3-0-0, Zone1 3-0-0 to 12-0-0, Zone2 12-0-0 to 16-2-15, Zone1 16-2-15 to 25-6-0 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) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) All bearings are assumed to be SP No.2 .
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 37 lb uplift at joint 7.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied direc[illegible]he top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

Review for Code Compliance
Universal Engineering Science

PX2707 05/10/2025
Examiner-License No.



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

February 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Remillet
1024-054	C05	Common	7	1	T36298518
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066,

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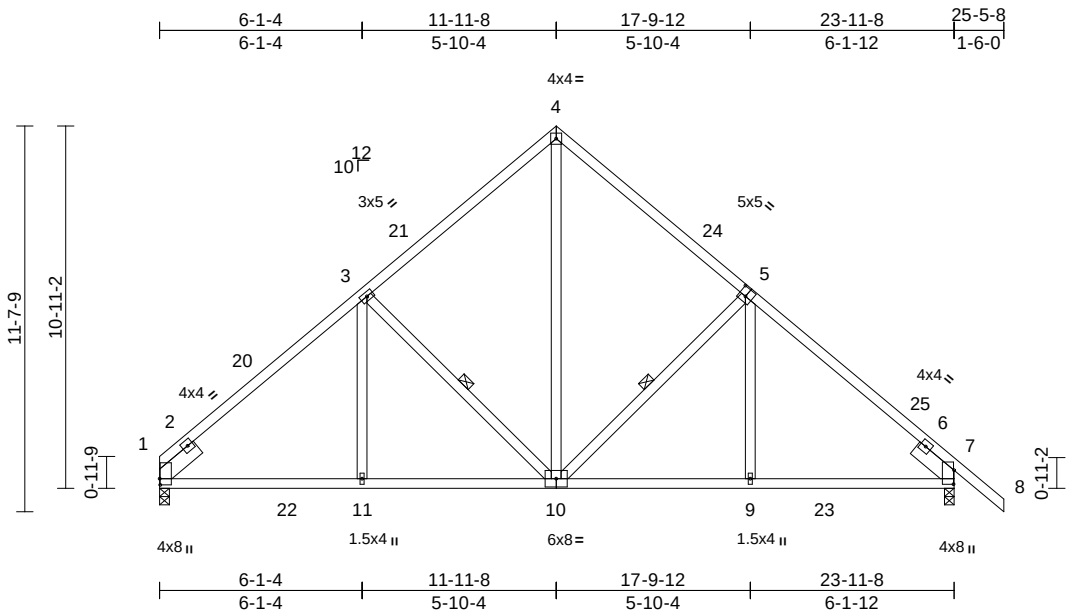

Scale = 1:69.5

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.39	Vert(LL)	-0.06	9-10	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.53	Vert(CT)	-0.11	9-10	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.04	7	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 147 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2
SLIDER Left 2x6 SP No.2 -- 1-6-0, Right 2x6 SP No.2 -- 1-6-0

BRACING
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 5-10, 3-10

REACTIONS (size) 1=0-3-8, 7=0-3-8
Max Horiz 1=-214 (LC 10)
Max Uplift 7=-37 (LC 12)
Max Grav 1=1074 (LC 17), 7=1162 (LC 18)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-3=-1246/87, 3-4=-920/155, 4-7=-1247/151, 7-8=0/58
BOT CHORD 1-11=-56/1019, 9-11=0/1019, 7-9=-26/910
WEBS 3-11=0/251, 4-10=-82/735, 5-9=0/252, 5-10=-441/116, 3-10=-445/117

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=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 0-0-8 to 3-0-8, Zone1 3-0-8 to 12-0-0, Zone2 12-0-0 to 16-2-15, Zone1 16-2-15 to 25-6-0 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) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) All bearings are assumed to be SP No.2 .
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 37 lb uplift at joint 7.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied direc[illegible]he top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

Review for Code Compliance
Universal Engineering Science

Examiner-License No. PX2707 05/10/2025

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

February 6,2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcscomponents.com)

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

Job	Truss	Truss Type	Qty	Ply	Remillet
1024-054	C06	Common Supported Gable	1	1	T36298519
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066,

Run: 8.73 S Dec 5 2024 Print: 8.730 S Dec 5 2024 MiTek Industries, Inc. Thu Feb 06 08:19:11 Page: 1
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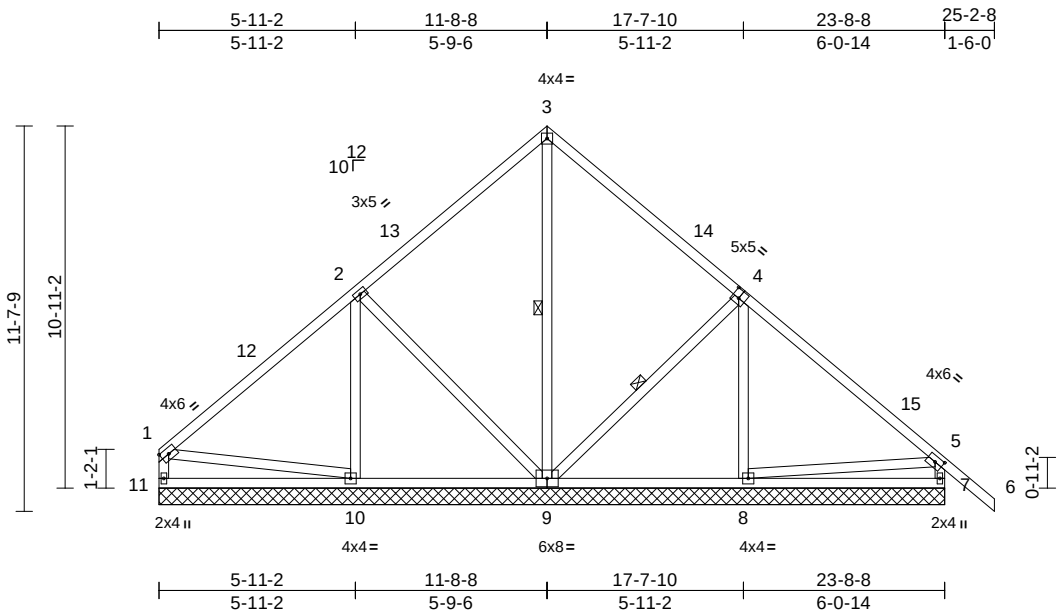

Scale = 1:69.5

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

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	0.32	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.29	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.01	7	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 158 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, except end verticals.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 3-9, 4-9

REACTIONS (size) 7=23-8-8, 8=23-8-8, 9=23-8-8, 10=23-8-8, 11=23-8-8
Max Horiz 11=-236 (LC 10)
Max Uplift 7=-41 (LC 12), 9=-61 (LC 12)
Max Grav 7=400 (LC 1), 8=397 (LC 1), 9=499 (LC 1), 10=394 (LC 17), 11=286 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-11=-232/47, 1-2=-239/48, 2-3=-173/109, 5-7=-345/104, 3-5=-237/104, 5-6=0/63
BOT CHORD 10-11=-164/314, 8-10=-118/196, 7-8=-6/180
WEBS 3-9=-260/0, 5-8=-172/106, 4-9=-142/130, 4-8=-265/44, 1-10=-129/87, 2-9=-126/125, 2-10=-264/47

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=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 0-5-4 to 3-5-4, Zone1 3-5-4 to 12-0-0, Zone2 12-0-0 to 16-2-15, Zone1 16-2-15 to 25-6-0 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) 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.
7) All bearings are assumed to be SP No.2 .
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 41 lb uplift at joint 7 and 61 lb uplift at joint 9.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

Review for Code Compliance
Universal Engineering Science
Examiner PX2707 05/10/2025
Examiner-License No.

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:

February 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Remillet
1024-054	C07	Common	6	1	T36298520
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066,

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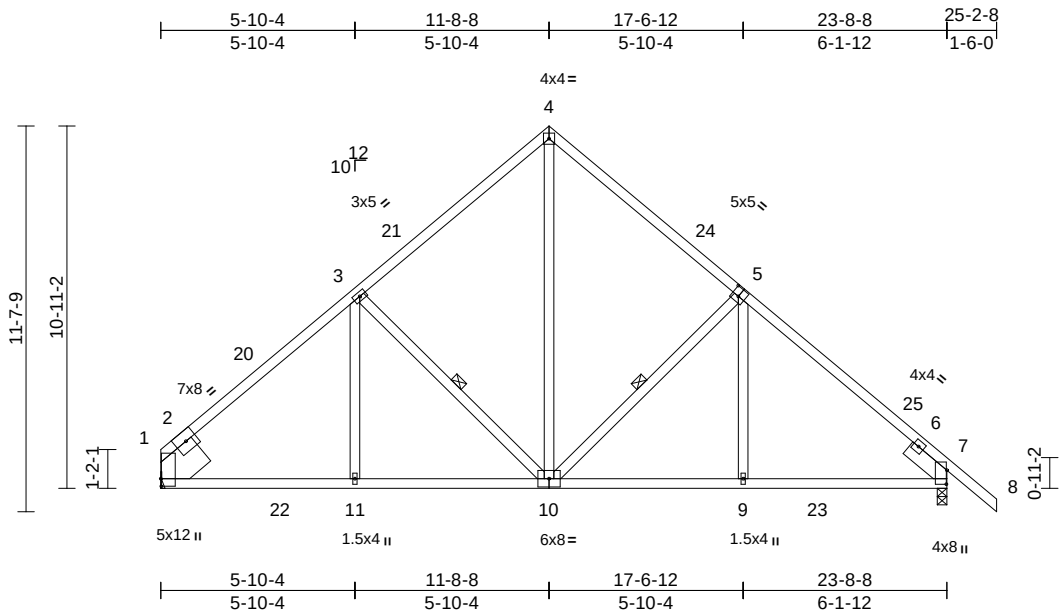


Scale = 1:69.5

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

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)	-0.07	10-11	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.59	Vert(CT)	-0.13	10-11	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.04	7	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 150 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2
SLIDER Left 2x12 SP No.2 -- 1-6-0, Right 2x6 SP No.2 -- 1-6-0

BRACING
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 5-10, 3-10

REACTIONS (size) 1= Mechanical, 7=0-3-8
Max Horiz 1=-212 (LC 10)
Max Uplift 7=-36 (LC 12)
Max Grav 1=1078 (LC 17), 7=1151 (LC 18)

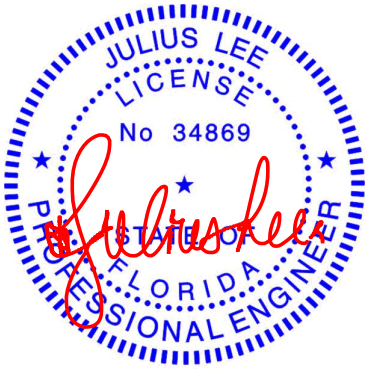
FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-3=-1194/1499, 3-4=-904/155, 4-7=-1231/151, 7-8=0/58
BOT CHORD 1-11=-18/975, 9-11=0/975, 7-9=-26/898
WEBS 3-11=0/217, 4-10=-79/713, 5-9=0/250, 5-10=-440/117, 3-10=-399/115

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=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 0-3-8 to 3-3-8, Zone1 3-3-8 to 12-0-0, Zone2 12-0-0 to 16-2-15, Zone1 16-2-15 to 25-6-0 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) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) 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 36 lb uplift at joint 7.
9) This truss design requires that a minimum 6" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

Review for Code Compliance
Universal Engineering Science

PX2707 05/10/2025
Examiner-License No.



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

February 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Remillet
1024-054	C08	Common Structural Gable	1	1	T36298521
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066,

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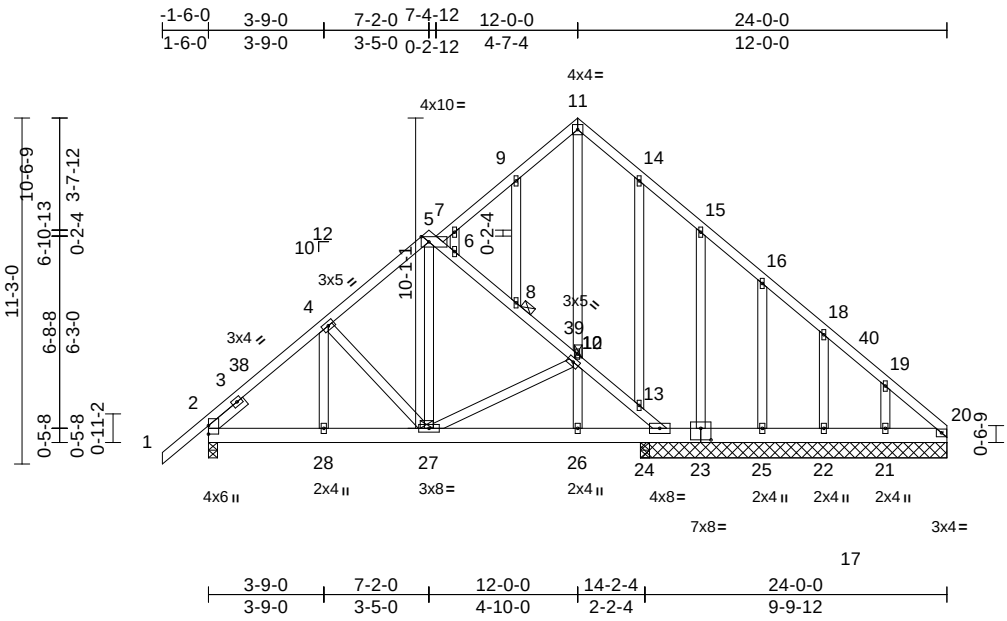
Page: 1



Scale = 1:74.9

Plate Offsets (X, Y): [5:0-3-0,0-2-0], [23:0-4-0,0-4-8]

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	0.74	Vert(LL)	-0.10	17-33	>239	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.77	Vert(CT)	-0.13	17-33	>191	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.25	Horz(CT)	0.01	17	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 208 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2 *Except* 17-5:2x4 SP SS
BOT CHORD	2x6 SP No.2
WEBS	2x4 SP No.2
OTHERS	2x4 SP No.2
SLIDER	Left 2x4 SP No.2 -- 1-6-0

BRACING

TOP CHORD	Structural wood sheathing directly applied.
BOT CHORD	Rigid ceiling directly applied.
JOINTS	1 Brace at Jt(s): 10, 8

REACTIONS (size) 2=0-3-8, 17=9-11-8, 20=9-11-8, 21=9-11-8, 22=9-11-8, 23=9-11-8, 24=0-3-8, 25=9-11-8
Max Horiz 2=348 (LC 11)
Max Uplift 2=-165 (LC 12), 17=-66 (LC 12), 20=-39 (LC 11), 21=-72 (LC 12), 22=-46 (LC 12), 23=-114 (LC 12), 24=-208 (LC 12), 25=-36 (LC 12)
Max Grav 2=660 (LC 1), 17=395 (LC 1), 20=189 (LC 1), 21=269 (LC 18), 22=253 (LC 1), 23=568 (LC 1), 24=1196 (LC 1), 25=180 (LC 18)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/58, 2-4=-638/191, 4-5=-577/218, 5-6=-338/201, 6-8=-421/193, 8-10=-516/194, 10-12=-328/82, 12-13=-501/156, 13-17=-661/176, 5-7=-182/37, 7-9=-194/57, 9-11=-127/85, 11-14=-208/112, 14-15=-179/60, 15-16=-206/20, 16-18=-196/58, 18-19=-197/92, 19-20=-219/129

BOT CHORD 2-28=-226/507, 27-28=-125/507, 26-27=-48/447, 24-26=-48/447, 17-24=-90/480, 17-25=-108/193, 22-25=-108/193, 21-22=-108/193, 20-21=-108/193

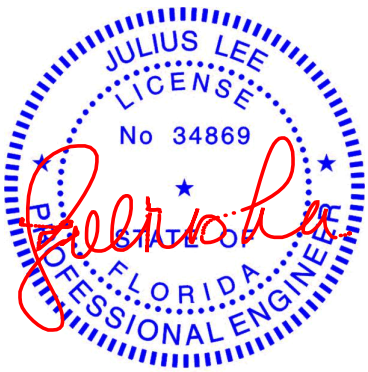
WEBS 4-28=-79/7, 4-27=-106/60, 5-27=-86/118, 10-11=-70/33, 8-9=-46/28, 6-7=-37/8, 13-14=-246/58, 15-23=-164/72, 16-25=-216/78, 18-22=-199/77, 19-21=-196/92, 12-26=-285/52, 12-27=-78/137

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=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -1-6-0 to 1-6-0, Zone1 1-6-0 to 12-0-0, Zone2 7-2-0 to 11-4-15, Zone1 11-4-15 to 24-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
5) This truss is not designed to support a ceiling and is not intended for use where aesthetics are a consideration.
6) All plates are 1.5x4 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) All bearings are assumed to be SP No.2 .
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 165 lb uplift at joint 2, 66 lb uplift at joint 17, 39 lb uplift at joint 20, 114 lb uplift at joint 23, 36 lb uplift at joint 25, 46 lb uplift at joint 22, 72 lb uplift at joint 21, 208 lb uplift at joint 24 and 39 lb uplift at joint 20.
12) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord. PX2707

LOAD CASE(S) Standard

Review for Code Compliance
Universal Engineering Science
Examined Date: 05/10/2025



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

February 6,2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcscomponents.com)

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

Job	Truss	Truss Type	Qty	Ply	Remillet
1024-054	C09	Common	1	1	T36298522
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066,

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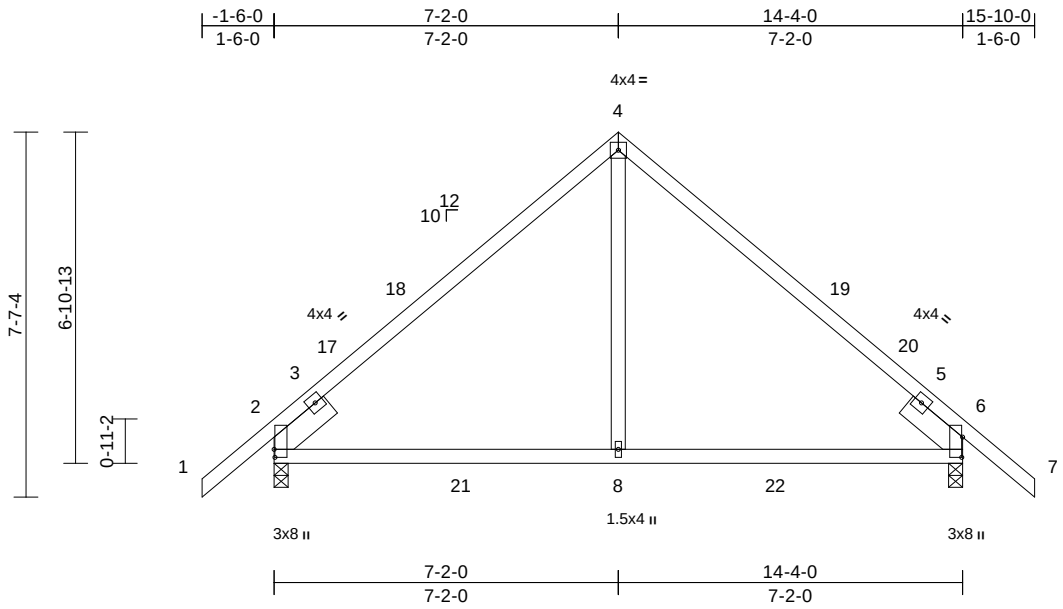


Scale = 1:48

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

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)	-0.07	8-11	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.54	Vert(CT)	-0.12	8-11	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.03	2	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 72 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.2
SLIDER	Left 2x6 SP No.2 -- 1-6-0, Right 2x6 SP No.2 -- 1-6-0

BRACING

TOP CHORD	Structural wood sheathing directly applied.
BOT CHORD	Rigid ceiling directly applied.

REACTIONS (size) 2=0-3-8, 6=0-3-8
Max Horiz 2=-143 (LC 10)
Max Uplift 2=-36 (LC 12), 6=-36 (LC 12)
Max Grav 2=755 (LC 17), 6=755 (LC 18)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/58, 2-4=-679/127, 4-6=-679/127, 6-7=0/58
BOT CHORD	2-8=-74/484, 6-8=-99/484
WEBS	4-8=0/409

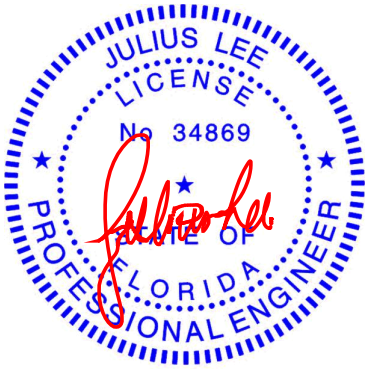
NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -1-6-0 to 1-6-0, Zone1 1-6-0 to 7-2-0, Zone2 7-2-0 to 11-4-15, Zone1 11-4-15 to 15-10-0 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) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) All bearings are assumed to be SP No.2 .
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 36 lb uplift at joint 2 and 36 lb uplift at joint 6.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied direc[illegible]he top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

Review for Code Compliance
Universal Engineering Science

PX2707 05/10/2025
Examiner-License No.



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

February 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Remillet
1024-054	C10	Common Supported Gable	1	1	T36298523
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066,

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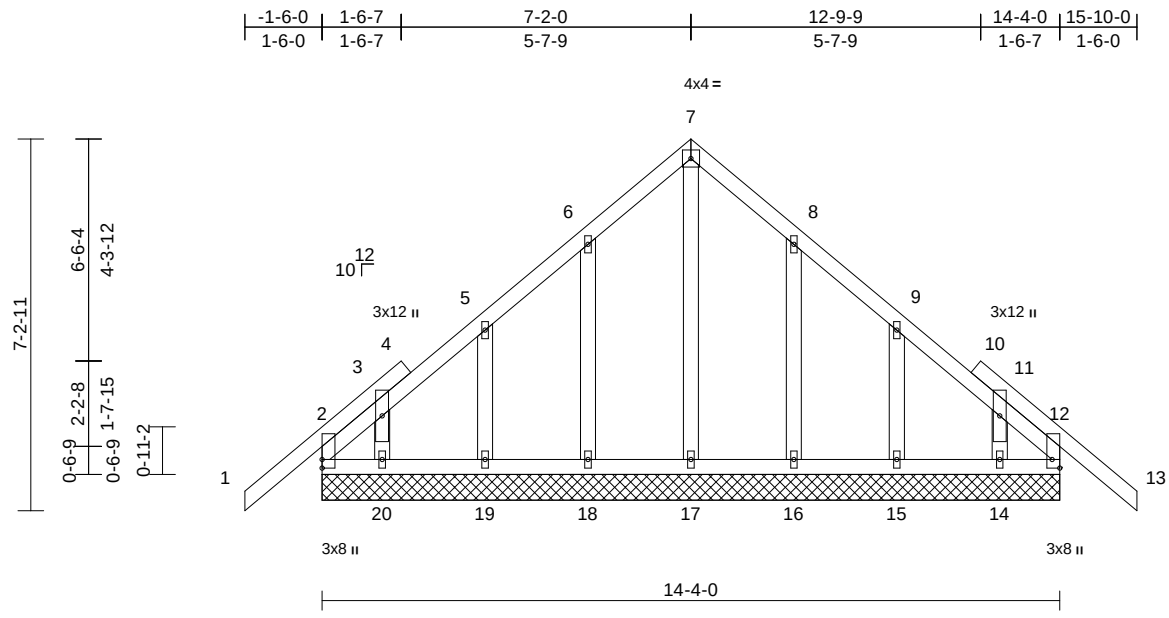

Scale = 1:44.8

Plate Offsets (X, Y): [12:Edge,0-1-13]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.16	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.02	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00	12	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 94 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

REACTIONS (size) 2=14-4-0, 12=14-4-0, 14=14-4-0, 15=14-4-0, 16=14-4-0, 17=14-4-0, 18=14-4-0, 19=14-4-0, 20=14-4-0
Max Horiz 2=-136 (LC 10)
Max Uplift 2=-24 (LC 8), 12=-15 (LC 9), 14=-31 (LC 8), 15=-29 (LC 12), 16=-31 (LC 12), 18=-31 (LC 12), 19=-29 (LC 12), 20=-34 (LC 9)
Max Grav 2=169 (LC 23), 12=169 (LC 24), 14=118 (LC 18), 15=165 (LC 18), 16=176 (LC 18), 17=166 (LC 1), 18=177 (LC 17), 19=163 (LC 17), 20=124 (LC 17)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/58, 2-3=-104/91, 3-5=-69/87, 5-6=-59/73, 6-7=-86/156, 7-8=-86/156, 8-9=-40/64, 9-11=-49/70, 11-12=-109/65, 12-13=0/58
BOT CHORD 2-20=-63/167, 19-20=-63/167, 18-19=-63/167, 17-18=-63/167, 16-17=-63/167, 15-16=-63/167, 14-15=-63/167, 12-14=-63/167
WEBS 7-17=-125/21, 6-18=-138/120, 5-19=-122/119, 3-20=-100/102, 8-16=-136/120, 9-15=-124/119, 11-14=-101/103

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=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) 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 1.5x4 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 .
11) Solid blocking is required on both sides of the truss at joint(s), 2.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 24 lb uplift at joint 2, 15 lb uplift at joint 12, 31 lb uplift at joint 18, 29 lb uplift at joint 19, 34 lb uplift at joint 20, 31 lb uplift at joint 16, 29 lb uplift at joint 15, 31 lb uplift at joint 14, 24 lb uplift at joint 2 and 15 lb uplift at joint 12.
13) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

Review for Code Compliance
Universal Engineering Science
PX2707 05/10/2025
Examiner-License No.

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:

February 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Remillet
1024-054	D01	Common Supported Gable	1	1	T36298524
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066,

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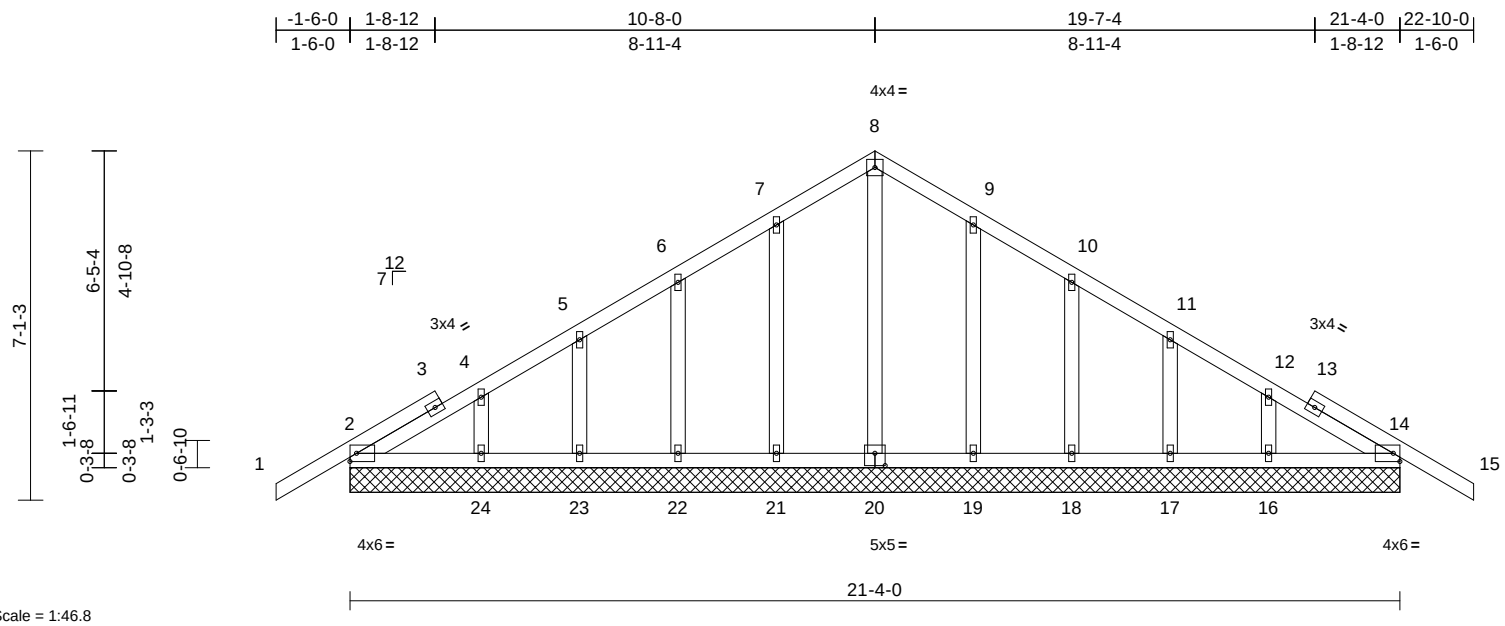

Scale = 1:46.8

Plate Offsets (X, Y): [20:0-2-8,0-3-0]

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	0.14	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.04	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	28	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 124 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.
BOT CHORD Rigid ceiling directly applied.

REACTIONS (size) 2=21-4-0, 14=21-4-0, 16=21-4-0, 17=21-4-0, 18=21-4-0, 19=21-4-0, 20=21-4-0, 21=21-4-0, 22=21-4-0, 23=21-4-0, 24=21-4-0
Max Horiz 2=117 (LC 11)
Max Uplift 2=-34 (LC 12), 14=-34 (LC 12), 17=-21 (LC 12), 18=-16 (LC 12), 19=-13 (LC 12), 21=-13 (LC 12), 22=-16 (LC 12), 23=-21 (LC 12)
Max Grav 2=218 (LC 1), 14=218 (LC 1), 16=174 (LC 18), 17=159 (LC 24), 18=160 (LC 1), 19=167 (LC 24), 20=140 (LC 17), 21=167 (LC 23), 22=160 (LC 1), 23=159 (LC 23), 24=174 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/45, 2-4=-82/85, 4-5=-85/69, 5-6=-76/58, 6-7=-68/99, 7-8=-90/142, 8-9=-90/142, 9-10=-66/99, 10-11=-44/53, 11-12=-50/27, 12-14=-81/56, 14-15=0/45
BOT CHORD 2-24=-58/101, 23-24=-39/101, 22-23=-39/101, 21-22=-39/101, 19-21=-39/101, 18-19=-39/101, 17-18=-39/101, 16-17=-39/101, 14-16=-49/101
WEBS 8-20=-100/15, 7-21=-127/61, 6-22=-119/67, 5-23=-120/68, 4-24=-130/62, 9-19=-127/61, 10-18=-119/67, 11-17=-120/68, 12-16=-130/62

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=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) 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 1.5x4 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 34 lb uplift at joint 2, 34 lb uplift at joint 14, 13 lb uplift at joint 21, 16 lb uplift at joint 22, 21 lb uplift at joint 23, 13 lb uplift at joint 19, 16 lb uplift at joint 18, 21 lb uplift at joint 17, 34 lb uplift at joint 2 and 34 lb uplift at joint 14.
12) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

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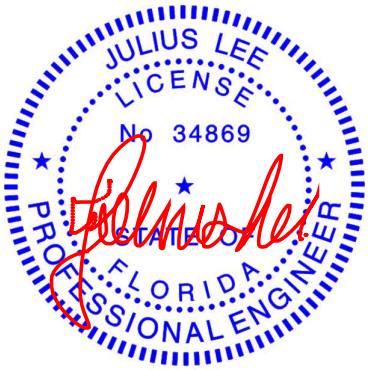
Universal Engineering Science

PX2707 05/10/2025
Examiner-License No.



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

February 6,2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcscomponents.com)

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

Job	Truss	Truss Type	Qty	Ply	Remillet
1024-054	D02	Common	2	1	T36298525
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066,

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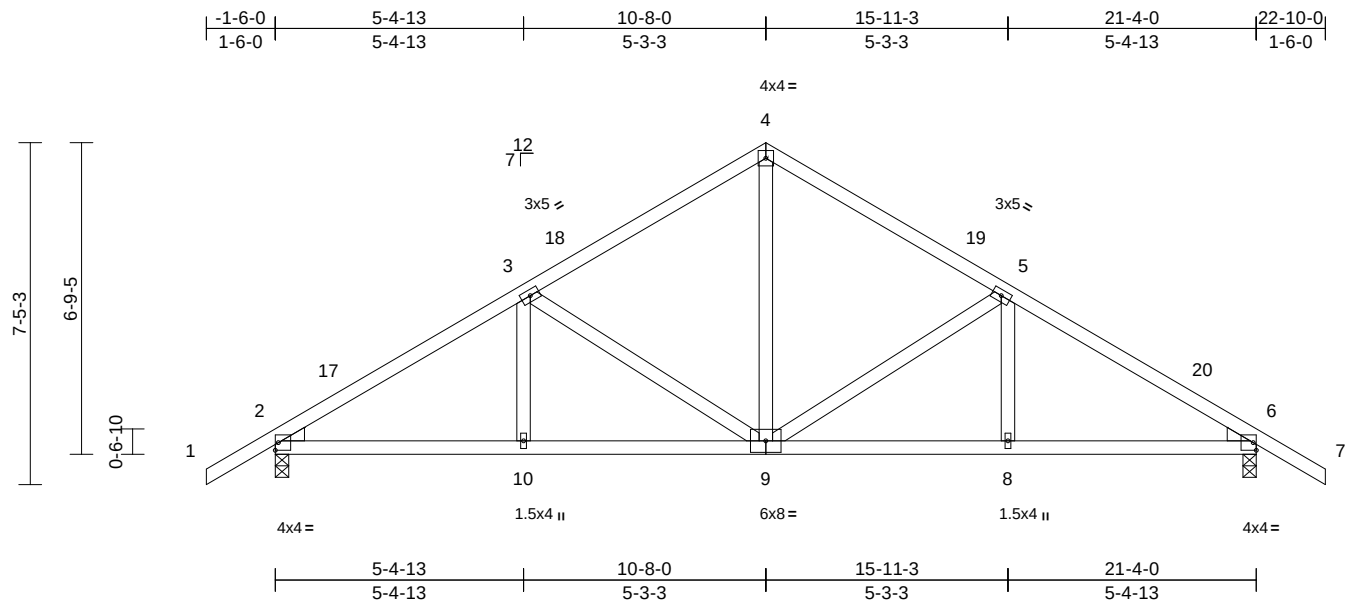

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.31	Vert(LL)	-0.04	8-9	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.39	Vert(CT)	-0.09	8-9	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.27	Horz(CT)	0.04	6	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 112 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2
WEDGE Left: 2x4 SP No.3
Right: 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

REACTIONS (size) 2=0-3-8, 6=0-3-8
Max Horiz 2=123 (LC 11)
Max Uplift 2=-36 (LC 12), 6=-36 (LC 12)
Max Grav 2=943 (LC 1), 6=943 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/45, 2-3=-1285/62, 3-4=-914/104, 4-5=-914/104, 5-6=-1285/62, 6-7=0/45
BOT CHORD 2-10=-43/1036, 8-10=0/1036, 6-8=-35/1036
WEBS 3-10=0/198, 4-9=-1/528, 5-8=0/198, 3-9=-397/73, 5-9=-397/73

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=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -1-6-0 to 1-6-0, Zone1 1-6-0 to 10-8-0, Zone2 10-8-0 to 14-10-15, Zone1 14-10-15 to 22-10-0 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) 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 36 lb uplift at joint 2 and 36 lb uplift at joint 6.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

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Universal Engineering Science

Examiner-License No. PX2707 05/10/2025

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:

February 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Remillet
1024-054	G01	Common Girder	1	2	T36298526
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066,

Run: 8.73 S Dec 5 2024 Print: 8.730 S Dec 5 2024 MiTek Industries, Inc. Thu Feb 06 08:19:12 Page: 1
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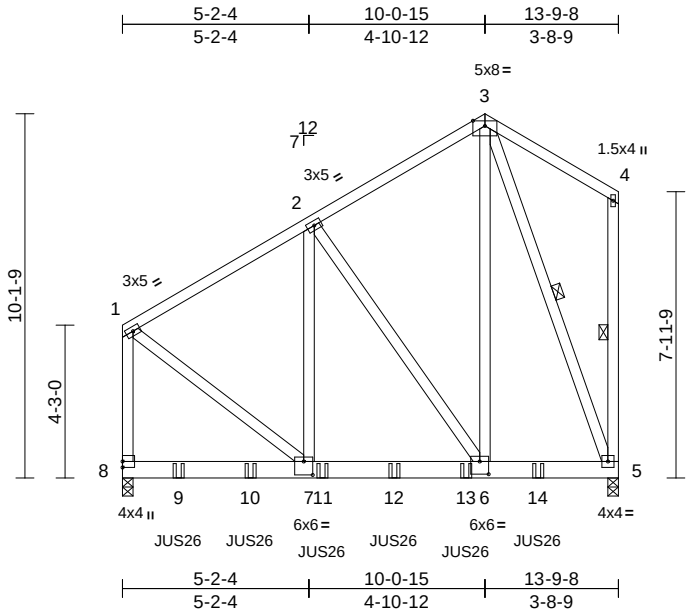

Scale = 1:64.1

Plate Offsets (X, Y): [6:0-3-0,0-4-4], [7:0-3-0,0-4-8]

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	0.28	Vert(LL)	-0.05	7-8	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.81	Vert(CT)	-0.09	7-8	>999	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.59	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 264 lb	FT = 20%

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

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

REACTIONS (size) 5=0-3-8, 8=0-3-8
Max Horiz 8=258 (LC 7)
Max Grav 5=3541 (LC 13), 8=3832 (LC 14)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-2470/0, 2-3=-1445/0, 3-4=-142/125, 1-8=-2911/0, 4-5=-157/84
BOT CHORD 7-8=-218/188, 6-7=0/2149, 5-6=0/1195
WEBS 1-7=0/2586, 2-7=0/1584, 2-6=-1645/0, 3-6=0/3625, 3-5=-3382/0

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 0-9-0 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=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); 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 No.2 .
9) Use MiTek JUS26 (With 4-10d nails into Girder & 4-10d nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 1-6-12 from the left end to 11-6-12 to connect truss(es) to back face of bottom chord.
10) 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, 5-8=-20
Concentrated Loads (lb)
Vert: 9=-945 (B), 10=-945 (B), 11=-945 (B), 12=-945 (B), 13=-945 (B), 14=-945 (B)

Review for Code Compliance
Universal Engineering Science
Examiner-License No. PX2707 05/10/2025

JULIUS LEE LICENSE No. 34869 STATE OF FLORIDA PROFESSIONAL ENGINEER

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

February 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Remillet
1024-054	M01	Monopitch Supported Gable	2	1	T36298527
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066,

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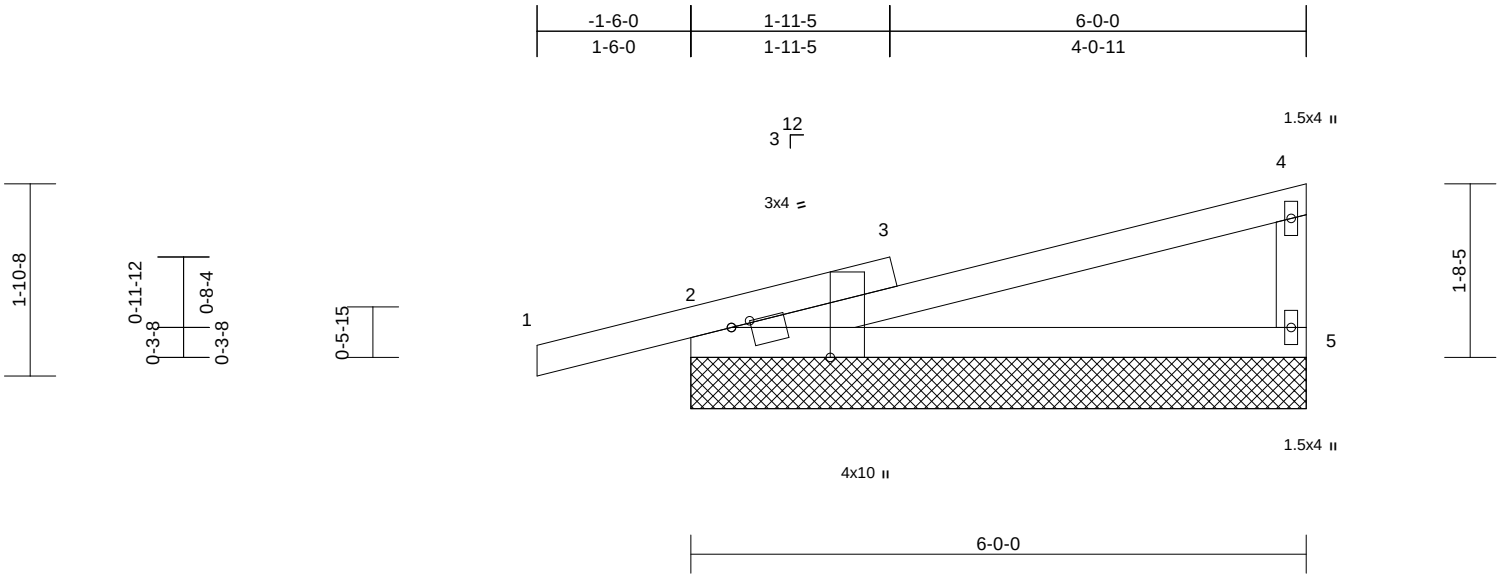

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Plate Offsets (X, Y): [2:0-3-8,Edge], [2:0-2-4,0-0-4]

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	0.39	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.34	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	2	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 25 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, except end verticals.
BOT CHORD Rigid ceiling directly applied.

REACTIONS (size) 2=6-0-0, 5=6-0-0
Max Horiz 2=42 (LC 11)
Max Uplift 2=-41 (LC 12)
Max Grav 2=336 (LC 1), 5=223 (LC 1)

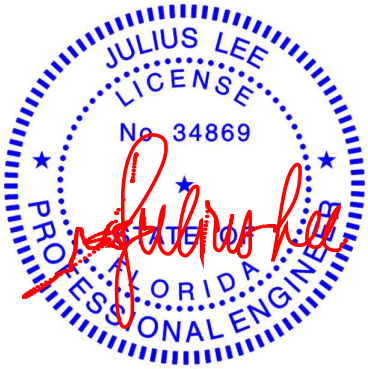
FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/22, 2-4=-111/47, 4-5=-148/186
BOT CHORD 2-5=-35/109

NOTES
1) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) 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) 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.
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) 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 .
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 41 lb uplift at joint 2 and 41 lb uplift at joint 2.
10) This truss design requires that a minimum of 7/16" structural wood sheathing be applied direc[illegible]he top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

Review for Code Compliance
Universal Engineering Science

Examiner-License No. PX2707 05/10/2025



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

February 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Remillet
1024-054	M02	Monopitch	3	1	T36298528
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066,

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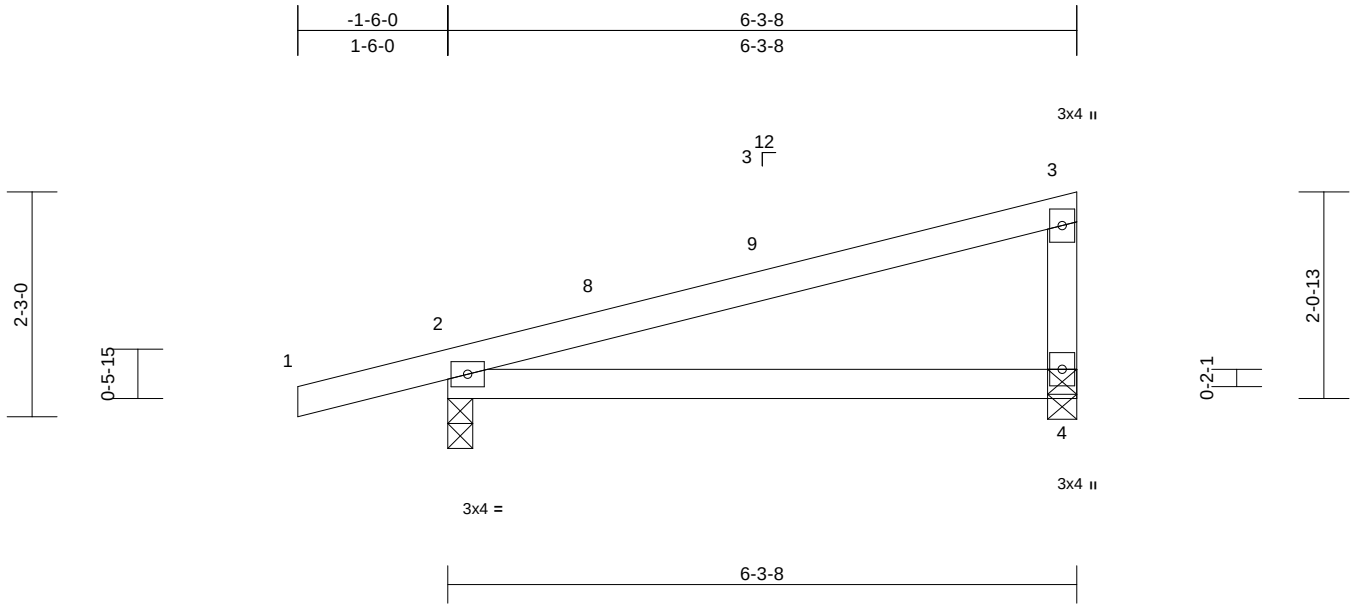

Scale = 1:23

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)	-0.03	4-7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.29	Vert(CT)	-0.06	4-7	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	2	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 24 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.
BOT CHORD Rigid ceiling directly applied.

REACTIONS (size) 2=0-3-0, 4=0-3-8
Max Horiz 2=84 (LC 12)
Max Uplift 2=-30 (LC 12), 4=-6 (LC 12)
Max Grav 2=347 (LC 1), 4=235 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/22, 2-3=-224/59, 3-4=-151/202
BOT CHORD 2-4=-145/169

NOTES
1) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -1-6-0 to 1-6-0, Zone1 1-6-0 to 6-1-12 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
2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
5) All bearings are assumed to be SP No.2 .
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 30 lb uplift at joint 2 and 6 lb uplift at joint 4.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

Review for Code Compliance
Universal Engineering Science

Lawrence Parnell PX2707 05/10/2025
Examiner-License No.

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:

February 6,2025

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Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Remillet
1024-054	M03	Monopitch	1	1	T36298529
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066,

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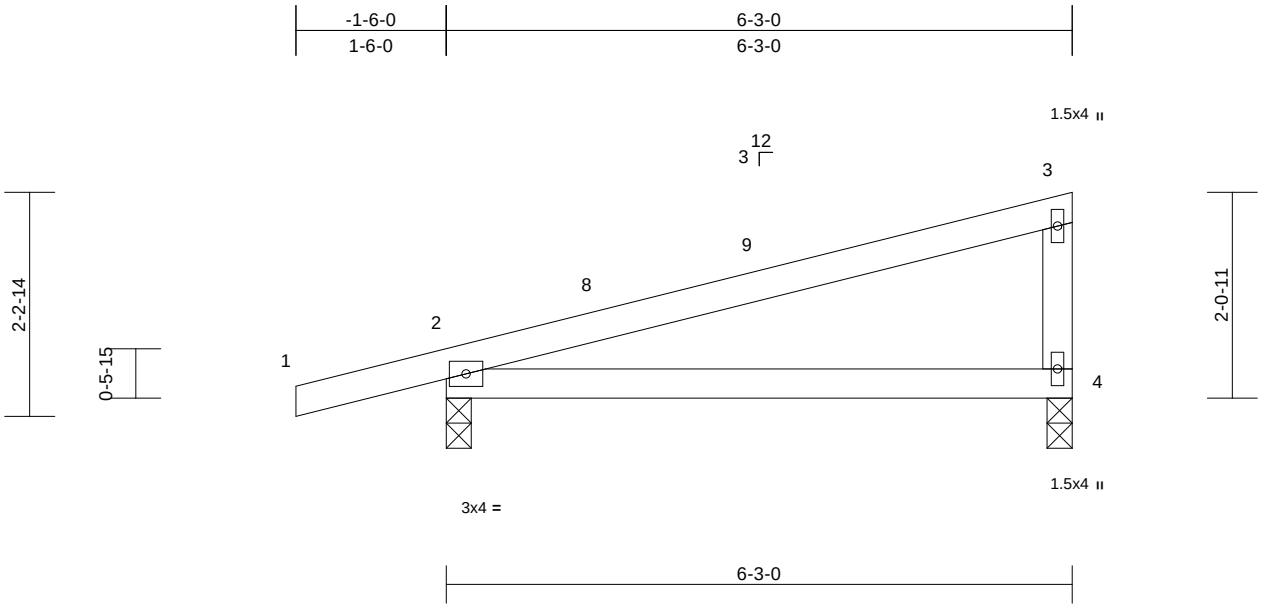

Scale = 1:23

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	0.46	Vert(LL)	0.06	4-7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.38	Vert(CT)	-0.12	4-7	>587	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	2	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 23 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, except end verticals.
BOT CHORD Rigid ceiling directly applied.

REACTIONS (size) 2=0-3-0, 4=0-3-0
Max Horiz 2=52 (LC 11)
Max Uplift 2=-40 (LC 12)
Max Grav 2=345 (LC 1), 4=233 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/22, 2-3=-251/93, 3-4=-162/197
BOT CHORD 2-4=-98/86

NOTES
1) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -1-6-0 to 1-6-0, Zone1 1-6-0 to 6-1-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
5) All bearings are assumed to be SP No.2 .
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 40 lb uplift at joint 2.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

Review for Code Compliance
Universal Engineering Science

Lawrence Parnell PX2707 05/10/2025
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Date:

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Job	Truss	Truss Type	Qty	Ply	Remillet
1024-054	M04	Monopitch	11	1	T36298530
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066,

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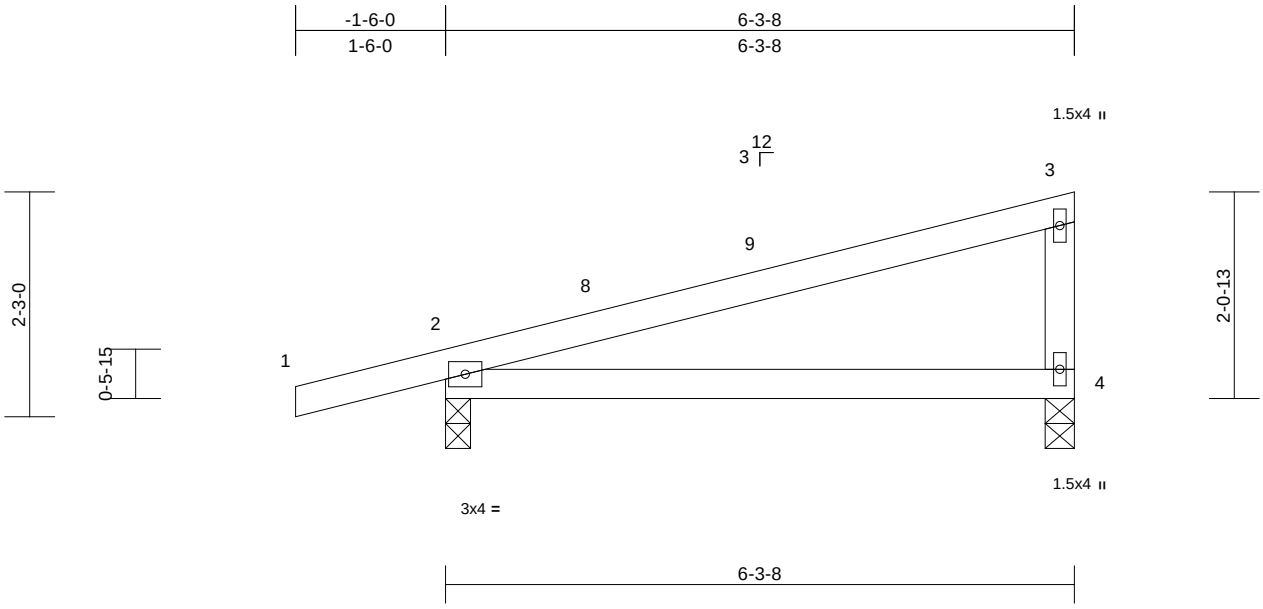

Scale = 1:23

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)	0.06	4-7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.38	Vert(CT)	-0.13	4-7	>575	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	2	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 24 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied.

REACTIONS (size) 2=0-3-0, 4=0-3-8
Max Horiz 2=52 (LC 11)
Max Uplift 2=-40 (LC 12)
Max Grav 2=347 (LC 1), 4=235 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/22, 2-3=-251/93, 3-4=-164/197
BOT CHORD 2-4=-98/87

NOTES
1) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -1-6-0 to 1-6-0, Zone1 1-6-0 to 6-1-12 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
2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
5) All bearings are assumed to be SP No.2 .
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 40 lb uplift at joint 2.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

Review for Code Compliance
Universal Engineering Science

Lawrence Parnell PX2707 05/10/2025
Examiner-License No.

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:

February 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Remillet
1024-054	M05	Monopitch	1	1	T36298531
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066,

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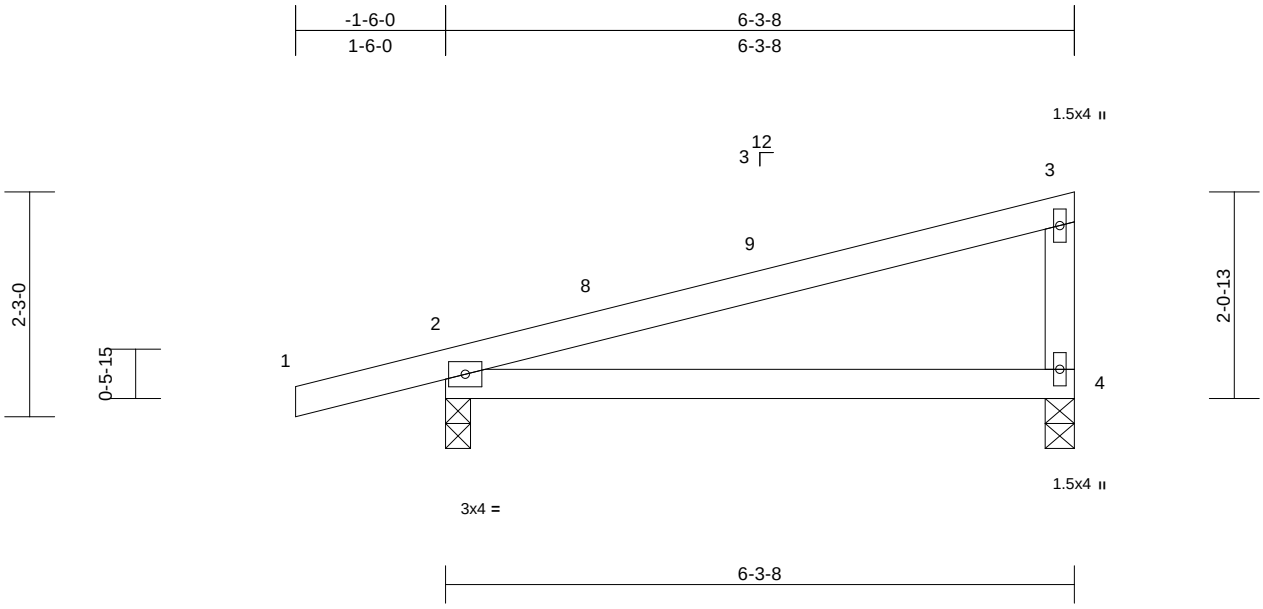

Scale = 1:23

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)	0.06	4-7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.38	Vert(CT)	-0.13	4-7	>575	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	2	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 24 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied.

REACTIONS (size) 2=0-3-0, 4=0-3-8
Max Horiz 2=52 (LC 11)
Max Uplift 2=-40 (LC 12)
Max Grav 2=347 (LC 1), 4=235 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/22, 2-3=-251/93, 3-4=-164/197
BOT CHORD 2-4=-98/87

NOTES
1) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -1-6-0 to 1-6-0, Zone1 1-6-0 to 6-1-12 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
2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
5) All bearings are assumed to be SP No.2 .
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 40 lb uplift at joint 2.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

Review for Code Compliance
Universal Engineering Science

Lawrence Parnell PX2707 05/10/2025
Examiner-License No.

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:

February 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Remillet
1024-054	PB01	Piggyback	12	1	T36298532
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066,

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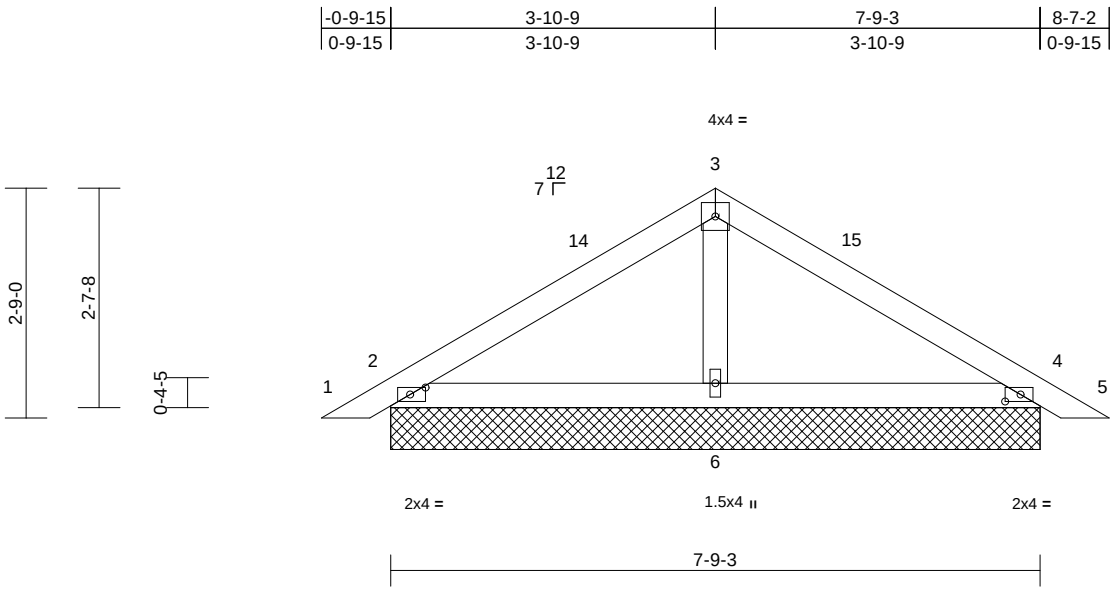

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Plate Offsets (X, Y): [2:0-1-13,Edge], [4:0-1-13,Edge]

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	0.17	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.18	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	11	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 31 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.
BOT CHORD Rigid ceiling directly applied.

REACTIONS (size) 2=7-9-3, 4=7-9-3, 6=7-9-3
Max Horiz 2=-45 (LC 10)
Max Uplift 2=-27 (LC 12), 4=-27 (LC 12)
Max Grav 2=206 (LC 1), 4=206 (LC 1), 6=275 (LC 1)

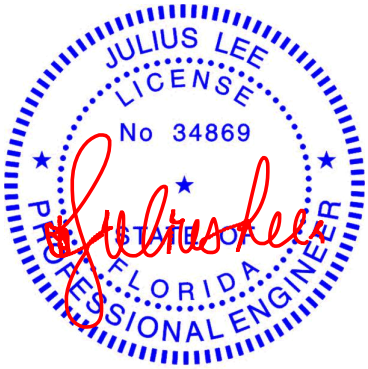
FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/16, 2-3=-122/104, 3-4=-122/92, 4-5=0/16
BOT CHORD 2-6=-9/61, 4-6=-18/61
WEBS 3-6=-124/32

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=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 0-3-8 to 3-3-8, Zone1 3-3-8 to 4-8-9, Zone3 4-8-9 to 9-1-10 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) 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 27 lb uplift at joint 2, 27 lb uplift at joint 4, 27 lb uplift at joint 2 and 27 lb uplift at joint 4.
11) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
12) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

Review for Code Compliance
Universal Engineering Science

PX2707 05/10/2025
Examiner-License No.



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

February 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Remillet
1024-054	PB02	Piggyback	2	2	T36298533
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066,

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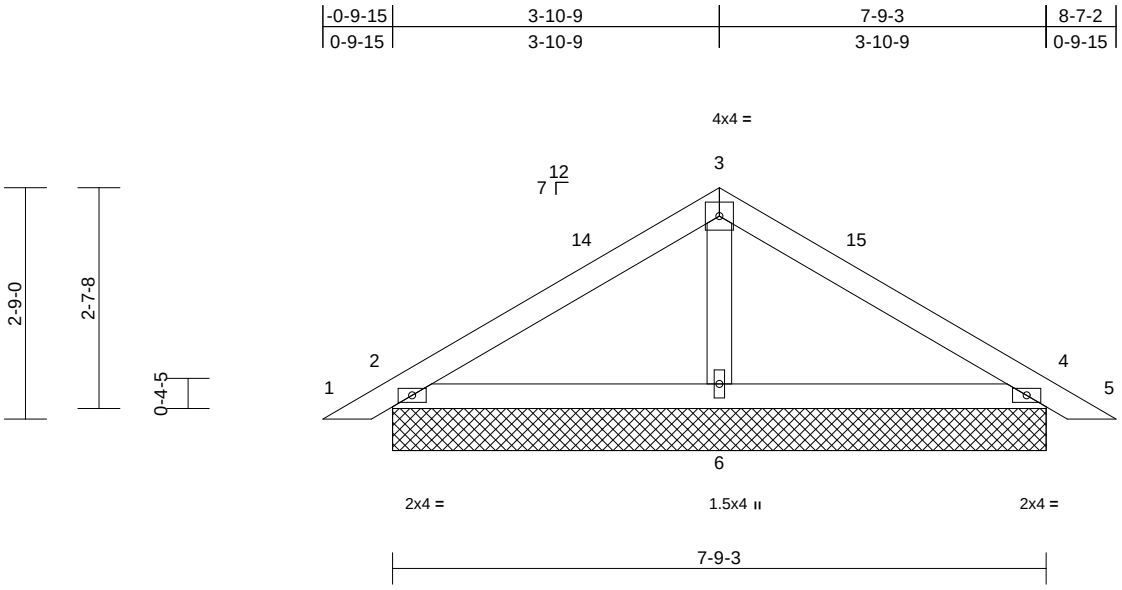

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.09	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.09	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.01	Horz(CT)	0.00	11	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 61 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.
BOT CHORD Rigid ceiling directly applied.

REACTIONS (size) 2=7-9-3, 4=7-9-3, 6=7-9-3
Max Horiz 2=-45 (LC 10)
Max Uplift 2=-27 (LC 12), 4=-27 (LC 12)
Max Grav 2=205 (LC 1), 4=205 (LC 1), 6=276 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/16, 2-3=-121/104, 3-4=-121/92, 4-5=0/16
BOT CHORD 2-6=-10/74, 4-6=-21/66
WEBS 3-6=-125/32

NOTES
1) 2-ply truss to be connected together as follows:
Top chords connected with 10d (0.131"x3") nails as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected with 10d (0.131"x3") nails 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=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 0-3-8 to 3-3-8, Zone1 3-3-8 to 4-8-9, Zone3 4-8-9 to 9-1-10 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
5) 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.
6) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
7) Gable requires continuous bottom chord bearing.
8) Gable studs spaced at 4-0-0 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.
11) All bearings are assumed to be SP No.2 .
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 27 lb uplift at joint 2, 27 lb uplift at joint 4, 27 lb uplift at joint 2 and 27 lb uplift at joint 4.
13) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
14) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

Review for Code Compliance
Universal Engineering Science

PX2707 05/10/2025
Examiner-License No.

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:

February 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Remillet
1024-054	PB03	Piggyback	3	1	T36298534
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066,

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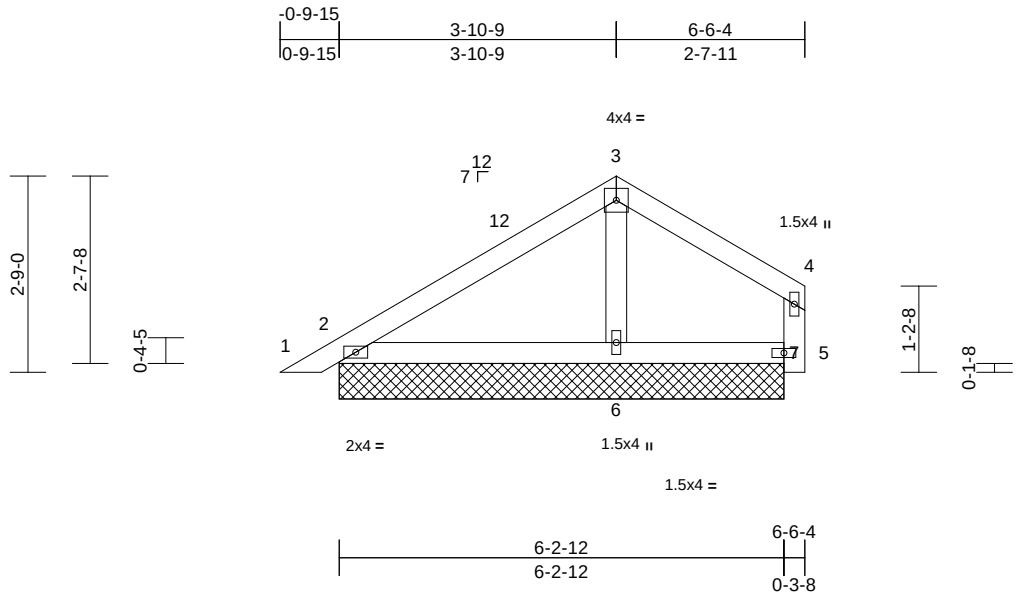

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.23	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.54	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 27 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, except end verticals.
BOT CHORD	Rigid ceiling directly applied.

REACTIONS (size) 2=6-2-12, 5=6-2-12, 6=6-2-12, 7=6-2-12
Max Horiz 2=60 (LC 11)
Max Uplift 2=-22 (LC 12)
Max Grav 2=194 (LC 1), 5=172 (LC 3), 6=291 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/16, 2-3=-81/76, 3-4=-45/74, 5-7=0/0, 4-5=-77/98
BOT CHORD	2-6=-42/51, 5-6=-22/24
WEBS	3-6=-189/80

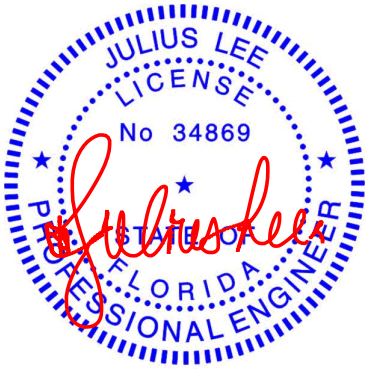
NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 0-3-8 to 3-3-8, Zone1 3-3-8 to 4-8-9, Zone3 4-8-9 to 7-2-8 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) 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 22 lb uplift at joint 2 and 22 lb uplift at joint 2.
11) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
12) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

Review for Code Compliance
Universal Engineering Science

PX2707 05/10/2025
Examiner-License No.



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

February 6,2025

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

Job	Truss	Truss Type	Qty	Ply	Remillet
1024-054	PB04	Piggyback	1	1	T36298535
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066,

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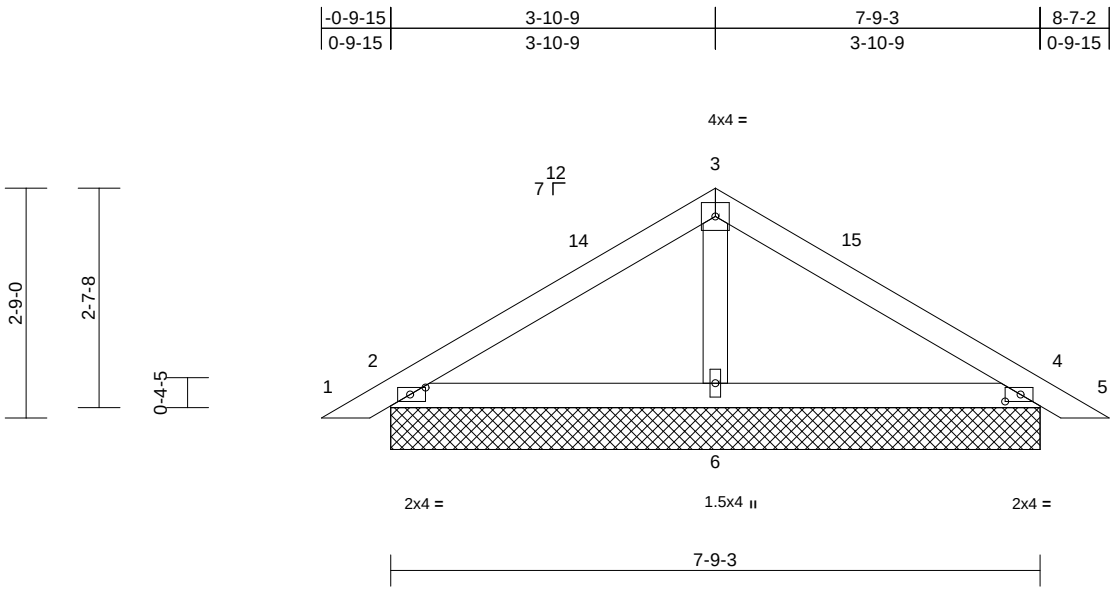

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Plate Offsets (X, Y): [2:0-1-13,Edge], [4:0-1-13,Edge]

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	0.17	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.18	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	11	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 31 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.
BOT CHORD Rigid ceiling directly applied.

REACTIONS (size) 2=7-9-3, 4=7-9-3, 6=7-9-3
Max Horiz 2=-45 (LC 10)
Max Uplift 2=-27 (LC 12), 4=-27 (LC 12)
Max Grav 2=206 (LC 1), 4=206 (LC 1), 6=275 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/16, 2-3=-122/104, 3-4=-122/92, 4-5=0/16
BOT CHORD 2-6=-9/61, 4-6=-18/61
WEBS 3-6=-124/32

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=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 0-3-8 to 3-3-8, Zone1 3-3-8 to 4-8-9, Zone3 4-8-9 to 9-1-10 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) 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 27 lb uplift at joint 2, 27 lb uplift at joint 4, 27 lb uplift at joint 2 and 27 lb uplift at joint 4.
11) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
12) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

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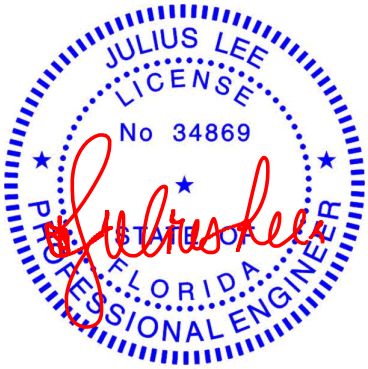

Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

February 6,2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcscomponents.com)

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

Job	Truss	Truss Type	Qty	Ply	Remillet
1024-054	PB05	Piggyback	1	1	T36298536
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066,

Run: 8.73 S Dec 5 2024 Print: 8.730 S Dec 5 2024 MiTek Industries, Inc. Thu Feb 06 08:19:13
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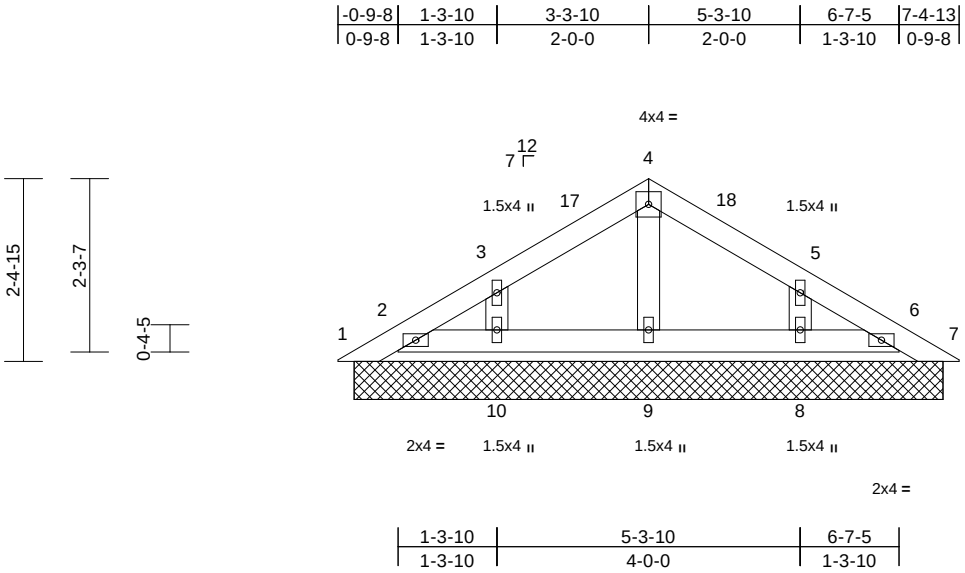

Scale = 1:30.4

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	0.05	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.03	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	7	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 28 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.
BOT CHORD Rigid ceiling directly applied.

REACTIONS (size) 1=7-9-3, 2=7-9-3, 6=7-9-3, 7=7-9-3, 8=7-9-3, 9=7-9-3, 10=7-9-3
Max Horiz 1=-39 (LC 10)
Max Uplift 1=-12 (LC 10), 7=-1 (LC 12), 8=-21 (LC 12), 10=-20 (LC 12)
Max Grav 1=27 (LC 18), 2=81 (LC 17), 6=68 (LC 1), 7=16 (LC 1), 8=161 (LC 1), 9=126 (LC 1), 10=162 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-45/50, 2-3=-28/30, 3-4=-51/76, 4-5=-50/69, 5-6=-22/19, 6-7=-6/14
BOT CHORD 2-10=-16/54, 9-10=-16/54, 8-9=-16/54, 6-8=-16/54
WEBS 4-9=-83/4, 3-10=-127/142, 5-8=-126/151

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=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 0-10-10 to 3-10-10, Zone1 3-10-10 to 4-8-9, Zone3 4-8-9 to 8-6-7 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) 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 oth loads.
8) * This truss has been designed for a live lc 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 12 lb uplift at joint 1, 1 lb uplift at joint 7, 20 lb uplift at joint 10 and 21 lb uplift at joint 8.
11) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
12) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

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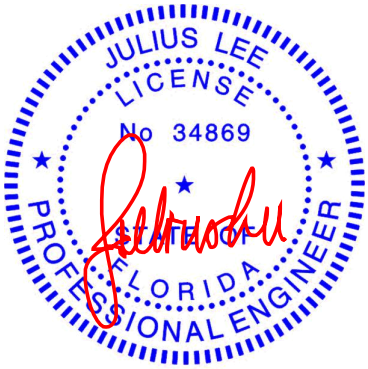

Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

February 6,2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcscomponents.com)

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Job	Truss	Truss Type	Qty	Ply	Remillet
1024-054	T01	Flat Girder	1	2	T36298537
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066,

Run: 8.73 S Dec 5 2024 Print: 8.730 S Dec 5 2024 MiTek Industries, Inc. Thu Feb 06 08:19:13
ID:gDxz84cZ1lXJB5iACI?GgMyQsW0-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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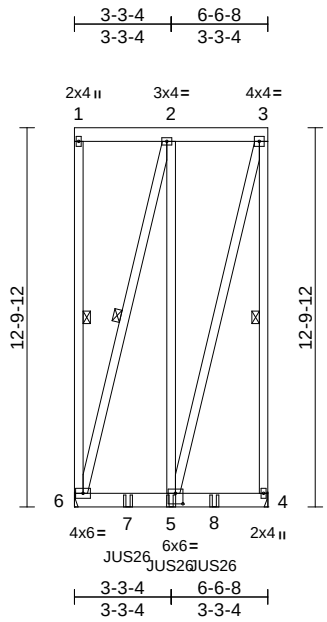

Scale = 1:77.9

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

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)	-0.01	5-6	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.23	Vert(CT)	-0.02	5-6	>999	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.30	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MP							Weight: 240 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.2 *Except* 6-1,3-4:2x4 SP No.1

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 1-6, 3-4, 2-6

REACTIONS (size) 4= Mechanical, 6= Mechanical
Max Horiz 6=-345 (LC 4)
Max Uplift 4=-438 (LC 5), 6=-438 (LC 4)
Max Grav 4=1411 (LC 13), 6=1411 (LC 14)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-6=-90/24, 1-2=-134/121, 2-3=-246/138, 3-4=-1162/432
BOT CHORD 5-6=-181/302, 4-5=-134/121
WEBS 3-5=-421/1114, 2-5=-356/918, 2-6=-1121/431

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, 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 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) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; 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) Provide adequate drainage to prevent water ponding.
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) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 438 lb uplift at joint 4 and 438 lb uplift at joint 6.
10) Use MiTek JUS26 (With 4-10d nails into Girder & 4-10d nails into Truss) or equivalent spaced at 1-5-8 oc max. starting at 1-9-12 from the left end to 3-3-4 to connect truss(es) to back face of bottom chord.
11) Use MiTek JUS26 (With 4-10d nails into Girder & 4-10d nails into Truss) or equivalent at 4-8-12 from the left end to connect truss(es) to back face of bottom chord, skewed 0.0 deg.to the right, sloping 0.0 deg. down.
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, 4-6=-20
Concentrated Loads (lb)
Vert: 5=-657 (B), 7=-657 (B), 8=-657 (B)

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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:

February 6,2025

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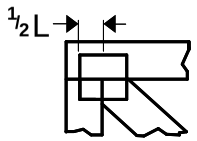
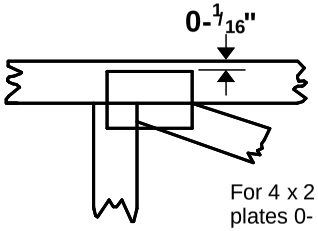
Symbols

PLATE LOCATION AND ORIENTATION



Center plate on joint unless x, y offsets are indicated. Dimensions are in ft-in-sixteenths. Apply plates to both sides of truss and fully embed teeth.



For 4 x 2 orientation, locate plates 0- 1/16" from outside edge of truss.

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

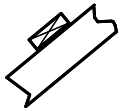
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 x 4

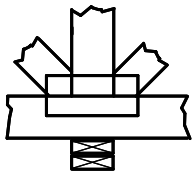
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

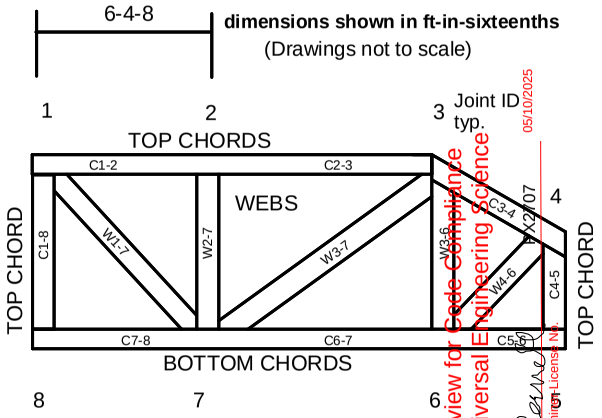


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-22: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



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

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

Product Code Approvals

ICC-ES Reports:

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

Design General Notes

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

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

MiTek®

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.