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: 1024-077 -

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

Site Information:

Customer Info: ALEC NORTON 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):

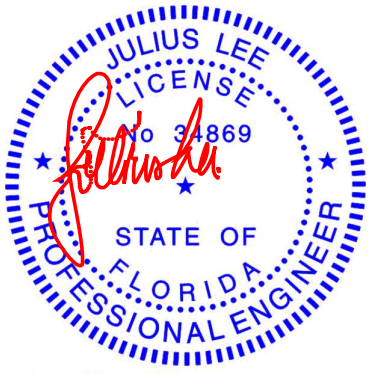
Design Code: FBC2023/TPI2014 Design Program: MiTek 20/20 8.7
Wind Code: ASCE 7-22 Wind Speed: 130 mph
Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 35 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	T36176031	A01	1/27/25	23	T36176053	GDR	1/27/25
2	T36176032	A02	1/27/25	24	T36176054	J01	1/27/25
3	T36176033	A03	1/27/25	25	T36176055	J02	1/27/25
4	T36176034	A3A	1/27/25	26	T36176056	J03	1/27/25
5	T36176035	A04	1/27/25	27	T36176057	J04	1/27/25
6	T36176036	A4A	1/27/25	28	T36176058	M01	1/27/25
7	T36176037	A4B	1/27/25	29	T36176059	M02	1/27/25
8	T36176038	A05	1/27/25	30	T36176060	M2A	1/27/25
9	T36176039	B01	1/27/25	31	T36176061	PB01	1/27/25
10	T36176040	B02	1/27/25	32	T36176062	PB02	1/27/25
11	T36176041	B03	1/27/25	33	T36176063	PB2A	1/27/25
12	T36176042	C01	1/27/25	34	T36176064	PB2B	1/27/25
13	T36176043	C02	1/27/25	35	T36176065	PB03	1/27/25
14	T36176044	C03	1/27/25				
15	T36176045	C04	1/27/25				
16	T36176046	CJ01	1/27/25				
17	T36176047	D01	1/27/25				
18	T36176048	D02	1/27/25				
19	T36176049	D03	1/27/25				
20	T36176050	D04	1/27/25				
21	T36176051	D05	1/27/25				
22	T36176052	D06	1/27/25				

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:

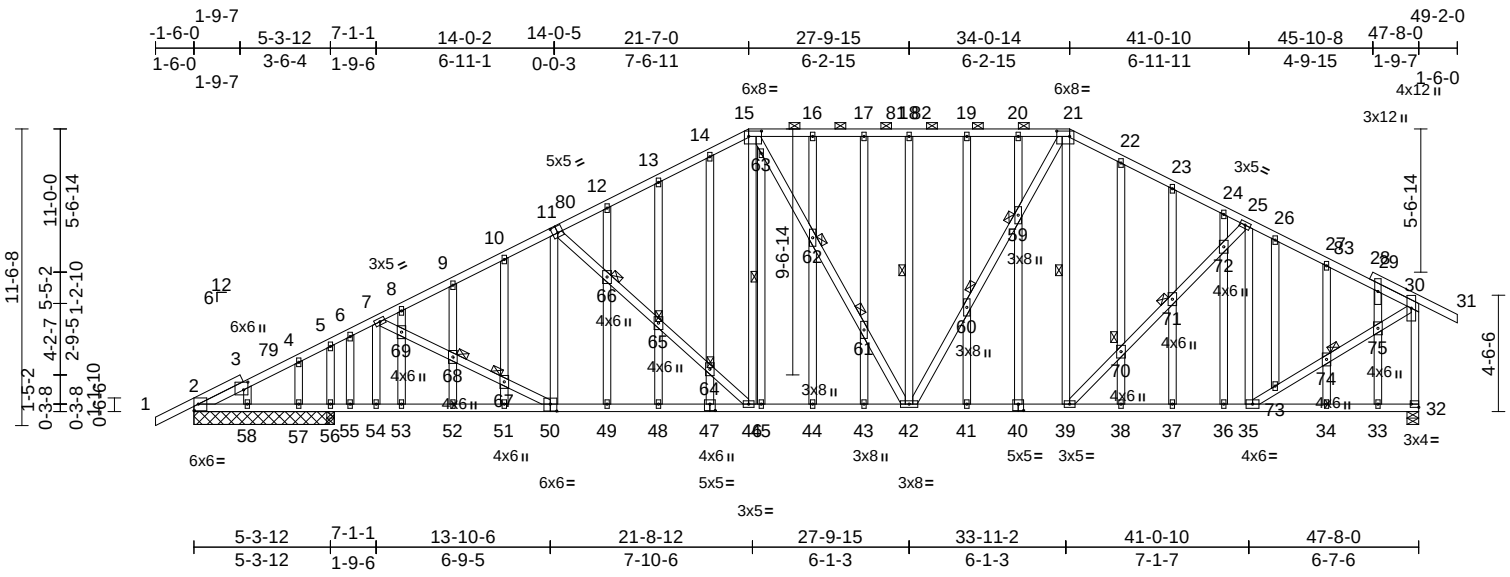
January 27,2025

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	
1024-077	A01	Piggyback Base Structural Gable	1	1	T36176031 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. Mon Jan 27 07:17:34 Page: 1
ID:yCaQp_q?a0WH_C1oiQ13l4yOaIU-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:89.7

Plate Offsets (X, Y): [2:Edge,0-3-2], [3:0-3-10,0-2-0], [11:0-2-8,0-3-0], [15:0-6-0,0-2-8], [21:0-6-0,0-2-8], [32:Edge,0-1-8], [40:0-2-8,0-3-0], [47:0-2-8,0-3-0], [50:0-3-0,0-3-4]

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	0.78	Vert(LL)	-0.18	51-52	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.93	Vert(CT)	-0.36	51-52	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.53	Horz(CT)	0.10	32	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 529 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except* 2-50:2x4 SP SS
WEBS 2x4 SP No.2
OTHERS 2x4 SP No.2

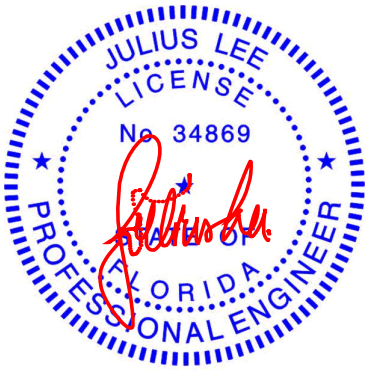
BRACING
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (4-0-9 max.): 15-21.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 18-42, 21-39, 45-63
JOINTS 1 Brace at Jt(s): 59, 60, 61, 62, 64, 65, 66, 67, 68, 70, 71, 74

REACTIONS (size) 2=5-5-8, 32=0-5-8, 56=5-5-8, 57=5-5-8, 58=5-5-8
Max Horiz 2=260 (LC 11)
Max Uplift 2=-35 (LC 12), 32=-37 (LC 12), 57=-825 (LC 1), 58=-7 (LC 9)
Max Grav 2=1039 (LC 1), 32=1863 (LC 1), 56=1814 (LC 1), 57=-18 (LC 12), 58=113 (LC 17)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/40, 2-3=-1844/33, 3-4=-1808/56, 4-5=-1676/76, 5-6=-1943/91, 6-7=-1985/103, 7-8=-2361/92, 8-9=-2389/113, 9-10=-2367/140, 10-12=-2331/165, 12-13=-2014/171, 13-14=-2004/198, 14-15=-1954/218, 15-16=-1810/212, 16-17=-1810/212, 17-18=-1810/212, 18-19=-1810/212, 19-20=-1810/212, 20-21=-1810/212, 21-22=-1737/218, 22-23=-1765/189, 23-24=-1791/158, 24-25=-1818/141, 25-26=-1487/158, 26-27=-1567/154, 27-29=-1549/122, 29-30=-1559/117, 30-31=0/37, 30-32=-1782/112

BOT CHORD 2-58=-112/1631, 57-58=-112/1631, 56-57=-112/1631, 55-56=-112/1631, 54-55=-112/1631, 53-54=-112/1631, 52-53=-112/1631, 51-52=-112/1631, 49-51=-129/2109, 48-49=-129/2109, 46-48=-129/2109, 45-46=-76/1783, 44-45=-76/1783, 43-44=-76/1783, 42-43=-76/1783, 41-42=-59/1562, 39-41=-59/1562, 38-39=-77/1386, 37-38=-77/1386, 36-37=-77/1386, 35-36=-77/1386, 34-35=-42/70, 33-34=-42/70, 32-33=-42/70



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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 27,2025

Continued on page 2

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WEBS 7-54=-311/25, 7-69=-23/599, 68-69=-20/538, 67-68=-17/511, 50-67=-21/547, 11-50=-11/128, 11-66=-480/72, 65-66=-439/67, 64-65=-498/76, 46-64=-474/74, 15-46=-43/530, 15-63=-39/190, 62-63=-67/263, 61-62=-64/245, 42-61=-67/240, 18-42=-267/35, 42-60=-24/600, 59-60=-27/621, 21-59=-25/587, 21-39=-47/142, 39-70=0/358, 70-71=0/344, 71-72=0/375, 25-72=0/333, 25-35=-581/30, 35-73=-39/1608, 73-74=-41/1571, 74-75=-42/1598, 30-75=-43/1663, 20-59=-43/28, 40-59=-82/31, 19-60=-63/35, 41-60=-41/31, 17-61=-53/28, 43-61=-48/26, 16-62=-54/34, 44-62=-39/34, 45-63=-87/36, 14-64=0/46, 47-64=-37/30, 13-65=-99/48, 48-65=-11/43, 12-66=-10/44, 49-66=-70/38, 10-67=-27/29, 51-67=-109/34, 9-68=-73/37, 52-68=-9/46, 8-69=-132/30, 53-69=0/43, 6-55=-140/20, 4-57=0/182, 3-58=-23/37, 22-70=-45/36, 38-70=-61/36, 23-71=-76/47, 37-71=0/54, 24-72=-3/30, 36-72=-100/21, 26-73=-4/71, 27-74=-122/48, 34-74=-70/47, 29-75=-113/35, 33-75=-10/35, 5-56=-671/49

NOTES

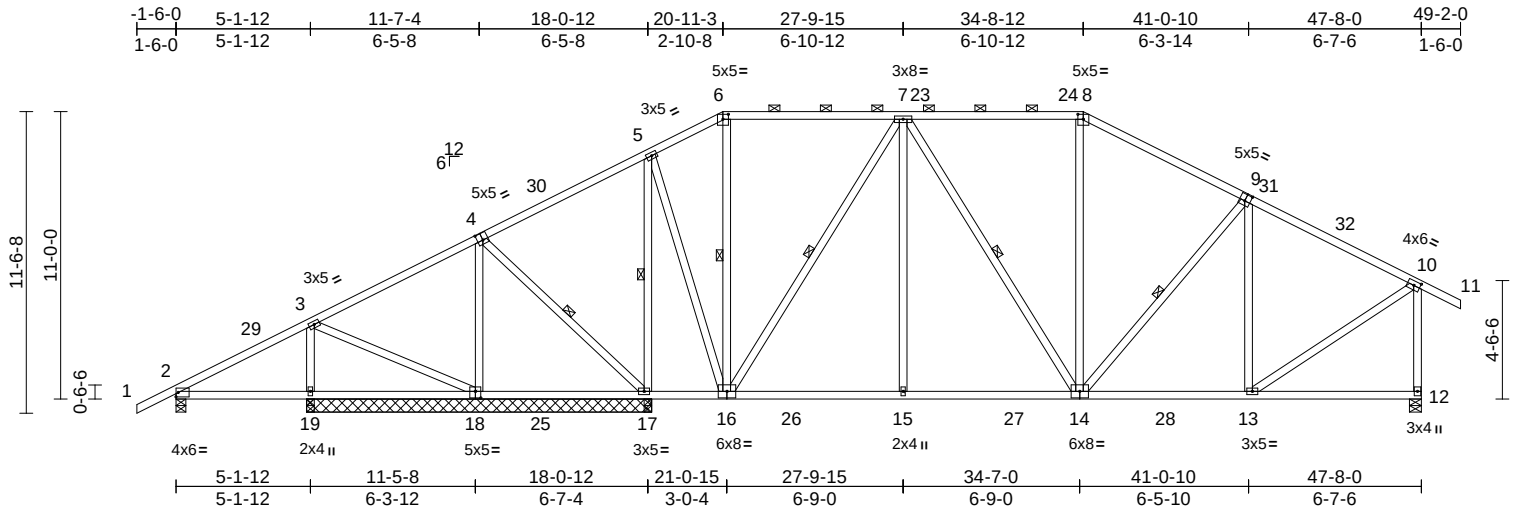
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=48ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -1-6-0 to 3-3-3, Zone1 3-3-3 to 21-7-0, Zone2 21-7-0 to 28-3-15, Zone1 28-3-15 to 34-0-14, Zone2 34-0-14 to 41-0-10, Zone1 41-0-10 to 49-2-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
5) Provide adequate drainage to prevent water ponding.
6) All plates are 2x4 MT20 unless otherwise indicated.
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) Bearings are assumed to be: Joint 2 SP SS , Joint 32 SP No.2 , Joint 56 SP SS .
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 35 lb uplift at joint 2, 37 lb uplift at joint 32, 825 lb uplift at joint 57, 7 lb uplift at joint 58 and 35 lb uplift at joint 2.
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.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	
1024-077	A02	Piggyback Base	1	1	T36176032
					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. Mon Jan 27 07:17:35 Page: 1
ID:yniicoMMSdGh_27BEsAJYlyOaXt-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:88.2

Plate Offsets (X, Y): [4:0-2-8,0-3-4], [6:0-2-8,0-2-4], [8:0-2-8,0-2-4], [9:0-2-8,0-3-0], [10:0-2-15,0-2-0], [18:0-2-8,0-3-0]

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	0.61	Vert(LL)	-0.09	15-16	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.59	Vert(CT)	-0.16	15-16	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.74	Horz(CT)	0.03	12	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

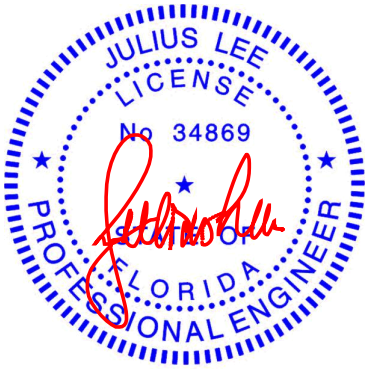
BRACING
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (5-6-13 max.): 6-8.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 6-16, 7-16, 7-14, 9-14, 5-17, 4-17

REACTIONS (size) 2=0-4-8, 12=0-5-8, 17=13-2-8, 18=13-2-8, 19=13-2-8
Max Horiz 2=262 (LC 11)
Max Uplift 2=-40 (LC 12), 12=-33 (LC 12), 17=-20 (LC 12)
Max Grav 2=332 (LC 18), 12=1477 (LC 18), 17=1763 (LC 17), 18=584 (LC 17), 19=501 (LC 17)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 6-7=-356/153, 7-8=-997/183, 10-12=-1377/115, 1-2=0/40, 2-3=-262/106, 3-5=-188/123, 5-6=-436/160, 8-10=-1188/172, 10-11=0/44
BOT CHORD 2-19=-188/203, 17-19=-117/203, 15-17=-139/894, 13-15=-41/961, 12-13=-42/70
WEBS 6-16=-118/37, 7-16=-1034/49, 7-15=0/414, 7-14=-21/169, 8-14=0/226, 9-14=-84/100, 9-13=-385/85, 10-13=0/1095, 3-19=-322/73, 4-18=-320/63, 5-17=-1495/122, 5-16=0/1132, 3-18=-90/58, 4-17=-128/79

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=48ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -1-6-0 to 3-3-3, Zone1 3-3-3 to 20-11-3, Zone2 20-11-3 to 27-9-15, Zone1 27-9-15 to 34-8-12, Zone2 34-8-12 to 41-5-10, Zone1 41-5-10 to 49-2-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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, 33 lb uplift at joint 12 and 20 lb uplift at joint 17.
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



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Date:

January 27,2025

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Chesterfield, MO 63017
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Job	Truss	Truss Type	Qty	Ply	
1024-077	A03	Piggyback Base	1	1	T36176033 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. Mon Jan 27 07:17:35 Page: 1
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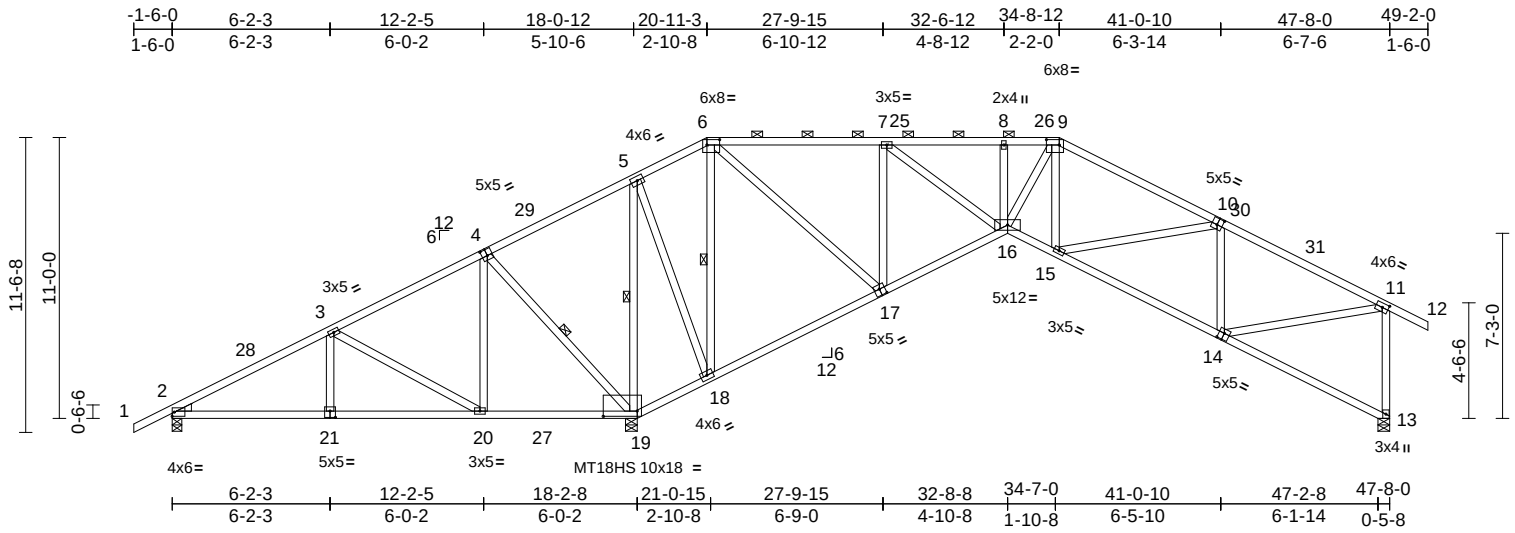


Scale = 1:90.2

Plate Offsets (X, Y): [4:0-2-8,0-3-0], [6:0-6-0,0-2-8], [9:0-6-0,0-2-8], [10:0-2-8,0-3-0], [11:0-2-15,0-2-0], [14:0-2-8,0-3-0], [17:0-2-8,0-3-0], [19:1-4-0,0-2-8], [21:0-2-8,0-3-0]

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	0.51	Vert(LL)	-0.10	14-15	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.47	Vert(CT)	-0.20	14-15	>999	180	MT18HS	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.68	Horz(CT)	0.17	13	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 311 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

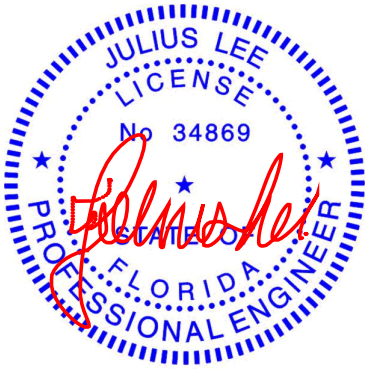
BRACING
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (4-9-6 max.): 6-9.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 4-19, 5-19, 6-18

REACTIONS (size) 2=0-4-8, 13=0-5-8, 19=0-5-8
Max Horiz 2=265 (LC 11)
Max Uplift 2=-79 (LC 12), 13=-63 (LC 12)
Max Grav 2=384 (LC 23), 13=1080 (LC 18), 19=3067 (LC 17)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 6-7=-346/167, 7-8=-1268/145, 8-9=-1263/142, 11-13=-979/184, 1-2=0/40, 2-3=-242/441, 3-5=-96/1320, 5-6=0/758, 9-11=-1337/135, 11-12=0/44
BOT CHORD 2-20=-362/203, 19-20=-645/75, 18-19=-1295/143, 16-18=-825/413, 15-16=-14/1252, 13-15=-97/1186
WEBS 4-19=-869/75, 5-19=-1739/159, 5-18=-14/1351, 6-18=-1339/79, 6-17=-58/1199, 9-16=-7/285, 9-15=-49/177, 10-15=-58/167, 10-14=-512/107, 11-14=-21/987, 7-17=-1031/139, 7-16=-48/1144, 8-16=-159/69, 3-21=0/260, 4-20=0/576, 3-20=-689/63

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=48ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -1-6-0 to 3-3-3, Zone1 3-3-3 to 20-11-3, Zone2 20-11-3 to 27-9-15, Zone1 27-9-15 to 34-8-12, Zone2 34-8-12 to 41-5-10, Zone1 41-5-10 to 49-2-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) Provide adequate drainage to prevent water ponding.
5) All plates are MT20 plates unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) All bearings are assumed to be SP No.2 .
9) Bearing at joint(s) 13 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 63 lb uplift at joint 13 and 79 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) 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



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Date:

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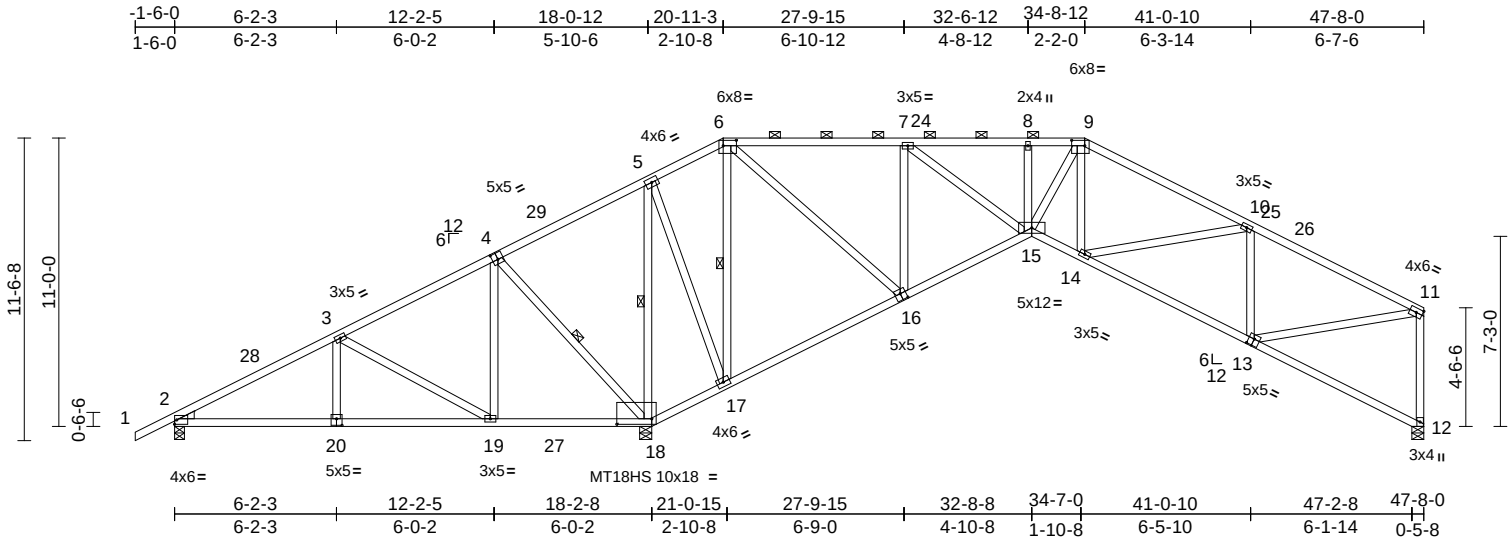
Job	Truss	Truss Type	Qty	Ply	
1024-077	A3A	Piggyback Base	3	1	T36176034
					Job Reference (optional)

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

Run: 8.73 S Dec 5 2024 Print: 8.730 S Dec 5 2024 MiTek Industries, Inc. Mon Jan 27 07:17:33
ID:RP0wxSEyBxfrSjuoFCwRnEyOaVT-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:87.9

Plate Offsets (X, Y): [4:0-2-8,0-3-0], [6:0-6-0,0-2-8], [9:0-6-0,0-2-8], [13:0-2-8,0-3-0], [16:0-2-8,0-3-0], [18:1-4-0,0-2-8], [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	0.51	Vert(LL)	-0.11	13-14	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.47	Vert(CT)	-0.20	13-14	>999	180	MT18HS	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.68	Horz(CT)	0.17	12	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 308 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

BRACING

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (4-9-4 max.): 6-9.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 4-18, 5-18, 6-17

REACTIONS (size) 2=0-4-8, 12=0-5-8, 18=0-5-8
Max Horiz 2=261 (LC 11)
Max Uplift 2=-68 (LC 24), 12=-17 (LC 12)
Max Grav 2=383 (LC 23), 12=986 (LC 18), 18=3066 (LC 17)

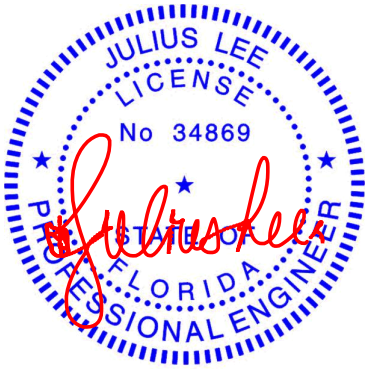
FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	6-7=-347/163, 7-8=-1274/173, 8-9=-1269/170, 9-10=-1345/157, 10-11=-1252/130, 11-12=-887/132, 1-2=0/40, 2-3=-241/445, 3-5=-133/1315, 5-6=0/754
BOT CHORD	2-19=-365/200, 18-19=-648/72, 17-18=-1297/141, 15-17=-826/414, 14-15=-71/1259, 12-14=-157/1194
WEBS	4-18=-869/75, 5-18=-1737/187, 5-17=-40/1352, 6-17=-1340/107, 6-16=-82/1201, 9-15=-24/285, 9-14=-42/179, 10-14=-58/160, 10-13=-519/139, 11-13=-67/1000, 7-16=-1036/163, 7-15=-91/1148, 8-15=-159/72, 3-20=0/260, 4-19=0/575, 3-19=-689/64

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=48ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -1-6-0 to 3-3-3, Zone1 3-3-3 to 20-11-3, Zone2 20-11-3 to 27-9-15, Zone1 27-9-15 to 34-8-12, Zone2 34-8-12 to 41-5-10, Zone1 41-5-10 to 47-6-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) Provide adequate drainage to prevent water ponding.
5) All plates are MT20 plates unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) All bearings are assumed to be SP No.2 .
9) Bearing at joint(s) 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 17 lb uplift at joint 12 and 68 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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



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

January 27,2025

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

Job	Truss	Truss Type	Qty	Ply	
1024-077	A04	Piggyback Base	3	1	T36176035
					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. Mon Jan 27 07:17:35 Page: 1
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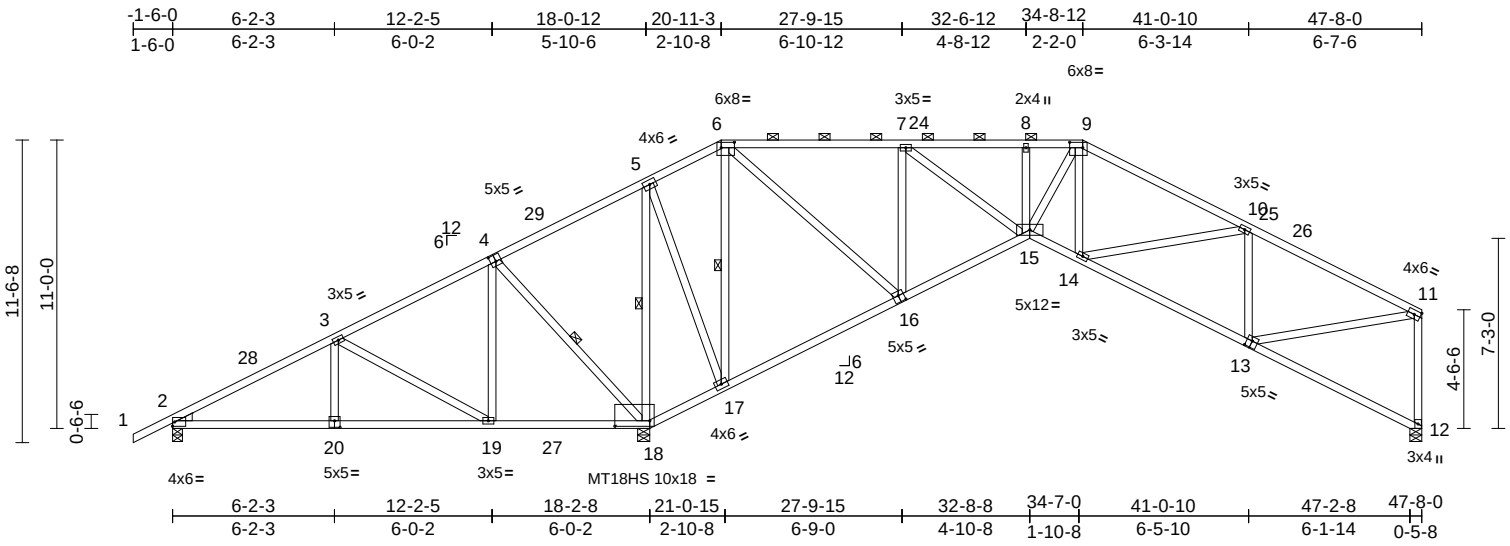

Scale = 1:87.9

Plate Offsets (X, Y): [4:0-2-8,0-3-0], [6:0-6-0,0-2-8], [9:0-6-0,0-2-8], [13:0-2-8,0-3-0], [16:0-2-8,0-3-0], [18:1-4-0,0-2-8], [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	0.51	Vert(LL)	-0.11	13-14	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.47	Vert(CT)	-0.20	13-14	>999	180	MT18HS	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.68	Horz(CT)	0.17	12	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 308 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

BRACING

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (4-9-4 max.): 6-9.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 4-18, 5-18, 6-17

REACTIONS (size) 2=0-4-8, 12=0-5-8, 18=0-5-8
Max Horiz 2=261 (LC 11)
Max Uplift 2=-68 (LC 24), 12=-17 (LC 12)
Max Grav 2=383 (LC 23), 12=986 (LC 18), 18=3066 (LC 17)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	6-7=-347/163, 7-8=-1274/173, 8-9=-1269/170, 9-10=-1345/157, 10-11=-1252/130, 11-12=-887/132, 1-2=0/40, 2-3=-241/445, 3-5=-133/1315, 5-6=0/754
BOT CHORD	2-19=-365/200, 18-19=-648/72, 17-18=-1297/141, 15-17=-826/414, 14-15=-71/1259, 12-14=-157/1194
WEBS	4-18=-869/75, 5-18=-1737/187, 5-17=-40/1352, 6-17=-1340/107, 6-16=-82/1201, 9-15=-24/285, 9-14=-42/179, 10-14=-58/160, 10-13=-519/139, 11-13=-67/1000, 7-16=-1036/163, 7-15=-91/1148, 8-15=-159/72, 3-20=0/260, 4-19=0/575, 3-19=-689/64

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=48ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -1-6-0 to 3-3-3, Zone1 3-3-3 to 20-11-3, Zone2 20-11-3 to 27-9-15, Zone1 27-9-15 to 34-8-12, Zone2 34-8-12 to 41-5-10, Zone1 41-5-10 to 47-6-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) Provide adequate drainage to prevent water ponding.
5) All plates are MT20 plates unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) All bearings are assumed to be SP No.2 .
9) Bearing at joint(s) 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 17 lb uplift at joint 12 and 68 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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

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

January 27,2025

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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Job	Truss	Truss Type	Qty	Ply	
1024-077	A4A	Piggyback Base Girder	2	**2**	T36176036
					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. Mon Jan 27 07:17:34 Page: 1
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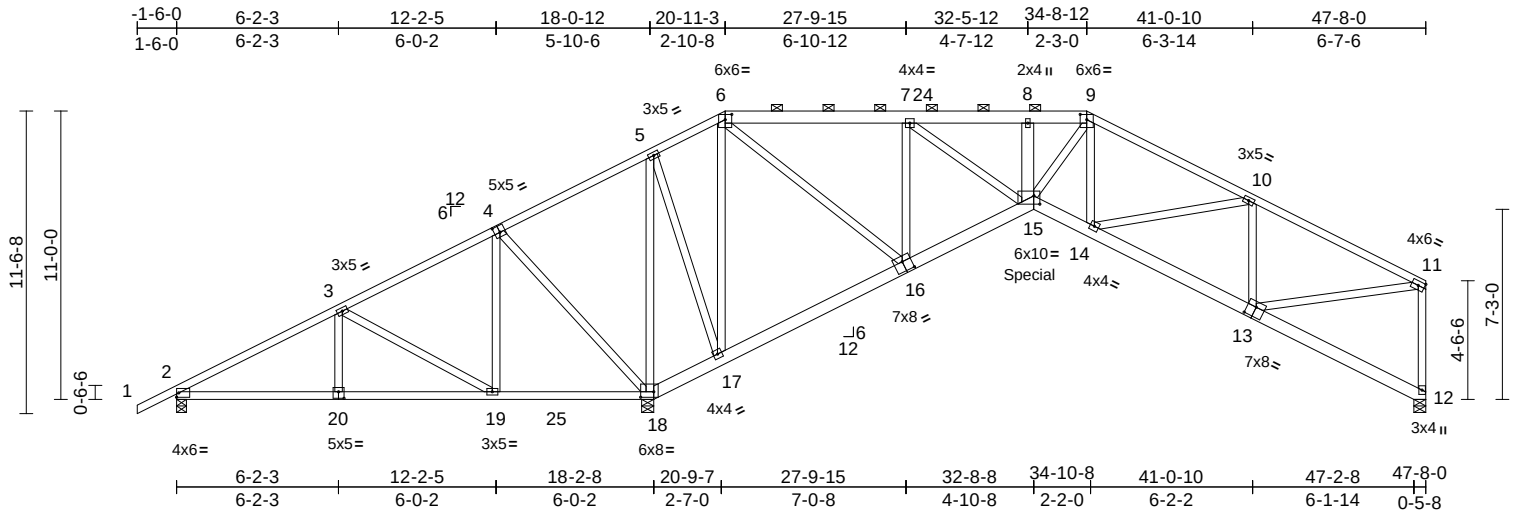


Scale = 1:87.9

Plate Offsets (X, Y): [4:0-2-8,0-3-0], [6:0-3-0,0-2-7], [9:0-3-0,0-2-7], [13:0-4-0,0-4-8], [15:0-2-12,0-3-12], [16:0-4-0,0-4-8], [18:0-6-0,0-2-8], [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	0.39	Vert(LL)	-0.08	15	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.23	Vert(CT)	-0.14	15	>999	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.75	Horz(CT)	0.14	12	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 695 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2 *Except* 6-9:2x6 SP No.2
BOT CHORD 2x6 SP No.2 *Except* 2-20,20-18:2x4 SP No.2
WEBS 2x4 SP No.2 *Except* 8-15:2x6 SP No.2

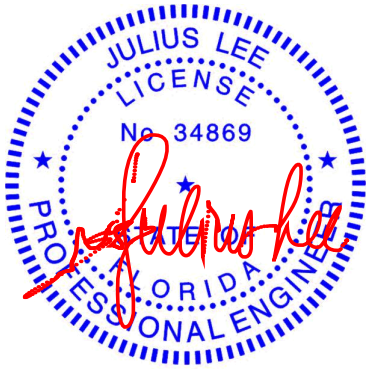
BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-9.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size) 2=0-4-8, 12=0-5-8, 18=0-5-8
Max Horiz 2=258 (LC 7)
Max Uplift 2=-356 (LC 20), 12=-50 (LC 8), 18=-68 (LC 8)
Max Grav 2=132 (LC 18), 12=1298 (LC 14), 18=4030 (LC 13)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/40, 2-3=-145/1033, 3-5=-79/1935, 5-6=0/1227, 6-7=-625/106, 7-8=-2726/99, 8-9=-2719/98, 9-10=-2406/98, 10-11=-1792/92, 11-12=-1194/63
BOT CHORD 2-19=-887/138, 18-19=-1205/77, 17-18=-1969/137, 15-17=-1261/713, 14-15=-15/2304, 12-14=-58/1734
WEBS 3-20=0/274, 3-19=-729/41, 4-19=0/585, 4-18=-868/49, 5-18=-2336/12, 5-17=0/1860, 6-17=-2018/0, 6-16=0/2025, 7-16=-1871/82, 9-14=-297/96, 10-14=-57/618, 10-13=-853/76, 11-13=0/1499, 8-15=-137/32, 7-15=-53/2535, 9-15=-98/1240

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: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered 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=48ft; eave=6ft; 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 18 SP No.2 , Joint 12 SP No.2 .
10) Bearing at joint(s) 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 50 lb uplift at joint 12, 356 lb uplift at joint 2 and 68 lb uplift at joint 18.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1023 lb down and 114 lb up at 32-8-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (lb/ft)
Vert: 1-6=-60, 6-9=-60, 9-11=-60, 18-21=-20, 15-18=-20, 12-15=-20
Concentrated Loads (lb)
Vert: 15=-1023 (F)



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

January 27,2025

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
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	
1024-077	A4B	Piggyback Base	4	1	T36176037
					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. Mon Jan 27 07:17:34
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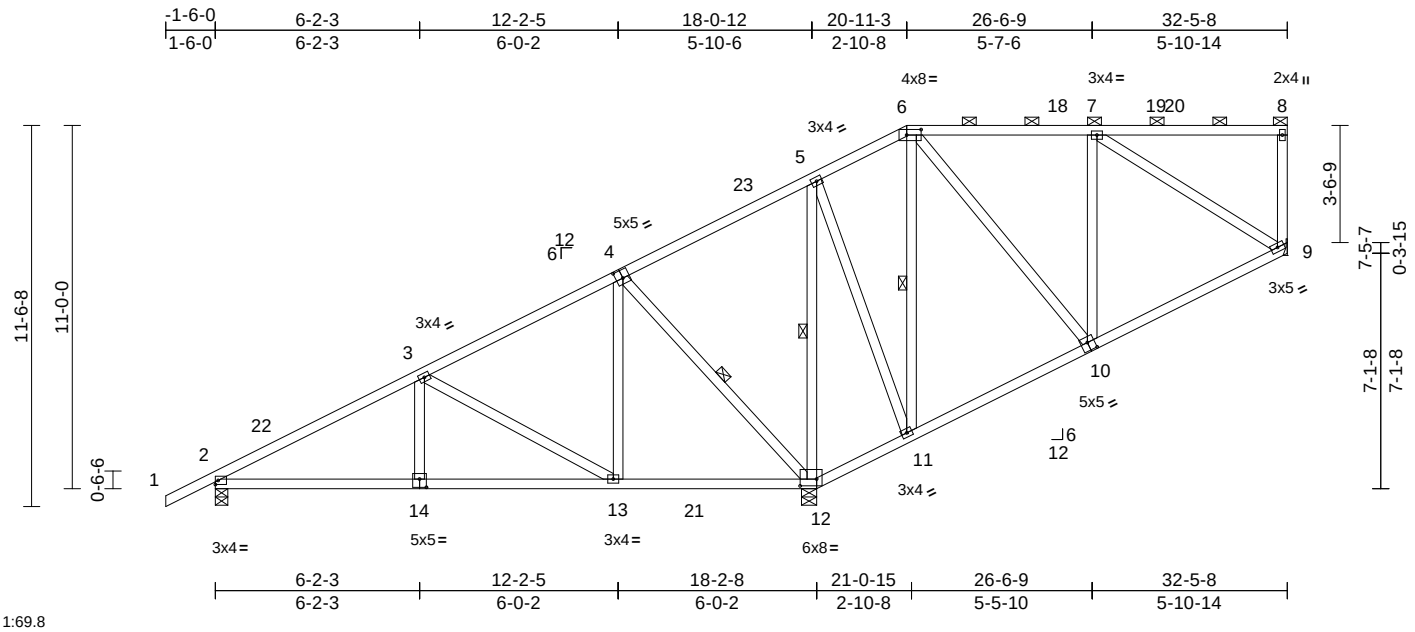


Scale = 1:69.8

Plate Offsets (X, Y): [4:0-2-8,0-3-0], [6:0-5-4,0-2-0], [10:0-2-8,0-3-0], [12:0-6-0,0-2-8], [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	0.41	Vert(LL)	-0.04	12-13	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.39	Vert(CT)	-0.08	12-13	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.50	Horz(CT)	0.02	12	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 216 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.): 6-8.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 4-12, 5-12, 6-11

REACTIONS (size) 2=0-4-8, 9= Mechanical, 12=0-5-8
Max Horiz 2=239 (LC 9)
Max Uplift 9=-52 (LC 9), 12=-31 (LC 12)
Max Grav 2=737 (LC 17), 9=471 (LC 24), 12=1880 (LC 17)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 6-7=-249/86, 7-8=-75/58, 8-9=-150/41, 1-2=0/40, 2-3=-915/0, 3-5=-374/430, 5-6=-48/146
BOT CHORD 2-13=-300/841, 12-13=-134/285, 11-12=-388/35, 9-11=-173/306
WEBS 4-12=-849/63, 5-12=-938/103, 5-11=0/611, 6-11=-557/39, 6-10=0/422, 7-10=-300/72, 7-9=-262/49, 3-14=0/244, 4-13=0/554, 3-13=-627/61

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 1-8-15, Zone1 1-8-15 to 20-11-3, Zone2 20-11-3 to 25-6-5, Zone1 25-6-5 to 32-3-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Bearings are assumed to be: Joint 2 SP No.2 , Joint 12 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 52 lb uplift at joint 9 and 31 lb uplift at joint 12.
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

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

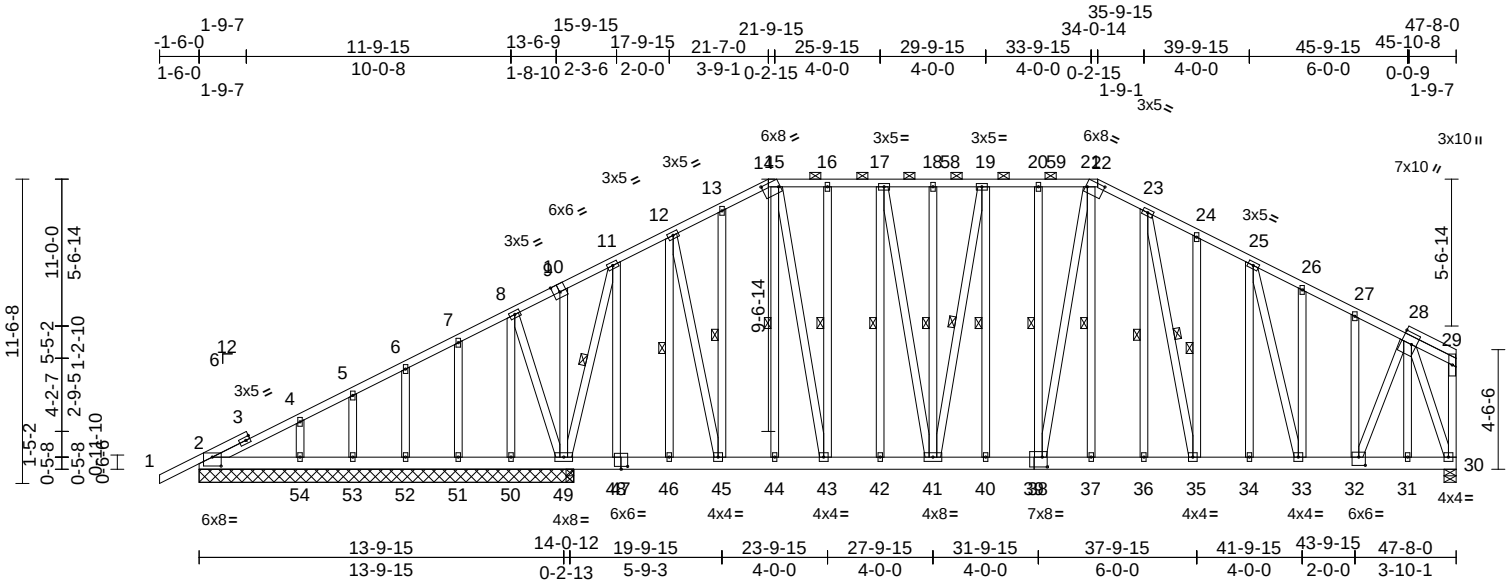
January 27,2025

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

Job	Truss	Truss Type	Qty	Ply	
1024-077	A05	Piggyback Base Structural Gable	1	1	T36176038 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. Mon Jan 27 07:17:35 Page: 1
ID:qEIUCo_1xVrjGWAZz0?MupyOaQc-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:87.4

Plate Offsets (X, Y): [2:0-4-0,0-4-1], [9:0-3-0,Edge], [14:0-7-4,0-3-8], [22:0-7-4,0-3-8], [28:Edge,0-4-13], [32:0-3-0,0-3-12], [38:0-2-4,0-4-8], [47:0-3-0,0-1-4]

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	0.34	Vert(LL)	-0.10	41	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.60	Vert(CT)	-0.20	41	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.92	Horz(CT)	0.04	30	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 576 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.2 *Except* 30-29:2x4 SP 2400F 2.0E
OTHERS 2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (5-0-13 max.): 14-22.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 18-41, 19-40, 20-38, 21-37, 23-36, 24-35, 17-42, 16-43, 15-44, 13-45, 12-46, 11-49, 19-41, 23-35

REACTIONS (size) 2=14-2-8, 30=0-5-8, 49=14-2-8, 50=14-2-8, 51=14-2-8, 52=14-2-8, 53=14-2-8, 54=14-2-8
Max Horiz 2=254 (LC 11)
Max Uplift 2=-7 (LC 12), 49=-42 (LC 12), 51=-10 (LC 12), 52=-11 (LC 12), 53=-19 (LC 12)
Max Grav 2=479 (LC 1), 30=1473 (LC 1), 49=760 (LC 23), 50=456 (LC 1), 51=170 (LC 1), 52=169 (LC 23), 53=106 (LC 23), 54=313 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/40, 2-4=-644/0, 4-5=-667/31, 5-6=-651/74, 6-7=-644/119, 7-8=-641/163, 8-10=-737/199, 10-11=-694/238, 11-12=-1112/341, 12-13=-1174/384, 13-14=-1219/420, 14-15=-1062/395, 15-16=-1206/423, 16-17=-1206/423, 17-18=-1273/440, 18-19=-1273/440, 19-20=-1263/442, 20-21=-1263/442, 21-22=-1199/442, 22-23=-1339/459, 23-24=-1351/492, 24-25=-1378/431, 25-26=-1074/391, 26-27=-1166/351, 27-28=-1041/293, 28-29=-116/128, 29-30=-125/98
BOT CHORD 2-54=-113/541, 53-54=-113/541, 52-53=-113/541, 51-52=-113/541, 50-51=-113/541, 49-50=-113/541, 48-49=-161/914, 46-48=-161/914, 45-46=-161/914, 44-45=-175/1062, 43-44=-175/1062, 42-43=-203/1206, 41-42=-203/1206, 40-41=-220/1263, 38-40=-220/1263, 37-38=-218/1199, 36-37=-218/1199, 35-36=-218/1199, 34-35=-245/1189, 33-34=-245/1189, 32-33=-225/971, 31-32=-135/456, 30-31=-135/456
WEBS 18-41=-180/66, 19-40=-215/43, 20-38=-240/56, 21-37=-105/178, 23-36=-90/191, 24-35=-99/116, 25-34=0/478, 26-33=0/134, 27-32=-409/120, 28-31=-374/103, 17-42=-390/114, 16-43=-318/92, 15-44=-339/35, 13-45=-219/69, 12-46=-606/113, 11-48=-68/605, 10-49=-44/63, 8-50=-426/62, 7-51=-130/75, 6-52=-122/78, 5-53=-98/71, 4-54=-200/91, 8-49=0/296, 11-49=-1121/212, 15-43=-154/873, 21-38=-15/556, 17-41=-88/420, 19-41=-35/179, 28-30=-1334/273, 28-32=-238/1362, 25-33=-870/79, 23-35=-288/115, 12-45=-60/660

NOTES
1) Unbalanced roof live loads have been considered for this design.

Julius Lee PE No. 34869
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Date:

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2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=48ft; 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) Provide adequate drainage to prevent water ponding.
6) All plates are 2x4 MT20 unless otherwise indicated.
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) All bearings are assumed to be SP No.2 .
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 7 lb uplift at joint 2, 42 lb uplift at joint 49, 10 lb uplift at joint 51, 11 lb uplift at joint 52, 19 lb uplift at joint 53 and 7 lb uplift at joint 2.
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.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	
1024-077	B01	Common Supported Gable	1	1	T36176039
					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. Mon Jan 27 07:17:36 Page: 1
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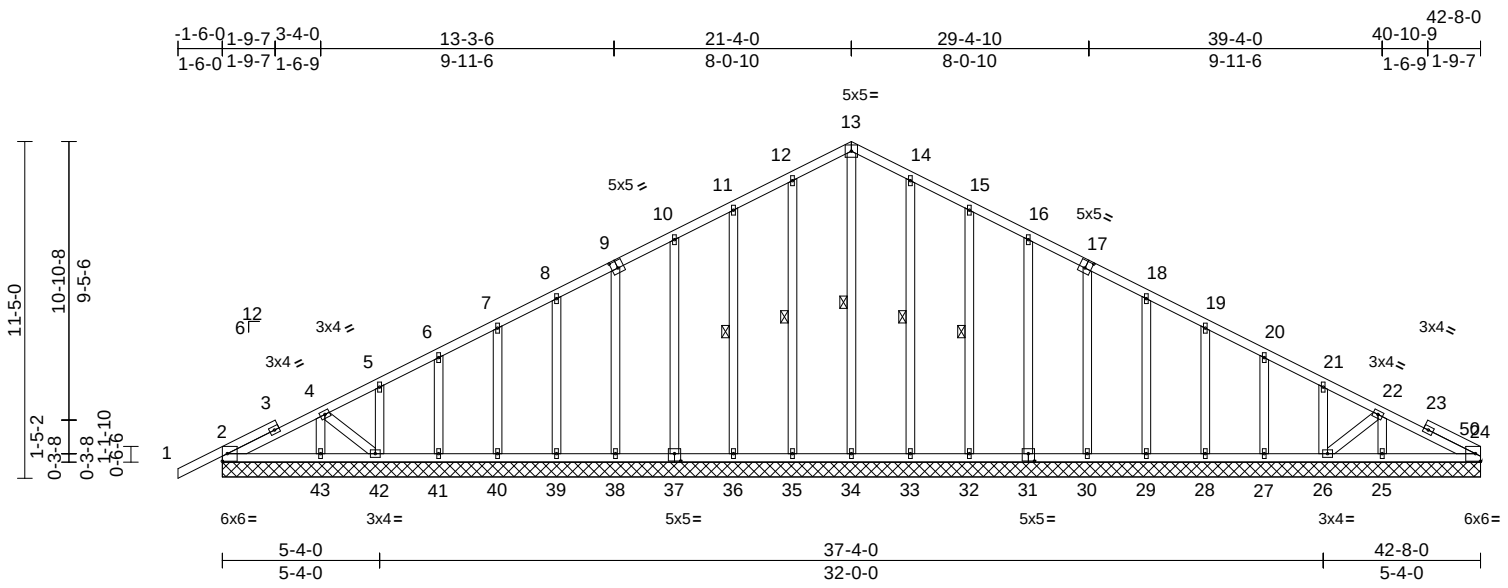


Scale = 1:78.1

Plate Offsets (X, Y): [2:Edge,0-3-2], [9:0-2-8,0-3-0], [17:0-2-8,0-3-0], [24:Edge,0-3-2], [31:0-2-8,0-3-0], [37:0-2-8,0-3-0]

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	0.07	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.01	24	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 307 lb	FT = 20%

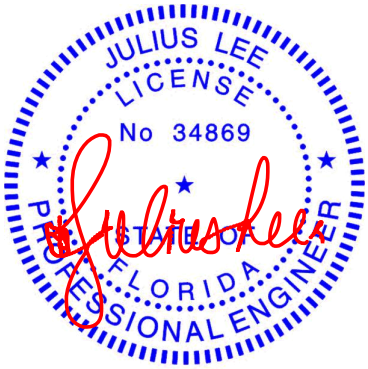
LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2
OTHERS 2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 13-34, 12-35, 11-36, 14-33, 15-32

REACTIONS (size) 2=42-8-0, 24=42-8-0, 25=42-8-0, 26=42-8-0, 27=42-8-0, 28=42-8-0, 29=42-8-0, 30=42-8-0, 31=42-8-0, 32=42-8-0, 33=42-8-0, 34=42-8-0, 35=42-8-0, 36=42-8-0, 37=42-8-0, 38=42-8-0, 39=42-8-0, 40=42-8-0, 41=42-8-0, 42=42-8-0, 43=42-8-0
Max Horiz 2=200 (LC 11)
Max Uplift 2=-31 (LC 12), 26=-50 (LC 12), 27=-12 (LC 12), 28=-12 (LC 12), 29=-12 (LC 12), 30=-12 (LC 12), 31=-11 (LC 12), 32=-15 (LC 12), 33=-3 (LC 12), 35=-3 (LC 12), 36=-15 (LC 12), 37=-11 (LC 12), 38=-12 (LC 12), 39=-12 (LC 12), 40=-12 (LC 12), 41=-11 (LC 12), 42=-52 (LC 12)
Max Grav 2=237 (LC 1), 24=115 (LC 1), 25=228 (LC 1), 26=166 (LC 18), 27=169 (LC 24), 28=158 (LC 1), 29=161 (LC 24), 30=160 (LC 24), 31=159 (LC 1), 32=160 (LC 1), 33=166 (LC 24), 34=150 (LC 17), 35=166 (LC 23), 36=160 (LC 1), 37=159 (LC 1), 38=160 (LC 23), 39=161 (LC 23), 40=159 (LC 1), 41=165 (LC 23), 42=155 (LC 17), 43=210 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/40, 2-4=-137/129, 4-5=-139/131, 5-6=-127/124, 6-7=-118/111, 7-8=-108/100, 8-10=-99/137, 10-11=-81/181, 11-12=-100/229, 12-13=-116/267, 13-14=-116/267, 14-15=-100/229, 15-16=-80/181, 16-18=-62/137, 18-19=-44/48, 19-20=-51/36, 20-21=-57/47, 21-22=-95/53, 22-24=-54/25
BOT CHORD 2-43=-74/82, 42-43=-61/82, 41-42=-60/151, 40-41=-60/151, 39-40=-60/151, 38-39=-60/151, 36-38=-60/151, 35-36=-60/151, 34-35=-60/151, 33-34=-60/151, 32-33=-60/151, 30-32=-60/151, 29-30=-61/151, 28-29=-61/151, 27-28=-61/151, 26-27=-61/151, 25-26=-12/60, 24-25=-12/60
WEBS 13-34=-164/37, 12-35=-126/62, 11-36=-120/82, 10-37=-119/74, 9-38=-120/76, 8-39=-121/76, 7-40=-119/76, 6-41=-123/77, 5-42=-108/73, 4-43=-148/0, 14-33=-126/62, 15-32=-120/82, 16-31=-119/74, 17-30=-120/76, 18-29=-121/76, 19-28=-119/75, 20-27=-124/78, 21-26=-101/68, 22-25=-150/0, 4-42=-62/109, 22-26=-66/116

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=43ft; 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 .



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Date:

January 27,2025

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11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 31 lb uplift at joint 2, 3 lb uplift at joint 35, 15 lb uplift at joint 36, 11 lb uplift at joint 37, 12 lb uplift at joint 38, 12 lb uplift at joint 39, 12 lb uplift at joint 40, 11 lb uplift at joint 41, 52 lb uplift at joint 42, 3 lb uplift at joint 33, 15 lb uplift at joint 32, 11 lb uplift at joint 31, 12 lb uplift at joint 30, 12 lb uplift at joint 29, 12 lb uplift at joint 28, 12 lb uplift at joint 27, 50 lb uplift at joint 26 and 31 lb uplift at joint 2.
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

Job	Truss	Truss Type	Qty	Ply	
1024-077	B02	Common	6	1	T36176040
					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. Mon Jan 27 07:17:36 Page: 1
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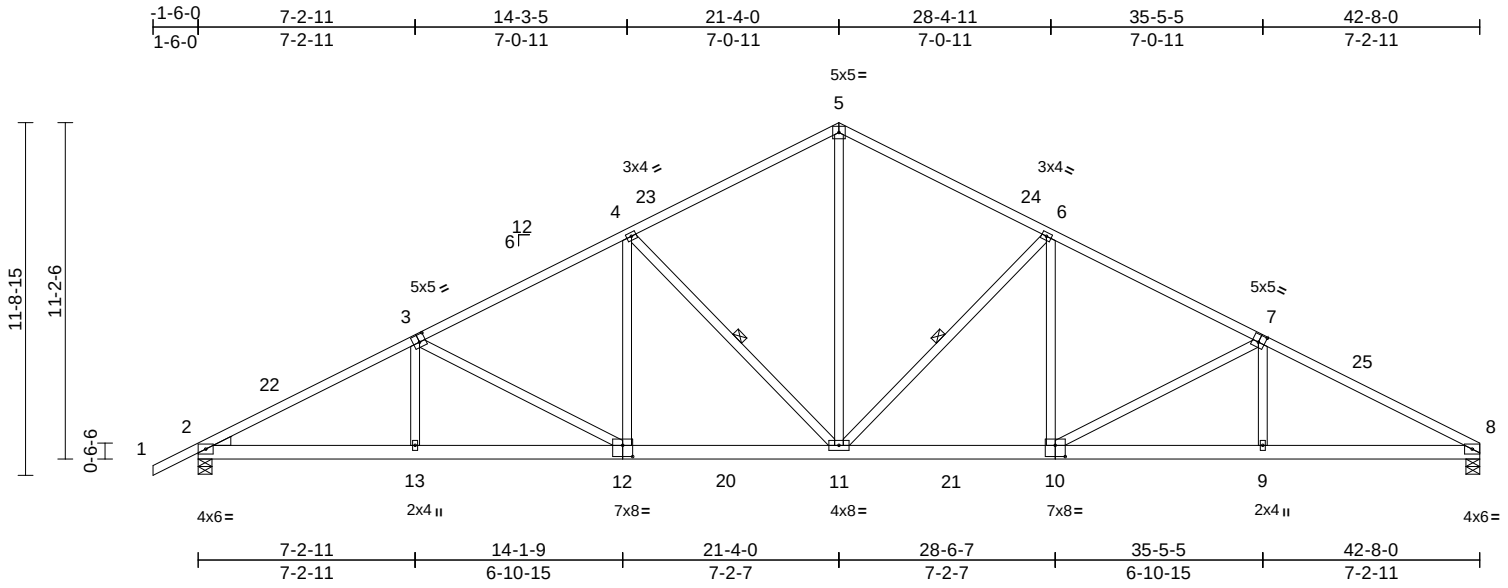


Scale = 1:76.7

Plate Offsets (X, Y): [3:0-2-8,0-3-0], [7:0-2-8,0-3-0], [10:0-4-0,0-4-8], [12:0-4-0,0-4-8]

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	0.45	Vert(LL)	-0.22	10-11	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.54	Vert(CT)	-0.40	10-11	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.74	Horz(CT)	0.12	8	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 272 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.2
WEDGE Left: 2x4 SP No.3

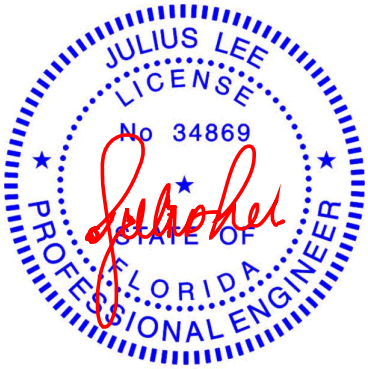
BRACING
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 6-11, 4-11

REACTIONS (size) 2=0-5-8, 8=0-5-8
Max Horiz 2=207 (LC 11)
Max Uplift 2=-35 (LC 12)
Max Grav 2=2017 (LC 17), 8=1933 (LC 18)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/40, 2-4=-3573/173, 4-5=-2231/214, 5-6=-2230/221, 6-8=-3590/189
BOT CHORD 2-13=-46/3260, 11-13=-47/3256, 9-11=-72/3124, 8-9=-71/3129
WEBS 3-13=0/258, 4-12=0/618, 5-11=-52/1570, 6-10=0/622, 7-9=0/262, 7-10=-676/100, 6-11=-990/110, 4-11=-987/109, 3-12=-661/66

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=43ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -1-6-0 to 2-9-3, Zone1 2-9-3 to 21-4-0, Zone2 21-4-0 to 27-4-7, Zone1 27-4-7 to 42-8-0 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.
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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Job	Truss	Truss Type	Qty	Ply	
1024-077	B03	Common	6	1	T36176041
					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. Mon Jan 27 07:17:36 Page: 1
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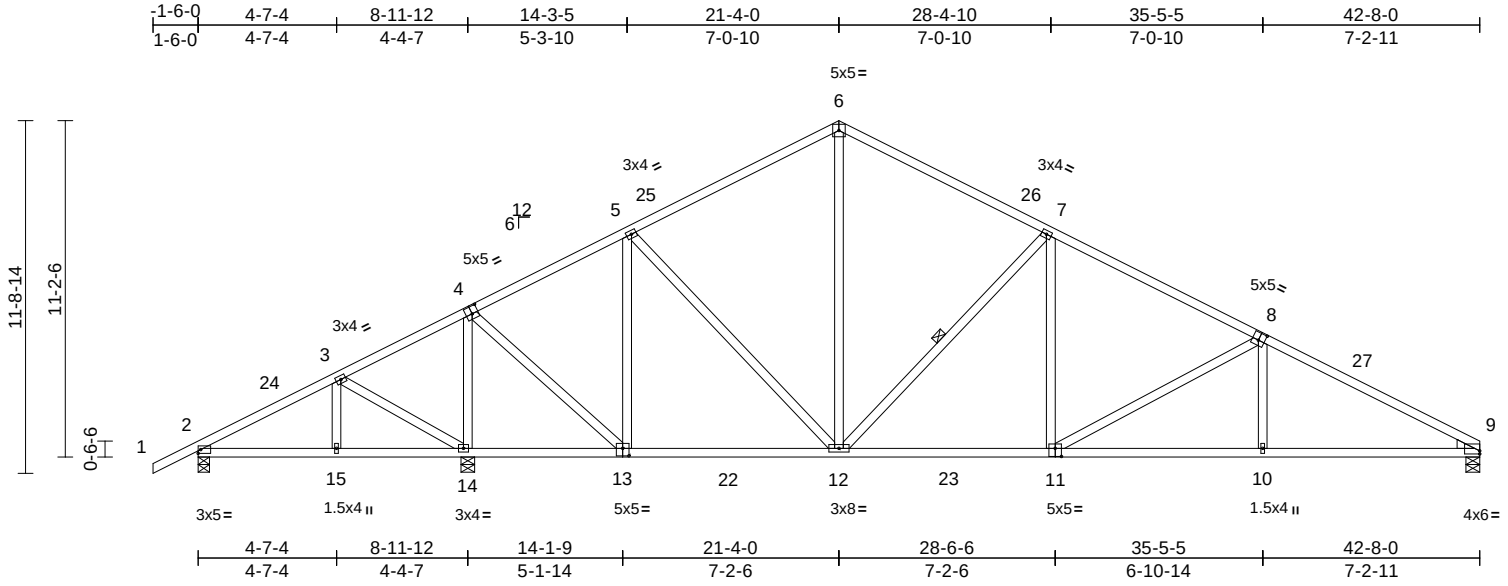


Scale = 1:76.7

Plate Offsets (X, Y): [4:0-2-8,0-3-0], [8:0-2-8,0-3-0], [9:Edge,0-1-4], [11:0-2-8,0-3-4], [13:0-2-8,0-3-0]

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	0.45	Vert(LL)	-0.14	11-12	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.73	Vert(CT)	-0.26	11-12	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.83	Horz(CT)	0.06	9	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 248 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

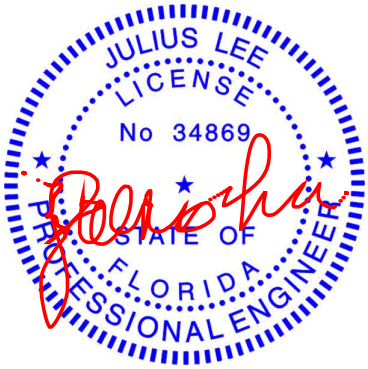
BRACING
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 7-12

REACTIONS (size) 2=0-4-8, 9=0-5-8, 14=0-5-8
Max Horiz 2=207 (LC 11)
Max Uplift 2=-56 (LC 24)
Max Grav 2=235 (LC 23), 9=1454 (LC 18), 14=2422 (LC 17)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/40, 2-3=-146/384, 3-5=-721/848, 5-6=-1163/184, 6-7=-1144/192, 7-9=-2529/161
BOT CHORD 2-15=-374/113, 14-15=-374/58, 12-14=-710/667, 10-12=-46/2169, 9-10=-139/2173
WEBS 6-12=-23/613, 7-11=0/626, 8-10=0/271, 4-14=-2014/96, 3-14=-520/47, 3-15=0/200, 8-11=-679/100, 7-12=-992/111, 5-13=-871/92, 4-13=-22/1659, 5-12=0/543

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=43ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -1-6-0 to 2-9-3, Zone1 2-9-3 to 21-4-0, Zone2 21-4-0 to 27-4-6, Zone1 27-4-6 to 42-8-0 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 56 lb uplift at joint 2.
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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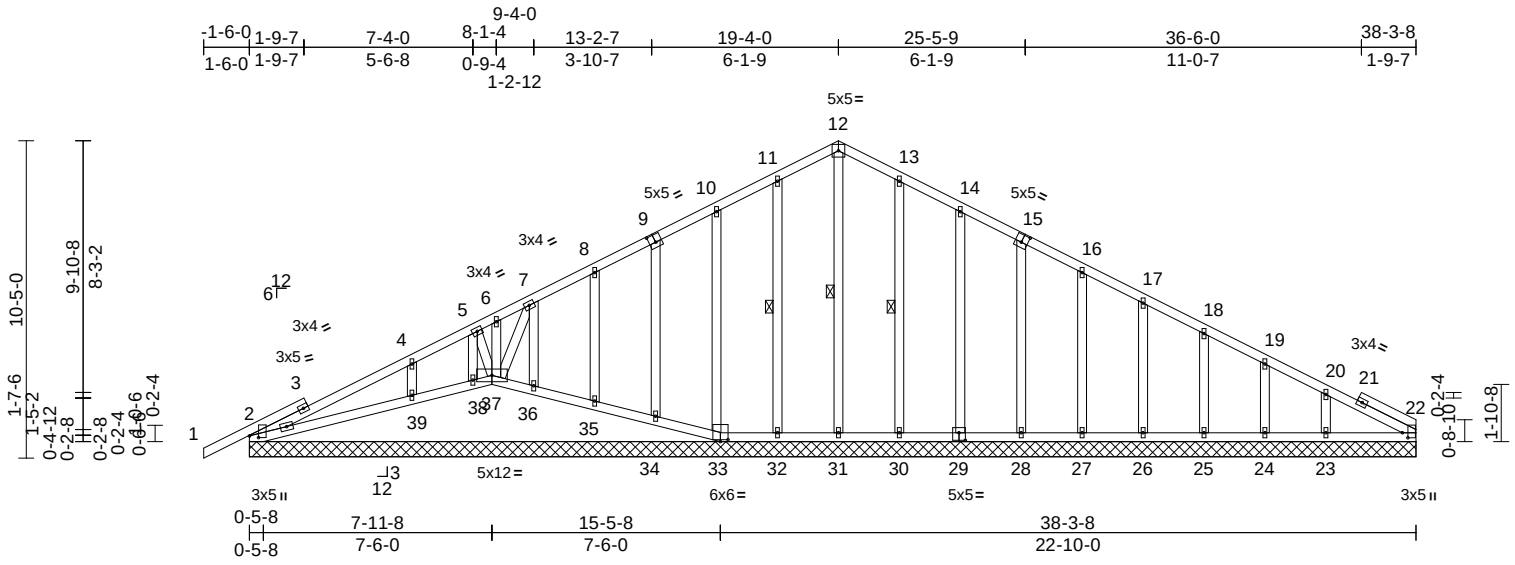
Job	Truss	Truss Type	Qty	Ply	
1024-077	C01	Roof Special Supported Gable	1	1	T36176042
					Job Reference (optional)

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

Run: 8.73 S Dec 5 2024 Print: 8.730 S Dec 5 2024 MiTek Industries, Inc. Mon Jan 27 07:17:36 Page: 1
ID:BuSf08dLCgZbA7o7GtNen4yOaJK-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:75.6

Plate Offsets (X, Y): [2:0-0-10,0-3-9], [9:0-2-8,0-3-0], [15:0-2-8,0-3-0], [22:0-2-0,0-2-3], [29:0-2-8,0-3-0], [33:0-3-0,0-0-12]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.24	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	0.12	Horz(CT)	0.01	2	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 257 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.
WEBS	1 Row at midpt 12-31, 11-32, 13-30

REACTIONS (size) 2=38-3-8, 22=38-3-8, 23=38-3-8, 24=38-3-8, 25=38-3-8, 26=38-3-8, 27=38-3-8, 28=38-3-8, 29=38-3-8, 30=38-3-8, 31=38-3-8, 32=38-3-8, 33=38-3-8, 34=38-3-8, 35=38-3-8, 36=38-3-8, 37=38-3-8, 38=38-3-8, 39=38-3-8

Max Horiz 2=177 (LC 11)

Max Uplift 2=-37 (LC 12), 23=-21 (LC 12), 24=-9 (LC 12), 25=-12 (LC 12), 26=-12 (LC 12), 27=-11 (LC 12), 28=-11 (LC 12), 29=-15 (LC 12), 30=-5 (LC 12), 32=-5 (LC 12), 33=-35 (LC 12), 34=-9 (LC 12), 35=-12 (LC 12), 36=-21 (LC 12), 38=-128 (LC 17), 39=-20 (LC 12)

Max Grav 2=286 (LC 1), 22=115 (LC 1), 23=229 (LC 24), 24=142 (LC 1), 25=164 (LC 24), 26=160 (LC 1), 27=157 (LC 1), 28=160 (LC 24), 29=162 (LC 1), 30=164 (LC 24), 31=140 (LC 17), 32=164 (LC 23), 33=155 (LC 23), 34=162 (LC 1), 35=160 (LC 23), 36=162 (LC 17), 37=188 (LC 17), 38=39 (LC 9), 39=429 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

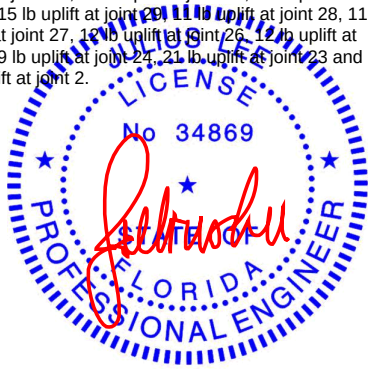
TOP CHORD 1-2=0/40, 2-4=-127/96, 4-5=-118/60, 5-6=-89/61, 6-7=-92/65, 7-8=-114/81, 8-10=-107/169, 10-11=-104/216, 11-12=-120/255, 12-13=-120/255, 13-14=-104/216, 14-16=-85/168, 16-17=-55/81, 17-18=-58/36, 18-19=-64/19, 19-20=-74/27, 20-22=-111/51

BOT CHORD 2-39=-72/128, 38-39=-77/109, 37-38=-64/121, 36-37=-40/123, 35-36=-41/125, 34-35=-41/125, 33-34=-41/126, 32-33=-37/121, 31-32=-37/121, 30-31=-37/121, 28-30=-37/121, 27-28=-36/119, 26-27=-36/119, 25-26=-36/119, 24-25=-36/119, 23-24=-36/119, 22-23=-36/119

WEBS 12-31=-155/42, 11-32=-125/63, 10-33=-122/82, 9-34=-119/74, 8-35=-120/77, 7-36=-127/99, 5-38=-76/83, 4-39=-293/156, 13-30=-125/63, 14-29=-122/83, 15-28=-120/75, 16-27=-117/74, 17-26=-120/76, 18-25=-122/77, 19-24=-110/71, 20-23=-167/96, 6-37=-81/36, 7-37=-51/73, 5-37=-64/85

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=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 37 lb uplift at joint 2, 5 lb uplift at joint 32, 35 lb uplift at joint 33, 9 lb uplift at joint 34, 12 lb uplift at joint 35, 21 lb uplift at joint 36, 128 lb uplift at joint 38, 20 lb uplift at joint 39, 5 lb uplift at joint 30, 15 lb uplift at joint 29, 11 lb uplift at joint 28, 11 lb uplift at joint 27, 12 lb uplift at joint 26, 12 lb uplift at joint 25, 9 lb uplift at joint 24, 21 lb uplift at joint 23 and 37 lb uplift at joint 2.



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

January 27,2025

Continued on page 2

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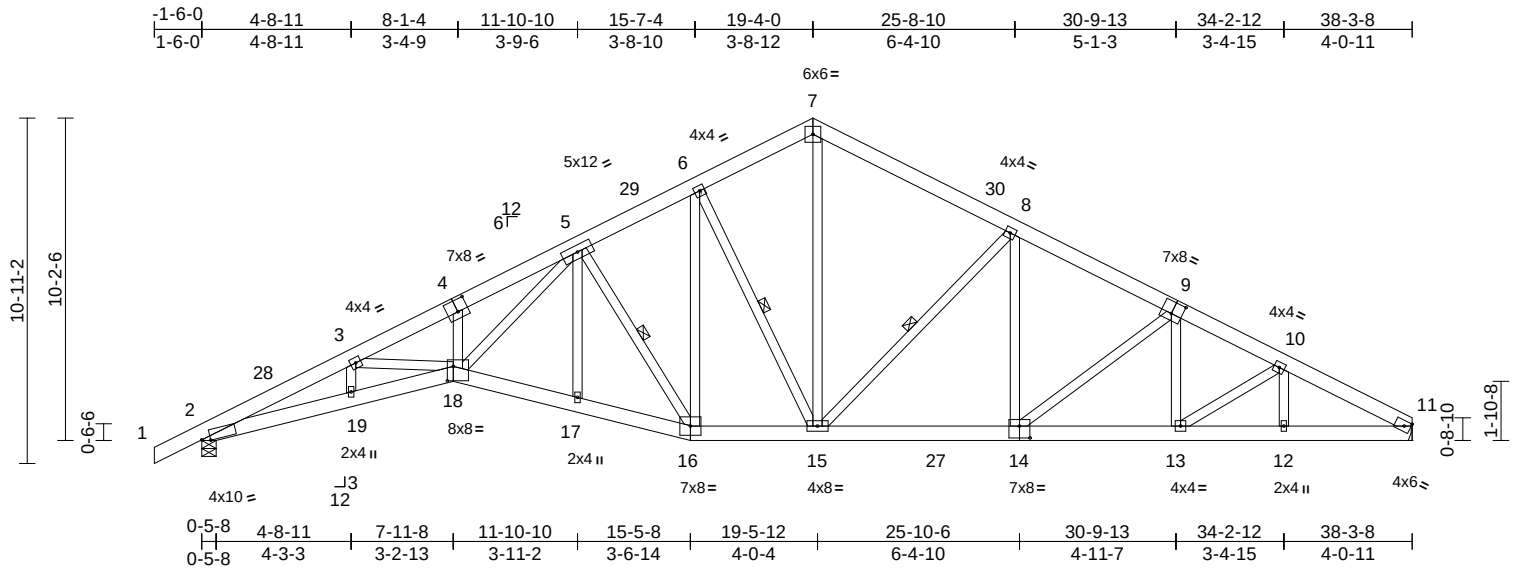
12) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 37, 34, 35, 36, 38, 39.
13) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	
1024-077	C02	Roof Special	2	1	T36176043
					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. Mon Jan 27 07:17:36 Page: 1
ID:ZTQ6TkwS?Y1PWZTh1snkceyOaHf-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:72.9

Plate Offsets (X, Y): [2:0-3-5,0-0-15], [4:0-4-0,0-4-8], [9:0-4-0,0-4-8], [14:0-4-0,0-4-8], [18:0-2-4,0-5-8]

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)	-0.27	17-18	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.96	Vert(CT)	-0.51	17-18	>903	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.65	Horz(CT)	0.25	11	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 310 lb	FT = 20%

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

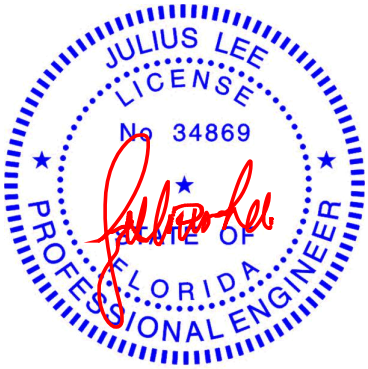
BRACING
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 6-15, 8-15, 5-16

REACTIONS (size) 2=0-5-8, 11= Mechanical
Max Horiz 2=183 (LC 11)
Max Uplift 2=-36 (LC 12)
Max Grav 2=1781 (LC 17), 11=1700 (LC 18)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/40, 2-3=-5560/149, 3-5=-5473/209, 5-6=-2265/180, 6-7=-1868/196, 7-8=-1952/200, 8-10=-2889/172, 10-11=-2960/163
BOT CHORD 2-19=-98/5158, 18-19=-98/5196, 17-18=-16/2933, 16-17=-15/2955, 15-16=0/2042, 13-15=-38/2555, 12-13=-93/2561, 11-12=-93/2561
WEBS 6-16=-9/687, 7-15=-79/1372, 6-15=-740/100, 8-14=0/533, 9-14=-475/60, 9-13=0/192, 8-15=-821/98, 4-18=-173/64, 3-18=-74/62, 3-19=-90/42, 10-13=-34/67, 10-12=-80/42, 5-16=-1546/57, 5-17=0/216, 5-18=-71/3098

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 2-3-15, Zone1 2-3-15 to 19-4-0, Zone2 19-4-0 to 24-8-15, Zone1 24-8-15 to 38-2-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Bearings are assumed to be: Joint 2 SP No.2 .
7) Refer to girder(s) for truss to truss connections.
8) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 36 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.

LOAD CASE(S) Standard



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

January 27,2025

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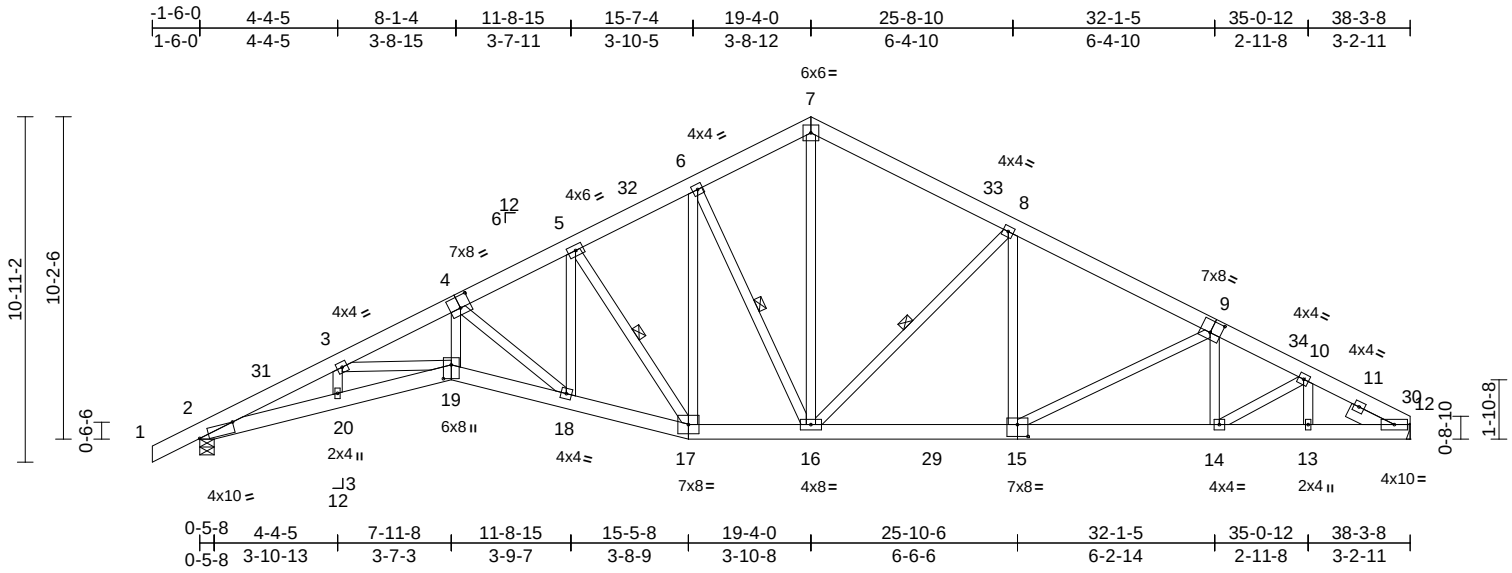
Job	Truss	Truss Type	Qty	Ply	
1024-077	C03	Roof Special	8	1	T36176044 Job Reference (optional)

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

Run: 8.73 S Dec 5 2024 Print: 8.730 S Dec 5 2024 MiTek Industries, Inc. Mon Jan 27 07:17:36 Page: 1
ID:u8na17ITIGBqUSIJtyI9QUyOaDI-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:72.9

Plate Offsets (X, Y): [2:1-1-9,Edge], [4:0-4-0,0-4-8], [9:0-4-0,0-4-8], [15:0-4-0,0-4-8], [19:0-5-4,0-3-0]

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	0.37	Vert(LL)	-0.26	18-19	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.94	Vert(CT)	-0.50	18-19	>928	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.95	Horz(CT)	0.26	12	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 311 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.2
SLIDER 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 5-17, 6-16, 8-16

REACTIONS (size) 2=0-5-8, 12= Mechanical
Max Horiz 2=183 (LC 11)
Max Uplift 2=-36 (LC 12)
Max Grav 2=1781 (LC 17), 12=1701 (LC 18)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/40, 2-3=-5509/146, 3-5=-5523/161, 5-6=-2263/179, 6-7=-1882/197, 7-8=-1943/200, 8-10=-2980/167, 10-12=-2870/165
BOT CHORD 2-20=-98/5102, 19-20=-101/5148, 18-19=-69/4970, 17-18=-16/2974, 16-17=0/2047, 14-16=-55/2656, 13-14=-98/2481, 12-13=-98/2481
WEBS 6-17=-6/670, 4-19=0/2597, 4-18=-2604/68, 5-17=-1521/53, 5-18=0/1413, 3-19=-8/125, 3-20=-109/46, 7-16=-82/1385, 6-16=-752/103, 8-15=0/513, 9-14=0/158, 9-15=-521/72, 8-16=-846/98, 10-14=0/237, 10-13=-102/18

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 2-3-15, Zone1 2-3-15 to 19-4-0, Zone2 19-4-0 to 24-8-15, Zone1 24-8-15 to 38-2-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Bearings are assumed to be: Joint 2 SP No.2 .
7) Refer to girder(s) for truss to truss connections.
8) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 36 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.

LOAD CASE(S) Standard

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

January 27,2025

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	
1024-077	C04	Roof Special	1	1	T36176045
					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. Mon Jan 27 07:17:37

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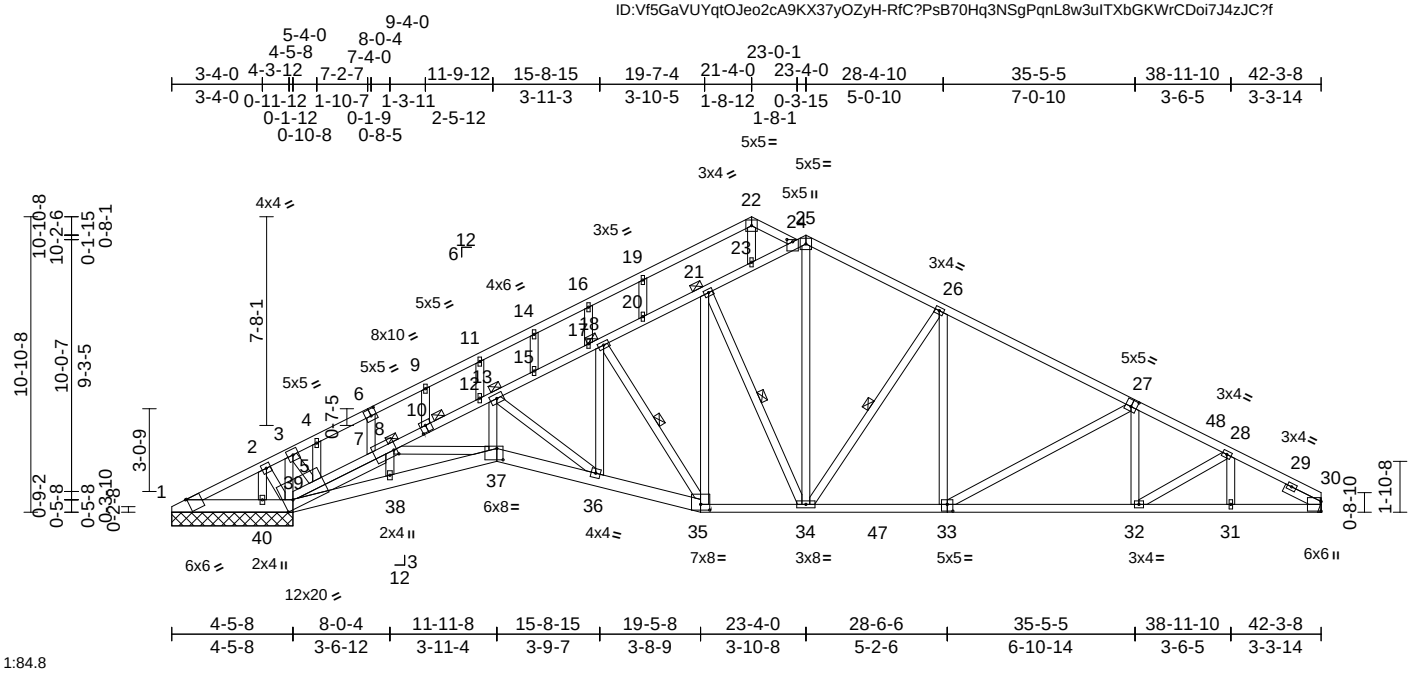


Scale = 1:84.8

Plate Offsets (X, Y): [1:0-0-8,Edge], [5:0-4-3,0-3-15], [6:0-2-8,0-3-0], [8:0-1-4,0-2-8], [10:0-2-8,0-3-0], [24:0-1-0,0-2-8], [27:0-2-8,0-3-0], [33:0-2-8,0-3-0], [35:0-4-0,0-2-8], [37:0-2-12,0-5-0]

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	0.68	Vert(LL)	-0.20	36-37	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.83	Vert(CT)	-0.38	36-37	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.80	Horz(CT)	0.18	30	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 335 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2 *Except* 35-33:2x4 SP No.2, 33-30:2x4 SP No.1
WEBS 2x4 SP No.2
OTHERS 2x4 SP No.2
SLIDER Right 2x4 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 21-34, 26-34, 18-35
JOINTS 1 Brace at Jt(s): 13, 21, 18, 8

REACTIONS (size) 1=4-5-8, 30= Mechanical, 40=4-5-8
Max Horiz 1=-195 (LC 10)
Max Uplift 1=-668 (LC 17), 40=-61 (LC 12)
Max Grav 1=59 (LC 12), 30=1689 (LC 18), 40=2750 (LC 17)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 22-24=-891/117, 25-26=-1838/143, 26-28=-2829/107, 28-30=-2727/110, 1-2=-169/1809, 2-3=-105/302, 3-4=-804/0, 4-9=-964/0, 9-11=-888/0, 11-14=-911/24, 14-16=-896/46, 16-19=-956/80, 19-22=-929/121, 5-39=-2875/145, 5-7=-2267/132, 7-8=-2267/105, 8-12=-3237/101, 12-13=-3146/68, 13-15=-1658/88, 15-17=-1635/77, 17-18=-1556/54, 18-20=-1044/71, 20-21=-1036/52, 21-23=-832/47, 23-24=-1040/60, 24-25=-1567/121

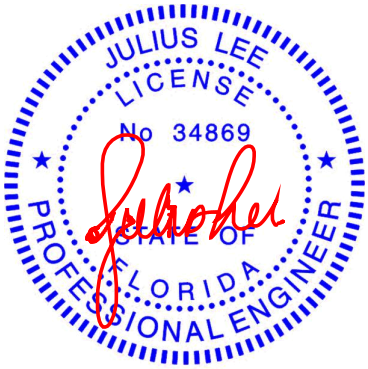
BOT CHORD 1-40=-1470/175, 39-40=-1516/183, 38-39=0/2778, 37-38=0/2854, 36-37=0/4019, 35-36=0/2464, 34-35=0/1695, 32-34=0/2513, 31-32=-53/2336, 30-31=-54/2336

WEBS 26-33=0/541, 27-33=-587/82, 27-32=0/192, 13-37=0/1703, 25-34=-25/994, 21-35=-13/547, 21-34=-259/10, 26-34=-842/82, 13-36=-1959/7, 18-35=-1258/40, 18-36=0/1061, 8-37=0/1031, 8-38=-248/44, 28-31=-114/23, 28-32=0/234, 22-23=-29/490, 19-20=-94/43, 16-17=-225/53, 14-15=-72/25, 11-12=-166/48, 9-10=-54/29, 6-7=-84/48, 4-5=-463/23, 2-40=-2264/104, 3-39=-1849/24, 2-39=-24/1849, 3-5=-12/2110

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=42ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -0-0-0 to 4-3-12, Zone1 4-3-12 to 23-4-0, Zone3 21-4-0 to 23-0-1, Zone1 23-4-0 to 42-3-8 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) 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, with BCDL = 10.0psf.
9) Bearings are assumed to be: Joint 40 SP No.2 .
10) Refer to girder(s) for truss to truss connections.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 668 lb uplift at joint 1 and 61 lb uplift at joint 40.
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.

LOAD CASE(S) Standard



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

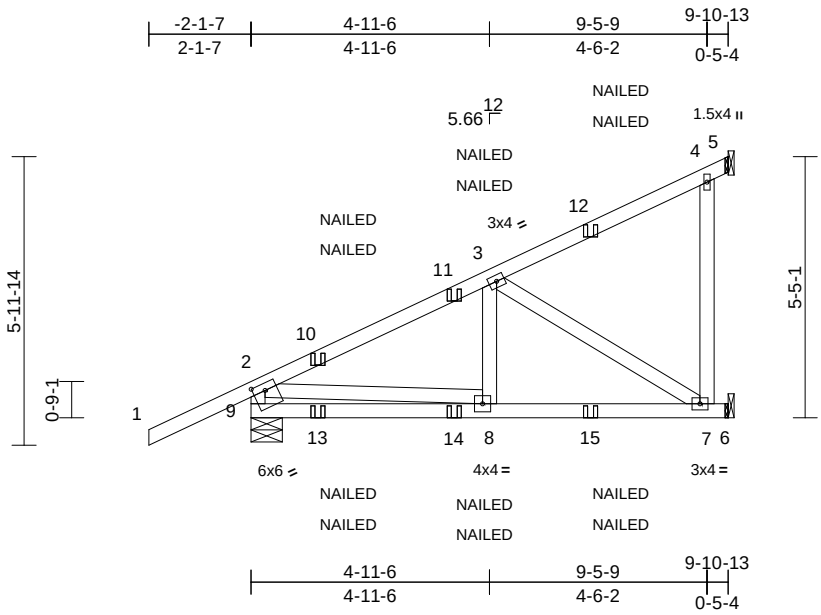
January 27,2025

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

Job	Truss	Truss Type	Qty	Ply	
1024-077	CJ01	Diagonal Hip Girder	2	1	T36176046
					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. Mon Jan 27 07:17:37 Page: 1
ID:m_E8ZmkRIZ6F5Q0l22cGdvyOazo-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:47.8

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.48	Vert(LL)	-0.04	7-8	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.47	Vert(CT)	-0.09	7-8	>999	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.25	Horz(CT)	-0.01	5	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 60 lb	FT = 20%

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

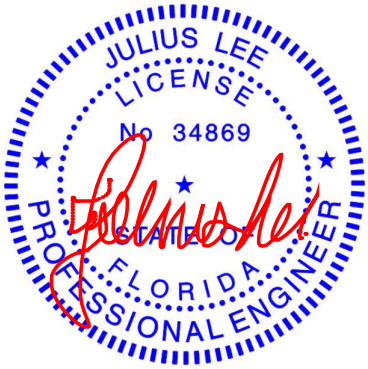
BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size) 5= Mechanical, 6= Mechanical, 9=0-7-12
Max Horiz 9=158 (LC 8)
Max Uplift 6=-142 (LC 8), 9=-133 (LC 8)
Max Grav 5=189 (LC 3), 6=364 (LC 13), 9=456 (LC 13)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-9=-460/129, 1-2=0/58, 2-3=-551/39, 3-4=-105/48, 4-5=0/80
BOT CHORD 8-9=-349/28, 7-8=-85/457, 6-7=0/0
WEBS 3-8=0/222, 2-8=0/677, 4-7=-65/145, 3-7=-537/100

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); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
5) Bearings are assumed to be: , Joint 9 SP No.2 .
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 133 lb uplift at joint 9 and 142 lb uplift at joint 6.
8) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (lb/ft)
Vert: 1-2=-60, 2-5=-60, 6-9=-20
Concentrated Loads (lb)
Vert: 10=85 (F=43, B=43), 12=-78 (F=-39, B=-39), 13=55 (F=28, B=28), 14=5 (F=2, B=2), 15=-45 (F=-22, B=-22)



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

January 27,2025

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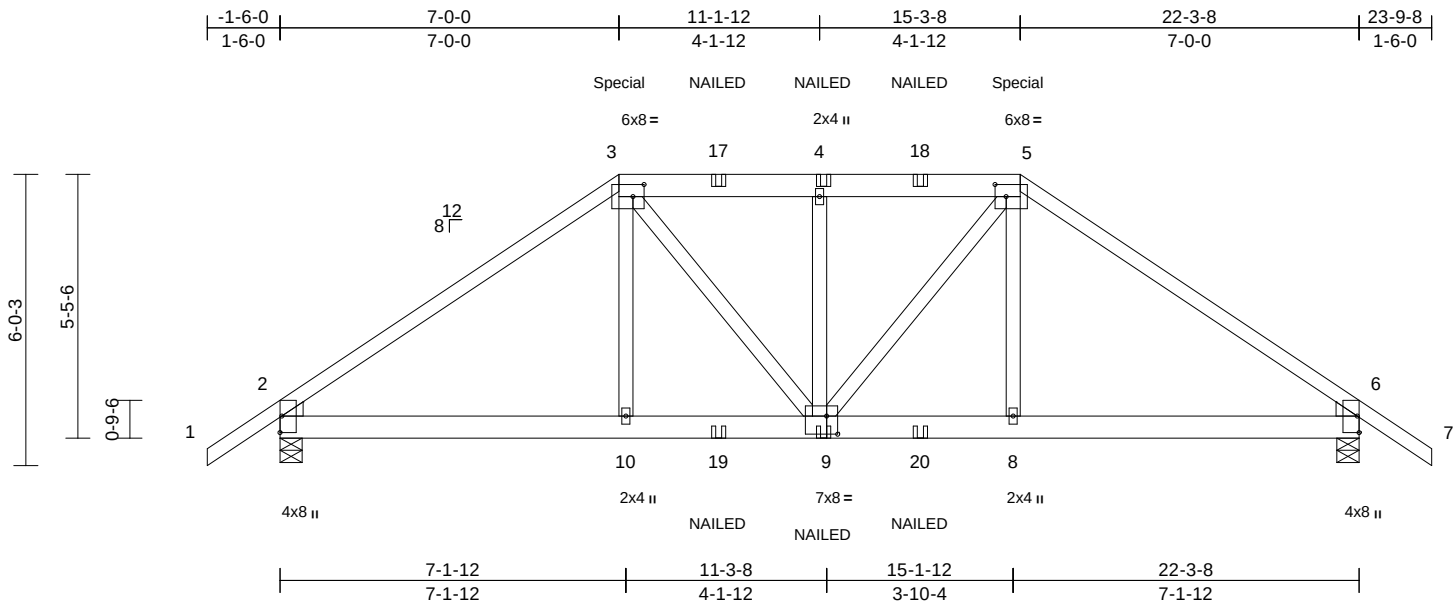
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	
1024-077	D01	Hip Girder	1	**2**	T36176047 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. Mon Jan 27 07:17:37 Page: 1
ID:VauDuE55uozJVRfxFu5N1YyOZBj-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:47.6

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

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	0.37	Vert(LL)	-0.04	9-10	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.44	Vert(CT)	-0.07	9-10	>999	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.09	Horz(CT)	0.03	6	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 283 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2 *Except* 3-5:2x6 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.2
WEDGE Left: 2x4 SP No.2
Right: 2x4 SP No.2

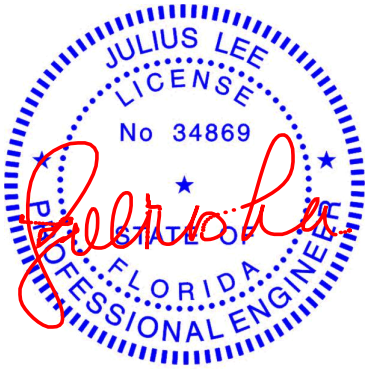
BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-5-8, 6=0-5-8
Max Horiz 2=-104 (LC 6)
Max Uplift 2=-240 (LC 8), 6=-239 (LC 8)
Max Grav 2=1907 (LC 13), 6=1909 (LC 14)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/50, 2-3=-2687/364, 3-4=-2606/382, 4-5=-2585/375, 5-6=-2688/363, 6-7=0/50
BOT CHORD 2-10=-200/2199, 8-10=-201/2211, 6-8=-184/2158
WEBS 3-10=-35/415, 3-9=-114/766, 4-9=-723/233, 5-9=-108/760, 5-8=-38/404

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) 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) 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.
9) All bearings are assumed to be SP No.2 .
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 240 lb uplift at joint 2 and 239 lb uplift at joint 6.
11) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 269 lb down and 31 lb up at 7-0-0, and 269 lb down and 31 lb up at 15-3-8 on top chord, and 394 lb down and 132 lb up at 7-0-0, and 394 lb down and 132 lb up at 15-2-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (lb/ft)
Vert: 1-3=-60, 3-5=-60, 5-7=-60, 11-14=-20
Concentrated Loads (lb)
Vert: 3=-186 (B), 5=-186 (B), 9=-112 (B), 10=-374 (B), 4=-248 (B), 8=-374 (B), 17=-124 (B), 18=-124 (B), 19=-56 (B), 20=-56 (B)



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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 27,2025

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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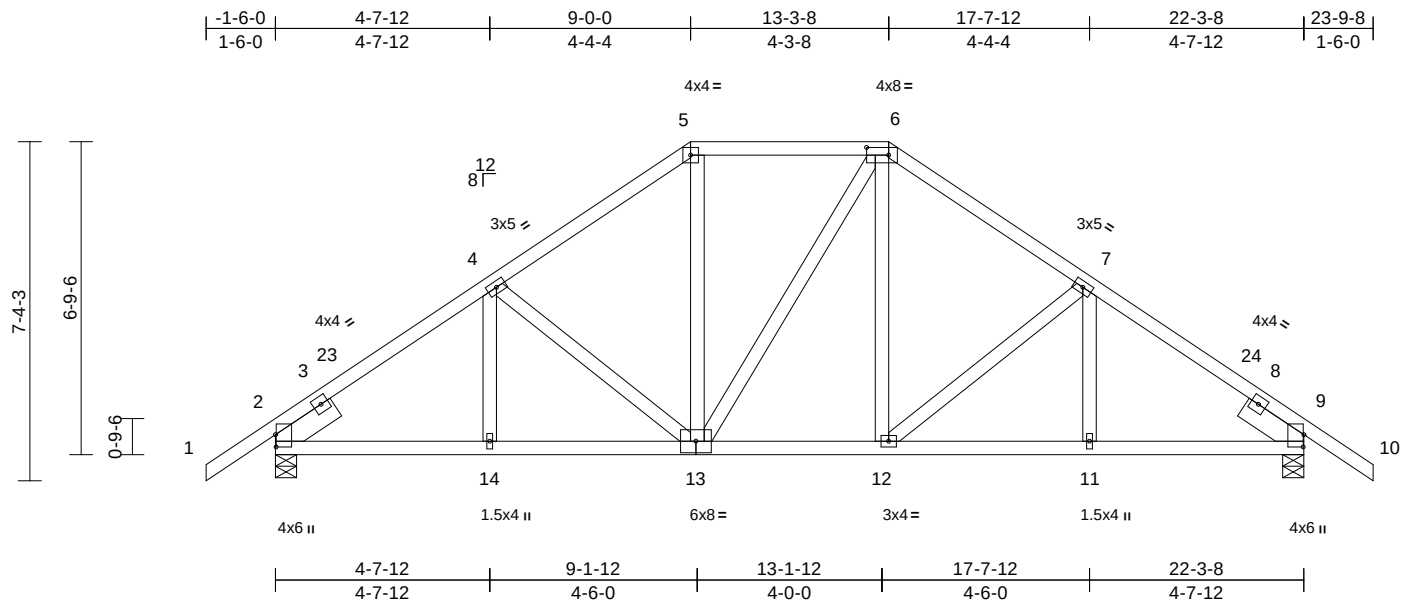
Job	Truss	Truss Type	Qty	Ply	
1024-077	D02	Hip	1	1	T36176048
					Job Reference (optional)

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

Run: 8.73 S Dec 5 2024 Print: 8.730 S Dec 5 2024 MiTek Industries, Inc. Mon Jan 27 07:17:37
ID:dulQJ6tEqT1EBGYF?KENd1yOZAj-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:49.9

Plate Offsets (X, Y): [2:0-3-3,0-0-3], [6:0-5-12,0-2-0], [9:0-3-3,0-0-3]

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	0.33	Vert(LL)	-0.04	11-12	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.41	Vert(CT)	-0.08	11-12	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.04	9	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 140 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=0-5-8, 9=0-5-8
Max Horiz 2=-129 (LC 10)
Max Uplift 2=-36 (LC 12), 9=-36 (LC 12)
Max Grav 2=982 (LC 1), 9=982 (LC 1)

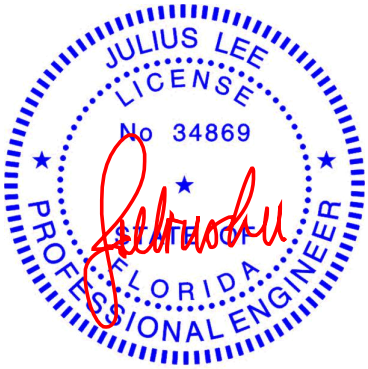
FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/50, 2-4=-1171/54, 4-5=-962/98, 5-6=-746/103, 6-7=-961/99, 7-9=-1171/60, 9-10=0/50
BOT CHORD	2-14=0/910, 12-14=0/910, 11-12=0/910, 9-11=-7/910
WEBS	4-13=-236/61, 5-13=0/282, 6-13=-92/93, 6-12=0/282, 7-12=-238/59, 4-14=0/142, 7-11=0/143

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 9-0-0, Zone3 9-0-0 to 13-3-8, Zone2 13-3-8 to 17-7-12, Zone1 17-7-12 to 23-9-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) All bearings are assumed to be SP No.2 .
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 36 lb uplift at joint 2 and 36 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



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Date:

January 27,2025

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Job	Truss	Truss Type	Qty	Ply	
1024-077	D03	Hip	1	1	T36176049
					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. Mon Jan 27 07:17:37

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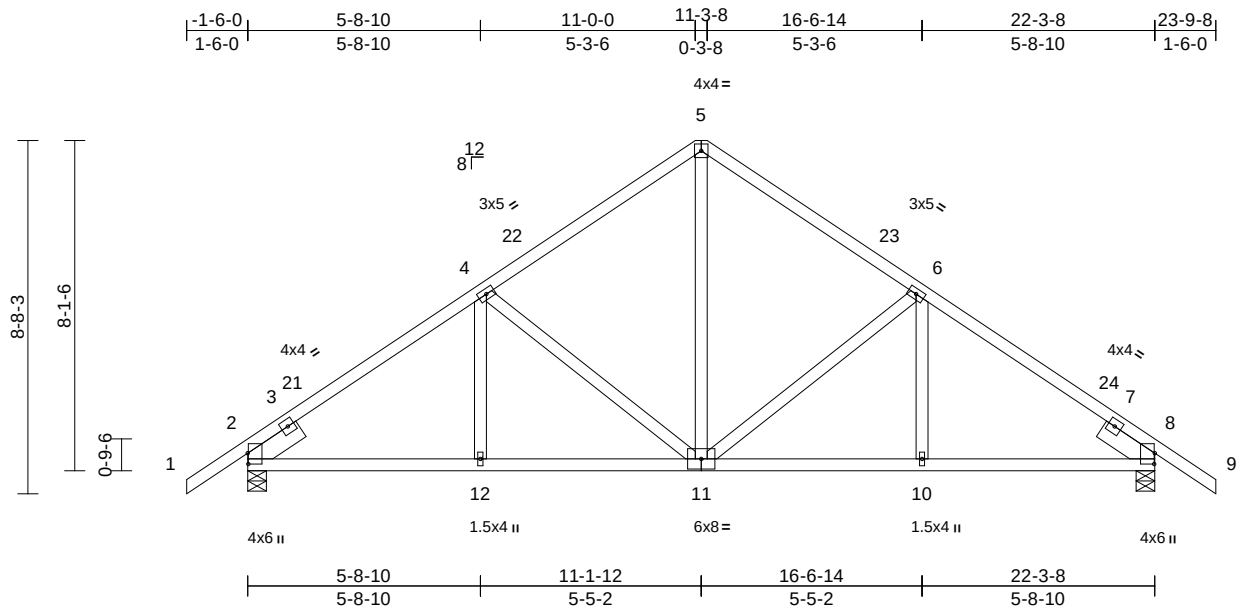

Scale = 1:56.6

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

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	0.33	Vert(LL)	-0.04	10-11	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.38	Vert(CT)	-0.09	10-11	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.28	Horz(CT)	0.04	8	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 129 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=0-5-8, 8=0-5-8
Max Horiz 2=-154 (LC 10)
Max Uplift 2=-36 (LC 12), 8=-36 (LC 12)
Max Grav 2=982 (LC 1), 8=982 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/50, 2-4=-1165/44, 4-5=-865/95, 5-6=-865/95, 6-8=-1165/44, 8-9=0/50
BOT CHORD	2-12=-5/902, 10-12=0/902, 8-10=-13/899
WEBS	4-12=0/194, 5-11=-11/530, 6-10=0/194, 4-11=-347/72, 6-11=-347/72

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 11-1-12, Zone2 11-1-12 to 15-4-11, Zone1 15-4-11 to 23-9-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
6) 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 8.
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

Julius Lee PE No. 34869
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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 27,2025

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Job	Truss	Truss Type	Qty	Ply	
1024-077	D04	Common	5	1	T36176050
					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. Mon Jan 27 07:17:37

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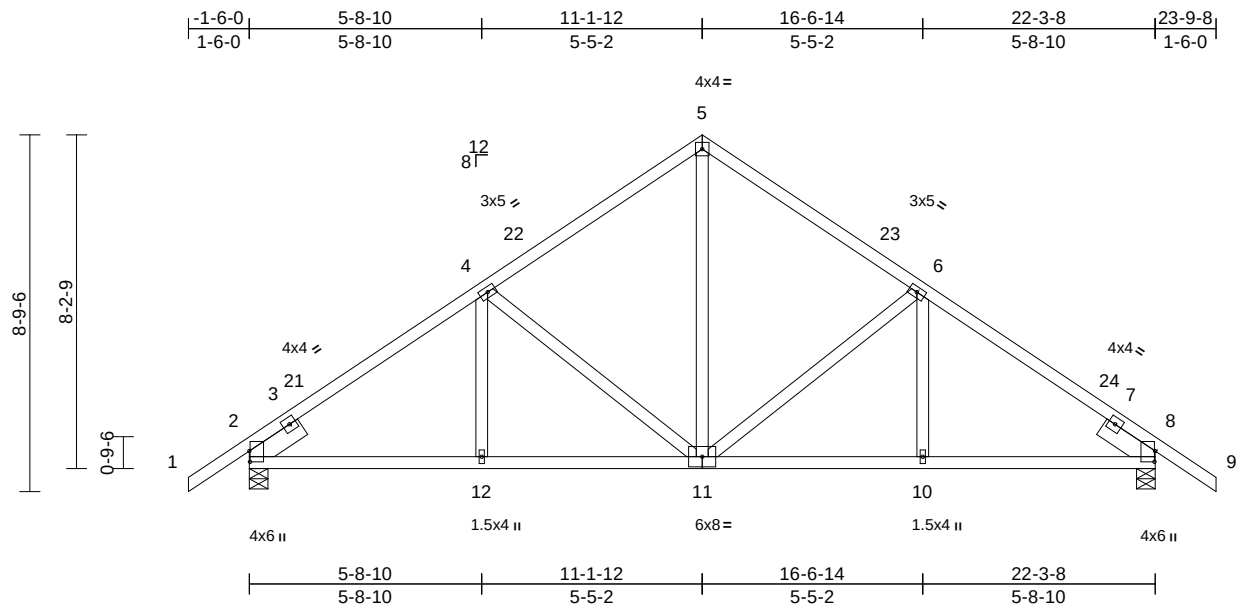


Scale = 1:56.7

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

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	0.33	Vert(LL)	-0.04	11-12	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.38	Vert(CT)	-0.09	11-12	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.29	Horz(CT)	0.04	8	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 129 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=0-5-8, 8=0-5-8
Max Horiz 2=-155 (LC 10)
Max Uplift 2=-36 (LC 12), 8=-36 (LC 12)
Max Grav 2=982 (LC 1), 8=982 (LC 1)

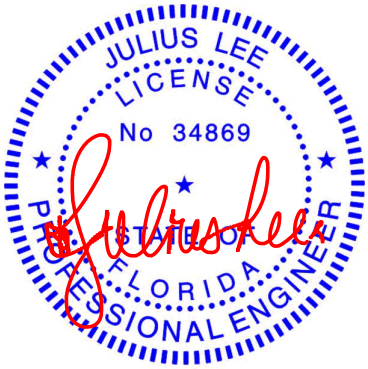
FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/50, 2-4=-1165/68, 4-5=-864/118, 5-6=-864/118, 6-8=-1165/68, 8-9=0/50
BOT CHORD	2-12=-5/902, 10-12=0/902, 8-10=-19/899
WEBS	4-12=0/194, 5-11=-23/534, 6-10=0/194, 6-11=-350/85, 4-11=-350/85

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 11-1-12, Zone2 11-1-12 to 15-4-11, Zone1 15-4-11 to 23-9-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
6) 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 8.
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



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

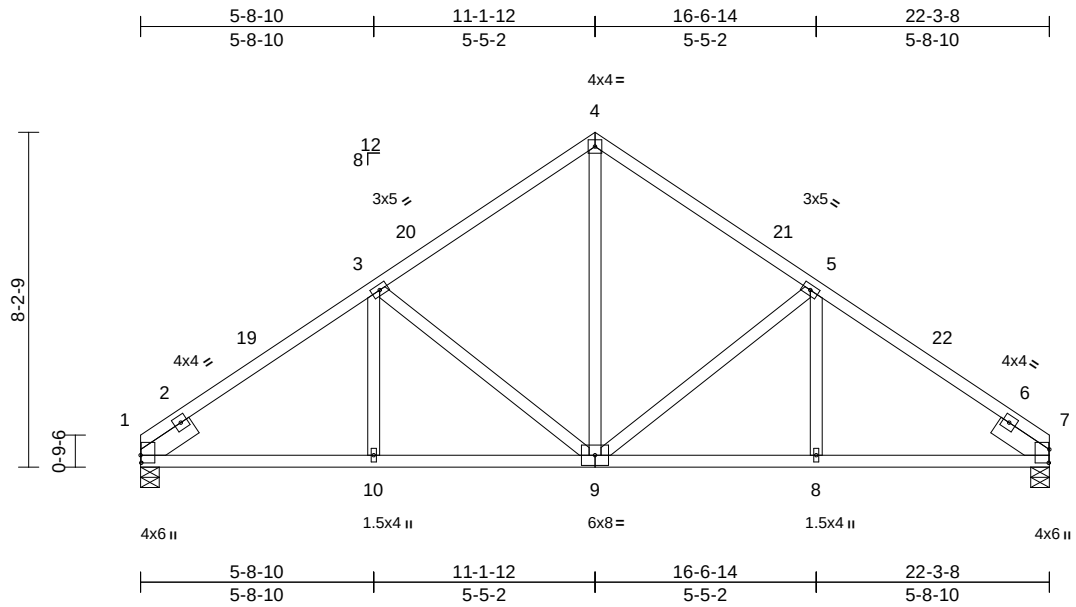
January 27,2025

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

Job	Truss	Truss Type	Qty	Ply	
1024-077	D05	Common	1	1	T36176051
					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. Mon Jan 27 07:17:38
ID:W0d3?Yy3spEcMyrLiXKFjpyOZ9K-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:56.5

Plate Offsets (X, Y): [1:0-2-4,0-0-3], [7:0-3-15,0-0-3]

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	0.25	Vert(LL)	-0.03	8-9	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.35	Vert(CT)	-0.08	8-9	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.30	Horz(CT)	0.03	7	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 123 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) 1=0-5-8, 7=0-5-8
Max Horiz 1=-137 (LC 10)
Max Grav 1=892 (LC 1), 7=892 (LC 1)

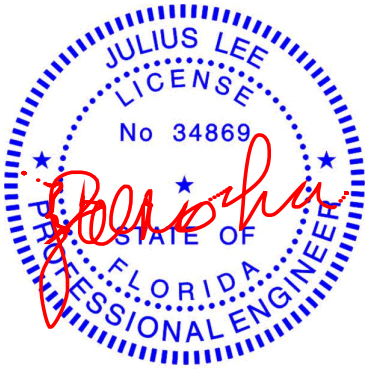
FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-3=-1185/86, 3-4=-874/126, 4-5=-874/126, 5-7=-1185/86
BOT CHORD	1-10=-64/919, 8-10=-2/919, 7-8=-67/919
WEBS	3-10=0/197, 4-9=-33/545, 5-8=0/197, 3-9=-366/87, 5-9=-366/87

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 11-1-12, Zone2 11-1-12 to 15-4-11, Zone1 15-4-11 to 22-3-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
6) 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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Date:

January 27,2025

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Job	Truss	Truss Type	Qty	Ply	
1024-077	D06	Common Girder	1	**2**	T36176052 Job Reference (optional)

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

Run: 8.73 E Nov 16 2023 Print: 8.730 E Nov 16 2023 MiTek Industries, Inc. Mon Jan 27 15:30:06 Page: 1
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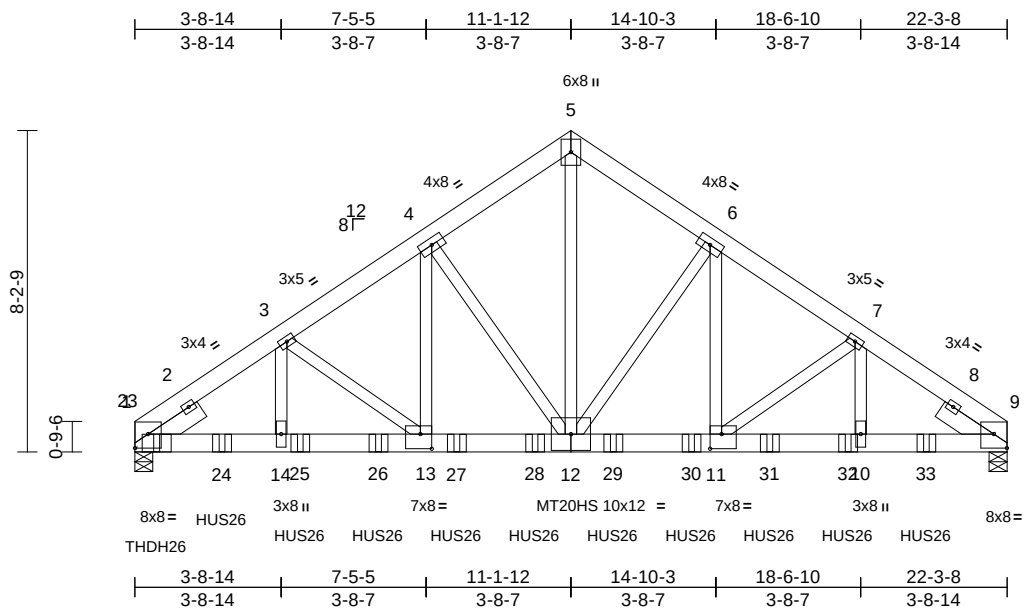


Scale = 1:58.9

Plate Offsets (X, Y): [1:0-4-0,0-4-5], [9:0-4-0,0-4-5], [11:0-3-8,0-4-8], [13:0-3-8,0-4-8]

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	0.59	Vert(LL)	-0.14	12-13	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.51	Vert(CT)	-0.26	12-13	>999	180	MT20HS	187/143
BCLL	0.0*	Rep Stress Incr	NO	WB	0.68	Horz(CT)	0.08	9	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 370 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP 2400F 2.0E
WEBS 2x4 SP No.2 *Except* 12-5:2x4 SP No.1
SLIDER Left 2x6 SP No.2 -- 1-6-0, Right 2x6 SP No.2 -- 1-6-0

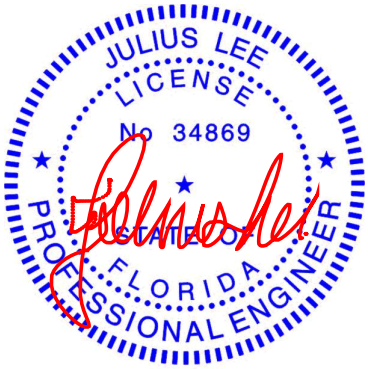
BRACING
TOP CHORD Structural wood sheathing directly applied or 3-10-6 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 1=9831/0-5-8, 9=8503/0-5-8
Max Horiz 1=134 (LC 7)
Max Grav 1=10784 (LC 13), 9=9287 (LC 14)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-11502/0, 2-3=-12778/0, 3-4=-11206/0, 4-5=-8698/0, 5-6=-8699/0, 6-7=-11171/0, 7-8=-12648/0, 8-9=-10280/0
BOT CHORD 1-23=0/10439, 1-23=0/10439, 1-24=0/10439, 14-24=0/10439, 14-25=0/10439, 25-26=0/10439, 13-26=0/10439, 13-27=0/9426, 27-28=0/9426, 12-28=0/9426, 12-29=0/9344, 29-30=0/9344, 11-30=0/9344, 11-31=0/10206, 31-32=0/10206, 10-32=0/10206, 10-33=0/10206, 9-33=0/10206
WEBS 5-12=0/9273, 6-12=-3686/0, 6-11=0/4121, 7-11=-1129/0, 7-10=0/1860, 3-13=-1266/0, 3-14=0/1950, 4-13=0/4184, 4-12=-3727/0

NOTES
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-7-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-7-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=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) All plates are MT20 plates unless otherwise indicated.
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) Use MiTek THDH26 (With 20-16d nails into Girder & 8-16d nails into Truss) or equivalent at 0-6-12 from the left end to connect truss(es) to front face of bottom chord.
10) Use MiTek HUS26 (With 14-16d nails into Girder & 6-16d nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 2-2-12 from the left end to 20-2-12 to connect truss(es) to front face of bottom chord.
11) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (lb/ft)
Vert: 1-5=-60, 5-9=-60, 15-19=-20
Concentrated Loads (lb)
Vert: 23=-1488 (F), 24=-1509 (F), 25=-1510 (F), 26=-1510 (F), 27=-1510 (F), 28=-1510 (F), 29=-1510 (F), 30=-1510 (F), 31=-1510 (F), 32=-1510 (F), 33=-1509 (F)



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Date:

January 27,2025

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Job	Truss	Truss Type	Qty	Ply	
1024-077	GDR	Roof Special Girder	1	**2**	T36176053 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. Mon Jan 27 07:17:38 Page: 1
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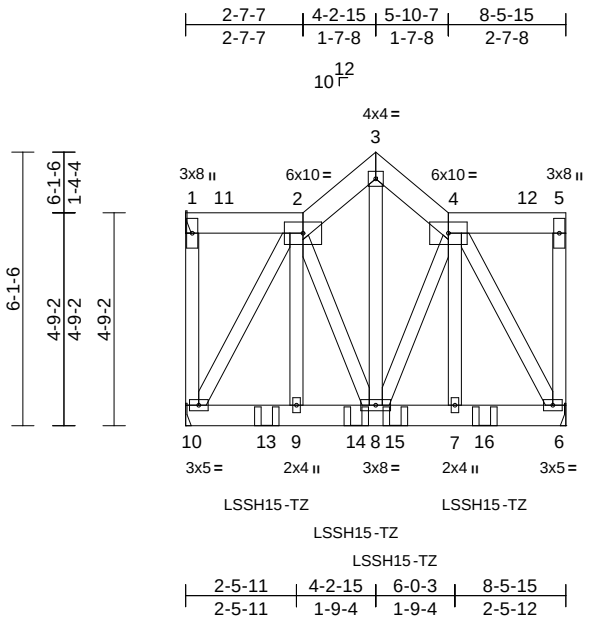


Scale = 1:51.5

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.06	Vert(LL)	-0.01	7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.14	Vert(CT)	-0.01	7	>999	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.13	Horz(CT)	0.00	6	n/a	n/a		
BCDL	15.0	Code	FBC2023/TPI2014	Matrix-MP							Weight: 198 lb	FT = 20%

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

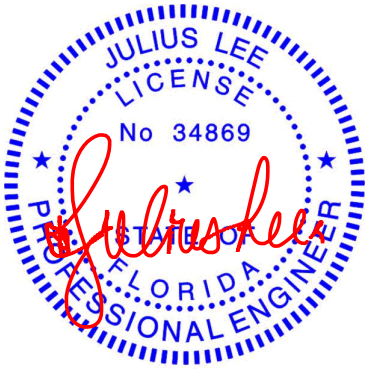
BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1= Mechanical, 6= Mechanical, 10= Mechanical
Max Horiz 1=-404 (LC 13), 10=400 (LC 14)
Max Uplift 1=-17 (LC 4), 6=-102 (LC 8), 10=-138 (LC 8)
Max Grav 1=74 (LC 1), 6=1043 (LC 1), 10=1384 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-51/404, 2-3=-568/76, 3-4=-568/76, 4-5=0/0
BOT CHORD 9-10=-29/317, 8-9=-28/302, 7-8=-47/459, 6-7=-48/474
WEBS 1-10=0/0, 5-6=-74/17, 2-9=-35/453, 4-7=-35/452, 3-8=-72/587, 2-8=-36/369, 4-8=-105/21, 2-10=-1430/155, 4-6=-949/97

NOTES
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 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) 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) 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.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 17 lb uplift at joint 1, 138 lb uplift at joint 10 and 102 lb uplift at joint 6.
11) N/A
12) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
13) Use MiTek LSSH15-TZ (With 6-10d HDG nails into Girder & 7-10d x 1-1/2 HDG nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 1-9-12 from the left end to 3-9-12 to connect truss(es) to back face of bottom chord.
14) Use MiTek LSSH15-TZ (With 6-10d HDG nails into Girder & 7-10d x 1-1/2 HDG nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 4-8-3 from the left end to 6-8-3 to connect truss(es) to back face of bottom chord.
15) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (lb/ft)
Vert: 1-2=-60, 2-3=-60, 3-4=-60, 4-5=-60, 6-10=-30
Concentrated Loads (lb)
Vert: 13=-441 (B), 14=-441 (B), 15=-441 (B), 16=-441 (B)



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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 27,2025

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	
1024-077	J01	Jack-Open	6	1	T36176054
					Job Reference (optional)

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

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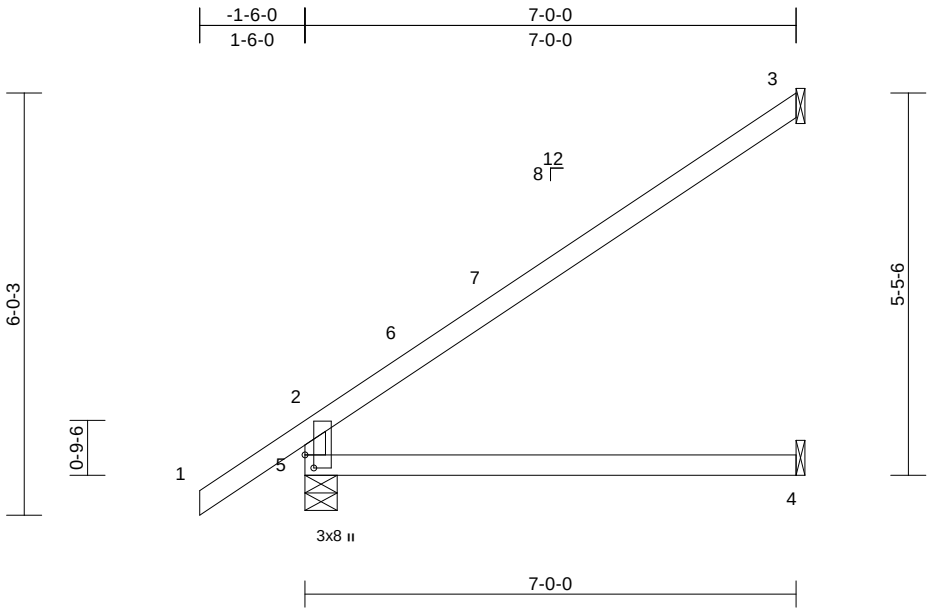


Scale = 1:32.8

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

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	0.58	Vert(LL)	-0.09	4-5	>889	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.51	Vert(CT)	-0.21	4-5	>394	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.05	3	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 26 lb	FT = 20%

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

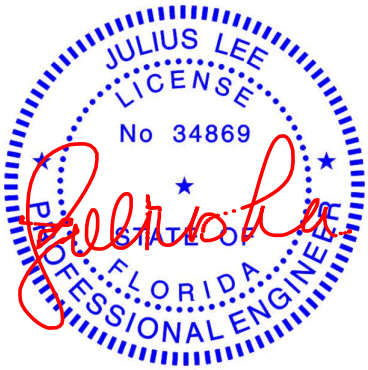
BRACING
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied.

REACTIONS (size) 3= Mechanical, 4= Mechanical, 5=0-5-8
Max Horiz 5=159 (LC 12)
Max Uplift 3=-66 (LC 12)
Max Grav 3=189 (LC 17), 4=125 (LC 3), 5=382 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-5=-322/167, 1-2=0/55, 2-3=-140/86
BOT CHORD 4-5=0/0

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 6-11-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
5) Bearings are assumed to be: , Joint 5 SP No.2 .
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 66 lb uplift at joint 3.
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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Date:

January 27,2025

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

Job	Truss	Truss Type	Qty	Ply	
1024-077	J02	Jack-Open	4	1	T36176055
					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. Mon Jan 27 07:17:38 Page: 1
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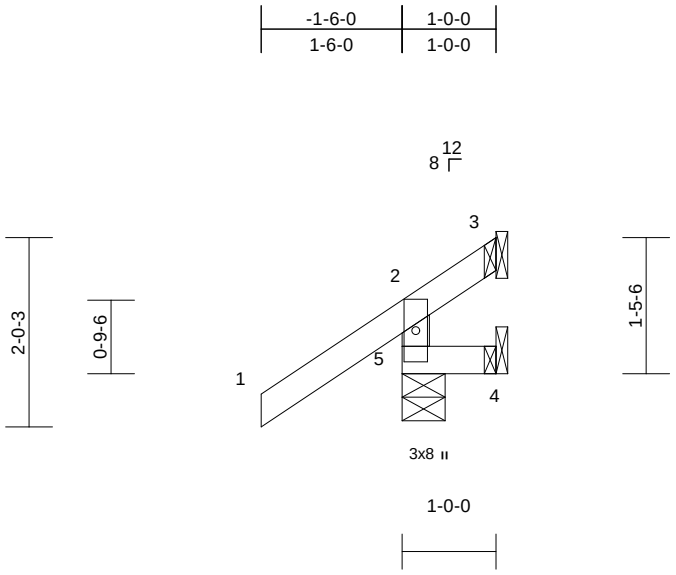


Scale = 1:24.5

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.22	Vert(LL)	0.00	4-5	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.05	Vert(CT)	0.00	4-5	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MR							Weight: 7 lb	FT = 20%

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

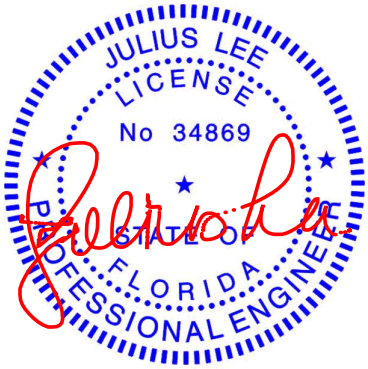
BRACING
TOP CHORD Structural wood sheathing directly applied or 1-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 3= Mechanical, 4= Mechanical, 5=0-5-8
Max Horiz 5=64 (LC 12)
Max Uplift 3=-44 (LC 1), 4=-19 (LC 1), 5=-62 (LC 12)
Max Grav 3=20 (LC 12), 4=7 (LC 3), 5=229 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-5=-193/203, 1-2=0/55, 2-3=-52/28
BOT CHORD 4-5=0/0

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 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
5) Bearings are assumed to be: , Joint 5 SP No.2 .
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 62 lb uplift at joint 5, 19 lb uplift at joint 4 and 44 lb uplift at joint 3.

LOAD CASE(S) Standard



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Date:

January 27,2025

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314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	
1024-077	J03	Jack-Open	4	1	T36176056
					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. Mon Jan 27 07:17:38
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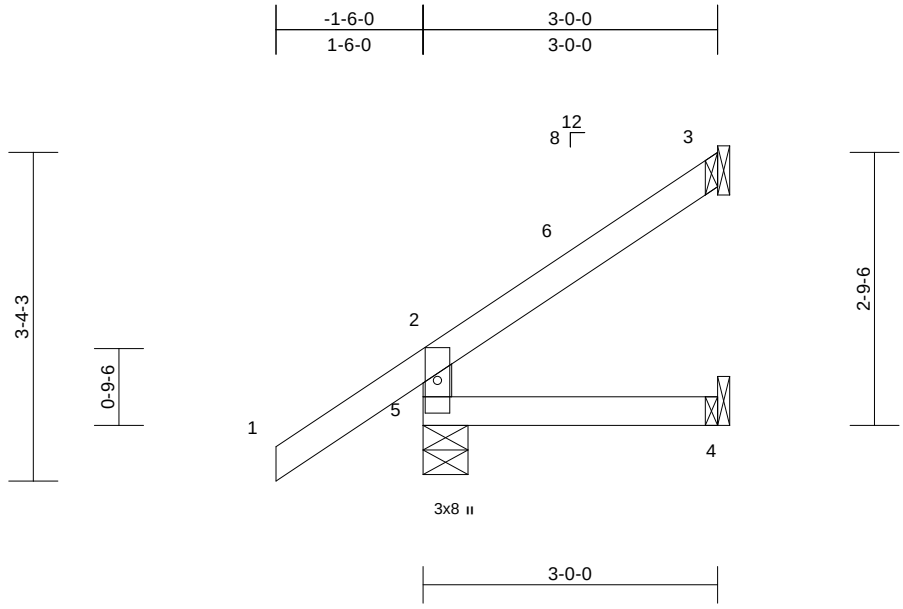


Scale = 1:23.5

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.22	Vert(LL)	0.00	4-5	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.07	Vert(CT)	-0.01	4-5	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MR							Weight: 13 lb	FT = 20%

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

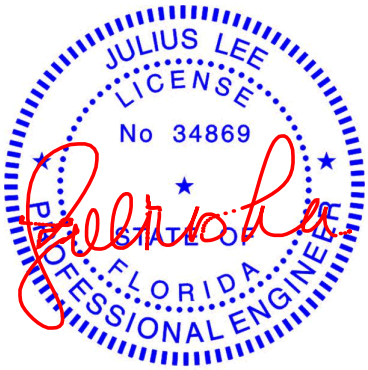
BRACING
TOP CHORD Structural wood sheathing directly applied or 3-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 3= Mechanical, 4= Mechanical, 5=0-5-8
Max Horiz 5=96 (LC 12)
Max Uplift 3=-24 (LC 12), 5=-27 (LC 12)
Max Grav 3=65 (LC 17), 4=50 (LC 3), 5=240 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-5=-206/165, 1-2=0/55, 2-3=-62/35
BOT CHORD 4-5=0/0

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 2-11-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
5) Bearings are assumed to be: , Joint 5 SP No.2 .
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 27 lb uplift at joint 5 and 24 lb uplift at joint 3.

LOAD CASE(S) Standard



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Date:

January 27,2025

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Job	Truss	Truss Type	Qty	Ply	
1024-077	J04	Jack-Open	4	1	T36176057
					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. Mon Jan 27 07:17:38

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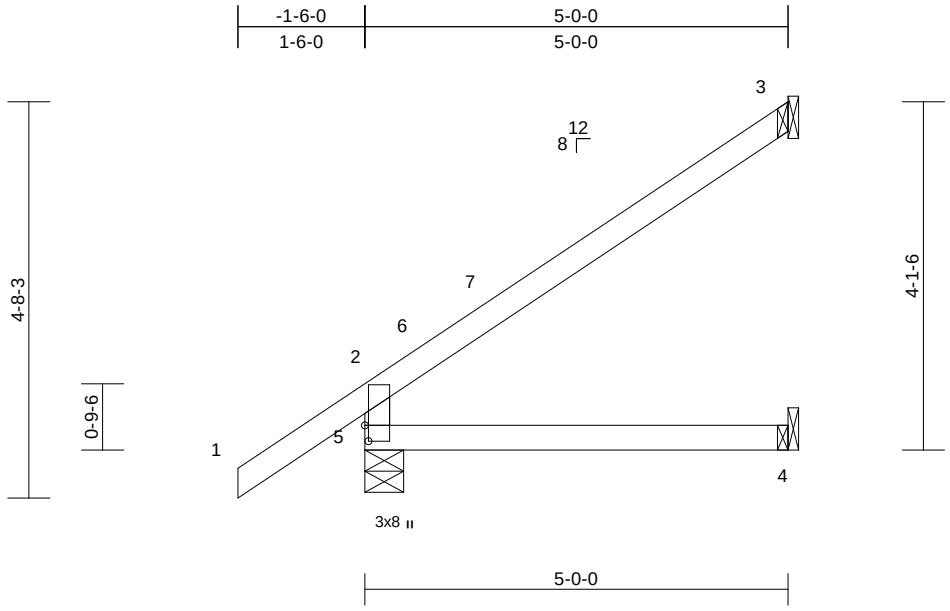


Scale = 1:27.2

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

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)	0.03	4-5	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.24	Vert(CT)	-0.05	4-5	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.02	3	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 20 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.

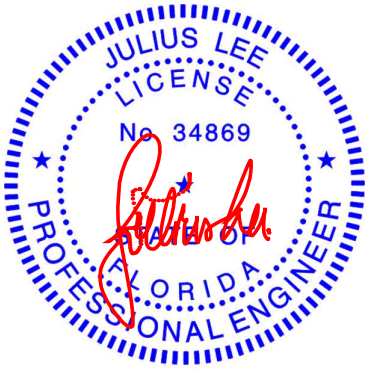
REACTIONS (size) 3= Mechanical, 4= Mechanical, 5=0-5-8
Max Horiz 5=127 (LC 12)
Max Uplift 3=-46 (LC 12), 5=-12 (LC 12)
Max Grav 3=128 (LC 17), 4=88 (LC 3), 5=307 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-5=-262/176, 1-2=0/55, 2-3=-110/61
BOT CHORD 4-5=0/0

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 4-11-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
5) Bearings are assumed to be: , Joint 5 SP No.2 .
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 12 lb uplift at joint 5 and 46 lb uplift at joint 3.
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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Date:

January 27,2025

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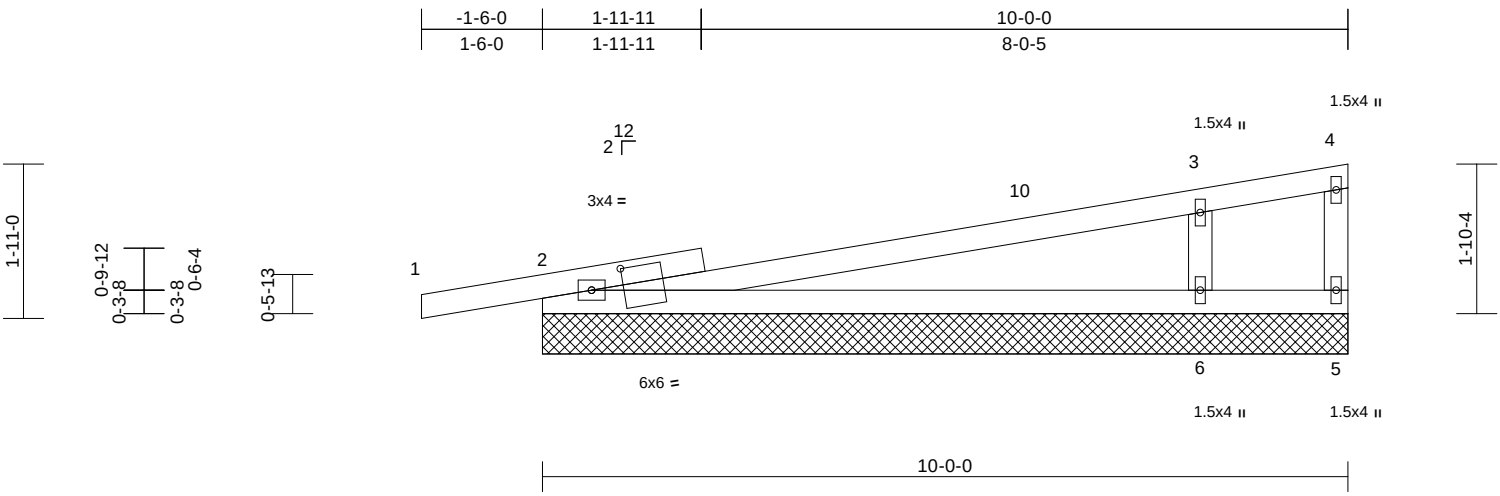
Job	Truss	Truss Type	Qty	Ply	
1024-077	M01	Monopitch Supported Gable	2	1	T36176058 Job Reference (optional)

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

Run: 8.73 S Dec 5 2024 Print: 8.730 S Dec 5 2024 MiTek Industries, Inc. Mon Jan 27 07:17:38 Page: 1
ID:Eq9Ox2jk4mX90Wbc7P5ZDCyOb?6-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:28.6

Plate Offsets (X, Y): [2:0-4-12,0-2-7]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.67	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.61	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.02	2	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 38 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

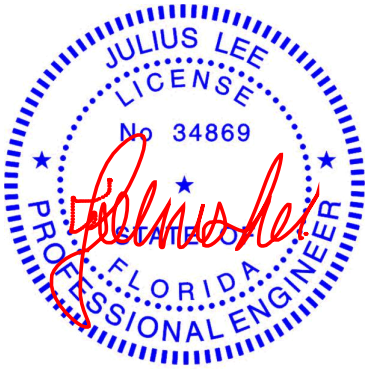
BRACING
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

REACTIONS (size) 2=10-0-0, 5=10-0-0, 6=10-0-0
Max Horiz 2=55 (LC 8)
Max Uplift 2=-115 (LC 8), 5=-265 (LC 1), 6=-39 (LC 8)
Max Grav 2=479 (LC 1), 5=22 (LC 8), 6=808 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/15, 2-3=-184/295, 3-4=-42/21
BOT CHORD 2-6=-311/189, 5-6=0/0
WEBS 3-6=-526/491, 4-5=-130/153

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 115 lb uplift at joint 2, 265 lb uplift at joint 5, 39 lb uplift at joint 6 and 115 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.

LOAD CASE(S) Standard



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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 27,2025

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Job	Truss	Truss Type	Qty	Ply	
1024-077	M02	Monopitch	10	1	T36176059
					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. Mon Jan 27 07:17:38
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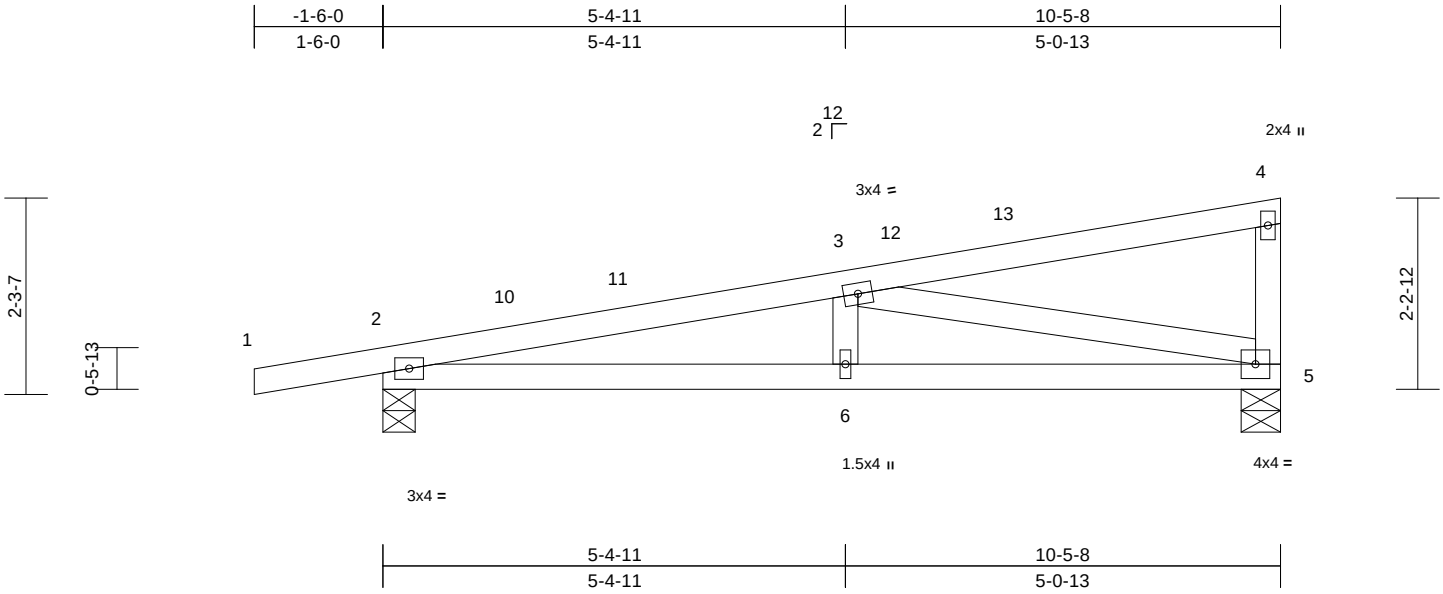


Scale = 1:26.9

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.21	Vert(LL)	-0.04	6-9	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.30	Vert(CT)	-0.08	6-9	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.43	Horz(CT)	0.02	5	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 44 lb	FT = 20%

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

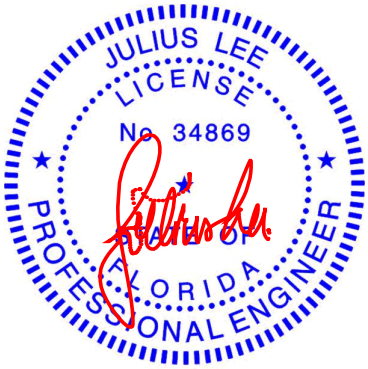
BRACING
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied.

REACTIONS (size) 2=0-4-8, 5=0-5-8
Max Horiz 2=72 (LC 9)
Max Uplift 2=-49 (LC 8), 5=-15 (LC 9)
Max Grav 2=509 (LC 1), 5=406 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/15, 2-3=-1065/232, 3-4=-96/32, 4-5=-135/131
BOT CHORD 2-6=-324/1028, 5-6=-324/1028
WEBS 3-6=0/196, 3-5=-984/280

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 10-3-12 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 15 lb uplift at joint 5 and 49 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



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Date:

January 27,2025

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Job	Truss	Truss Type	Qty	Ply	
1024-077	M2A	Monopitch	4	1	T36176060 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. Mon Jan 27 07:17:38 Page: 1
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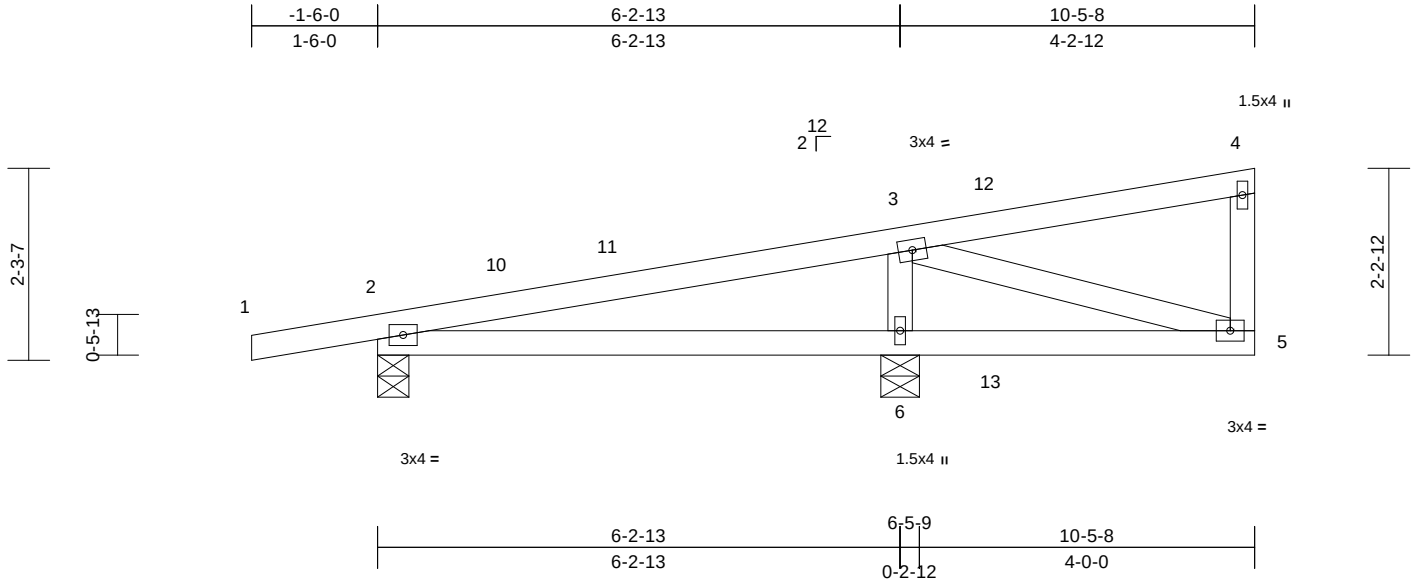


Scale = 1:27.5

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.41	Vert(LL)	-0.03	6-9	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.34	Vert(CT)	-0.07	6-9	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.23	Horz(CT)	0.01	2	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 43 lb	FT = 20%

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

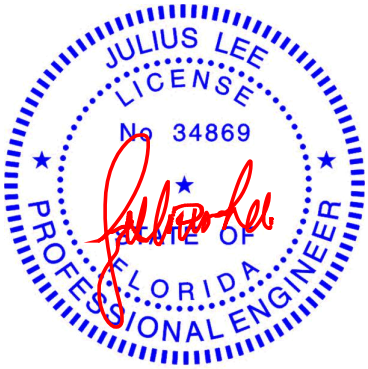
BRACING
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied.

REACTIONS (size) 2=0-4-8, 6=0-5-8
Max Horiz 2=72 (LC 9)
Max Uplift 2=-50 (LC 8), 6=-119 (LC 9)
Max Grav 2=243 (LC 1), 6=672 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/15, 2-3=-796/309, 3-4=-32/44, 4-5=-71/84
BOT CHORD 2-6=-271/680, 5-6=-271/680
WEBS 3-6=-508/578, 3-5=-768/280

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 10-3-12 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 50 lb uplift at joint 2 and 119 lb uplift at joint 6.
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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Date:

January 27,2025

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314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	
1024-077	PB01	Piggyback	2	1	T36176061
					Job Reference (optional)

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

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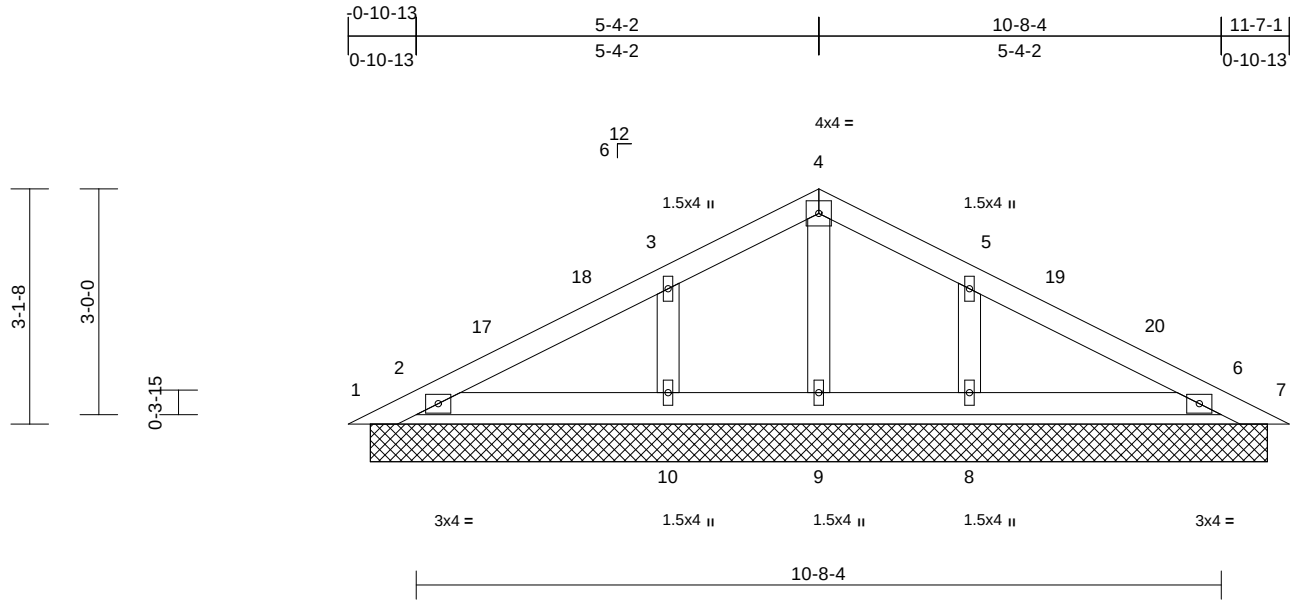


Scale = 1:30.6

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.14	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.06	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.02	Horiz(TL)	0.00	6	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 45 lb	FT = 20%

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

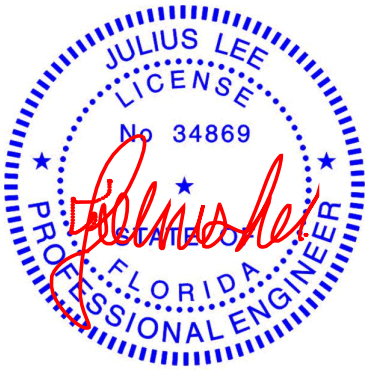
BRACING
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

REACTIONS (size) 1=11-10-14, 2=11-10-14, 6=11-10-14, 7=11-10-14, 8=11-10-14, 9=11-10-14, 10=11-10-14
Max Horiz 1=49 (LC 11)
Max Uplift 1=-106 (LC 17), 6=-7 (LC 12), 7=-87 (LC 1), 8=-18 (LC 12), 10=-17 (LC 12)
Max Grav 1=5 (LC 12), 2=291 (LC 1), 6=275 (LC 1), 7=7 (LC 12), 8=243 (LC 24), 9=90 (LC 1), 10=244 (LC 23)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-37/99, 2-3=-59/43, 3-4=-51/86, 4-5=-49/88, 5-6=-47/32, 6-7=-22/60
BOT CHORD 2-10=-25/49, 9-10=-12/49, 8-9=-12/49, 6-8=-27/49
WEBS 4-9=-73/0, 3-10=-172/130, 5-8=-172/130

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 0-11-12 to 3-11-12, Zone1 3-11-12 to 6-10-12, Zone2 6-10-12 to 11-1-11, Zone1 11-1-11 to 12-9-13 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) All bearings are assumed to be SP No.2 .
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 7 lb uplift at joint 6, 17 lb uplift at joint 10, 18 lb uplift at joint 8, 106 lb uplift at joint 1, 87 lb uplift at joint 7 and 7 lb uplift at joint 6.
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



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

January 27,2025

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

Job	Truss	Truss Type	Qty	Ply	
1024-077	PB02	Piggyback	7	1	T36176062
					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. Mon Jan 27 07:17:39 Page: 1
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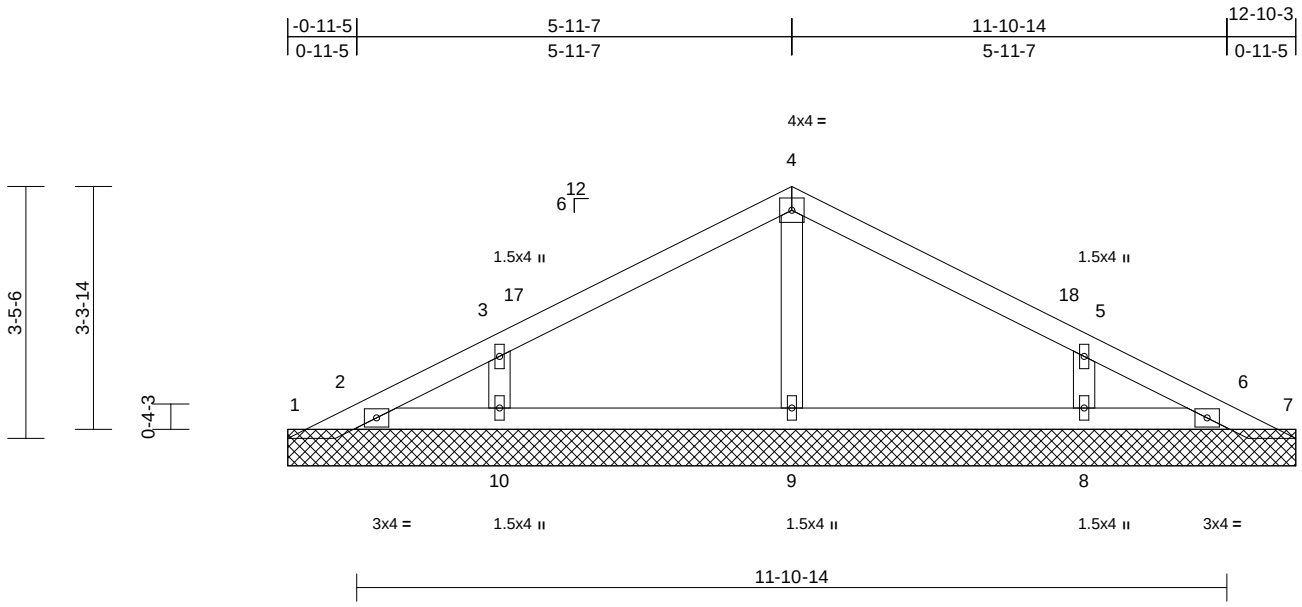


Scale = 1:31.5

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.15	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.12	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.04	Horiz(TL)	0.00	7	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 47 lb	FT = 20%

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

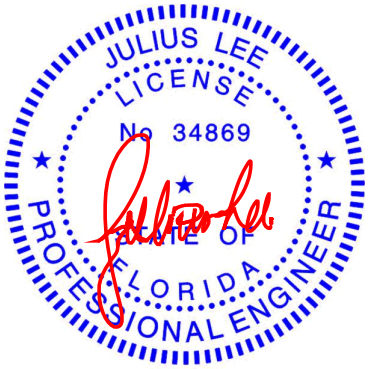
BRACING
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

REACTIONS (size) 1=13-9-8, 2=13-9-8, 6=13-9-8, 7=13-9-8, 8=13-9-8, 9=13-9-8, 10=13-9-8
Max Horiz 1=54 (LC 11)
Max Uplift 1=-7 (LC 10), 7=-2 (LC 12), 8=-24 (LC 12), 10=-23 (LC 12)
Max Grav 1=39 (LC 18), 2=78 (LC 1), 6=65 (LC 1), 7=34 (LC 24), 8=294 (LC 24), 9=297 (LC 1), 10=295 (LC 23)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-62/62, 2-3=-48/44, 3-4=-83/80, 4-5=-82/82, 5-6=-31/28, 6-7=-13/14
BOT CHORD 2-10=-9/41, 9-10=-9/41, 8-9=-9/41, 6-8=-9/41
WEBS 4-9=-212/52, 3-10=-233/158, 5-8=-232/158

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 0-3-15 to 3-3-15, Zone1 3-3-15 to 6-10-12, Zone2 6-10-12 to 10-10-12, Zone1 10-10-12 to 13-5-10 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 7 lb uplift at joint 1, 2 lb uplift at joint 7, 23 lb uplift at joint 10 and 24 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



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

January 27,2025

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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	
1024-077	PB2A	Piggyback	2	**2**	T36176063
					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. Mon Jan 27 07:17:38 Page: 1
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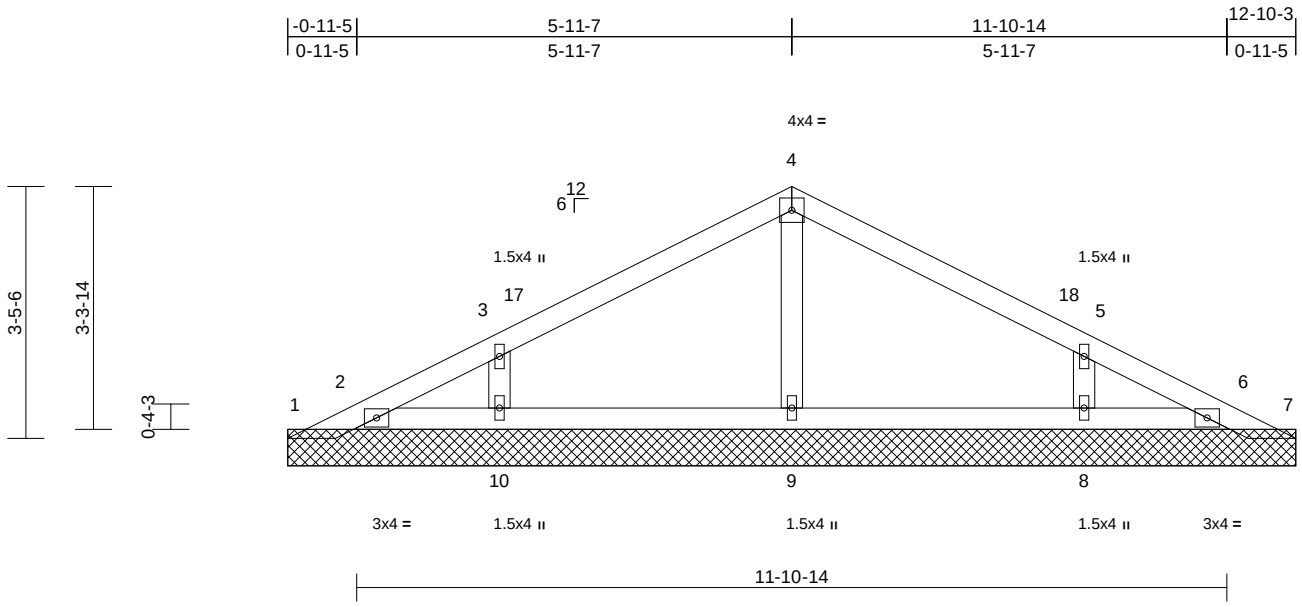


Scale = 1:31.5

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.06	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.01	Horiz(TL)	0.00	7	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 No.2
OTHERS 2x4 SP No.2

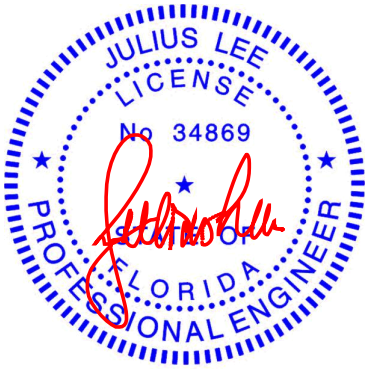
BRACING
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

REACTIONS (size) 1=13-9-8, 2=13-9-8, 6=13-9-8, 7=13-9-8, 8=13-9-8, 9=13-9-8, 10=13-9-8
Max Horiz 1=54 (LC 11)
Max Uplift 1=-7 (LC 10), 7=-2 (LC 12), 8=-24 (LC 12), 10=-23 (LC 12)
Max Grav 1=39 (LC 18), 2=79 (LC 1), 6=66 (LC 1), 7=33 (LC 24), 8=294 (LC 24), 9=298 (LC 1), 10=296 (LC 23)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-62/62, 2-3=-49/44, 3-4=-82/80, 4-5=-82/82, 5-6=-32/28, 6-7=-12/13
BOT CHORD 2-10=-9/41, 9-10=-9/41, 8-9=-9/41, 6-8=-9/41
WEBS 4-9=-212/52, 3-10=-233/158, 5-8=-232/158

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 0-3-15 to 3-3-15, Zone1 3-3-15 to 6-10-12, Zone2 6-10-12 to 10-10-12, Zone1 10-10-12 to 13-5-10 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 7 lb uplift at joint 1, 2 lb uplift at joint 7, 23 lb uplift at joint 10 and 24 lb uplift at joint 8.
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



Julius Lee PE No. 34869
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Date:

January 27,2025

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Job	Truss	Truss Type	Qty	Ply	
1024-077	PB2B	Piggyback	4	1	T36176064
					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. Mon Jan 27 07:17:39 Page: 1
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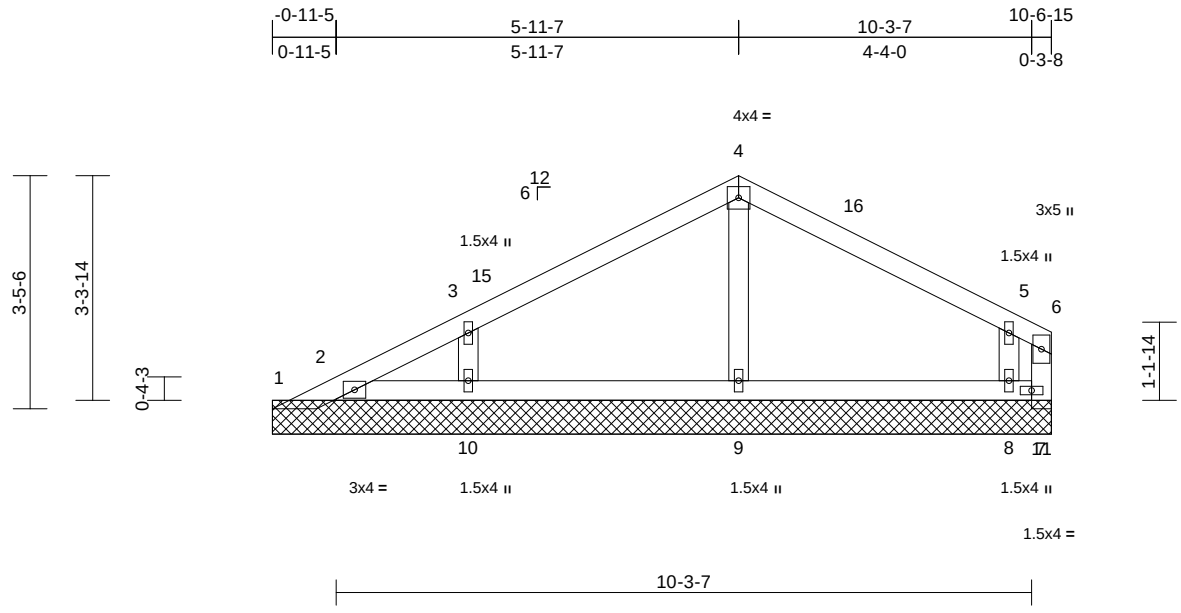

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.18	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.12	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.06	Horiz(TL)	0.00	6	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 42 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

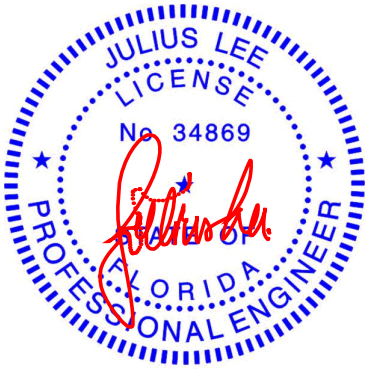
BRACING
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

REACTIONS (size) 1=11-6-4, 2=11-6-4, 6=11-6-4, 7=11-6-4, 8=11-6-4, 9=11-6-4, 10=11-6-4, 11=11-6-4
Max Horiz 1=46 (LC 11)
Max Uplift 1=-2 (LC 10), 6=-162 (LC 24), 7=-85 (LC 3), 8=-33 (LC 12), 10=-23 (LC 12)
Max Grav 1=37 (LC 18), 2=64 (LC 1), 6=42 (LC 12), 7=-26 (LC 8), 8=413 (LC 24), 9=318 (LC 1), 10=296 (LC 23)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-53/52, 2-3=-45/73, 3-4=-66/116, 4-5=-59/95, 5-6=-70/85
BOT CHORD 2-10=-6/15, 9-10=0/0, 8-9=0/0, 7-8=0/0
WEBS 4-9=-234/68, 3-10=-233/171, 5-8=-322/317, 7-11=0/0, 6-7=0/0

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 0-3-15 to 3-3-15, Zone1 3-3-15 to 6-10-12, Zone3 6-10-12 to 11-4-8 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) Bearing at joint(s) 7, 6, 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 85 lb uplift at joint 7, 2 lb uplift at joint 1, 23 lb uplift at joint 10, 33 lb uplift at joint 8 and 162 lb uplift at joint 6.
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) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard



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

January 27,2025

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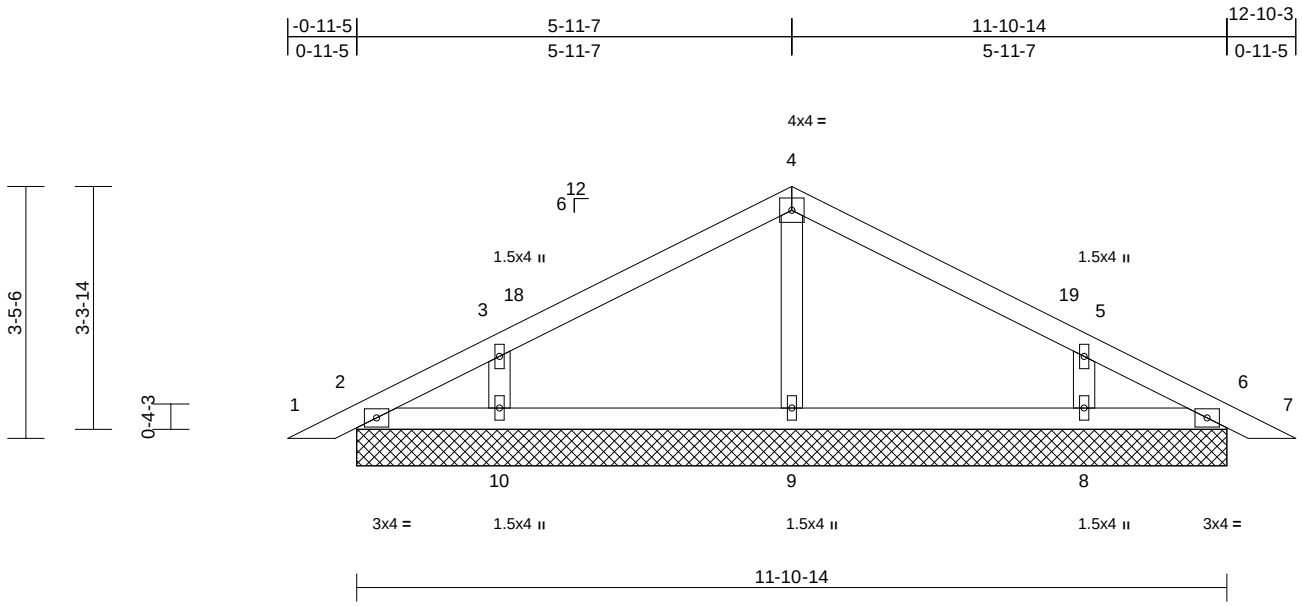
MiTek®
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	
1024-077	PB03	Piggyback	1	1	T36176065
					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. Mon Jan 27 07:17:39 ID:yZLSkvS?iVDWrulKCjhtB3yOb_9-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:31.5

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.15	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.12	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	15	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 47 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=11-10-14, 6=11-10-14, 8=11-10-14, 9=11-10-14, 10=11-10-14
Max Horiz 2=-54 (LC 10)
Max Uplift 2=-13 (LC 12), 6=-13 (LC 12), 8=-19 (LC 12), 10=-19 (LC 12)
Max Grav 2=91 (LC 1), 6=91 (LC 1), 8=283 (LC 24), 9=299 (LC 1), 10=283 (LC 23)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/17, 2-3=-49/44, 3-4=-82/79, 4-5=-82/84, 5-6=-32/26, 6-7=0/17
BOT CHORD 2-10=-8/45, 9-10=-8/45, 8-9=-8/45, 6-8=-8/45
WEBS 4-9=-212/53, 3-10=-227/155, 5-8=-227/155

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 0-3-15 to 3-3-15, Zone1 3-3-15 to 6-10-12, Zone2 6-10-12 to 10-10-12, Zone1 10-10-12 to 13-5-10 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 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 13 lb uplift at joint 2, 13 lb uplift at joint 6, 19 lb uplift at joint 10, 19 lb uplift at joint 8, 13 lb uplift at joint 2 and 13 lb uplift at joint 6.
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

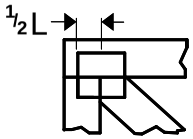
Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

January 27,2025

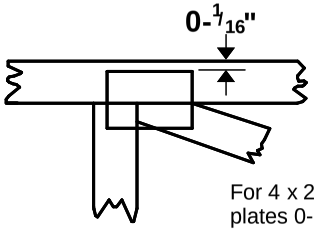
MiTek®
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

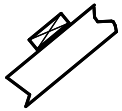
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 x 4

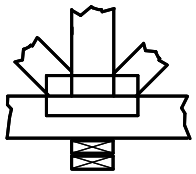
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

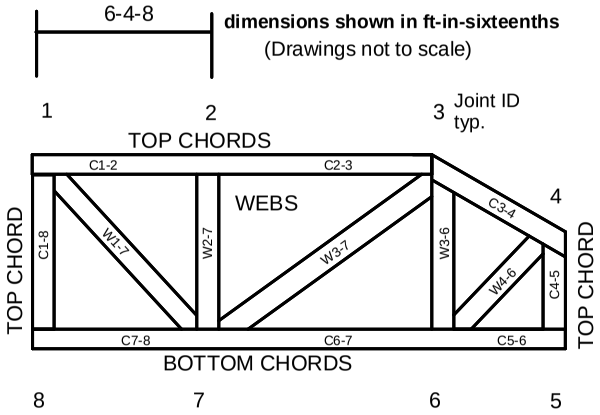


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

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

Numbering System



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

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

Product Code Approvals

ICC-ES Reports:

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

Design General Notes

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

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

MiTek®

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.