



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

RE: 1024-089 -

MiTek, Inc.

16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200

Site Information:

Customer Info: BRYAN LITTLE Project Name: . Model: .
Lot/Block: . Subdivision: .
Address: ., .
City: COLUMBIA CO. 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 47 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.

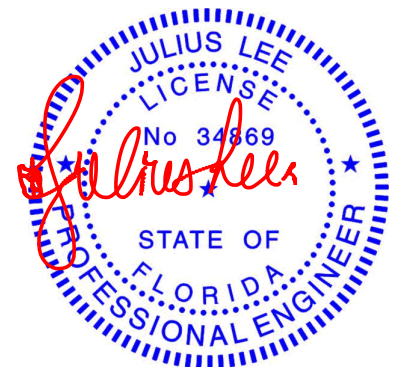
No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	T35639435	A01	11/24/24	23	T35639457	D10	11/24/24
2	T35639436	A02	11/24/24	24	T35639458	D11	11/24/24
3	T35639437	A03	11/24/24	25	T35639459	D12	11/24/24
4	T35639438	A04	11/24/24	26	T35639460	D13	11/24/24
5	T35639439	A05	11/24/24	27	T35639461	D14	11/24/24
6	T35639440	A06	11/24/24	28	T35639462	D15	11/24/24
7	T35639441	B01	11/24/24	29	T35639463	D16	11/24/24
8	T35639442	B02	11/24/24	30	T35639464	D17	11/24/24
9	T35639443	B03	11/24/24	31	T35639465	D18	11/24/24
10	T35639444	B04	11/24/24	32	T35639466	D19	11/24/24
11	T35639445	C01	11/24/24	33	T35639467	G01	11/24/24
12	T35639446	C02	11/24/24	34	T35639468	G02	11/24/24
13	T35639447	C03	11/24/24	35	T35639469	G03	11/24/24
14	T35639448	D01	11/24/24	36	T35639470	G04	11/24/24
15	T35639449	D02	11/24/24	37	T35639471	H01	11/24/24
16	T35639450	D03	11/24/24	38	T35639472	H02	11/24/24
17	T35639451	D04	11/24/24	39	T35639473	H03	11/24/24
18	T35639452	D05	11/24/24	40	T35639474	H04	11/24/24
19	T35639453	D06	11/24/24	41	T35639475	J01	11/24/24
20	T35639454	D07	11/24/24	42	T35639476	PB01	11/24/24
21	T35639455	D08	11/24/24	43	T35639477	PB02	11/24/24
22	T35639456	D09	11/24/24	44	T35639478	PB03	11/24/24

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.

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



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

November 25, 2024



RE: 1024-089 -

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

Site Information:

Customer Info: BRYAN LITTLE Project Name: . Model: .
Lot/Block: . Subdivision: .
Address: ., .
City: COLUMBIA CO. State: FL

No.	Seal#	Truss Name	Date
45	T35639479	V01	11/24/24
46	T35639480	V02	11/24/24
47	T35639481	V03	11/24/24

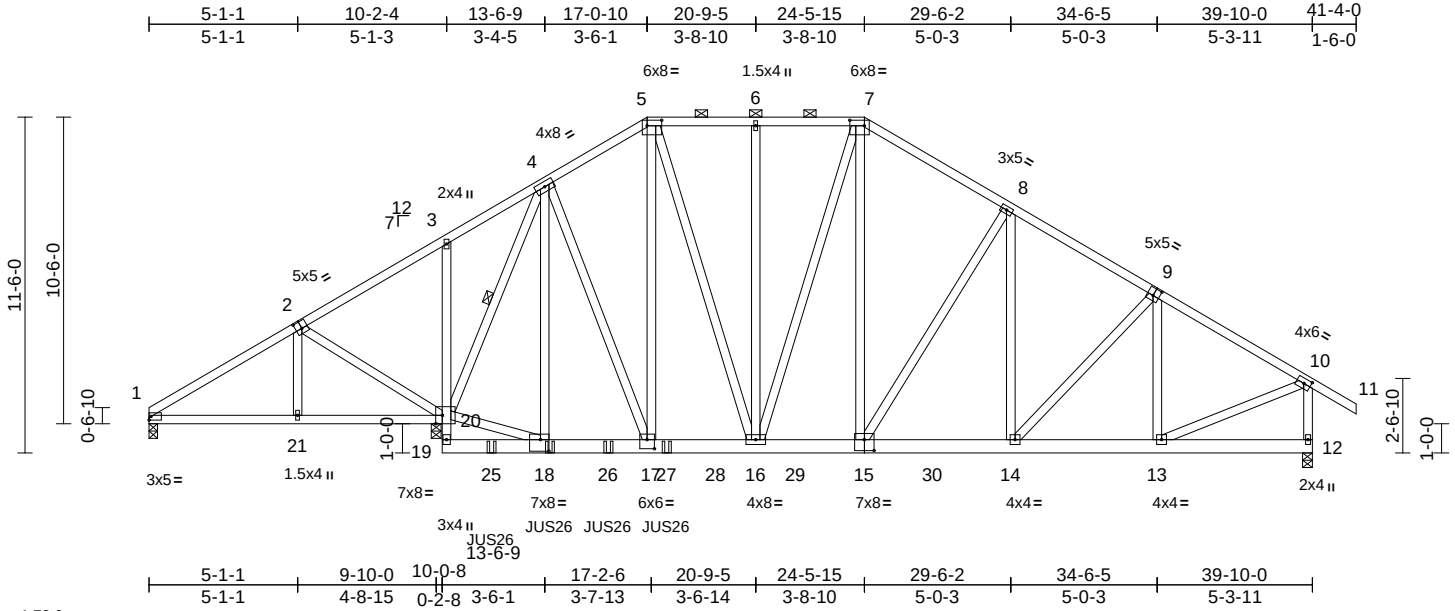
Job	Truss	Truss Type	Qty	Ply	
1024-089	A01	Piggyback Base Girder	1	2	T35639435
Job Reference (optional)					

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

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Page: 1

ID:SQ1V4PwltpaCHn9nuSjK4XyLzW4-RfC?PSB70Hq3NSgPqnL8w3uITxbGKWrCDoi7J4zJC?F



Scale = 1:78.9

Plate Offsets (X, Y): [2:0-2-8,0-3-0], [5:0-6-0,0-2-4], [7:0-6-0,0-2-4], [9:0-2-8,0-3-0], [10:0-2-14,0-2-0], [15:0-4-0,0-4-8], [17:0-3-0,0-3-12], [18:0-3-8,0-4-12], [20:0-2-12,Edge]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.16	Vert(LL)	-0.04	17-18	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.40	Vert(CT)	-0.07	17-18	>999	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.52	Horz(CT)	0.01	12	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 712 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2 *Except* 19-15-12:2x6 SP No.2
WEBS	2x4 SP No.2

BRACING

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-7.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 4-20

REACTIONS

(size)	1=0-3-7, 12=0-4-0, 20=0-4-0
Max Horiz	1=226 (LC 7)
Max Uplift	12=71 (LC 8), 20=173 (LC 8)
Max Grav	1=419 (LC 14), 12=2098 (LC 14), 20=5418 (LC 13)

FORCES

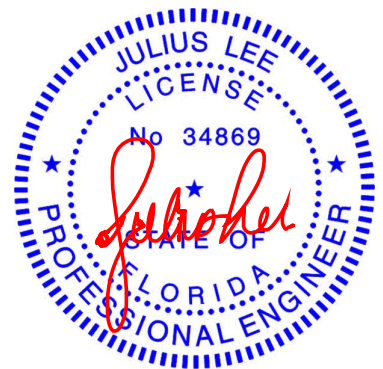
(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-3=-521/129, 3-4=-104/123, 4-5=-2285/213, 5-6=-1947/189, 6-7=-1947/189, 7-8=-2168/184, 8-10=-2321/138, 10-11=0/50, 10-12=-2006/98
BOT CHORD	1-21=-183/485, 20-21=-15/481, 19-20=-2/579, 3-20=-289/83, 18-19=-17/107, 17-18=-12/1624, 16-17=0/1977, 14-16=0/1908, 13-14=0/1730, 12-13=-5/54, 2-21=0/224, 2-20=-502/54, 18-20=0/1572, 4-20=-4104/123, 4-18=-80/1691, 4-17=0/944, 5-17=-134/1002, 5-16=-311/174, 6-16=-242/46, 7-16=-95/553, 7-15=-78/454, 8-15=-319/148, 8-14=-86/104, 9-14=-22/290, 9-13=-559/54, 10-13=0/1838
WEBS	

NOTES

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
- 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.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=40ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Bearings are assumed to be: Joint 1 SP No.2, Joint 20 SP No.2, Joint 12 SP No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 173 lb uplift at joint 20 and 71 lb uplift at joint 12.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Use MiTek JUS26 (With 4-10d nails into Girder & 4-10d nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 11-8-12 from the left end to 17-8-12 to connect truss(es) to front face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (lb/ft)
Vert: 1-5=-60, 5-7=-60, 7-10=-60, 10-11=-60, 20-22=-20, 12-19=-20
Concentrated Loads (lb)
Vert: 18=-891 (F), 25=-891 (F), 26=-891 (F), 27=-891 (F)



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

November 25,2024

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

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

MiTek®

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

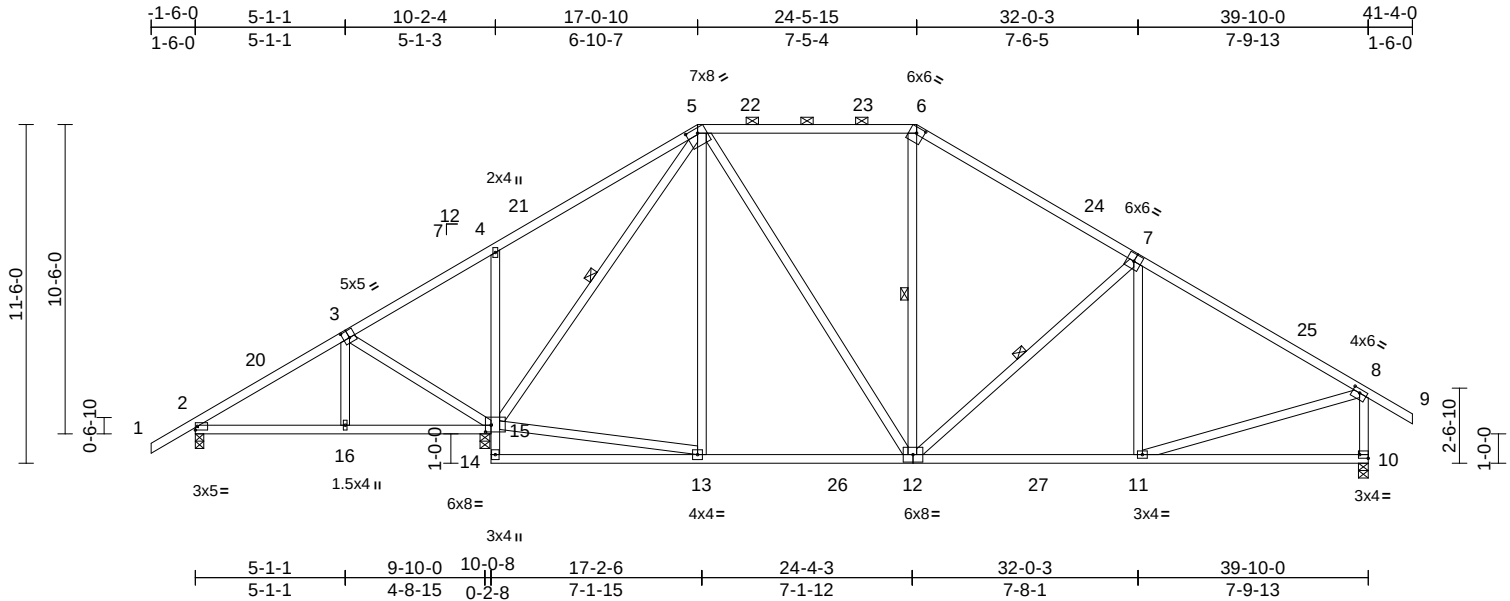
Job	Truss	Truss Type	Qty	Ply	
1024-089	A02	Piggyback Base	5	1	T35639436
Job Reference (optional)					

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

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Page: 1

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Scale = 1:78.2

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.71	Vert(LL)	-0.10	12-13	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.63	Vert(CT)	-0.16	11-12	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.84	Horz(CT)	0.03	10	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 273 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 (4-8-2 max.): 5-6.

BOT CHORD Rigid ceiling directly applied.

WEBS 1 Row at midpt 5-15, 6-12, 7-12

REACTIONS

(size) 2=0-3-7, 10=0-4-0, 15=0-4-0
Max Horiz 2=239 (LC 11)
Max Uplift 2=-25 (LC 12), 10=-34 (LC 12), 15=-14 (LC 12)
Max Grav 2=451 (LC 25), 10=1448 (LC 18), 15=1932 (LC 17)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/45, 2-4=-423/227, 4-5=-52/208, 5-6=-933/173, 6-8=-1492/156, 8-9=0/50, 8-10=-1325/117
BOT CHORD 2-16=-184/387, 15-16=-34/383, 14-15=0/130, 4-15=-379/150, 13-14=0/60, 11-13=0/1162, 10-11=-23/119
WEBS 3-16=0/222, 3-15=-477/40, 13-15=0/634, 5-15=-1260/0, 5-13=0/304, 5-12=-26/530, 6-12=-13/233, 7-12=-441/95, 7-11=-117/142, 8-11=0/1095

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=40ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -1-6-0 to 2-5-13, Zone1 2-5-13 to 17-0-10, Zone2 17-0-10 to 22-8-4, Zone1 22-8-4 to 24-5-15, Zone2 24-5-15 to 30-1-8, Zone1 30-1-8 to 41-4-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 4) 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 25 lb uplift at joint 2, 14 lb uplift at joint 15 and 34 lb uplift at joint 10.
- 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



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

November 25,2024

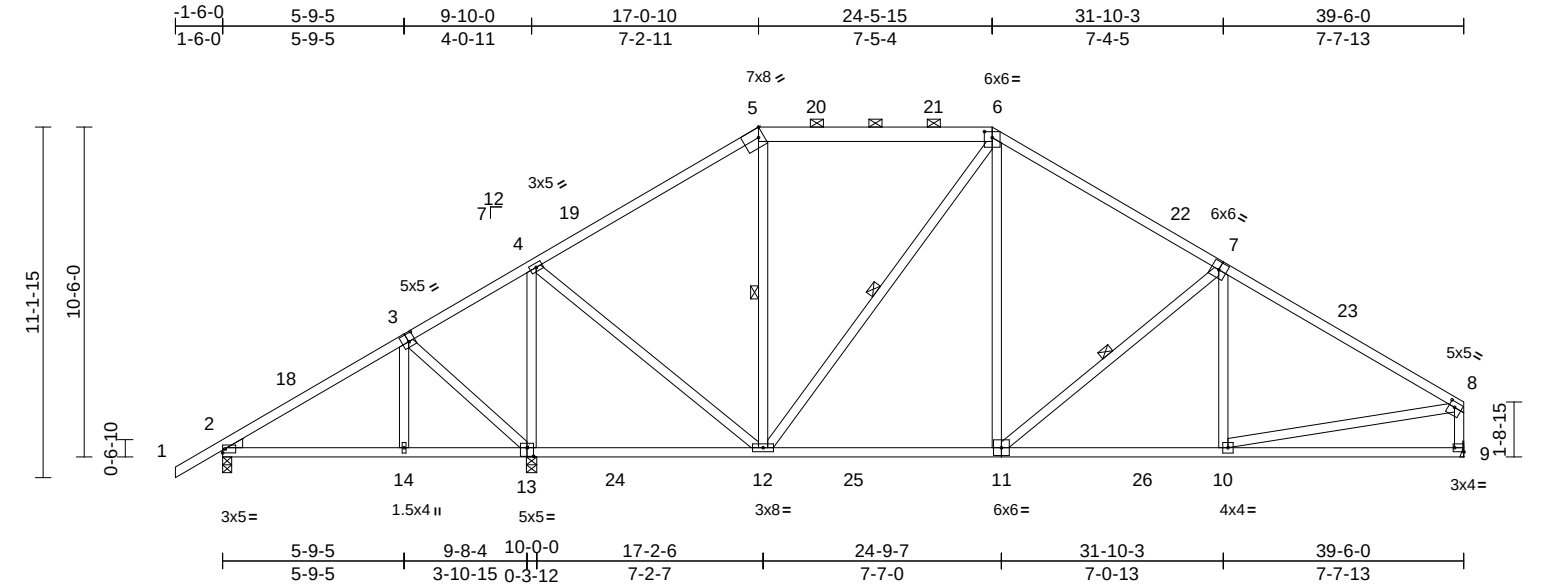
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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

MiTek®

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

Job	Truss	Truss Type	Qty	Ply	
1024-089	A03	Piggyback Base	5	1	T35639437
Job Reference (optional)					



Scale = 1:73.3									
Plate Offsets (X, Y): [3:0-2-8,0-3-0], [5:0-2-1,Edge], [6:0-3-0,0-2-5], [8:0-2-4,0-2-0], [9:Edge,0-1-8], [13:0-2-8,0-3-4]									
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.50	Vert(LL)	-0.12	11-12	>999
TCDL	10.0	Lumber DOL	1.25	BC	0.64	Vert(CT)	-0.20	11-12	>999
BCLL	0.0*	Rep Stress Incr	YES	WB	0.89	Horz(CT)	0.03	9	n/a
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS					
Weight: 251 lb FT = 20%									
PLATES GRIP									
MT20 244/190									

LUMBER
TOP CHORD 2x4 SP No.2 *Except* 5-6:2x6 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 (6-0-0 max.): 5-6.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 5-12, 6-12, 7-11

REACTIONS
(size) 2=0-3-7, 9= Mechanical, 13=0-4-0
Max Horiz 2=214 (LC 11)
Max Uplift 2=-40 (LC 12)
Max Grav 2=431 (LC 23), 9=1354 (LC 18), 13=1968 (LC 17)

FORCES
(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/45, 2-4=-319/224, 4-5=-937/143, 5-6=-720/155, 6-8=-1668/150, 8-9=-1227/81
BOT CHORD 2-14=-190/259, 12-14=-166/256, 10-12=-21/1324, 9-10=-38/186
WEBS 4-12=0/1024, 5-12=-148/154, 6-12=-514/24, 6-11=0/632, 7-11=-494/89, 7-10=-55/169, 8-10=0/1164, 3-14=0/184, 3-13=-412/38, 4-13=-1447/102

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=39ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -1-6-0 to 2-5-6, Zone1 2-5-6 to 17-0-10, Zone2 17-0-10 to 22-7-11, Zone1 22-7-11 to 24-5-15, Zone2 24-5-15 to 30-0-15, Zone1 30-0-15 to 39-4-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Bearings are assumed to be: Joint 2 SP No.2 , Joint 13 SP No.2 .
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 40 lb uplift at joint 2.
 - 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.
 - 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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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

November 25,2024

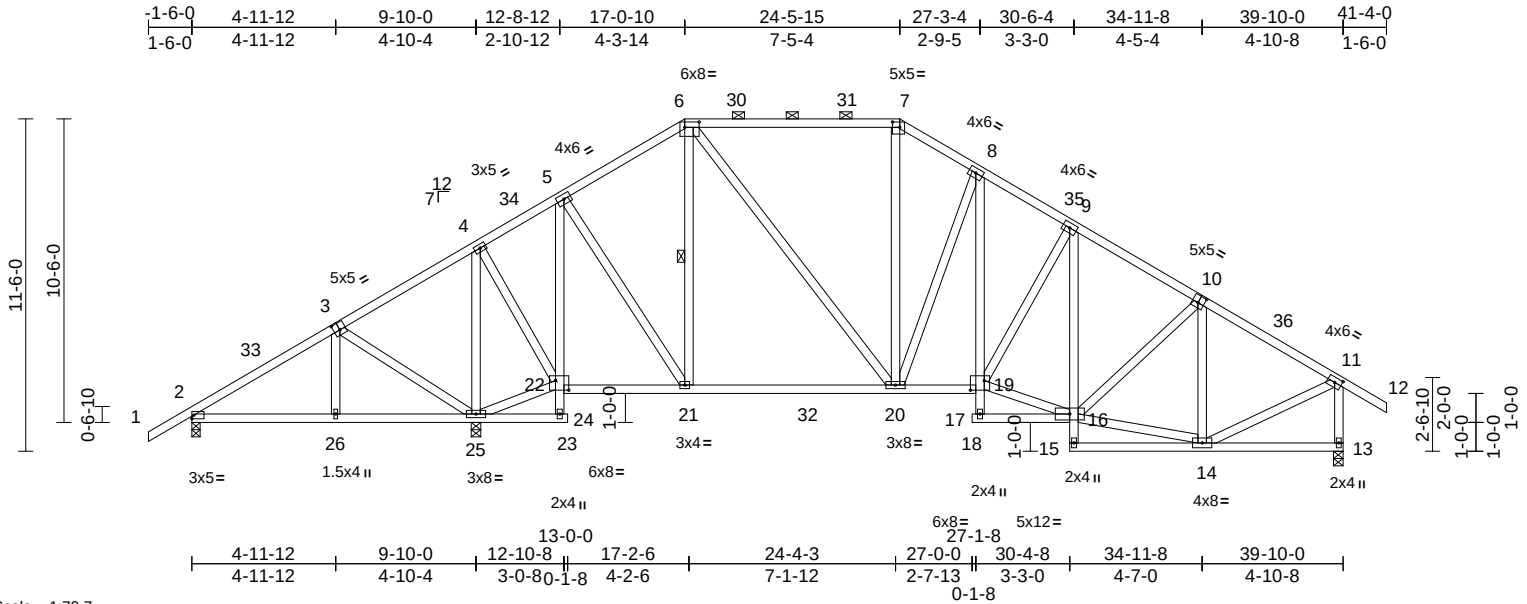
Job	Truss	Truss Type	Qty	Ply	T35639438
1024-089	A04	Piggyback Base	5	1	Job Reference (optional)

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

Run: 8.73 S Oct 31 2024 Print: 8.730 S Oct 31 2024 MiTek Industries, Inc. Fri Nov 22 10:07:11

Page: 1

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Scale = 1:79.7

Plate Offsets (X, Y): [3:0-2-8,0-3-0], [6:0-6-0,0-2-4], [7:0-3-0,0-2-4], [10:0-2-8,0-3-0], [11:0-2-14,0-2-0], [19:0-5-12,0-4-0], [22:0-5-8,0-4-0]												
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.74	Vert(LL)	-0.11	20-21	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.58	Vert(CT)	-0.19	20-21	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.96	Horz(CT)	0.05	13	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 312 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 (4-2-2 max.): 6-7.
BOT CHORD Rigid ceiling directly applied. Except: 10-0-0 oc bracing: 22-24, 17-19
WEBS 1 Row at midpt 6-21

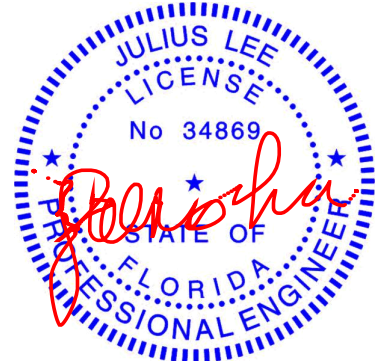
REACTIONS
(size) 2=0-3-7, 13=0-4-0, 25=0-4-0
Max Horiz 2=239 (LC 11)
Max Uplift 2=55 (LC 12), 13=42 (LC 12)
Max Grav 2=346 (LC 23), 13=1392 (LC 18), 25=2104 (LC 17)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 6-7=-1040/153, 11-13=-1316/104, 1-2=0/45, 2-4=-210/485, 4-5=-379/110, 5-6=-848/142, 7-8=-1194/151, 8-9=-1468/130, 9-11=-1469/120, 11-12=0/50
BOT CHORD 2-26=-203/171, 25-26=-127/168, 24-25=-8/10, 23-24=0/0, 22-24=0/44, 5-22=-992/39, 21-22=-20/347, 20-21=0/733, 19-20=0/1190, 17-19=0/93, 8-19=-20/546, 17-18=0/0, 16-17=0/105, 15-16=0/87, 9-16=-263/9, 14-15=0/88, 13-14=-16/49
WEBS 4-25=-1562/55, 22-25=-423/123, 4-22=0/1144, 5-21=0/752, 6-21=-415/41, 6-20=-12/575, 7-20=0/292, 8-20=-572/64, 16-19=0/1140, 9-19=-62/91, 10-16=0/251, 11-14=0/1073, 3-26=0/212, 3-25=-495/49, 10-14=-526/57, 14-16=-8/936

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

- Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=40ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -1-6-0 to 2-5-13, Zone1 2-5-13 to 17-0-10, Zone2 17-0-10 to 22-8-4, Zone1 22-8-4 to 24-5-15, Zone2 24-5-15 to 30-1-8, Zone1 30-1-8 to 41-4-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- All bearings are assumed to be SP No.2 .
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 55 lb uplift at joint 2 and 42 lb uplift at joint 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



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

November 25,2024

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

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MiTek®
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Chesterfield, MO 63017
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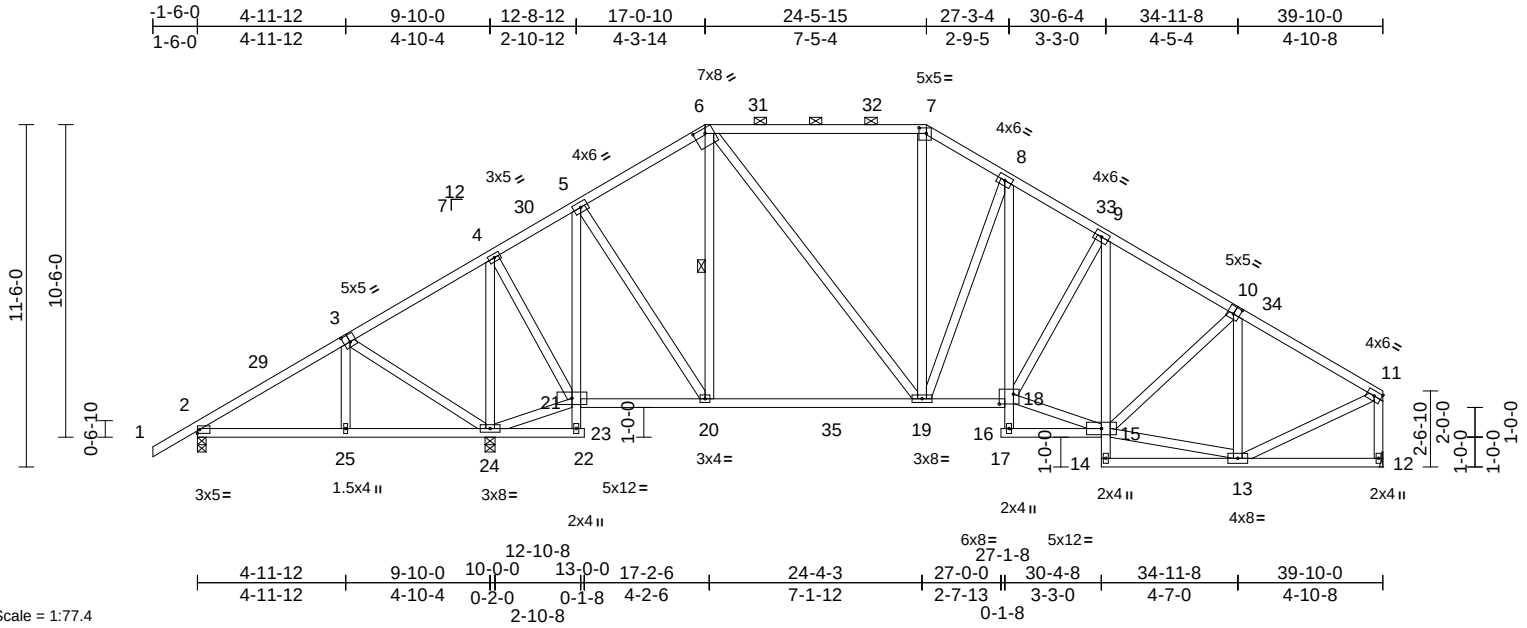
Job	Truss	Truss Type	Qty	Ply	
1024-089	A05	Piggyback Base	4	1	T35639439
Job Reference (optional)					

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

Run: 8.73 S Oct 31 2024 Print: 8.730 S Oct 31 2024 MiTek Industries, Inc. Fri Nov 22 10:07:12

Page: 1

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Scale = 1:77.4

Plate Offsets (X, Y): [3:0-2-8,0-3-0], [6:0-4-8,0-2-0], [7:0-3-0,0-2-4], [10:0-2-8,0-3-0], [18:0-5-12,0-4-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.74	Vert(LL)	-0.11	19-20	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.60	Vert(CT)	-0.19	19-20	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.96	Horz(CT)	0.05	12	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 309 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 (4-1-14 max.): 6-7.

BOT CHORD Rigid ceiling directly applied. Except: 10-0-0 oc bracing: 21-23, 16-18

WEBS 1 Row at midpt 6-20

REACTIONS (size) 2=0-3-7, 12= Mechanical, 24=0-4-0
Max Horiz 2=234 (LC 11)
Max Uplift 2=44 (LC 12)
Max Grav 2=351 (LC 23), 12=1302 (LC 18), 24=2092 (LC 17)

FORCES (lb) - Maximum Compression/Maximum Tension

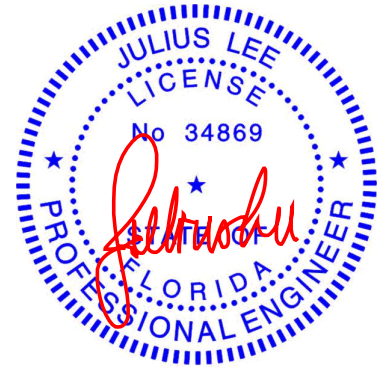
TOP CHORD 1-2=0/45, 2-4=-220/465, 4-5=-384/107, 5-6=-855/138, 6-7=-1047/151, 7-8=-1201/149, 8-9=-1478/129, 9-11=-1480/116, 11-12=-1225/55
BOT CHORD 2-25=-198/170, 24-25=-122/168, 23-24=-9/10, 22-23=0/0, 21-23=0/44, 5-21=-998/46, 20-21=-11/342, 19-20=0/733, 18-19=0/1196, 16-18=0/94, 8-18=-29/551, 16-17=0/0, 15-16=0/105, 14-15=0/87, 9-15=-256/13, 13-14=0/90, 12-13=-33/56
WEBS 5-20=0/755, 6-20=-411/49, 6-19=-14/576, 7-19=0/294, 8-19=-578/66, 15-18=-22/1148, 9-18=-61/85, 10-15=0/242, 11-13=-3/1078, 10-13=-532/76, 13-15=-43/949, 21-24=-403/113, 4-24=-1567/79, 4-21=-1/1147, 3-25=0/211, 3-24=-493/51

NOTES

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

- Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=40ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -1-6-0 to 2-5-13, Zone1 2-5-13 to 17-0-10, Zone2 17-0-10 to 22-8-4, Zone1 22-8-4 to 24-5-15, Zone2 24-5-15 to 30-1-8, Zone1 30-1-8 to 39-8-4 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
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Bearings are assumed to be: Joint 2 SP No.2 , Joint 24 SP No.2 .
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 44 lb uplift at joint 2.
- 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



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

November 25,2024

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Job	Truss	Truss Type	Qty	Ply	
1024-089	A06	Piggyback Base	1	1	T35639440
Job Reference (optional)					

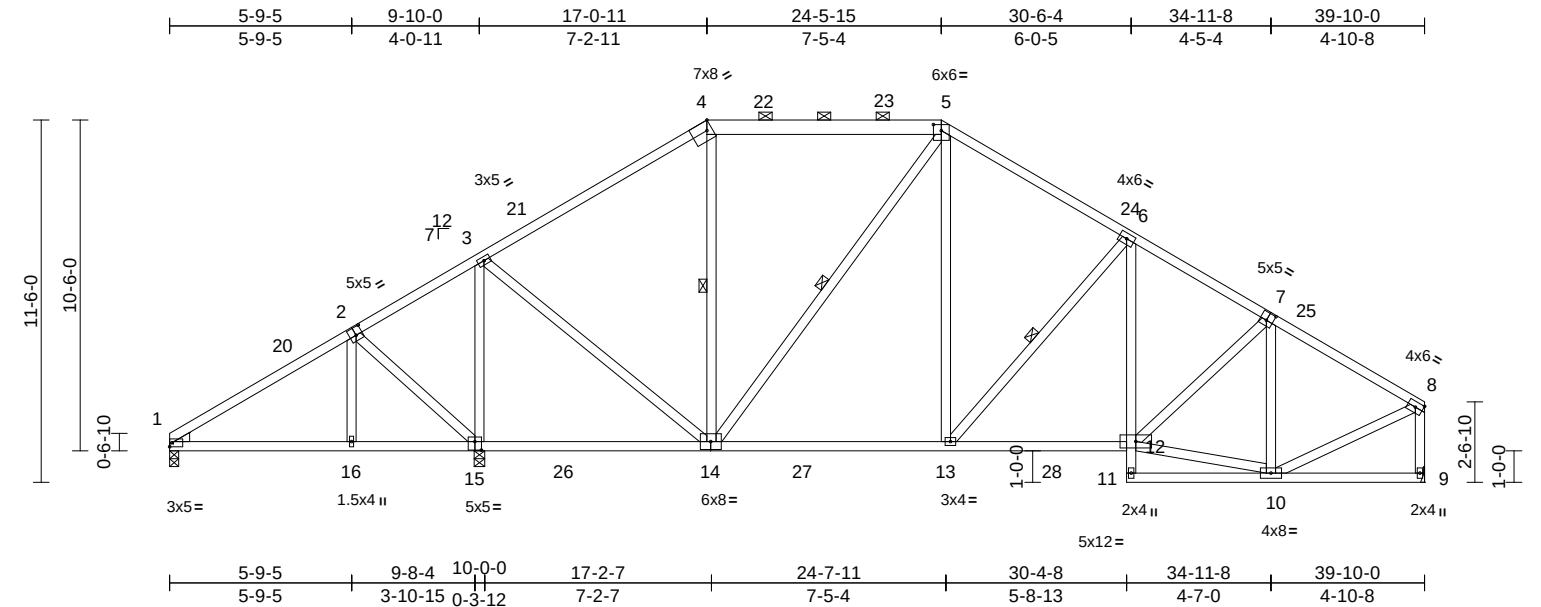


Plate Offsets (X, Y): [2:0-2-8,0-3-0], [4:0-2-1,Edge], [5:0-3-0,0-2-5], [7:0-2-8,0-3-0], [15:0-2-8,0-3-4]												
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.39	Vert(LL)	-0.11	13-14	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.63	Vert(CT)	-0.18	13-14	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.88	Horz(CT)	0.04	9	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 271 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2 *Except* 4-5:2x6 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2
WEDGE Left: 2x4 SP No.3

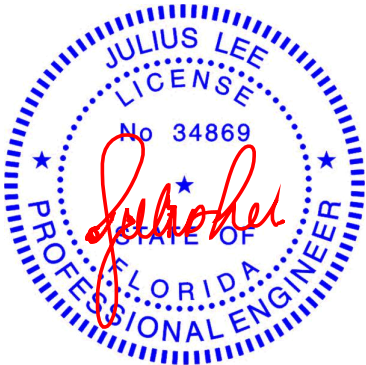
BRACING
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-5.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 4-14, 5-14, 6-13

REACTIONS
(size) 1=0-3-7, 9= Mechanical, 15=0-4-0
Max Horiz 1=222 (LC 11)
Max Uplift 1=12 (LC 12), 9=3 (LC 12)
Max Grav 1=352 (LC 25), 9=1372 (LC 18), 15=1967 (LC 17)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-3=-363/192, 3-4=-962/158, 4-5=-742/169, 5-6=-1287/164, 6-8=-1605/124, 8-9=-1295/61
BOT CHORD 1-16=-193/302, 13-16=-158/1025, 12-13=-21/1309, 11-12=0/87, 6-12=0/241, 10-11=-11/57, 9-10=-34/58
WEBS 4-14=-139/160, 5-14=-528/13, 5-13=0/677, 6-13=-497/84, 7-12=0/310, 8-10=-7/1145, 7-10=-584/76, 10-12=-34/1056, 3-14=0/1018, 2-16=0/187, 2-15=-427/57, 3-15=-1438/104

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=40ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 0-0-0 to 3-11-13, Zone1 3-11-13 to 17-0-11, Zone2 17-0-11 to 22-8-4, Zone1 22-8-4 to 24-5-15, Zone2 24-5-15 to 30-1-8, Zone1 30-1-8 to 39-8-4 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
 - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Bearings are assumed to be: Joint 1 SP No.2 , Joint 15 SP No.2 .
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 12 lb uplift at joint 1 and 3 lb uplift at joint 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.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



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

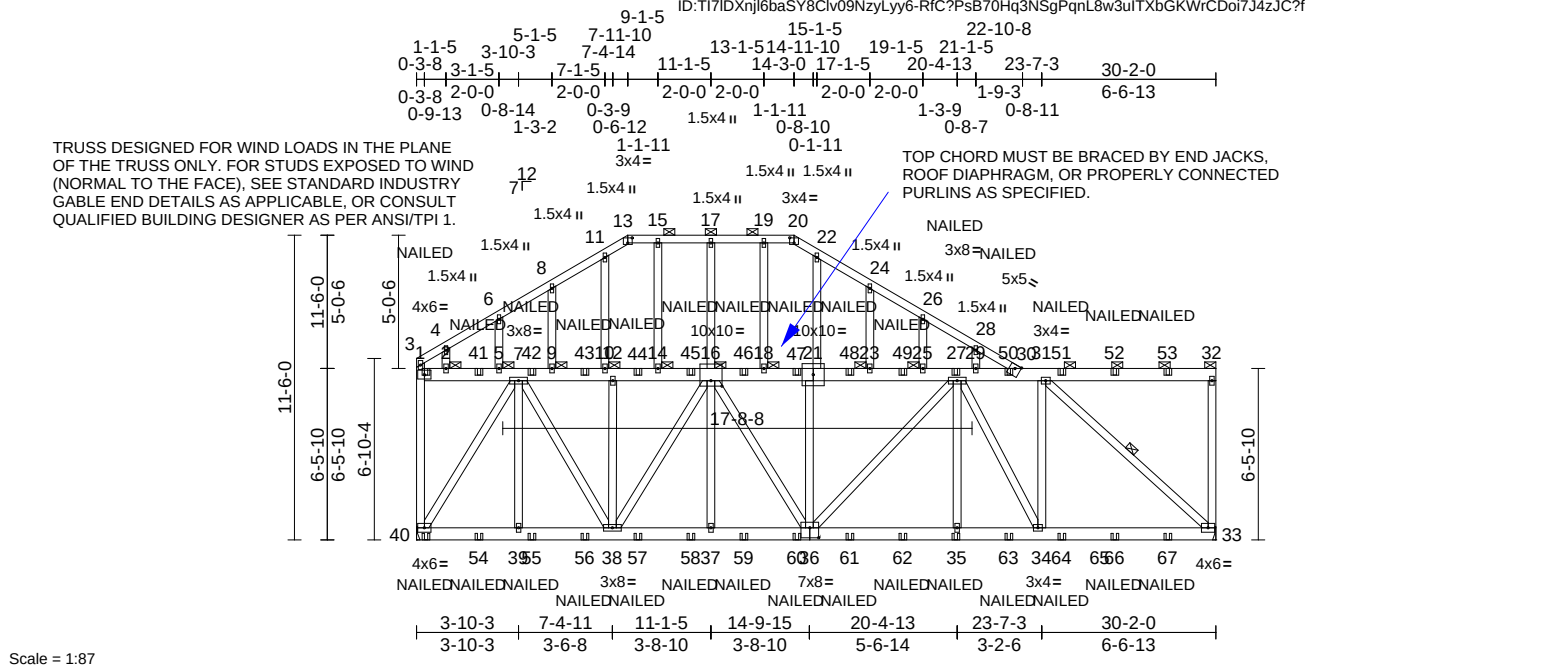
November 25,2024

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Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	
1024-089	B01	Piggyback Base Girder	1	2	T35639441
Job Reference (optional)					



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)	-0.05	35-36	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.45	Vert(CT)	-0.11	35-36	>999	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.52	Horz(CT)	0.04	33	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 737 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2 *Except* 1-21,21-32:2x6 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, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 13-20, 1-32.

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

WEBS 1 Row at midpt 31-33

JOINTS 1 Brace at Jt(s): 32, 14, 10, 9, 5, 2, 18, 23, 25, 16

REACTIONS (size) 33= Mechanical, 40= Mechanical

Max Horiz 40=263 (LC 6)

Max Uplift 33=294 (LC 8), 40=310 (LC 8)

Max Grav 33=3278 (LC 13), 40=3604 (LC 14)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 13-15=-1200/169, 15-17=-1200/169, 17-19=-1200/169, 19-20=-1200/169, 1-2=-126/1237, 2-5=-126/1237, 5-7=-126/1237, 7-9=-1086/194, 9-10=-1086/194, 10-12=-1086/194, 12-14=-1085/194, 14-16=-1085/194, 16-18=-2260/298, 18-23=-2268/299, 23-25=-2268/299, 25-27=-2268/299, 27-29=-1862/276, 29-30=-1862/276, 30-31=-3003/323, 31-32=-81/61, 32-33=-191/66, 1-40=-1093/126, 1-3=-842/56, 3-4=-1472/100, 4-6=-1434/108, 6-8=-1413/140, 8-11=-1443/175, 11-13=-1208/168, 20-22=-1212/169, 22-24=-1427/170, 24-26=-1417/139, 26-28=-1435/124, 28-30=-1435/110

BOT CHORD 39-40=-249/1475, 38-39=-249/1475, 37-38=-317/3031, 35-37=-321/3510, 34-35=-321/3510, 33-34=-288/3008

WEBS 31-34=-88/1753, 31-33=-4066/358, 16-17=-240/42, 14-15=-33/267, 10-11=-42/372, 8-9=-186/49, 5-6=-103/57, 2-4=-32/77, 18-19=-34/270, 21-22=-39/342, 23-24=-149/39, 25-26=-109/43, 28-29=-131/49, 16-37=0/396, 12-38=0/226, 7-39=-3/487, 21-36=-16/196, 27-35=0/474, 27-34=-1070/102, 27-36=-140/52, 16-36=-104/922, 16-38=-1418/151, 7-38=-149/1802, 7-40=-2576/223

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; TCCL=6.0psf; BCCL=6.0psf; h=15ft; B=45ft; L=30ft; 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) All plates are 2x4 MT20 unless otherwise indicated.

8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCCL = 10.0psf.

10) Refer to girder(s) for truss to truss connections.

11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 294 lb uplift at joint 33 and 310 lb uplift at joint 40.

12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

13) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.

14) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) . The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced); Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (lb/ft)

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

November 25,2024

Continued on page 2

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Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	
1024-089	B01	Piggyback Base Girder	1	2	T35639441
			Job Reference (optional)		

Vert: 13-20=-60, 30-32=-60, 33-40=-20, 3-13=-60,
20-30=-60

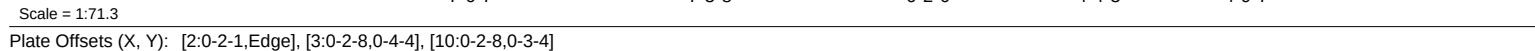
Concentrated Loads (lb)

Vert: 1=-90 (B), 27=-90 (B), 35=-189 (B), 40=-197 (B), 41=-90 (B), 42=-90 (B), 43=-90 (B), 44=-90 (B), 45=-90 (B), 46=-90 (B), 47=-90 (B), 48=-90 (B), 49=-90 (B), 50=-90 (B), 51=-30 (B), 52=-30 (B), 53=-30 (B), 54=-189 (B), 55=-189 (B), 56=-189 (B), 57=-189 (B), 58=-189 (B), 59=-189 (B), 60=-189 (B), 61=-189 (B), 62=-189 (B), 63=-189 (B), 64=-189 (B), 66=-189 (B), 67=-189 (B)

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

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Mayo Truss Company, Inc., Mayo, FL - 32066, Run: 8.73 S Oct 31 2024 Print: 8.730 S Oct 31 2024 MiTek Industries, Inc. Fri Nov 22 10:07:13 Page: 1
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LUMBER
TOP CHORD 2x4 SP No.2 *Except* 2-3:2x6 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.): 2-3, 4-6.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 6-7, 2-11, 3-11, 4-10, 5-7, 1-12, 4-8

REACTIONS (size) 7= Mechanical, 12= Mechanical
Max Horiz 12=277 (LC 11)
Max Grav 7=1384 (LC 17), 12=1395 (LC 18)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-944/130, 2-3=-755/153, 3-4=-1190/117, 4-5=-776/110, 5-6=-115/119, 6-7=-121/51, 1-12=-1243/125
BOT CHORD 11-12=-293/300, 9-11=-183/1192, 8-9=-165/1196, 7-8=-123/756
WEBS 1-11=-75/991, 2-11=-175/160, 3-11=-507/68, 3-10=-2/614, 4-10=-392/101, 4-9=0/244, 5-7=-1400/93, 5-8-0/938, 4-8=-879/83

- 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 4) Provide adequate drainage to prevent water ponding.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3'-06"-00" tall by 2'-00"-00" wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 7) Refer to girder(s) for truss to truss connections.
- 8) 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.
- 9) 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

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=30ft; eave=4ft; Cat. II; Exp B; Enclosed;
 MWFRS (directional) and C-C Zone3 11-6-5 to 14-6-8,
 Zone1 14-6-8 to 18-9-4, Zone2 18-9-4 to 23-0-7, Zone1
 23-0-7 to 26-2-8, Zone2 26-2-8 to 30-5-11, Zone1
 30-5-11 to 41-4-13 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 drip DOL=1.60



November 25.2024



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

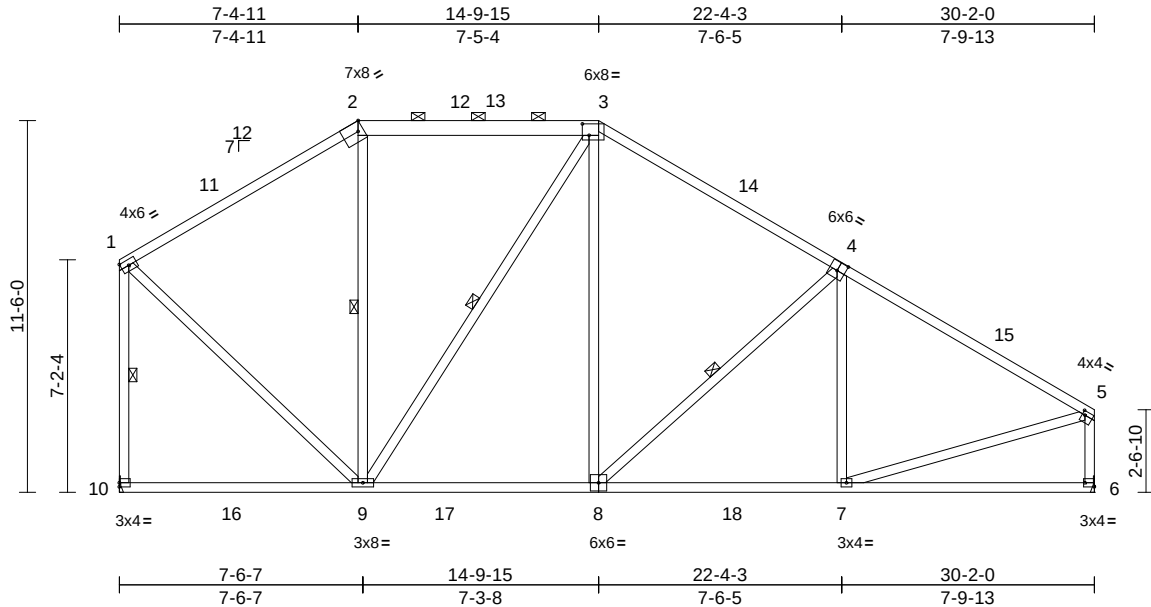
Job	Truss	Truss Type	Qty	Ply	
1024-089	B03	Piggyback Base	1	1	T35639443
Job Reference (optional)					

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

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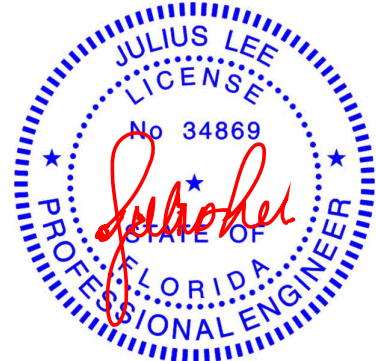
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Plate Offsets (X, Y): [2:0-2-1,Edge], [3:0-2-8,0-4-4], [4:0-3-0,0-3-4], [5:0-1-0,0-1-8], [6:Edge,0-1-8]											
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.53	Vert(LL)	-0.10	9-10	>999	240	GRIP
TCDL	10.0	Lumber DOL	1.25	BC	0.64	Vert(CT)	-0.18	9-10	>999	180	MT20
BCLL	0.0*	Rep Stress Incr	YES	WB	0.39	Horz(CT)	0.03	6	n/a	n/a	244/190
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 216 lb FT = 20%

LUMBER	
TOP CHORD	2x4 SP No.2 *Except* 2-3:2x6 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.): 2-3.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 2-9, 3-9, 4-8, 1-10
REACTIONS	
(size)	6= Mechanical, 10= Mechanical
Max Horiz	10=-278 (LC 10)
Max Uplift	10=-1 (LC 12)
Max Grav	6=1382 (LC 18), 10=1390 (LC 18)
FORCES	
(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=-932/154, 2-3=-745/172, 3-5=-1532/158, 5-6=-1258/85, 1-10=-1238/111
BOT CHORD	9-10=-187/255, 7-9=-42/1222, 6-7=-36/117
WEBS	1-9=-63/987, 2-9=-176/158, 3-9=-505/57, 3-8=0/606, 4-8=-430/98, 4-7=-136/123, 5-7=-5/1160

- 4) Provide adequate drainage to prevent water ponding.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1 lb uplift at joint 10.
- 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

- 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=30ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 11-6-5 to 14-6-8, Zone1 14-6-8 to 18-9-4, Zone2 18-9-4 to 23-0-7, Zone1 23-0-7 to 26-2-8, Zone2 26-2-8 to 30-5-11, Zone1 30-5-11 to 41-4-13 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) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.



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

November 25,2024

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

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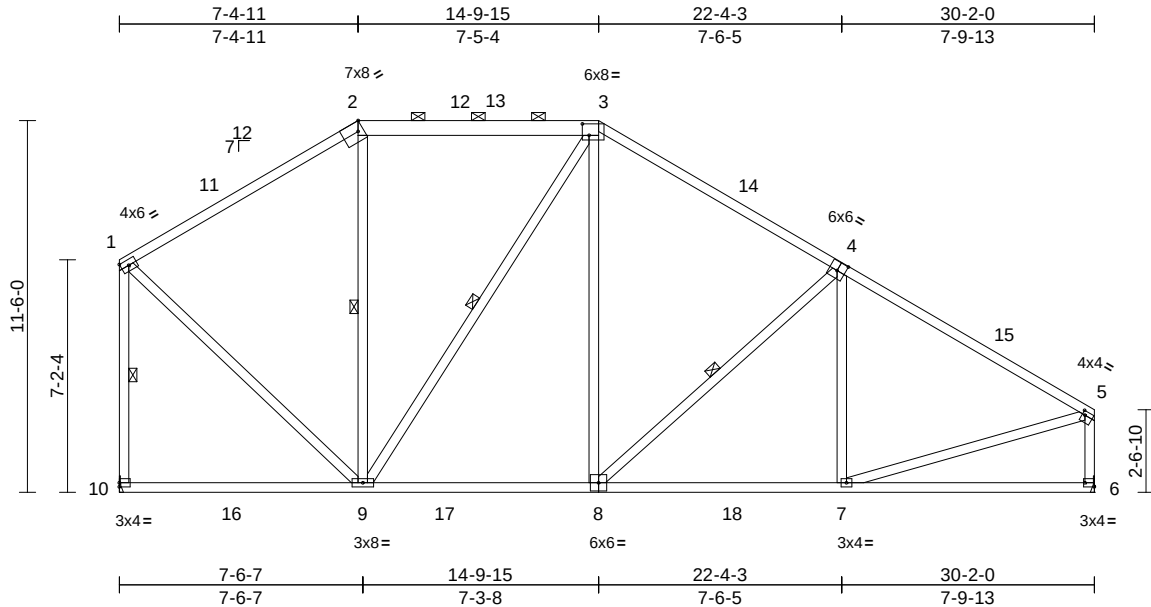
Job	Truss	Truss Type	Qty	Ply	
1024-089	B04	Piggyback Base	1	1	
Job Reference (optional)					T35639444

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

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Scale = 1:71.3

Plate Offsets (X, Y): [2:0-2-1,Edge], [3:0-2-8,0-4-4], [4:0-3-0,0-3-4], [5:0-1-0,0-1-8], [6:Edge,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	0.53	Vert(LL)	-0.10	9-10	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.64	Vert(CT)	-0.18	9-10	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.39	Horz(CT)	0.03	6	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 216 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2 *Except* 2-3:2x6 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.): 2-3.

BOT CHORD Rigid ceiling directly applied.

WEBS 1 Row at midpt 2-9, 3-9, 4-8, 1-10

REACTIONS (size) 6= Mechanical, 10= Mechanical
Max Horiz 10=-278 (LC 10)
Max Uplift 10=-1 (LC 12)
Max Grav 6=1382 (LC 18), 10=1390 (LC 18)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-932/154, 2-3=-745/172, 3-5=-1532/158, 5-6=-1258/85, 1-10=-1238/111

BOT CHORD 9-10=-187/255, 7-9=-42/1222, 6-7=-36/117

WEBS 1-9=-63/987, 2-9=-176/158, 3-9=-505/57, 3-8=0/606, 4-8=-430/98, 4-7=-136/123, 5-7=-5/1160

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=30ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 11-6-5 to 14-6-8, Zone1 14-6-8 to 18-9-4, Zone2 18-9-4 to 23-0-7, Zone1 23-0-7 to 26-2-8, Zone2 26-2-8 to 30-5-11, Zone1 30-5-11 to 41-4-13 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) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.

- 4) Provide adequate drainage to prevent water ponding.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1 lb uplift at joint 10.
- 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



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

November 25, 2024

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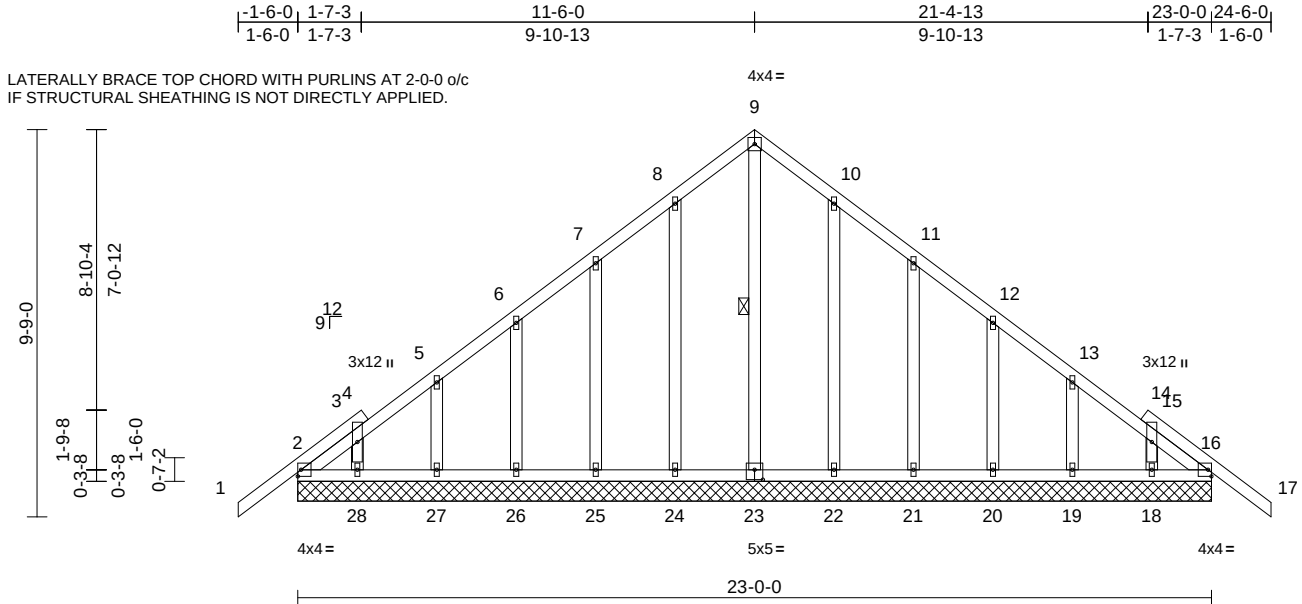
Job	Truss	Truss Type	Qty	Ply	
1024-089	C01	Common Supported Gable	1	1	T35639445
Job Reference (optional)					

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

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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	0.14	Vert(LL)	n/a	-	n/a	999	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.04	Vert(CT)	n/a	-	n/a	999	
BCLL	0.0*	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.00	32	n/a	n/a	
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							
Weight: 158 lb FT = 20%											

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

BRACING
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 9-23

REACTIONS (size)
2=23-0-0, 16=23-0-0, 18=23-0-0,
19=23-0-0, 20=23-0-0, 21=23-0-0,
22=23-0-0, 23=23-0-0, 24=23-0-0,
25=23-0-0, 26=23-0-0, 27=23-0-0,
28=23-0-0, 29=23-0-0, 32=23-0-0
Max Horiz 2=-180 (LC 10), 29=-180 (LC 10)
Max Uplift 2=-22 (LC 8), 16=-11 (LC 12),
18=-4 (LC 8), 19=-27 (LC 12),
20=-26 (LC 12), 21=-30 (LC 12),
22=-19 (LC 12), 24=-19 (LC 12),
25=-30 (LC 12), 26=-26 (LC 12),
27=-27 (LC 12), 28=-5 (LC 9),
29=-22 (LC 8), 32=-11 (LC 12)
Max Grav 2=191 (LC 1), 16=191 (LC 1),
18=114 (LC 18), 19=168 (LC 18),
20=165 (LC 18), 21=166 (LC 18),
22=169 (LC 18), 23=143 (LC 12),
24=172 (LC 17), 25=164 (LC 17),
26=165 (LC 17), 27=166 (LC 1),
28=116 (LC 17), 29=191 (LC 1),
32=191 (LC 1)

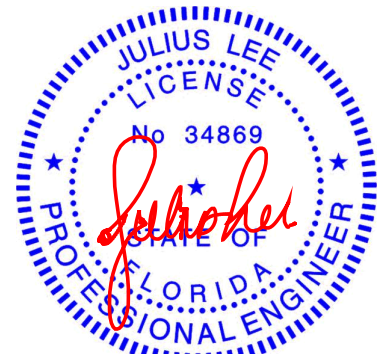
FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/54, 2-3=-120/128, 3-5=-117/120,
5-6=-113/102, 6-7=-100/81, 7-8=-89/118,
8-9=-109/172, 9-10=-109/172, 10-11=-78/118,
11-12=-55/57, 12-13=-67/42, 13-15=-80/60,
15-16=-115/78, 16-17=0/54

BOT CHORD 2-28=-90/154, 27-28=-68/154,
26-27=-68/154, 25-26=-68/154,
24-25=-68/154, 22-24=-68/154,
21-22=-68/154, 20-21=-68/154,
19-20=-68/154, 18-19=-68/154,
16-18=-68/154
WEBS 9-23=-151/48, 8-24=-132/65, 7-25=-124/78,
6-26=-126/74, 5-27=-122/72, 3-28=-95/54,
10-22=-129/65, 11-21=-125/78,
12-20=-126/74, 13-19=-124/73, 15-18=-96/53

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - 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
 - 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.
 - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
 - All plates are 1.5x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - Gable studs spaced at 2-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
 - All bearings are assumed to be SP No.2.

- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 22 lb uplift at joint 2, 11 lb uplift at joint 16, 19 lb uplift at joint 24, 30 lb uplift at joint 25, 26 lb uplift at joint 26, 27 lb uplift at joint 27, 5 lb uplift at joint 28, 19 lb uplift at joint 22, 30 lb uplift at joint 21, 26 lb uplift at joint 20, 27 lb uplift at joint 19, 4 lb uplift at joint 18, 22 lb uplift at joint 2 and 11 lb uplift at joint 16.
- 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:

November 25,2024

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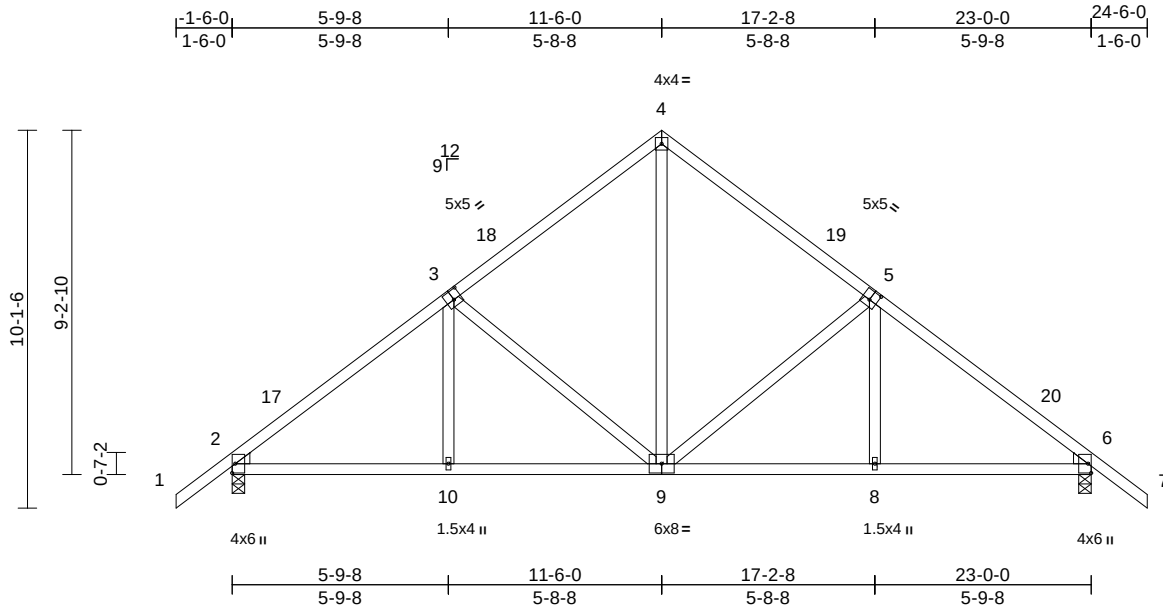
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)	T35639446
1024-089	C02	Common	1	1		

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

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Page: 1



Scale = 1:61.7

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

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	0.28	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	0.36	Horz(CT)	0.03	6	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 131 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.2 Right: 2x4 SP No.2

BRACING

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

REACTIONS

(size)	2=0-4-0, 6=0-4-0
Max Horiz	2=-187 (LC 10)
Max Uplift	2=-36 (LC 12), 6=-36 (LC 12)
Max Grav	2=1010 (LC 1), 6=1010 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=0/54, 2-4=-1207/128, 4-6=-1207/128, 6-7=0/54
BOT CHORD	2-10=-4/912, 8-10=0/911, 6-8=0/890
WEBS	3-10=0/220, 4-9=-38/585, 5-8=0/220, 3-9=-391/97, 5-9=-391/97

NOTES

- Unbalanced roof live loads have been considered for this design.
- 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 11-6-0, Zone2 11-6-0 to 15-8-15, Zone1 15-8-15 to 24-6-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 36 lb uplift at joint 2 and 36 lb uplift at joint 6.
- 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:

November 25, 2024

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

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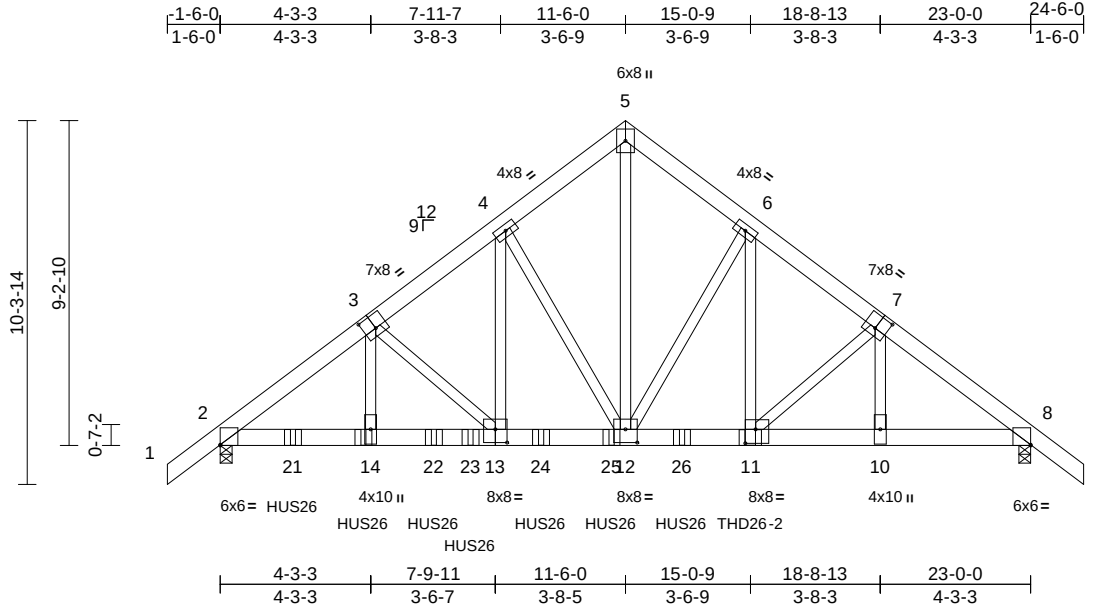
Job	Truss	Truss Type	Qty	Ply	
1024-089	C03	Common Girder	1	2	Job Reference (optional)
					T35639447

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

Run: 8.73 S Oct 31 2024 Print: 8.730 S Oct 31 2024 MiTek Industries, Inc. Fri Nov 22 10:07:14

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Scale = 1:65.4

Plate Offsets (X, Y): [2:Edge,0-0-4], [3:0-4-0,0-4-8], [7:0-4-0,0-4-8], [8:Edge,0-0-4], [11:0-3-8,0-4-12], [12:0-4-0,0-4-8], [13:0-4-0,0-4-8]

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	0.29	Vert(LL)	-0.12	13-14	>999	240	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.47	Vert(CT)	-0.22	13-14	>999	180	
BCLL	0.0*	Rep Stress Incr	NO	WB	0.91	Horz(CT)	0.06	8	n/a	n/a	
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							
										Weight: 403 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-5-9 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-4-0, 8=0-4-0
Max Horiz 2=-187 (LC 6)
Max Grav 2=8253 (LC 13), 8=6143 (LC 14)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/54, 2-4=-12036/0, 4-5=-7482/0, 5-6=-7478/0, 6-8=-9504/0, 8-9=0/54
BOT CHORD 2-14=0/9710, 12-14=0/9704, 11-12=0/7557, 10-11=0/7531, 8-10=0/7531
WEBS 3-14=0/2634, 4-12=-3567/0, 4-13=0/4466, 5-12=0/8514, 6-12=-3033/230, 6-11=-164/3734, 7-10=-146/18, 7-11=-79/142, 3-13=-2340/0

NOTES

- 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 0-7-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc, Except member 3-14 2x4 - 1 row at 0-5-0 oc, Except member 6-11 2x4 - 1 row at 0-5-0 oc.
- 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.

- Unbalanced roof live loads have been considered for this design.
- 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
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP 2400F 2.0E .
- Use MiTek HUS26 (With 14-16d nails into Girder & 6-16d nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 2-0-12 from the left end to 13-1-4 to connect truss(es) to back face of bottom chord.
- Use MiTek THD26-2 (With 18-16d nails into Girder & 12-10d nails into Truss) or equivalent at 15-0-8 from the left end to connect truss(es) to back face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (lb/ft)
Vert: 1-5=-60, 5-9=-60, 15-18=-20
Concentrated Loads (lb)
Vert: 14=-1119 (B), 11=-3004 (B), 21=-1119 (B), 22=-1119 (B), 23=-1158 (B), 24=-1175 (B), 25=-1175 (B), 26=-1175 (B)



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

November 25, 2024

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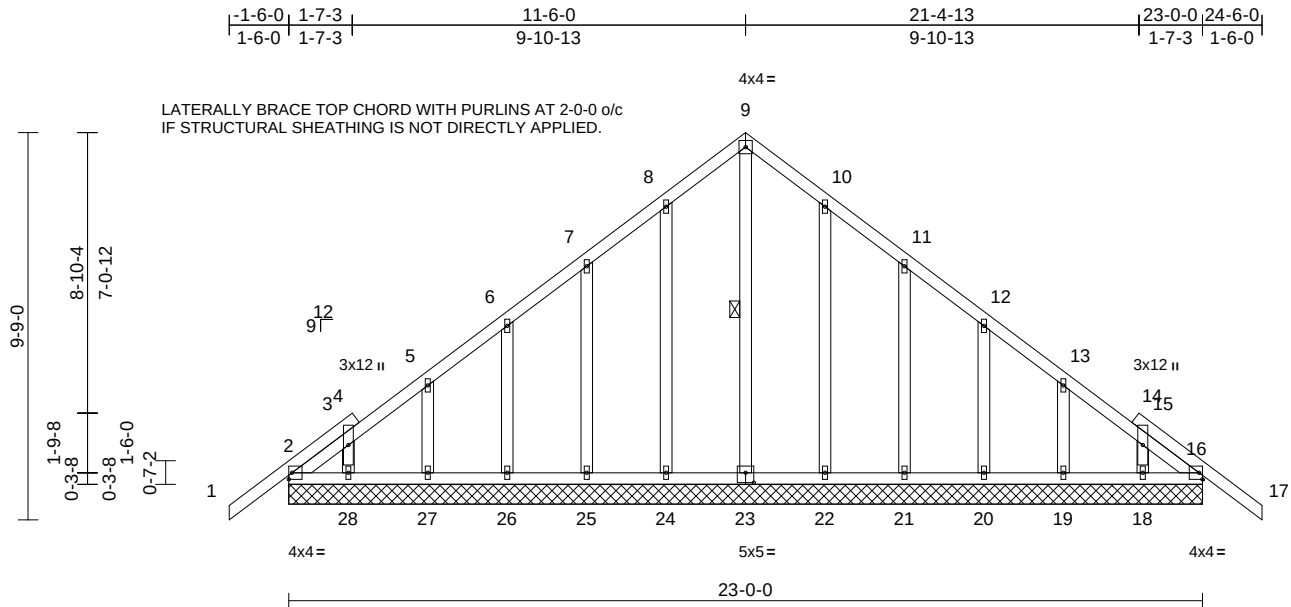
Job	Truss	Truss Type	Qty	Ply	
1024-089	D01	Common Supported Gable	2	1	
					T35639448
					Job Reference (optional)

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

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Scale = 1:58

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

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	0.17	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.25	BC	0.04	Vert(CT)	n/a	-	n/a	999	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.00	32	n/a	n/a	
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							
Weight: 158 lb FT = 20%											

LUMBER

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

BRACING

TOP CHORD	Structural wood sheathing directly applied.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 9-23

REACTIONS	(size)	2=23-0-0, 16=23-0-0, 18=23-0-0, 19=23-0-0, 20=23-0-0, 21=23-0-0, 22=23-0-0, 23=23-0-0, 24=23-0-0, 25=23-0-0, 26=23-0-0, 27=23-0-0, 28=23-0-0, 29=23-0-0, 32=23-0-0
	Max Horiz	2=181 (LC 11), 29=181 (LC 11)
	Max Uplift	2=-22 (LC 8), 16=-13 (LC 12), 18=-4 (LC 8), 19=-27 (LC 12), 20=-26 (LC 12), 21=-30 (LC 12), 22=-19 (LC 12), 24=-19 (LC 12), 25=-30 (LC 12), 26=-26 (LC 12), 27=-27 (LC 12), 28=-5 (LC 9), 29=-22 (LC 8), 32=-13 (LC 12)
	Max Grav	2=191 (LC 1), 16=191 (LC 1), 18=114 (LC 18), 19=169 (LC 18), 20=164 (LC 18), 21=166 (LC 18), 22=169 (LC 18), 23=143 (LC 12), 24=172 (LC 17), 25=164 (LC 17), 26=165 (LC 17), 27=166 (LC 1), 28=116 (LC 17), 29=191 (LC 1), 32=191 (LC 1)

FORCES

TOP CHORD	(lb) - Maximum Compression/Maximum Tension
	1-2=0/54, 2-3=-120/128, 3-5=-117/119, 5-6=-113/102, 6-7=-101/81, 7-8=-90/118, 8-9=-109/172, 9-10=-109/172, 10-11=-79/118, 11-12=-55/57, 12-13=-67/42, 13-15=-80/60, 15-16=-115/77, 16-17=0/53

BOT CHORD	2-28=-90/153, 27-28=-68/153, 26-27=-68/153, 25-26=-68/153, 24-25=-68/153, 22-24=-68/153, 21-22=-68/153, 20-21=-68/153, 19-20=-68/153, 18-19=-68/153, 16-18=-68/153
WEBS	9-23=-151/49, 8-24=-132/65, 7-25=-124/78, 6-26=-126/74, 5-27=-122/72, 3-28=-95/54, 10-22=-129/65, 11-21=-125/78, 12-20=-126/74, 13-19=-124/73, 15-18=-97/54

NOTES

- Unbalanced roof live loads have been considered for this design.
- 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
- 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.
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- All plates are 1.5x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2.

- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 22 lb uplift at joint 2, 13 lb uplift at joint 16, 19 lb uplift at joint 24, 30 lb uplift at joint 25, 26 lb uplift at joint 26, 27 lb uplift at joint 27, 5 lb uplift at joint 28, 19 lb uplift at joint 22, 30 lb uplift at joint 21, 26 lb uplift at joint 20, 27 lb uplift at joint 19, 4 lb uplift at joint 18, 22 lb uplift at joint 2 and 13 lb uplift at joint 16.
- 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:

November 25,2024

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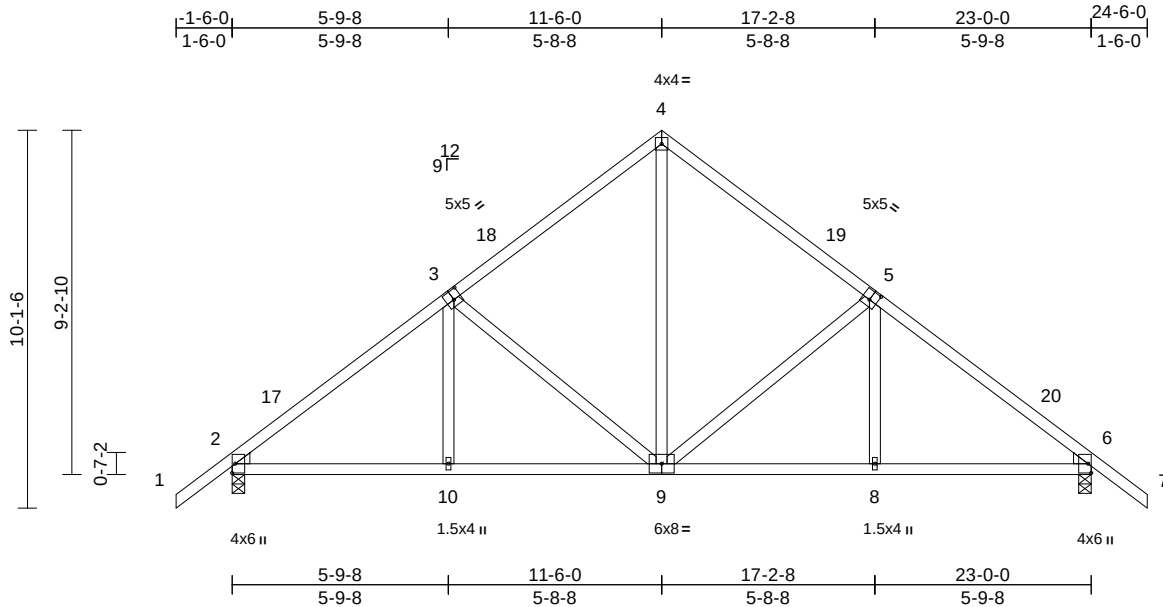
Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)	T35639449
1024-089	D02	Common	2	1		

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

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Scale = 1:61.7

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

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	0.28	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	0.36	Horz(CT)	0.03	6	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 131 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.2 Right: 2x4 SP No.2

BRACING

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

REACTIONS

(size)	2=0-4-0, 6=0-4-0
Max Horiz	2=-187 (LC 10)
Max Uplift	2=-36 (LC 12), 6=-36 (LC 12)
Max Grav	2=1010 (LC 1), 6=1010 (LC 1)

FORCES

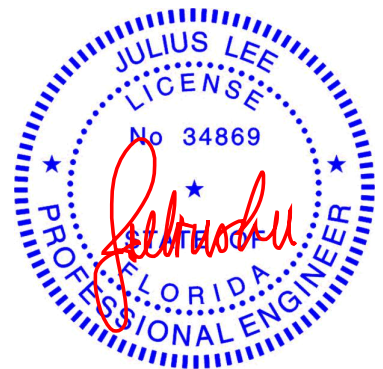
(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=0/54, 2-4=-1207/128, 4-6=-1207/128, 6-7=0/54
BOT CHORD	2-10=-4/912, 8-10=0/911, 6-8=0/890
WEBS	3-10=0/220, 4-9=-38/585, 5-8=0/220, 3-9=-391/97, 5-9=-391/97

NOTES

- Unbalanced roof live loads have been considered for this design.
- 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 11-6-0, Zone2 11-6-0 to 15-8-15, Zone1 15-8-15 to 24-6-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 36 lb uplift at joint 2 and 36 lb uplift at joint 6.
- 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:

November 25, 2024

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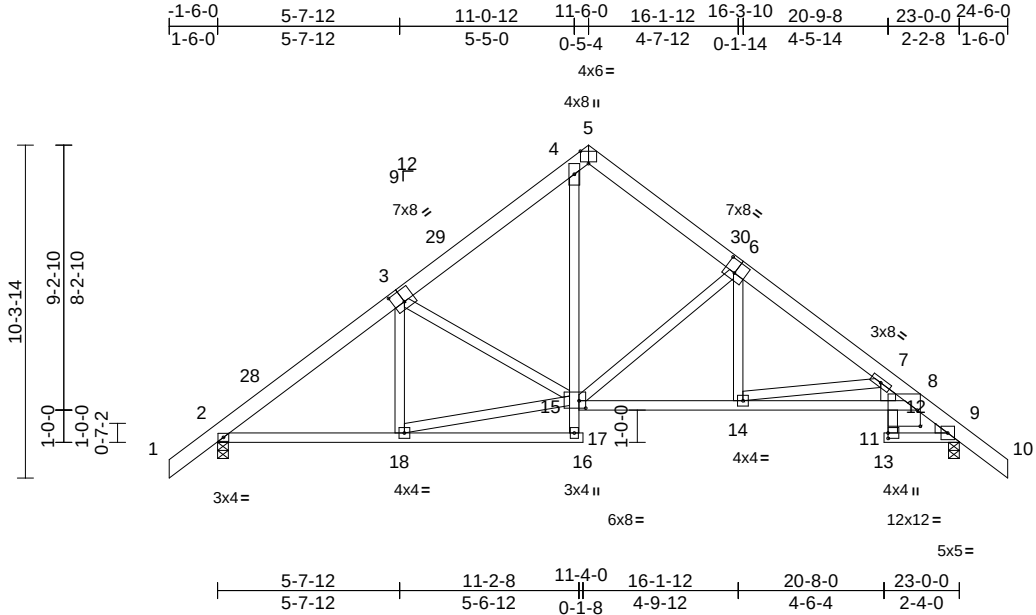
Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
1024-089	D03	Roof Special	5	1	T35639450

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

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Scale = 1:71.4

Plate Offsets (X, Y): [3:0-4-0,0-4-8], [5:0-3-0,Edge], [6:0-4-0,0-4-8], [8:0-1-2,0-6-0], [11:0-2-0,Edge], [15:0-2-8,0-2-12]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.50	Vert(LL)	-0.07	12-14	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.62	Vert(CT)	-0.14	12-14	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.36	Horz(CT)	0.09	9	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 173 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2 *Except* 7-12:2x6 SP No.2
WEDGE Right: 2x4 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied. Except:
10-0-0 oc bracing: 15-17

REACTIONS (size) 2=0-4-0, 9=0-4-0
Max Horiz 2=-187 (LC 10)
Max Uplift 2=-34 (LC 12), 9=-32 (LC 12)
Max Grav 2=1013 (LC 1), 9=1016 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/54, 2-4=-1248/101, 4-5=-375/94,
5-7=-1357/107, 7-8=-2459/0, 8-9=-979/32,
9-10=0/54

BOT CHORD 2-18=0/950, 17-18=0/67, 16-17=0/0,
15-17=0/118, 4-15=-17/718, 14-15=0/1056,
12-14=0/1911, 8-12=0/1581, 11-12=0/305,
11-13=0/0, 9-11=0/393

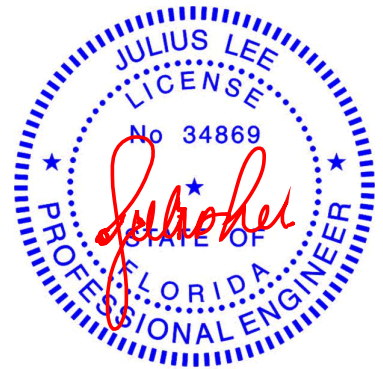
WEBS 3-18=-61/97, 15-18=0/902, 3-15=-313/104,
6-15=-482/70, 6-14=0/361, 7-14=-869/32,
7-12=0/706

NOTES

- Unbalanced roof live loads have been considered for this design.
- 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 11-6-0, Zone2 11-6-0 to 15-8-15, Zone1
15-8-15 to 24-6-0 zone; cantilever left and right
exposed; end vertical left and right exposed; C-C for
members and forces & MWFRS for reactions shown;
Lumber DOL=1.60 plate grip DOL=1.60

- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2 .
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 34 lb uplift at joint 2 and 32 lb uplift at joint 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



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

November 25, 2024

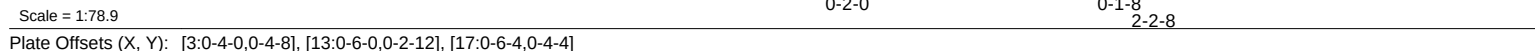
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Chesterfield, MO 63017
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Mayo Truss Company, Inc., Mayo, FL - 32066, Run: 8.73 S Oct 31 2024 Print: 8.730 S Oct 31 2024 MiTek Industries, Inc. Fri Nov 22 10:07:14 Page: 1
ID: Z9?tzhPa9wUUKYlthNGXFyLvPM-RfC?PsB70Ha3NSaPnL8w3ulTXbGKWrCDoi7J4zJC?f



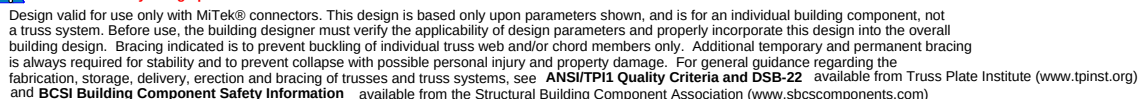
LUMBER		2) Wind: ASCE 7-22; Vult=130mph (3-second gust)
TOP CHORD	2x6 SP No.2	Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft;
BOT CHORD	2x4 SP No.2	B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed;
WEBS	2x4 SP No.2	MWFRS (directional) and C-C Zone3 -1-6-0 to 1-6-0,
BRACING		Zone1 1-6-0 to 11-6-0, Zone2 11-6-0 to 15-9-12, Zone1
TOP CHORD	Structural wood sheathing directly applied, except end verticals.	15-9-12 to 22-10-4 zone; cantilever left and right
BOT CHORD	Rigid ceiling directly applied. Except: 10-0-0 oc bracing: 17-19, 11-13	exposed ; end vertical left and right exposed;C-C for
REACTIONS (size) 2=0-4-0, 10=0-4-0		members and forces & MWFRS for reactions shown;
	Max Horiz 2=205 (LC 11)	Lumber DOL=1.60 plate grip DOL=1.60
	Max Uplift 2=-35 (LC 12)	3) Building Designer / Project engineer responsible for
	Max Grav 2=1010 (LC 1), 10=919 (LC 1)	verifying applied roof live load shown covers rain loading
FORCES (lb) - Maximum Compression/Maximum Tension		requirements specific to the use of this truss component.
TOP CHORD	1-2=0/54, 2-4=-1234/109, 4-5=-676/122, 5-6=-944/133, 6-7=-1296/82, 7-8=-1665/73, 8-9=-1452/63, 9-10=-861/60	4) Provide adequate drainage to prevent water ponding.
BOT CHORD	2-20=-84/922, 19-20=-2/159, 18-19=0/0, 17-19=0/114, 4-17=0/211, 16-17=0/593, 15-16=-58/1012, 14-15=-107/1621, 13-14=-126/1706, 11-13=0/50, 8-13=-405/3, 11-12=0/0, 10-11=-1/80	5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
WEBS	3-20=-67/95, 17-20=-84/782, 3-17=-287/81, 5-16=-65/546, 6-16=-466/82, 6-15=0/311, 7-15=-628/51, 7-14=-344/85, 10-13=-87/33, 9-13=-98/1631	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 35 lb uplift at joint 2.
		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

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

LOAD CASE(S) Standard

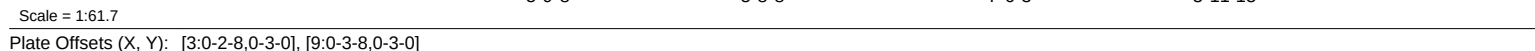


November 25, 2024



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

Mayo Truss Company, Inc., Mayo, FL - 32066, Run: 8.73 S Oct 31 2024 Print: 8.730 S Oct 31 2024 MiTek Industries, Inc. Fri Nov 22 10:07:14 Page: 1
ID:W2PrtU6cs?wvnKU5f91NryLzd5-RfC?PsB70Ha3NSaPqnL8w3uITxbGKWrCDoi7J4zJC?i



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

BRACING
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 5-9

REACTIONS (size) 2=0-4-0, 7=0-4-0
Max Horiz 2=220 (LC 11)
Max Uplift 2=-36 (LC 12)
Max Grav 2=1007 (LC 1), 7=911 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/54, 2-4=-1199/130, 4-5=-898/101, 5-6=-913/79, 6-7=-885/63
BOT CHORD 2-10=-134/894, 8-10=-135/942, 7-8=-44/57
WEBS 5-8=-678/128, 6-8=-67/1204, 3-10=0/207, 3-9=-379/94, 4-9=-4/560, 5-9=-386/106

- 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.
- 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

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

November 25, 2024



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/TP1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Components Association (www.sbsccomponents.com)

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Job	Truss	Truss Type	Qty	Ply	
1024-089	D06	Roof Special	1	1	Job Reference (optional)

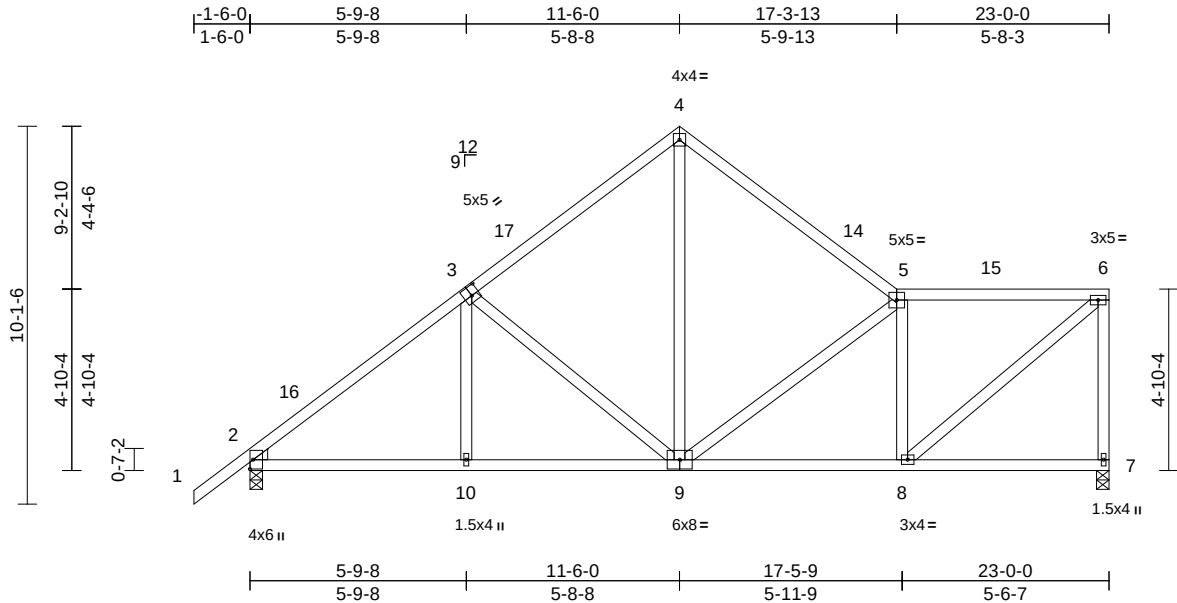
T35639453

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

Run: 8.73 S Oct 31 2024 Print: 8.730 S Oct 31 2024 MiTek Industries, Inc. Fri Nov 22 10:07:15

Page: 1

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Scale = 1:61.7

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

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	0.32	Vert(LL)	-0.03	9-10	>999	240	MT20
TCDL	10.0	Lumber DOL	1.25	BC	0.35	Vert(CT)	-0.08	8-9	>999	180	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.36	Horz(CT)	0.02	7	n/a	n/a	
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							
Weight: 142 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.2

BRACING

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

REACTIONS

(size) 2=0-4-0, 7=0-4-0
Max Horiz 2=233 (LC 11)
Max Uplift 2=-35 (LC 12)
Max Grav 2=1007 (LC 1), 7=911 (LC 1)

FORCES

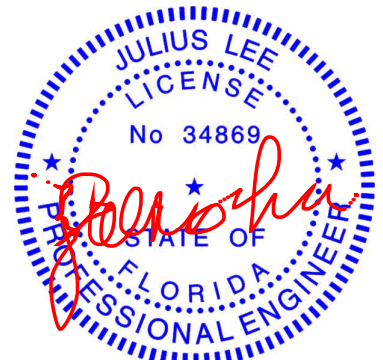
(lb) - Maximum Compression/Maximum Tension
TOP CHORD 4-5=-858/115, 5-6=-854/90, 6-7=-859/87, 1-2=0/54, 2-4=-1202/134
BOT CHORD 2-10=-176/898, 8-10=-177/897, 7-8=-51/74
WEBS 5-8=-590/126, 6-8=-73/1087, 3-10=0/220, 3-9=-390/96, 4-9=-33/567, 5-9=-358/96

NOTES

- Unbalanced roof live loads have been considered for this design.
- 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 11-6-0, Zone2 11-6-0 to 15-8-15, Zone1 15-8-15 to 22-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 35 lb uplift at joint 2.
- 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:

November 25, 2024

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

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

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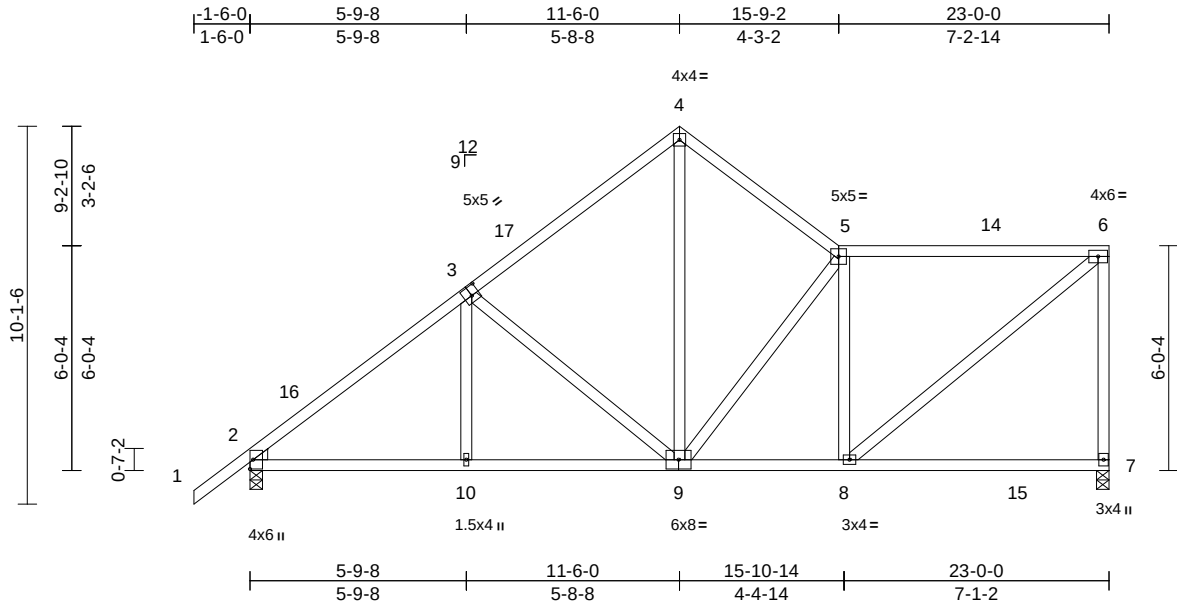
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	
1024-089	D07	Roof Special	1	1	
Job Reference (optional)					T35639454

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

Run: 8.73 S Oct 31 2024 Print: 8.730 S Oct 31 2024 MiTek Industries, Inc. Fri Nov 22 10:07:15
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Page: 1



Scale = 1:61.7

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

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	0.57	Vert(LL)	-0.09	7-8	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.42	Vert(CT)	-0.16	7-8	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.43	Horz(CT)	0.02	7	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 147 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS

(size) 2=0-4-0, 7=0-4-0
Max Horiz 2=245 (LC 11)
Max Uplift 2=-34 (LC 12)
Max Grav 2=1094 (LC 17), 7=1036 (LC 17)

FORCES

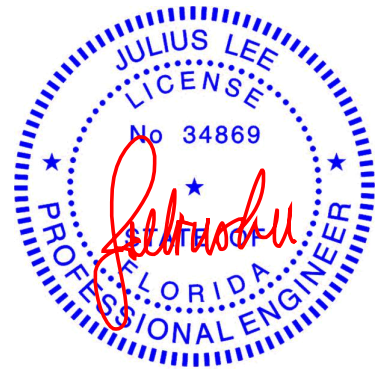
(lb) - Maximum Compression/Maximum Tension
TOP CHORD 4-5=-902/134, 5-6=-883/103, 6-7=-888/108, 1-2=0/54, 2-4=-1296/141
BOT CHORD 2-10=-213/1074, 8-10=-214/1072, 7-8=-61/91
WEBS 5-8=-514/140, 6-8=-86/1114, 3-10=0/232, 3-9=-471/98, 4-9=-67/746, 5-9=-445/96

NOTES

- Unbalanced roof live loads have been considered for this design.
- 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 11-6-0, Zone3 11-6-0 to 15-9-2, Zone1 15-9-2 to 22-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- All bearings are assumed to be SP No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 34 lb uplift at joint 2.
- 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:

November 25, 2024

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

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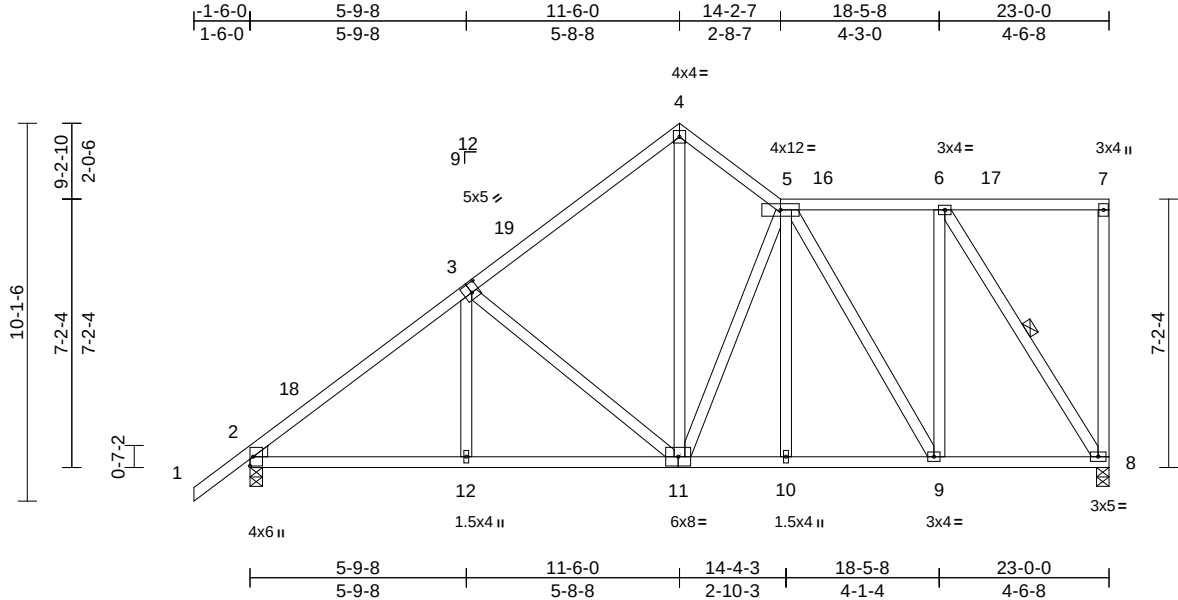
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	
1024-089	D08	Roof Special	1	1	Job Reference (optional)
					T35639455

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

Run: 8.73 S Oct 31 2024 Print: 8.730 S Oct 31 2024 MiTek Industries, Inc. Fri Nov 22 10:07:15
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Page: 1



Scale = 1:61.7									
Plate Offsets (X, Y): [3:0-2-8,0-3-0]									
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in (loc)	l/defl	L/d
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.28	Vert(LL)	-0.03 11-12	>999	240
TCDL	10.0	Lumber DOL	1.25	BC	0.33	Vert(CT)	-0.08 11-12	>999	180
BCLL	0.0*	Rep Stress Incr	YES	WB	0.47	Horz(CT)	0.03 8	n/a	n/a
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS					
								Weight: 170 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.2
BRACING	
TOP CHORD	Structural wood sheathing directly applied, except end verticals.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 6-8
REACTIONS	
(size)	2=0-4-0, 8=0-4-0
Max Horiz	2=258 (LC 11)
Max Uplift	2=-33 (LC 12), 8=-6 (LC 9)
Max Grav	2=1007 (LC 1), 8=911 (LC 1)
FORCES	
(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	4-5=-774/139, 5-6=-492/111, 6-7=-105/109, 7-8=-111/45, 1-2=0/54, 2-4=-1204/135
BOT CHORD	2-12=-245/905, 10-12=-245/903, 9-10=-156/713, 8-9=-117/492
WEBS	5-10=0/105, 6-8=-901/91, 6-9=0/468, 5-9=-422/73, 3-12=0/227, 4-11=-81/624, 5-11=-337/92, 3-11=-396/100

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - 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 11-6-0, Zone3 11-6-0 to 14-2-7, Zone1 14-2-7 to 22-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.

- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2 .
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 6 lb uplift at joint 8 and 33 lb uplift at joint 2.
- 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:

November 25,2024

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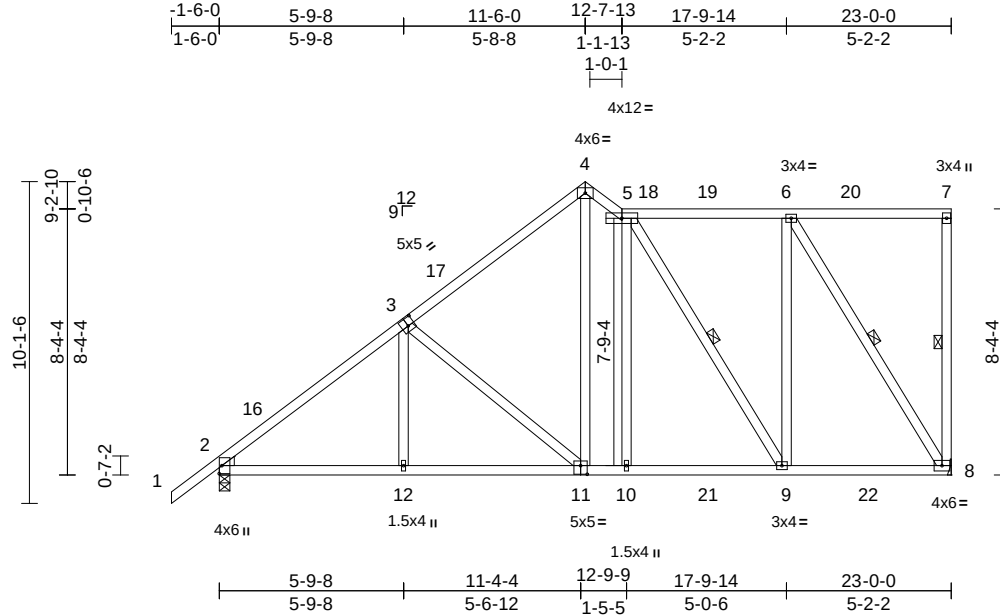
Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
1024-089	D09	Roof Special	1	1	T35639456

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

Run: 8.73 S Oct 31 2024 Print: 8.730 S Oct 31 2024 MiTek Industries, Inc. Fri Nov 22 10:07:15

Page: 1

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Scale = 1:72.4

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

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	0.38	Vert(LL)	-0.10	9-10	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.55	Vert(CT)	-0.18	9-10	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.43	Horz(CT)	0.03	8	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 168 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.2

BRACING

TOP CHORD	Structural wood sheathing directly applied, except end verticals.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 7-8, 5-9, 6-8

REACTIONS

(size)	2=0-4-0, 8= Mechanical
Max Horiz	2=271 (LC 11)
Max Uplift	2=-31 (LC 12), 8=-28 (LC 9)
Max Grav	2=1123 (LC 17), 8=1071 (LC 17)

FORCES

	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=0/54, 2-4=-1327/130, 4-5=-751/121, 5-6=-579/126, 6-7=-119/125, 7-8=-116/49
BOT CHORD	2-12=-274/1093, 10-12=-275/1091, 9-10=-191/763, 8-9=-133/586
WEBS	3-12=0/206, 3-11=-414/110, 4-11=-45/586, 5-10=-170/87, 5-9=-328/107, 6-9=0/551, 6-8=-1059/105

NOTES

- Unbalanced roof live loads have been considered for this design.
- 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 11-6-0, Zone3 11-6-0 to 12-7-13, Zone1 12-7-13 to 22-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.

- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Bearings are assumed to be: Joint 2 SP No.2
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 28 lb uplift at joint 8 and 31 lb uplift at joint 2.
- 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:

November 25, 2024

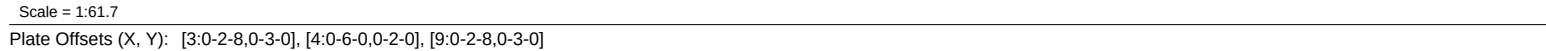
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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

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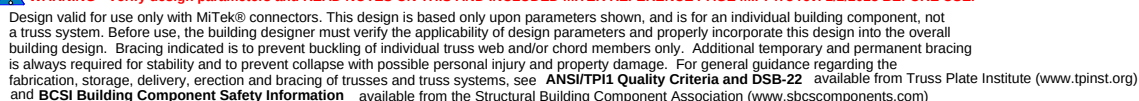
Mayo Truss Company, Inc., Mayo, FL - 32066, Run: 8.73 S Oct 31 2024 Print: 8.730 S Oct 31 2024 MiTek Industries, Inc. Fri Nov 22 10:07:15 Page: 1
ID:W2PlrtU6cs?vwnKU5f91NryLzd5-RfC?PsB70Hg3NSgPqnL8w3ulTXbGKWCRDci7J4zJC?f

[illegible]

- 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 11-6-0, Zone2 11-6-0 to 15-8-15, Zone1 15-8-15 to 22-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 4) Provide adequate drainage to prevent water ponding.



November 25, 2024



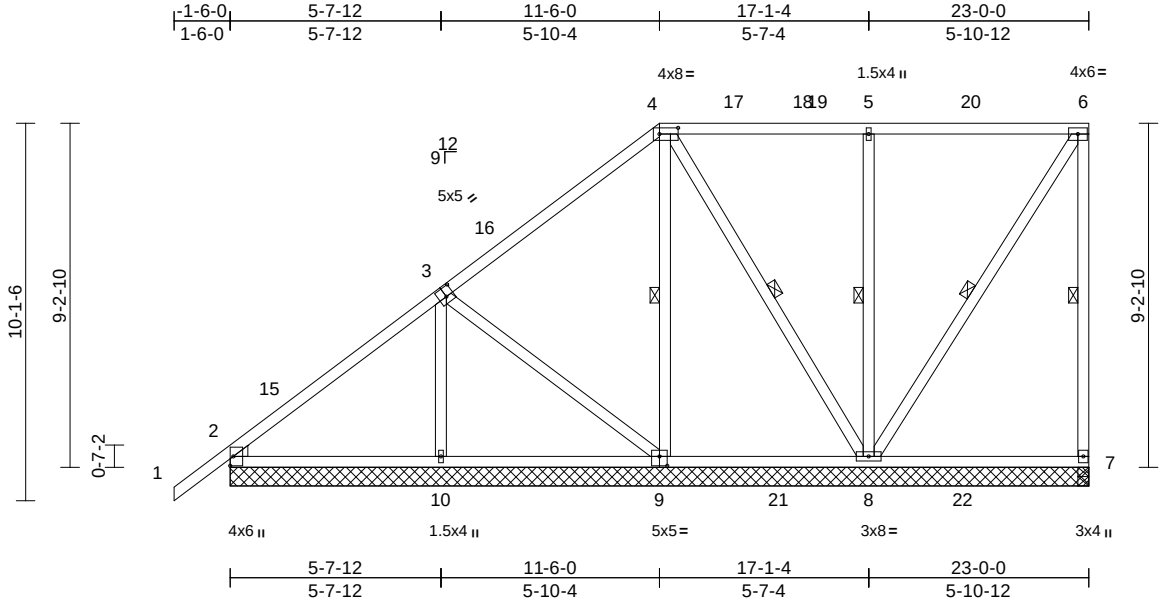
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16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
1024-089	D11	Half Hip	1	1	T35639458

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

Run: 8.73 S Oct 31 2024 Print: 8.730 S Oct 31 2024 MiTek Industries, Inc. Fri Nov 22 10:07:15
ID:6?nTLTsYJOvW8YCRPFIDl7NylZcc-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1



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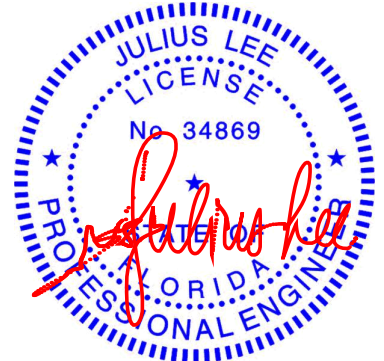
Plate Offsets (X, Y): [3:0-2-8,0-3-0], [4:0-6-0,0-2-0], [9:0-2-8,0-3-0]												
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.43	Vert(LL)	-0.05	7-8	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.33	Vert(CT)	-0.07	7-8	>962	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.19	Horz(CT)	0.01	7	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 162 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.2
BRACING	
TOP CHORD	Structural wood sheathing directly applied, except end verticals.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 6-7, 4-9, 4-8, 5-8, 6-8
REACTIONS	(size) 2=23-0-0, 7=23-0-0, 8=23-0-0, 9=23-0-0, 10=23-0-0, 11=23-0-0
	Max Horiz 2=281 (LC 11), 11=281 (LC 11)
	Max Uplift 2=-35 (LC 12), 7=-24 (LC 9), 8=-51 (LC 12), 9=-2 (LC 9), 11=-35 (LC 12)
	Max Grav 2=429 (LC 18), 7=224 (LC 17), 8=702 (LC 17), 9=490 (LC 17), 10=384 (LC 17), 11=429 (LC 18)
FORCES	
(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=0/54, 2-4=-330/116, 4-5=-98/110, 5-6=-98/110, 6-7=-106/60
BOT CHORD	2-10=-256/328, 8-10=-228/329, 7-8=-118/135
WEBS	3-10=-199/73, 3-9=-201/98, 4-9=-166/64, 4-8=-135/88, 5-8=-397/104, 6-8=-71/48

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - 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 11-6-0, Zone2 11-6-0 to 15-8-15, Zone1 15-8-15 to 22-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- All bearings are assumed to be SP No.2 .
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 35 lb uplift at joint 2, 2 lb uplift at joint 9, 24 lb uplift at joint 7, 51 lb uplift at joint 8 and 35 lb uplift at joint 2.
- 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:

November 25,2024

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

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Job	Truss	Truss Type	Qty	Ply	
1024-089	D12	Half Hip	1	1	Job Reference (optional)

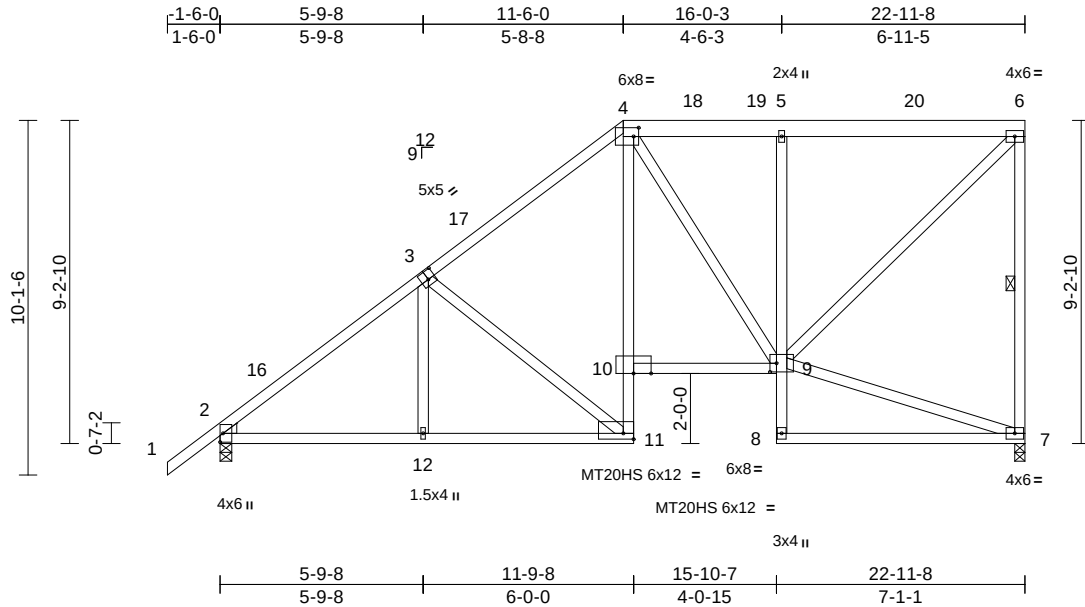
T35639459

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

Run: 8.73 S Oct 31 2024 Print: 8.730 S Oct 31 2024 MiTek Industries, Inc. Fri Nov 22 10:07:15

Page: 1

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Scale = 1:65.7

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.43	Vert(LL)	-0.19	9-10	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.87	Vert(CT)	-0.39	9-10	>703	180	MT20HS	187/143
BCLL	0.0*	Rep Stress Incr	YES	WB	0.33	Horz(CT)	0.49	7	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS								
Weight: 176 lb											FT = 20%	

LUMBER

TOP CHORD	2x4 SP No.2 *Except* 4-6:2x6 SP No.2
BOT CHORD	2x4 SP No.1 *Except* 11-4,5-8:2x4 SP SS, 8-7:2x4 SP No.2
WEBS	2x4 SP No.2
WEDGE	Left: 2x4 SP No.2

BRACING

TOP CHORD	Structural wood sheathing directly applied, except end verticals.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 6-7

REACTIONS

(size)	2=0-4-0, 7=0-3-8
Max Horiz	2=279 (LC 11)
Max Uplift	2=-30 (LC 12), 7=-42 (LC 9)
Max Grav	2=1005 (LC 1), 7=910 (LC 1)

FORCES

TOP CHORD	1-2=0/54, 2-4=-1178/127, 4-5=-683/103, 5-6=-675/104, 6-7=-852/181
BOT CHORD	2-12=-282/898, 11-12=-283/898, 10-11=-46/351, 4-10=-2/321, 9-10=-250/731, 8-9=0/143, 5-9=-397/105, 7-8=-33/46
WEBS	3-12=0/163, 3-11=-343/83, 4-9=-87/61, 7-9=-137/146, 6-9=-208/945

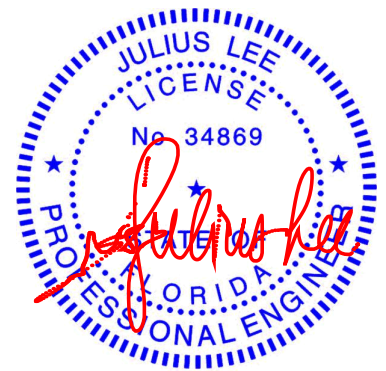
NOTES

- Unbalanced roof live loads have been considered for this design.
- 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 11-6-0, Zone2 11-6-0 to 16-0-3, Zone1 16-0-3 to 22-9-12 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

- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Bearings are assumed to be: Joint 2 SP No.1, Joint 7 SP No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 42 lb uplift at joint 7 and 30 lb uplift at joint 2.
- 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:

November 25,2024

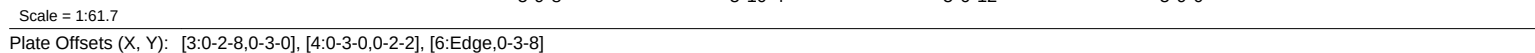
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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MiTek®

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

Mayo Truss Company, Inc., Mayo, FL - 32066, Run: 8.73 S Oct 31 2024 Print: 8.730 S Oct 31 2024 MiTek Industries, Inc. Fri Nov 22 10:07:16 Page: 1
ID:RXUzHRCcFu 9cObdZ?N7zvLvJ9-RfC?PsB70Hg3NSoPanL8w3ulTXbGKWrcDoi7J4zJC?f



LUMBER	
TOP CHORD	2x4 SP No.2 *Except* 4-6:2x6 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.2
WEDGE	Left: 2x4 SP No.2
BRACING	
TOP CHORD	Structural wood sheathing directly applied, except end verticals.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 6-7, 5-7
REACTIONS	
(size)	2=0-4-0, 7=0-3-8
Max Horiz	2=279 (LC 11)
Max Uplift	2=-30 (LC 12), 7=-42 (LC 9)
Max Grav	2=1126 (LC 17), 7=1086 (LC 17)
FORCES	
	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	4-5=-711/140, 5-6=-134/141, 6-7=-139/63, 1-2=0/54, 2-4=-1343/134
BOT CHORD	2-10=-288/1106, 8-10=-288/1103, 7-8=-150/581
WEBS	3-10=0/225, 4-9=0/261, 5-8=0/342, 3-9=-457/101, 5-9=-111/318, 5-7=-1034/132

LOAD CASE(S) Standard

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 11-6-0, Zone2 11-6-0 to 15-8-15, Zone1
15-8-15 to 22-9-12 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.



November 25, 2024



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

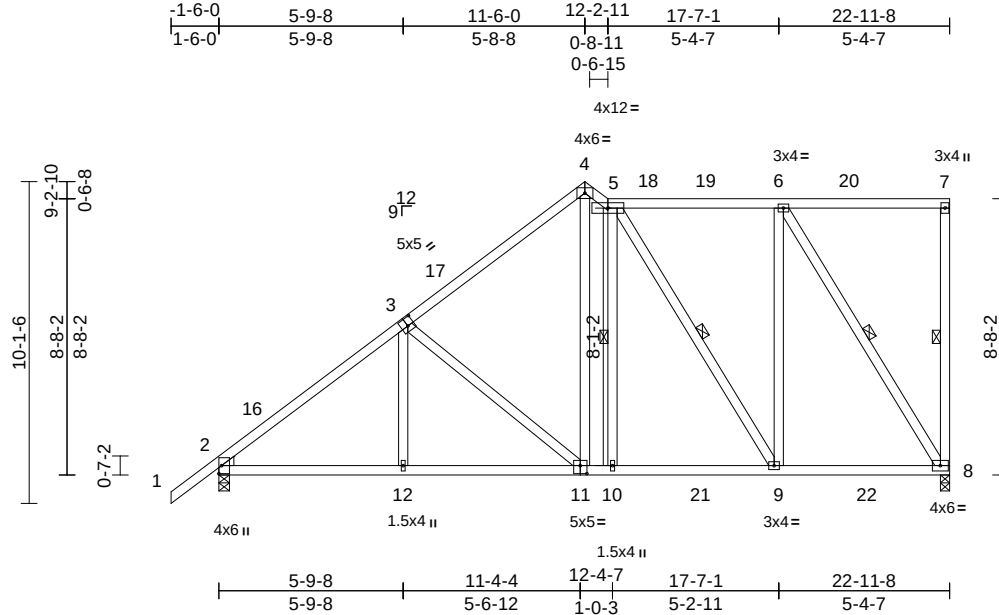
Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
1024-089	D14	Roof Special	1	1	T35639461

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

Run: 8.73 S Oct 31 2024 Print: 8.730 S Oct 31 2024 MiTek Industries, Inc. Fri Nov 22 10:07:16

Page: 1

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Scale = 1:72.4

Plate Offsets (X, Y): [3:0-2-8,0-3-0], [11:0-2-8,0-3-0]

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	0.38	Vert(LL)	-0.07	9-10	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.46	Vert(CT)	-0.12	9-10	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.46	Horz(CT)	0.03	8	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 171 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.2

BRACING

TOP CHORD	Structural wood sheathing directly applied, except end verticals.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 7-8, 5-10, 5-9, 6-8

REACTIONS

(size)	2=0-4-0, 8=0-3-8
Max Horiz	2=274 (LC 11)
Max Uplift	2=-31 (LC 12), 8=-33 (LC 9)
Max Grav	2=1125 (LC 17), 8=1074 (LC 17)

FORCES

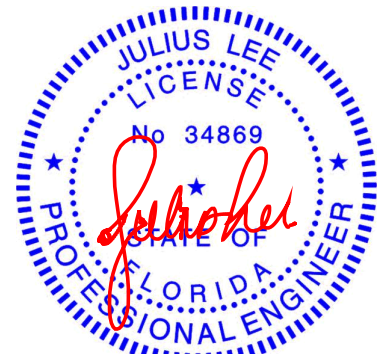
(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=0/54, 2-4=-1334/126, 4-5=-705/115, 5-6=-571/128, 6-7=-123/129, 7-8=-124/52
BOT CHORD	2-12=-280/1098, 10-12=-281/1096, 9-10=-199/760, 8-9=-139/580
WEBS	3-12=0/214, 3-11=-429/109, 4-11=-38/530, 5-10=-132/73, 5-9=-334/111, 6-9=0/545, 6-8=-1045/111

NOTES

- Unbalanced roof live loads have been considered for this design.
- 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 11-6-0, Zone3 11-6-0 to 12-2-11, Zone1 12-2-11 to 22-9-12 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
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.

- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- All bearings are assumed to be SP No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 33 lb uplift at joint 8 and 31 lb uplift at joint 2.
- 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:

November 25, 2024

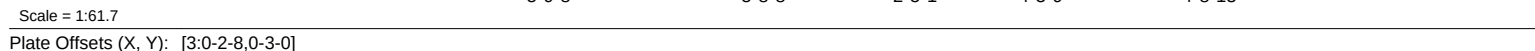
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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MiTek®

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Mayo Truss Company, Inc., Mayo, FL - 32066, Run: 8.73 S Oct 31 2024 Print: 8.730 S Oct 31 2024 MiTek Industries, Inc. Fri Nov 22 10:07:16 Page: 1
ID:RXUzHRCcFu 9cObdZ?N7zLvJ9-RfC?PsB70Hg3NSoPanL8w3uITXBGKWrCDoi7J4zJC?f



LUMBER			4) Provide adequate drainage to prevent water ponding.
TOP CHORD	2x4 SP No.2		5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
BOT CHORD	2x4 SP No.2		
WEBS	2x4 SP No.2		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.
WEDGE	Left: 2x4 SP No.2		
BRACING			7) All bearings are assumed to be SP No.2 .
TOP CHORD	Structural wood sheathing directly applied, except end verticals.		8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 12 lb uplift at joint 8 and 32 lb uplift at joint 2.
BOT CHORD	Rigid ceiling directly applied.		
WEBS	1 Row at midpt 6-8, 5-9		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.
REACTIONS		(size) 2=0-4-0, 8=0-3-8	
		Max Horiz 2=262 (LC 11)	
		Max Uplift 2=-32 (LC 12), 8=-12 (LC 9)	
		Max Grav 2=1005 (LC 1), 8=910 (LC 1)	
FORCES		(lb) - Maximum Compression/Maximum Tension	LOAD CASE(S) Standard
TOP CHORD	1-2=0/54, 2-4=-1201/133, 4-5=-759/140, 5-6=-486/115, 6-7=-109/113, 7-8=-115/46		
BOT CHORD	2-12=-252/904, 10-12=-253/903, 9-10=-163/690, 8-9=-123/486		
WEBS	3-12=0/228, 3-11=-395/101, 4-11=-84/626, 5-10=0/96, 6-8=-892/96, 5-11=-339/90, 6-9=0/457, 5-9=-389/78		

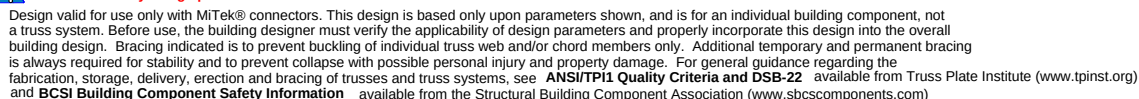
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-22; Vult=130mph (3-second gust)
Vasd=101mph; TCDF=6.0psf; BCDF=6.0psf; h=15ft;
B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed;
MWFRS (directional) and C-C Zone3 -1-6-0 to 1-6-0,
Zone1 1-6-0 to 11-6-0, Zone3 11-6-0 to 13-9-5, Zone1
13-9-5 to 22-9-12 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.
- 7) All bearings are assumed to be SP No.2 .
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 12 lb uplift at joint 8 and 32 lb uplift at joint 2.
- 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



November 25.2024



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

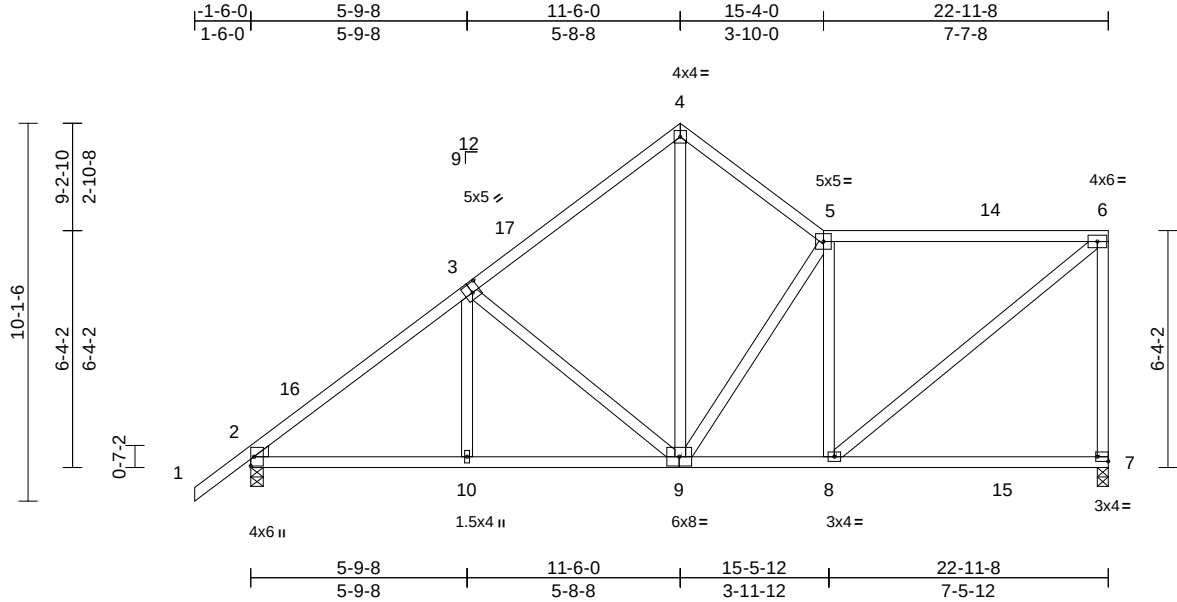
Job	Truss	Truss Type	Qty	Ply	
1024-089	D16	Roof Special	1	1	T35639463
Job Reference (optional)					

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

Run: 8.73 S Oct 31 2024 Print: 8.730 S Oct 31 2024 MiTek Industries, Inc. Fri Nov 22 10:07:16

Page: 1

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Scale = 1:61.7

Plate Offsets (X, Y): [3:0-2-8,0-3-0], [7:Edge,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	0.65	Vert(LL)	-0.11	7-8	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.46	Vert(CT)	-0.20	7-8	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.44	Horz(CT)	0.02	7	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 148 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS

(size) 2=0-4-0, 7=0-3-8
Max Horiz 2=249 (LC 11)
Max Uplift 2=-34 (LC 12)
Max Grav 2=1094 (LC 17), 7=1041 (LC 17)

FORCES

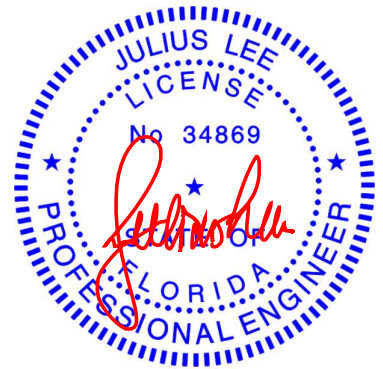
(lb) - Maximum Compression/Maximum Tension
TOP CHORD 4-5=-894/137, 5-6=-866/104, 6-7=-883/114, 1-2=0/54, 2-4=-1296/140
BOT CHORD 2-10=-222/1074, 8-10=-223/1072, 7-8=-64/96
WEBS 5-8=-493/147, 6-8=-91/1091, 3-10=0/234, 3-9=-474/98, 4-9=-74/758, 5-9=-458/94

NOTES

- Unbalanced roof live loads have been considered for this design.
- 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 11-6-0, Zone3 11-6-0 to 15-4-0, Zone1 15-4-0 to 22-9-12 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
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- All bearings are assumed to be SP No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 34 lb uplift at joint 2.
- 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:

November 25, 2024

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

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

MiTek®

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Chesterfield, MO 63017
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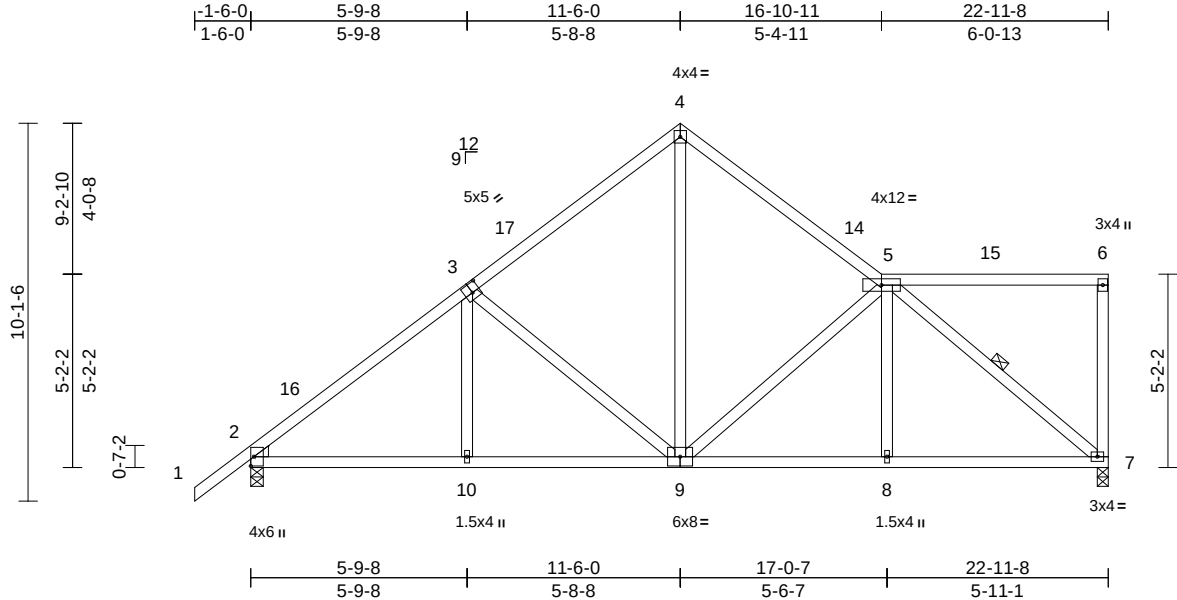
Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)	T35639464
1024-089	D17	Roof Special	1	1		

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

Run: 8.73 S Oct 31 2024 Print: 8.730 S Oct 31 2024 MiTek Industries, Inc. Fri Nov 22 10:07:16

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Scale = 1:61.7

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

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	0.33	Vert(LL)	-0.03	7-8	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.35	Vert(CT)	-0.08	9-10	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.36	Horz(CT)	0.03	7	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 143 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.2

BRACING

TOP CHORD	Structural wood sheathing directly applied, except end verticals.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 5-7

REACTIONS

(size)	2=0-4-0, 7=0-3-8
Max Horiz	2=236 (LC 11)
Max Uplift	2=-35 (LC 12)
Max Grav	2=1005 (LC 1), 7=910 (LC 1)

FORCES

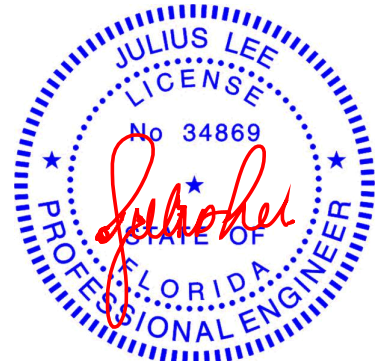
(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	4-5=-846/120, 5-6=-91/79, 6-7=-171/44, 1-2=0/54, 2-4=-1200/135
BOT CHORD	2-10=-187/897, 8-10=-188/896, 7-8=-111/852
WEBS	4-9=-42/574, 3-10=0/223, 3-9=-393/97, 5-9=-353/96, 5-8=0/238, 5-7=-1071/77

NOTES

- Unbalanced roof live loads have been considered for this design.
- 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 11-6-0, Zone2 11-6-0 to 15-8-15, Zone1 15-8-15 to 22-9-12 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
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.

- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 35 lb uplift at joint 2.
- 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:

November 25, 2024

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

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MiTek®

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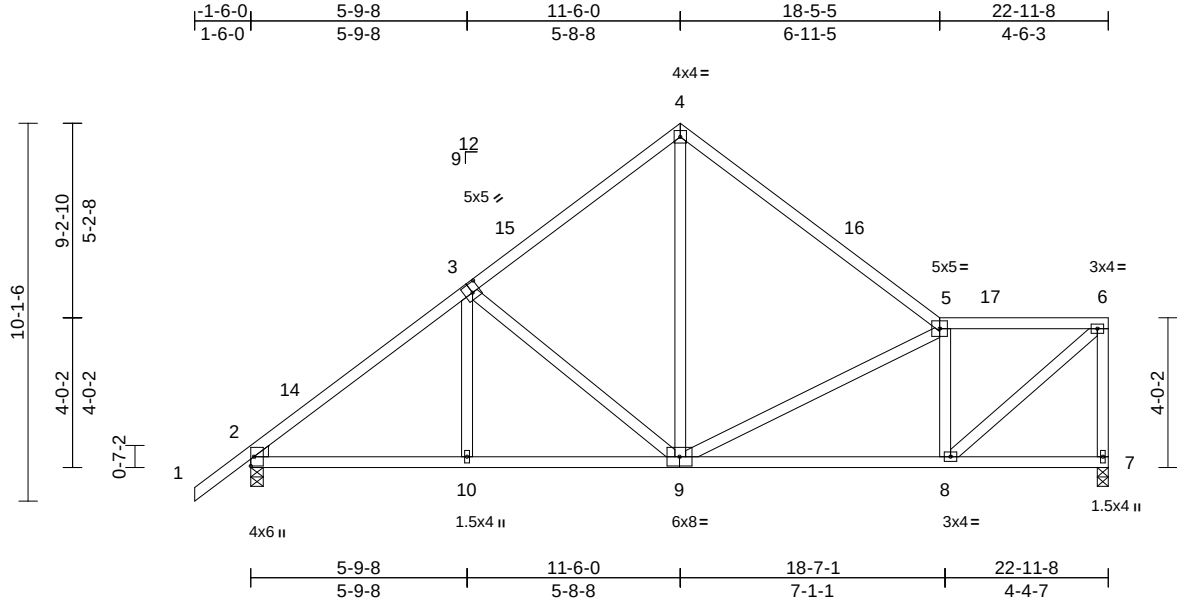
Job	Truss	Truss Type	Qty	Ply	T35639465
1024-089	D18	Roof Special	1	1	Job Reference (optional)

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

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Scale = 1:61.7

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

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	0.50	Vert(LL)	-0.06	8-9	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.45	Vert(CT)	-0.14	8-9	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.40	Horz(CT)	0.03	7	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 138 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.2

BRACING

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

REACTIONS

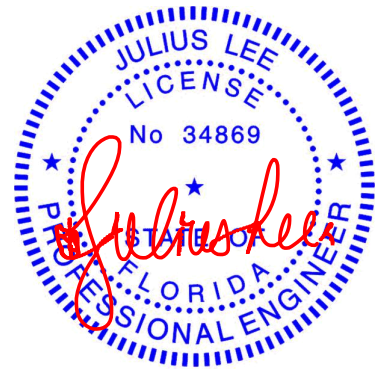
(size)	2=0-4-0, 7=0-3-8
Max Horiz	2=223 (LC 11)
Max Uplift	2=-36 (LC 12)
Max Grav	2=1005 (LC 1), 7=910 (LC 1)
TOP CHORD	1-2=-0/54, 2-4=-1197/131, 4-5=-881/105, 5-6=-888/81, 6-7=-876/70
BOT CHORD	2-10=-146/893, 8-10=-147/914, 7-8=-46/61
WEBS	5-8=-651/126, 6-8=-67/1164, 3-10=0/208, 3-9=-381/95, 5-9=-371/102, 4-9=-11/559

NOTES

- Unbalanced roof live loads have been considered for this design.
- 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 11-6-0, Zone2 11-6-0 to 15-8-15, Zone1 15-8-15 to 22-9-12 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
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 36 lb uplift at joint 2.
- 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:

November 25, 2024

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

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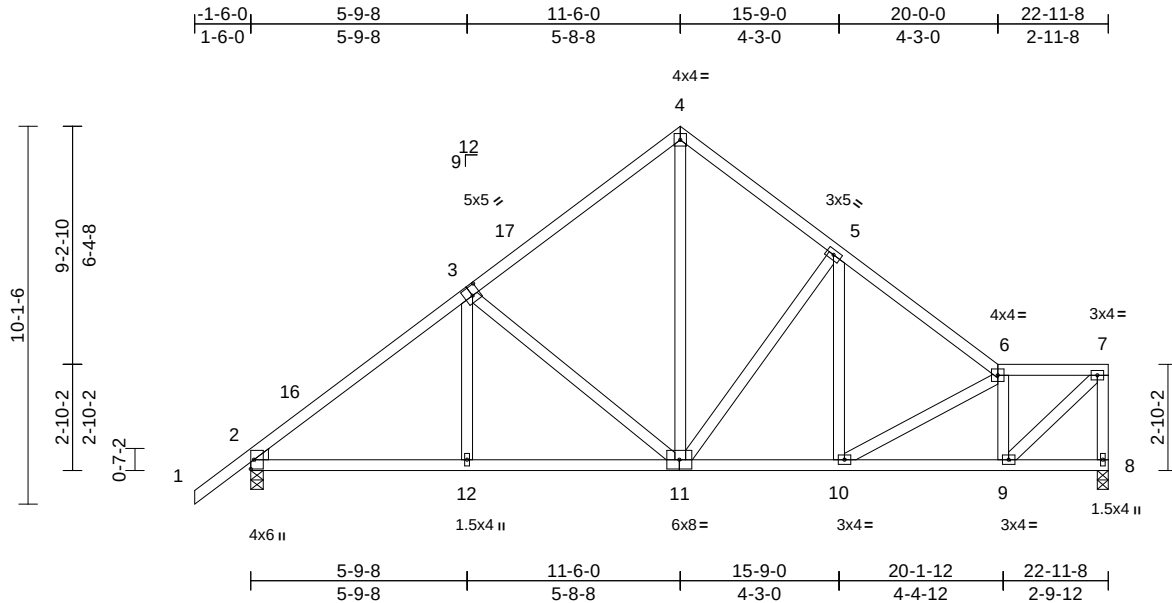
Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)	T35639466
1024-089	D19	Roof Special	1	1		

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

Run: 8.73 S Oct 31 2024 Print: 8.730 S Oct 31 2024 MiTek Industries, Inc. Fri Nov 22 10:07:16

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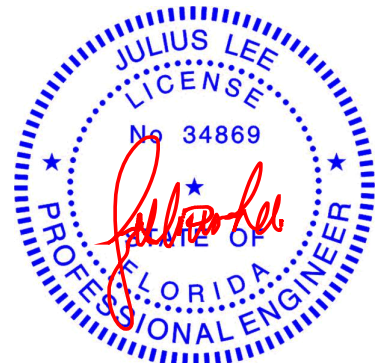
Scale = 1:61.7											
Plate Offsets (X, Y): [3:0-2-8,0-3-0]											
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.28	Vert(LL)	-0.03	11-12	>999	240	GRIP
TCDL	10.0	Lumber DOL	1.25	BC	0.33	Vert(CT)	-0.08	11-12	>999	180	MT20
BCLL	0.0*	Rep Stress Incr	YES	WB	0.37	Horz(CT)	0.03	8	n/a	n/a	
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 146 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.2
BRACING	
TOP CHORD	Structural wood sheathing directly applied, except end verticals.
BOT CHORD	Rigid ceiling directly applied.
REACTIONS (size) 2=0-4-0, 8=0-3-8	
Max Horiz	2=211 (LC 11)
Max Uplift	2=37 (LC 12)
Max Grav	2=1005 (LC 1), 8=910 (LC 1)
FORCES (lb) - Maximum Compression/Maximum Tension	
TOP CHORD	4-5=-822/130, 5-6=-1061/82, 6-7=-853/56, 7-8=-879/56, 1-2=0/54, 2-4=-1201/132
BOT CHORD	2-12=-102/896, 10-12=-103/895, 9-10=-73/895, 8-9=-28/42
WEBS	6-9=-737/90, 7-9=-55/1155, 3-12=0/226, 3-11=-396/97, 4-11=-63/611, 5-11=-359/95, 5-10=0/215, 6-10=-135/47

- NOTES**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -1-6-0 to 1-6-0, Zone1 1-6-0 to 11-6-0, Zone2 11-6-0 to 15-9-0, Zone1 15-9-0 to 22-9-12 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.
- 7) All bearings are assumed to be SP No.2 .
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 37 lb uplift at joint 2.
- 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



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

November 25,2024

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

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MiTek®

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Chesterfield, MO 63017
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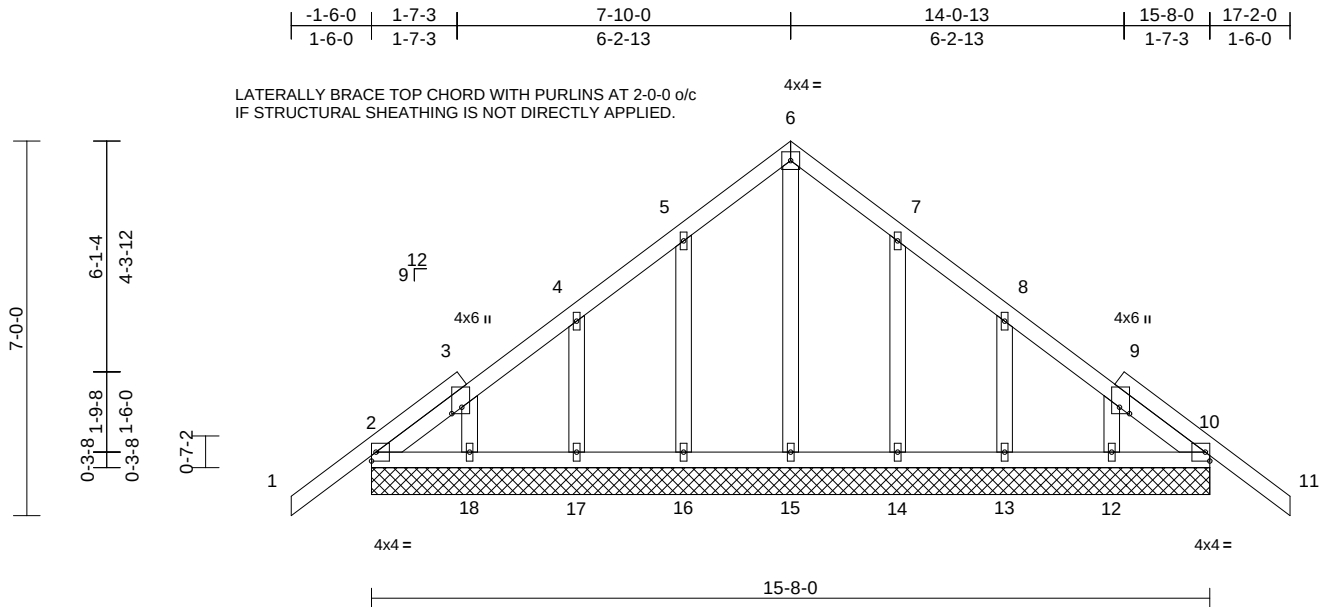
Job	Truss	Truss Type	Qty	Ply	
1024-089	G01	Common Supported Gable	1	1	Job Reference (optional)
					T35639467

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

Run: 8.73 S Oct 31 2024 Print: 8.730 S Oct 31 2024 MiTek Industries, Inc. Fri Nov 22 10:07:17

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Scale = 1:43.1

Plate Offsets (X, Y): [3:0-1-7,0-2-4], [9:0-1-7,0-2-4]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.14	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.25	BC	0.04	Vert(CT)	n/a	-	n/a	999	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	22	n/a	n/a	
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							
										Weight: 95 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=15-8-0, 10=15-8-0, 12=15-8-0, 13=15-8-0, 14=15-8-0, 15=15-8-0, 16=15-8-0, 17=15-8-0, 18=15-8-0, 19=15-8-0, 22=15-8-0
Max Horiz	2=-127 (LC 10), 19=-127 (LC 10)
Max Uplift	2=-31 (LC 12), 10=-31 (LC 12), 12=-6 (LC 8), 13=-30 (LC 12), 14=-23 (LC 12), 16=-23 (LC 12), 17=-30 (LC 12), 18=-8 (LC 9), 19=-31 (LC 12), 22=-31 (LC 12)
Max Grav	2=202 (LC 1), 10=202 (LC 1), 12=131 (LC 18), 13=170 (LC 18), 14=169 (LC 18), 15=136 (LC 17), 16=170 (LC 17), 17=167 (LC 1), 18=135 (LC 17), 19=202 (LC 1), 22=202 (LC 1)

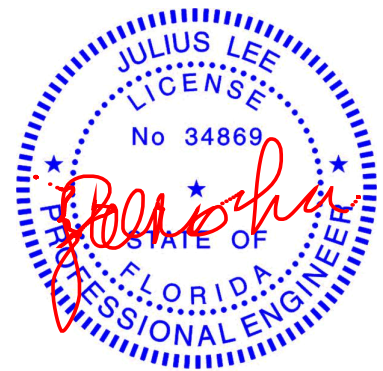
FORCES

(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=0/54, 2-3=-106/89, 3-4=-88/70, 4-5=-83/76, 5-6=-88/150, 6-7=-88/150, 7-8=-54/76, 8-9=-56/31, 9-10=-105/67, 10-11=0/54
BOT CHORD	2-18=-66/145, 17-18=-53/145, 16-17=-53/145, 15-16=-53/145, 14-15=-53/145, 13-14=-53/145, 12-13=-53/145, 10-12=-56/145
WEBS	6-15=-110/18, 5-16=-131/100, 4-17=-124/107, 3-18=-108/84, 7-14=-130/101, 8-13=-127/108, 9-12=-104/84

NOTES

- Unbalanced roof live loads have been considered for this design.
- 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
- 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.
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- All plates are 1.5x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 31 lb uplift at joint 2, 31 lb uplift at joint 10, 23 lb uplift at joint 16, 30 lb uplift at joint 17, 8 lb uplift at joint 18, 23 lb uplift at joint 14, 30 lb uplift at joint 13, 6 lb uplift at joint 12, 31 lb uplift at joint 2 and 31 lb uplift at joint 10.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 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:

November 25, 2024

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

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

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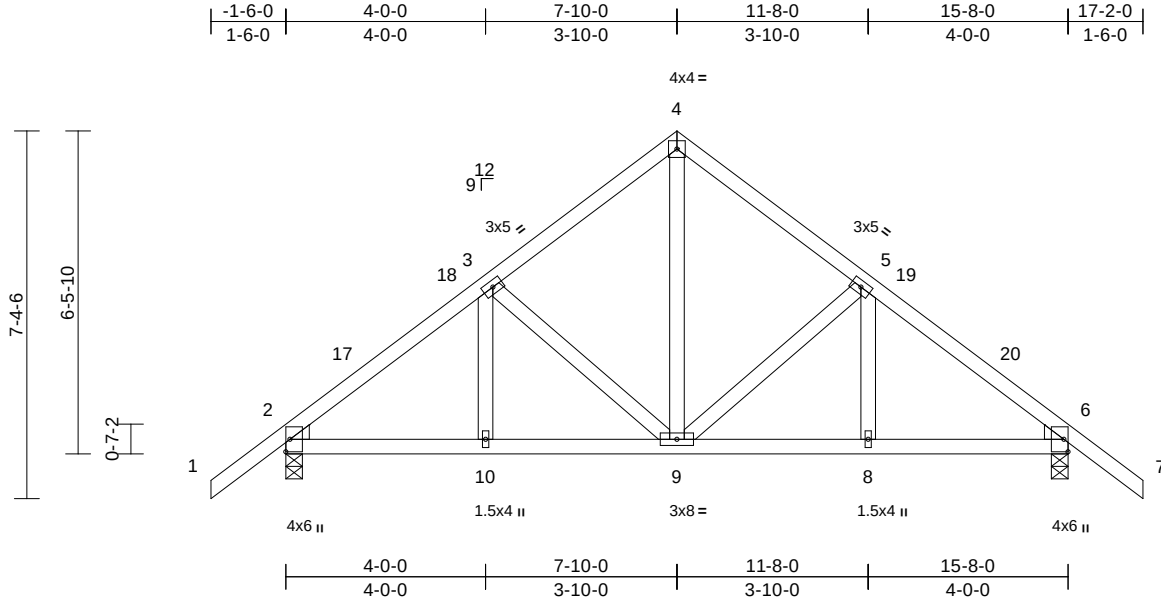
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
1024-089	G02	Common	6	1	T35639468

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

Run: 8.73 S Oct 31 2024 Print: 8.730 S Oct 31 2024 MiTek Industries, Inc. Fri Nov 22 10:07:17
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Page: 1



Loading	(psf)	Spacing	2'-0"-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.14	Vert(LL)	-0.01	8-9	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.21	Vert(CT)	-0.03	8-9	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.01	6	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 91 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.2 Right: 2x4 SP No.2

BRACING

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

REACTIONS

(size)	2'-0"-4'-0, 6'-0"-4'-0
Max Horiz	2'-134 (LC 10)
Max Uplift	2'-36 (LC 12), 6'-36 (LC 12)
Max Grav	2'-717 (LC 1), 6'-717 (LC 1)

FORCES

	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=0/54, 2-3=-778/81, 3-4=-573/126, 4-5=-573/126, 5-6=-778/81, 6-7=0/54
BOT CHORD	2-10=0/591, 9-10=0/591, 8-9=0/568, 6-8=0/568
WEBS	3-10=0/137, 3-9=-237/96, 4-9=-50/381, 5-9=-238/95, 5-8=0/137

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -1-6-0 to 1-6-0, Zone1 1-6-0 to 7-10-0, Zone2 7-10-0 to 12-0-15, Zone1 12-0-15 to 17-2-0 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
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3'-06"-00 tall by 2'-00"-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2 .
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 36 lb uplift at joint 2 and 36 lb uplift at joint 6.
- 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:

November 25, 2024

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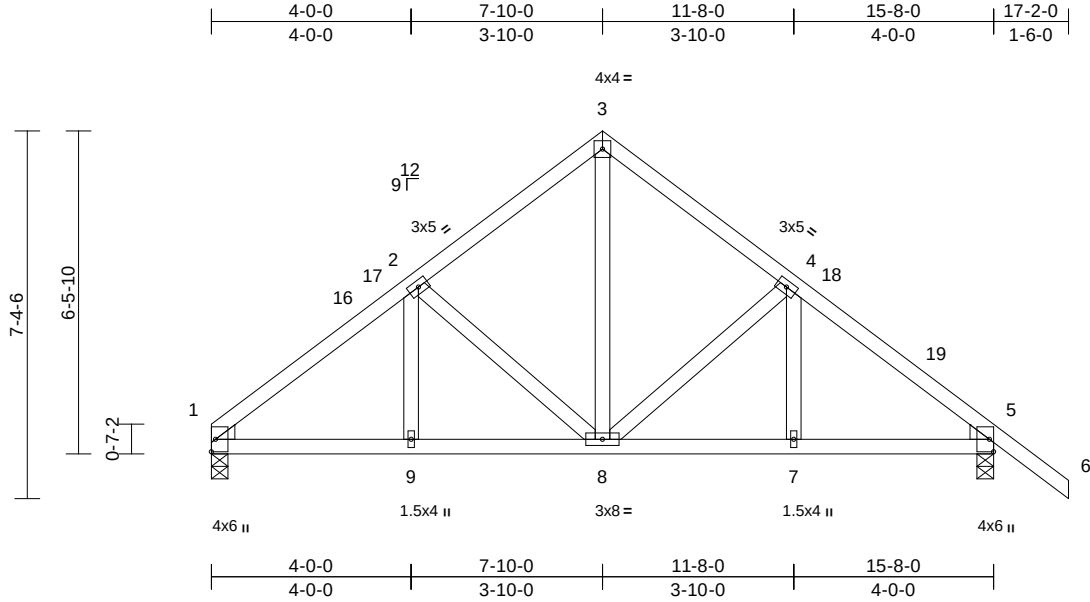
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
1024-089	G03	Common	4	1	T35639469

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

Run: 8.73 S Oct 31 2024 Print: 8.730 S Oct 31 2024 MiTek Industries, Inc. Fri Nov 22 10:07:17
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Page: 1



Scale = 1:46.1

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.15	Vert(LL)	-0.02	7-8	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.21	Vert(CT)	-0.03	7-8	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 89 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.2 Right: 2x4 SP No.2

BRACING

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

REACTIONS

(size)	1=0-4-0, 5=0-4-0
Max Horiz	1=-127 (LC 10)
Max Uplift	5=-38 (LC 12)
Max Grav	1=622 (LC 1), 5=721 (LC 1)

FORCES

	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=-799/119, 2-3=-581/143, 3-4=-579/128, 4-5=-785/92, 5-6=0/54
BOT CHORD	1-9=-19/610, 8-9=0/610, 7-8=0/574, 5-7=0/574
WEBS	2-9=0/142, 2-8=-257/102, 3-8=-73/384, 4-8=-238/96, 4-7=0/138

NOTES

- Unbalanced roof live loads have been considered for this design.
- 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 7-10-0, Zone2 7-10-0 to 12-0-15, Zone1
12-0-15 to 17-2-0 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
- Building Designer / Project engineer responsible for
verifying applied roof live load shown covers rain loading
requirements specific to the use of this truss component.
- This truss has been designed for a 10.0 psf bottom
chord live load nonconcurrent with any other live loads.

- * This truss has been designed for a live load of 20.0psf
on the bottom chord in all areas where a rectangle
3-06-00 tall by 2-00-00 wide will fit between the bottom
chord and any other members.
- All bearings are assumed to be SP No.2 .
- Provide mechanical connection (by others) of truss to
bearing plate capable of withstanding 38 lb uplift at joint
5.
- 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:

November 25, 2024

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Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

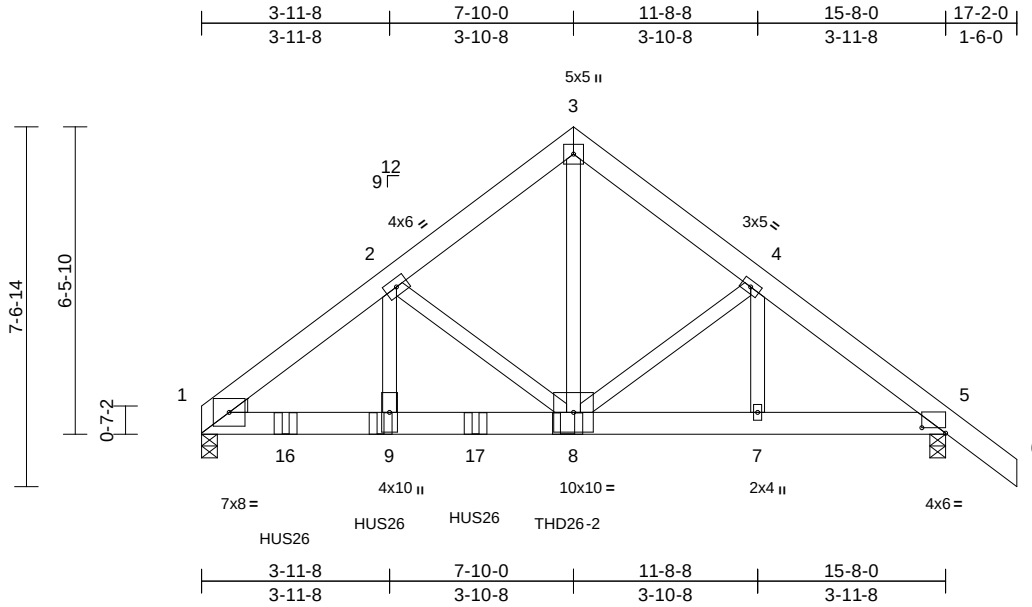
Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
1024-089	G04	Common Girder	1	2	T35639470

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

Run: 8.73 S Oct 31 2024 Print: 8.730 S Oct 31 2024 MiTek Industries, Inc. Fri Nov 22 10:07:17

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Scale = 1:48.5

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.24	Vert(LL)	-0.06	8-9	>999	240	MT20
TCDL	10.0	Lumber DOL	1.25	BC	0.97	Vert(CT)	-0.12	8-9	>999	180	244/190
BCLL	0.0*	Rep Stress Incr	NO	WB	0.61	Horz(CT)	0.04	5	n/a	n/a	
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							
Weight: 236 lb FT = 20%											

LUMBER

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

BRACING

TOP CHORD	Structural wood sheathing directly applied or 5-7-13 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS	(size) 1=0-4-0, 5=0-4-0
	Max Horiz 1=-127 (LC 6)
	Max Uplift 5=-77 (LC 8)
	Max Grav 1=5474 (LC 13), 5=3463 (LC 14)

FORCES

	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=-7558/0, 2-3=-5199/99, 3-4=-5197/95, 4-5=-5162/82, 5-6=0/54
BOT CHORD	1-9=0/6130, 8-9=0/6130, 7-8=0/4070, 5-7=0/4070
WEBS	2-9=0/2766, 3-8=-61/5861, 4-7=-162/6, 2-8=-2466/0, 4-8=-59/209

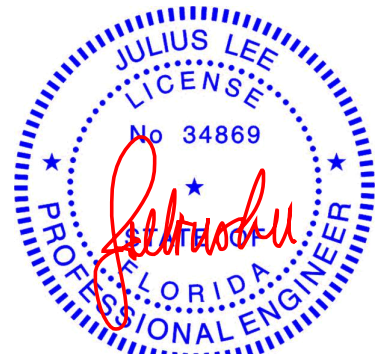
NOTES

- 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 0-7-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc, Except member 2-9 2x4 - 1 row at 0-4-0 oc, Except member 3-8 2x4 - 1 row at 0-4-0 oc.
- 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.

- Unbalanced roof live loads have been considered for this design.
- 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
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 77 lb uplift at joint 5.
- 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 1-9-4 from the left end to 5-9-4 to connect truss(es) to front face of bottom chord.
- Use MiTek THD26-2 (With 18-16d nails into Girder & 12-10d nails into Truss) or equivalent at 7-8-8 from the left end to connect truss(es) to front face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (lb/ft)
Vert: 1-3=-60, 3-6=-60, 10-13=-20
Concentrated Loads (lb)
Vert: 9=-1175 (F), 8=-3354 (F), 16=-1175 (F), 17=-1175 (F)



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

November 25,2024

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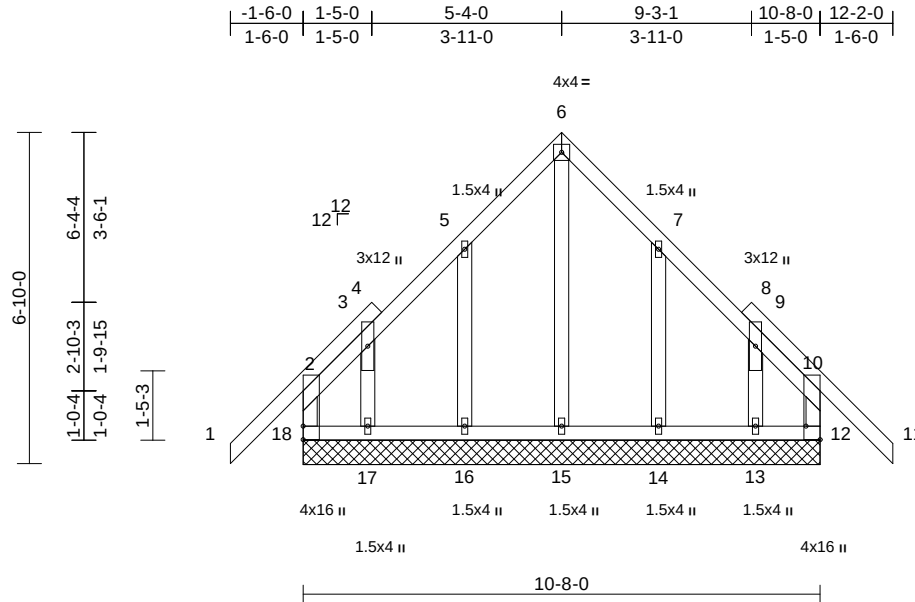
Job	Truss	Truss Type	Qty	Ply	
1024-089	H01	Common Supported Gable	1	1	T35639471
Job Reference (optional)					

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

Run: 8.73 S Oct 31 2024 Print: 8.730 S Oct 31 2024 MiTek Industries, Inc. Fri Nov 22 10:07:17

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Scale = 1:47.5											
Plate Offsets (X, Y): [12:Edge,0-3-8]											
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.24	Vert(LL)	n/a	-	n/a	999	GRIP
TCDL	10.0	Lumber DOL	1.25	BC	0.07	Vert(CT)	n/a	-	n/a	999	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.20	Horz(CT)	0.00	12	n/a	n/a	
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MR							Weight: 79 lb FT = 20%

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

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

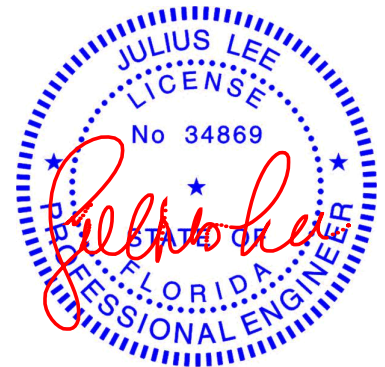
REACTIONS (size) 12=10-8-0, 13=10-8-0, 14=10-8-0, 15=10-8-0, 16=10-8-0, 17=10-8-0, 18=10-8-0
Max Horiz 18=-163 (LC 10)
Max Uplift 12=-66 (LC 12), 13=-62 (LC 8), 14=-41 (LC 12), 16=-41 (LC 12), 17=-66 (LC 9), 18=-74 (LC 8)
Max Grav 12=194 (LC 17), 13=148 (LC 11), 14=183 (LC 18), 15=211 (LC 12), 16=182 (LC 17), 17=156 (LC 10), 18=207 (LC 18)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-18=-176/183, 1-2=0/65, 2-3=-103/91, 3-5=-61/154, 5-6=-136/295, 6-7=-136/295, 7-9=-49/155, 9-10=-91/75, 10-11=0/65, 10-12=-176/180
BOT CHORD 17-18=-83/107, 16-17=-83/107, 15-16=-83/107, 14-15=-83/107, 13-14=-83/107, 12-13=-83/107
WEBS 6-15=-327/80, 5-16=-149/175, 3-17=-168/145, 7-14=-149/175, 9-13=-168/144

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

- 2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 5) Gable requires continuous bottom chord bearing.
- 6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 7) Gable studs spaced at 2-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 10) All bearings are assumed to be SP No.2.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 74 lb uplift at joint 18, 66 lb uplift at joint 12, 41 lb uplift at joint 16, 66 lb uplift at joint 17, 41 lb uplift at joint 14 and 62 lb uplift at joint 13.

LOAD CASE(S) Standard



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

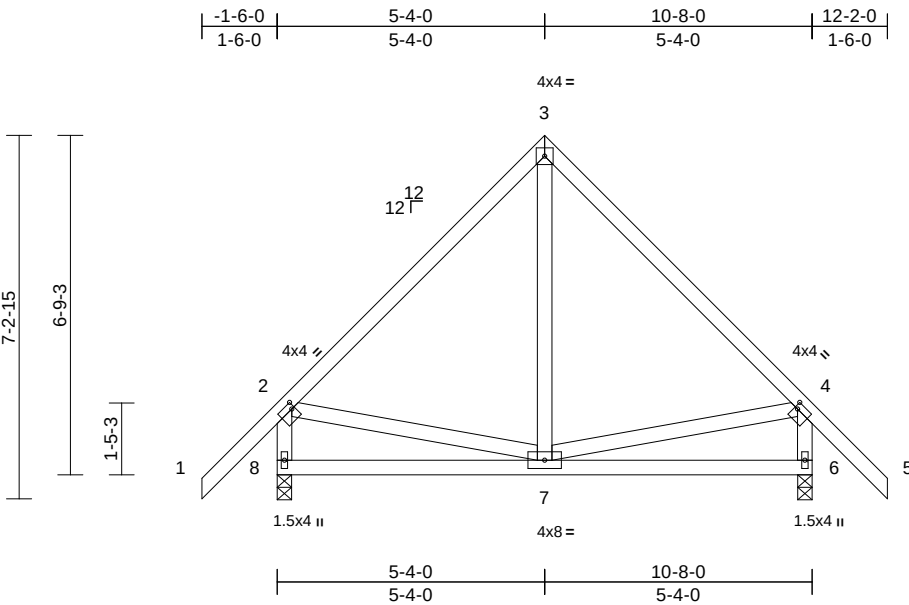
November 25,2024

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Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
1024-089	H02	Common	2	1	T35639472



Scale = 1:45.9											
Plate Offsets (X, Y): [2:0-0-12,0-1-8], [4:0-0-12,0-1-8]											
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.31	Vert(LL)	-0.02	6-7	>999	240	GRIP
TCDL	10.0	Lumber DOL	1.25	BC	0.24	Vert(CT)	-0.03	6-7	>999	180	MT20
BCLL	0.0*	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	6	n/a	n/a	244/190
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 72 lb FT = 20%

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

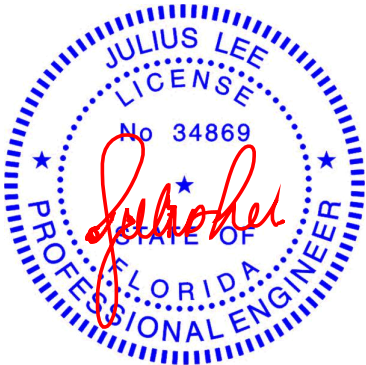
BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 6=0-3-7, 8=0-3-7
Max Horiz 8=-177 (LC 10)
Max Uplift 6=-40 (LC 12), 8=-40 (LC 12)
Max Grav 6=514 (LC 1), 8=514 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/70, 2-3=-367/98, 3-4=-367/98, 4-5=0/70, 2-8=-468/159, 4-6=-468/159
BOT CHORD 7-8=-151/234, 6-7=-31/153
WEBS 3-7=0/193, 2-7=-58/172, 4-7=-61/172

- 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 40 lb uplift at joint 8 and 40 lb uplift at joint 6.
- LOAD CASE(S)** Standard

- 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 Zone1 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.



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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

November 25,2024

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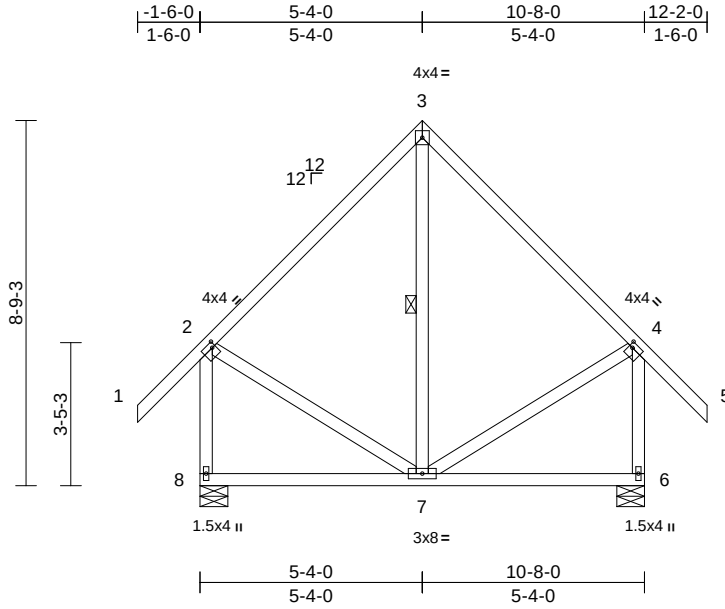
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Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
1024-089	H03	Common	1	1	T35639473

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

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Page: 1



Scale = 1:55.3

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

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	0.30	Vert(LL)	-0.02	6-7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.24	Vert(CT)	-0.03	6-7	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 84 lb	FT = 20%

LUMBER

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

BRACING

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

WEBS 1 Row at midpt 3-7

REACTIONS (size) 6=0-8-0, 8=0-8-0
Max Horiz 8=-233 (LC 10)
Max Uplift 6=-40 (LC 12), 8=-40 (LC 12)
Max Grav 6=514 (LC 1), 8=514 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/70, 2-3=-307/139, 3-4=-307/139, 4-5=0/70, 2-8=-468/172, 4-6=-468/172
BOT CHORD 7-8=-217/220, 6-7=-36/64
WEBS 3-7=-59/124, 2-7=-57/201, 4-7=-58/201

NOTES

- Unbalanced roof live loads have been considered for this design.
- 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 Zone1 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 40 lb uplift at joint 8 and 40 lb uplift at joint 6.

LOAD CASE(S) Standard



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

November 25, 2024

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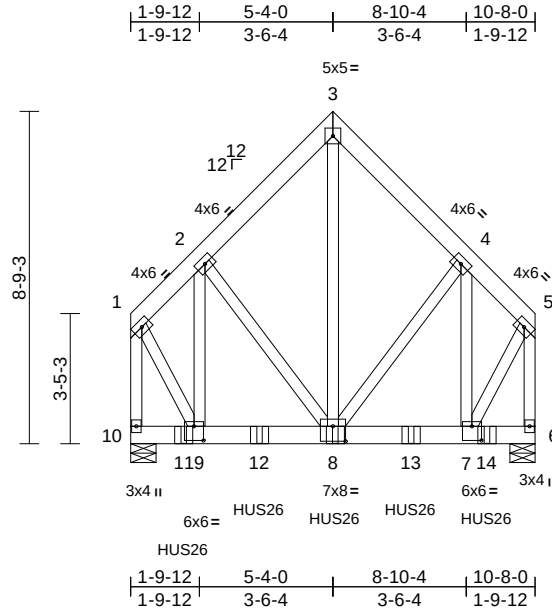
Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
1024-089	H04	Common Girder	1	2	T35639474

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

Run: 8.73 S Oct 31 2024 Print: 8.730 S Oct 31 2024 MiTek Industries, Inc. Fri Nov 22 10:07:18

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Scale = 1:60.8

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.11	Vert(LL)	-0.02	8-9	>999	240	MT20
TCDL	10.0	Lumber DOL	1.25	BC	0.47	Vert(CT)	-0.04	8-9	>999	180	244/190
BCLL	0.0*	Rep Stress Incr	NO	WB	0.27	Horz(CT)	0.00	6	n/a	n/a	
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 238 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, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS	(size) 6=0-8-0, 10=0-8-0
	Max Horiz 10=-193 (LC 6)
	Max Grav 6=3770 (LC 13), 10=3706 (LC 14)

FORCES	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=-1832/0, 2-3=-1926/0, 3-4=-1926/0, 4-5=-1820/0, 1-10=-3549/0, 5-6=-3521/0
BOT CHORD	9-10=-167/175, 8-9=0/1323, 7-8=0/1238, 6-7=-18/45
WEBS	1-9=0/2501, 5-7=0/2479, 2-9=-265/10, 2-8=-6/232, 3-8=0/2375, 4-8=0/248, 4-7=-285/6

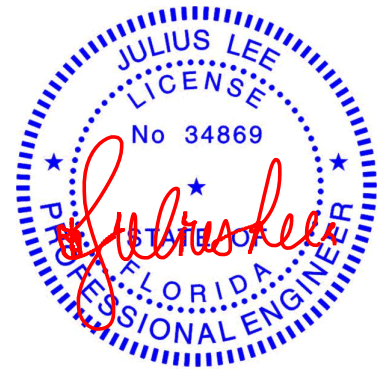
NOTES

- 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, 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
- 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.
- Unbalanced roof live loads have been considered for this design.

- 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
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2 .
- 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 3-4-12 from the left end to 11-4-12 to connect truss(es) to back face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.25,
Plate Increase=1.25
Uniform Loads (lb/ft)
Vert: 1-3=-60, 3-5=-60, 6-10=-20
Concentrated Loads (lb)
Vert: 8=-1139 (B), 11=-1139 (B), 12=-1139 (B),
13=-1139 (B), 14=-1139 (B)



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

November 25,2024

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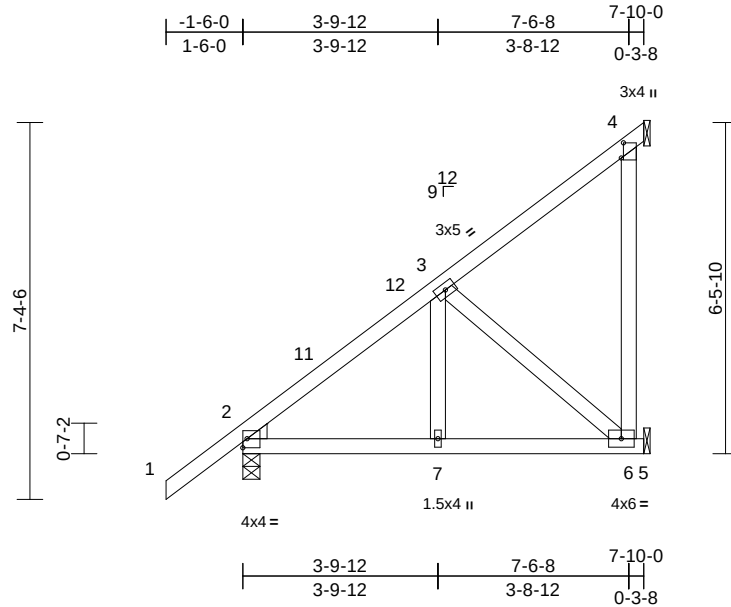
Job	Truss	Truss Type	Qty	Ply	
1024-089	J01	Jack-Open	15	1	Job Reference (optional)
					T35639475

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

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Scale = 1:45											
Plate Offsets (X, Y): [2:Edge,0-2-2], [4:0-3-9,0-0-8]											
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.17	Vert(LL)	-0.01	6-7	>999	240	GRIP
TCDL	10.0	Lumber DOL	1.25	BC	0.14	Vert(CT)	-0.01	6-7	>999	180	MT20
BCLL	0.0*	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.00	6	n/a	n/a	244/190
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 49 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.2

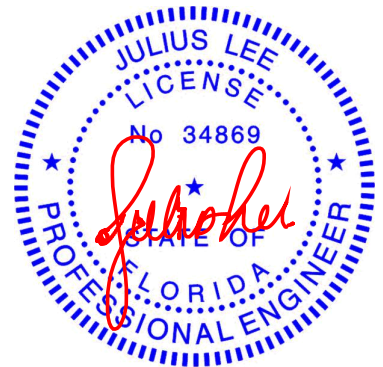
BRACING
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

REACTIONS (size) 2=0-4-0, 4= Mechanical, 6= Mechanical
Max Horiz 2=176 (LC 12)
Max Uplift 4=-37 (LC 12), 6=-9 (LC 12)
Max Grav 2=401 (LC 1), 4=93 (LC 17), 6=218 (LC 17)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/54, 2-3=-308/0, 3-4=-80/45
BOT CHORD 2-7=-129/216, 6-7=-118/216, 5-6=0/0
WEBS 3-7=0/167, 3-6=-282/154, 4-6=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 7-6-8 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
 - 2) Building Designer / Project engineer responsible for
verifying applied roof live load shown covers rain loading
requirements specific to the use of this truss component.
 - 3) This truss has been designed for a 10.0 psf bottom
chord live load nonconcurrent with any other live loads.
 - 4) * This truss has been designed for a live load of 20.0psf
on the bottom chord in all areas where a rectangle
3-06-00 tall by 2-00-00 wide will fit between the bottom
chord and any other members.
 - 5) Bearings are assumed to be: , Joint 2 SP No.2 .

- 6) Refer to girder(s) for truss to truss connections.
 - 7) Provide mechanical connection (by others) of truss to
bearing plate capable of withstanding 9 lb uplift at joint 6
and 37 lb uplift at joint 4.
 - 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.
 - 9) Gap between inside of top chord bearing and first
diagonal or vertical web shall not exceed 0.500in.
- LOAD CASE(S)** Standard



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MiTek Inc. DBA MiTek USA FL Cert 6634
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Date:

November 25,2024

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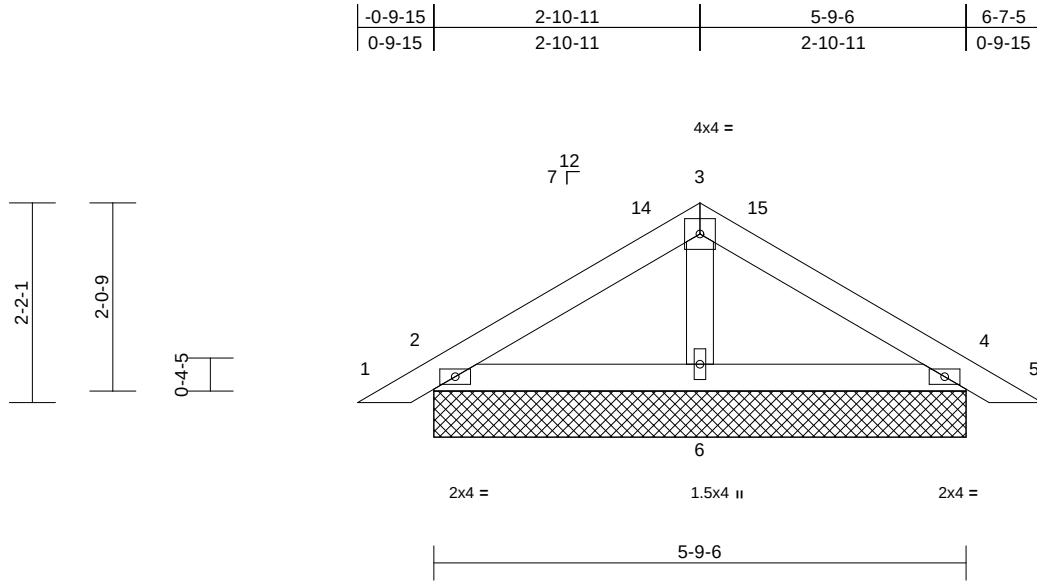
Job	Truss	Truss Type	Qty	Ply	
1024-089	PB01	Piggyback	1	2	T35639476
Job Reference (optional)					

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

Run: 8.73 S Oct 31 2024 Print: 8.730 S Oct 31 2024 MiTek Industries, Inc. Fri Nov 22 10:07:18

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Scale = 1:25

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.04	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.05	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.01	Horz(CT)	0.00	4	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=5-9-6, 4=5-9-6, 6=5-9-6, 7=5-9-6, 11=5-9-6
Max Horiz	2=35 (LC 11), 7=35 (LC 11)
Max Uplift	2=-23 (LC 12), 4=-23 (LC 12), 7=-23 (LC 12), 11=-23 (LC 12)
Max Grav	2=157 (LC 1), 4=157 (LC 1), 6=214 (LC 1), 7=157 (LC 1), 11=157 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/16, 2-3=-77/79, 3-4=-77/74, 4-5=0/16
BOT CHORD	2-6=0/47, 4-6=-7/39
WEBS	3-6=-99/39

NOTES

- 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.
- 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.
- Unbalanced roof live loads have been considered for this design.

- Wind: ASCE 7-22; Vult=130mph (3-second gust)
Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 0-3-8 to 3-3-8, Zone1 3-3-8 to 3-8-10, Zone3 3-8-10 to 7-1-13 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
- 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.
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 23 lb uplift at joint 2, 23 lb uplift at joint 4, 23 lb uplift at joint 2 and 23 lb uplift at joint 4.
- 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.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard



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

November 25, 2024

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of the 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.tpinet.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcsccomponents.com)

MiTek®

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

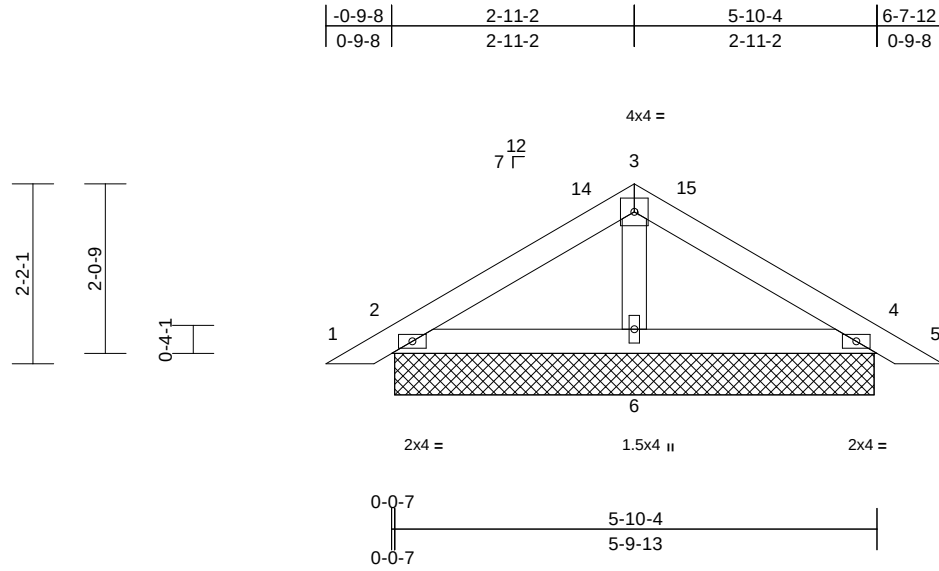
Job	Truss	Truss Type	Qty	Ply	
1024-089	PB02	Piggyback	23	1	Job Reference (optional)
					T35639477

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

Run: 8.73 S Oct 31 2024 Print: 8.730 S Oct 31 2024 MiTek Industries, Inc. Fri Nov 22 10:07:18

Page: 1

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Scale = 1:27.8

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	0.09	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.10	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.01	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 24 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS

(size)	2=5-9-6, 4=5-9-6, 6=5-9-6, 7=5-9-6, 11=5-9-6
Max Horiz	2=35 (LC 11), 7=35 (LC 11)
Max Uplift	2=-21 (LC 12), 4=-21 (LC 12), 7=-21 (LC 12), 11=-21 (LC 12)
Max Grav	2=150 (LC 1), 4=150 (LC 1), 6=229 (LC 1), 7=150 (LC 1), 11=150 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=0/15, 2-3=-60/69, 3-4=-59/65, 4-5=0/15
BOT CHORD	2-6=-1/44, 4-6=-6/44
WEBS	3-6=-110/48

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 0-3-8 to 3-3-8, Zone1 3-3-8 to 3-8-10, Zone3 3-8-10 to 7-1-13 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
- 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.
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.

- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2 .
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 21 lb uplift at joint 2, 21 lb uplift at joint 4, 21 lb uplift at joint 2 and 21 lb uplift at joint 4.
- n/a
- 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.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard



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

November 25,2024

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

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MiTek®

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

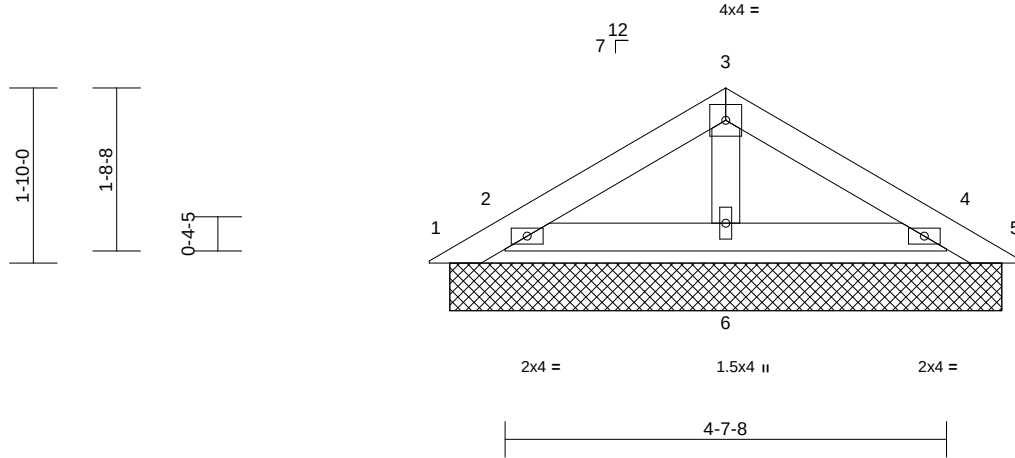
Job	Truss	Truss Type	Qty	Ply	
1024-089	PB03	Piggyback	1	2	Job Reference (optional)
					T35639478

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

Run: 8.73 S Oct 31 2024 Print: 8.730 S Oct 31 2024 MiTek Industries, Inc. Fri Nov 22 10:07:18
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Page: 1

-0-9-8	2-3-12	4-7-8	5-5-0
0-9-8	2-3-12	2-3-12	0-9-8



Scale = 1:24.1

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.03	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.02	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	0.00	4	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
OTHERS 2x4 SP No.2

BRACING

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

REACTIONS (size) 1=5-9-6, 2=5-9-6, 4=5-9-6, 5=5-9-6, 6=5-9-6, 7=5-9-6, 10=5-9-6

Max Horiz 1=-29 (LC 10)
Max Uplift 1=-50 (LC 17), 2=-6 (LC 12), 4=-13 (LC 12), 5=-38 (LC 24), 7=-6 (LC 12), 10=-13 (LC 12)
Max Grav 1=9 (LC 9), 2=200 (LC 17), 4=188 (LC 24), 5=7 (LC 12), 6=155 (LC 1), 7=200 (LC 17), 10=188 (LC 24)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-26/63, 2-3=-52/61, 3-4=-52/59, 4-5=-18/41

BOT CHORD 2-6=-14/37, 4-6=-15/37

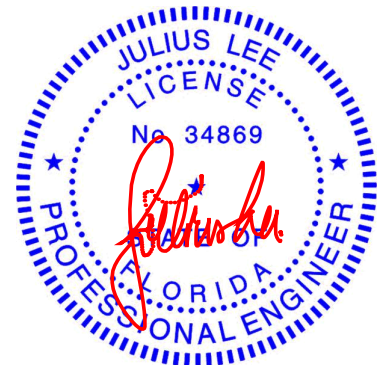
WEBS 3-6=-79/35

NOTES

- 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.
- 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.
- Unbalanced roof live loads have been considered for this design.

- 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
- 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.
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 6 lb uplift at joint 2, 13 lb uplift at joint 4, 50 lb uplift at joint 1, 38 lb uplift at joint 5, 6 lb uplift at joint 2 and 13 lb uplift at joint 4.
- 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.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard



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

November 25, 2024

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

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MiTek®

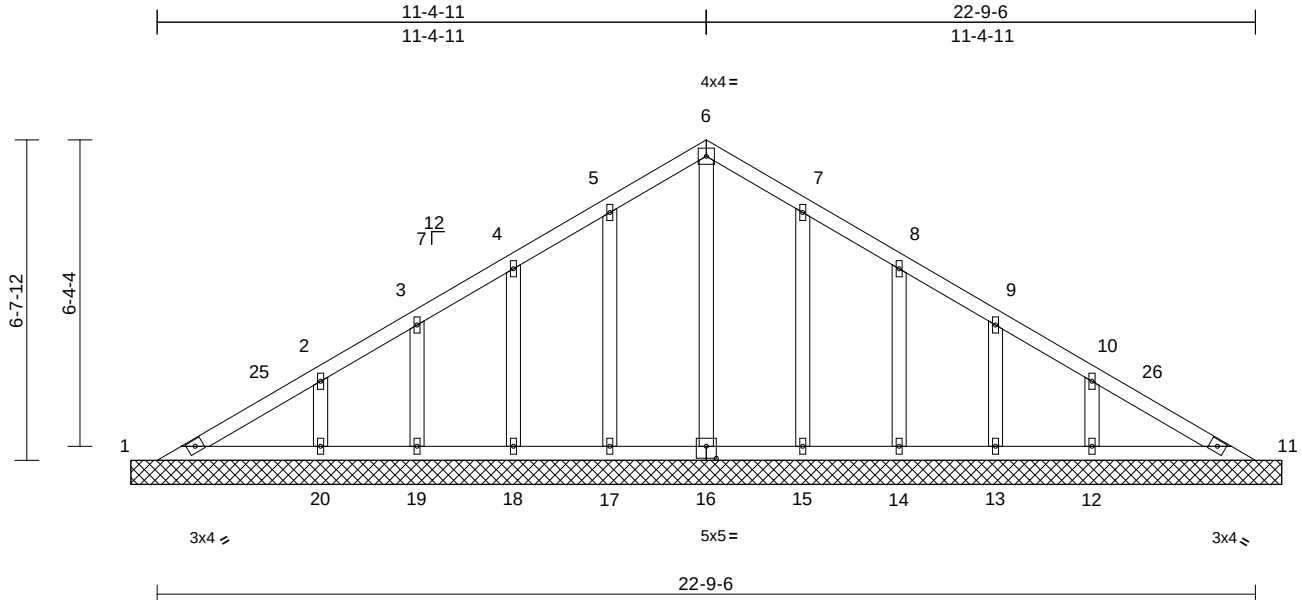
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
1024-089	V01	Valley	1	1	T35639479

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

Run: 8.73 S Oct 31 2024 Print: 8.730 S Oct 31 2024 MiTek Industries, Inc. Fri Nov 22 10:07:18
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Page: 1



Scale = 1:47.8

Plate Offsets (X, Y): [16:0-2-8,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.12	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.25	BC	0.12	Vert(TL)	n/a	-	n/a	999	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.14	Horiz(TL)	0.00	11	n/a	n/a	
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							
Weight: 118 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=23-10-6, 11=23-10-6, 12=23-10-6, 13=23-10-6, 14=23-10-6, 15=23-10-6, 16=23-10-6, 17=23-10-6, 18=23-10-6, 19=23-10-6, 20=23-10-6
Max Horiz	1=-112 (LC 10)
Max Uplift	12=-14 (LC 12), 13=-17 (LC 12), 14=-17 (LC 12), 15=-12 (LC 12), 17=-12 (LC 12), 18=-17 (LC 12), 19=-17 (LC 12), 20=-14 (LC 12)
Max Grav	1=107 (LC 23), 11=107 (LC 24), 12=295 (LC 24), 13=111 (LC 18), 14=171 (LC 24), 15=167 (LC 24), 16=245 (LC 1), 17=167 (LC 23), 18=171 (LC 23), 19=112 (LC 17), 20=295 (LC 23)

FORCES

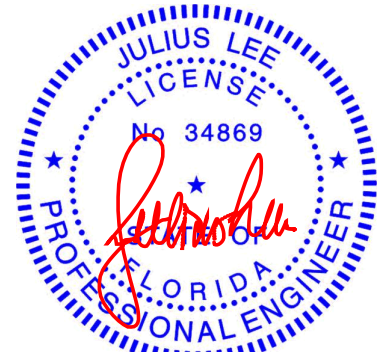
(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=-169/185, 2-3=-27/147, 3-4=-8/149, 4-5=-5/138, 5-6=-28/125, 6-7=-28/123, 7-8=-5/126, 8-9=0/128, 9-10=-11/116, 10-11=-164/154
BOT CHORD	1-20=-101/150, 19-20=-101/63, 18-19=-101/63, 17-18=-101/63, 15-17=-101/63, 14-15=-101/63, 13-14=-101/63, 12-13=-101/63, 11-12=-101/147
WEBS	6-16=-204/0, 5-17=-129/57, 4-18=-124/52, 3-19=-96/41, 2-20=-187/55, 7-15=-129/57, 8-14=-124/53, 9-13=-96/41, 10-12=-187/55

NOTES

- Unbalanced roof live loads have been considered for this design.
- 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 0-0-7 to 3-0-7, Zone1 3-0-7 to 11-11-10, Zone2 11-11-10 to 15-11-10, Zone1 15-11-10 to 23-10-13 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
- 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.
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- All plates are 1.5x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2 .
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 12 lb uplift at joint 17, 17 lb uplift at joint 18, 17 lb uplift at joint 19, 14 lb uplift at joint 20, 12 lb uplift at joint 15, 17 lb uplift at joint 14, 17 lb uplift at joint 13 and 14 lb uplift at joint 12.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 11.

- 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



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

November 25,2024

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MiTek®

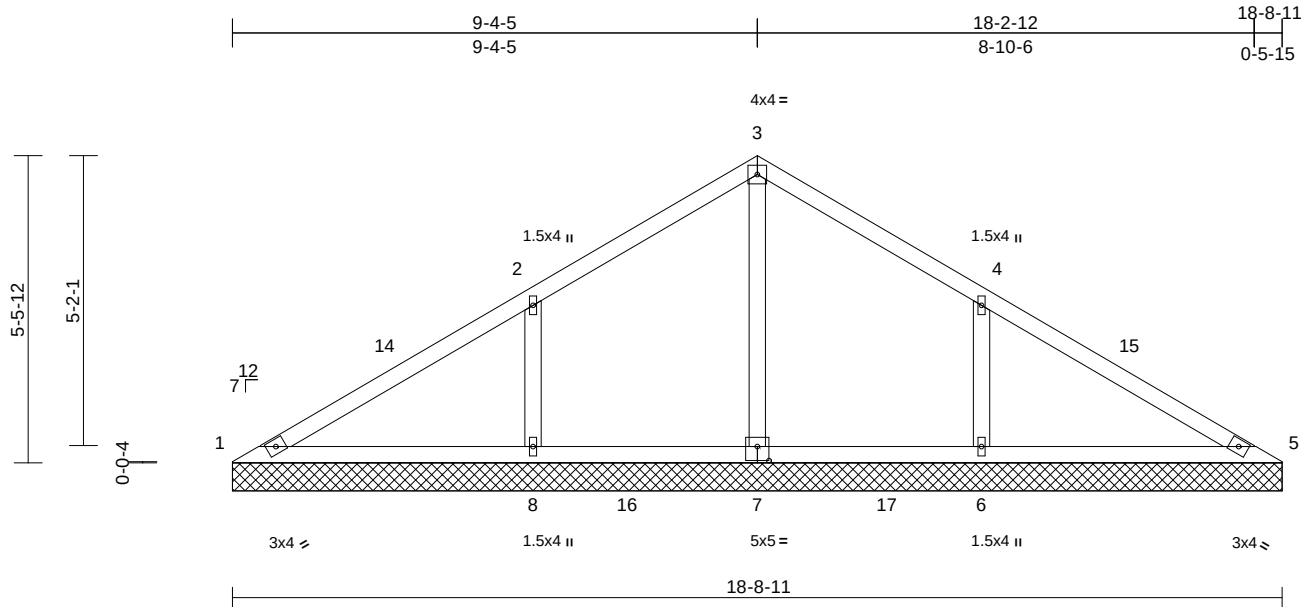
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply		T35639480
1024-089	V02	Valley	1	1	Job Reference (optional)	

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

Run: 8.73 S Oct 31 2024 Print: 8.730 S Oct 31 2024 MiTek Industries, Inc. Fri Nov 22 10:07:18
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Page: 1



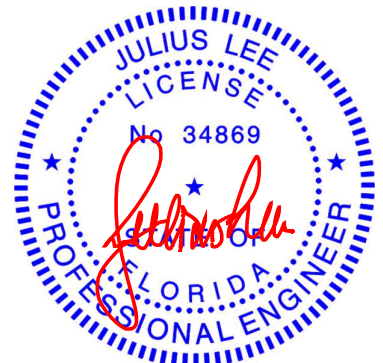
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Plate Offsets (X, Y): [7:0-2-8,0-3-0]											
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.33	Vert(LL)	n/a	-	n/a	999	GRIP
TCDL	10.0	Lumber DOL	1.25	BC	0.20	Vert(TL)	n/a	-	n/a	999	MT20
BCLL	0.0*	Rep Stress Incr	YES	WB	0.27	Horiz(TL)	-0.01	13	n/a	n/a	244/190
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 73 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=18-8-11, 5=18-8-11, 6=18-8-11, 7=18-8-11, 8=18-8-11, 13=18-8-11
Max Horiz	1=-92 (LC 10)
Max Uplift	1=-83 (LC 24), 6=-43 (LC 12), 8=-44 (LC 12)
Max Grav	1=86 (LC 23), 5=1 (LC 18), 6=518 (LC 18), 7=699 (LC 19), 8=516 (LC 17), 13=1 (LC 18)
FORCES (lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=-90/479, 2-3=0/433, 3-4=0/432, 4-5=-108/481
BOT CHORD	1-8=-364/94, 6-8=-364/94, 5-6=-377/102
WEBS	3-7=-577/34, 2-8=-316/124, 4-6=-315/126

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - 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 0-0-7 to 3-0-7, Zone1 3-0-7 to 9-4-12, Zone2 9-4-12 to 13-4-12, Zone1 13-4-12 to 18-9-2 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
 - 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.

- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- All bearings are assumed to be SP No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 83 lb uplift at joint 1, 44 lb uplift at joint 8 and 43 lb uplift at joint 6.
- 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:

November 25,2024

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

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

MiTek®

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

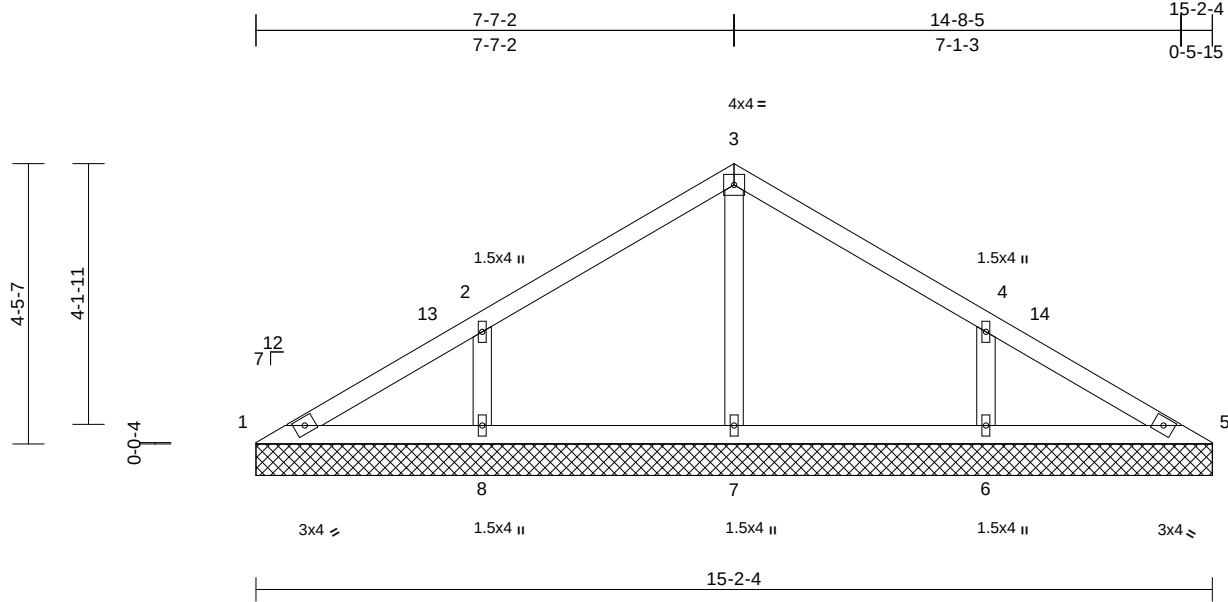
Job	Truss	Truss Type	Qty	Ply	
1024-089	V03	Valley	6	1	Job Reference (optional)
					T35639481

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

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Scale = 1:36.6									
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	L/d
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.18	Vert(LL)	n/a	-	999
TCDL	10.0	Lumber DOL	1.25	BC	0.11	Vert(TL)	n/a	-	999
BCLL	0.0*	Rep Stress Incr	YES	WB	0.08	Horiz(TL)	0.00	5	n/a
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS					
						PLATES	GRIP		
						MT20	244/190		
						Weight: 57 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=15-2-4, 5=15-2-4, 6=15-2-4,
7=15-2-4, 8=15-2-4
Max Horiz 1=-74 (LC 10)
Max Uplift 6=-32 (LC 12), 8=-32 (LC 12)
Max Grav 1=94 (LC 23), 5=94 (LC 24), 6=352 (LC 24), 7=342 (LC 1), 8=352 (LC 23)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-123/127, 2-3=-33/105, 3-4=-32/100, 4-5=-119/104

BOT CHORD 1-8=-62/113, 7-8=-62/53, 6-7=-62/53, 5-6=-62/97

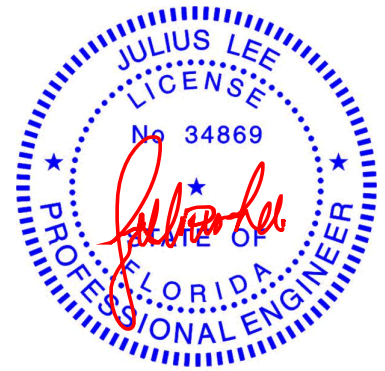
WEBS 3-7=-269/22, 2-8=-255/127, 4-6=-255/127

NOTES

- Unbalanced roof live loads have been considered for this design.
- 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 0-0-7 to 3-0-7, Zone1 3-0-7 to 7-7-9, Zone2 7-7-9 to 11-7-9, Zone1 11-7-9 to 15-2-11 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
- 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.

- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 32 lb uplift at joint 8 and 32 lb uplift at joint 6.
- 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:

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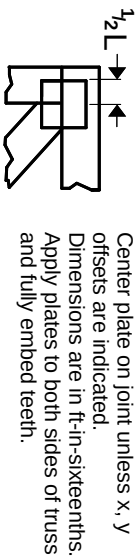
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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.sbcsccomponents.com)

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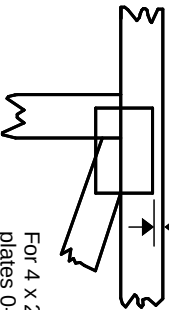
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Symbols

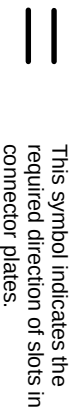
PLATE LOCATION AND ORIENTATION



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



For 4 x 2 orientation, locate plates 0- $\frac{1}{16}$ " from outside edge of truss.



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

PLATE SIZE

4 X 4

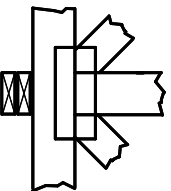
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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.

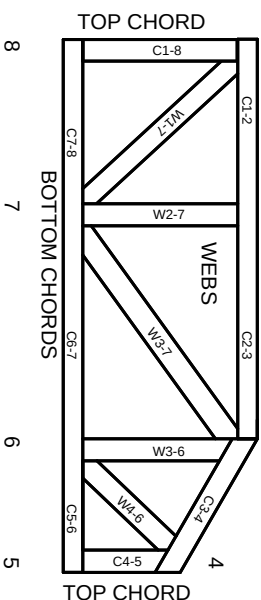
Industry Standards:

ANSI/TPI 1: 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



1 2 3 Joint ID typ.



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.

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MITek Engineering Reference Sheet: MIL-7473 rev. 1/12/2023

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative 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.