



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

RE: 0325-046 - DAVID SIMQUE

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

**Site Information:**

Customer Info: DAVID SIMQUE Project Name: . Model: .  
 Lot/Block: . Subdivision: .  
 Address: ., .  
 City: COLUMBIA COUNTY 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

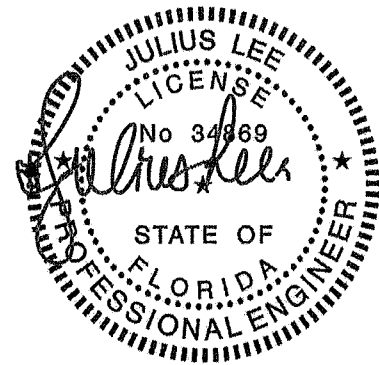
This package includes 53 individual, Truss Design Drawings and 0 Additional Drawings.  
 With my seal affixed to this sheet, I hereby certify that I am the Truss Design Engineer and this index sheet conforms to 61G15-31.003, section 5 of the Florida Board of Professional Engineers Rules.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	T36741621	A01	3/20/25	23	T36741643	F01GE	3/20/25
2	T36741622	A02	3/20/25	24	T36741644	M01	3/20/25
3	T36741623	A03	3/20/25	25	T36741645	M01A	3/20/25
4	T36741624	A04	3/20/25	26	T36741646	M01B	3/20/25
5	T36741625	A04A	3/20/25	27	T36741647	M02	3/20/25
6	T36741626	A05	3/20/25	28	T36741648	M02A	3/20/25
7	T36741627	B01	3/20/25	29	T36741649	M03	3/20/25
8	T36741628	B01GE	3/20/25	30	T36741650	M03A	3/20/25
9	T36741629	B02	3/20/25	31	T36741651	M04	3/20/25
10	T36741630	B03	3/20/25	32	T36741652	MG01	3/20/25
11	T36741631	B04	3/20/25	33	T36741653	PB01	3/20/25
12	T36741632	B05	3/20/25	34	T36741654	PB01GE	3/20/25
13	T36741633	B06	3/20/25	35	T36741655	PB02	3/20/25
14	T36741634	B06GE	3/20/25	36	T36741656	PB02GE	3/20/25
15	T36741635	C01	3/20/25	37	T36741657	PB03	3/20/25
16	T36741636	C01GE	3/20/25	38	T36741658	PB04	3/20/25
17	T36741637	D01	3/20/25	39	T36741659	PB04GE	3/20/25
18	T36741638	D01GE	3/20/25	40	T36741660	PB05	3/20/25
19	T36741639	D02	3/20/25	41	T36741661	PB05GE	3/20/25
20	T36741640	D03	3/20/25	42	T36741662	V01	3/20/25
21	T36741641	D04	3/20/25	43	T36741663	V02	3/20/25
22	T36741642	E01GE	3/20/25	44	T36741664	V03	3/20/25

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

Truss Design Engineer's Name: Lee, Julius  
 My license renewal date for the state of Florida is February 28, 2027.

**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:

March 20, 2025



RE: 0325-046 - DAVID SIMQUE

MiTek, Inc.  
16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
314.434 1200

**Site Information:**

Customer Info: DAVID SIMQUE Project Name: . Model: .  
Lot/Block: . Subdivision: .  
Address: ., .  
City: COLUMBIA COUNTY State: FL

No.	Seal#	Truss Name	Date
45	T36741665	V04	3/20/25
46	T36741666	V05	3/20/25
47	T36741667	V06	3/20/25
48	T36741668	V07	3/20/25
49	T36741669	V08	3/20/25
50	T36741670	V09	3/20/25
51	T36741671	V10	3/20/25
52	T36741672	V11	3/20/25
53	T36741673	V12	3/20/25

Job 0325-046	Truss A01	Truss Type Piggyback Base	Qty 6	Ply 1	DAVID SIMQUE Job Reference (optional)	T36741621
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Mayo Truss Company Inc Mayo, FL 32066,

Run 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MITek Industries, Inc. Thu Mar 20 07:29 24  
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Page 1

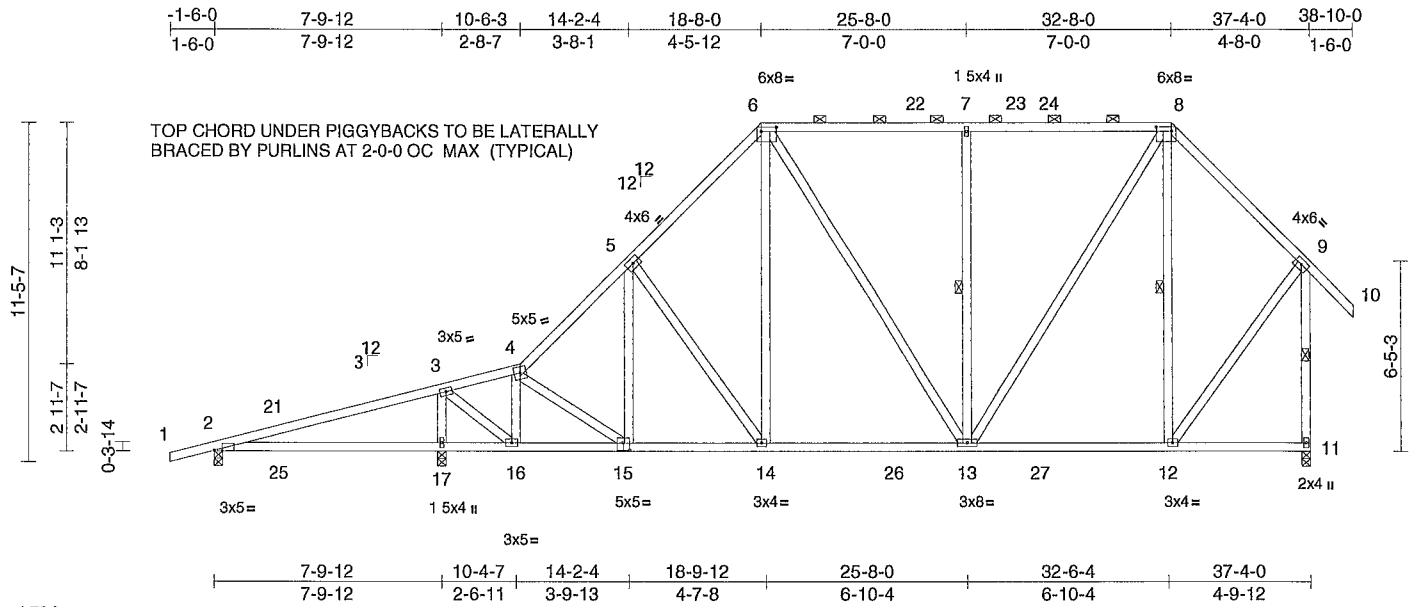


Plate Offsets (X, Y) [2'-0-3-4,Edge], [6'-0-6-4,0-1-12], [8'-0-6-4,0-1-12], [15 0-2-8,0-3-0]

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 67	Vert(LL)	0 15	17-20	>627	240	MT20	244/190
TCDL	10 0	Lumber DOL	1 25	BC	0 57	Vert(CT)	-0.22	17-20	>431	180		
BCLL	0 0 *	Rep Stress Incr	YES	WB	0 31	Horz(CT)	0 02	11	n/a	n/a		
BCDL	10 0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 266 lb	FT = 20%

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

**BRACING**  
TOP CHORD Structural wood sheathing directly applied or 5-0-6 oc purlins, except end verticals, and 2-0-0 oc purlins (5-8-7 max ) 6-8  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:  
6-0-0 oc bracing 2-17,16-17  
WEBS 1 Row at midpt 7-13, 8-12, 9-11

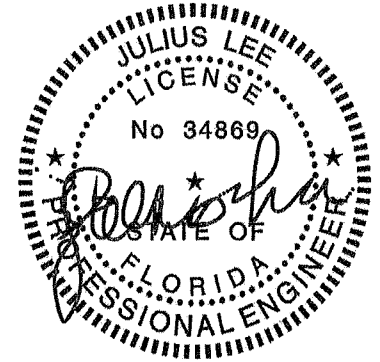
**REACTIONS** (size) 2=0-3-8, 11=0-3-8, 17=0-3-8  
Max Horiz 2=297 (LC 11)  
Max Uplift 2=111 (LC 8), 11=31 (LC 12), 17=73 (LC 12)  
Max Grav 2=260 (LC 23), 11=1383 (LC 18), 17=1862 (LC 17)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=0/22, 2-3=94/617, 3-4=850/45,  
4-5=1347/123, 5-6=1215/201,  
6-7=891/191, 7-8=891/191, 8-9=825/195,  
9-10=0/70, 9-11=1334/124  
BOT CHORD 2-17=525/64, 16-17=525/22,  
14-16=107/1039, 13-14=63/896,  
12-13=58/524, 11-12=83/96  
WEBS 4-16=918/59, 6-14=13/462, 7-13=488/131,  
8-12=422/81, 9-12=0/852, 6-13=37/202,  
8-13=35/761, 3-17=1606/59, 3-16=0/1510,  
5-15=14/85, 4-15=75/235, 5-14=252/106

- Wind ASCE 7-22, Vult=130mph (3-second gust)  
Vasd=101mph, TCDL=6 0psf, BCDL=6 0psf; h=15ft;  
B=45ft; L=37ft, eave=5ft; Cat. II, Exp B, Enclosed,  
MWFERS (directional) and C-C Zone3 -1-6-0 to 2-2-14,  
Zone1 2-2-14 to 18-8-0, Zone2 18-8-0 to 23-11-7, Zone1  
23-11-7 to 38-10-0 zone, cantilever left and right  
exposed , end vertical left and right exposed, porch left  
exposed,C-C for members and forces & MWFERS 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 111 lb uplift at joint  
2, 31 lb uplift at joint 11 and 73 lb uplift at joint 17
- 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



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

March 20,2025

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

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

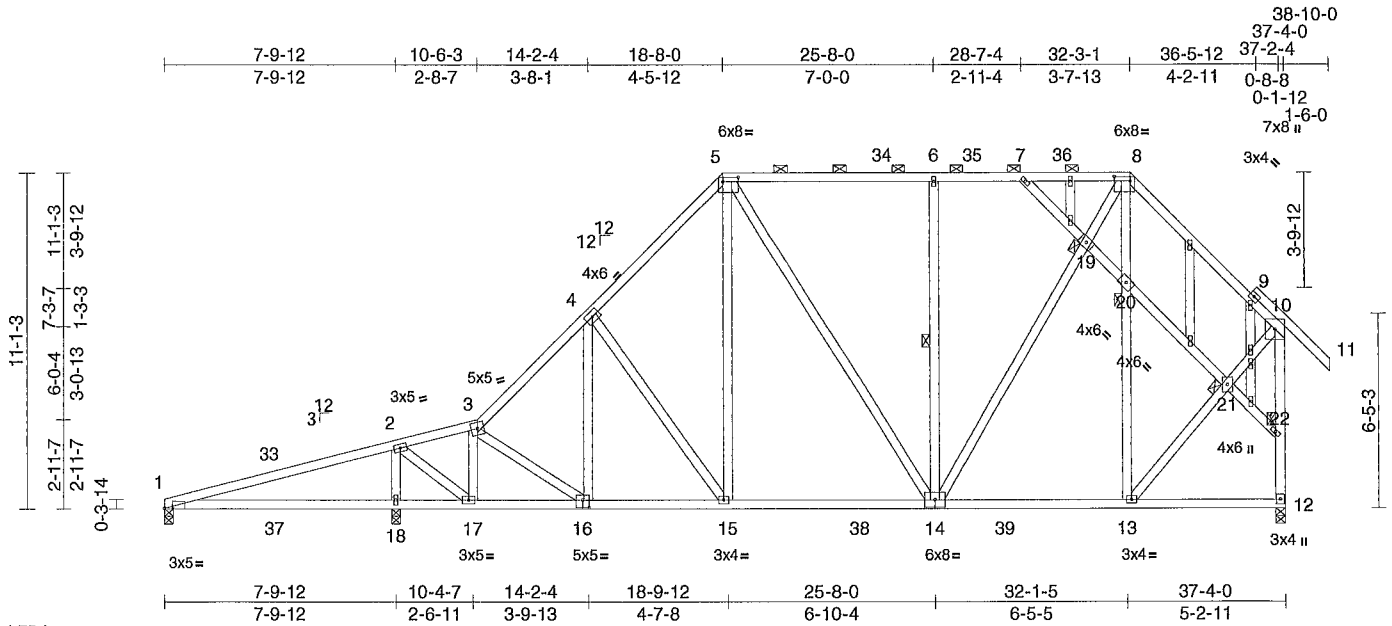
**MiTek®**  
16023 Swingley Ridge Rd  
Chesterfield, MO 63017  
314.434 1200 / MiTek-US.com

Job 0325-046	Truss A02	Truss Type Piggyback Base	Qty 1	Ply 1	DAVID SIMQUE Job Reference (optional)	T36741622
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Mayo Truss Company Inc. Mayo, FL 32066,

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Page. 1



Scale = 1/75.1  
Plate Offsets (X, Y) [1 0-3-4,Edge], [5 0-6-4,0-1-12], [8 0-6-4,0-1-12], [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 70	Vert(LL)	0 20	18-32	>472	240	MT20 244/190
TCDL	10 0	Lumber DOL	1.25	BC	0 58	Vert(CT)	-0 23	18-32	>402	180	
BCLL	0 0*	Rep Stress Incr	YES	WB	0 31	Horz(CT)	0 02	12	n/a	n/a	
BCDL	10 0	Code	FBC2023/TPI2014	Matrix-MS							Weight 295 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 5-0-5 oc purlins, except end verticals, and 2-0-0 oc purlins (5-5-5 max ) 5-8  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except 6-0-0 oc bracing 1-18,17-18  
WEBS 1 Row at midpt 6-14  
JOINTS 1 Brace at Jt(s) 19, 20, 21, 22

**REACTIONS** (size) 1=0-3-8, 12=0-3-8, 18=0-3-8  
Max Horiz 1=289 (LC 11)  
Max Uplift 1=78 (LC 8), 12=30 (LC 12), 18=77 (LC 12)  
Max Grav 1=161 (LC 24), 12=1382 (LC 18), 18=1869 (LC 17)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=-98/611, 2-3=-846/65, 3-4=-1344/152, 4-5=-1214/231, 5-6=-882/224, 6-7=-882/224, 7-8=-796/204, 8-10=-750/188, 10-11=0/62, 12-22=-1309/127, 10-22=-1232/139  
BOT CHORD 1-18=-518/92, 17-18=-518/31, 15-17=-106/1035, 13-15=-65/894, 12-13=-53/73  
WEBS 3-17=-916/61, 5-15=-10/462, 6-14=-411/114, 13-20=-363/83, 8-20=-343/72, 5-14=-40/187, 13-21=-6/795, 10-21=-8/796, 14-19=-18/667, 8-19=-19/659, 2-18=-1604/69, 2-17=0/1498, 4-16=-16/84, 3-16=-78/237, 4-15=-248/104, 7-19=-135/43, 19-20=-165/43, 20-21=-140/48, 21-22=-135/51

- Unbalanced roof live loads have been considered for this design
- Wind ASCE 7-22, Vult=130mph (3-second gust) Vasd=101mph, TC DL=6 0psf, BCDL=6 0psf; h=15ft; B=45ft, L=37ft; eave=5ft; Cat II, Exp B, Enclosed, MWFRS (directional) and C-C Zone3 0-0-0 to 3-8-12, Zone1 3-8-12 to 18-8-0, Zone2 18-8-0 to 23-11-4, Zone1 23-11-4 to 32-3-1, Zone2 32-3-1 to 37-3-0, Zone1 37-3-0 to 38-10-0 zone, cantilever left and right exposed , end vertical left and right exposed, porch left 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.
- Provide adequate drainage to prevent water ponding
- All plates are 1 5x4 MT20 unless otherwise indicated
- 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, 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 78 lb uplift at joint 1, 30 lb uplift at joint 12 and 77 lb uplift at joint 18.
- 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:

NOTES

March 20,2025

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

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

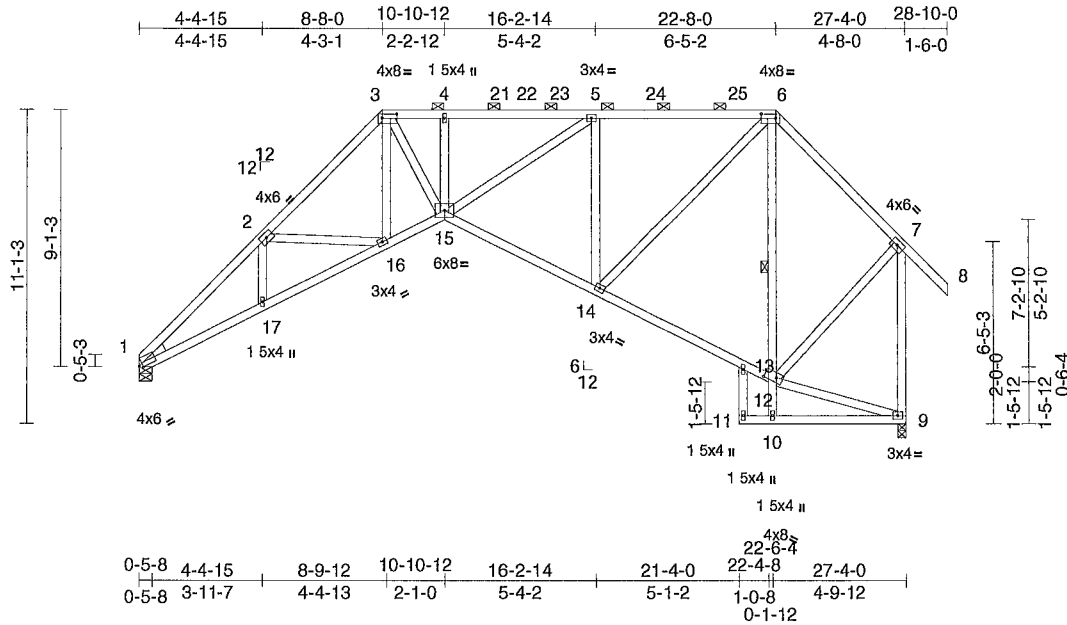
**MiTek®**  
16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
314.434 1200 / MiTek-US.com

Job 0325-046	Truss A03	Truss Type Piggyback Base	Qty 1	Ply 1	DAVID SIMQUE Job Reference (optional)	T36741623
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Mayo Truss Company Inc. Mayo, FL 32066

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Page: 1



Scale = 1/80 3

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

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 79	Vert(LL)	-0 12	15	>999	240	MT20 244/190
TCDL	10 0	Lumber DOL	1.25	BC	0.88	Vert(CT)	-0 25	14-15	>999	180	
BCLL	0 0*	Rep Stress Incr	YES	WB	0 65	Horz(CT)	0 28	9	n/a	n/a	
BCDL	10 0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 201 lb FT = 20%

**LUMBER**  
 TOP CHORD 2x4 SP No 2  
 BOT CHORD 2x4 SP No 2  
 WEBS 2x4 SP No 2  
 WEDGE Left 2x4 SP No 3

**BRACING**  
 TOP CHORD Structural wood sheathing directly applied or 3-4-8 oc purlins, except end verticals, and 2-0-0 oc purlins (3-9-10 max.) 3-6  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:  
 6-0-0 oc bracing 10-11,9-10  
 1 Row at midpt 6-10

**REACTIONS** (size) 1=0-5-8, 9=0-3-8  
 Max Horiz 1=281 (LC 11)  
 Max Uplift 1=3 (LC 12), 9=35 (LC 12)  
 Max Grav 1=1085 (LC 1), 9=1189 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=-2371/120, 2-3=-2054/128, 3-4=-1992/139, 4-5=-1992/139, 5-6=-1177/92, 6-7=-741/128, 7-8=0/70, 7-9=-1160/62  
 BOT CHORD 1-17=-216/1900, 16-17=-216/1938, 15-16=-100/1622, 14-15=-78/1330, 13-14=-51/524, 12-13=-25/529, 11-13=-123/0, 10-11=-40/0, 9-10=-37/0  
 WEBS 2-16=-263/135, 3-16=-28/257, 3-15=-34/1142, 10-12=0/279, 6-12=-560/59, 2-17=-3/112, 4-15=-210/59, 6-14=-29/1023, 5-14=-952/102, 5-15=-56/1042, 7-12=0/646, 9-12=-70/117

- Wind ASCE 7-22, Vult=130mph (3-second gust) Vasd=101mph, TCCL=6.0psf, BCDL=6.0psf; h=15ft; B=45ft, L=27ft; eave=4ft; Cat II, Exp B, Enclosed, MWFRS (directional) and C-C Zone1 0-0-0 to 8-8-0, Zone2 8-8-0 to 12-10-14, Zone1 12-10-14 to 28-10-0 zone, cantilever left and right exposed, end vertical left and right exposed, C-C for members and forces & MWFRS for reactions shown, Lumber DOL=1 60 plate grip DOL=1 60
- 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 psf 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
- Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 3 lb uplift at joint 1 and 35 lb uplift at joint 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



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

March 20, 2025

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

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

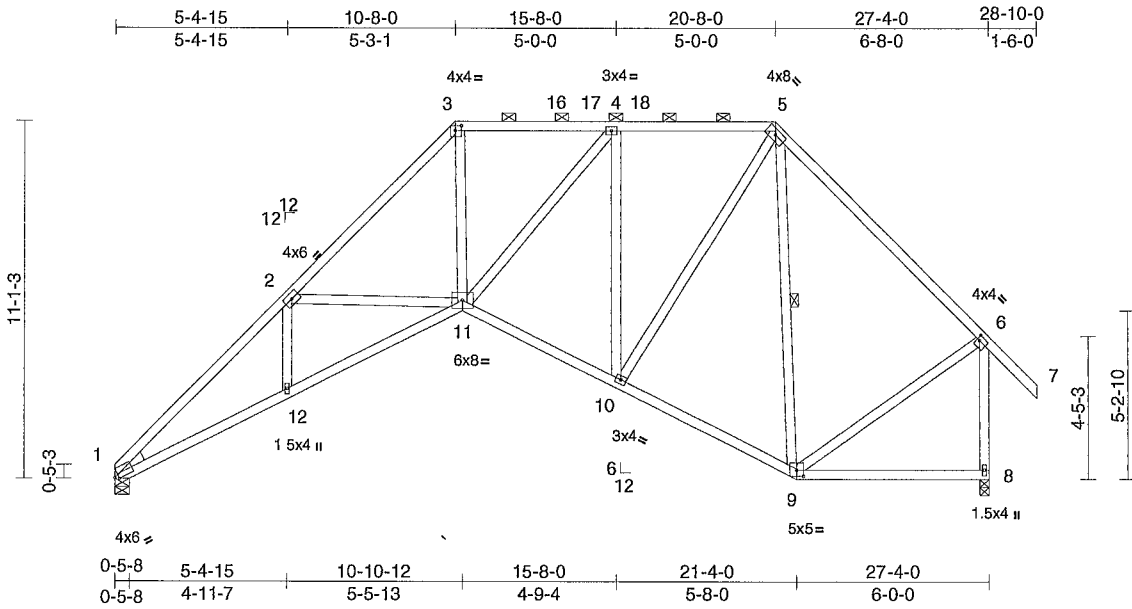
**MiTek®**  
 16023 Swingley Ridge Rd.  
 Chesterfield, MO 63017  
 314.434.1200 / MITek-US.com

Job 0325-046	Truss A04	Truss Type Piggyback Base	Qty 12	Ply 1	DAVID SIMQUE Job Reference (optional)	T36741624
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Mayo Truss Company Inc. Mayo, FL 32066,

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Page. 1



Scale = 1/70.5

Plate Offsets (X, Y) [1 0-1-8,Edge], [3 0-2-4,0-1-12], [6 0-1-0,0-1-12], [9 0-2-8,0-2-4]

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 54	Vert(LL)	-0 11	11-12	>999	240	MT20	244/190
TCDL	10 0	Lumber DOL	1 25	BC	0 74	Vert(CT)	-0 25	11-12	>999	180		
BCLL	0 0*	Rep Stress Incr	YES	WB	0 84	Horz(CT)	0 22	8	n/a	n/a		
BCDL	10 0	Code	FBC2023/TPI2014	Matrix-MS								
											Weight: 188 lb	FT = 20%

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

**BRACING**  
TOP CHORD Structural wood sheathing directly applied or 3-3-3 oc purlins, except end verticals, and 2-0-0 oc purlins (4-11-8 max ) 3-5  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing  
WEBS 1 Row at midpt 5-9

**REACTIONS** (size) 1=0-5-8, 8=0-3-8  
Max Horiz 1=280 (LC 11)  
Max Uplift 1=-4 (LC 12), 8=-34 (LC 12)  
Max Grav 1=1085 (LC 1), 8=1189 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=-2384/72, 2-3=-1882/74, 3-4=-1287/89, 4-5=-924/91, 5-6=-844/129, 6-7=0/70, 6-8=-1130/68  
BOT CHORD 1-12=-206/1946, 11-12=-125/1971, 10-11=-8/1070, 9-10=0/611, 8-9=-50/78  
WEBS 2-12=0/191, 2-11=-415/157, 3-11=0/968, 4-11=-37/652, 4-10=-760/84, 5-10=-14/786, 5-9=-482/39, 6-9=0/565

- 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 psf 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
- Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula Building designer should verify capacity of bearing surface
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 4 lb uplift at joint 1 and 34 lb uplift at joint 8
- 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**
- 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=27ft, eave=4ft; Cat. II, Exp B, Enclosed, MWFRS (directional) and C-C Zone1 0-0-0 to 10-8-0, Zone2 10-8-0 to 14-10-14, Zone1 14-10-14 to 28-10-0 zone, cantilever left and right exposed , end vertical left and right exposed,C-C for members and forces & MWFRS for reactions shown, Lumber DOL=1 60 plate grip DOL=1 60



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

March 20, 2025

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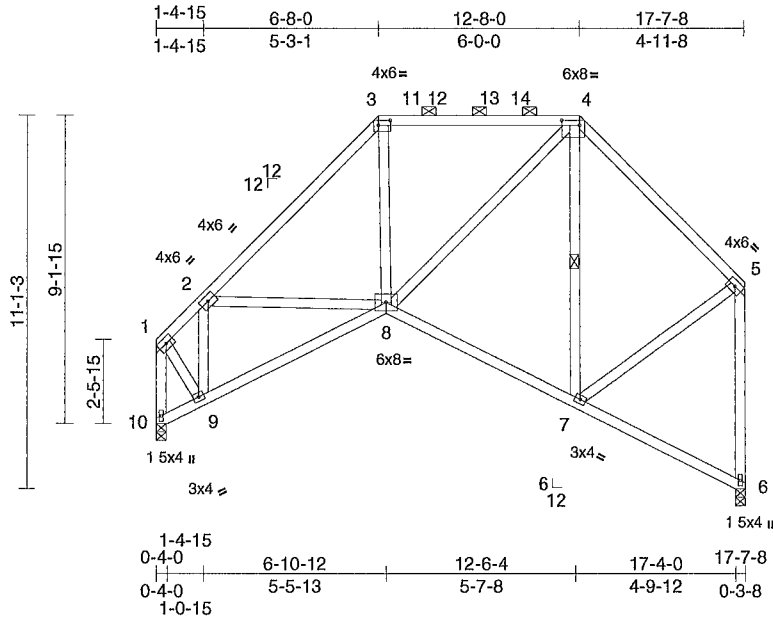


Job 0325-046	Truss A05	Truss Type Piggyback Base	Qty 1	Ply 1	DAVID SIMQUE Job Reference (optional)	848741626
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Mayo Truss Company, Inc , Mayo, FL 32066

Run 8 73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MITek Industries, Inc. Thu Mar 20 07:29:26  
ID:Qm8UBGstUVD4VrTG8ROZnVzZOSw-RIC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC7f

Page 1



Scale = 1.67.5

Plate Offsets (X, Y) [3'0-4-4,0-1-12], [4'0-6-4,0-1-12]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20 0	Plate Grip DOL	1.25	TC	0.42	Vert(LL)	-0.03	8-9	>999	240	MT20 244/190
TCDL	10 0	Lumber DOL	1.25	BC	0.26	Vert(CT)	-0.06	8-9	>999	180	
BCLL	0 0*	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.04	6	n/a	n/a	
BCDL	10 0	Code	FBC2023/TPI2014	Matrix-AS							Weight 130 lb FT = 20%

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

**BRACING**  
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max ) 3-4  
BOT CHORD Rigid ceiling directly applied  
WEBS 1 Row at midpt 4-7

**REACTIONS**  
(size) 6=0-3-8, 10=0-3-8  
Max Horiz 10=124 (LC 10)  
Max Uplift 6=7 (LC 12)  
Max Grav 6=693 (LC 1), 10=693 (LC 1)

**FORCES**  
(lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=-416/0, 2-3=-859/55, 3-4=-536/82, 4-5=-534/60, 5-6=-656/32, 1-10=-712/0  
BOT CHORD 9-10=-118/154, 8-9=-108/479, 7-8=0/368, 6-7=-28/61  
WEBS 2-9=-502/101, 2-8=0/218, 3-8=0/282, 4-8=-44/372, 4-7=-246/55, 1-9=-33/546, 5-7=0/369

- 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
- Bearing at joint(s) 10, 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 7 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.
- 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**

- 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 4-1-12 to 10-8-0, Zone2 10-8-0 to 14-10-14, Zone1 14-10-14 to 21-5-12 zone, cantilever 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



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

March 20,2025

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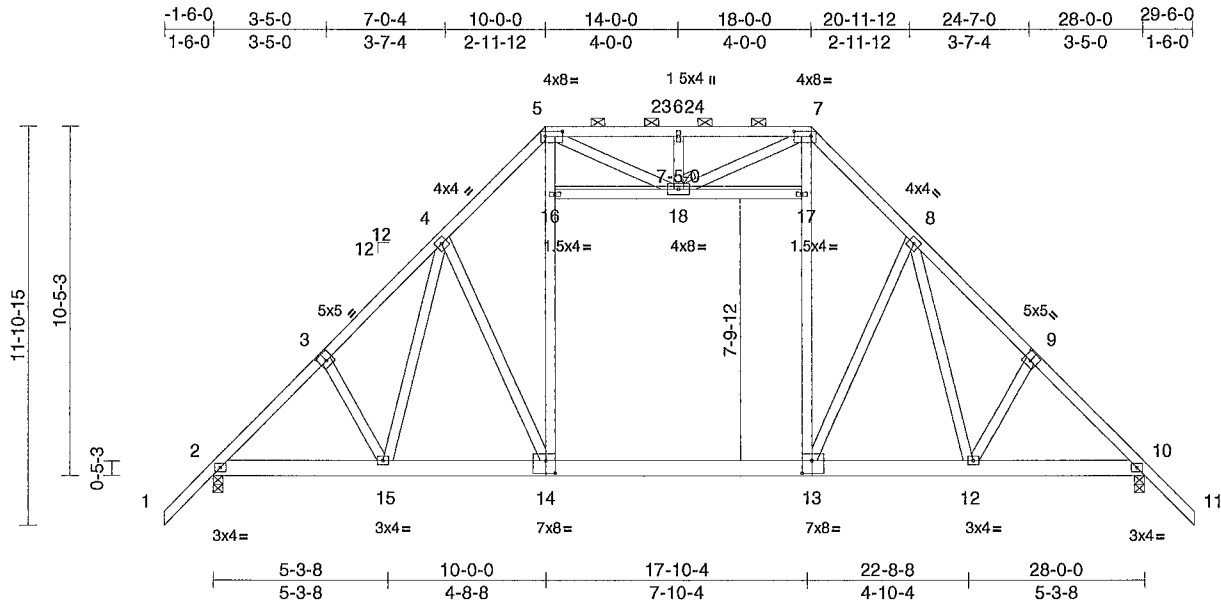
16023 Swingley Ridge Rd  
Chesterfield, MO 63017  
314.434 1200 / MiTek-US.com

Job 0325-046	Truss B01	Truss Type Attic	Qty 1	Ply 1	DAVID SIMQUE Job Reference (optional)	T36741627
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Mayo Truss Company Inc. Mayo, FL - 32066,

Run 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu Mar 20 07:29:26  
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Page: 1



Scale = 1/8"

Plate Offsets (X, Y) [3 0-2-8,0-3-0], [5 0-6-4,0-1-12], [7 0-6-4,0-1-12], [8 0-0-0,0-0-0], [9 0-2-8,0-3-0], [13 0-3-8,0-4-8], [14 0-3-8,0-4-8]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	200	Plate Grip DOL	1.25	TC	0.21	Vert(LL)	-0.13	13-14	>999	240	MT20 244/190
TCDL	100	Lumber DOL	1.25	BC	0.78	Vert(CT)	-0.22	13-14	>999	180	
BCLL	00*	Rep Stress Incr	YES	WB	0.32	Horz(CT)	0.03	10	n/a	n/a	
BCDL	100	Code	FBC2023/TPI2014	Matrix-MS		Attic	-0.11	13-14	>912	360	Weight 232 lb FT = 20%

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

**BRACING**  
TOP CHORD Structural wood sheathing directly applied or 4-4-5 oc purlins, except 2-0-0 oc purlins (4-10-4 max.) 5-7  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing

**JOINTS**  
1 Brace at Jt(s) 18

**REACTIONS** (size) 2=0-3-8, 10=0-3-8  
Max Horiz 2=247 (LC 10)  
Max Grav 2=1508 (LC 18), 10=1508 (LC 19)

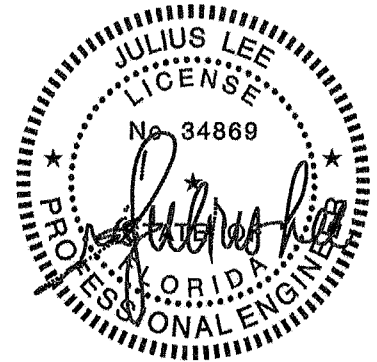
**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=0/64, 2-4=-1828/0, 4-5=-1593/0, 5-6=-1406/0, 6-7=-1406/0, 7-8=-1593/0, 8-10=-1828/0, 10-11=0/64  
BOT CHORD 2-15=0/1420, 12-15=0/1288, 10-12=0/1258  
WEBS 14-16=0/795, 5-16=0/818, 13-17=0/795, 7-17=0/818, 16-18=-4/100, 17-18=-4/100, 4-15=-34/256, 3-15=-172/84, 8-12=-35/256, 9-12=-172/84, 4-14=-325/110, 8-13=-325/110, 6-18=-263/51, 5-18=-29/396, 7-18=-29/396

- 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
- Ceiling dead load (5.0 psf) on member(s) 16-18, 17-18, Wall dead load (5.0psf) on member(s) 14-16, 13-17
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room 13-14
- All bearings are assumed to be SP No 2
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord
- Attic room checked for L/360 deflection

**LOAD CASE(S)** Standard

**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=28ft; eave=4ft; Cat. II, Exp B, Enclosed, MWFRS (directional) and C-C Zone1 -1-6-0 to 10-0-0, Zone2 10-0-0 to 14-0-0, Zone1 14-0-0 to 29-6-0 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



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

March 20, 2025

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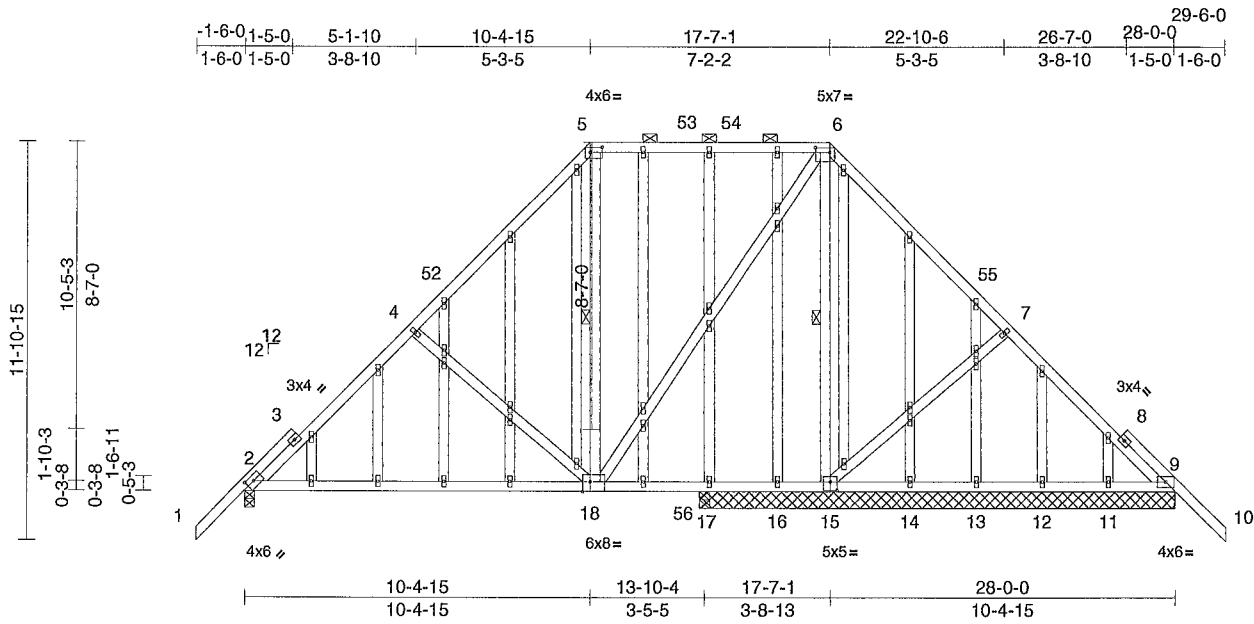
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Chesterfield, MO 63017  
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	DAVID SIMQUE	T36741628
0325-046	B01GE	Piggyback Base Structural Gable	1	1	Job Reference (optional)	

Mayo Truss Company, Inc. Mayo, FL 32066,

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MITek Industries, Inc. Thu Mar 20 07:29 26  
 ID:yl3hP6eajzxeL45o4g3L2izZOTC-RIC?PsB70Hq3NSgPqnL8w3uTXbGKWCDol7J4zJC?f

Page 1



Scale = 1/8" = 1'-0"

Plate Offsets (X, Y) [2'-0-2-12, 0'-1-13], [5'-0-4-4, 0'-1-12], [6'-0-5-4, 0'-1-12], [15'-0-2-8, 0'-3-0], [18'-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	Vert(LL)	-0.21	18-51	>803	240	MT20	244/190	
TCDL	10 0	Lumber DOL	1.25	BC	Vert(CT)	-0.43	18-51	>384	180			
BCLL	0 0*	Rep Stress Incr	YES	WB	Horz(CT)	0.02	2	n/a	n/a			
BCDL	10 0	Code	FBC2023/TPI2014	Matrix-MS								
											Weight: 298 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 4-8-2 oc purlins, except 2-0-0 oc purlins (6-0-0 max.) 5-6
  - BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing
  - WEBS 1 Row at midpt 5-18, 6-15
- REACTIONS (size)**
- 2=0-3-8, 9=14-3-8, 11=14-3-8, 12=14-3-8, 13=14-3-8, 14=14-3-8, 15=14-3-8, 16=14-3-8, 17=14-3-8
  - Max Horiz 2=247 (LC 11)
  - Max Uplift 2=-44 (LC 12), 9=-81 (LC 12), 15=-69 (LC 12), 17=-6 (LC 12)
  - Max Grav 2=833 (LC 17), 9=348 (LC 24), 11=171 (LC 18), 12=74 (LC 16), 13=78 (LC 16), 14=94 (LC 3), 15=1033 (LC 17), 16=148 (LC 16), 17=30 (LC 17)
- FORCES (lb) - Maximum Compression/Maximum Tension**
- TOP CHORD 1-2=0/70, 2-4=-738/58, 4-5=-565/96, 5-6=-343/115, 6-7=-120/135, 7-9=-308/77, 9-10=0/64
  - BOT CHORD 2-17=-130/680, 16-17=-130/179, 14-16=-130/179, 13-14=-3/169, 12-13=-3/169, 11-12=-3/169, 9-11=-42/169
  - WEBS 4-18=-345/119, 5-18=-68/114, 6-18=0/667, 6-15=-872/1, 7-15=-261/139

- Wind ASCE 7-22, Vult=130mph (3-second gust) Vasd=101mph, TCDL=6 0psf; BCDL=6 0psf; h=15ft; B=45ft, L=28ft; eave=4ft; Cat II, Exp B, Enclosed, MWFRS (directional) and C-C Zone3 -1-6-0 to 1-6-0, Zone1 1-6-0 to 10-4-15, Zone2 10-4-15 to 14-7-14, Zone1 14-7-14 to 17-7-1, Zone2 17-7-1 to 21-10-0, Zone1 21-10-0 to 29-6-0 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
- 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.
- Provide adequate drainage to prevent water ponding
- All plates are 1 5x4 MT20 unless otherwise indicated
- 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, 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 69 lb uplift at joint 15, 81 lb uplift at joint 9, 44 lb uplift at joint 2, 6 lb uplift at joint 17 and 81 lb uplift at joint 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



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

March 20, 2025

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**MiTek**

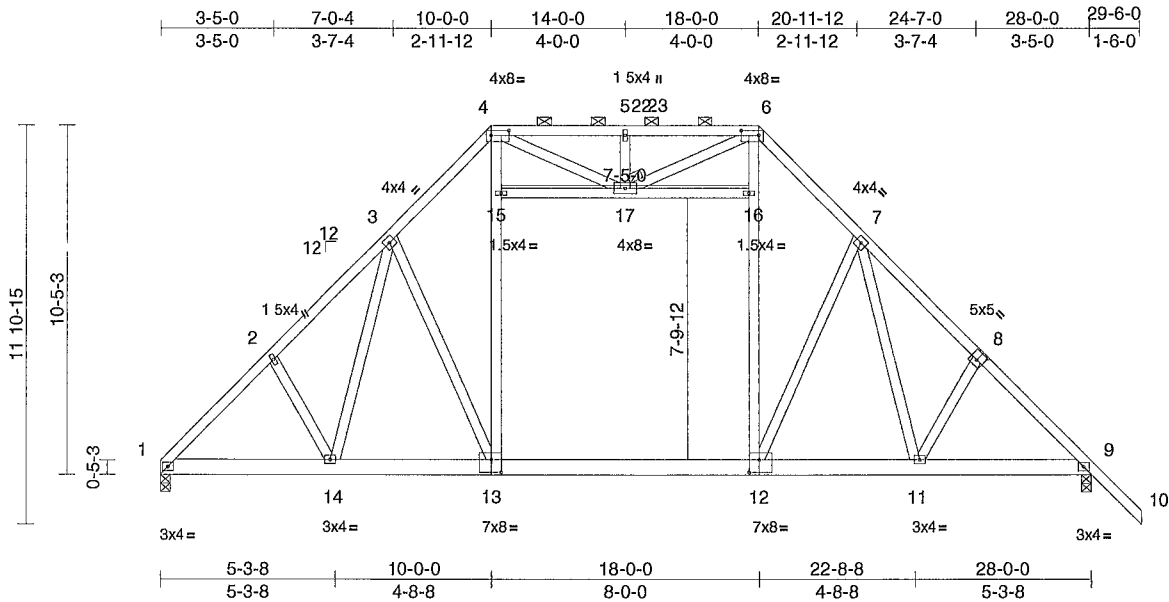
16023 Swingley Ridge Rd  
 Chesterfield, MO 63017  
 314.434.1200 / MITek-US.com

Job	Truss	Truss Type	Qty	Ply	DAVID SIMQUE	T36741629
0325-046	B02	Attic	15	1	Job Reference (optional)	

Mayo Truss Company Inc. Mayo, FL 32066,

Run 8 73 S Feb 19 2025 Print: 8 730 S Feb 19 2025 MiTek Industries, Inc Thu Mar 20 07:29 27  
 ID:JrYI4rkrQyVILLYLDDNOzZOT4-RIC?PsB70Hq3NSgPqnL8w3uITXbGKwRCDoI7JazJC7f

Page 1



Scale = 1/8" = 1'-0"

Plate Offsets (X, Y) [4'-0-6-4,0-1-12], [6'-0-6-4,0-1-12], [7'-0-0-0,0-0-0], [8'-0-2-8,0-3-0], [12'-0-3-8,0-4-8], [13'-0-3-8,0-4-8]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1 25	TC	0 22	Vert(LL)	-0 12	13-14	>999	240	MT20	244/190
TCDL	10 0	Lumber DOL	1 25	BC	0 70	Vert(CT)	-0.20	12-13	>999	180		
BCLL	0 0*	Rep Stress Incr	YES	WB	0.33	Horz(CT)	0 03	9	n/a	n/a		
BCDL	10 0	Code	FBC2023/TP12014	Matrix-MS		Attic	-0 09	12-13	>999	360	Weight 229 lb	FT = 20%

**LUMBER**

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

**BRACING**

TOP CHORD Structural wood sheathing directly applied or 4-5-4 oc purlins, except 2-0-0 oc purlins (4-10-9 max.) 4-6  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing

JOINTS 1 Brace at Jt(s) 17

**REACTIONS** (size) 1=0-3-8, 9=0-3-8  
 Max Horiz 1=-234 (LC 10)  
 Max Grav 1=1358 (LC 18), 9=1446 (LC 19)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=-1749/0, 2-3=-1704/0, 3-4=-1506/0, 4-5=-1389/2, 5-6=-1389/2, 6-7=-1503/0, 7-9=-1742/0, 9-10=0/64  
 BOT CHORD 1-14=0/1374, 11-14=0/1232, 9-11=0/1198  
 WEBS 13-15=0/695, 4-15=0/732, 12-16=0/692, 6-16=0/729, 15-17=-8/94, 16-17=-7/92, 2-14=-178/89, 5-17=-262/51, 4-17=-20/450, 6-17=-21/451, 3-14=-48/267, 3-13=-330/126, 7-11=-41/243, 8-11=-172/83, 7-12=-318/113

**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=28ft, eave=4ft; Cat. II, Exp B, Enclosed, MWFRS (directional) and C-C Zone1 0-0-0 to 10-0-0, Zone2 10-0-0 to 14-0-0, Zone1 14-0-0 to 29-6-0 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.
- 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 psf 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.
- Ceiling dead load (10 0 psf) on member(s) 15-17, 16-17
- Bottom chord live load (30 0 psf) and additional bottom chord dead load (10.0 psf) applied only to room 12-13
- All bearings are assumed to be SP No 2
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord
- Attic room checked for L/360 deflection

**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:

March 20, 2025

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown and is for an individual building component, not a truss system. Before use the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPH 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)

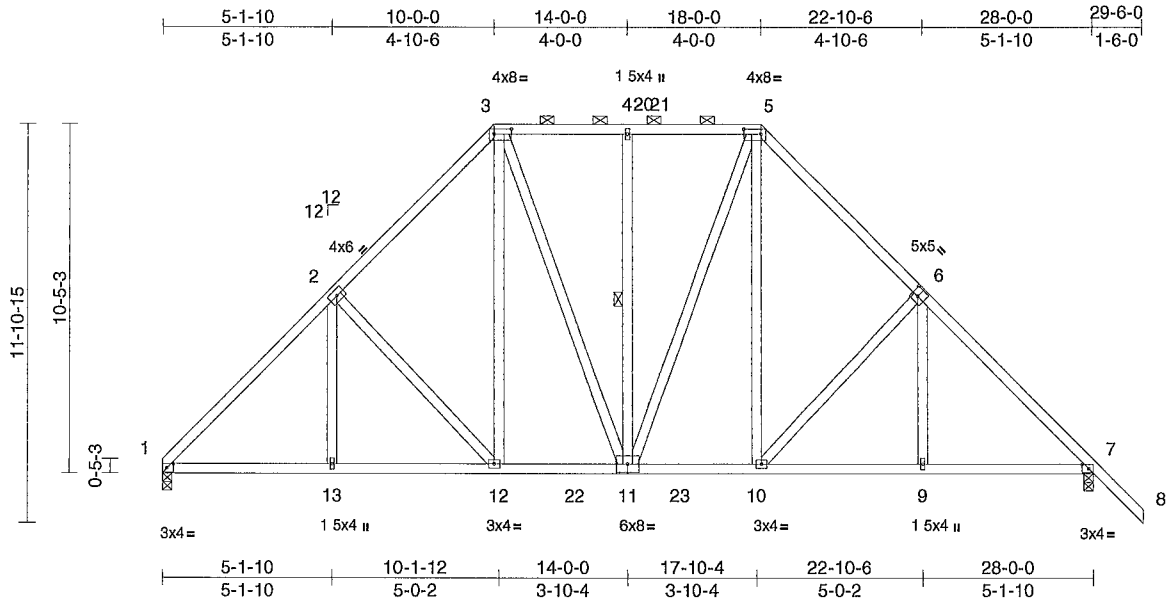
**MiTek**  
 16023 Swingley Ridge Rd.  
 Chesterfield, MO 63017  
 314.434.1200 / MiTek-US.com

Job 0325-046	Truss B03	Truss Type Piggyback Base	Qty 8	Ply 1	DAVID SIMQUE Job Reference (optional)	T36741630
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Mayo Truss Company, Inc. Mayo, FL 32066,

Run: 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MITek Industries, Inc. Thu Mar 20 07:29 27  
ID:IDTIVXmrM1CDYcsjgmFhSpzZOT2-RIC7PsB70Hq3NSgPqnL8w3ulTXbGkWrCDol7J4zJC7f

Page 1



Scale = 1/67.8

Plate Offsets (X, Y) [1'0-2-6,0-1-8], [3'0-6-4,0-1-12], [5'0-6-4,0-1-12], [6.0-2-4,0-3-0], [7'0-2-6,0-1-8]

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	Vert(LL)	-0.04	11-12	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	Vert(CT)	-0.08	9-10	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	Horz(CT)	0.04	7	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS						Weight: 210 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 4-6-4 oc purlins, except 2-0-0 oc purlins (6-0-0 max ) 3-5  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing  
WEBS 1 Row at midpt 4-11

**REACTIONS**

(size) 1=0-3-8, 7=0-3-8  
Max Horiz 1=-234 (LC 10)  
Max Uplift 7=-38 (LC 12)  
Max Grav 1=-1265 (LC 17), 7=1353 (LC 18)

**FORCES**

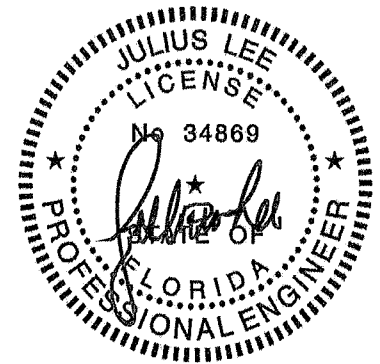
(lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=-1563/34, 2-3=-1257/114, 3-4=-890/117, 4-5=-890/117, 5-7=-1549/111, 7-8=0/64  
BOT CHORD 1-13=-28/1206, 12-13=0/1206, 10-12=0/920, 9-10=0/1056, 7-9=0/1057  
WEBS 2-12=-423/106, 3-12=-18/480, 5-10=-12/474, 6-10=-408/92, 2-13=0/217, 6-9=0/213, 5-11=-38/260, 4-11=-264/39, 3-11=-43/257

**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=28ft, eave=4ft; Cat. II, Exp B, Enclosed, MWFRS (directional) and C-C Zone1 0-0-0 to 10-0-0, Zone2 10-0-0 to 14-0-0, Zone1 14-0-0 to 29-6-0 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.
- 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 38 lb uplift at joint 7
- 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:

March 20,2025

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**MiTek®**

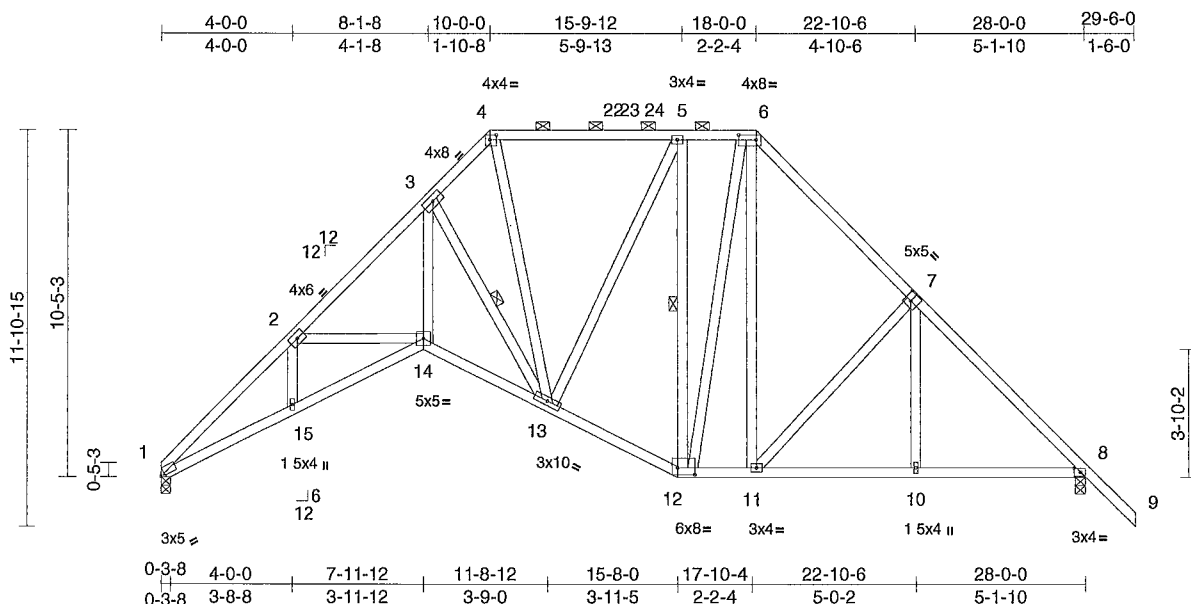
16023 Swingley Ridge Rd  
Chesterfield MO 63017  
314.434 1200 / MiTek-US.com

Job 0325-046	Truss B04	Truss Type Piggyback Base	Qty 2	Ply 1	DAVID SIMQUE Job Reference (optional)	T36741631
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Mayo Truss Company Inc. Mayo, FL 32066,

Run: 8 73 S Feb 19 2025 Print: 8 730 S Feb 19 2025 MiTek Industries, Inc. Thu Mar 20 07:29:27  
ID:fdTTVXmrM1CDYcsjgmFhSpzZOT2-RIC?PsB70Hq3NSgPqnL8w3uitXbGKWrCDol7J4zJC7f

Page 1



Scale = 1/68.3

Plate Offsets (X, Y) [1 0-1-5,0-0-5], [4 0-2-4,0-1-12], [6 0-6-4,0-1-12], [7 0-2-4,0-3-0], [8 0-2-6,0-1-8], [12 0-6-0,0-2-8]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	200	Plate Grip DOL	1 25	TC	0.42	Vert(LL)	-0 12	14-15	>999	240	MT20 244/190
TCDL	100	Lumber DOL	1 25	BC	0 73	Vert(CT)	-0 24	14-15	>999	180	
BCLL	0 0*	Rep Stress Incr	YES	WB	0 38	Horz(CT)	0 22	8	n/a	n/a	
BCDL	100	Code	FBC2023/TPI2014	Matrix-MS							Weight: 215 lb FT = 20%

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

**BRACING**  
TOP CHORD Structural wood sheathing directly applied or 3-5-7 oc purlins, except 2-0-0 oc purlins (5-3-15 max ) 4-6  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing  
WEBS 1 Row at midpt 5-12, 3-13

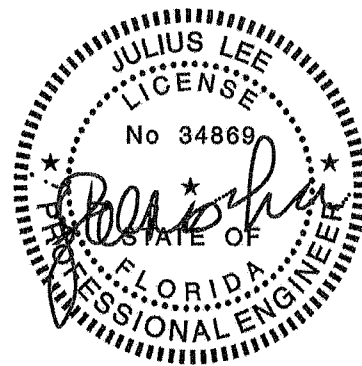
**REACTIONS** (size) 1=0-3-8, 8=0-3-8  
Max Horiz 1=-234 (LC 10)  
Max Uplift 8=-37 (LC 12)  
Max Grav 1=1118 (LC 1), 8=1212 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=-2540/0, 2-3=-2239/0, 3-4=-1169/78, 4-5=-922/69, 5-6=-775/119, 6-8=-1402/111, 8-9=0/64  
BOT CHORD 1-15=-48/2070, 14-15=0/2094, 13-14=0/1740, 12-13=0/879, 11-12=0/714, 10-11=0/922, 8-10=0/923  
WEBS 5-12=-639/21, 6-12=-47/360, 6-11=-19/329, 7-11=-353/92, 2-14=-248/117, 3-14=0/1796, 2-15=0/114, 3-13=-1432/0, 5-13=0/424, 4-13=-14/594, 7-10=0/216

- 2) Wind ASCE 7-22, Vult=130mph (3-second gust) Vasd=101mph, TCCL=6 0psf, BCDL=6 0psf; h=15ft; B=45ft; L=28ft, eave=4ft; Cat II, Exp B, Enclosed, MWFRS (directional) and C-C Zone1 0-0-0 to 10-0-0, Zone2 10-0-0 to 14-2-14, Zone1 14-2-14 to 29-6-0 zone, cantilever left and right exposed , end vertical left and right exposed,C-C for members and forces & MWFRS for reactions shown, Lumber DOL=1 60 plate grip DOL=1 60
- 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 4) 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) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 37 lb uplift at joint 8
- 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



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

March 20,2025

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Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery erection and bracing of trusses and truss systems see ANSI/TPI 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

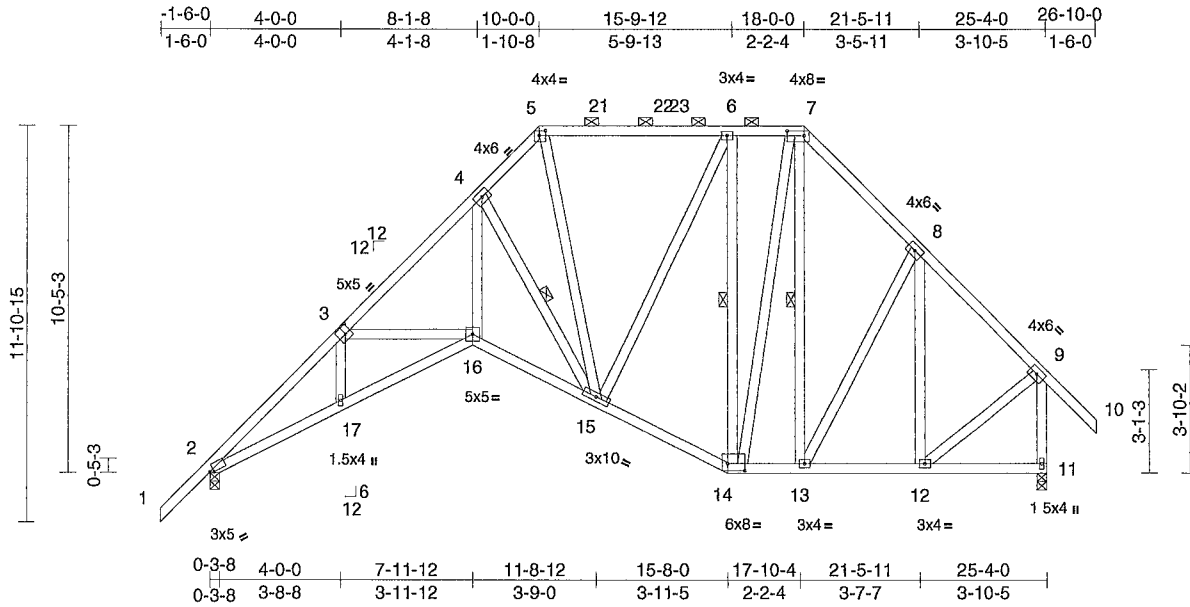


Job 0325-046	Truss B06	Truss Type Piggyback Base	Qty 1	Ply 1	DAVID SIMQUE Job Reference (optional)	T36741633
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Mayo Truss Company, Inc. Mayo, FL - 32066,

Run 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MITek Industries, Inc Thu Mar 20 07:29 27  
ID:B155IBIDbk4MwSHX62kSvzbZOT3-RfC?PsbB70Hq3NSgPqnL8w3uITXbGKWrCDol7J4zJC7f

Page 1



Scale = 1/68.3

Plate Offsets (X, Y) [2 0-1-5,0-0-9], [3:0-2-4,0-3-0], [5 0-2-4,0-1-12], [7:0-6-4,0-1-12], [14 0-6-0,0-2-8]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	200	Plate Grip DOL	1 25	TC	Vert(LL)	-0 10	16-17	>999	240	MT20	244/190
TCDL	100	Lumber DOL	1 25	BC	Vert(CT)	-0 20	16-17	>999	180		
BCLL	0 0*	Rep Stress Incr	YES	WB	Horz(CT)	0 18	11	n/a	n/a		
BCDL	100	Code	FBC2023/TP12014	Matrix-MS						Weight 222 lb	FT = 20%

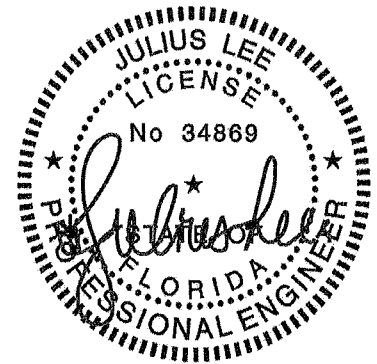
- LUMBER**
- TOP CHORD 2x4 SP No 2
  - BOT CHORD 2x4 SP No 2
  - WEBS 2x4 SP No 2
- BRACING**
- TOP CHORD Structural wood sheathing directly applied or 3-8-5 oc purlins, except end verticals, and 2-0-0 oc purlins (5-11-5 max.) 5-7
  - BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing
  - WEBS 1 Row at midpt 6-14, 7-13, 4-15
- REACTIONS** (size) 2=0-3-8, 11=0-3-8
- Max Horiz 2=272 (LC 11)
  - Max Uplift 2=41 (LC 12), 11=34 (LC 12)
  - Max Grav 2=1097 (LC 1), 11=1107 (LC 1)
- FORCES** (lb) - Maximum Compression/Maximum Tension
- TOP CHORD 5-6=-754/79, 6-7=-598/125, 7-8=-806/135, 8-9=-766/85, 9-10=0/70, 9-11=-1073/55, 1-2=0/64, 2-4=-2215/16, 4-5=-973/90
  - BOT CHORD 2-17=-84/1823, 16-17=-71/1848, 15-16=-13/1513, 14-15=0/688, 13-14=0/513, 12-13=0/484, 11-12=-28/47
  - WEBS 6-14=-657/60, 7-14=-42/450, 7-13=-58/123, 9-12=0/610, 4-16=0/1588, 8-13=-76/106, 8-12=-298/16, 4-15=-1282/44, 6-15=-2/441, 5-15=-27/452, 3-16=-239/96, 3-17=0/118

**NOTES**

- Unbalanced roof live loads have been considered for this design

- Wind ASCE 7-22, Vult=130mph (3-second gust) Vasd=101 mph, TCCL=6 0psf, BCDL=6 0psf; h=15ft; B=45ft; L=25ft; eave=4ft; Cat II, Exp B, Enclosed, MWFRS (directional) and C-C Zone1 -1-6-0 to 10-0-0, Zone2 10-0-0 to 14-2-14, Zone1 14-2-14 to 26-10-0 zone, cantilever left and right exposed, end vertical left and right exposed, C-C for members and forces & MWFRS for reactions shown, Lumber DOL=1 60 plate grip DOL=1 60
- 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
- Bearing at joint(s) 2 considers parallel to grain value using ANSI/TP1 1 angle to grain formula Building designer should verify capacity of bearing surface
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 41 lb uplift at joint 2 and 34 lb uplift at joint 11
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord

**LOAD CASE(S)** Standard



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

March 20, 2025

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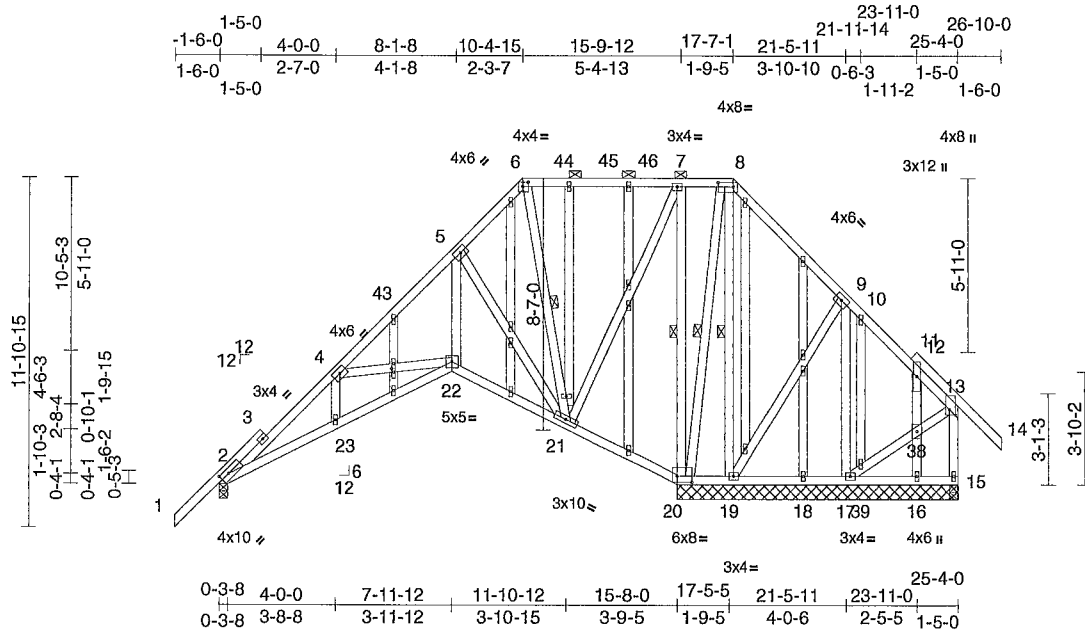
**MiTek®**  
16023 Swingley Ridge Rd  
Chesterfield, MO 63017  
314.434.1200 / MITek-US.com

Job	Truss	Truss Type	Qty	Ply	DAVID SIMQUE	T36741634
0325-046	B06GE	Piggyback Base Structural Gable	1	1	Job Reference (optional)	

Mayo Truss Company, Inc. Mayo, FL 32066

Run 9 S 8.73 May 2024 Print. 8 730 S May 9 2024 MITek Industries, Inc. Thu Mar 20 14:36:45  
 ID:jrY14rkrQyV11LYLDNOzZOT4-403E\_wVQDrtMD0F26lcNlMqJeadwBZ78dqUz3TzZ112

Page 1



Scale = 1/77.4

Plate Offsets (X, Y) [2 0-6-7,Edge], [6 0-2-4,0-1-12], [8 0-6-4,0-1-12], [13 0-2-4,0-2-8], [20 0-6-0,0-2-8], [35 0-1-9,0-0-12]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	200	Plate Grip DOL	1 25	TC	0 38	Vert(LL)	-0 02	22-23	>999	240	MT20 244/190
TCDL	100	Lumber DOL	1 25	BC	0 19	Vert(CT)	-0 05	22-23	>999	180	
BCLL	0 0*	Rep Stress Incr	YES	WB	0 37	Horz(CT)	-0 04	2	n/a	n/a	
BCDL	100	Code	FBC2023/TPI2014	Matrix-MS							
											Weight 299 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, and 2-0-0 oc purlins (10-0-0 max ) 6-8  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing  
 WEBS 1 Row at midpt 7-20, 8-19, 6-21, 8-20

**REACTIONS**

All bearings 9-8-0 except 2=0-3-8  
 (lb) - Max Horiz 20=268 (LC 11)  
 Max Uplift All uplift 100 (lb) or less at joint(s) 2, 17 except 15=283 (LC 24)  
 Max Grav All reactions 250 (lb) or less at joint (s) 15, 16, 17, 18 except 2=462 (LC 24), 19=397 (LC 19), 20=1330 (LC 1)

**FORCES**

(lb) - Max Comp./Max Ten - All forces 250 (lb) or less except when shown  
 TOP CHORD 2-3=654/0, 3-4=647/1, 7-8=0/393, 8-9=0/551, 9-10=0/380, 10-11=0/328, 11-12=0/276, 12-13=0/291, 13-15=25/285  
 BOT CHORD 2-23=0/530, 22-23=0/529, 20-21=523/121, 19-20=420/97, 18-19=265/72, 17-18=265/72  
 WEBS 7-20=783/0, 5-22=0/337, 4-22=404/88, 7-21=0/524, 6-21=339/0, 5-21=363/0, 8-20=301/0, 9-19=282/48, 17-39=276/48, 38-39=304/51, 13-38=295/51

**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 Opsf; BCDL=6 Opsf, h=15ft; B=45ft, L=25ft; eave=4ft; Cat. II, Exp B, Enclosed, MWFRS (directional) and C-C Zone3 -1-6-0 to 1-6-0, Zone1 1-6-0 to 10-4-15, Zone2 10-4-15 to 14-7-14, Zone1 14-7-14 to 17-7-1, Zone2 17-7-1 to 21-11-14, Zone1 21-11-14 to 26-10-0 zone, cantilever left and right exposed, end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown, Lumber DOL=1 60 plate grip DOL=1 60
- 3) 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
- 4) Provide adequate drainage to prevent water ponding
- 5) All plates are 1 5x4 MT20 unless otherwise indicated
- 6) Gable studs spaced at 2-0-0 oc
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads
- 8) \* This truss has been designed for a live load of 20 Opsf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members
- 9) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula Building designer should verify capacity of bearing surface
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint (s) 2, 17 except (jt=lb) 15=283
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord

**LOAD CASE(S)** Standard



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

March 20, 2025

**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®**

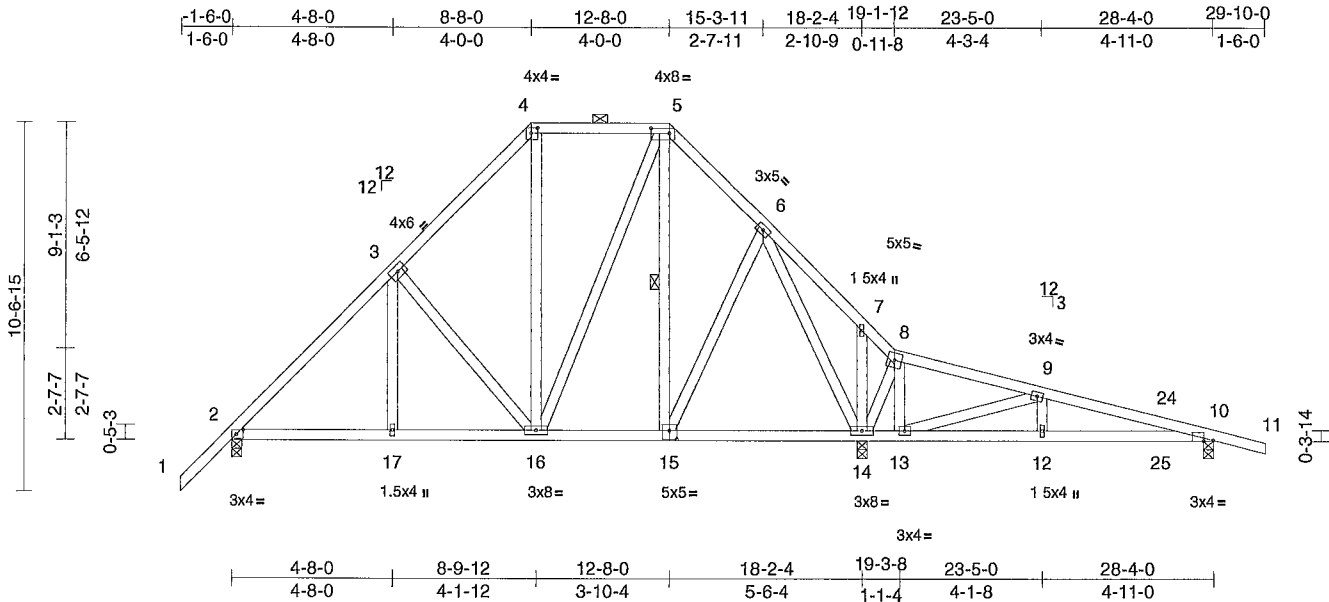
16023 Swingley Ridge Rd.  
 Chesterfield, MO 63017  
 314.434.1200 / MITek-US.com

Job 0325-046	Truss C01	Truss Type Piggyback Base	Qty 5	Ply 1	DAVID SIMQUE Job Reference (optional)	T36741635
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Mayo Truss Company, Inc Mayo, FL 32066,

Run 8 73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MITek Industries, Inc. Thu Mar 20 07:29:28  
ID.X?7v\_LvpMQGfH1D9UvcKdofzZOT\_RfC?PsB70Hq3NSgPqL8w3uITXbGKwCD0i7J4zJC?f

Page: 1



Scale = 1/65.1

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

Loading	(psf)	Spacing		CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	200	Plate Grip DOL	1 25	TC	0.22	Vert(LL)	0 03	12-23	>999	240	MT20	244/190
TCDL	100	Lumber DOL	1 25	BC	0.26	Vert(CT)	-0 05	12-23	>999	180		
BCLL	0 0*	Rep Stress Incr	YES	WB	0.73	Horz(CT)	0 02	10	n/a	n/a		
BCDL	100	Code	FBC2023/TPI2014	Matrix-MS								
											Weight. 192 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 2-0-0 oc purlins (6-0-0 max ) 4-5  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except. 6-0-0 oc bracing 13-14.  
WEBS 1 Row at midpt 5-15

**REACTIONS** (size) 2=0-3-8, 10=0-3-8, 14=0-3-8  
Max Horiz 2=-199 (LC 10)  
Max Uplift 2=-25 (LC 12), 10=-101 (LC 12), 14=-119 (LC 12)  
Max Grav 2=774 (LC 1), 10=418 (LC 24), 14=1255 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=0/64, 2-3=-800/46, 3-4=-562/125, 4-5=-330/122, 5-6=-420/113, 6-7=-136/381, 7-8=-201/346, 8-9=-96/177, 9-10=-604/284, 10-11=0/22  
BOT CHORD 2-17=0/581, 16-17=0/581, 14-16=0/297, 13-14=-159/174, 12-13=-238/572, 10-12=-238/572  
WEBS 3-16=-304/91, 4-16=0/173, 5-16=-43/213, 5-15=-108/68, 8-13=-233/225, 9-13=-750/399, 3-17=0/189, 9-12=-130/192, 7-14=-148/82, 6-15=0/219, 6-14=-934/213, 8-14=-186/153

- Wind ASCE 7-22, Vult=130mph (3-second gust) Vasd=101mph, TCDL=6 Opsf; BCDL=6 Opsf; h=15ft; B=45ft, L=28ft; eave=4ft; Cat II, Exp B, Enclosed, MWFRS (directional) and C-C Zone1 -1-6-0 to 8-8-0, Zone3 8-8-0 to 12-8-0, Zone1 12-8-0 to 29-10-0 zone, cantilever left and right exposed, end vertical left and right exposed, porch 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 25 lb uplift at joint 2, 101 lb uplift at joint 10 and 119 lb uplift at joint 14
- 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



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

March 20, 2025

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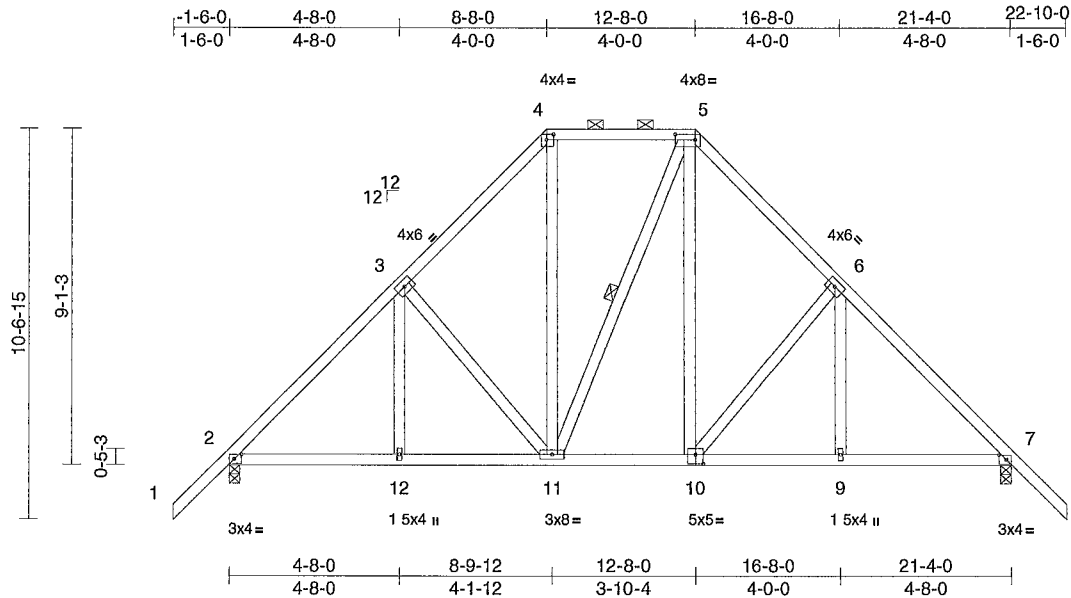


Job 0325-046	Truss D01	Truss Type Piggyback Base	Qty 1	Ply 1	DAVID SIMQUE Job Reference (optional)	T36741637
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Mayo Truss Company, Inc. Mayo, FL 32066

Run 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu Mar 20 07:29 28  
ID:7QDritmU7LK4AmQvETmw\_QzZOT1-RIC?PsB70Hq3NSgPqnlBw3uITXbGKwRCDol7J4zJC?f

Page 1



Scale = 1/61.5

Plate Offsets (X, Y) [2'-0-2-6,0-1-8], [4'-0-2-4,0-1-12], [5'-0-6-4,0-1-12], [7'-0-2-6,0-1-8], [10'-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	Vert(LL)	-0.02	10	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	Vert(CT)	-0.04	10-11	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	Horz(CT)	0.02	7	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS						Weight: 152 lb	FT = 20%

**LUMBER**

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

**BRACING**

TOP CHORD Structural wood sheathing directly applied or 5-7-9 oc purlins, except 2-0-0 oc purlins (6-0-0 max.) 4-5  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing  
WEBS 1 Row at midpt 5-11

**REACTIONS**

(size) 2=0-3-8, 7=0-3-8  
Max Horiz 2=-214 (LC 10)  
Max Uplift 2=-36 (LC 12), 7=-36 (LC 12)  
Max Grav 2=943 (LC 1), 7=943 (LC 1)  
TOP CHORD 1-2=0/64, 2-3=-1034/18, 3-4=-800/96, 4-5=-500/97, 5-6=-805/99, 6-7=-1033/25, 7-8=0/64  
BOT CHORD 2-12=-8/727, 11-12=0/727, 9-11=0/668, 7-9=0/668  
WEBS 3-11=-298/77, 4-11=-12/305, 5-11=-80/86, 5-10=-14/304, 6-10=-299/78, 3-12=0/183, 6-9=0/181

**NOTES**

- Unbalanced roof live loads have been considered for this design
- Wind ASCE 7-22, Vult=130mph (3-second gust) Vasd=101mph, TC DL=6 Opsf; BCDL=6 Opsf; h=15ft; B=45ft; L=24ft; eave=4ft, Cat II, Exp B, Enclosed, MWFRS (directional) and C-C Zone 1 -1-6-0 to 8-8-0, Zone 3 8-8-0 to 12-8-0, Zone 1 12-8-0 to 22-10-0 zone, cantilever left and right exposed, end vertical left and right exposed, C-C for members and forces & MWFRS for reactions shown, Lumber DOL=1.60 plate grip DOL=1.60

- 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 psf 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 7 and 36 lb uplift at joint 2
- 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:

March 20, 2025

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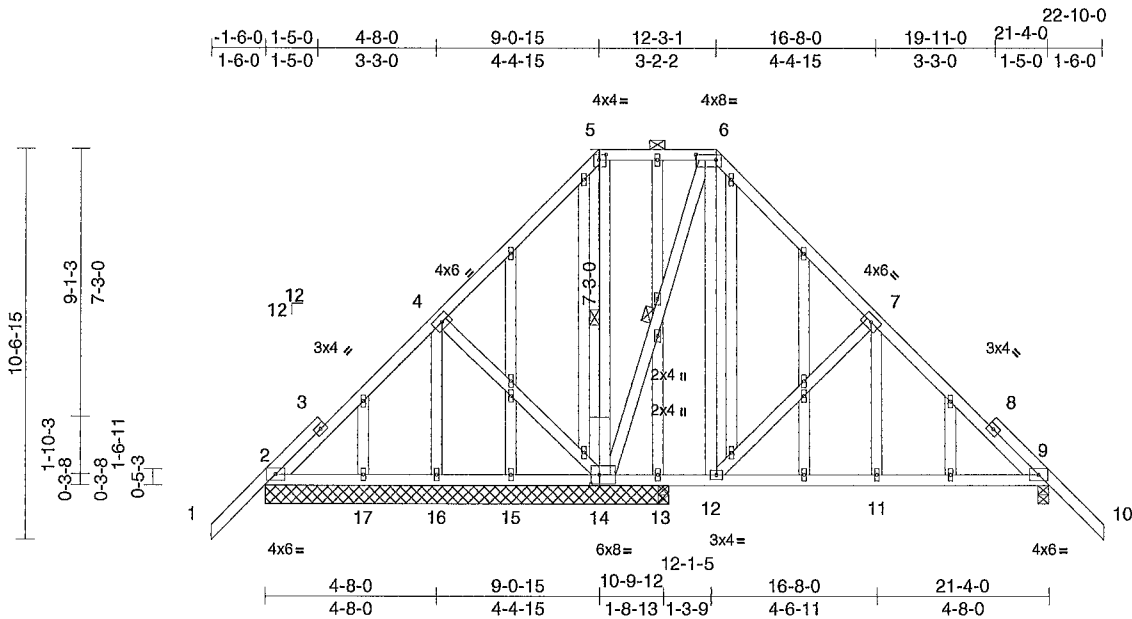
16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
314.434.1200 / MiTek-US.com

Job 0325-046	Truss D01GE	Truss Type Piggyback Base Structural Gable	Qty 1	Ply 1	DAVID SIMQUE Job Reference (optional)	T36741638
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Mayo Truss Company Inc , Mayo, FL 32066,

Run 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MITek Industries, Inc Thu Mar 20 07:29 28  
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Page 1



Scale = 1/61.5

Plate Offsets (X, Y) [5 0-2-4,0-1-12], [6-0-6-4,0-1-12], [14-0-2-12,0-3-0]

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 24	Vert(LL)	-0 01	11-12	>999	240	MT20	244/190
TCDL	10 0	Lumber DOL	1 25	BC	0 21	Vert(CT)	-0 03	11-12	>999	180		
BCLL	0 0*	Rep Stress Incr	YES	WB	0 22	Horz(CT)	0 00	9	n/a	n/a		
BCDL	10 0	Code	FBC2023/TPI2014	Matrix-MS							Weight 215 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 2-0 0 oc purlins (10-0-0 max.) 5-6  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing  
WEBS 1 Row at midpt 5-14, 6-14

**REACTIONS** (size) 2=10-11-8, 9=0-3-8, 13=10-11-8, 14=10-11-8, 15=10-11-8, 16=10-11-8, 17=10-11-8  
Max Horiz 2=-215 (LC 10)  
Max Uplift 2=-52 (LC 12), 9=-39 (LC 12), 14=-24 (LC 12), 16=-29 (LC 9)  
Max Grav 2=223 (LC 23), 9=523 (LC 24), 13=88 (LC 18), 14=737 (LC 1), 15=99 (LC 3), 16=230 (LC 23), 17=113 (LC 3)

**FORCES** (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/64, 2-4=-97/192, 4-5=-46/203, 5-6=-13/101, 6-7=-191/90, 7-9=-440/12, 9-10=0/70  
BOT CHORD 2-17=-137/119, 16-17=-137/109, 15-16=-137/109, 13-15=-137/178, 12-13=-81/178, 11-12=0/274, 9-11=-12/274  
WEBS 4-14=-82/92, 5-14=-298/8, 6-14=-413/16, 6-12=-5/263, 7-12=-328/81, 7-11=0/205, 4-16=-210/54

**NOTES**

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

- Wind ASCE 7-22, Vult=130mph (3-second gust) Vasd=101mph, TCCL=6.0psf, BCDL=6.0psf; h=15ft; B=45ft, L=24ft, eave=4ft; Cat. II, Exp B, Enclosed, MWFRS (directional) and C-C Zone3 -1-6-0 to 1-6-0, Zone1 1-6-0 to 9-0-15, Zone3 9-0-15 to 12-3-1, Zone2 12-3-1 to 16-8-0, Zone1 16-8-0 to 22-10-0 zone; cantilever left and right exposed , end vertical left and right exposed,C-C for members and forces & MWFRS for reactions shown, Lumber DOL=1 60 plate grip DOL=1 60
- 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.
- Provide adequate drainage to prevent water ponding
- All plates are 1.5x4 MT20 unless otherwise indicated
- 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 52 lb uplift at joint 2, 24 lb uplift at joint 14, 39 lb uplift at joint 9, 29 lb uplift at joint 16 and 52 lb uplift at joint 2
- 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:

March 20, 2025

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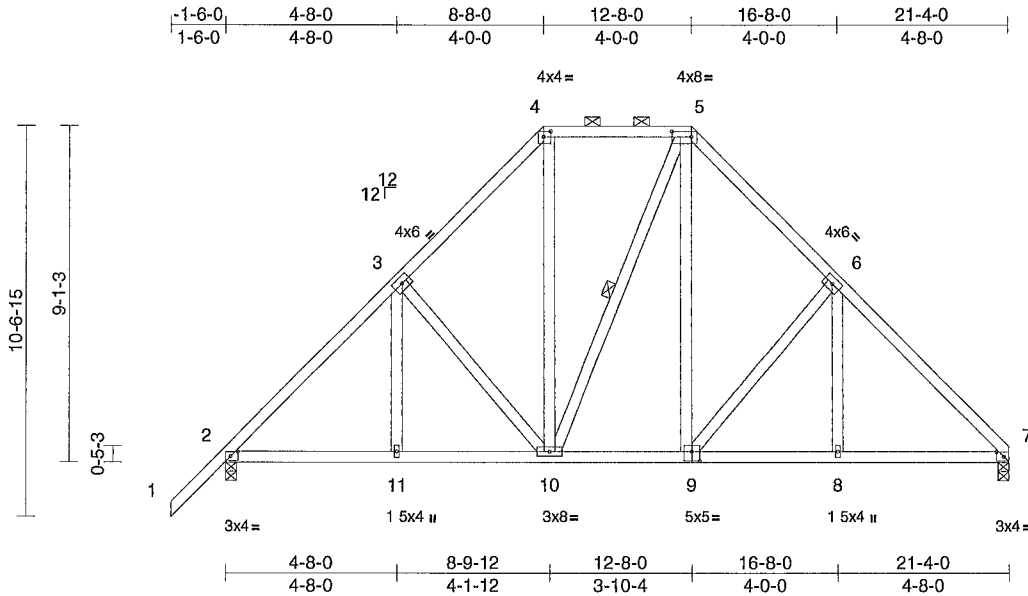
16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
314.434.1200 / MITek-US.com

Job 0325-046	Truss D02	Truss Type Piggyback Base	Qty 5	Ply 1	DAVID SIMQUE Job Reference (optional)	T36741639
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Mayo Truss Company, Inc., Mayo, FL - 32066

Run 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MITek Industries, Inc. Thu Mar 20 07:29:28  
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Page 1



Scale = 1/61.5

Plate Offsets (X, Y) [2 0-2-6,0-1-8], [4 0-2-4,0-1-12], [5 0-6-4,0-1-12], [7 0-2-6,0-1-8], [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	Vert(LL)	-0 02	9-10	>999	240	MT20	244/190
TCDL	10 0	Lumber DOL	1 25	BC	Vert(CT)	-0 04	9-10	>999	180		
BCLL	0 0*	Rep Stress Incr	YES	WB	Horz(CT)	0 02	7	n/a	n/a		
BCDL	10 0	Code	FBC2023/TPI2014	Matrix-MS						Weight 148 lb	FT = 20%

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

**BRACING**  
TOP CHORD Structural wood sheathing directly applied or 5-6-9 oc purlins, except 2-0-0 oc purlins (6-0-0 max ) 4-5  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing  
WEBS 1 Row at midpt 5-10

**REACTIONS** (size) 2=0-3-8, 7=0-3-8  
Max Horiz 2=202 (LC 11)  
Max Uplift 2=39 (LC 12)  
Max Grav 2=946 (LC 1), 7=850 (LC 1)

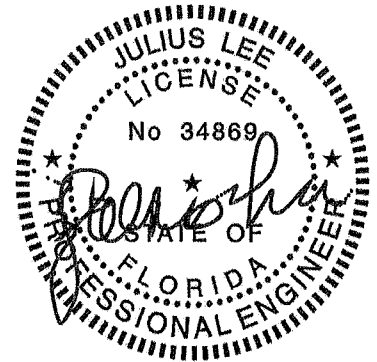
**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=0/64, 2-3=-1038/20, 3-4=-805/98, 4-5=-503/100, 5-6=-812/102, 6-7=-1049/31  
BOT CHORD 2-11=-22/714, 10-11=0/714, 8-10=0/683, 7-8=-17/683  
WEBS 3-10=-298/77, 4-10=-15/306, 5-10=-81/86, 5-9=-22/310, 6-9=-317/94, 3-11=0/182, 6-8=0/186

- 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 psf 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 39 lb uplift at joint 2
- 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**

- 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 -1-6-0 to 8-8-0, Zone3 8-8-0 to 12-8-0, Zone1 12-8-0 to 21-4-0 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



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

March 20, 2025

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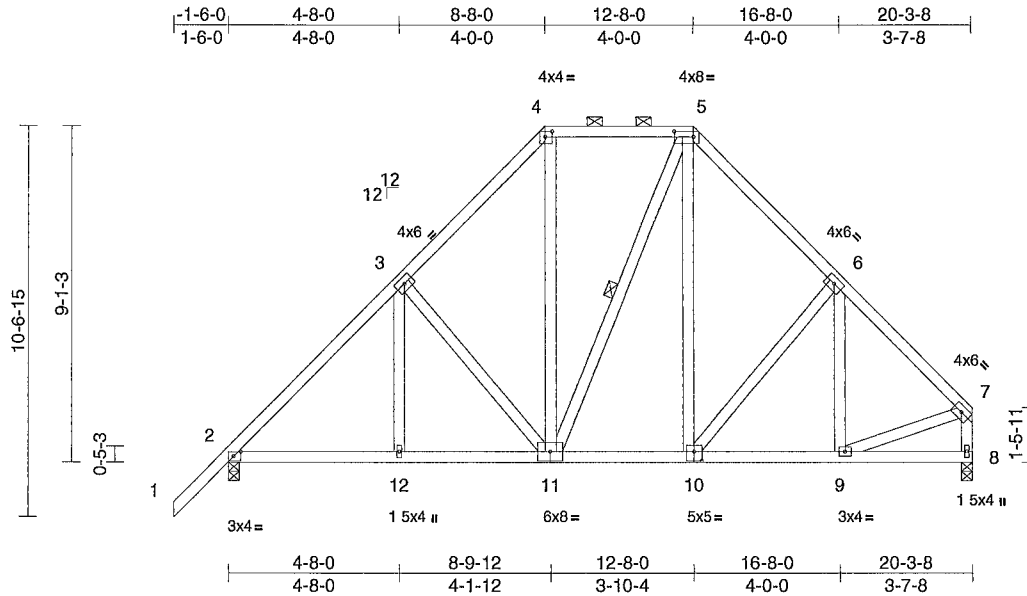
16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
314.434.1200 / MITek-US.com

Job 0325-046	Truss D03	Truss Type Piggyback Base	Qty 4	Ply 1	DAVID SIMQUE Job Reference (optional)	T36741640
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Mayo Truss Company, Inc. Mayo, FL 32066

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Page 1



Scale = 1/61.5

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

Loading	(psf)	Spacing		CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1 25	TC	0 20	Vert(LL)	-0 01	11	>999	240	MT20	244/190
TCDL	10 0	Lumber DOL	1 25	BC	0 23	Vert(CT)	-0.03	12-15	>999	180		
BCLL	0 0*	Rep Stress Incr	YES	WB	0.20	Horz(CT)	0.02	8	n/a	n/a		
BCDL	10 0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 151 lb	FT = 20%

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

**BRACING**  
TOP CHORD Structural wood sheathing directly applied or 5-9-11 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max ) 4-5  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing  
WEBS 1 Row at midpt 5-11

**REACTIONS** (size) 2=0-3-8, 8=0-3-8  
Max Horiz 2=215 (LC 11)  
Max Uplift 2=39 (LC 12)  
Max Grav 2=899 (LC 1), 8=803 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=0/64, 2-3=-973/20, 3-4=-739/99,  
4-5=-456/100, 5-6=-712/101, 6-7=-780/37,  
7-8=-769/13  
BOT CHORD 2-12=-35/672, 9-12=-15/672, 8-9=-19/39  
WEBS 4-11=-16/272, 5-11=-57/114, 5-10=-20/219,  
3-12=0/183, 6-9=-99/41, 3-11=-299/77,  
6-10=-161/88, 7-9=0/506

- 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 psf 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 39 lb uplift at joint 2
- 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**
- 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,  
MWFRR (directional) and C-C Zone1 -1-6-0 to 8-8-0,  
Zone3 8-8-0 to 12-8-0, Zone1 12-8-0 to 20-1-12 zone,  
cantilever left and right exposed , end vertical left and right exposed,C-C for members and forces & MWFRR for reactions shown, Lumber DOL=1 60 plate grip DOL=1 60



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

March 20,2025

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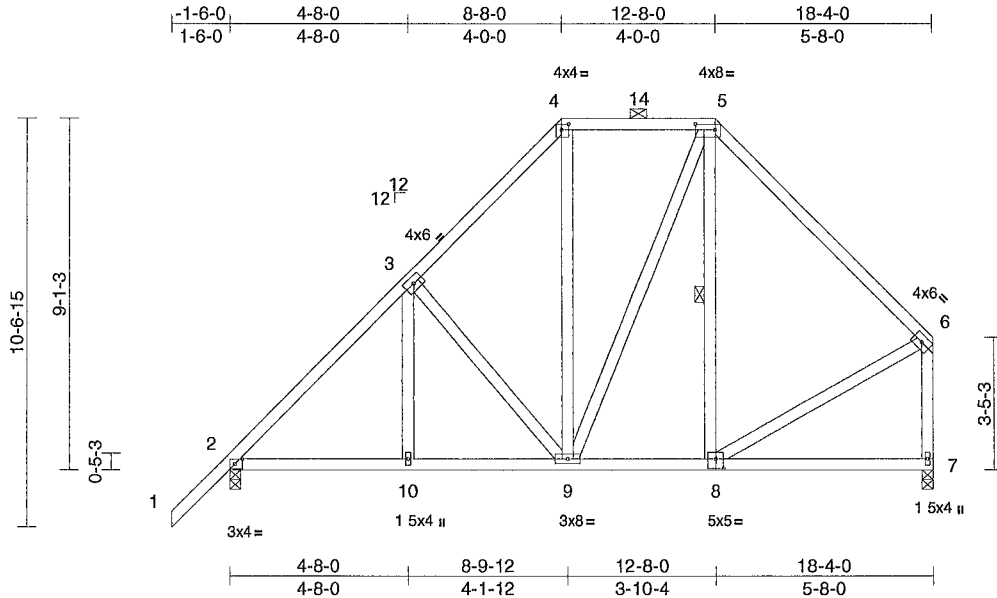
**MiTek®**  
16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
314.434.1200 / MiTek-US.com

Job 0325-046	Truss D04	Truss Type Piggyback Base	Qty 15	Ply 1	DAVID SIMQUE Job Reference (optional)	T36741641
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Mayo Truss Company, Inc. Mayo, FL 32066

Run 8.73 S Feb 19 2025 Print. 8.730 S Feb 19 2025 MITek Industries, Inc. Thu Mar 20 07:29:29  
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Page 1



Scale = 1/8" = 1'-0"

Plate Offsets (X, Y) [2'-0-2-6,0-1-8], [4'-0-2-4,0-1-12], [5'-0-6-4,0-1-12], [8'-0-2-8,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20 0	Plate Grip DOL	1 25	TC	0.41	Vert(LL)	-0 03	7-8	>999	240	MT20 244/190
TCDL	10 0	Lumber DOL	1 25	BC	0 25	Vert(CT)	-0 06	7-8	>999	180	
BCLL	0 0*	Rep Stress Incr	YES	WB	0 23	Horz(CT)	0 01	7	n/a	n/a	
BCDL	10 0	Code	FBC2023/TPI2014	Matrix-MS							Weight 136 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, and 2-0-0 oc purlins (6-0-0 max ) 4-5

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

WEBS 1 Row at midpt 5-8

**REACTIONS** (size) 2=0-3-8, 7=0-3-8

Max Horiz 2=233 (LC 11)  
Max Uplift 2=-38 (LC 12)  
Max Grav 2=821 (LC 1), 7=724 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/64, 2-3=-865/24, 3-4=-628/103, 4-5=-419/101, 5-6=-586/86, 6-7=-672/28  
BOT CHORD 2-10=-71/602, 9-10=-71/602, 7-9=-45/337  
WEBS 3-9=-335/77, 4-9=-24/226, 5-9=-44/168, 5-8=-74/79, 6-8=0/355, 3-10=0/190

**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 -1-6-0 to 8-8-0, Zone3 8-8-0 to 12-8-0, Zone1 12-8-0 to 18-2-4 zone, cantilever left and right exposed, end vertical left and right exposed, C-C for members and forces & MWFRS for reactions shown, Lumber DOL=1 60 plate grip DOL=1 60
- 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 4) Provide adequate drainage to prevent water ponding

- 5) 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 38 lb uplift at joint 2
- 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



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Date:

March 20, 2025

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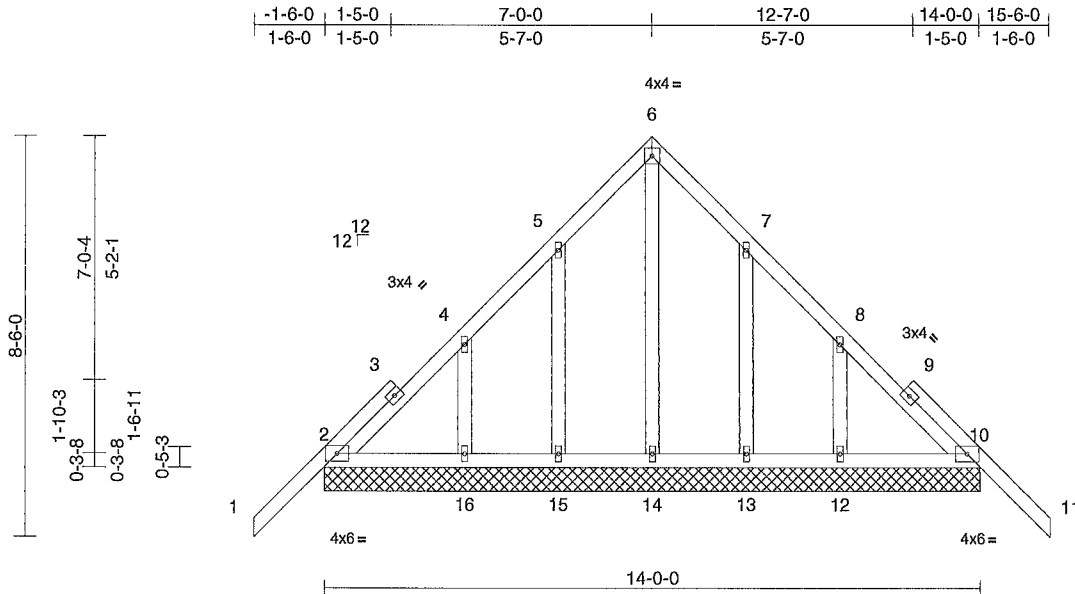
**MiTek®**  
16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
314.434.1200 / MITek-US.com

Job 0325-046	Truss E01GE	Truss Type Common Supported Gable	Qty 1	Ply 1	DAVID SIMQUE Job Reference (optional)	T36741642
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Mayo Truss Company Inc., Mayo, FL 32066,

Run 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MITek Industries, Inc. Thu Mar 20 07:29:29  
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Page 1



Scale = 1.48.2

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP		
TCLL (roof)	20 0	Plate Grip DOL	1.25	TC	0 20	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.07	Vert(CT)	n/a	-	n/a	999		
BCLL	0 0*	Rep Stress Incr	YES	WB	0 12	Horz(CT)	0 00	20	n/a	n/a		
BCDL	10 0	Code	FBC2023/TPI2014	Matrix-MS							Weight. 92 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 or 6-0-0 oc purlins  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing

**REACTIONS** (size) 2=14-0-0, 10=14-0-0, 12=14-0-0, 13=14-0-0, 14=14-0-0, 15=14-0-0, 16=14-0-0  
Max Horiz 2=169 (LC 11)  
Max Uplift 2=-22 (LC 12), 10=-22 (LC 12), 12=-22 (LC 12), 13=-56 (LC 12), 15=-56 (LC 12), 16=-22 (LC 12)  
Max Grav 2=228 (LC 1), 10=228 (LC 1), 12=218 (LC 18), 13=174 (LC 18), 14=141 (LC 17), 15=176 (LC 17), 16=214 (LC 17)

**FORCES** (lb) - Maximum Compression/Maximum Tension

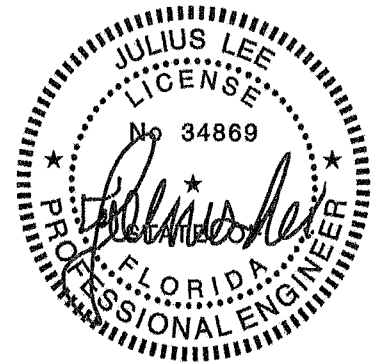
TOP CHORD 1-2=0/64, 2-4=-167/122, 4-5=-99/78, 5-6=-83/165, 6-7=-84/165, 7-8=-66/40, 8-10=-164/91, 10-11=0/64  
BOT CHORD 2-16=-94/228, 15-16=-94/228, 14-15=-94/228, 13-14=-94/228, 12-13=-94/228, 10-12=-94/228  
WEBS 6-14=-159/20, 5-15=-142/155, 4-16=-158/157, 7-13=-140/155, 8-12=-161/156

**NOTES**

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

- Wind ASCE 7-22, Vult=130mph (3-second gust) Vasd=101mph, TCCL=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, 22 lb uplift at joint 10, 56 lb uplift at joint 15, 22 lb uplift at joint 16, 56 lb uplift at joint 13, 22 lb uplift at joint 12, 22 lb uplift at joint 2 and 22 lb uplift at joint 10

**LOAD CASE(S)** Standard



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

March 20, 2025

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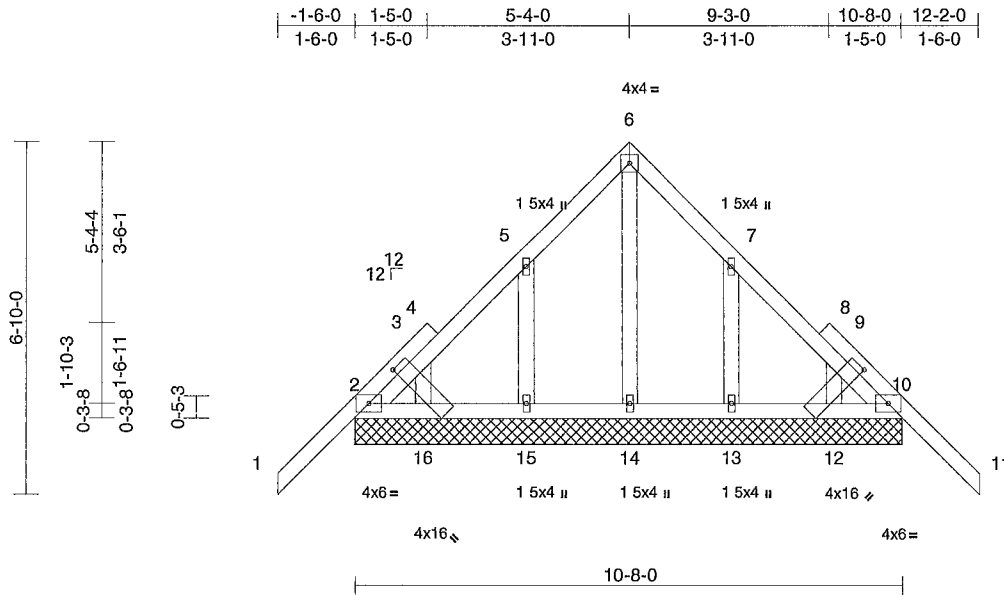
16023 Swingley Ridge Rd  
Chesterfield, MO 63017  
314.434.1200 / MITek-US.com

Job	Truss	Truss Type	Qty	Ply	DAVID SIMQUE	T36741643
0325-046	F01GE	Common Supported Gable	1	1	Job Reference (optional)	

Mayo Truss Company, Inc. Mayo, FL 32066,

Run 8.73 S Feb 19 2025 Print. 8.730 S Feb 19 2025 MITek Industries, Inc. Thu Mar 20 07:29:29  
 ID:U6VJBndyyfprnjwWcXyY6VUzZOTD-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDOI7J4zJC7f

Page. 1



Scale = 1.44

Plate Offsets (X, Y) [12 0-1-8,0-9-9], [16 0-1-8,0-9-9]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20 0	Plate Grip DOL	1 25	TC	0 23	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10 0	Lumber DOL	1 25	BC	0 09	Vert(CT)	n/a	-	n/a	999		
BCLL	0 0*	Rep Stress Incr	YES	WB	0 05	Horz(CT)	0 00	20	n/a	n/a		
BCDL	10 0	Code	FBC2023/TPI2014	Matrix-MS							Weight 68 lb	FT = 20%

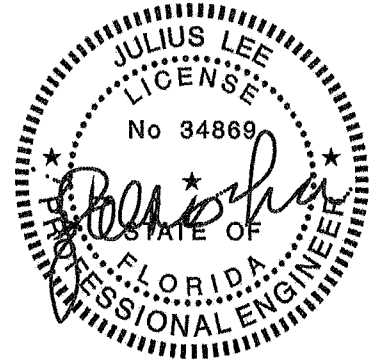
LUMBER	
TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
OTHERS	2x4 SP No.2
BRACING	
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing
REACTIONS (size)	
	2=10-8-0, 10=10-8-0, 12=10-8-0, 13=10-8-0, 14=10-8-0, 15=10-8-0, 16=10-8-0
Max Horiz	2=135 (LC 10)
Max Uplift	2=52 (LC 12), 10=52 (LC 12), 13=55 (LC 12), 15=55 (LC 12)
Max Grav	2=193 (LC 1), 10=193 (LC 1), 12=100 (LC 18), 13=193 (LC 18), 14=120 (LC 17), 15=193 (LC 17), 16=97 (LC 17)
FORCES (lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=0/64, 2-3=-141/81, 3-5=-81/71, 5-6=-81/137, 6-7=-79/137, 7-9=-57/41, 9-10=-138/70, 10-11=0/64
BOT CHORD	2-16=-74/214, 15-16=-73/214, 14-15=-73/214, 13-14=-73/214, 12-13=-73/214, 10-12=-90/229
WEBS	6-14=-109/12, 5-15=-148/185, 3-16=-112/116, 7-13=-148/185, 9-12=-111/115

- Wind ASCE 7-22, Vult=130mph (3-second gust) Vasd=101mph, TCCL=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.
- 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 52 lb uplift at joint 2, 52 lb uplift at joint 10, 55 lb uplift at joint 15, 55 lb uplift at joint 13, 52 lb uplift at joint 2 and 52 lb uplift at joint 10

LOAD CASE(S) Standard

NOTES

- Unbalanced roof live loads have been considered for this design



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 Date:

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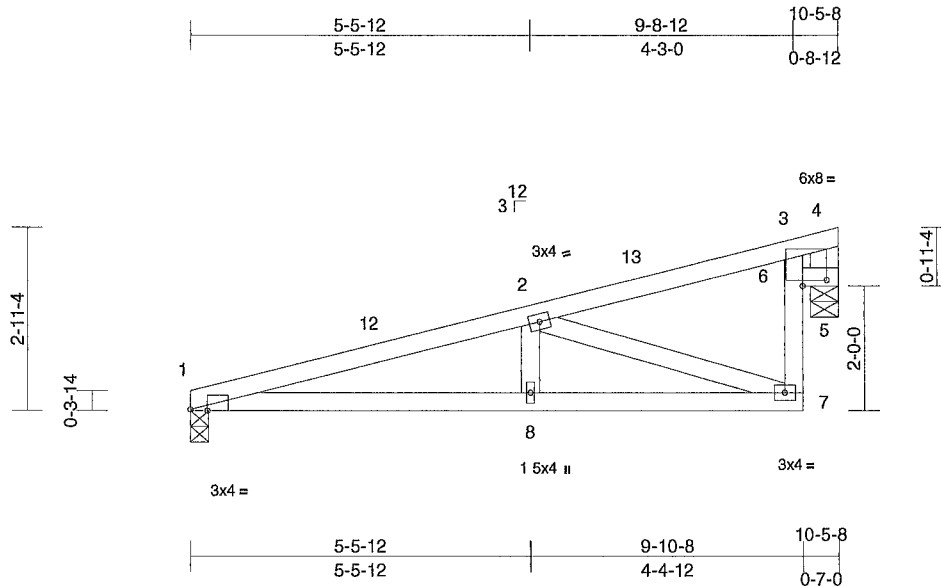


Job 0325-046	Truss M01A	Truss Type Monopitch	Qty 1	Ply 1	DAVID SIMQUE Job Reference (optional)	T36741645
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Mayo Truss Company Inc. Mayo, FL 32066,

Run 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu Mar 20 07:29:29  
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Page: 1



Scale = 1/32.4

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20 0	Plate Grip DOL	1 25	TC	Vert(LL)	0 05	8-11	>999	240	MT20	244/190
TCDL	10 0	Lumber DOL	1 25	BC	Vert(CT)	-0 09	8-11	>999	180		
BCLL	0 0 *	Rep Stress Incr	YES	WB	Horz(CT)	0 01	5	n/a	n/a		
BCDL	10 0	Code	FBC2023/TPI2014	Matrix-AS						Weight 44 lb	FT = 20%

**LUMBER**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No 2  
WEBS 2x4 SP No 2 \*Except\* 4-5 2x6 SP No.2

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

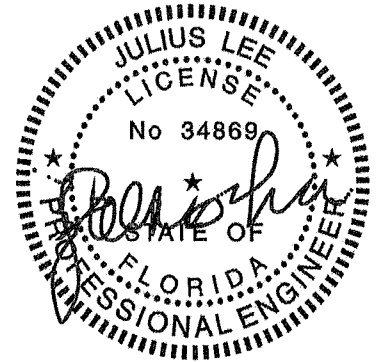
**REACTIONS** (size) 1=0-3-8, 5=0-5-8  
Max Horiz 1=85 (LC 12)  
Max Uplift 1=-36 (LC 12), 5=-58 (LC 12)  
Max Grav 1=409 (LC 1), 5=409 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=-916/309, 2-3=-139/25, 3-4=-12/28  
BOT CHORD 1-8=-390/874, 7-8=-390/874, 6-7=-93/297,  
3-6=0/110, 5-6=0/0  
WEBS 4-5=-119/45, 2-8=0/205, 2-7=-817/372

- 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, Partially  
Enclosed, MWFRS (directional) and C-C Zone3 0-0-0 to  
3-0-0, Zone1 3-0-0 to 10-2-12 zone, cantilever left and  
right exposed ,C-C for members and forces & MWFRS  
for reactions shown, Lumber DOL=1 60 plate grip  
DOL=1 60
  - 2) Building Designer / Project engineer responsible for  
verifying applied roof live load shown covers rain loading  
requirements specific to the use of this truss component.
  - 3) This truss has been designed for a 10 0 psf bottom  
chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 20 0psf  
on the bottom chord in all areas where a rectangle  
3-06-00 tall by 2-00-00 wide will fit between the bottom  
chord and any other members
  - 5) All bearings are assumed to be SP No 2

- 6) Provide mechanical connection (by others) of truss to  
bearing plate capable of withstanding 36 lb uplift at joint  
1 and 58 lb uplift at joint 5
- 7) This truss design requires that a minimum of 7/16"  
structural wood sheathing be applied directly to the top  
chord and 1/2 gypsum sheetrock be applied directly to  
the bottom chord

**LOAD CASE(S)** Standard



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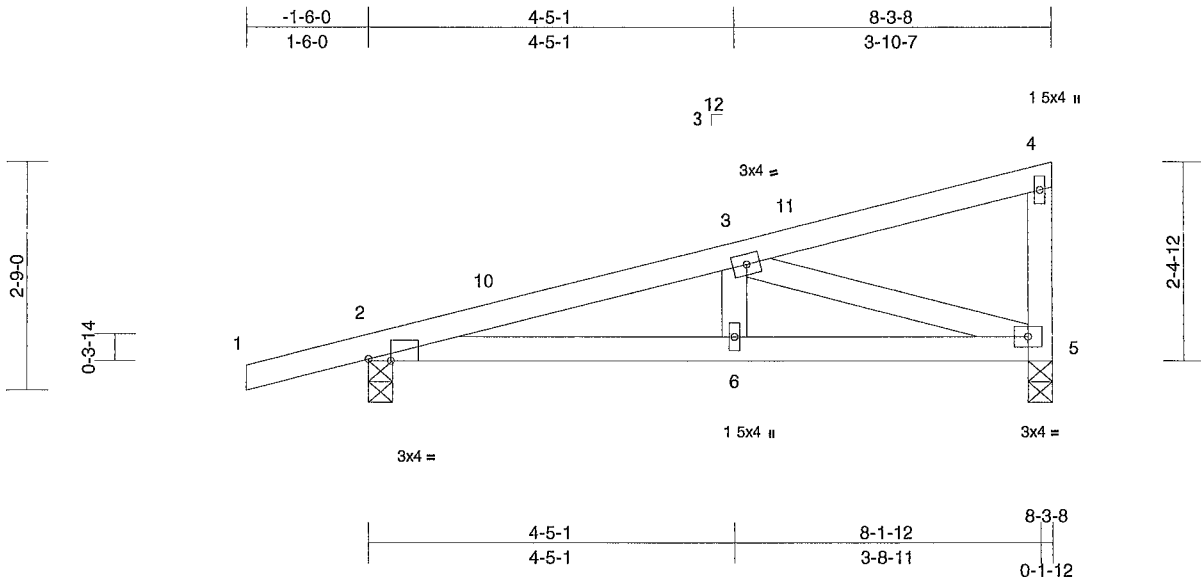


Job	Truss	Truss Type	Qty	Ply	DAVID SIMQUE	
0325-046	M02	Monopitch	7	1	Job Reference (optional)	T36741647

Mayo Truss Company Inc Mayo, FL 32066,

Run 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu Mar 20 07:29:29  
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Page: 1



Scale = 1/27.4

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20 0	Plate Grip DOL	1.25	TC	0 16	Vert(LL)	0 02	6-9	>999	240	MT20	244/190
TCDL	10 0	Lumber DOL	1 25	BC	0 22	Vert(CT)	-0.04	6-9	>999	180		
BCLL	0 0*	Rep Stress Incr	YES	WB	0 18	Horz(CT)	0 01	5	n/a	n/a		
BCDL	10 0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 37 lb	FT = 20%

**LUMBER**

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

**BRACING**

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

BOT CHORD Rigid ceiling directly applied

**REACTIONS** (size) 2=0-3-8, 5=0-3-8

Max Horiz 2=81 (LC 12)

Max Uplift 2=-69 (LC 12), 5=-43 (LC 12)

Max Grav 2=424 (LC 1), 5=318 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/22, 2-3=-677/279, 3-4=-42/17, 4-5=-90/127

BOT CHORD 2-6=-371/644, 5-6=-371/644

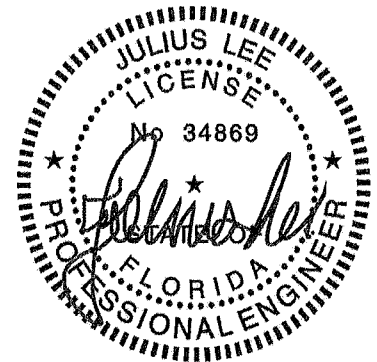
WEBS 3-5=-673/388, 3-6=0/179

**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, Partially Enclosed, MWFRS (directional) and C-C Zone3 -1-6-0 to 1-6-0, Zone1 1-6-0 to 8-1-12 zone, cantilever left and right exposed ,C-C for members and forces & MWFRS for reactions shown, Lumber DOL=1 60 plate grip DOL=1 60
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 3) This truss has been designed for a 10 0 psf bottom chord live load nonconcurrent with any other live loads
- 4) \* This truss has been designed for a live load of 20 0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members
- 5) All bearings are assumed to be SP No 2

- 6) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula Building designer should verify capacity of bearing surface
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 69 lb uplift at joint 2 and 43 lb uplift at joint 5
- 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

**LOAD CASE(S)** Standard



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

March 20, 2025

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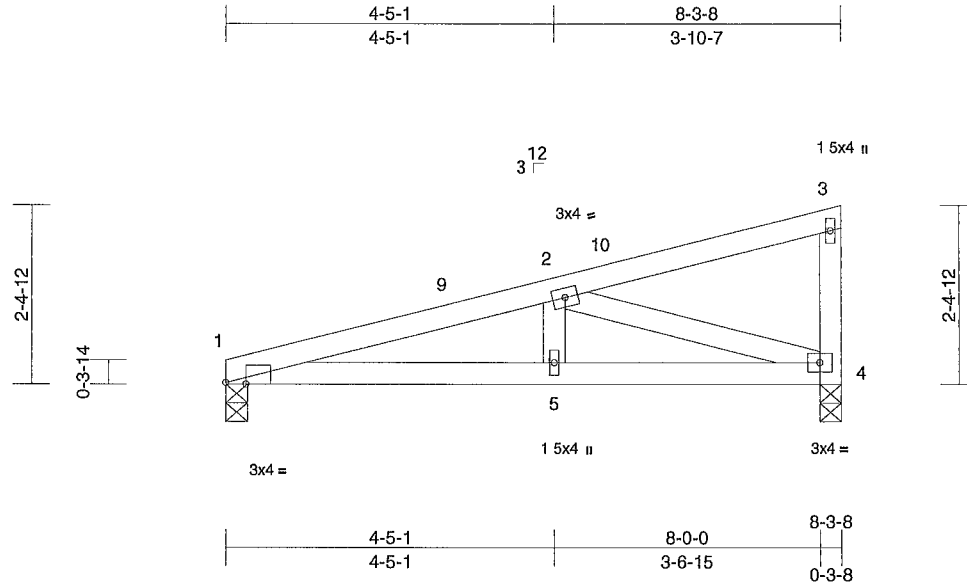
**MiTek®**  
 16023 Swingley Ridge Rd  
 Chesterfield, MO 63017  
 314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	DAVID SIMQUE	T36741648
0325-046	M02A	Monopitch	1	1	Job Reference (optional)	

Mayo Truss Company, Inc. Mayo, FL 32066

Run 8 73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MITek Industries, Inc. Thu Mar 20 07:29 29  
ID:Qm8UBGatUVD4VrTG8ROZnVzZOSw-RfC?PsB70Hq3NSgPqnL8w3ulTXbGkWrCDol7J4zJC?I

Page 1



Scale = 1:30.4

Plate Offsets (X, Y) [1 0-3-4,Edge]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.17	Vert(LL)	0.03	5-8	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.27	Vert(CT)	-0.04	5-8	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.19	Horz(CT)	0.01	4	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 34 lb	FT = 20%

**LUMBER**

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

**BRACING**

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

**REACTIONS** (size) 1=0-3-8, 4=0-3-8

Max Horiz 1=68 (LC 12)  
Max Uplift 1=29 (LC 12), 4=46 (LC 12)  
Max Grav 1=326 (LC 1), 4=326 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-714/314, 2-3=-41/16, 3-4=-89/126  
BOT CHORD 1-5=-392/683, 4-5=-392/683  
WEBS 2-4=-714/409, 2-5=0/182

**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, Partially Enclosed, MWFERS (directional) and C-C Zone3 0-0-0 to 3-0-0, Zone1 3-0-0 to 8-1-12 zone, cantilever left and right exposed, C-C for members and forces & MWFERS for reactions shown, Lumber DOL=1.60 plate grip DOL=1.60
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members
- 5) All bearings are assumed to be SP No.2

- 6) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 29 lb uplift at joint 1 and 46 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

**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.

March 20, 2025

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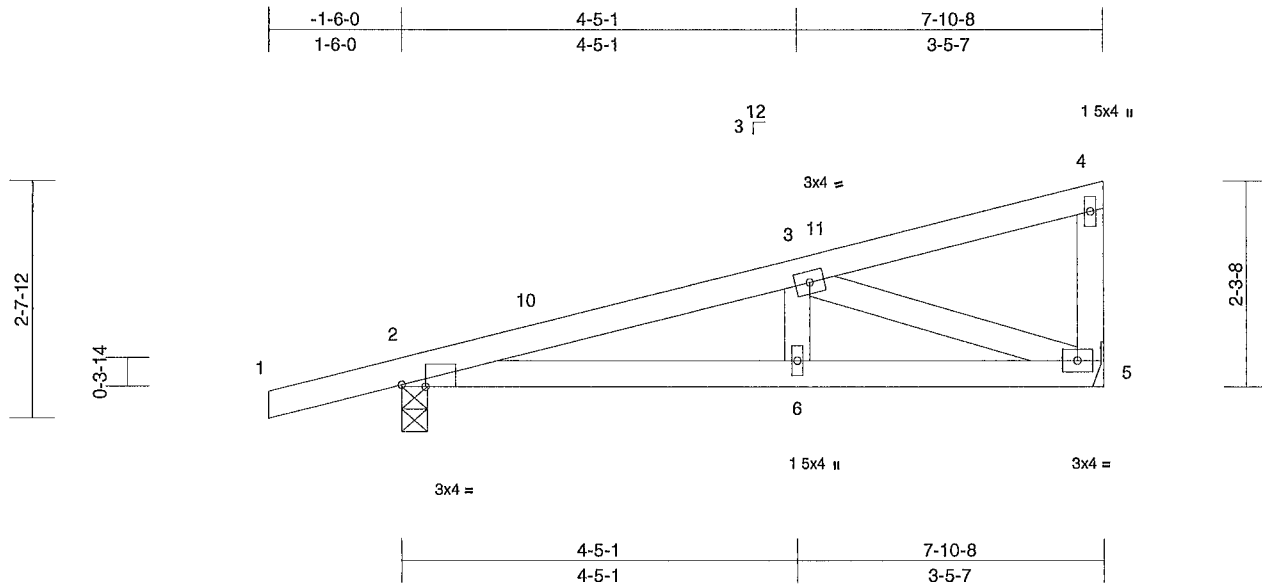
16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
314.434.1200 / MITek-US.com

Job	Truss	Truss Type	Qty	Ply	DAVID SIMQUE	T36741649
0325-046	M03	Monopitch	12	1	Job Reference (optional)	

Mayo Truss Company Inc. Mayo, FL 32066,

Run 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MITek Industries, Inc Thu Mar 20 07:29:30  
ID:3XpAZlb3fkRCsSn1rq?PuszZOTG-RIC?PsB70Hq3NSgPqnL8w3uITXbGKwRCDoI7J4zJC7f

Page 1



Scale = 1:25.3

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP		
TCLL (roof)	20 0	Plate Grip DOL	1 25	TC	0 16	Vert(LL)	0 02	6-9	>999	240	MT20	244/190
TCDL	10 0	Lumber DOL	1 25	BC	0 22	Vert(CT)	-0 03	6-9	>999	180		
BCLL	0 0 *	Rep Stress Incr	YES	WB	0 13	Horz(CT)	0 01	5	n/a	n/a		
BCDL	10 0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 35 lb	FT = 20%

**LUMBER**

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

**BRACING**

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

BOT CHORD Rigid ceiling directly applied

**REACTIONS** (size) 2=0-3-8, 5= Mechanical  
Max Horiz 2=78 (LC 12)  
Max Uplift 2=-68 (LC 12), 5=-40 (LC 12)  
Max Grav 2=408 (LC 1), 5=300 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/22, 2-3=-606/264, 3-4=-38/14, 4-5=-77/115

BOT CHORD 2-6=-352/575, 5-6=-352/575

WEBS 3-5=-608/372, 3-6=0/169

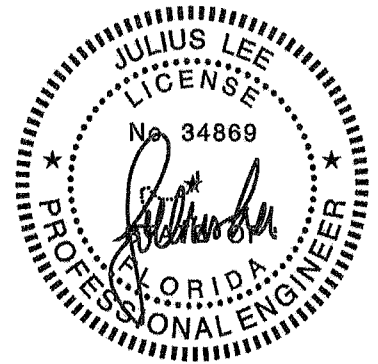
**NOTES**

- 1) Wind ASCE 7-22, Vult=130mph (3-second gust)  
Vasd=101mph, TCDL=6 0psf, BCDL=6 0psf; h=15ft;  
B=45ft; L=24ft, eave=4ft; Cat II, Exp B, Partially Enclosed, MWFRS (directional) and C-C Zone3 -1-6-0 to 1-6-0, Zone1 1-6-0 to 7-8-12 zone, cantilever 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 68 lb uplift at joint 2 and 40 lb uplift at joint 5

8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord

**LOAD CASE(S)** Standard



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

March 20, 2025

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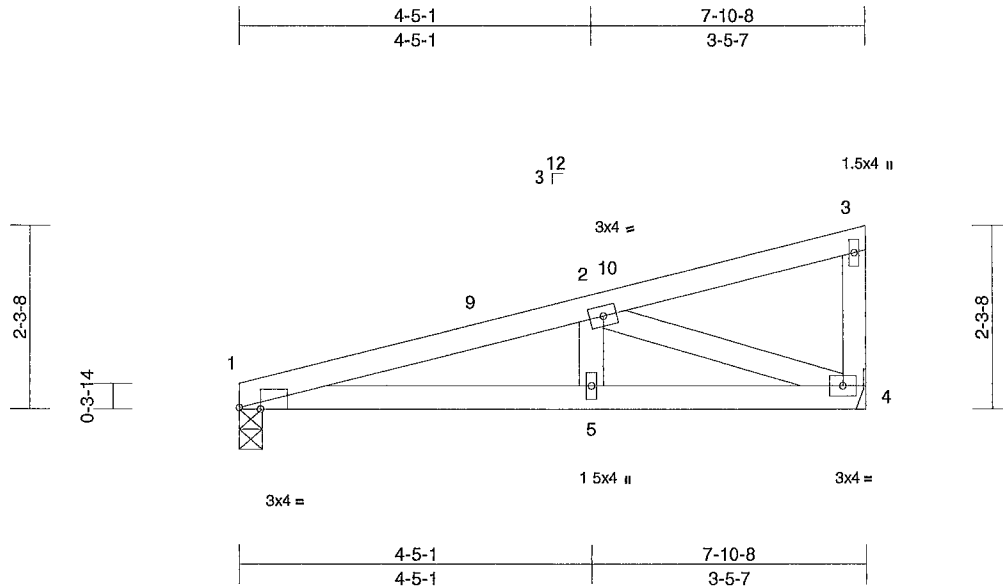
16023 Swingley Ridge Rd.  
Chesterfield MO 63017  
314.434.1200 / MITek-US.com

Job 0325-046	Truss M03A	Truss Type Monopitch	Qty 1	Ply 1	DAVID SIMQUE Job Reference (optional)	T36741650
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Mayo Truss Company Inc., Mayo, FL 32066,

Fun 8 73 S Feb 19 2025 Print: 8 730 S Feb 19 2025 MITek Industries, Inc. Thu Mar 20 07:29:30  
ID:Qm8UBGstUVD4VrTG8ROZnVzZOSw-RIC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDof7J4zJC7f

Page 1



Scale = 1/28.4

Plate Offsets (X, Y) [1 0-3-4, Edge]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20 0	Plate Grip DOL	1 25	TC	0 17	Vert(LL)	0 03	5-8	>999	240	MT20	244/190
TCDL	10 0	Lumber DOL	1 25	BC	0 27	Vert(CT)	-0 04	5-8	>999	180		
BCLL	0 0*	Rep Stress Incr	YES	WB	0 14	Horz(CT)	0 01	4	n/a	n/a		
BCDL	10 0	Code	FBC2023/TPI2014	Matrix-AS							Weight 32 lb	FT = 20%

#### LUMBER

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

#### BRACING

TOP CHORD Structural wood sheathing directly applied, except end verticals

BOT CHORD Rigid ceiling directly applied

REACTIONS (size) 1=0-3-8, 4= Mechanical

Max Horiz 1=64 (LC 12)

Max Uplift 1=-27 (LC 12), 4=-44 (LC 12)

Max Grav 1=309 (LC 1), 4=309 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-642/297, 2-3=-37/14, 3-4=-75/114

BOT CHORD 1-5=-373/613, 4-5=-373/613

WEBS 2-4=-648/394, 2-5=0/173

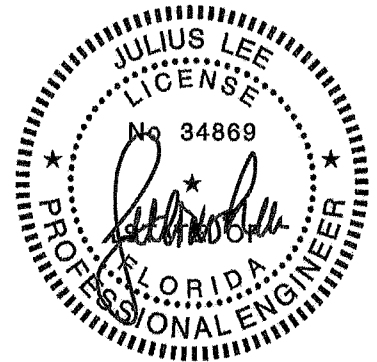
#### NOTES

- 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, Partially Enclosed, MWFRS (directional) and C-C Zone3 0-0-0 to 3-0-0, Zone1 3-0-0 to 7-8-12 zone, cantilever 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 1 SP No 2
- 6) Refer to girder(s) for truss to truss connections

7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 27 lb uplift at joint 1 and 44 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

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:

March 20, 2025

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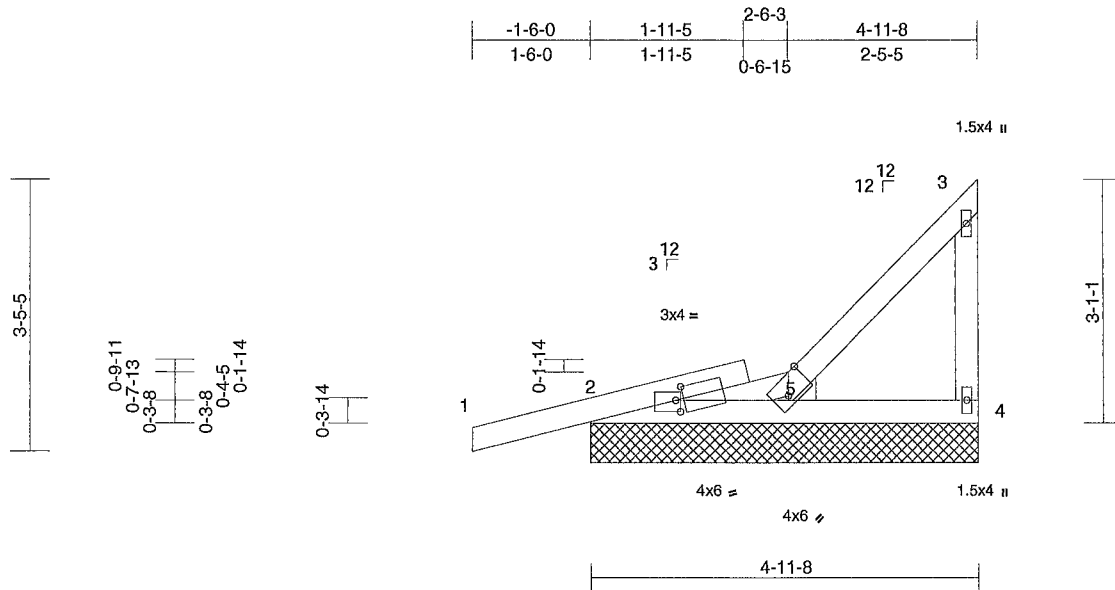
16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
314.434 1200 / MITek-US.com

Job 0325-046	Truss M04	Truss Type Roof Special Supported Gable	Qty 1	Ply 1	DAVID SIMQUE Job Reference (optional)	T36741651
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Mayo Truss Company Inc Mayo, FL - 32066

Run 8.73 S Feb 19 2025 Print: 8 730 S Feb 19 2025 MiTek Industries Inc. Thu Mar 20 07:29 30  
ID-U6VJBndyfpnjwWcXyY6VUzZOTD-RIC?PsB70Hq3NSgPqnL8w3ulTXbGKWRCDoI7J4zJC?I

Page. 1



Scale = 1/28.8

Plate Offsets (X, Y) [2-0-1-4,0-1-13], [2-0-10-12,0-1-12], [5-0-3-12,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 19	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10 0	Lumber DOL	1.25	BC	0 07	Vert(CT)	n/a	-	n/a	999		
BCLL	0 0*	Rep Stress Incr	YES	WB	0 00	Horz(CT)	0 00	4	n/a	n/a		
BCDL	10 0	Code	FBC2023/TPI2014	Matrix-MR							Weight 24 lb	FT = 20%

**LUMBER**

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

**BRACING**

TOP CHORD Structural wood sheathing directly applied or 4-11-8 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing

**REACTIONS**

(size) 2=4-11-8, 4=4-11-8, 5=4-11-8  
Max Horiz 2=89 (LC 9)  
Max Uplift 2=-45 (LC 12), 4=-36 (LC 9)  
Max Grav 2=207 (LC 1), 4=98 (LC 17), 5=175 (LC 18)

**FORCES**

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/22, 2-2=-52/9, 3-5=-146/92,  
3-4=-99/163  
BOT CHORD 2-5=-243/138, 4-5=-49/53

**NOTES**

- 1) Wind ASCE 7-22, Vult=130mph (3-second gust)  
Vasd=101mph, TCDL=6 0psf; BCDL=6.0psf, h=15ft;  
B=45ft, L=24ft; eave=2ft, Cat. II, Exp B, Enclosed,  
MWFRS (directional) and C-C Zone3 -1-6-0 to 2-3-7,  
Zone2 2-6-9 to 4-9-12 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
- 2) Truss designed for wind loads in the plane of the truss  
only For studs exposed to wind (normal to the face),  
see Standard Industry Gable End Details as applicable,  
or consult qualified building designer as per ANSI/TPI 1
- 3) Building Designer / Project engineer responsible for  
verifying applied roof live load shown covers rain loading  
requirements specific to the use of this truss component.
- 4) Gable requires continuous bottom chord bearing
- 5) Gable studs spaced at 2-0-0 oc.

- 6) This truss has been designed for a 10 0 psf bottom  
chord live load nonconcurrent with any other live loads
- 7) \* This truss has been designed for a live load of 20 0psf  
on the bottom chord in all areas where a rectangle  
3-06-00 tall by 2-00-00 wide will fit between the bottom  
chord and any other members
- 8) All bearings are assumed to be SP No 2
- 9) Provide mechanical connection (by others) of truss to  
bearing plate capable of withstanding 45 lb uplift at joint  
2, 36 lb uplift at joint 4 and 45 lb uplift at joint 2

**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:

March 20, 2025

**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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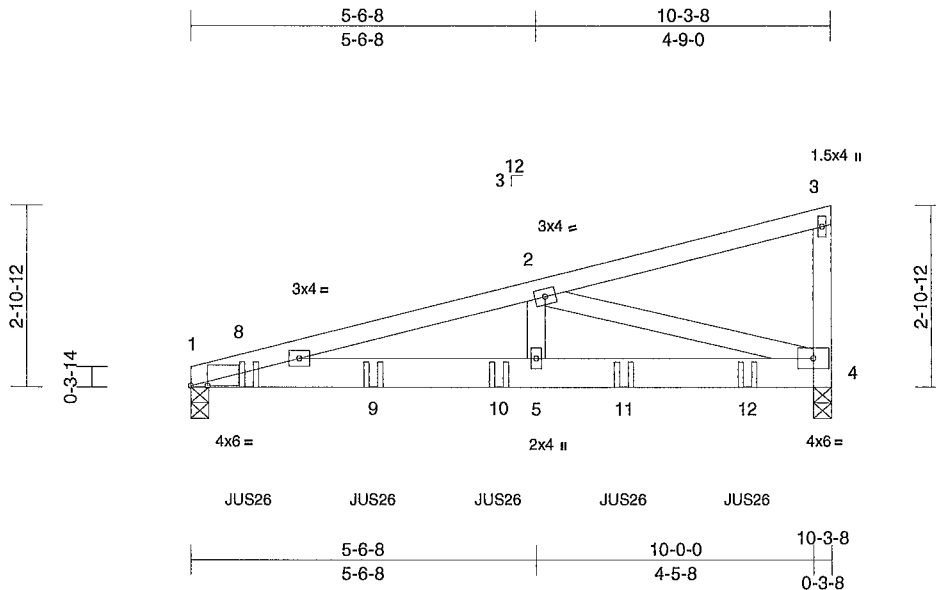
16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
314.434 1200 / MiTek-US.com

Job 0325-046	Truss MG01	Truss Type Monopitch Girder	Qty 1	Ply 2	DAVID SIMQUE Job Reference (optional)	T36741652
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Mayo Truss Company Inc, Mayo, FL - 32066,

Run 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MITek Industries, Inc. Thu Mar 20 07:29:30  
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Page: 1



Scale = 1/36.2

Plate Offsets (X, Y) [1 0-3-4,0-0-0]

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	Vert(LL)	-0 05	5-7	>999	240	MT20	244/190
TCDL	10 0	Lumber DOL	1 25	BC	Vert(CT)	-0 10	5-7	>999	180		
BCLL	0 0*	Rep Stress Incr	NO	WB	Horz(CT)	0 02	4	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS						Weight 102 lb	FT = 20%

**LUMBER**

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

**BRACING**

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

**REACTIONS** (size) 1=0-3-8, 4=0-3-8

Max Horiz 1=60 (LC 8)  
Max Uplift 1=-117 (LC 8), 4=-123 (LC 8)  
Max Grav 1=1415 (LC 1), 4=1333 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-3047/248, 2-3=-106/2, 3-4=-113/28  
BOT CHORD 1-5=-276/2950, 4-5=-276/2950  
WEBS 2-5=-77/1229, 2-4=-2999/279

**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 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
- 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, Lumber DOL=1 60 plate grip DOL=1 60

- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- This truss has been designed for a 10 0 psf bottom chord live load nonconcurrent with any other live loads
- \* This truss has been designed for a live load of 20 0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Bearings are assumed to be Joint 1 SP No.2, Joint 4 SP No.2
- Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 117 lb uplift at joint 1 and 123 lb uplift at joint 4
- Use MITek JUS26 (With 4-10d nails into Girder & 2-10d nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 0-11-4 from the left end to 8-11-4 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, 1-4=-20  
Concentrated Loads (lb)  
Vert: 8=-391 (B), 9=-389 (B), 10=-389 (B), 11=-389 (B), 12=-389 (B)



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

March 20, 2025

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**MiTek®**

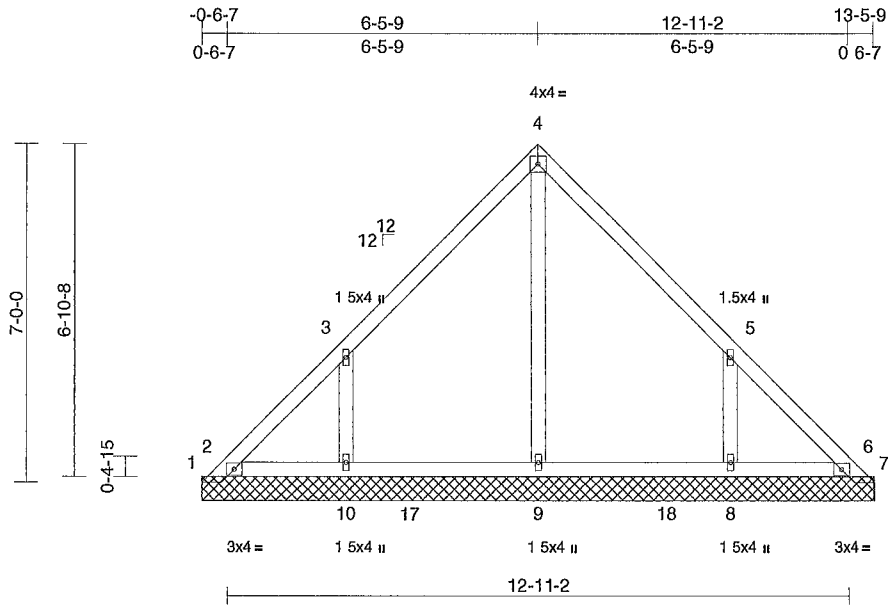
16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
314.434 1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	DAVID SIMQUE	T36741653
0325-046	PB01	Piggyback	7	1	Job Reference (optional)	

Mayo Truss Company Inc. Mayo, FL 32066

Run 8.73 S Feb 19 2025 Print: 8 730 S Feb 19 2025 MITek Industries, Inc. Thu Mar 20 07:29 30  
 ID:XJNYm5bhQZ23UcMDPXWeQ3zZOTF-RIC?PsB70Hq3NSgPqnL8w3uITxbGKWRCDoi7J4zJC7f

Page 1



Scale = 1.47

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20 0	Plate Grip DOL	1 25	TC	0 17	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10 0	Lumber DOL	1 25	BC	0 19	Vert(TL)	n/a	-	n/a	999		
BCLL	0 0 *	Rep Stress Incr	YES	WB	0 12	Horiz(TL)	0 00	7	n/a	n/a		
BCDL	10 0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 65 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 or 6-0-0 oc purlins  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing

**REACTIONS** (size) 1=14-0-0, 2=14-0-0, 6=14-0-0, 7=14-0-0, 8=14-0-0, 9=14-0-0, 10=14-0-0  
 Max Horiz 1=-142 (LC 10)  
 Max Uplift 1=-137 (LC 10), 8=-89 (LC 12), 10=-94 (LC 12)  
 Max Grav 1=112 (LC 11), 2=182 (LC 17), 7=121 (LC 17), 8=422 (LC 18), 9=362 (LC 17), 10=407 (LC 17)

**FORCES**

(lb) - Maximum Compression/Maximum Tension

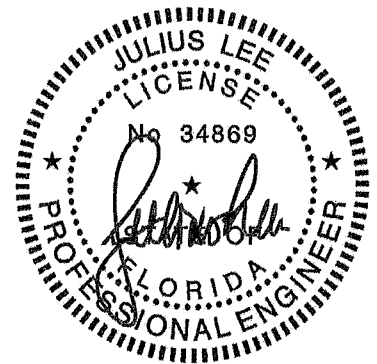
TOP CHORD 1-2=-179/209, 2-3=-122/124, 3-4=-149/103, 4-5=-135/103, 5-6=-85/83, 6-7=-84/0  
 BOT CHORD 2-10=-54/91, 9-10=-54/91, 8-9=-54/91, 6-8=-54/91  
 WEBS 4-9=-162/0, 3-10=-269/189, 5-8=-275/187

**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) Truss designed for wind loads in the plane of the truss only For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1

- 4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component
- 5) Gable requires continuous bottom chord bearing
- 6) Gable studs spaced at 4-0-0 oc
- 7) This truss has been designed for a 10 0 psf bottom chord live load nonconcurrent with any other live loads
- 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10 0psf
- 9) All bearings are assumed to be SP No.2
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 137 lb uplift at joint 1, 94 lb uplift at joint 10 and 89 lb uplift at joint 8.
- 11) 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  
 Dntc:

March 20, 2025

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 Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI 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)

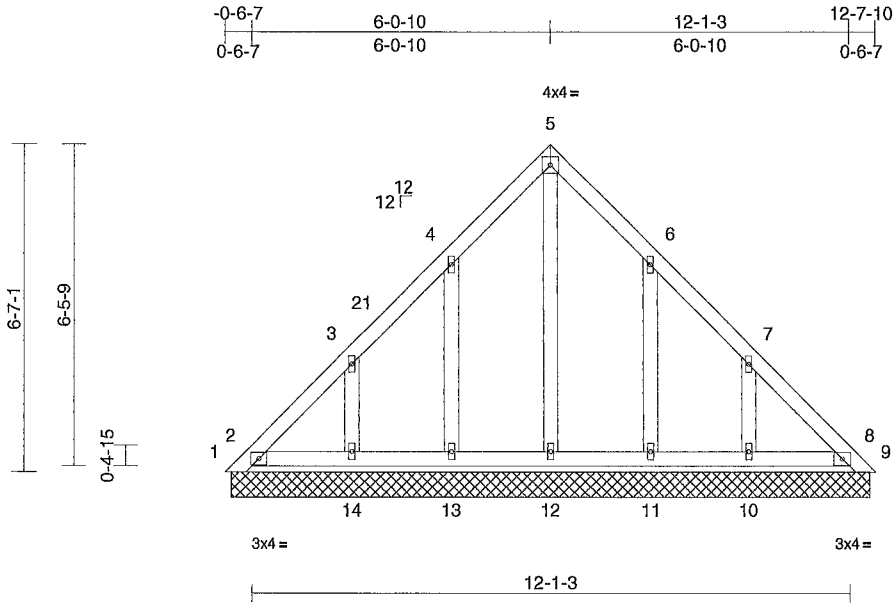
**MiTek®**  
 16023 Swingley Ridge Rd.  
 Chesterfield, MO 63017  
 314.434.1200 / MITek-US.com

Job	Truss	Truss Type	Qty	Ply	DAVID SIMQUE	T36741654
0325-046	PBO1GE	Piggyback	1	1	Job Reference (optional)	

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

Run 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries Inc. Thu Mar 20 07:29 30  
 ID:XjNym5bhQ2Z3UcMDPXWeQ3zZOTF-RIC?PsB70Hq3NSgPqnl8w3uITxbGKwCDoI7J4zJC?I

Page 1



Scale = 1:45 7

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1 25	TC	0 06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10 0	Lumber DOL	1 25	BC	0 04	Vert(TL)	n/a	-	n/a	999		
BCLL	0 0*	Rep Stress Incr	YES	WB	0 06	Horiz(TL)	0 00	8	n/a	n/a		
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  
 OTHERS 2x4 SP No 2

**BRACING**

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

**REACTIONS** (size) 1=12-11-2, 2=12-11-2, 8=12-11-2, 9=12-11-2, 10=12-11-2, 11=12-11-2, 12=12-11-2, 13=12-11-2, 14=12-11-2  
 Max Horiz 1=-134 (LC 10)  
 Max Uplift 1=-161 (LC 10), 2=-3 (LC 9), 9=-58 (LC 18), 10=-52 (LC 12), 11=-47 (LC 12), 13=-47 (LC 12), 14=-52 (LC 12)  
 Max Grav 1=104 (LC 11), 2=225 (LC 17), 8=176 (LC 1), 9=24 (LC 12), 10=186 (LC 18), 11=183 (LC 18), 12=111 (LC 17), 13=184 (LC 17), 14=186 (LC 17)

**FORCES** (lb) - Maximum Compression/Maximum Tension

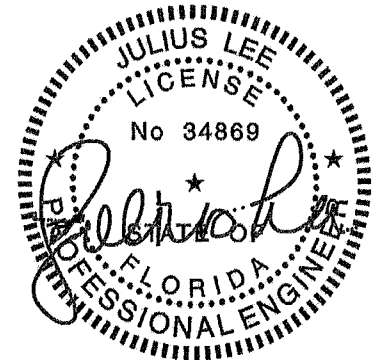
TOP CHORD 1-2=-167/219, 2-3=-135/100, 3-4=-106/65, 4-5=-95/108, 5-6=-95/117, 6-7=-81/33, 7-8=-92/68, 8-9=-26/59  
 BOT CHORD 2-14=-63/106, 13-14=-63/106, 12-13=-63/106, 11-12=-63/106, 10-11=-63/106, 8-10=-63/106  
 WEBS 5-12=-101/33, 3-14=-136/152, 7-10=-136/107, 4-13=-147/148, 6-11=-146/107

**NOTES**

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

- Wind ASCE 7-22, Vult=130mph (3-second gust) Vasd=101mph, TC DL=6 0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II, Exp B, Enclosed, MWFRS (directional) and C-C Zone 3 0-7-7 to 3-7-7, Zone 1 3-7-7 to 13-4-9 zone, cantilever left and right exposed, end vertical left and right exposed, C-C for members and forces & MWFRS for reactions shown, Lumber DOL=1 60 plate grip DOL=1 60
- 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
- Bearing at joint(s) 2, 8, 1, 9, 2, 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula Building designer should verify capacity of bearing surface
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 3 lb uplift at joint 2, 52 lb uplift at joint 14, 52 lb uplift at joint 10, 161 lb uplift at joint 1, 58 lb uplift at joint 9, 47 lb uplift at joint 13, 47 lb uplift at joint 11 and 3 lb uplift at joint 2
- 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:

March 20, 2025

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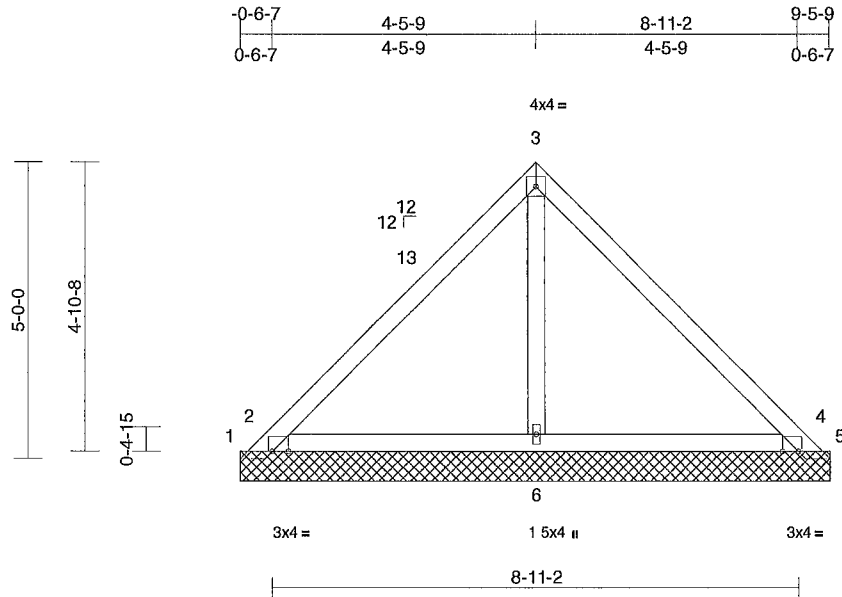
16023 Swingley Ridge Rd.  
 Chesterfield MO 63017  
 314.434 1200 / MiTek-US.com

Job 0325-046	Truss PB02	Truss Type Piggyback	Qty 13	Ply 1	DAVID SIMQUE Job Reference (optional)	T36741655
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Mayo Truss Company Inc. Mayo, FL 32066,

Run 8 73 S Feb 19 2025 Print. 8.730 S Feb 19 2025 MITek Industries, Inc. Thu Mar 20 07:29:31  
ID:XJNYm5bhQ2Z3UcMDPXWeQ3zZOTF-RIC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDotJ4zJC?I

Page 1



Scale = 1/38.3

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20 0	Plate Grip DOL	1 25	TC	0 36	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10 0	Lumber DOL	1 25	BC	0 32	Vert(TL)	n/a	-	n/a	999		
BCLL	0 0*	Rep Stress Incr	YES	WB	0 13	Horiz(TL)	0 01	5	n/a	n/a		
BCDL	10 0	Code	FBC2023/TP12014	Matrix-MP							Weight: 41 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 or 6-0-0 oc purlins  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing

**REACTIONS** (size) 1=10-0-0, 2=10-0-0, 4=10-0-0, 5=10-0-0, 6=10-0-0  
Max Horiz 1=100 (LC 10)  
Max Uplift 1=558 (LC 17), 2=149 (LC 12), 6=28 (LC 12)  
Max Grav 1=165 (LC 12), 2=718 (LC 17), 5=103 (LC 1), 6=527 (LC 1)

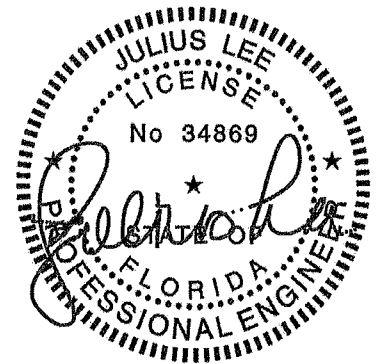
**FORCES** (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-410/466, 2-3=-331/275, 3-4=-126/192, 4-5=-71/0  
BOT CHORD 2-6=-174/156, 4-6=-145/144  
WEBS 3-6=-367/158

**NOTES**

- 1) Unbalanced roof live loads have been considered for this design
- 2) Wind ASCE 7-22, Vult=130mph (3-second gust) Vasd=101mph, TCDL=6 0psf; BCDL=6 0psf; h=15ft; B=45ft; L=24ft, eave=4ft; Cat. II, Exp B, Enclosed, MWFRS (directional) and C-C Zone3 0-2-8 to 3-2-8, Zone1 3-2-8 to 9-9-9 zone, cantilever left and right exposed, end vertical left and right exposed, C-C for members and forces & MWFRS for reactions shown, Lumber DOL=1 60 plate grip DOL=1 60
- 3) Truss designed for wind loads in the plane of the truss only For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1

- 4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - 5) Gable requires continuous bottom chord bearing
  - 6) Gable studs spaced at 4-0-0 oc
  - 7) This truss has been designed for a 10 0 psf bottom chord live load nonconcurrent with any other live loads
  - 8) \* This truss has been designed for a live load of 20 0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
  - 9) All bearings are assumed to be SP No 2
  - 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 149 lb uplift at joint 2, 558 lb uplift at joint 1, 28 lb uplift at joint 6 and 149 lb uplift at joint 2
  - 11) 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:

March 20, 2025

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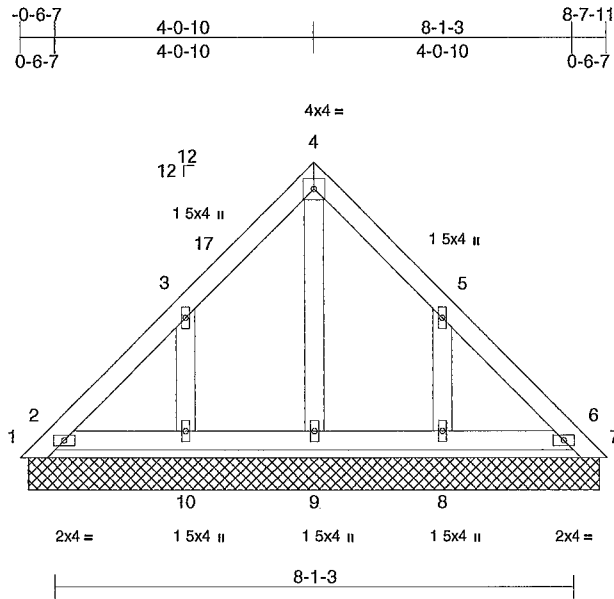
16023 Swingley Ridge Rd  
Chesterfield, MO 63017  
314.434 1200 / MiTek-US.com

Job 0325-046	Truss PB02GE	Truss Type Piggyback	Qty 1	Ply 1	DAVID SIMQUE Job Reference (optional)	T36741656
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Mayo Truss Company, Inc. Mayo, FL 32066

Run 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MITek Industries, Inc. Thu Mar 20 07:29:31  
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Page 1



Scale = 1/32.3

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20 0	Plate Grip DOL	1 25	TC	0 07	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10 0	Lumber DOL	1 25	BC	0 05	Vert(TL)	n/a	-	n/a	999		
BCLL	0 0*	Rep Stress Incr	YES	WB	0 04	Horiz(TL)	0 00	7	n/a	n/a		
BCDL	10 0	Code	FBC2023/TP12014	Matrix-MP							Weight. 43 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 or 6-0-0 oc purlins  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing

**REACTIONS** (size) 1=8-11-2, 2=8-11-2, 6=8-11-2, 7=8-11-2, 8=8-11-2, 9=8-11-2, 10=8-11-2  
Max Horiz 1=92 (LC 11)  
Max Uplift 1=-119 (LC 10), 2=-7 (LC 9), 8=-58 (LC 12), 10=-59 (LC 12)  
Max Grav 1=67 (LC 11), 2=192 (LC 17), 7=80 (LC 1), 8=236 (LC 18), 9=115 (LC 1), 10=207 (LC 17)

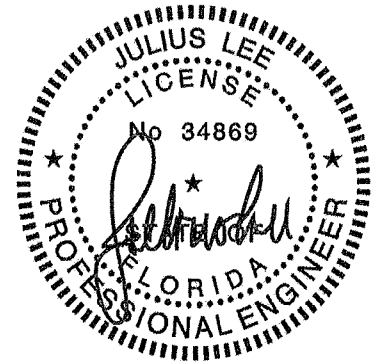
**FORCES** (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-113/161, 2-3=-90/79, 3-4=-65/86, 4-5=-62/89, 5-6=-56/70, 6-7=-55/0  
BOT CHORD 2-10=-57/91, 9-10=-57/91, 8-9=-57/91, 6-8=-57/91  
WEBS 4-9=-86/0, 3-10=-157/207, 5-8=-168/160

**NOTES**

- Unbalanced roof live loads have been considered for this design
- Wind ASCE 7-22, Vult=130mph (3-second gust) Vasd=101mph, TC DL=6 0psf; BCDL=6.0psf; h=15ft; B=45ft, L=24ft; eave=4ft, Cat. II, Exp B, Enclosed, MWFRS (directional) and C-C Zone3 0-7-7 to 3-7-7, Zone1 3-7-7 to 9-4-9 zone, cantilever left and right exposed, end vertical left and right exposed, C-C for members and forces & MWFRS for reactions shown, Lumber DOL=1 60 plate grip DOL=1 60
- 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 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 psf 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
  - Bearing at joint(s) 2, 6, 1, 7, 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 7 lb uplift at joint 2, 119 lb uplift at joint 1, 59 lb uplift at joint 10, 58 lb uplift at joint 8 and 7 lb uplift at joint 2
  - 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:

March 20, 2025

**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®**

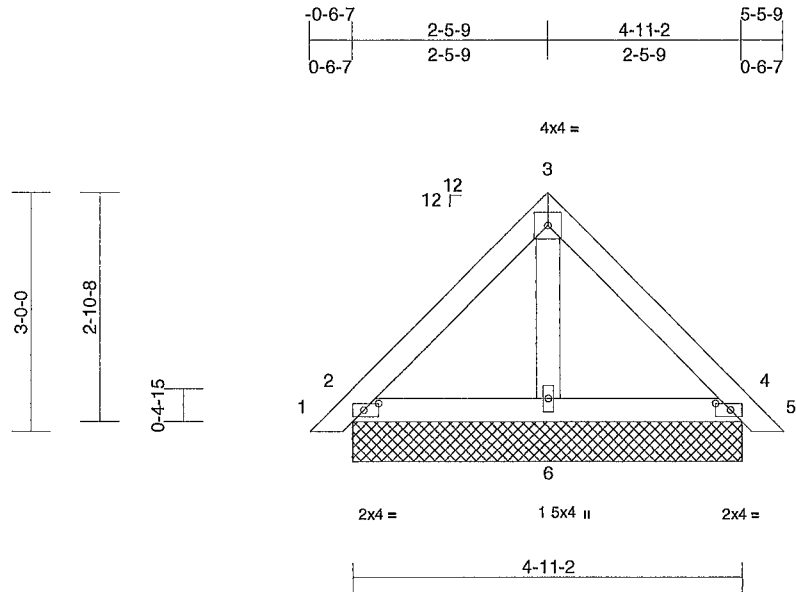
16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
314.434 1200 / MITek-US.com

Job 0325-046	Truss PB03	Truss Type Piggyback	Qty 1	Ply 1	DAVID SIMQUE Job Reference (optional)	T36741657
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Mayo Truss Company Inc. Mayo, FL 32066,

Run 8 73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries Inc Thu Mar 20 07:29 31  
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Page 1



Scale = 1:28 6

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

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 11	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10 0	Lumber DOL	1.25	BC	0.13	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-MP							Weight: 23 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 or 6-0-0 oc purlins  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing

**REACTIONS**

(size) 2=4-11-2, 4=4-11-2, 6=4-11-2  
Max Horiz 2=-59 (LC 10)  
Max Uplift 2=-17 (LC 12), 4=-17 (LC 12)  
Max Grav 2=139 (LC 1), 4=139 (LC 1), 6=156 (LC 1)

**FORCES**

(lb) - Maximum Compression/Maximum Tension

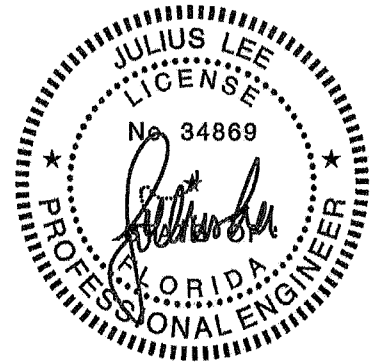
TOP CHORD 1-2=0/14, 2-3=-97/97, 3-4=-94/91, 4-5=0/14  
BOT CHORD 2-6=-13/80, 4-6=-15/80  
WEBS 3-6=-56/0

**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 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 17 lb uplift at joint 2, 17 lb uplift at joint 4, 17 lb uplift at joint 2 and 17 lb uplift at joint 4
- 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:

March 20, 2025

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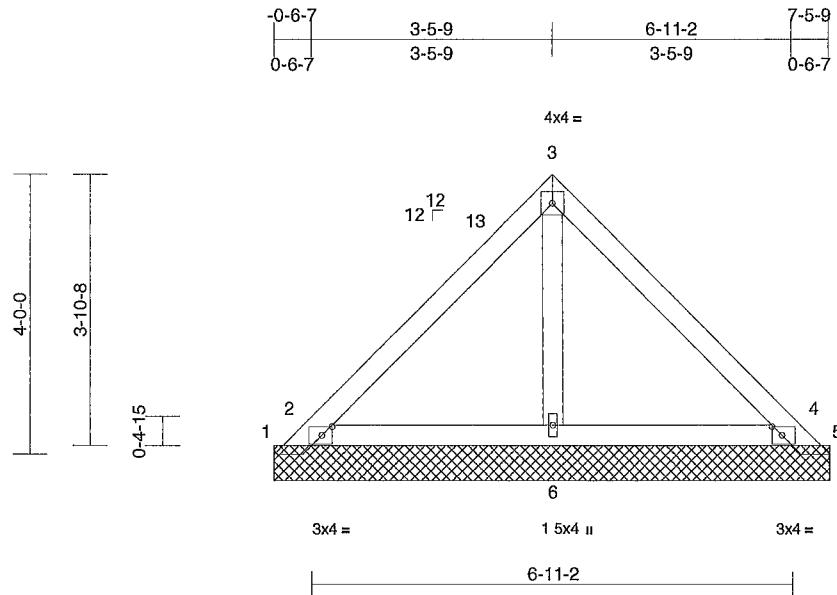
16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	DAVID SIMQUE	T36741658
0325-046	PB04	Piggyback	33	1	Job Reference (optional)	

Mayo Truss Company Inc. Mayo, FL 32066,

Run 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MITek Industries, Inc. Thu Mar 20 07:29:31  
 ID:?wxw\_RcKBLhw6mxQzF1tzHzZOTE RIC?PsB70Hq3NSgPqnLw3ulTXbGKW/CDol7J4zJC7I

Page: 1



Scale = 1/32.5

Plate Offsets (X, Y) [2 0-1-12,0-1-8], [4 0-1-12,0-1-8]

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 21	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10 0	Lumber DOL	1.25	BC	0 10	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.02	Horiz(TL)	0 00	4	n/a	n/a		
BCDL	10 0	Code	FBC2023/TPI2014	Matrix-MP							Weight 32 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 or 6-0-0 oc purlins  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing

**REACTIONS** (size) 1=8-0-0, 2=8-0-0, 4=8-0-0, 5=8-0-0, 6=8-0-0

Max Horiz 1=80 (LC 11)  
 Max Uplift 1=-342 (LC 17), 2=-111 (LC 12), 4=-118 (LC 12), 5=-289 (LC 18)  
 Max Grav 1=99 (LC 9), 2=548 (LC 17), 4=496 (LC 18), 5=99 (LC 12), 6=178 (LC 1)

**FORCES**

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-318/303, 2-3=-202/120, 3-4=-130/116, 4-5=-172/223  
 BOT CHORD 2-6=-84/94, 4-6=-84/73  
 WEBS 3-6=-88/0

**NOTES**

- Unbalanced roof live loads have been considered for this design
- Wind ASCE 7-22, Vult=130mph (3-second gust) Vasd=101mph, TCDL=6 opsf, BCDL=6.0psf; h=15ft; B=45ft, L=24ft, eave=4ft, Cat. II, Exp B, Enclosed, MWFRS (directional) and C-C Zone3 0-2-8 to 3-2-8, Zone1 3-2-8 to 7-9-9 zone, cantilever left and right exposed, end vertical left and right exposed, C-C for members and forces & MWFRS for reactions shown, Lumber DOL=1 60 plate grip DOL=1 60
- 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 pspf 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 111 lb uplift at joint 2, 118 lb uplift at joint 4, 342 lb uplift at joint 1, 289 lb uplift at joint 5, 111 lb uplift at joint 2 and 118 lb uplift at joint 4
- 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:

March 20, 2025

**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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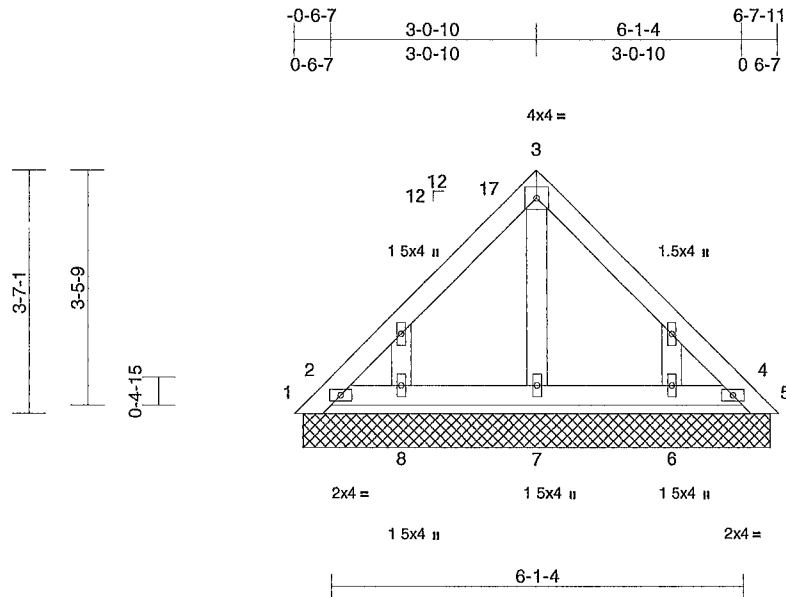
16023 Swingley Ridge Rd.  
 Chesterfield MO 63017  
 314.434 1200 / MITek-US.com

Job	Truss	Truss Type	Qty	Ply	DAVID SIMQUE	T36741659
0325-046	PB04GE	Piggyback	2	1	Job Reference (optional)	

Mayo Truss Company, Inc. Mayo, FL 32066,

Run 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MITek Industries, Inc. Thu Mar 20 07:29:31  
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Page 1



Scale = 1/32.5

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20 0	Plate Grip DOL	1.25	TC	0 15	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10 0	Lumber DOL	1.25	BC	0 11	Vert(TL)	n/a	-	n/a	999		
BCLL	0 0*	Rep Stress Incr	YES	WB	0 00	Horiz(TL)	0 00	5	n/a	n/a		
BCDL	10 0	Code	FBC2023/TPI2014	Matrix-MP							Weight. 31 lb	FT = 20%

**LUMBER**

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

**BRACING**

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

**REACTIONS** (size) 1=6-11-2, 2=6-11-2, 4=6-11-2, 5=6-11-2, 6=6-11-2, 7=6-11-2, 8=6-11-2  
Max Horiz 1=71 (LC 11)  
Max Uplift 1=-134 (LC 17), 2=-44 (LC 12), 4=-50 (LC 12), 5=-88 (LC 18), 6=-18 (LC 12), 8=-18 (LC 12)  
Max Grav 1=72 (LC 9), 2=277 (LC 17), 4=237 (LC 1), 5=53 (LC 12), 6=104 (LC 18), 7=81 (LC 3), 8=105 (LC 17)

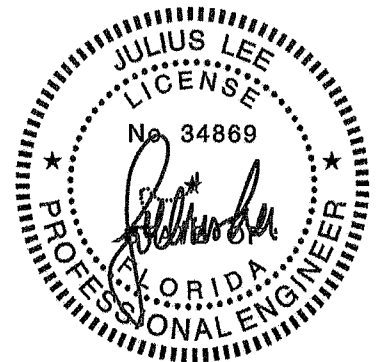
**FORCES**

(lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=-184/151, 2-3=-163/66, 3-4=-163/80, 4-5=-83/81  
BOT CHORD 2-8=-16/79, 7-8=-16/79, 6-7=-16/79, 4-6=-16/79

**NOTES**

- 1) Unbalanced roof live loads have been considered for this design
- 2) Wind ASCE 7-22, Vult=130mph (3-second gust) Vasd=101mph, TC DL=6 0psf; BC DL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat II, Exp B, Enclosed, MWFRS (directional) and C-C Zone3 0-7-7 to 3-7-7, Zone1 3-7-7 to 7-4-10 zone, cantilever left and right exposed, end vertical left and right exposed, C-C for members and forces & MWFRS for reactions shown, Lumber DOL=1 60 plate grip DOL=1 60
- 3) Truss designed for wind loads in the plane of the truss only For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1

- 4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - 5) Gable requires continuous bottom chord bearing
  - 6) Gable studs spaced at 2-0-0 oc
  - 7) This truss has been designed for a 10 0 psf bottom chord live load nonconcurrent with any other live loads
  - 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members
  - 9) All bearings are assumed to be SP No.2
  - 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 44 lb uplift at joint 2, 50 lb uplift at joint 4, 18 lb uplift at joint 8, 18 lb uplift at joint 6, 134 lb uplift at joint 1, 88 lb uplift at joint 5, 44 lb uplift at joint 2 and 50 lb uplift at joint 4
  - 11) 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:

March 20, 2025

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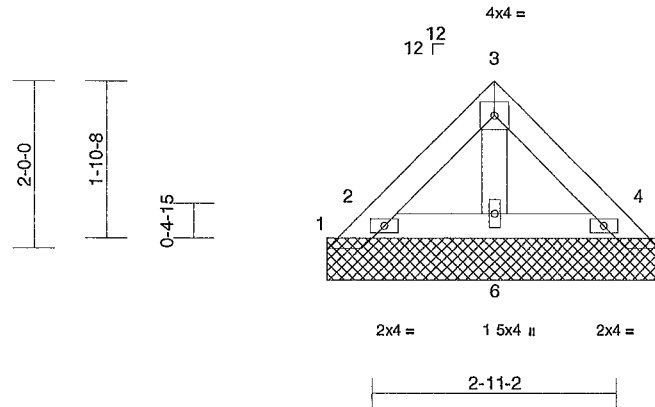
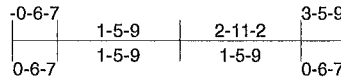
16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
314.434 1200 / MITek-US.com

Job	Truss	Truss Type	Qty	Ply	DAVID SIMQUE	T36741660
0325-046	PB05	Piggyback	30	1	Job Reference (optional)	

Mayo Truss Company Inc. Mayo, FL 32066,

Run 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MITek Industries, Inc. Thu Mar 20 07:29 31  
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Page 1



Scale = 1/272

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	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10 0	Lumber DOL	1 25	BC	0 02	Vert(TL)	n/a	-	n/a	999		
BCLL	0 0*	Rep Stress Incr	YES	WB	0 00	Horiz(TL)	0 00	4	n/a	n/a		
BCDL	10 0	Code	FBC2023/TP12014	Matrix-MP							Weight: 15 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 or 4-0-0 oc purlins
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing
REACTIONS (size)	
	1=4-0-0, 2=4-0-0, 4=4-0-0, 5=4-0-0, 6=4-0-0
Max Horiz	1=-38 (LC 10)
Max Uplift	1=-51 (LC 10), 2=-9 (LC 9), 4=-14 (LC 12), 5=-23 (LC 18)
Max Grav	1=30 (LC 11), 2=150 (LC 17), 4=122 (LC 18), 5=10 (LC 12), 6=88 (LC 1)
FORCES (lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=-47/74, 2-3=-48/34, 3-4=-46/34, 4-5=-18/35
BOT CHORD	2-6=-17/43, 4-6=-17/43
WEBS	3-6=-37/0

- 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 9 lb uplift at joint 2, 14 lb uplift at joint 4, 51 lb uplift at joint 1, 23 lb uplift at joint 5, 9 lb uplift at joint 2 and 14 lb uplift at joint 4
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer

LOAD CASE(S) Standard

- 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 Zone 1 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/TP1 1



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

March 20, 2025

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Chesterfield, MO 63017  
314.434.1200 / MiTek-US.com

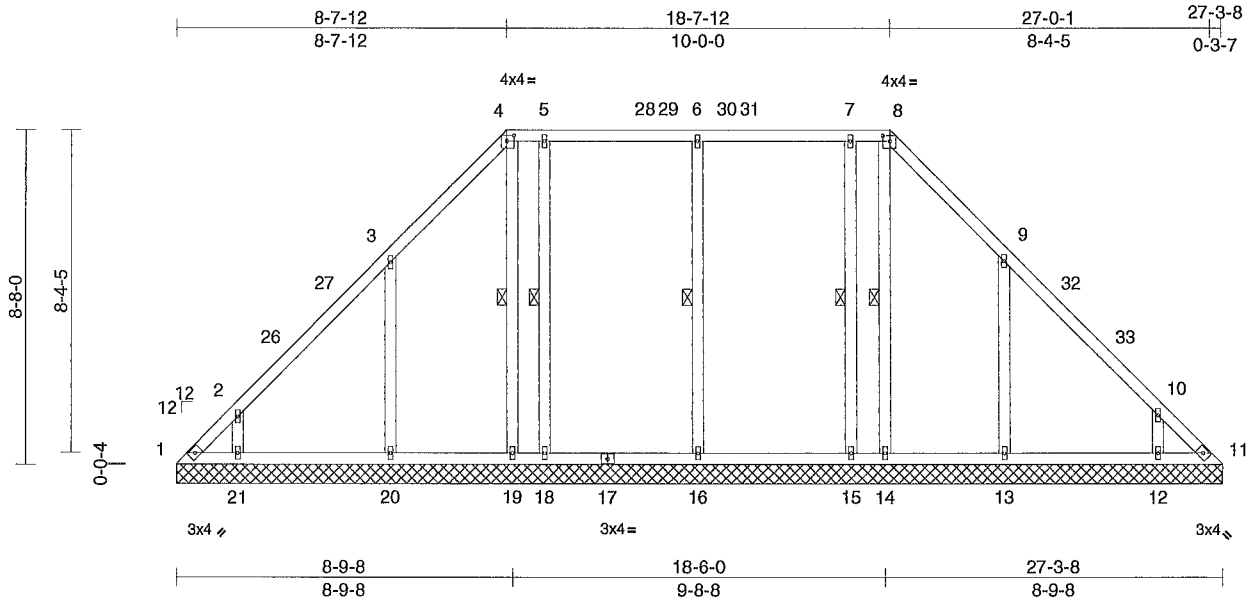


Job 0325-046	Truss V01	Truss Type Roof Special	Qty 1	Ply 1	DAVID SIMQUE Job Reference (optional)	T36741662
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Mayo Truss Company Inc Mayo, FL 32066,

Run: 8.73 S Feb 19 2025 Print: 8 730 S Feb 19 2025 MITek Industries, Inc Thu Mar 20 07:29:31  
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Page 1



Scale = 1/8" = 1'-0"

Plate Offsets (X, Y) [4'-0"-2'-4, 0'-1"-12], [8'-0"-2'-4, 0'-1"-12]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20 0	Plate Grip DOL	1 25	TC	0 18	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10 0	Lumber DOL	1 25	BC	0 18	Vert(TL)	n/a	-	n/a	999		
BCLL	0 0 *	Rep Stress Incr	YES	WB	0 13	Horiz(TL)	0 00	11	n/a	n/a		
BCDL	10 0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 169 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
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing
WEBS	1 Row at midpt 6-16, 5-18, 7-15, 4-19, 8-14

REACTIONS (size)	
Max Horiz	1=181 (LC 11)
Max Uplift	1=-101 (LC 10), 11=-43 (LC 11), 12=-60 (LC 12), 13=-94 (LC 12), 16=-3 (LC 12), 19=-22 (LC 11), 20=-95 (LC 12), 21=-60 (LC 12)
Max Grav	1=109 (LC 11), 11=69 (LC 12), 12=342 (LC 18), 13=431 (LC 18), 14=95 (LC 26), 15=296 (LC 25), 16=431 (LC 18), 18=295 (LC 26), 19=127 (LC 17), 20=432 (LC 17), 21=346 (LC 17)

FORCES (lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=-158/191, 2-3=-171/138, 3-4=-132/131, 4-5=-83/116, 5-6=-83/116, 6-7=-83/116, 7-8=-83/116, 8-9=-106/135, 9-10=-118/85, 10-11=-129/119
BOT CHORD	1-21=-83/96, 20-21=-69/96, 19-20=-69/96, 18-19=-69/95, 16-18=-69/95, 15-16=-69/95, 14-15=-69/95, 13-14=-68/96, 12-13=-68/96, 11-12=-68/96

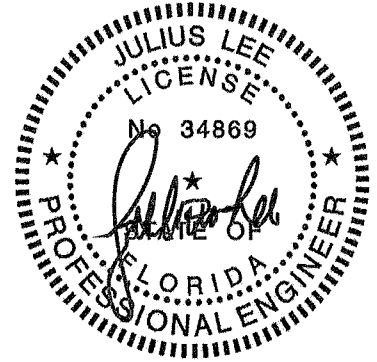
WEBS 6-16=-259/54, 5-18=-188/34, 3-20=-289/141, 2-21=-249/151, 7-15=-188/37, 9-13=-268/141, 10-12=-247/149, 4-19=-73/42, 8-14=-69/27

**NOTES**

- Unbalanced roof live loads have been considered for this design
- Wind ASCE 7-22, Vult=130mph (3-second gust) Vasd=101mph, TCDL=6 Opsf; BCDL=6 Opsf, h=15ft; B=45ft, L=27ft; eave=4ft; Cat. II, Exp B, Enclosed, MWFRS (directional) and C-C Zone3 0-0-4 to 3-0-4, Zone1 3-0-4 to 8-8-0, Zone2 8-8-0 to 12-10-14, Zone1 12-10-14 to 18-8-0, Zone2 18-8-0 to 22-10-15, Zone1 22-10-15 to 27-3-12 zone, cantilever left and right exposed, end vertical left and right exposed, C-C for members and forces & MWFRS for reactions shown, Lumber DOL=1 60 plate grip DOL=1 60
- 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
- Provide adequate drainage to prevent water ponding
- All plates are 1/2" x 4" MT20 unless otherwise indicated
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4'-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 Opsf 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 Opsf
- All bearings are assumed to be SP No 2

12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 101 lb uplift at joint 1, 43 lb uplift at joint 11, 3 lb uplift at joint 16, 95 lb uplift at joint 20, 60 lb uplift at joint 21, 94 lb uplift at joint 13, 60 lb uplift at joint 12 and 22 lb uplift at joint 19

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:

March 20, 2025

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

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

**MiTek®**

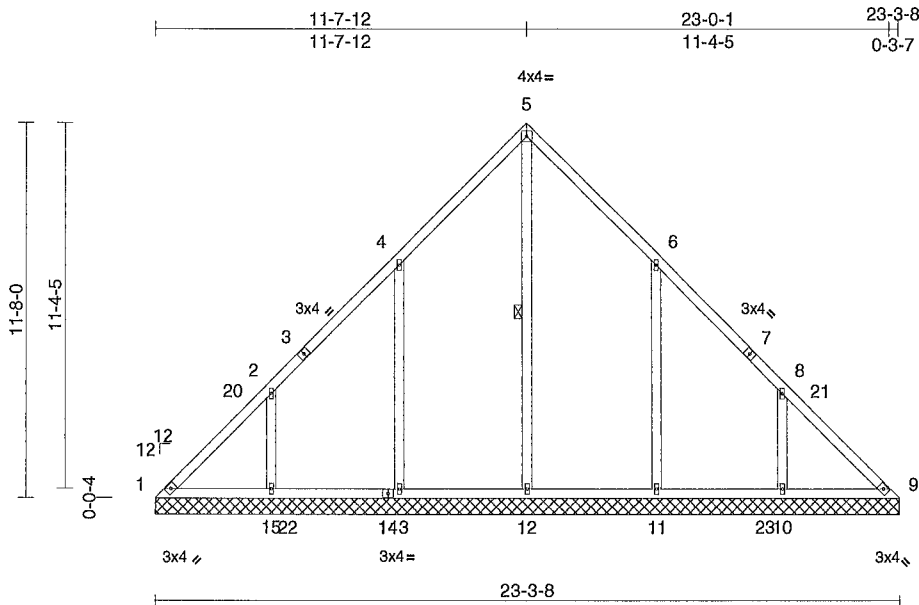
16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
314.434.1200 / MITek-US.com

Job	Truss	Truss Type	Qty	Ply	DAVID SIMQUE	T36741663
0325-046	V02	Valley	1	1	Job Reference (optional)	

Mayo Truss Company Inc. Mayo, FL 32066,

Run 8.73 S Feb 19 2025 Print. 8 730 S Feb 19 2025 MITek Industries, Inc. Thu Mar 20 07:29:32  
 ID:TXWq35zFm\_09J6ptmyGikzZKf-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoI7J4zJc?I

Page 1



Scale = 1/70

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 20	Vert(LL)	n/a	-	n/a	999	MT20 244/190
TCDL	10 0	Lumber DOL	1 25	BC	0 16	Vert(TL)	n/a	-	n/a	999	
BCLL	0 0 *	Rep Stress Incr	YES	WB	0 27	Horiz(TL)	0.01	9	n/a	n/a	
BCDL	10 0	Code	FBC2023/TPI2014	Matrix-MS							Weight 129 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 or 6-0-0 oc purlins
- BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing
- WEBS 1 Row at midpt 5-12

- REACTIONS** (size)
- 1=23-3-8, 9=23-3-8, 10=23-3-8, 11=23-3-8, 12=23-3-8, 13=23-3-8, 15=23-3-8
  - Max Horiz 1=240 (LC 11)
  - Max Uplift 1=63 (LC 10), 9=9 (LC 11), 10=82 (LC 12), 11=105 (LC 12), 13=105 (LC 12), 15=82 (LC 12)
  - Max Grav 1=187 (LC 18), 9=147 (LC 17), 10=449 (LC 18), 11=496 (LC 18), 12=413 (LC 17), 13=495 (LC 17), 15=454 (LC 17)

**FORCES** (lb) - Maximum Compression/Maximum Tension

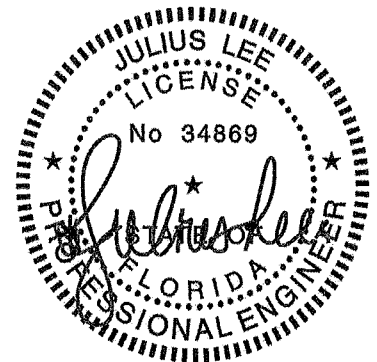
- TOP CHORD 1-2=-213/226, 2-4=-159/169, 4-5=-127/168, 5-6=-121/166, 6-8=-109/119, 8-9=-171/165
- BOT CHORD 1-15=-113/167, 13-15=-113/154, 12-13=-113/154, 11-12=-113/154, 10-11=-113/154, 9-10=-113/154
- WEBS 5-12=-212/19, 4-13=-298/190, 2-15=-267/147, 6-11=-298/190, 8-10=-264/147

**NOTES**

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

- 2) Wind ASCE 7-22, Vult=130mph (3-second gust) Vasd=101mph, TCCL=6 Opsf; BCDL=6 Opsf, h=15ft; B=45ft; L=24ft; eave=4ft, Cat. II, Exp B, Enclosed, MWFRS (directional) and C-C Zone3 0-0-4 to 3-0-4, Zone1 3-0-4 to 11-8-0, Zone2 11-8-0 to 15-8-0, Zone1 15-8-0 to 23-3-12 zone, cantilever left and right exposed, end vertical left and right exposed, C-C for members and forces & MWFRS for reactions shown, Lumber DOL=1 60 plate grip DOL=1 60
- 3) 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.
- 4) All bearings are assumed to be SP No 2
- 5) All plates are 1 5x4 MT20 unless otherwise indicated
- 6) Gable requires continuous bottom chord bearing
- 7) Gable studs spaced at 4-0-0 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 Opsf 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 Opsf
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 63 lb uplift at joint 1, 105 lb uplift at joint 13, 82 lb uplift at joint 15, 105 lb uplift at joint 11, 82 lb uplift at joint 10 and 9 lb uplift at joint 9

**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:

March 20, 2025

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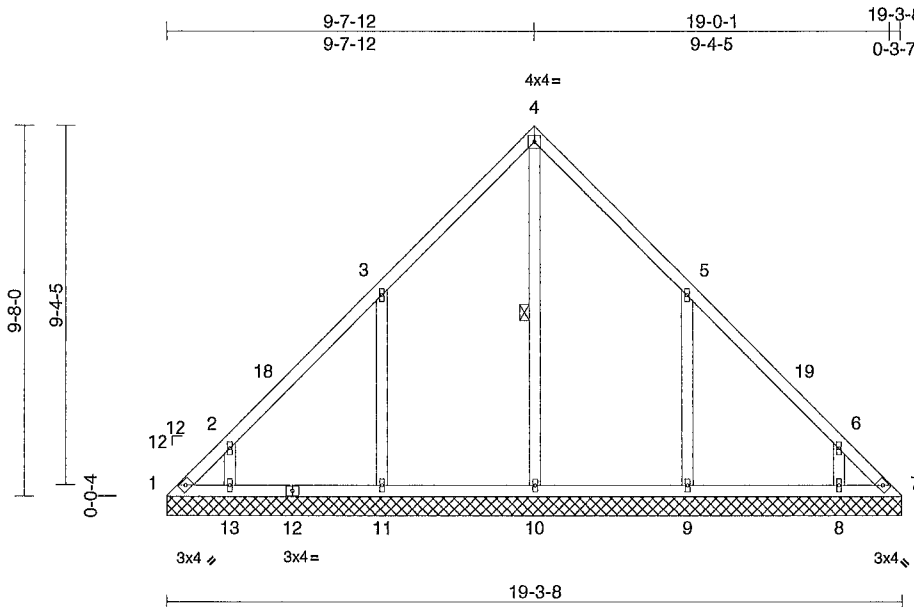
16023 Swingley Ridge Rd  
 Chesterfield, MO 63017  
 314.434.1200 / MITek-US.com

Job	Truss	Truss Type	Qty	Ply	DAVID SIMQUE	T36741664
0325-046	V03	Valley	1	1	Job Reference (optional)	

Mayo Truss Company Inc. Mayo, FL - 32066

Run 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MITek Industries, Inc Thu Mar 20 07:29:32  
 ID TIXwq35zFm\_09J6ptmyGikzZKfI-RIC?Psb70Hq3NSgPqnL8w3uITXbGKWrcDol7J4zJC7I

Page: 1



Scale = 1/8" = 1'-0"

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0 19	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0 17	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0 15	Horiz(TL)	0 00	7	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS								
											Weight: 100 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 or 6-0-0 oc purlins  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing  
 WEBS 1 Row at midpt 4-10

**REACTIONS** (size) 1=19-3-8, 7=19-3-8, 8=19-3-8, 9=19-3-8, 10=19-3-8, 11=19-3-8, 13=19-3-8  
 Max Horiz 1=198 (LC 11)  
 Max Uplift 1=-93 (LC 10), 7=-45 (LC 11), 8=-51 (LC 12), 9=-108 (LC 12), 11=-108 (LC 12), 13=-51 (LC 12)  
 Max Grav 1=120 (LC 11), 7=80 (LC 12), 8=323 (LC 18), 9=480 (LC 18), 10=337 (LC 17), 11=480 (LC 17), 13=333 (LC 17)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=-171/178, 2-3=-200/131, 3-4=-171/156, 4-5=-150/155, 5-6=-162/80, 6-7=-165/124  
 BOT CHORD 1-13=-90/125, 11-13=-76/125, 10-11=-76/125, 9-10=-76/125, 8-9=-76/125, 7-8=-76/125  
 WEBS 4-10=-135/32, 3-11=-305/208, 2-13=-231/175, 5-9=-305/208, 6-8=-228/175

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

- 2) Wind ASCE 7-22, Vult=130mph (3-second gust) Vasd=101mph, TC DL=6 Opsf; BCDL=6 Opsf; h=15ft, B=45ft, L=24ft; eave=4ft; Cat. II, Exp B, Enclosed, MWFRS (directional) and C-C Zone3 0-0-4 to 3-0-4, Zone1 3-0-4 to 9-8-0, Zone2 9-8-0 to 13-8-0, Zone1 13-8-0 to 19-3-12 zone, cantilever left and right exposed, end vertical left and right exposed, C-C for members and forces & MWFRS for reactions shown, Lumber DOL=1.60 plate grip DOL=1.60
- 3) 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.
- 4) All plates are 1/2" x 4" MT20 unless otherwise indicated
- 5) Gable requires continuous bottom chord bearing
- 6) Gable studs spaced at 4-0-0 oc
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads
- 8) \* This truss has been designed for a live load of 20 Opsf 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 Opsf
- 9) All bearings are assumed to be SP No 2
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 93 lb uplift at joint 1, 45 lb uplift at joint 7, 108 lb uplift at joint 11, 51 lb uplift at joint 13, 108 lb uplift at joint 9 and 51 lb uplift at joint 8

**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:

March 20, 2025

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**MiTek®**

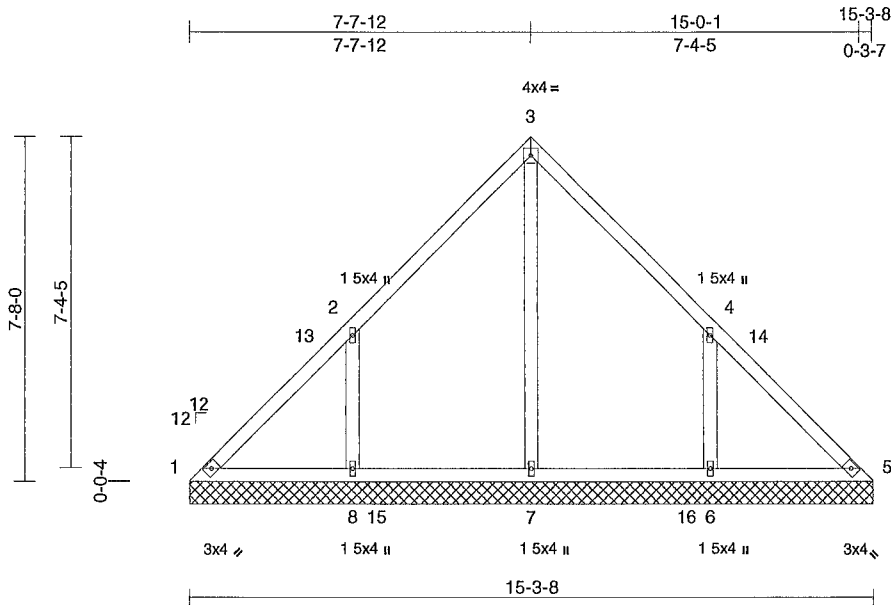
16023 Swingley Ridge Rd.  
 Chesterfield, MO 63017  
 314.434.1200 / MITek-US.com

Job	Truss	Truss Type	Qty	Ply	DAVID SIMQUE	
0325-046	V04	Valley	1	1	Job Reference (optional)	T36741665

Mayo Truss Company, Inc Mayo, FL 32066,

Run 8.73 S Feb 19 2025 Print: 8 730 S Feb 19 2025 MITek Industries, Inc. Thu Mar 20 07:29:32  
 ID:TIXwq35zFm\_09J6ptmyGikzZKft-RfC?PsB70Hq3NSgPqnL8w3uITXbGKwRCDol7J4zJC?f

Page 1



Scale = 1/50.5

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20 0	Plate Grip DOL	1.25	TC	0 20	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10 0	Lumber DOL	1.25	BC	0 17	Vert(TL)	n/a	-	n/a	999		
BCLL	0 0*	Rep Stress Incr	YES	WB	0 22	Horiz(TL)	0 00	5	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							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 or 10-0-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing

**REACTIONS** (size) 1=15-3-8, 5=15-3-8, 6=15-3-8, 7=15-3-8, 8=15-3-8  
 Max Horiz 1=156 (LC 11)  
 Max Uplift 1=-21 (LC 10), 6=-98 (LC 12), 8=-98 (LC 12)  
 Max Grav 1=142 (LC 18), 5=115 (LC 17), 6=477 (LC 18), 7=429 (LC 17), 8=481 (LC 17)

**FORCES**

(lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=-156/183, 2-3=-98/121, 3-4=-83/121, 4-5=-127/147  
 BOT CHORD 1-8=-87/127, 7-8=-87/120, 6-7=-87/120, 5-6=-87/120  
 WEBS 3-7=-234/0, 2-8=-297/221, 4-6=-295/221

**NOTES**

- 1) Unbalanced roof live loads have been considered for this design
- 2) Wind ASCE 7-22, Vult=130mph (3-second gust) Vasd=101mph, TC DL=6 0psf; BCDL=6 0psf, h=15ft; B=45ft; L=24ft; eave=4ft; Cat II, Exp B, Enclosed, MWFRS (directional) and C-C Zone3 0-0-4 to 3-0-4, Zone1 3-0-4 to 7-8-0, Zone2 7-8-0 to 11-8-0, Zone1 11-8-0 to 15-3-12 zone, cantilever left and right exposed, end vertical left and right exposed, C-C for members and forces & MWFRS for reactions shown, Lumber DOL=1 60 plate grip DOL=1 60
- 3) Truss designed for wind loads in the plane of the truss only For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1

- 4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 5) Gable requires continuous bottom chord bearing
- 6) Gable studs spaced at 4-0-0 oc
- 7) This truss has been designed for a 10 0 psf bottom chord live load nonconcurrent with any other live loads
- 8) \* This truss has been designed for a live load of 20 0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10 0psf
- 9) All bearings are assumed to be SP No.2
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 21 lb uplift at joint 1, 98 lb uplift at joint 8 and 98 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:

March 20, 2025

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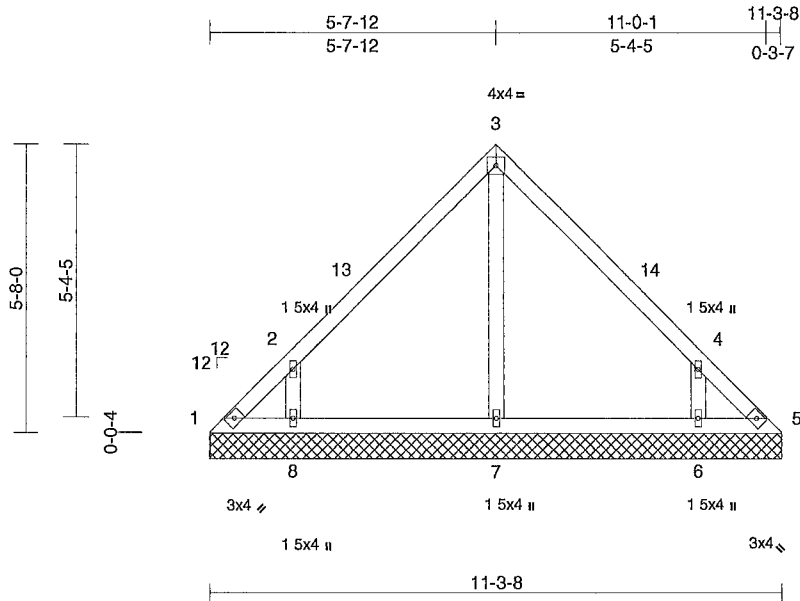
**MiTek®**  
 16023 Swingley Ridge Rd  
 Chesterfield, MO 63017  
 314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	DAVID SIMQUE	T36741666
0325-046	V05	Valley	1	1	Job Reference (optional)	

Mayo Truss Company Inc. Mayo, FL 32066,

Run 8.73 S Feb 19 2025 Print: 8 730 S Feb 19 2025 MiTek Industries, Inc. Thu Mar 20 07:29:32  
 ID:v1RT?bn9WTUHKgEWWTysr2zZKdI-RfC?PsB70Hq3NSgPqnLw3uITXbGKwRCdOl7J4zJC?f

Page 1



Scale = 1.44.6

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20 0	Plate Grip DOL	1 25	TC	0 17	Vert(LL)	n/a	-	n/a	999	MT20 244/190
TCDL	10 0	Lumber DOL	1 25	BC	0 12	Vert(TL)	n/a	-	n/a	999	
BCLL	0 0*	Rep Stress Incr	YES	WB	0 06	Horiz(TL)	0 00	5	n/a	n/a	
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight 50 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 or 6-0-0 oc purlins  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing

**REACTIONS** (size) 1=11-3-8, 5=11-3-8, 6=11-3-8, 7=11-3-8, 8=11-3-8  
 Max Horiz 1=114 (LC 11)  
 Max Uplift 1=-52 (LC 10), 5=-23 (LC 11), 6=-79 (LC 12), 8=-79 (LC 12)  
 Max Grav 1=87 (LC 18), 5=66 (LC 17), 6=326 (LC 18), 7=218 (LC 1), 8=332 (LC 17)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=-133/116, 2-3=-164/128, 3-4=-156/131, 4-5=-136/83  
 BOT CHORD 1-8=-40/89, 7-8=-33/81, 6-7=-33/81, 5-6=-39/82  
 WEBS 3-7=-131/0, 2-8=-289/289, 4-6=-287/289

- NOTES**
- 1) Unbalanced roof live loads have been considered for this design
  - 2) Wind ASCE 7-22, Vult=130mph (3-second gust) Vasd=101mph, TC DL=6 0psf, BC DL=6.0psf; h=15ft, B=45ft, L=24ft, eave=4ft, Cat. II, Exp B, Enclosed, MWFRS (directional) and C-C Zone3 0-0-4 to 3-0-4, Zone1 3-0-4 to 5-8-0, Zone2 5-8-0 to 9-8-0, Zone1 9-8-0 to 11-3-12 zone, cantilever left and right exposed , end vertical left and right exposed,C-C for members and forces & MWFRS for reactions shown, Lumber DOL=1 60 plate grip DOL=1 60
  - 3) Truss designed for wind loads in the plane of the truss only For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1

- 4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 5) Gable requires continuous bottom chord bearing
- 6) Gable studs spaced at 4-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads
- 8) \* This truss has been designed for a live load of 20 0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 9) All bearings are assumed to be SP No 2
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 52 lb uplift at joint 1, 23 lb uplift at joint 5, 79 lb uplift at joint 8 and 79 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  
 Dntc:

March 20,2025

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**MiTek®**

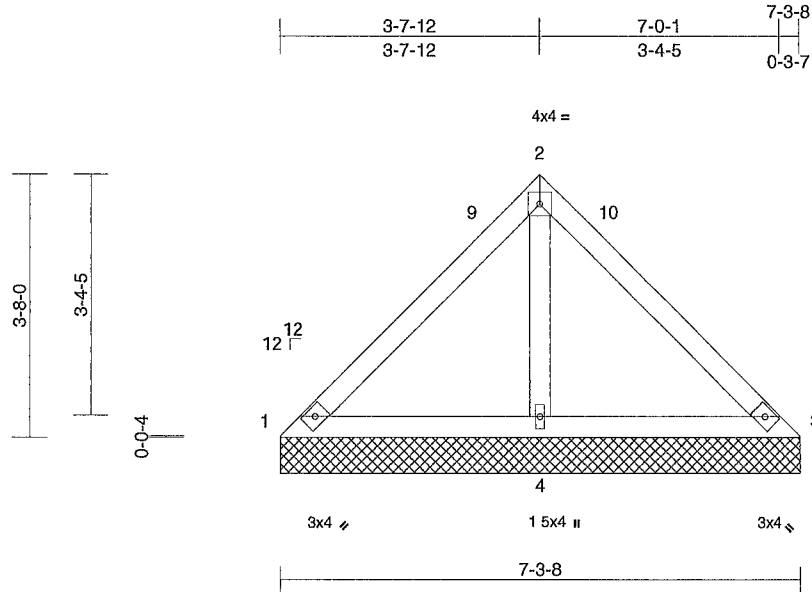
16023 Swingley Ridge Rd.  
 Chesterfield, MO 63017  
 314.434 1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	DAVID SIMQUE	T36741667
0325-046	V06	Valley	1	1	Job Reference (optional)	

Mayo Truss Company Inc Mayo, FL 32066

Run 8 73 S Feb 19 2025 Print. 8 730 S Feb 19 2025 MITek industries Inc. Thu Mar 20 07:29:32  
ID:SHdxvZdVKAejZ1skQOHw75zZKbK-RIC?PsB70Hq3NSgPqnL9wSuiTXbGKWrCDoi7J4zJC?I

Page 1



Scale = 1/317

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20 0	Plate Grip DOL	1 25	TC	0 16	Vert(LL)	n/a	-	n/a	999	244/190
TCDL	10 0	Lumber DOL	1 25	BC	0.21	Vert(TL)	n/a	-	n/a	999	
BCLL	0 0*	Rep Stress Incr	YES	WB	0 07	Horiz(TL)	0 00	3	n/a	n/a	
BCDL	10 0	Code	FBC2023/TPI2014	Matrix-MP							
										Weight: 29 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 or 7-3-8 oc purlins  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing

**REACTIONS**

(size) 1=7-3-8, 3=7-3-8, 4=7-3-8  
Max Horiz 1=73 (LC 11)  
Max Uplift 1=-7 (LC 24), 3=-7 (LC 23), 4=-47 (LC 12)  
Max Grav 1=66 (LC 23), 3=66 (LC 24), 4=505 (LC 1)

**FORCES**

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-123/186, 2-3=-136/182  
BOT CHORD 1-4=-150/218, 3-4=-150/218  
WEBS 2-4=-356/277

**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 0-0-4 to 3-0-4, Zone1 3-0-4 to 3-8-0, Zone3 3-8-0 to 7-3-12 zone, cantilever left and right exposed, end vertical left and right exposed, C-C for members and forces & MWFRS for reactions shown, Lumber DOL=1 60 plate grip DOL=1 60
- 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 7 lb uplift at joint 1, 7 lb uplift at joint 3 and 47 lb uplift at joint 4.
- 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:

March 20,2025

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

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

**MiTek®**

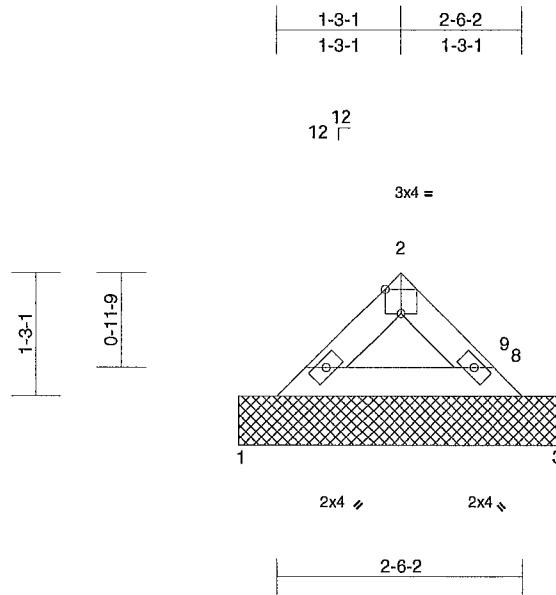
16023 Swingley Ridge Rd  
Chesterfield, MO 63017  
314.434.1200 / MITek-US.com

Job	Truss	Truss Type	Qty	Ply	DAVID SIMQUE	
0325-046	V07	Valley	1	1	Job Reference (optional)	T36741668

Mayo Truss Company Inc. Mayo, FL 32066,

Run 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MITek Industries Inc. Thu Mar 20 07:29:32  
 ID:HQ\_CAdiGJOOIHylumenwFMzZKbE-RIC?PsB70Hq3NSgPqnl8w3uITXbGKWrCDol7J4zJC7f

Page: 1



Scale = 1/23.1

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20 0	Plate Grip DOL	1 25	TC	0 08	Vert(LL)	n/a	-	n/a	999	244/190
TCDL	10 0	Lumber DOL	1.25	BC	0 07	Vert(TL)	n/a	-	n/a	999	
BCLL	0 0*	Rep Stress Incr	YES	WB	0 00	Horiz(TL)	0 00	3	n/a	n/a	
BCDL	10 0	Code	FBC2023/TPI2014	Matrix-MP							
										Weight: 8 lb	FT = 20%

**LUMBER**

TOP CHORD 2x4 SP No 2  
 BOT CHORD 2x4 SP No 2

**BRACING**

TOP CHORD Structural wood sheathing directly applied or 3-4-0 oc purlins  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing

**REACTIONS** (size) 1=3-3-8, 3=3-3-8

Max Horiz 1=-19 (LC 10)  
 Max Grav 1=127 (LC 1), 3=92 (LC 1)

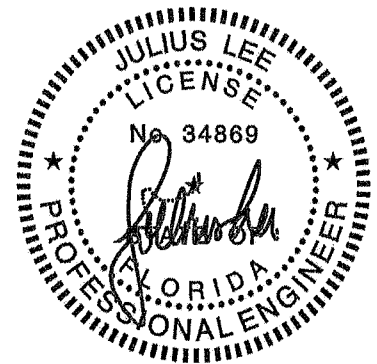
**FORCES** (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-193/81, 2-3=-165/67  
 BOT CHORD 1-3=-89/161

**NOTES**

- 1) Unbalanced roof live loads have been considered for this design
- 2) Wind ASCE 7-22, Vult=130mph (3-second gust)  
 Vasd=101mph, TCCL=6 0psf, BCCL=6 0psf; h=15ft;  
 B=45ft, L=24ft; eave=4ft, Cat. II, Exp B, Enclosed,  
 MWFRS (directional) and C-C Zone3 0-0-4 to 1-8-0,  
 Zone1 1-8-0 to 2-6-13 zone, cantilever left and right  
 exposed, end vertical left and right exposed, C-C  
 for members and forces & MWFRS for reactions shown,  
 Lumber DOL=1 60 plate grip DOL=1 60
- 3) Truss designed for wind loads in the plane of the truss  
 only For studs exposed to wind (normal to the face),  
 see Standard Industry Gable End Details as applicable,  
 or consult qualified building designer as per ANSI/TPI 1
- 4) Building Designer / Project engineer responsible for  
 verifying applied roof live load shown covers rain loading  
 requirements specific to the use of this truss component.
- 5) Gable requires continuous bottom chord bearing
- 6) Gable studs spaced at 4-0-0 oc.
- 7) This truss has been designed for a 10 0 psf bottom  
 chord live load nonconcurrent with any other live loads.

- 8) \* This truss has been designed for a live load of 20.0psf  
 on the bottom chord in all areas where a rectangle  
 3-06-00 tall by 2-00-00 wide will fit between the bottom  
 chord and any other members
  - 9) All bearings are assumed to be SP No.2
  - 10) Beveled plate or shim required to provide full bearing  
 surface with truss chord at joint(s) 1, 3
- 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:

March 20, 2025

**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®**

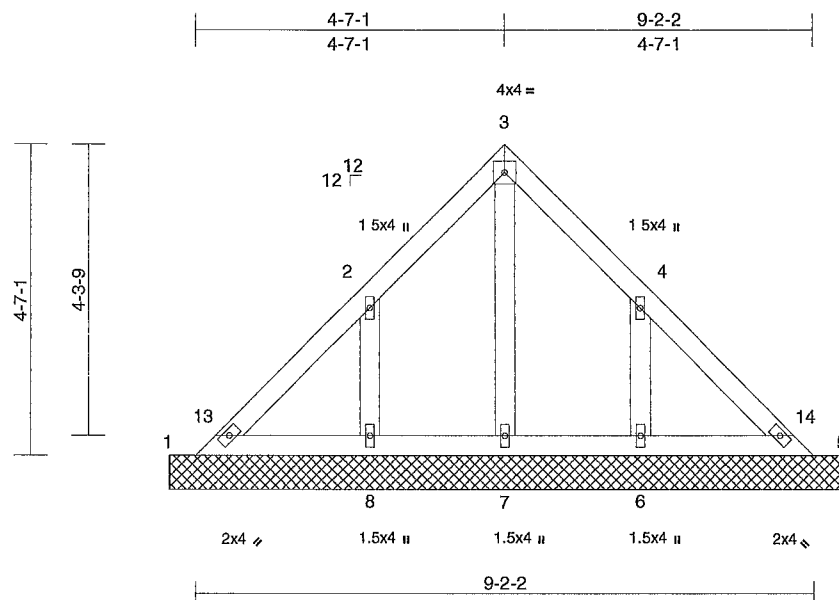
16023 Swingley Ridge Rd  
 Chesterfield, MO 63017  
 314.434 1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	DAVID SIMQUE	T36741669
0325-046	V08	Valley	1	1	Job Reference (optional)	

Mayo Truss Company, Inc. Mayo, FL 32066,

Run 8 73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu Mar 20 07:29:32  
ID:5Bb2v2XYLcgFfGJaexSUwVzZKV? RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDol7J4zJC?I

Page 1



Scale = 1:33.5

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/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 07	Vert(TL)	n/a	-	n/a	999		
BCLL	0 0*	Rep Stress Incr	YES	WB	0 06	Horiz(TL)	0 00	5	n/a	n/a		
BCDL	10 0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 44 lb	FT = 20%

**LUMBER**

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

**BRACING**

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

**REACTIONS**

(size) 1=9-11-8, 5=9-11-8, 6=9-11-8, 7=9-11-8, 8=9-11-8  
Max Horiz 1=92 (LC 11)  
Max Uplift 6=50 (LC 12), 8=50 (LC 12)  
Max Grav 1=74 (LC 18), 5=72 (LC 24), 6=248 (LC 18), 7=204 (LC 1), 8=249 (LC 17)

**FORCES**

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-90/154, 2-3=-8/104, 3-4=-8/101, 4-5=-88/135

BOT CHORD 1-8=-90/122, 7-8=-90/122, 6-7=-90/122, 5-6=-90/122

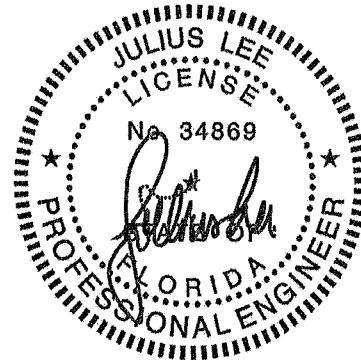
WEBS 3-7=-189/0, 2-8=-171/175, 4-6=-171/175

**NOTES**

- 1) Unbalanced roof live loads have been considered for this design
- 2) Wind ASCE 7-22, Vult=130mph (3-second gust) Vasd=101mph, TCDL=6 0psf, BCDL=6.0psf, h=15ft; B=45ft; L=24ft, eave=4ft; Cat. II, Exp B, Enclosed, MWFRS (directional) and C-C Zone3 0-0-4 to 3-0-0, Zone1 3-0-0 to 5-0-0, Zone2 5-0-0 to 9-2-15, Zone1 9-2-15 to 9-11-12 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) 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 covers rain loading requirements specific to the use of this truss component.
- 5) Gable requires continuous bottom chord bearing
- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10 0 psf bottom chord live load nonconcurrent with any other live loads
- 8) \* This truss has been designed for a live load of 20 psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members
- 9) All bearings are assumed to be SP No 2
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 50 lb uplift at joint 8 and 50 lb uplift at joint 6.
- 11) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 5

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:

March 20, 2025

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

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**MiTek®**

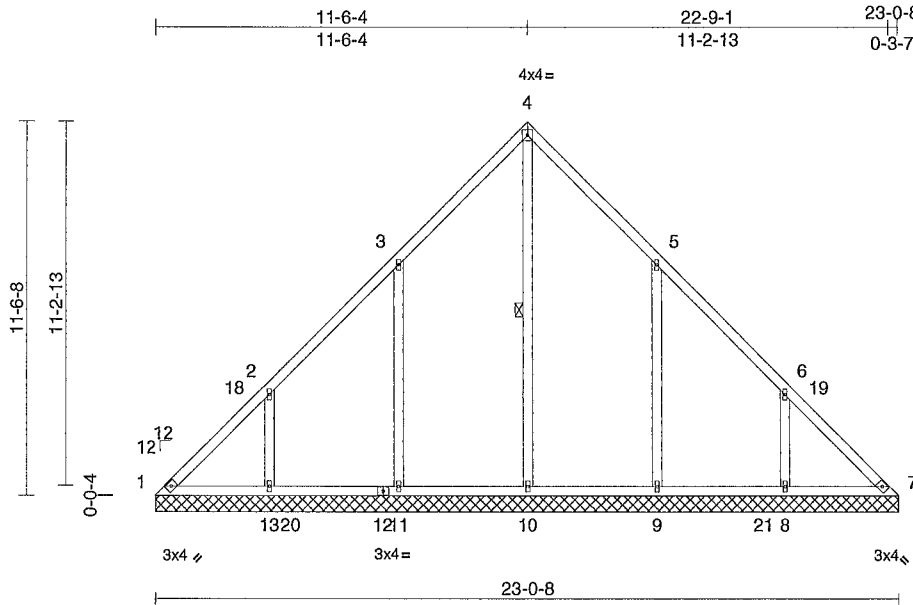
16023 Swingley Ridge Rd  
Chesterfield, MO 63017  
314.434.1200 / MiTek-US.com

Job 0325-046	Truss V09	Truss Type Valley	Qty 1	Ply 1	DAVID SIMQUE Job Reference (optional)	T36741670
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Mayo Truss Company, Inc. Mayo, FL 32066,

Run 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MiTek Industries, Inc. Thu Mar 20 07:29:32  
ID.aEs?VONKgj?iYollhUoafgzKbf-RfC?PsB70Hq3NSgPqnL8w3uITXbGKwRCDol7J4zC7f

Page 1



Scale = 1/70

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 20	Vert(LL)	n/a	-	n/a	999	MT20 244/190
TCDL	10 0	Lumber DOL	1 25	BC	0 16	Vert(TL)	n/a	-	n/a	999	
BCLL	0 0 *	Rep Stress Incr	YES	WB	0 27	Horiz(TL)	0 01	7	n/a	n/a	
BCDL	10 0	Code	FBC2023/TPI2014	Matrix-MS							Weight. 127 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 or 6-0-0 oc purlins

BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing

WEBS 1 Row at midpt 4-10

REACTIONS (size) 1=23-0-8, 7=23-0-8, 8=23-0-8, 9=23-0-8, 10=23-0-8, 11=23-0-8, 13=23-0-8

Max Horiz 1=-237 (LC 10)

Max Uplift 1=-64 (LC 10), 7=-10 (LC 11), 8=-79 (LC 12), 9=-105 (LC 12), 11=-105 (LC 12), 13=-79 (LC 12)

Max Grav 1=185 (LC 18), 7=145 (LC 17), 8=439 (LC 18), 9=498 (LC 18), 10=405 (LC 17), 11=497 (LC 17), 13=445 (LC 17)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-211/221, 2-3=-164/164, 3-4=-132/188, 4-5=-125/166, 5-6=-115/115, 6-7=-170/157

BOT CHORD 1-13=-110/165, 11-13=-110/151, 10-11=-110/151, 9-10=-110/151, 8-9=-110/151, 7-8=-110/151

WEBS 4-10=-204/22, 3-11=-299/191, 2-13=-262/146, 5-9=-299/191, 6-8=-260/146

**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 Opsf, BCDL=6 Opsf, h=15ft, B=45ft, L=24ft; eave=4ft; Cat II, Exp B, Enclosed, MWFRS (directional) and C-C Zone3 0-0-4 to 3-0-4, Zone1 3-0-4 to 11-6-8, Zone2 11-6-8 to 15-6-8, Zone1 15-6-8 to 23-0-12 zone, cantilever left and right exposed, end vertical left and right exposed, C-C for members and forces & MWFRS for reactions shown, Lumber DOL=1.60 plate grip DOL=1.60
- 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 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 Opsf 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 Opsf
- All bearings are assumed to be SP No.2
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 64 lb uplift at joint 1, 10 lb uplift at joint 7, 105 lb uplift at joint 11, 79 lb uplift at joint 13, 105 lb uplift at joint 9 and 79 lb uplift at joint 8

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:

March 20, 2025

**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®**

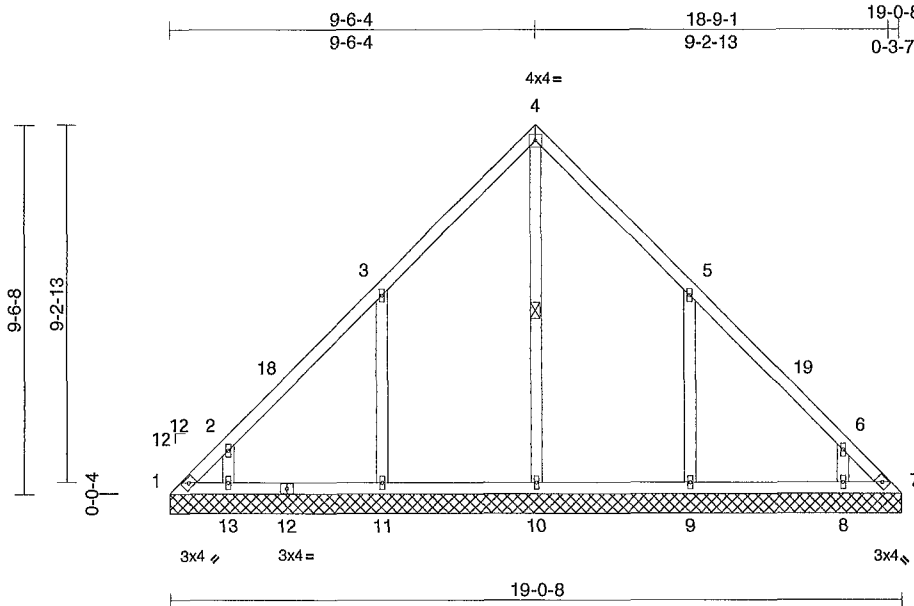
16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
314.434.1200 / MiTek-US.com

Job 0325-046	Truss V10	Truss Type Valley	Qty 1	Ply 1	DAVID SIMQUE Job Reference (optional)	T36741671
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Mayo Truss Company, Inc., Mayo, FL - 32066,

Run 8:73 S Feb 19 2025 Print: 8:730 S Feb 19 2025 MITek Industries, inc. Thu Mar 20 07:29:33  
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Page: 1



Scale = 1/8" = 1'-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	0.19	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10 0	Lumber DOL	1.25	BC	0.17	Vert(TL)	n/a	-	n/a	999		
BCLL	0 0*	Rep Stress Incr	YES	WB	0.14	Horiz(TL)	0 00	7	n/a	n/a		
BCDL	10 0	Code	FBC2023/TP12014	Matrix-MS							Weight: 98 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 or 6-0-0 oc purlins

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

WEBS 1 Row at midpt 4-10

**REACTIONS** (size) 1=19-0-8, 7=19-0-8, 8=19-0-8, 9=19-0-8, 10=19-0-8, 11=19-0-8, 13=19-0-8

Max Horiz 1=196 (LC 11)

Max Uplift 1=98 (LC 10), 7=50 (LC 11), 8=49 (LC 12), 9=108 (LC 12), 11=108 (LC 12), 13=49 (LC 12)

Max Grav 1=115 (LC 11), 7=80 (LC 12), 8=322 (LC 18), 9=480 (LC 18), 10=336 (LC 17), 11=480 (LC 17), 13=331 (LC 17)

**FORCES** (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=172/178, 2-3=200/130, 3-4=171/155, 4-5=151/154, 5-6=163/80, 6-7=168/125

BOT CHORD 1-13=91/124, 11-13=75/124, 10-11=75/124, 9-10=75/124, 8-9=75/124, 7-8=75/124

WEBS 4-10=133/30, 3-11=305/209, 2-13=234/184, 5-9=305/209, 6-8=231/184

**NOTES**

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

- Wind ASCE 7-22, Vult=130mph (3-second gust) Vasd=101mph, TC DL=6 0psf, BCDL=6 0psf, h=15ft, B=45ft, L=24ft; eave=4ft; Cat II, Exp B, Enclosed, MWFRS (directional) and C-C Zone3 0-0-4 to 3-0-4, Zone1 3-0-4 to 9-6-8, Zone2 9-6-8 to 13-6-8, Zone1 13-6-8 to 19-0-12 zone, cantilever left and right exposed, end vertical left and right exposed, C-C for members and forces & MWFRS for reactions shown, Lumber DOL=1 60 plate grip DOL=1 60
- 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 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 98 lb uplift at joint 1, 50 lb uplift at joint 7, 108 lb uplift at joint 11, 49 lb uplift at joint 13, 108 lb uplift at joint 9 and 49 lb uplift at joint 8

**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:

March 20, 2025

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

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**MiTek®**

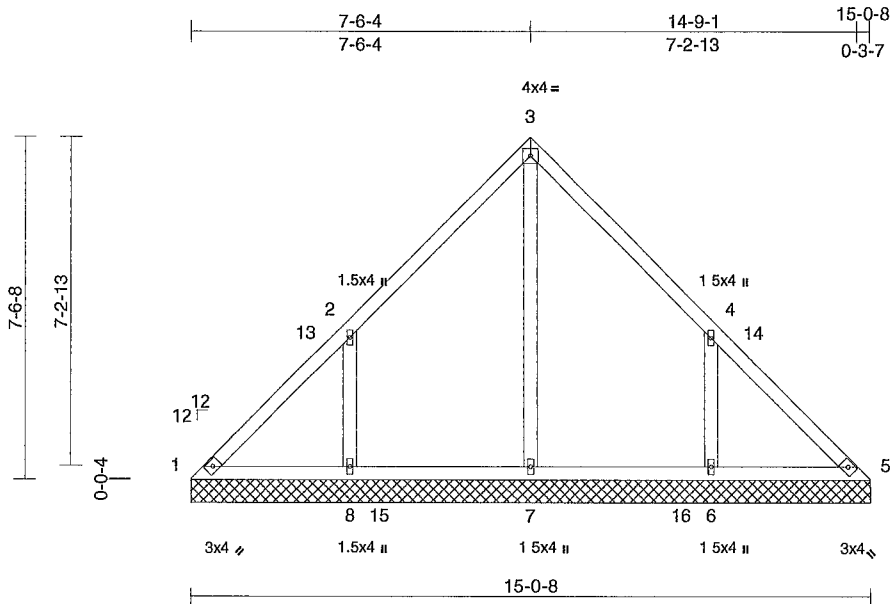
16023 Swingley Ridge Rd.  
Chesterfield, MO 63017  
314.434.1200 / MITek-US.com

Job 0325-046	Truss V11	Truss Type Valley	Qty 1	Ply 1	DAVID SIMQUE Job Reference (optional)	T36741672
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Mayo Truss Company Inc , Mayo, FL 32066,

Run 8 73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MITek Industries, Inc. Thu Mar 20 07:29:33  
ID:aEs?VONKgj?YollhUoafgzZKbf-RfC?PsB70Hq3NSgPqnlL8w3uITXbGKwCDoi7J4zJC?1

Page 1



Scale = 1.50

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 19	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10 0	Lumber DOL	1.25	BC	0 17	Vert(TL)	n/a	-	n/a	999		
BCLL	0 0 *	Rep Stress Incr	YES	WB	0 20	Horiz(TL)	0.00	5	n/a	n/a		
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  
OTHERS 2x4 SP No 2

**BRACING**

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

**REACTIONS** (size) 1=15-0-8, 5=15-0-8, 6=15-0-8, 7=15-0-8, 8=15-0-8  
Max Horiz 1=154 (LC 11)  
Max Uplift 1=-21 (LC 10), 6=-96 (LC 12), 8=-96 (LC 12)  
Max Grav 1=142 (LC 18), 5=114 (LC 17), 6=467 (LC 18), 7=420 (LC 17), 8=471 (LC 17)

**FORCES** (lb) - Maximum Compression/Maximum Tension

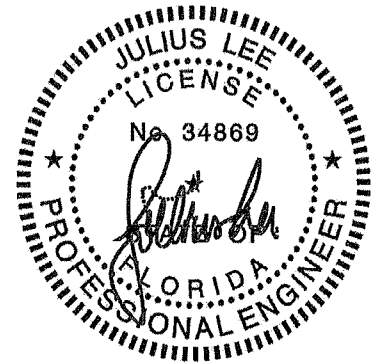
TOP CHORD 1-2=-157/172, 2-3=-105/123, 3-4=-88/123, 4-5=-128/137  
BOT CHORD 1-8=-81/126, 7-8=-81/117, 6-7=-81/117, 5-6=-81/117  
WEBS 3-7=-225/0, 2-8=-293/222, 4-6=-292/222

**NOTES**

- Unbalanced roof live loads have been considered for this design
- Wind ASCE 7-22, Vult=130mph (3-second gust) Vasd=101mph, TCCL=6 0psf; BCDL=6 0psf, h=15ft; B=45ft, L=24ft, eave=4ft, Cat. II, Exp B, Enclosed, MWFRS (directional) and C-C Zone3 0-0-4 to 3-0-4, Zone1 3-0-4 to 7-6-8, Zone2 7-6-8 to 11-6-8, Zone1 11-6-8 to 15-0-12 zone, cantilever left and right exposed, end vertical left and right exposed, C-C for members and forces & MWFRS for reactions shown, Lumber DOL=1 60 plate grip DOL=1 60
- 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 21 lb uplift at joint 1, 96 lb uplift at joint 8 and 96 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:

March 20, 2025

**WARNING** Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MI-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/TPI 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)

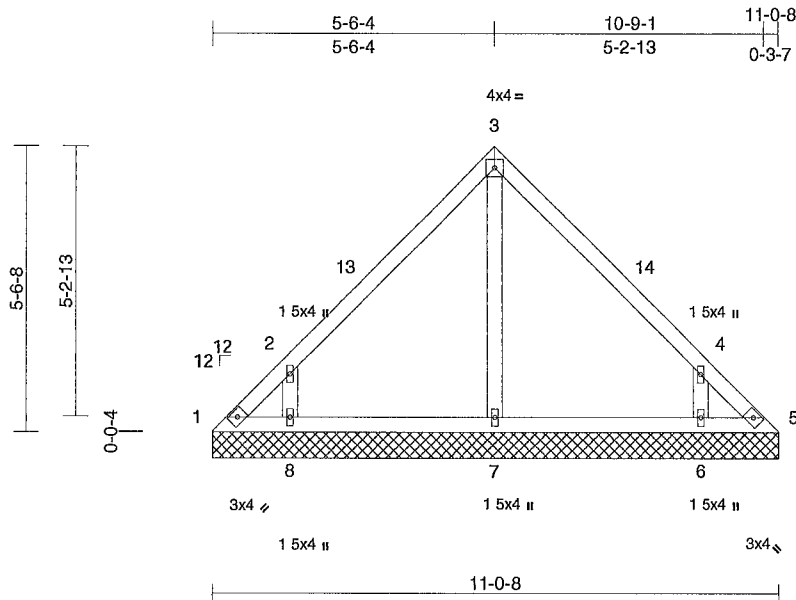
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Chesterfield, MO 63017  
314.434 1200 / MiTek-US.com

Job 0325-046	Truss V12	Truss Type Valley	Qty 1	Ply 1	DAVID SIMQUE Job Reference (optional)	T36741673
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Mayo Truss Company Inc., Mayo, FL 32066,

Run 8.73 S Feb 19 2025 Print: 8.730 S Feb 19 2025 MITek Industries, Inc. Thu Mar 20 07:29:33  
ID:aEs?VONKgj?YolthUoafgzZKbf-RIC?PsB70Hq3NSgPqnL8w3ulTXbGKwrcDoi7J4zJC?I

Page 1



Scale = 1.44.1

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)	n/a	-	n/a	999	MT20	244/190
TCDL	10 0	Lumber DOL	1 25	BC	0.12	Vert(TL)	n/a	-	n/a	999		
BCLL	0 0*	Rep Stress Incr	YES	WB	0.06	Horiz(TL)	0 00	5	n/a	n/a		
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  
OTHERS 2x4 SP No 2

**BRACING**

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

**REACTIONS**

(size) 1=11-0-8, 5=11-0-8, 6=11-0-8,  
7=11-0-8, 8=11-0-8  
Max Horiz 1=-112 (LC 10)  
Max Uplift 1=-55 (LC 10), 5=-27 (LC 11),  
6=-72 (LC 12), 8=-72 (LC 12)  
Max Grav 1=84 (LC 18), 5=63 (LC 17), 6=317  
(LC 18), 7=224 (LC 1), 8=323 (LC 17)

**FORCES**

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-131/113, 2-3=-163/124, 3-4=-155/126,  
4-5=-133/81

BOT CHORD 1-8=-39/87, 7-8=-31/78, 6-7=-31/78,  
5-6=-42/80

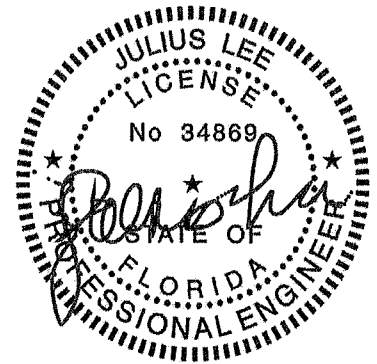
WEBS 3-7=-138/0, 2-8=-282/287, 4-6=-279/287

**NOTES**

- Unbalanced roof live loads have been considered for this design
- Wind ASCE 7-22, Vult=130mph (3-second gust)  
Vascd=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 0-0-4 to 3-0-4,  
Zone1 3-0-4 to 5-6-8, Zone2 5-6-8 to 9-6-8, Zone1 9-6-8  
to 11-0-12 zone, cantilever left and right exposed, end  
vertical left and right exposed, C-C for members and  
forces & MWFRS for reactions shown, Lumber  
DOL=1 60 plate grip DOL=1 60
- 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 55 lb uplift at joint 1, 27 lb uplift at joint 5, 72 lb uplift at joint 8 and 72 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



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16023 Swingley Ridge Rd. Chesterfield, MO 63017  
Date:

March 20, 2025

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

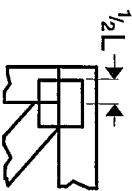
Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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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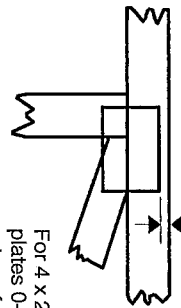
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Chesterfield, MO 63017  
314.434.1200 / MITek-US.com

# Symbols

## PLATE LOCATION AND ORIENTATION



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



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



This symbol indicates the required direction of slots in connector plates

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

## PLATE SIZE

4 X 4

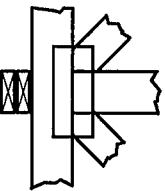
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## LATERAL BRACING LOCATION



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

## BEARING

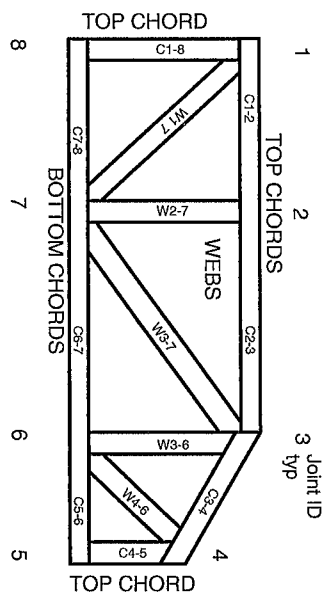


Indicates location where bearings (supports) occur Icons vary but reaction section indicates joint number/letter where bearings occur Min size shown is for crushing only

## Industry Standards:

- ANSI/TP1 National Design Specification for Metal Plate Connected Wood Truss Construction
- DSB-22 Design Standard for Bracing
- BCSI Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses

# Numbering System



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

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

## Product Code Approvals

ICC-ES Reports:

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

## Design General Notes

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

Lumber design values are in accordance with ANSI/TP1 section 6.3 These truss designs rely on lumber values established by others.

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# General Safety Notes

## Failure to Follow Could Cause Property Damage or Personal Injury

- Additional stability bracing for truss system, e.g diagonal or X-bracing, is always required. See BCSI
- 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
- Never exceed the design loading shown and never stack materials on inadequately braced trusses.
- Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties
- Cut members to bear tightly against each other
- Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TP1
- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication
- Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber
- Gamber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection
- Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
- Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
- Top chords must be sheathed or purlins provided at spacing indicated on design
- Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted
- Connections not shown are the responsibility of others
- Do not cut or alter truss member or plate without prior approval of an engineer
- Install and load vertically unless indicated otherwise
- Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use
- Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
- Design assumes manufacture in accordance with ANSI/TP1 Quality Criteria.
- The design does not take into account any dynamic or other loads other than those expressly stated.

