MiTek®

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

RE: 1024-049 -

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

Site Information:
Customer Info: Wentworth Construction Project Name: . Model: .
Lot/Block: . Subdivision: .
Address: ., .
City: Lake City State: FL

Name Address and License # of Structural Engineer of Record, If there is one, for the building.
Name: License #:
Address:
City: State:

General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):
Design Code: FBC2023/TPI2014 Design Program: MiTek 20/20 8.7
Wind Code: ASCE 7-22 Wind Speed: 130 mph
Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 29 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	T35433066	A01	11/1/24	23	T35433088	D03	11/1/24
2	T35433067	A02	11/1/24	24	T35433089	E01	11/1/24
3	T35433068	A03	11/1/24	25	T35433090	E02	11/1/24
4	T35433069	A04	11/1/24	26	T35433091	J01	11/1/24
5	T35433070	A05	11/1/24	27	T35433092	J02	11/1/24
6	T35433071	A06	11/1/24	28	T35433093	J03	11/1/24
7	T35433072	A07	11/1/24	29	T35433094	J04	11/1/24
8	T35433073	A08	11/1/24				
9	T35433074	A09	11/1/24				
10	T35433075	A10	11/1/24				
11	T35433076	A11	11/1/24				
12	T35433077	A12	11/1/24				
13	T35433078	A13	11/1/24				
14	T35433079	B01	11/1/24				
15	T35433080	B02	11/1/24				
16	T35433081	B03	11/1/24				
17	T35433082	C01	11/1/24				
18	T35433083	C02	11/1/24				
19	T35433084	C03	11/1/24				
20	T35433085	CJ01	11/1/24				
21	T35433086	D01	11/1/24				
22	T35433087	D02	11/1/24				

REVIEWED FOR CODE COMPLIANCE
These plans have been reviewed for compliance with the current building codes. Performance of this review shall not alleviate the applicant from full responsibility to comply with all applicable requirements.
Scope of Review Performed by: Timothy Hunt
02/02/2025
PX3903 • PEP690
CT SOLUTIONS OF FLORIDA, LLC
Inspections When You Need Them
Any deviation from this plan is not permitted without prior written authorization.

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: Velez, Joaquin
My license renewal date for the state of Florida is February 28, 2025.

JOAQUIN VELEZ LICENSE NO. 68182 STATE OF FLORIDA PROFESSIONAL ENGINEER

Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

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.

November 1,2024

Job	Truss	Truss Type	Qty	Ply	
1024-049	A01	Half Hip Girder	1	**2**	T35433066 Job Reference (optional)

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

Run: 8.73 S Sep 25 2024 Print: 8.730 S Sep 25 2024 MiTek Industries, Inc. Thu Oct 31 14:32:22 Page: 1
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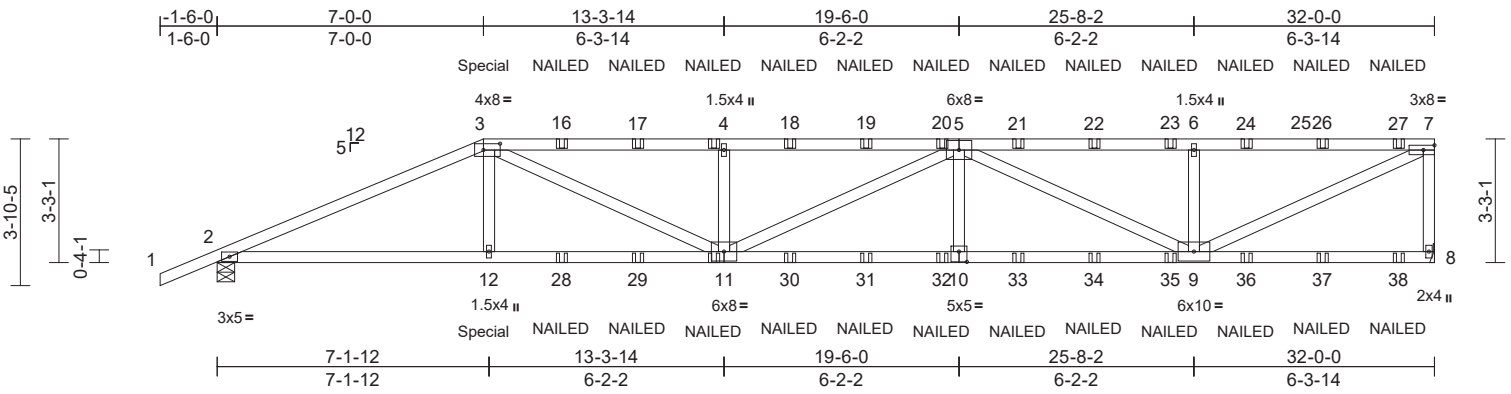

Scale = 1:60.6

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.91	Vert(LL)	-0.27	10-11	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	1.00	Vert(CT)	-0.57	10-11	>676	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.60	Horz(CT)	0.13	8	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 314 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.1 *Except* 1-3:2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except* 11-10:2x4 SP No.1
WEBS 2x4 SP No.2

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

REACTIONS (size) 2=0-5-8, 8= Mechanical
Max Horiz 2=97 (LC 7)
Max Grav 2=2627 (LC 1), 8=2824 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-5915/0, 3-4=-7590/0, 4-6=-7590/0, 6-7=-4907/0, 7-8=-2664/41
BOT CHORD 2-12=0/5390, 9-12=0/7332, 8-9=-17/99
WEBS 3-12=0/702, 3-11=-45/2484, 4-11=-832/168, 5-11=0/286, 5-10=0/493, 5-9=-2690/0, 6-9=-815/172, 7-9=0/5338

NOTES
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=32ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) Bearings are assumed to be: Joint 2 SP No.2 .
10) Refer to girder(s) for truss to truss connections.
11) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 223 lb down and 73 lb up at 7-0-0 on top chord, and 374 lb down at 7-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (lb/ft)
Vert: 1-3=-60, 3-7=-60, 8-13=-20
Concentrated Loads (lb)
Vert: 3=-176 (B), 12=-374 (B), 11=-63 (B), 4=-125 (B), 16=-125 (B), 17=-125 (B), 18=-125 (B), 19=-125 (B), 20=-125 (B), 21=-125 (B), 22=-125 (B), 23=-125 (B), 24=-125 (B), 26=-125 (B), 27=-131 (B), 28=-63 (B), 29=-63 (B), 30=-63 (B), 31=-63 (B), 32=-63 (B), 33=-63 (B), 34=-63 (B), 35=-63 (B), 36=-63 (B), 37=-63 (B), 38=-65 (B)

REVIEWED FOR CODE COMPLIANCE
These plans have been reviewed for compliance with the current building codes. Performance of this review shall not alleviate the applicant from full responsibility to comply with all applicable requirements.
Scope of Review Performed by: Timothy Hunt
02/02/2025
PX3903 • PEP690
CT SOLUTIONS OF FLORIDA, LLC
Inspections When You Need Them
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JOAQUIN VELEZ LICENSE No 68182 STATE OF FLORIDA PROFESSIONAL ENGINEER

Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

November 1,2024

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

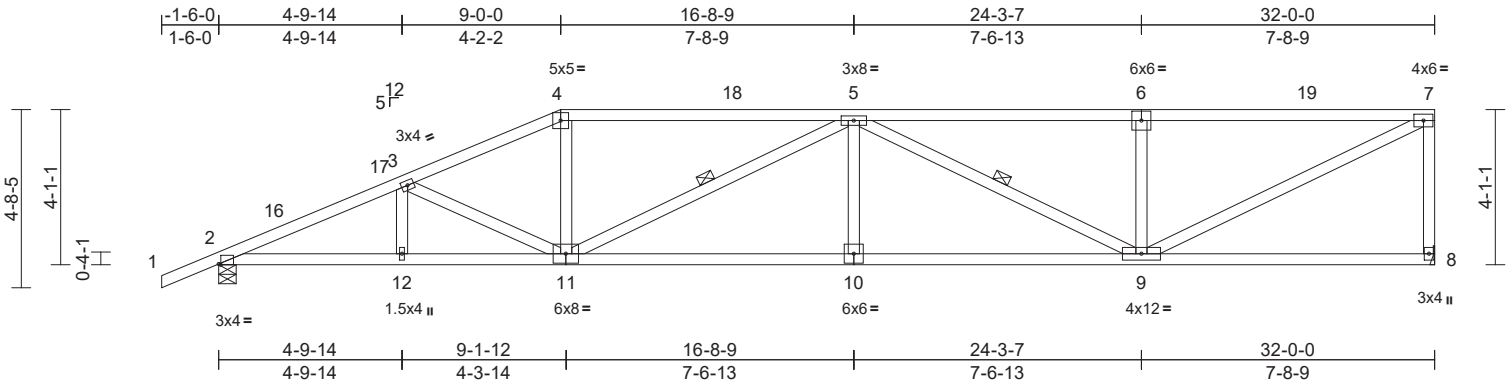
MiTek®
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	
1024-049	A02	Half Hip	1	1	T35433067
					Job Reference (optional)

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

Run: 8.73 S Sep 25 2024 Print: 8.730 S Sep 25 2024 MiTek Industries, Inc. Thu Oct 31 14:32:23 ID:Y7NFJMdFNi47TMfETHOvzUyRBAp-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:60.6

Plate Offsets (X, Y): [2:0-0-10,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	0.63	Vert(LL)	-0.19	10	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.78	Vert(CT)	-0.42	10-11	>920	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.50	Horz(CT)	0.10	8	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 165 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 5-11, 5-9

REACTIONS (size) 2=0-5-8, 8= Mechanical
Max Horiz 2=122 (LC 11)
Max Uplift 2=-35 (LC 12)
Max Grav 2=1366 (LC 1), 8=1272 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-2797/70, 3-4=-2432/94, 4-5=-2228/99, 5-7=-2034/91, 7-8=-1198/82
BOT CHORD 2-12=-200/2537, 9-12=-200/2759, 8-9=-40/82
WEBS 3-11=-365/50, 4-11=0/574, 5-11=-711/16, 5-10=0/306, 5-9=-811/40, 6-9=-474/110, 7-9=-63/2211, 3-12=0/139

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=32ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -1-6-0 to 1-8-6, Zone1 1-8-6 to 9-0-0, Zone2 9-0-0 to 13-6-5, Zone1 13-6-5 to 31-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) Bearings are assumed to be: Joint 2 SP No.2 .
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 35 lb uplift at joint 2.
10) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

REVIEWED FOR CODE COMPLIANCE

These plans have been reviewed for compliance with the current building codes. Performance of this review shall not alleviate the applicant from full responsibility to comply with all applicable requirements.

Scope of Review Performed by: Timothy Hunt

02/02/2025

PX3903 • PEP690

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JOAQUIN VELEZ LICENSE No 68182 STATE OF FLORIDA PROFESSIONAL ENGINEER

Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

November 1,2024

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

Job	Truss	Truss Type	Qty	Ply	
1024-049	A03	Hip	1	1	T35433068
					Job Reference (optional)

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

Run: 8.73 S Sep 25 2024 Print: 8.730 S Sep 25 2024 MiTek Industries, Inc. Thu Oct 31 14:32:23 Page: 1
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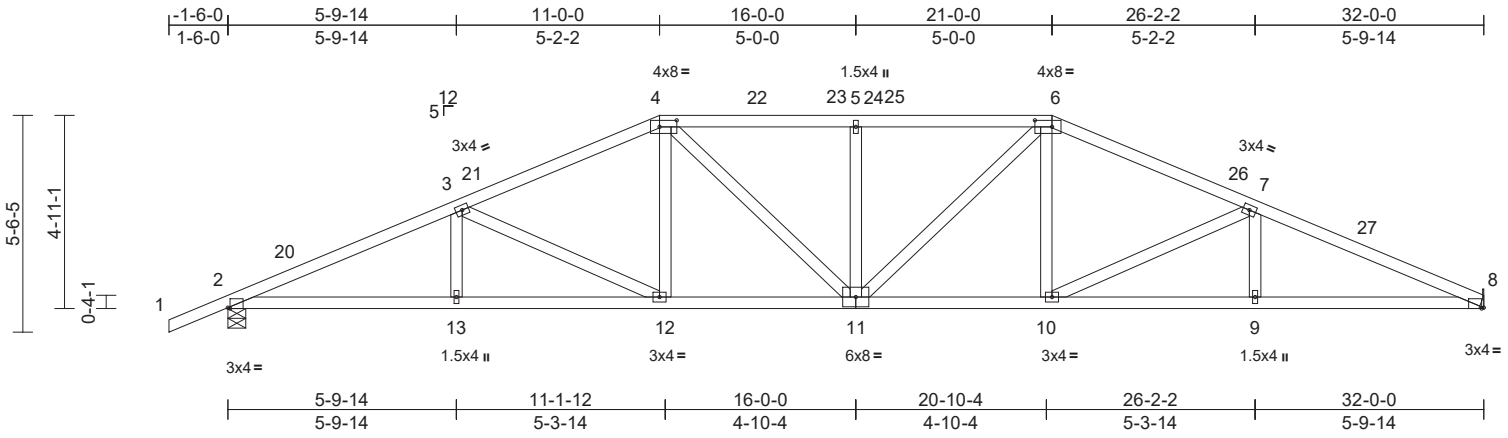

Scale = 1:58.7

Plate Offsets (X, Y): [2:0-0-10,Edge], [4:0-5-4,0-2-0], [6:0-5-4,0-2-0], [8:0-0-10,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	0.38	Vert(LL)	-0.16	11	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.68	Vert(CT)	-0.33	10-11	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.35	Horz(CT)	0.12	8	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 162 lb	FT = 20%

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

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

REACTIONS (size) 2=0-5-8, 8= Mechanical
Max Horiz 2=79 (LC 11)
Max Uplift 2=-36 (LC 12)
Max Grav 2=1372 (LC 1), 8=1278 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-2785/112, 3-4=-2238/124, 4-5=-2238/141, 5-6=-2238/141, 6-7=-2243/125, 7-8=-2796/112
BOT CHORD 2-13=-63/2521, 12-13=-63/2521, 10-12=-12/2021, 9-10=-61/2546, 8-9=-61/2546
WEBS 3-13=0/222, 3-12=-571/54, 4-12=0/389, 6-11=-17/417, 6-10=0/391, 7-10=-594/59, 7-9=0/225, 5-11=-324/76, 4-11=-19/421

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=32ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -1-6-0 to 1-8-6, Zone1 1-8-6 to 11-0-0, Zone2 11-0-0 to 15-6-5, Zone1 15-6-5 to 21-0-0, Zone2 21-0-0 to 25-6-5, Zone1 25-6-5 to 32-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) Bearings are assumed to be: Joint 2 SP No.2 .
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 36 lb uplift at joint 2.
10) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

REVIEWED FOR CODE COMPLIANCE
These plans have been reviewed for compliance with the current building codes. Performance of this review shall not alleviate the applicant from full responsibility to comply with all applicable requirements.
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02/02/2025
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Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:
November 1,2024

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

Job	Truss	Truss Type	Qty	Ply	
1024-049	A04	Hip	1	1	T35433069
					Job Reference (optional)

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

Run: 8.73 S Sep 25 2024 Print: 8.730 S Sep 25 2024 MiTek Industries, Inc. Thu Oct 31 14:32:23 Page: 1
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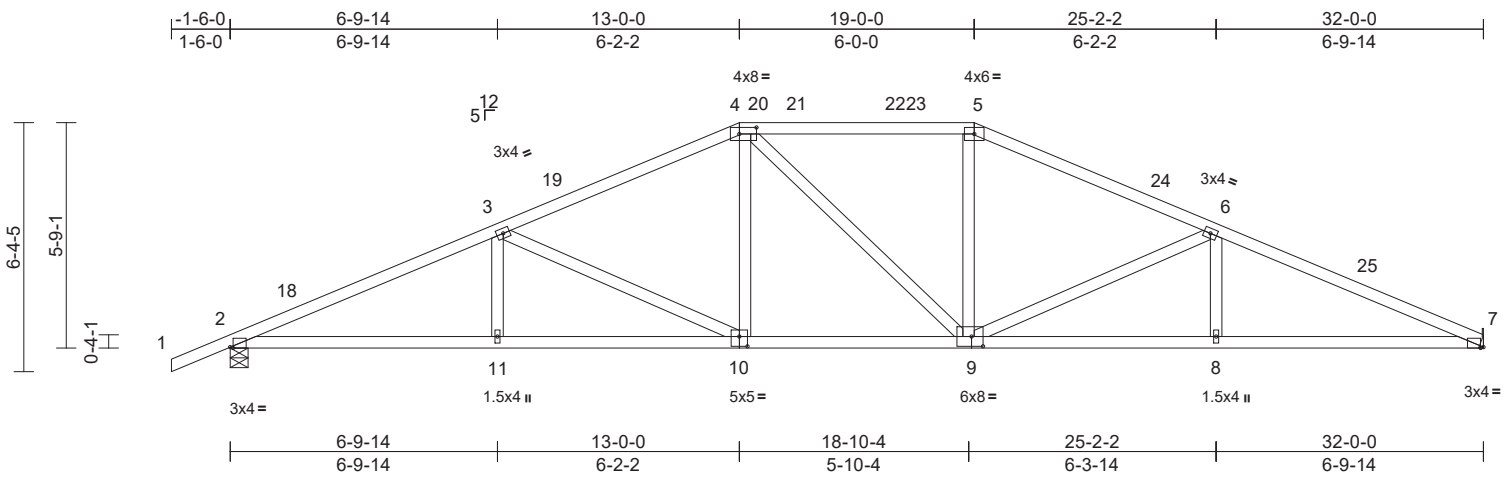

Scale = 1:58.8

Plate Offsets (X, Y): [2:0-0-14,Edge], [4:0-5-4,0-2-0], [7:0-0-14,Edge], [9:0-3-8,0-3-0], [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	0.47	Vert(LL)	-0.15	9-10	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.74	Vert(CT)	-0.32	9-10	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.60	Horz(CT)	0.12	7	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 155 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.
BOT CHORD Rigid ceiling directly applied.

REACTIONS (size) 2=0-5-8, 7= Mechanical
Max Horiz 2=92 (LC 11)
Max Uplift 2=-36 (LC 12)
Max Grav 2=1372 (LC 1), 7=1278 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-2733/115, 3-4=-2066/132, 4-5=-1839/141, 5-6=-2065/130, 6-7=-2737/114
BOT CHORD 2-11=-59/2466, 8-11=-59/2486, 7-8=-56/2486
WEBS 3-11=0/267, 3-10=-697/60, 4-10=0/460, 4-9=-162/169, 5-9=0/461, 6-9=-720/64, 6-8=0/271

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=32ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -1-6-0 to 1-8-6, Zone1 1-8-6 to 13-0-0, Zone2 13-0-0 to 17-6-5, Zone1 17-6-5 to 19-0-0, Zone2 19-0-0 to 23-6-5, Zone1 23-6-5 to 32-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) Bearings are assumed to be: Joint 2 SP No.2 .
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 36 lb uplift at joint 2.
10) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

REVIEWED FOR CODE COMPLIANCE
These plans have been reviewed for compliance with the current building codes. Performance of this review shall not alleviate the applicant from full responsibility to comply with all applicable requirements.
Scope of Review Performed by: Timothy Hunt
02/02/2025
PX3903 • PEP690
CT SOLUTIONS OF FLORIDA, LLC
Inspections When You Need Them
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JOAQUIN VELEZ LICENSE No 68182 STATE OF FLORIDA PROFESSIONAL ENGINEER

Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:
November 1,2024

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

Job	Truss	Truss Type	Qty	Ply	
1024-049	A05	Hip	1	1	T35433070
					Job Reference (optional)

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

Run: 8.73 S Sep 25 2024 Print: 8.730 S Sep 25 2024 MiTek Industries, Inc. Thu Oct 31 14:32:24 Page: 1
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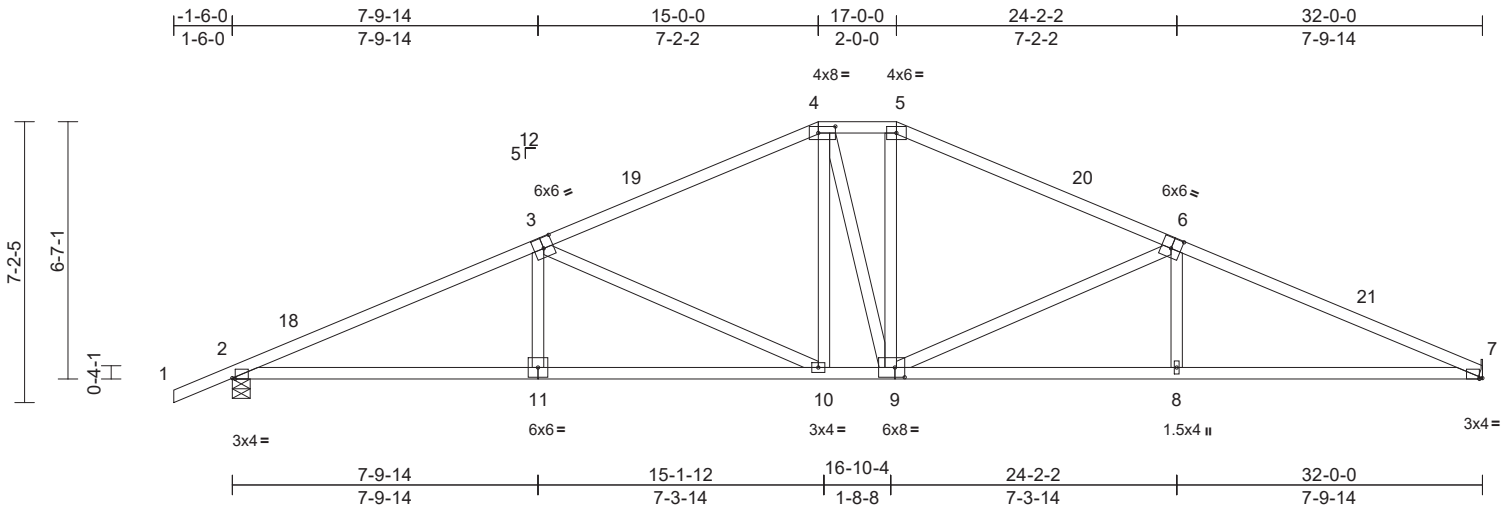

Scale = 1:59

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

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	0.60	Vert(LL)	-0.15	10	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.82	Vert(CT)	-0.33	10-11	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.96	Horz(CT)	0.12	7	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 161 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.
BOT CHORD Rigid ceiling directly applied.

REACTIONS (size) 2=0-5-8, 7= Mechanical
Max Horiz 2=105 (LC 11)
Max Uplift 2=-36 (LC 12)
Max Grav 2=1372 (LC 1), 7=1278 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-4=-2660/121, 4-5=-1641/133, 5-7=-2674/123
BOT CHORD 2-10=-38/2406, 8-10=-35/2416, 7-8=-32/2421
WEBS 3-11=0/326, 3-10=-853/69, 4-10=0/437, 4-9=-179/184, 5-9=0/442, 6-9=-862/73, 6-8=0/325

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=32ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -1-6-0 to 1-8-6, Zone1 1-8-6 to 15-0-0, Zone3 15-0-0 to 17-0-0, Zone2 17-0-0 to 21-6-5, Zone1 21-6-5 to 32-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) Bearings are assumed to be: Joint 2 SP No.2 .
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 36 lb uplift at joint 2.
10) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

REVIEWED FOR CODE COMPLIANCE
These plans have been reviewed for compliance with the current building codes. Performance of this review shall not alleviate the applicant from full responsibility to comply with all applicable requirements.
Scope of Review Performed by: Timothy Hunt
02/02/2025
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JOAQUIN VELEZ LICENSE No 68182 STATE OF FLORIDA PROFESSIONAL ENGINEER

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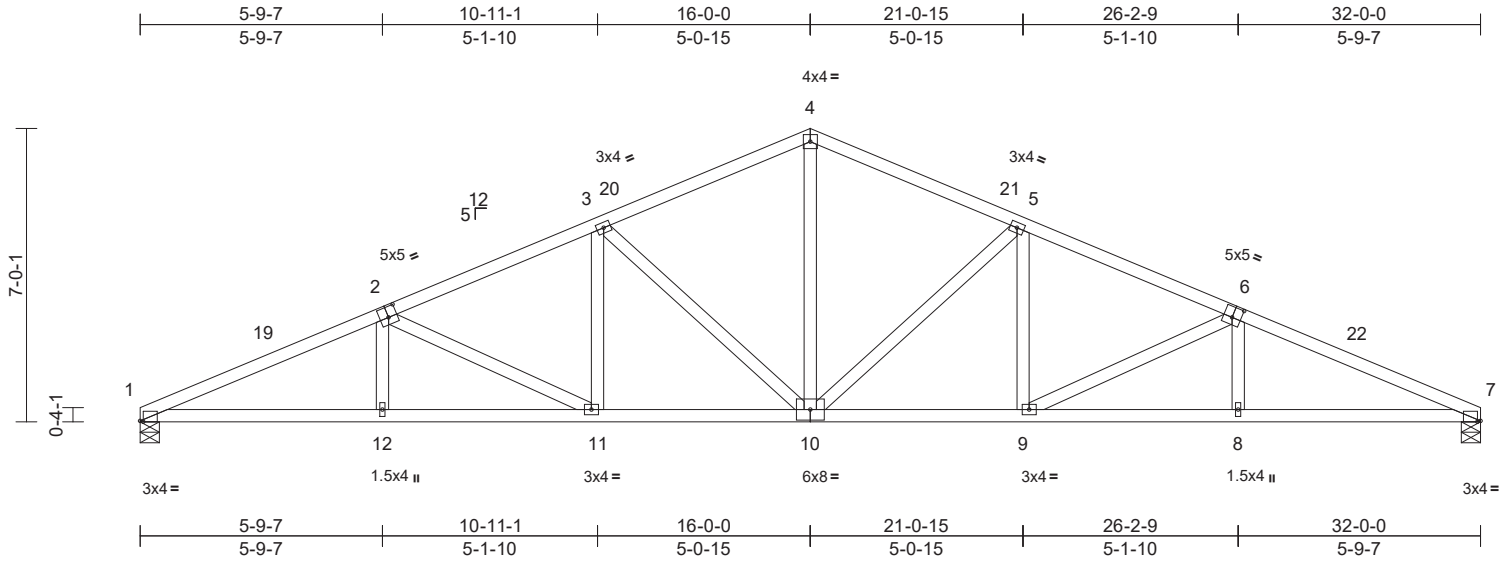
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:
November 1,2024

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

Job	Truss	Truss Type	Qty	Ply	
1024-049	A06	Common	4	1	T35433071 Job Reference (optional)

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

Run: 8.73 S Sep 25 2024 Print: 8.730 S Sep 25 2024 MiTek Industries, Inc. Thu Oct 31 14:32:24 Page: 1
ID:FKVSzbyB0?UICVDQYRNEZByRBAO-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:55

Plate Offsets (X, Y): [1:0-0-14,Edge], [2:0-2-8,0-3-0], [6:0-2-8,0-3-0], [7:0-0-14,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	0.41	Vert(LL)	-0.15	10-11	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.68	Vert(CT)	-0.32	10-11	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.54	Horz(CT)	0.12	7	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 163 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.
BOT CHORD Rigid ceiling directly applied.

REACTIONS (size) 1=0-5-8, 7=0-5-8
Max Horiz 1=-104 (LC 10)
Max Grav 1=1280 (LC 1), 7=1280 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-3=-2797/143, 3-4=-1740/158, 4-5=-1740/158, 5-7=-2797/143
BOT CHORD 1-12=-73/2545, 11-12=-75/2540, 9-11=-30/2042, 8-9=-74/2540, 7-8=-72/2545
WEBS 4-10=-20/995, 3-10=-673/71, 2-12=0/222, 2-11=-561/69, 3-11=0/384, 5-10=-673/71, 5-9=0/384, 6-9=-561/69, 6-8=0/222

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=32ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 0-0-0 to 3-2-6, Zone1 3-2-6 to 16-0-0, Zone2 16-0-0 to 20-6-5, Zone1 20-6-5 to 32-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
6) All bearings are assumed to be SP No.2 .
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

REVIEWED FOR CODE COMPLIANCE
These plans have been reviewed for compliance with the current building codes. Performance of this review shall not alleviate the applicant from full responsibility to comply with all applicable requirements.
Scope of Review Performed by: Timothy Hunt
02/02/2025
PX3903 • PEP690
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JOAQUIN VELEZ LICENSE No 68182 STATE OF FLORIDA PROFESSIONAL ENGINEER

Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:
November 1,2024

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

Job	Truss	Truss Type	Qty	Ply	
1024-049	A07	Common	3	1	T35433072 Job Reference (optional)

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

Run: 8.73 S Sep 25 2024 Print: 8.730 S Sep 25 2024 MiTek Industries, Inc. Thu Oct 31 14:32:24 Page: 1
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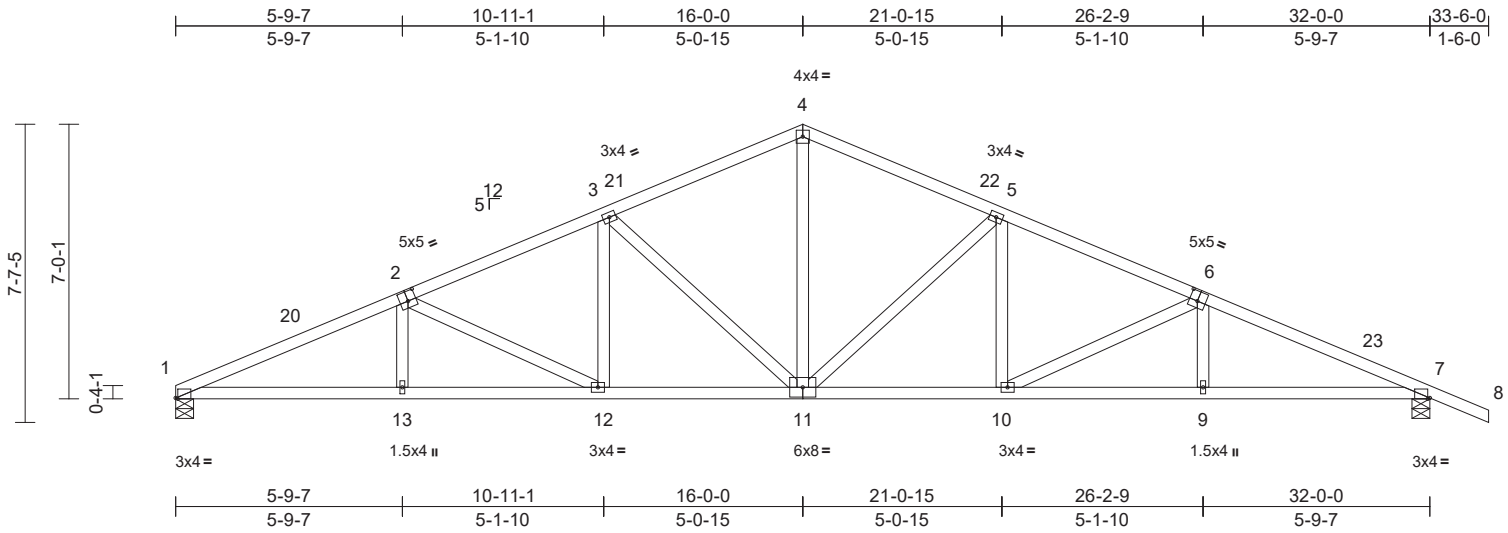

Scale = 1:58.8

Plate Offsets (X, Y): [1:0-0-10,Edge], [2:0-2-8,0-3-0], [6:0-2-8,0-3-0], [7:0-0-10,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	0.41	Vert(LL)	-0.15	11-12	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.68	Vert(CT)	-0.32	11-12	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.54	Horz(CT)	0.12	7	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 166 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.
BOT CHORD Rigid ceiling directly applied.

REACTIONS (size) 1=0-5-8, 7=0-5-8
Max Horiz 1=-112 (LC 10)
Max Uplift 7=-36 (LC 12)
Max Grav 1=1278 (LC 1), 7=1372 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-3=-2792/142, 3-4=-1734/157, 4-5=-1734/148, 5-7=-2780/135, 7-8=0/35
BOT CHORD 1-13=-60/2540, 12-13=-62/2535, 10-12=-16/2037, 9-10=-42/2511, 7-9=-40/2515
WEBS 4-11=-19/991, 3-11=-673/71, 2-13=0/222, 2-12=-561/69, 3-12=0/384, 5-11=-668/70, 5-10=0/381, 6-10=-538/30, 6-9=0/219

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=32ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 0-0-0 to 3-2-6, Zone1 3-2-6 to 16-0-0, Zone2 16-0-0 to 20-6-5, Zone1 20-6-5 to 33-6-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
6) All bearings are assumed to be SP No.2 .
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 36 lb uplift at joint 7.
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

REVIEWED FOR CODE COMPLIANCE
These plans have been reviewed for compliance with the current building codes. Performance of this review shall not alleviate the applicant from full responsibility to comply with all applicable requirements.
Scope of Review Performed by: Timothy Hunt
02/02/2025
PX3903 • PEP690
CT SOLUTIONS OF FLORIDA, LLC Inspections When You Need Them
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JOAQUIN VELEZ LICENSE No 68182 STATE OF FLORIDA PROFESSIONAL ENGINEER

Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:
November 1,2024

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

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

Job	Truss	Truss Type	Qty	Ply	
1024-049	A08	Common	3	1	T35433073 Job Reference (optional)

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

Run: 8.73 S Sep 25 2024 Print: 8.730 S Sep 25 2024 MiTek Industries, Inc. Thu Oct 31 14:32:24 Page: 1
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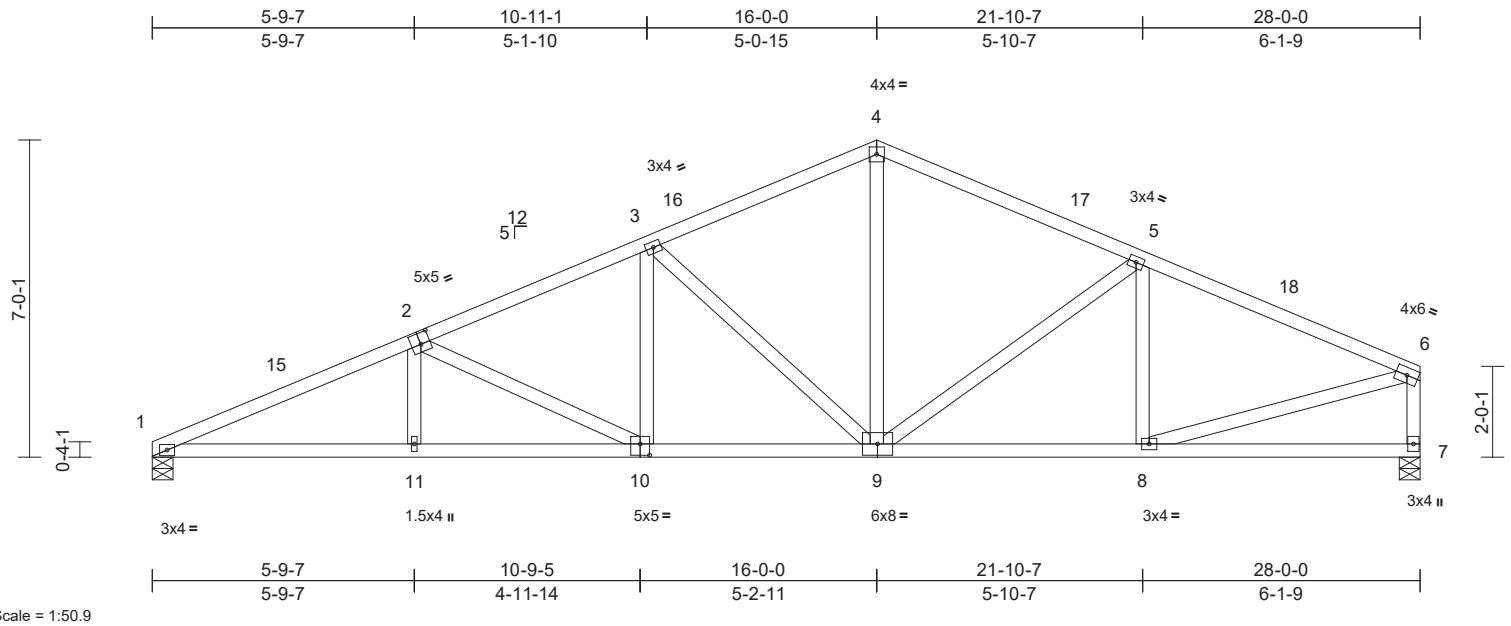

Scale = 1:50.9

Plate Offsets (X, Y): [2:0-2-8,0-3-0], [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	0.38	Vert(LL)	-0.09	10	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.61	Vert(CT)	-0.19	10-11	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.54	Horz(CT)	0.06	7	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 151 lb	FT = 20%

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

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

REACTIONS (size) 1=0-5-8, 7=0-5-8
Max Horiz 1=126 (LC 11)
Max Grav 1=1114 (LC 1), 7=1114 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-3=-2377/125, 3-4=-1311/142, 4-5=-1327/138, 5-6=-1459/100, 6-7=-1053/111
BOT CHORD 1-11=-118/2158, 8-11=-120/2153, 7-8=-35/92
WEBS 4-9=-5/652, 6-8=-37/1246, 3-9=-670/70, 2-11=0/221, 2-10=-559/68, 3-10=0/384, 5-9=-254/56, 5-8=-236/88

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=28ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 0-0-0 to 3-0-0, Zone1 3-0-0 to 16-0-0, Zone2 16-0-0 to 20-2-15, Zone1 20-2-15 to 27-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
6) All bearings are assumed to be SP No.2 .
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

REVIEWED FOR CODE COMPLIANCE
These plans have been reviewed for compliance with the current building codes. Performance of this review shall not alleviate the applicant from full responsibility to comply with all applicable requirements.
Scope of Review Performed by: Timothy Hunt
02/02/2025
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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:
November 1,2024

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

Job	Truss	Truss Type	Qty	Ply	
1024-049	A09	Hip	1	1	T35433074
					Job Reference (optional)

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

Run: 8.73 S Sep 25 2024 Print: 8.730 S Sep 25 2024 MiTek Industries, Inc. Thu Oct 31 14:32:24 Page: 1
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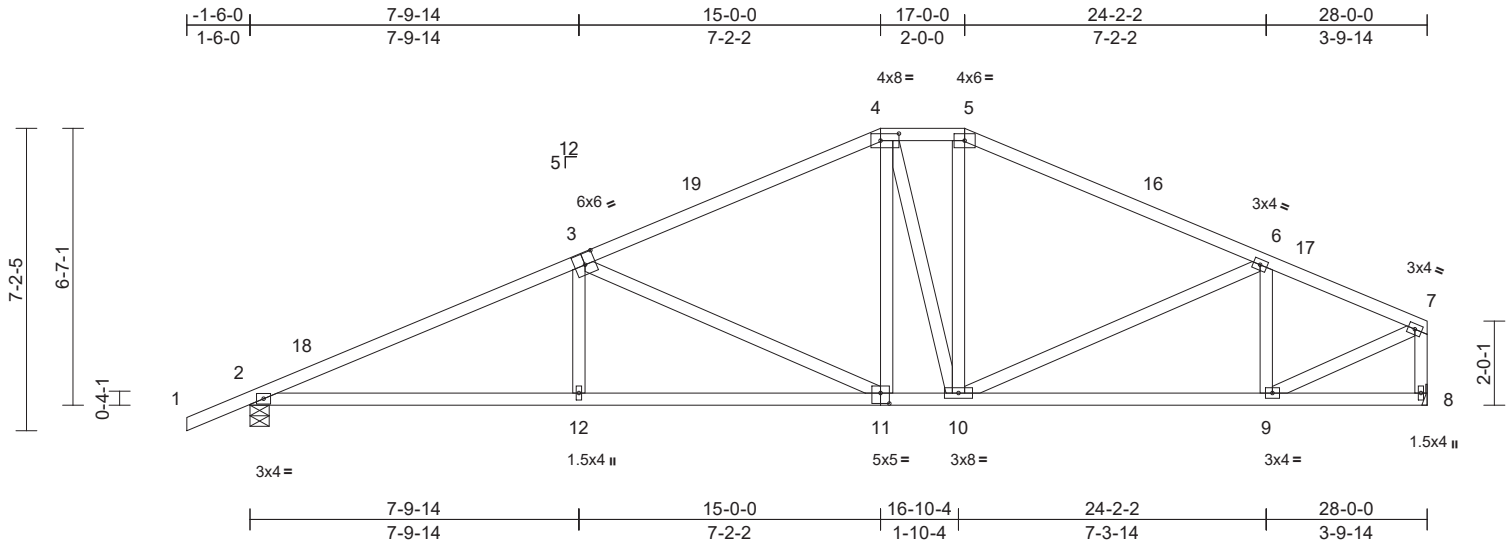

Scale = 1:54.8

Plate Offsets (X, Y): [3:0-3-0,0-3-4], [4:0-5-4,0-2-0], [11:0-2-8,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.56	Vert(LL)	-0.11	12-15	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.72	Vert(CT)	-0.25	12-15	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.95	Horz(CT)	0.07	8	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 156 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=0-5-8, 8= Mechanical
Max Horiz 2=128 (LC 11)
Max Uplift 2=-36 (LC 12)
Max Grav 2=1207 (LC 1), 8=1112 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 4-5=-1207/122, 5-6=-1390/104, 6-7=-1271/70, 7-8=-1088/52, 1-2=0/35, 2-4=-2237/108
BOT CHORD 2-12=-98/2017, 10-12=-101/2012, 9-10=-61/1162, 8-9=-21/30
WEBS 3-12=0/327, 3-11=-850/68, 4-11=0/421, 4-10=-269/75, 5-10=0/305, 6-10=-63/165, 6-9=-430/99, 7-9=-44/1274

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=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 15-0-0, Zone3 15-0-0 to 17-0-0, Zone2 17-0-0 to 21-2-15, Zone1 21-2-15 to 27-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) Bearings are assumed to be: Joint 2 SP No.2 .
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 36 lb uplift at joint 2.
10) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

REVIEWED FOR CODE COMPLIANCE
These plans have been reviewed for compliance with the current building codes. Performance of this review shall not alleviate the applicant from full responsibility to comply with all applicable requirements.
Scope of Review Performed by: Timothy Hunt
02/02/2025
PX3903 • PEP690
CT SOLUTIONS OF FLORIDA, LLC
Inspections When You Need Them
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JOAQUIN VELEZ LICENSE No 68182 STATE OF FLORIDA PROFESSIONAL ENGINEER

Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:
November 1,2024

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

Job	Truss	Truss Type	Qty	Ply	
1024-049	A10	Hip	1	1	T35433075
					Job Reference (optional)

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

Run: 8.73 S Sep 25 2024 Print: 8.730 S Sep 25 2024 MiTek Industries, Inc. Thu Oct 31 14:32:24 Page: 1
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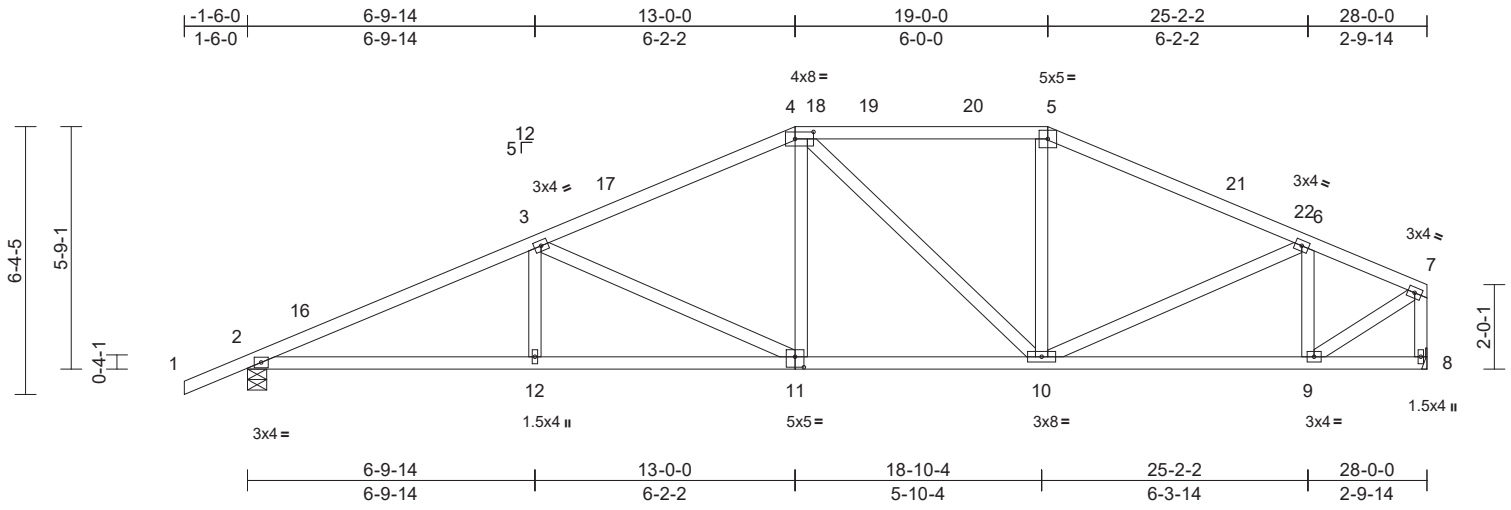

Scale = 1:54.7

Plate Offsets (X, Y): [4:0-5-4,0-2-0], [11:0-2-8,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.40	Vert(LL)	-0.09	12-15	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.63	Vert(CT)	-0.19	12-15	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.58	Horz(CT)	0.07	8	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 149 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=0-5-8, 8= Mechanical
Max Horiz 2=116 (LC 11)
Max Uplift 2=-36 (LC 12)
Max Grav 2=1207 (LC 1), 8=1112 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-2298/93, 3-4=-1639/111, 4-5=-1273/121, 5-6=-1446/107, 6-7=-1094/70, 7-8=-1096/52
BOT CHORD 2-12=-118/2078, 10-12=-118/2078, 9-10=-63/1000, 8-9=-21/30
WEBS 3-12=0/271, 3-11=-704/58, 4-11=0/456, 4-10=-326/20, 5-10=0/275, 6-10=0/364, 6-9=-555/95, 7-9=-51/1187

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=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 13-0-0, Zone2 13-0-0 to 17-2-15, Zone1 17-2-15 to 19-0-0, Zone2 19-0-0 to 23-2-15, Zone1 23-2-15 to 27-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) Bearings are assumed to be: Joint 2 SP No.2 .
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 36 lb uplift at joint 2.
10) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

REVIEWED FOR CODE COMPLIANCE
These plans have been reviewed for compliance with the current building codes. Performance of this review shall not alleviate the applicant from full responsibility to comply with all applicable requirements.
Scope of Review Performed by: Timothy Hunt
02/02/2025
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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:
November 1,2024

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

Job	Truss	Truss Type	Qty	Ply	
1024-049	A11	Half Hip	1	1	T35433076
					Job Reference (optional)

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

Run: 8.73 S Sep 25 2024 Print: 8.730 S Sep 25 2024 MiTek Industries, Inc. Thu Oct 31 14:32:24 Page: 1
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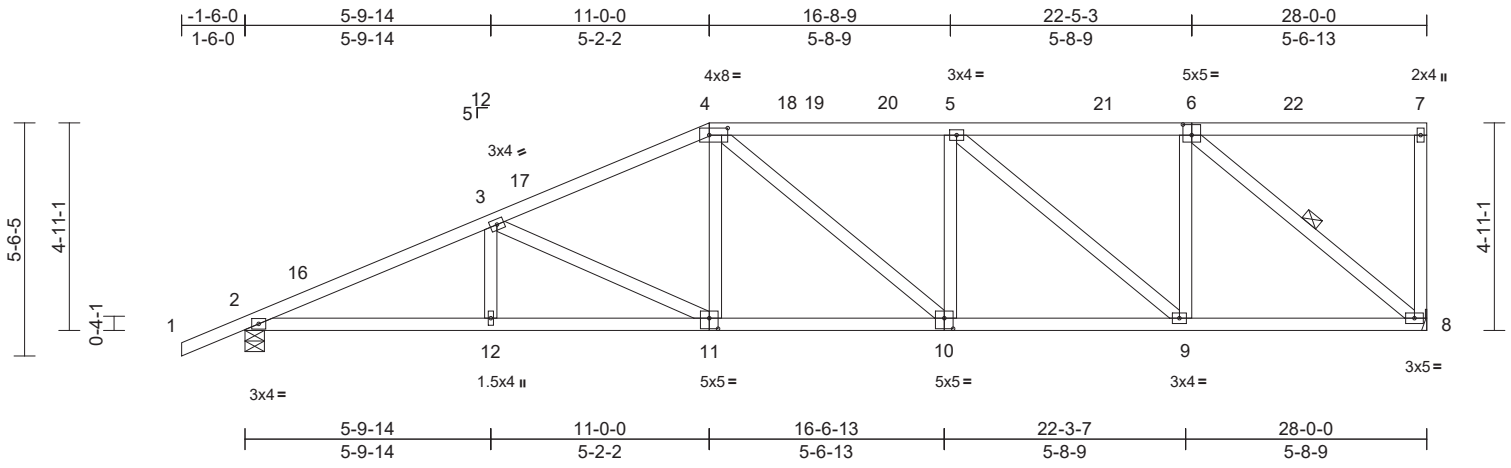

Scale = 1:54.6

Plate Offsets (X, Y): [4:0-5-4,0-2-0], [6:0-2-8,0-3-0], [10:0-2-8,0-3-0], [11:0-2-8,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.31	Vert(LL)	-0.09	11	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.57	Vert(CT)	-0.20	10-11	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.62	Horz(CT)	0.08	8	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 155 lb	FT = 20%

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

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

REACTIONS (size) 2=0-5-8, 8= Mechanical
Max Horiz 2=147 (LC 11)
Max Uplift 2=-35 (LC 12)
Max Grav 2=1207 (LC 1), 8=1112 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-2364/66, 3-4=-1825/95, 4-5=-1650/106, 5-7=-1112/91, 7-8=-143/36
BOT CHORD 2-12=-206/2133, 9-12=-206/2133, 8-9=-94/1094
WEBS 3-12=0/218, 3-11=-562/53, 4-11=0/398, 6-8=-1410/60, 5-10=0/212, 4-10=-15/175, 5-9=-696/47, 6-9=0/570

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=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 11-0-0, Zone2 11-0-0 to 15-2-15, Zone1 15-2-15 to 27-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) Bearings are assumed to be: Joint 2 SP No.2 .
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 35 lb uplift at joint 2.
10) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

REVIEWED FOR CODE COMPLIANCE
These plans have been reviewed for compliance with the current building codes. Performance of this review shall not alleviate the applicant from full responsibility to comply with all applicable requirements.
Scope of Review Performed by: Timothy Hunt
02/02/2025
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Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

November 1,2024

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

Job	Truss	Truss Type	Qty	Ply	
1024-049	A12	Half Hip	1	1	T35433077 Job Reference (optional)

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

Run: 8.73 S Sep 25 2024 Print: 8.730 S Sep 25 2024 MiTek Industries, Inc. Thu Oct 31 14:32:25 Page: 1
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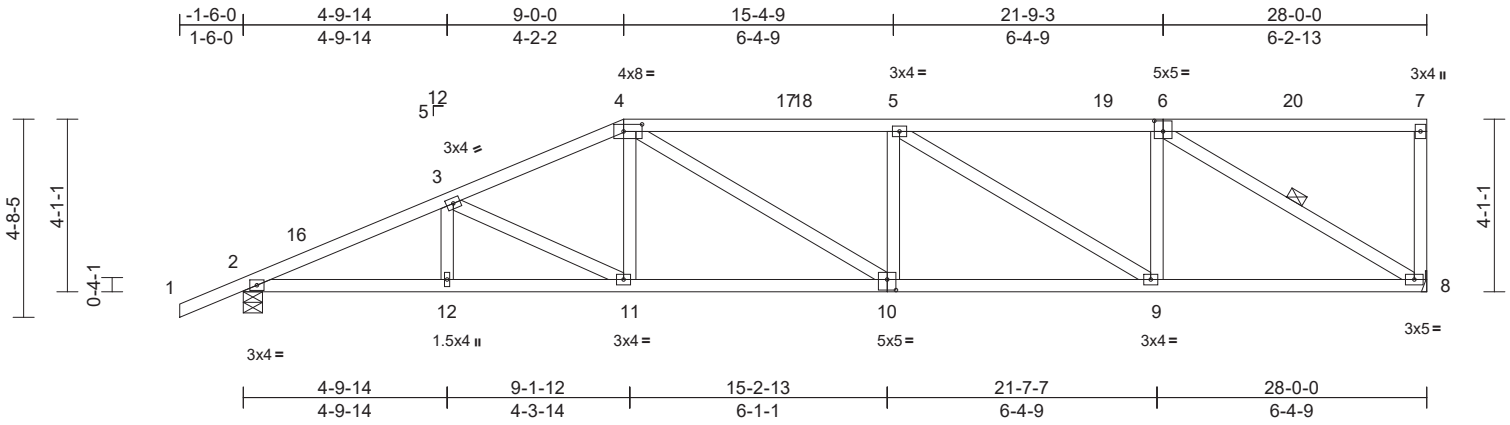

Scale = 1:54.5

Plate Offsets (X, Y): [4:0-5-4,0-2-0], [6:0-2-8,0-3-0], [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	0.38	Vert(LL)	-0.11	10-11	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.57	Vert(CT)	-0.25	10-11	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.64	Horz(CT)	0.09	8	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 148 lb	FT = 20%

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

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

REACTIONS (size) 2=0-5-8, 8= Mechanical
Max Horiz 2=122 (LC 11)
Max Uplift 2=-35 (LC 12)
Max Grav 2=1207 (LC 1), 8=1112 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-2403/60, 3-4=-2006/88, 4-5=-2079/100, 5-7=-1479/82, 7-8=-164/43
BOT CHORD 2-12=-187/2176, 11-12=-187/2176, 9-11=-144/2081, 8-9=-89/1460
WEBS 3-11=-405/45, 4-11=0/351, 6-8=-1678/57, 5-10=-93/138, 4-10=-12/419, 5-9=-704/42, 6-9=0/537, 3-12=0/161

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; 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 9-0-0, Zone2 9-0-0 to 13-2-15, Zone1 13-2-15 to 27-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) Bearings are assumed to be: Joint 2 SP No.2 .
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 35 lb uplift at joint 2.
10) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

REVIEWED FOR CODE COMPLIANCE
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Scope of Review Performed by: Timothy Hunt
02/02/2025
PX3903 • PEP690
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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:
November 1,2024

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

Job	Truss	Truss Type	Qty	Ply	
1024-049	A13	Half Hip Girder	1	2	T35433078
					Job Reference (optional)

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

Run: 8.73 S Sep 25 2024 Print: 8.730 S Sep 25 2024 MiTek Industries, Inc. Thu Oct 31 14:32:25 Page: 1
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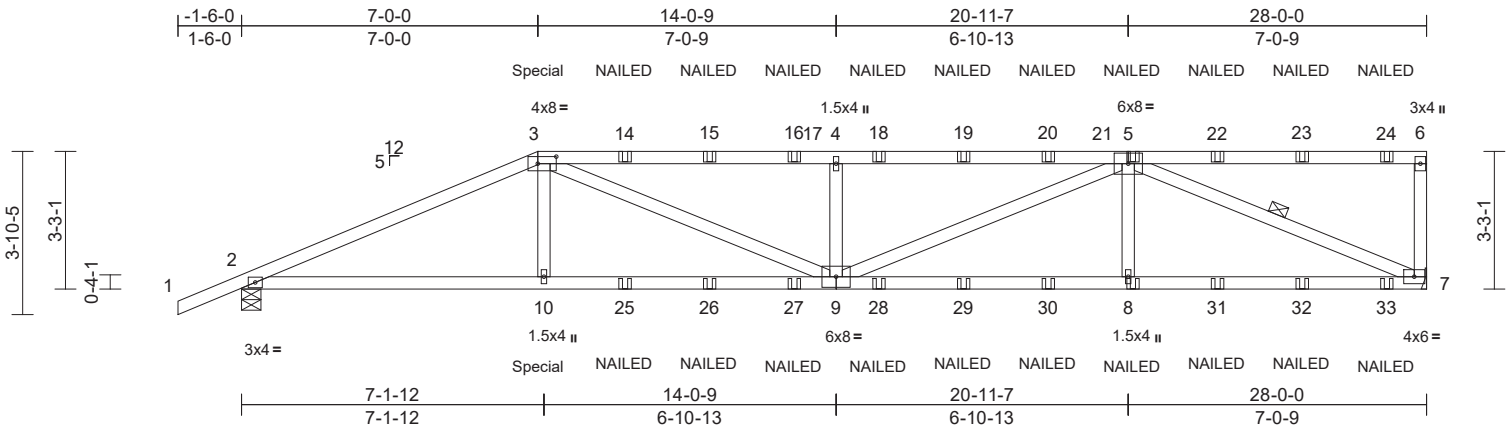

Scale = 1:54.4

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

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	0.96	Vert(LL)	-0.18	8-9	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.78	Vert(CT)	-0.39	9-10	>861	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.50	Horz(CT)	0.10	7	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 269 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2 *Except* 3-5:2x4 SP No.1
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 or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-7

REACTIONS (size) 2=0-5-8, 7= Mechanical
Max Horiz 2=97 (LC 7)
Max Grav 2=2278 (LC 1), 7=2477 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-5042/0, 3-4=-6065/0, 4-6=-6065/28, 6-7=-398/78
BOT CHORD 2-10=0/4587, 8-10=0/4618, 7-8=0/4554
WEBS 3-10=0/741, 3-9=-63/1666, 4-9=-910/183, 5-9=0/1645, 5-8=0/598, 5-7=-4830/0

NOTES
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=28ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) Bearings are assumed to be: Joint 2 SP No.2 .
10) Refer to girder(s) for truss to truss connections.
11) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 223 lb down and 73 lb up at 7-0-0 on top chord, and 374 lb down at 7-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (lb/ft)
Vert: 1-3=-60, 3-6=-60, 7-11=-20
Concentrated Loads (lb)
Vert: 3=-176 (F), 10=-374 (F), 5=-125 (F), 8=-63 (F), 14=-125 (F), 15=-125 (F), 16=-125 (F), 18=-125 (F), 19=-125 (F), 20=-125 (F), 22=-125 (F), 23=-125 (F), 24=-131 (F), 25=-63 (F), 26=-63 (F), 27=-63 (F), 28=-63 (F), 29=-63 (F), 30=-63 (F), 31=-63 (F), 32=-63 (F), 33=-65 (F)

REVIEWED FOR CODE COMPLIANCE
These plans have been reviewed for compliance with the current building codes. Performance of this review shall not alleviate the applicant from full responsibility to comply with all applicable requirements.
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02/02/2025
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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

November 1,2024

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

MiTek®
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Chesterfield, MO 63017
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Job	Truss	Truss Type	Qty	Ply	
1024-049	B01	Common Supported Gable	1	1	T35433079 Job Reference (optional)

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

Run: 8.73 S Sep 25 2024 Print: 8.730 S Sep 25 2024 MiTek Industries, Inc. Thu Oct 31 14:32:25 Page: 1
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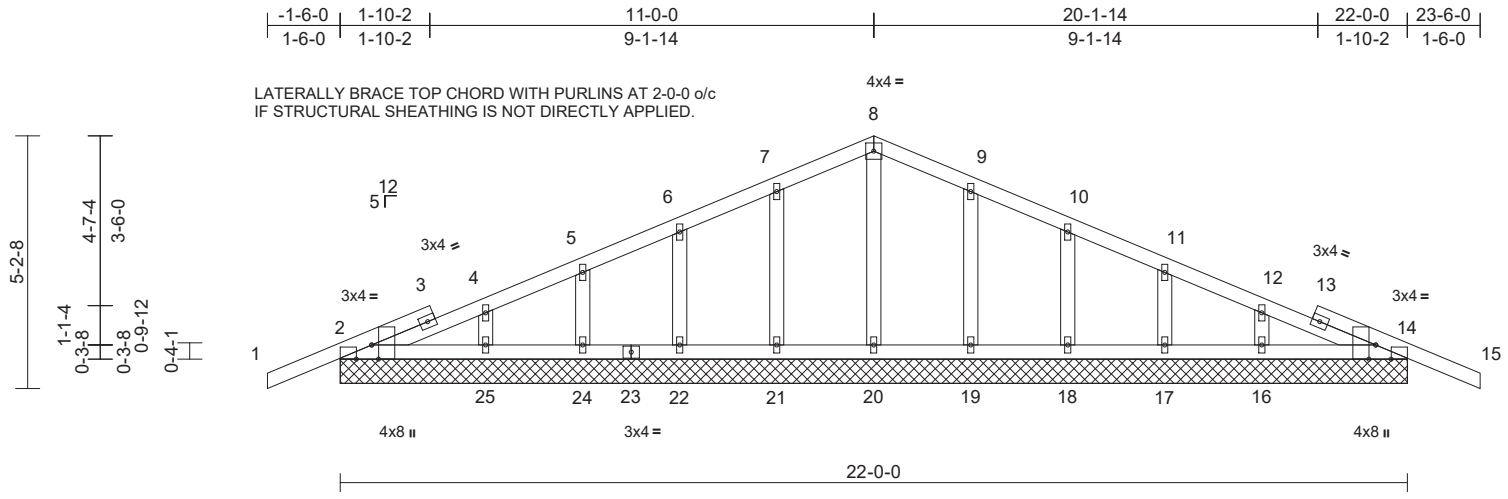

Scale = 1:47.5

Plate Offsets (X, Y): [2:0-3-8,Edge], [2:0-3-13,Edge], [14:0-3-8,Edge], [14:0-3-13,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.14	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.04	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	29	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 107 lb	FT = 20%

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

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

REACTIONS (size) 2=22-0-0, 14=22-0-0, 16=22-0-0, 17=22-0-0, 18=22-0-0, 19=22-0-0, 20=22-0-0, 21=22-0-0, 22=22-0-0, 24=22-0-0, 25=22-0-0, 26=22-0-0, 29=22-0-0
Max Horiz 2=69 (LC 11), 26=69 (LC 11)
Max Uplift 2=-47 (LC 12), 14=-47 (LC 12), 17=-14 (LC 12), 18=-7 (LC 12), 19=-7 (LC 12), 21=-7 (LC 12), 22=-7 (LC 12), 24=-14 (LC 12), 26=-47 (LC 12), 29=-47 (LC 12)
Max Grav 2=220 (LC 1), 14=220 (LC 1), 16=201 (LC 1), 17=149 (LC 24), 18=162 (LC 1), 19=167 (LC 24), 20=149 (LC 1), 21=167 (LC 23), 22=162 (LC 1), 24=149 (LC 23), 25=201 (LC 1), 26=220 (LC 1), 29=220 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-4=-43/54, 4-5=-53/45, 5-6=-45/59, 6-7=-41/95, 7-8=-56/131, 8-9=-56/131, 9-10=-41/95, 10-11=-28/59, 11-12=-30/22, 12-14=-33/30, 14-15=0/35
BOT CHORD 2-25=-26/72, 24-25=-26/72, 22-24=-26/72, 21-22=-26/72, 20-21=-26/72, 19-20=-26/72, 18-19=-26/72, 17-18=-26/72, 16-17=-26/72, 14-16=-26/72
WEBS 8-20=-109/0, 7-21=-127/69, 6-22=-120/70, 5-24=-116/73, 4-25=-139/64, 9-19=-127/69, 10-18=-120/70, 11-17=-116/73, 12-16=-139/64

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
5) All plates are 1.5x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) All bearings are assumed to be SP No.2 .
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 47 lb uplift at joint 2, 47 lb uplift at joint 14, 7 lb uplift at joint 21, 7 lb uplift at joint 22, 14 lb uplift at joint 24, 7 lb uplift at joint 19, 7 lb uplift at joint 18, 14 lb uplift at joint 17, 47 lb uplift at joint 2 and 47 lb uplift at joint 14.
12) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

REVIEWED FOR CODE COMPLIANCE
These plans have been reviewed for compliance with the current building codes. Performance of this review shall not alleviate the applicant from full responsibility to comply with all applicable requirements.
Scope of Review Performed by: Timothy Hunt
02/02/2025
PX3903 • PEP690
CT SOLUTIONS OF FLORIDA LLC
Inspections Where You Need Them
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JOAQUIN VELEZ LICENSE No 68182 STATE OF FLORIDA PROFESSIONAL ENGINEER

Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

November 1,2024

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

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

Job	Truss	Truss Type	Qty	Ply	
1024-049	B02	Common	7	1	T35433080 Job Reference (optional)

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

Run: 8.73 S Sep 25 2024 Print: 8.730 S Sep 25 2024 MiTek Industries, Inc. Thu Oct 31 14:32:25 Page: 1
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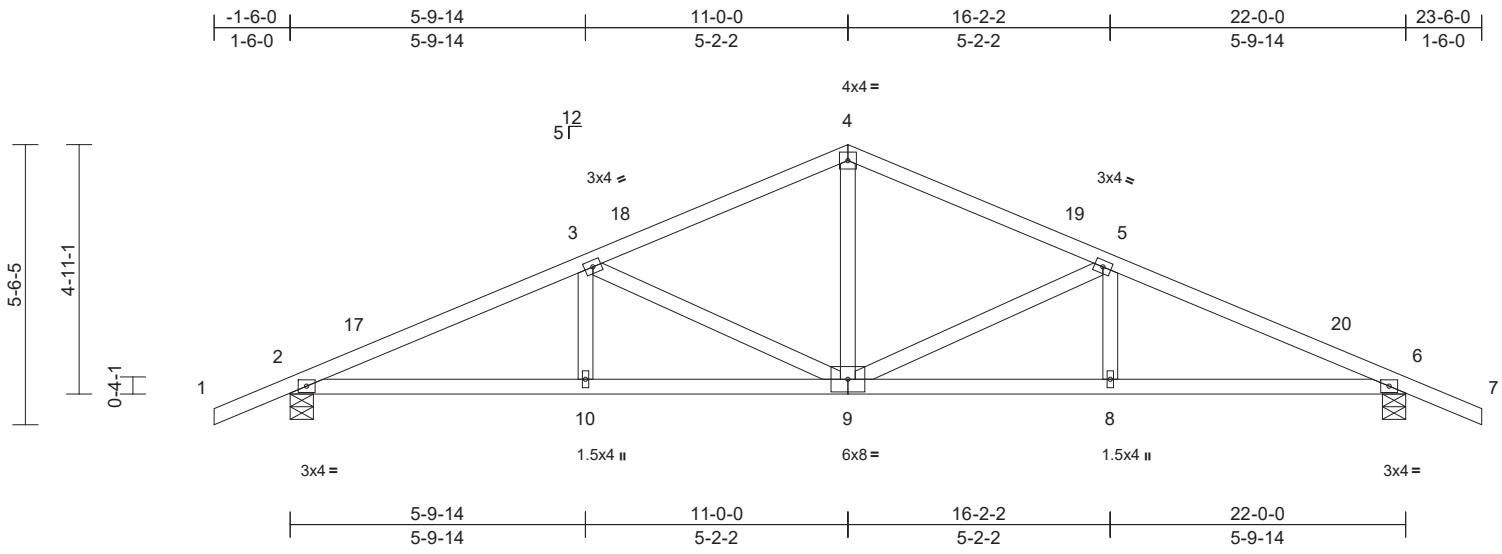

Scale = 1:45.4

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	0.28	Vert(LL)	-0.07	9	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.47	Vert(CT)	-0.14	9-10	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.33	Horz(CT)	0.05	6	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 102 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.
BOT CHORD Rigid ceiling directly applied.

REACTIONS (size) 2=0-5-8, 6=0-5-8
Max Horiz 2=-74 (LC 10)
Max Uplift 2=-36 (LC 12), 6=-36 (LC 12)
Max Grav 2=970 (LC 1), 6=970 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-1766/111, 3-4=-1215/119, 4-5=-1215/119, 5-6=-1766/111, 6-7=0/35
BOT CHORD 2-10=-31/1583, 8-10=-45/1583, 6-8=-45/1583
WEBS 3-10=0/225, 3-9=-592/74, 4-9=0/596, 5-9=-592/74, 5-8=0/225

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -1-6-0 to 1-6-0, Zone1 1-6-0 to 11-0-0, Zone2 11-0-0 to 15-2-15, Zone1 15-2-15 to 23-6-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
6) All bearings are assumed to be SP No.2 .
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 36 lb uplift at joint 2 and 36 lb uplift at joint 6.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

REVIEWED FOR CODE COMPLIANCE
These plans have been reviewed for compliance with the current building codes. Performance of this review shall not alleviate the applicant from full responsibility to comply with all applicable requirements.
Scope of Review Performed by: Timothy Hunt
02/02/2025
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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

November 1,2024

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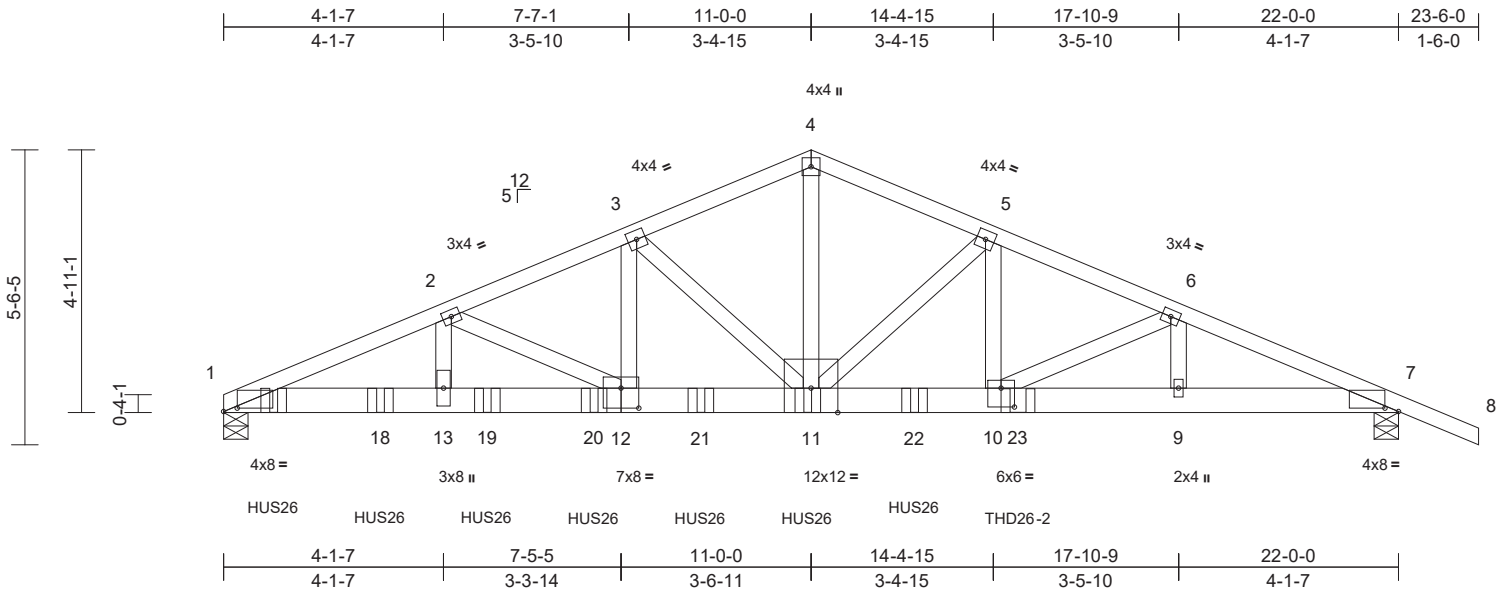
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	
1024-049	B03	Common Girder	1	3	T35433081 Job Reference (optional)

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

Run: 8.73 S Sep 25 2024 Print: 8.730 S Sep 25 2024 MiTek Industries, Inc. Thu Oct 31 14:32:25 Page: 1
ID:F30a3doOD_TMrcxl7KBvbPyRAf1-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:43.1

Plate Offsets (X, Y): [1:0-3-1,0-0-12], [7:0-3-1,0-0-12], [10:0-3-0,0-4-4], [12:0-4-0,0-4-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.69	Vert(LL)	-0.19	11-12	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.97	Vert(CT)	-0.37	11-12	>708	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.58	Horz(CT)	0.10	7	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 392 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP 2400F 2.0E *Except* 12-7:2x6 SP No.2
WEBS 2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-5-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=0-5-8, 7=0-5-8
Max Horiz 1=-73 (LC 6)
Max Grav 1=7807 (LC 1), 7=5653 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-16975/0, 2-3=-13756/0, 3-4=-10431/0, 4-5=-10431/0, 5-6=-13612/0, 6-7=-14046/0, 7-8=0/35
BOT CHORD 1-13=0/15599, 11-13=0/15599, 10-11=0/12545, 9-10=0/12936, 7-9=0/12936
WEBS 2-13=0/2428, 2-12=-3279/0, 3-12=0/3726, 3-11=-3913/0, 4-11=0/7744, 5-11=-3976/0, 5-10=0/3694, 6-10=-438/0, 6-9=0/241

NOTES
1) 3-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 - 3 rows staggered at 0-4-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc, Except member 4-11 2x4 - 1 row at 0-6-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) Bearings are assumed to be: Joint 1 SP 2400F 2.0E , Joint 7 SP No.2 .
9) Use MiTek HUS26 (With 14-16d nails into Girder & 4-16d nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 0-11-4 from the left end to 10-11-4 to connect truss(es) to back face of bottom chord.
10) Use MiTek HUS26 (With 14-16d nails into Girder & 6-16d nails into Truss) or equivalent at 12-11-4 from the left end to connect truss(es) to back face of bottom chord.
11) Use MiTek THD26-2 (With 18-16d nails into Girder & 12-10d nails into Truss) or equivalent at 14-10-8 from the left end to connect truss(es) to back face of bottom chord.
12) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (lb/ft)
Vert: 1-4=-60, 4-8=-60, 1-7=-20
Concentrated Loads (lb)
Vert: 11=-1258 (B), 15=-1261 (B), 18=-1260 (B), 19=-1260 (B), 20=-1258 (B), 21=-1258 (B), 22=-1252 (B), 23=-2804 (B)

REVIEWED FOR CODE COMPLIANCE
These plans have been reviewed for compliance with the current building codes. Performance of this review shall not alleviate the applicant from full responsibility to comply with all applicable requirements.
Scope of Review Performed by: Timothy Hunt
02/02/2025
PX3903 • PEP690
CT SOLUTIONS OF FLORIDA LLC
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JOAQUIN VELEZ LICENSE No 68182 STATE OF FLORIDA PROFESSIONAL ENGINEER

Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

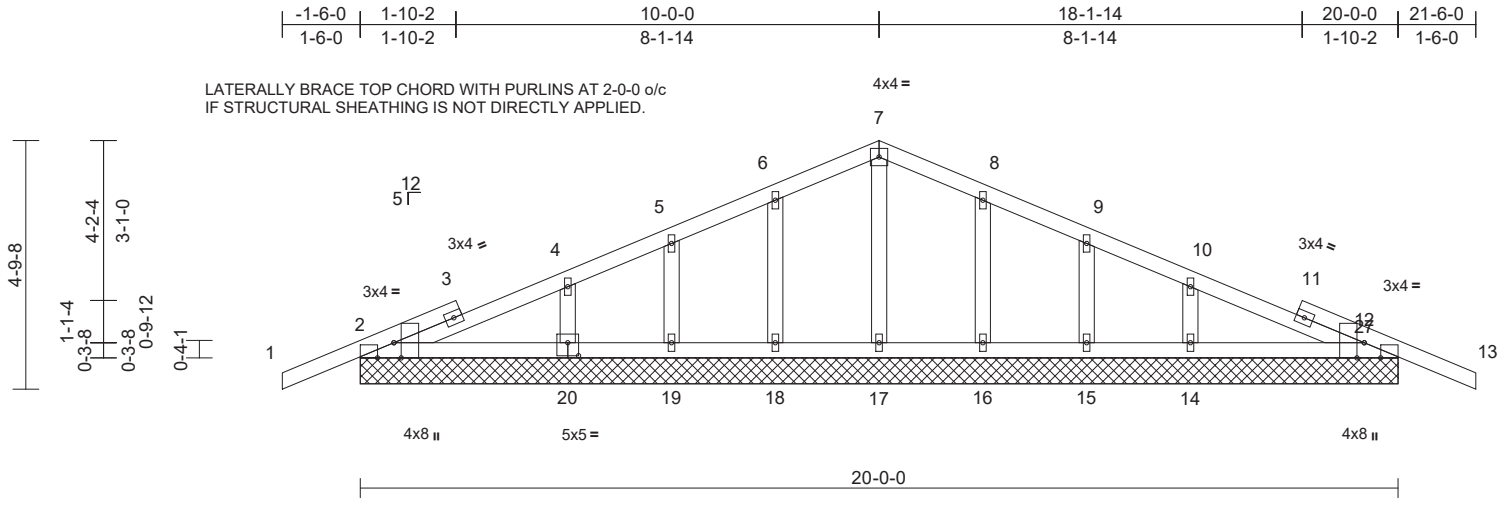
November 1,2024

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

Job	Truss	Truss Type	Qty	Ply	
1024-049	C01	Common Supported Gable	1	1	T35433082 Job Reference (optional)

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

Run: 8.73 S Sep 25 2024 Print: 8.730 S Sep 25 2024 MiTek Industries, Inc. Thu Oct 31 14:32:26 ID:zclNw46nfBSp66_hduaWwDyRB8v-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:44.4

Plate Offsets (X, Y): [2:0-3-8,Edge], [2:0-3-13,Edge], [12:0-3-8,Edge], [12:0-3-13,Edge], [20:0-2-8,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.29	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	0.04	Horz(CT)	0.00	12	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 94 lb	FT = 20%

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

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

REACTIONS (size) 2=20-0-0, 12=20-0-0, 14=20-0-0, 15=20-0-0, 16=20-0-0, 17=20-0-0, 18=20-0-0, 19=20-0-0, 20=20-0-0, 21=20-0-0, 24=20-0-0
Max Horiz 2=-65 (LC 10), 21=-65 (LC 10)
Max Uplift 2=-57 (LC 12), 12=-65 (LC 12), 14=-40 (LC 12), 15=-27 (LC 12), 16=-31 (LC 12), 18=-30 (LC 12), 19=-28 (LC 12), 20=-37 (LC 12), 21=-57 (LC 12), 24=-65 (LC 12)
Max Grav 2=237 (LC 23), 12=223 (LC 24), 14=295 (LC 18), 15=114 (LC 18), 16=186 (LC 18), 17=175 (LC 1), 18=186 (LC 17), 19=114 (LC 17), 20=295 (LC 17), 21=237 (LC 23), 24=223 (LC 24)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-4=-45/105, 4-5=-20/67, 5-6=-15/78, 6-7=-32/124, 7-8=-32/124, 8-9=-10/78, 9-10=-1/53, 10-12=-80/127, 12-13=0/42
BOT CHORD 2-19=-60/95, 18-19=-60/95, 17-18=-60/95, 16-17=-60/95, 15-16=-60/95, 14-15=-60/95, 12-14=-60/160
WEBS 7-17=-138/0, 6-18=-140/94, 5-19=-98/84, 4-20=-199/123, 8-16=-139/95, 9-15=-98/83, 10-14=-200/122

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Partially Enclosed; MWFRS (directional) and C-C Zone3 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
5) All plates are 1.5x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) All bearings are assumed to be SP No.2 .
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 57 lb uplift at joint 2, 65 lb uplift at joint 12, 30 lb uplift at joint 18, 28 lb uplift at joint 19, 37 lb uplift at joint 20, 31 lb uplift at joint 16, 27 lb uplift at joint 15, 40 lb uplift at joint 14, 57 lb uplift at joint 2 and 65 lb uplift at joint 12.
12) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

REVIEWED FOR CODE COMPLIANCE
These plans have been reviewed for compliance with the current building codes. Performance of this review shall not alleviate the applicant from full responsibility to comply with all applicable requirements.
Scope of Review Performed by: Timothy Hunt
02/02/2025
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Date:

November 1,2024

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Chesterfield, MO 63017
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Job	Truss	Truss Type	Qty	Ply	
1024-049	C02	Common	4	1	T35433083 Job Reference (optional)

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

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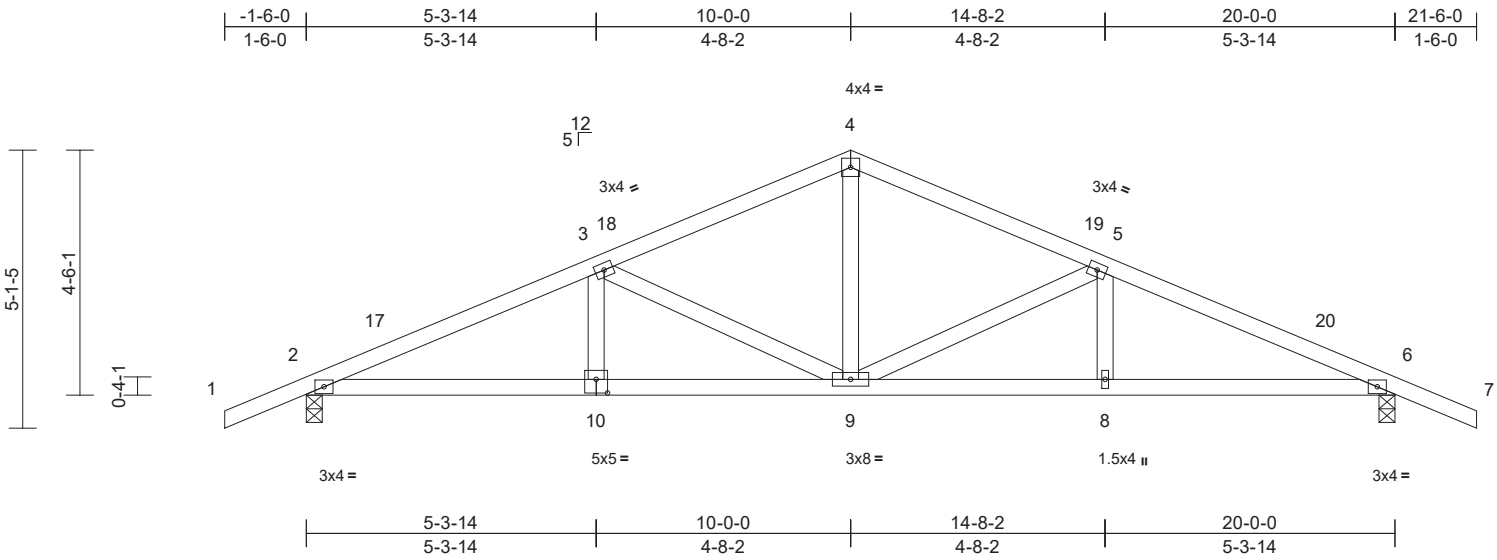

Scale = 1:42.3

Plate Offsets (X, Y): [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	0.23	Vert(LL)	-0.05	9	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.41	Vert(CT)	-0.11	8-9	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.25	Horz(CT)	0.04	6	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 93 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.
BOT CHORD Rigid ceiling directly applied.

REACTIONS (size) 2=0-3-8, 6=0-3-8
Max Horiz 2=-68 (LC 10)
Max Uplift 2=-129 (LC 12), 6=-129 (LC 12)
Max Grav 2=890 (LC 1), 6=890 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-1589/307, 3-4=-1100/256, 4-5=-1100/256, 5-6=-1589/307, 6-7=0/35
BOT CHORD 2-9=-202/1424, 8-9=-217/1424, 6-8=-217/1424
WEBS 3-10=0/202, 3-9=-542/151, 4-9=-60/538, 5-9=-543/150, 5-8=0/202

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; Partially Enclosed; MWFRS (directional) and C-C Zone3 -1-6-0 to 1-6-0, Zone1 1-6-0 to 10-0-0, Zone2 10-0-0 to 14-2-15, Zone1 14-2-15 to 21-6-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
6) All bearings are assumed to be SP No.2 .
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 129 lb uplift at joint 2 and 129 lb uplift at joint 6.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

REVIEWED FOR CODE COMPLIANCE
These plans have been reviewed for compliance with the current building codes. Performance of this review shall not alleviate the applicant from full responsibility to comply with all applicable requirements.
Scope of Review Performed by: Timothy Hunt
02/02/2025
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Date:

November 1,2024

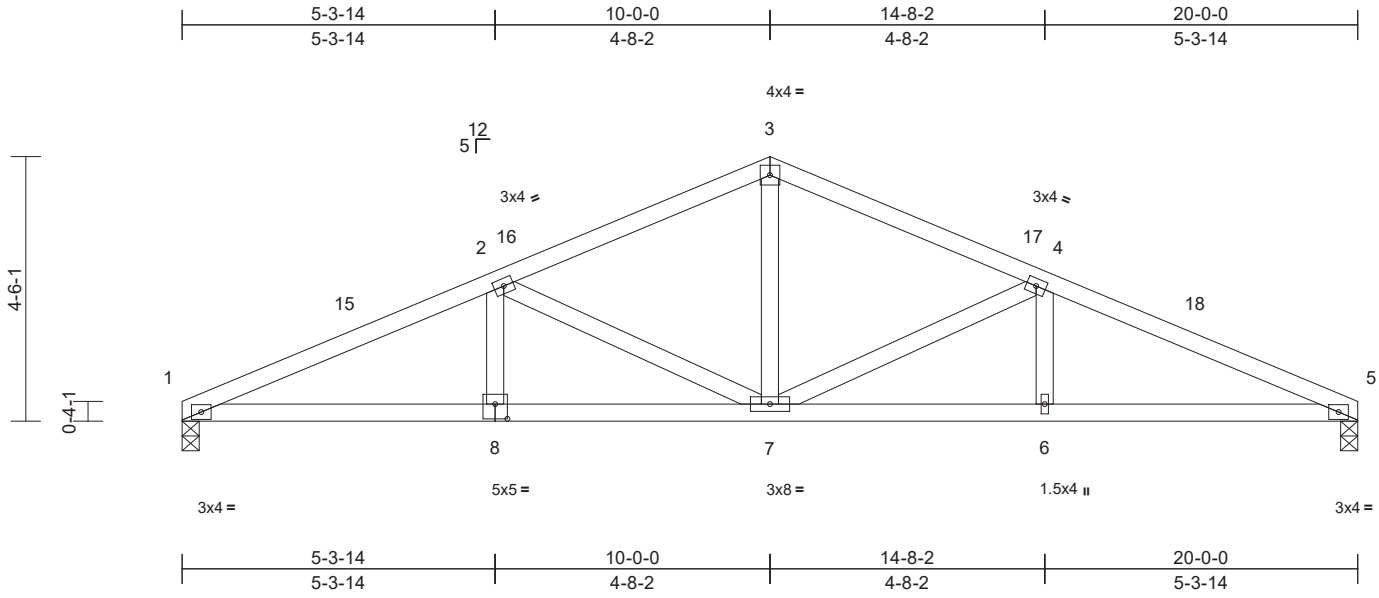
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use,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

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

Job	Truss	Truss Type	Qty	Ply	
1024-049	C03	Common	1	1	T35433084 Job Reference (optional)

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

Run: 8.73 S Sep 25 2024 Print: 8.730 S Sep 25 2024 MiTek Industries, Inc. Thu Oct 31 14:32:26 Page: 1
ID:dvTvRBFIqtz6Yyu_KQoKPlyRB8j-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:39.2

Plate Offsets (X, Y): [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	0.25	Vert(LL)	-0.06	7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.45	Vert(CT)	-0.12	7-8	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.26	Horz(CT)	0.04	5	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 88 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.
BOT CHORD Rigid ceiling directly applied.

REACTIONS (size) 1=0-3-8, 5=0-3-8
Max Horiz 1=59 (LC 11)
Max Uplift 1=-92 (LC 12), 5=-92 (LC 12)
Max Grav 1=800 (LC 1), 5=800 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-1616/336, 2-3=-1117/272, 3-4=-1117/272, 4-5=-1616/336
BOT CHORD 1-7=-249/1462, 6-7=-251/1462, 5-6=-251/1462
WEBS 2-8=0/206, 2-7=-564/158, 3-7=-76/555, 4-7=-565/158, 4-6=0/206

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; Partially Enclosed; MWFRS (directional) and C-C Zone3 0-0-0 to 3-0-0, Zone1 3-0-0 to 10-0-0, Zone2 10-0-0 to 14-2-15, Zone1 14-2-15 to 20-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
6) All bearings are assumed to be SP No.2 .
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 92 lb uplift at joint 1 and 92 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

REVIEWED FOR CODE COMPLIANCE
These plans have been reviewed for compliance with the current building codes. Performance of this review shall not alleviate the applicant from full responsibility to comply with all applicable requirements.
Scope of Review Performed by: Timothy Hunt
02/02/2025
PX3903 • PEP690
CT SOLUTIONS OF FLORIDA LLC
Any deviation from this plan is not permitted without prior written authorization.

JOAQUIN VELEZ LICENSE No 68182 STATE OF FLORIDA PROFESSIONAL ENGINEER

Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

November 1,2024

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Job	Truss	Truss Type	Qty	Ply	
1024-049	CJ01	Diagonal Hip Girder	2	1	T35433085 Job Reference (optional)

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

Run: 8.73 S Sep 25 2024 Print: 8.730 S Sep 25 2024 MiTek Industries, Inc. Thu Oct 31 14:32:26 Page: 1
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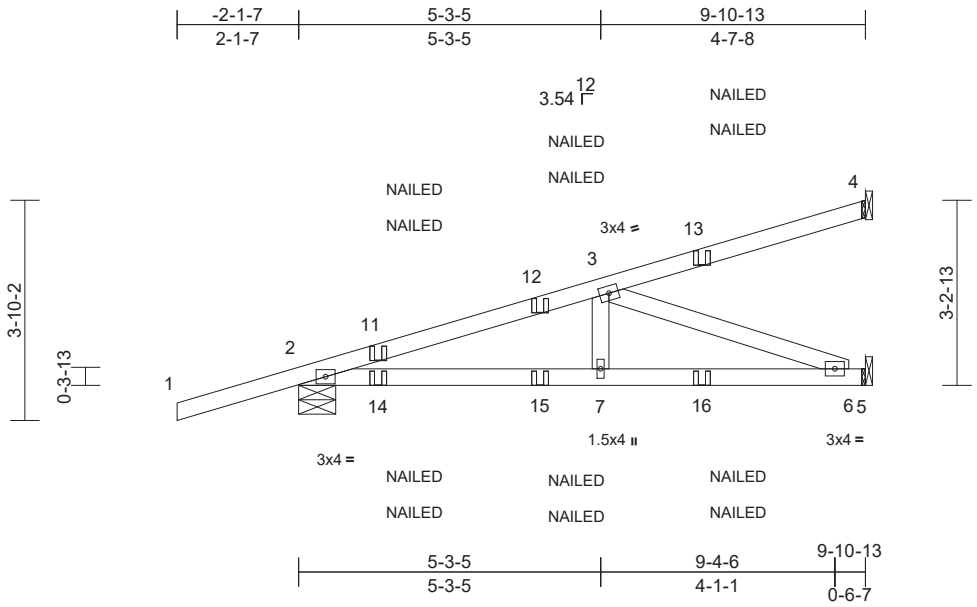


Scale = 1:40.2

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	0.42	Vert(LL)	-0.03	7-10	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.50	Vert(CT)	-0.08	6-7	>999	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.34	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 42 lb	FT = 20%

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

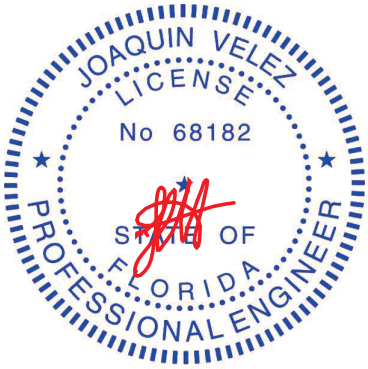
BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-7-12, 4= Mechanical, 5= Mechanical
Max Horiz 2=92 (LC 8)
Max Uplift 2=-65 (LC 8), 4=-30 (LC 8)
Max Grav 2=526 (LC 1), 4=136 (LC 1), 5=340 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/36, 2-3=-897/0, 3-4=-63/31
BOT CHORD 2-7=-1/827, 6-7=0/827, 5-6=0/0
WEBS 3-7=0/275, 3-6=-880/0

NOTES
1) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
5) Bearings are assumed to be: , Joint 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 30 lb uplift at joint 4 and 65 lb uplift at joint 2.
8) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (lb/ft)
Vert: 1-4=-60, 5-8=-20
Concentrated Loads (lb)
Vert: 13=-81 (F=-41, B=-41), 14=62 (F=31, B=31), 15=-8 (F=-4, B=-4), 16=-60 (F=-30, B=-30)



Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

November 1,2024

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Job	Truss	Truss Type	Qty	Ply	
1024-049	D01	Common Structural Gable	1	1	T35433086 Job Reference (optional)

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

Run: 8.73 S Sep 25 2024 Print: 8.730 S Sep 25 2024 MiTek Industries, Inc. Thu Oct 31 14:32:26 Page: 1
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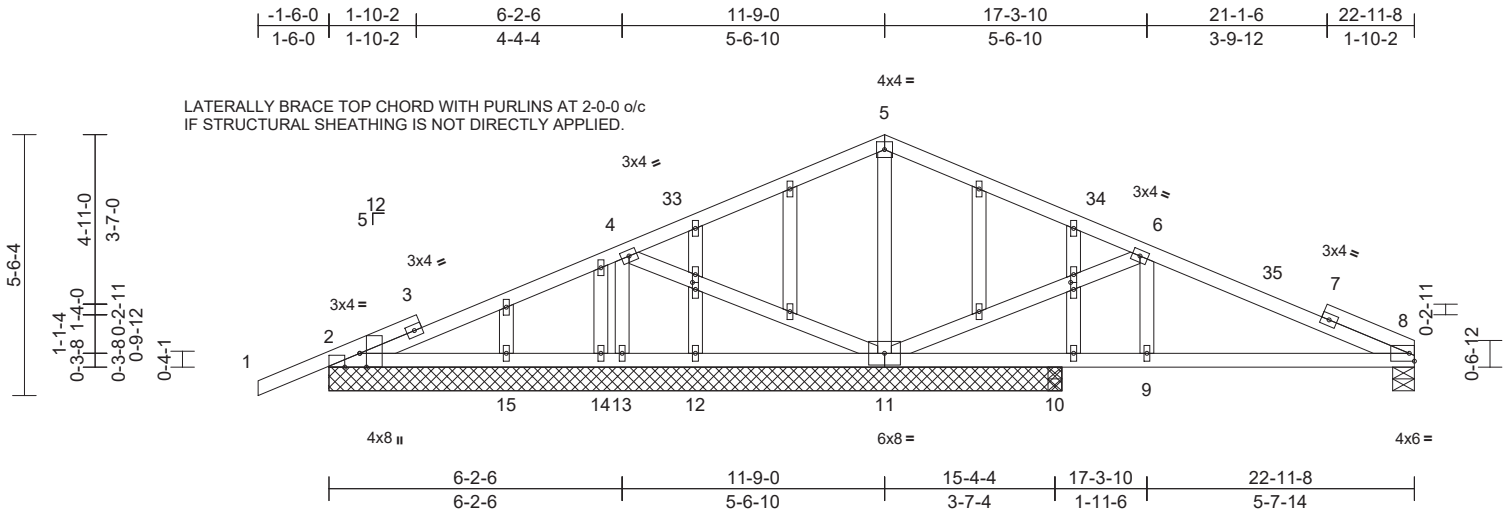

Scale = 1:48.7

Plate Offsets (X, Y): [2:0-3-8,Edge], [2:0-3-13,Edge], [18:0-1-12,0-0-12], [26:0-1-12,0-0-12]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.34	Vert(LL)	-0.02	9-29	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.23	Vert(CT)	-0.05	9-29	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.37	Horz(CT)	-0.01	8	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 128 lb	FT = 20%

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

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

REACTIONS (size) 2=15-6-0, 8=0-5-8, 10=0-3-8, 11=15-6-0, 12=15-6-0, 13=15-6-0, 14=15-6-0, 15=15-6-0, 30=15-6-0
Max Horiz 2=71 (LC 11), 30=71 (LC 11)
Max Uplift 2=-44 (LC 12), 11=-36 (LC 12), 13=-72 (LC 12), 14=-58 (LC 23), 30=-44 (LC 12)
Max Grav 2=227 (LC 23), 8=326 (LC 24), 10=89 (LC 3), 11=814 (LC 1), 12=140 (LC 3), 13=400 (LC 23), 14=27 (LC 12), 15=165 (LC 3), 30=227 (LC 23)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-4=-38/205, 4-5=-7/285, 5-6=-7/284, 6-8=-397/59
BOT CHORD 2-15=-128/41, 14-15=-128/41, 13-14=-128/41, 12-13=-128/41, 10-12=-128/353, 9-10=-12/353, 8-9=-29/353
WEBS 4-13=-355/85, 4-11=-116/52, 5-11=-480/89, 6-11=-602/98, 6-9=0/160

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -1-6-0 to 1-4-14, Zone1 1-4-14 to 11-9-0, Zone2 11-9-0 to 15-11-15, Zone1 15-11-15 to 22-8-12 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) All plates are 1.5x4 MT20 unless otherwise indicated.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) All bearings are assumed to be SP No.2 .
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 44 lb uplift at joint 2, 72 lb uplift at joint 13, 36 lb uplift at joint 11, 58 lb uplift at joint 14 and 44 lb uplift at joint 2.
11) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

REVIEWED FOR CODE COMPLIANCE
These plans have been reviewed for compliance with the current building codes. Performance of this review shall not alleviate the applicant from full responsibility to comply with all applicable requirements.
Scope of Review Performed by: Timothy Hunt
02/02/2025
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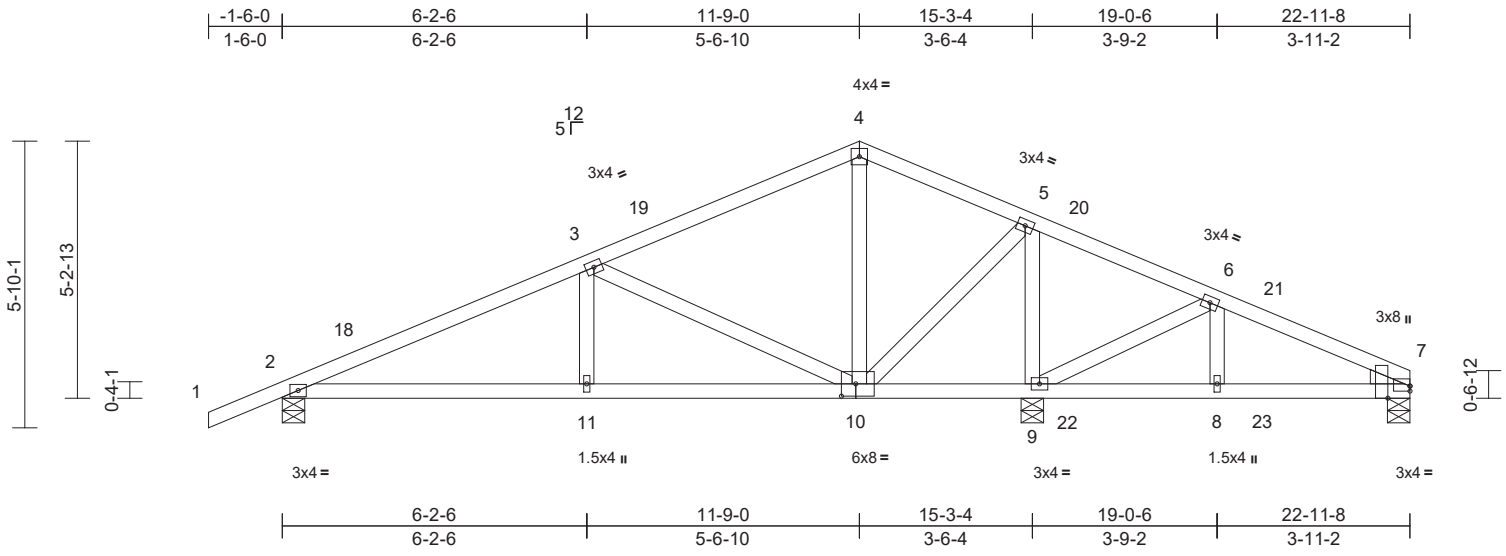
Job	Truss	Truss Type	Qty	Ply	
1024-049	D02	Common	1	1	T35433087 Job Reference (optional)

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

Run: 8.73 S Sep 25 2024 Print: 8.730 S Sep 25 2024 MiTek Industries, Inc. Thu Oct 31 14:32:26 ID:DQuU4P14Wr9urxMUdZTaXSyRB7i-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:46.9

Plate Offsets (X, Y): [7:Edge,0-1-4], [7:0-2-15,Edge], [10:0-3-8,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.33	Vert(LL)	-0.03	11-14	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.36	Vert(CT)	-0.08	11-14	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.42	Horz(CT)	0.01	9	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 114 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.2

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

REACTIONS (size) 2=0-5-8, 7=0-5-8, 9=0-5-8
Max Horiz 2=76 (LC 11)
Max Uplift 2=-35 (LC 12), 7=-58 (LC 12), 9=-73 (LC 12)
Max Grav 2=626 (LC 1), 7=205 (LC 24), 9=1151 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-864/41, 3-4=-256/43, 4-5=-225/56, 5-6=-30/390, 6-7=-187/221
BOT CHORD 2-11=0/762, 9-11=-322/762, 8-9=-166/156, 7-8=-166/156
WEBS 3-11=0/253, 3-10=-659/77, 4-10=-109/58, 5-9=-891/97, 5-10=-37/683, 6-9=-415/297, 6-8=-142/163

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -1-6-0 to 1-6-0, Zone1 1-6-0 to 11-9-0, Zone2 11-9-0 to 15-11-15, Zone1 15-11-15 to 22-11-8 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
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
6) All bearings are assumed to be SP No.2 .
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 35 lb uplift at joint 2, 58 lb uplift at joint 7 and 73 lb uplift at joint 9.
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

REVIEWED FOR CODE COMPLIANCE
These plans have been reviewed for compliance with the current building codes. Performance of this review shall not alleviate the applicant from full responsibility to comply with all applicable requirements.
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Date:

November 1,2024

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Job	Truss	Truss Type	Qty	Ply	
1024-049	D03	Common Girder	1	2	T35433088 Job Reference (optional)

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

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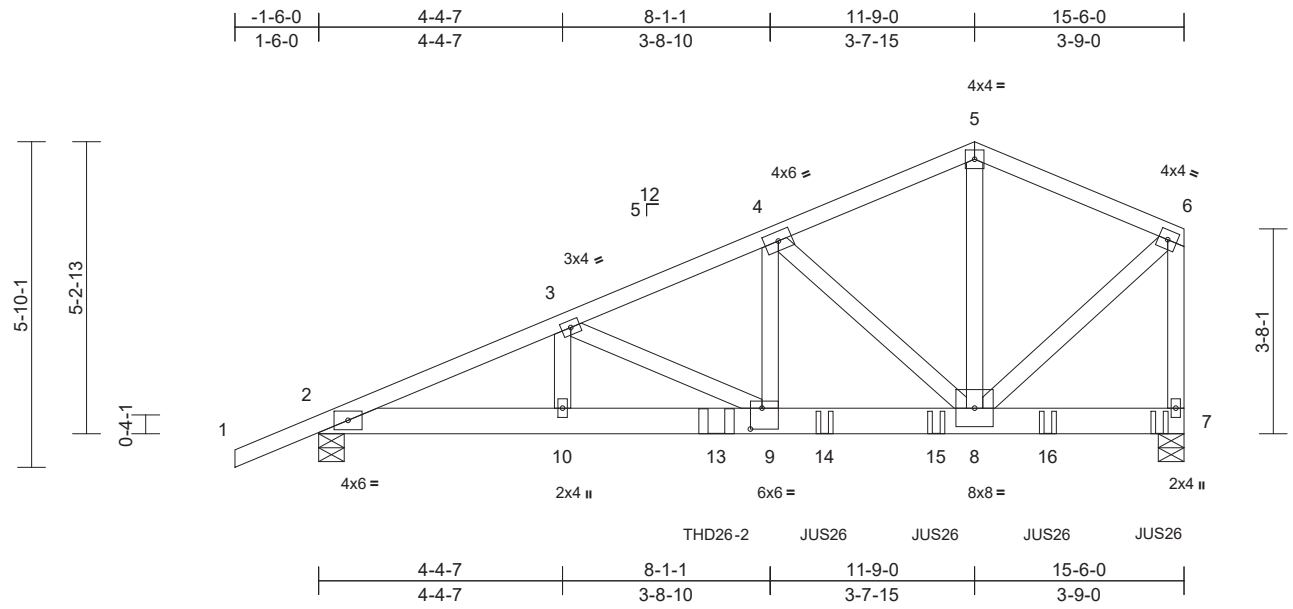

Scale = 1:41.3

Plate Offsets (X, Y): [9:0-2-8,0-4-8]

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	0.28	Vert(LL)	-0.08	9-10	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.43	Vert(CT)	-0.17	9-10	>999	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.42	Horz(CT)	0.03	7	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 2x6 SP 2400F 2.0E
WEBS 2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-6-10 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-5-8, 7=0-5-8
Max Horiz 2=130 (LC 7)
Max Grav 2=2941 (LC 1), 7=5209 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-7089/0, 3-4=-6195/0, 4-5=-3059/0, 5-6=-3057/0, 6-7=-3817/0
BOT CHORD 2-10=0/6512, 9-10=0/6512, 8-9=0/5693, 7-8=-21/47
WEBS 5-8=0/2142, 6-8=0/3750, 4-8=-3931/0, 3-10=0/550, 3-9=-906/0, 4-9=0/3607

NOTES
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-5-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) All bearings are assumed to be SP 2400F 2.0E .
9) Use MiTek THD26-2 (With 18-16d nails into Girder & 12-10d nails into Truss) or equivalent at 7-1-8 from the left end to connect truss(es) to back face of bottom chord.
10) Use MiTek JUS26 (With 4-10d nails into Girder & 4-10d nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 9-0-12 from the left end to 15-0-12 to connect truss(es) to back face of bottom chord.
11) Fill all nail holes where hanger is in contact with lumber.
12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1099 lb down at 15-4-4 on bottom chord. The design/ selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (lb/ft)
Vert: 1-5=-60, 5-6=-60, 2-7=-20
Concentrated Loads (lb)
Vert: 7=-1099 (B), 13=-2457 (B), 14=-1092 (B), 15=-1092 (B), 16=-1092 (B)

REVIEWED FOR CODE COMPLIANCE
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Scope of Review Performed by: Timothy Hunt
02/02/2025
PX3903 • PEP690
CT SOLUTIONS OF FLORIDA LLC
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JOAQUIN VELEZ LICENSE No 68182 STATE OF FLORIDA PROFESSIONAL ENGINEER

Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

November 1,2024

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

Job	Truss	Truss Type	Qty	Ply	
1024-049	E01	Common Supported Gable	1	1	T35433089 Job Reference (optional)

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

Run: 8.73 S Sep 25 2024 Print: 8.730 S Sep 25 2024 MiTek Industries, Inc. Thu Oct 31 14:32:26 Page: 1
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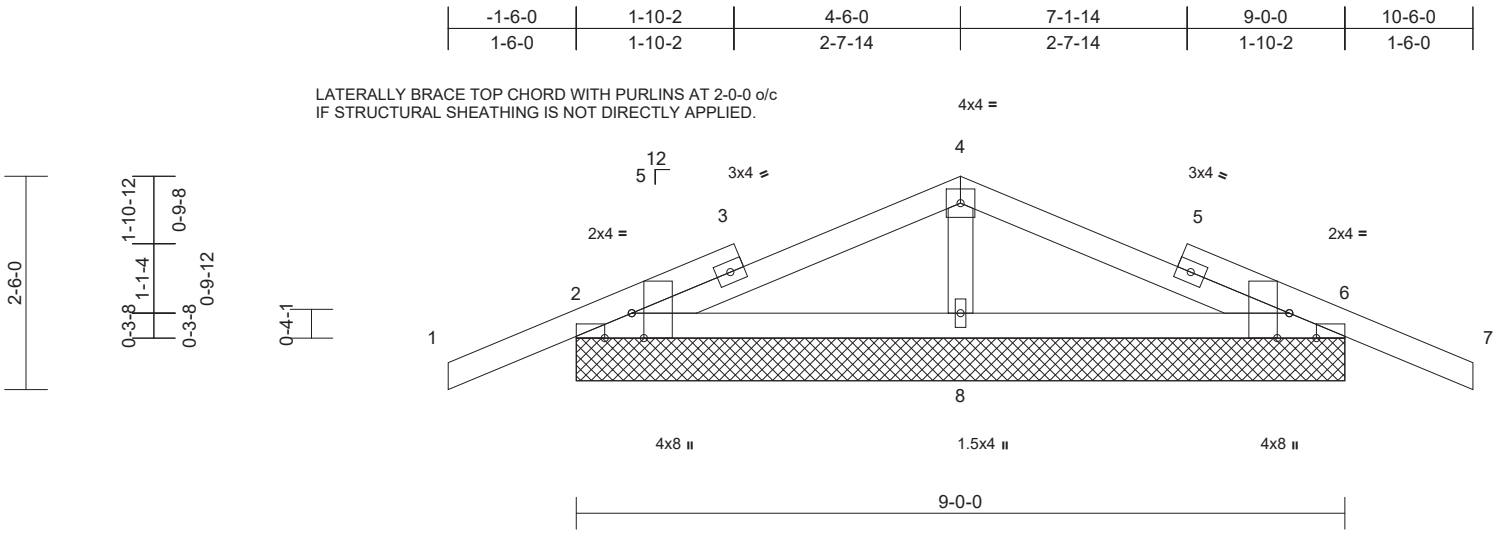

Scale = 1:27

Plate Offsets (X, Y): [2:0-3-8,Edge], [2:0-3-13,Edge], [6:0-3-8,Edge], [6:0-3-13,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.18	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.19	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 39 lb	FT = 20%

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

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

REACTIONS (size) 2=9-0-0, 6=9-0-0, 8=9-0-0, 9=9-0-0, 12=9-0-0
Max Horiz 2=-31 (LC 10), 9=-31 (LC 10)
Max Uplift 2=-57 (LC 12), 6=-57 (LC 12), 8=-43 (LC 12), 9=-57 (LC 12), 12=-57 (LC 12)
Max Grav 2=222 (LC 23), 6=222 (LC 24), 8=497 (LC 1), 9=222 (LC 23), 12=222 (LC 24)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-4=-136/229, 4-6=-136/228, 6-7=0/35
BOT CHORD 2-8=-197/224, 6-8=-197/224
WEBS 4-8=-336/255

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Partially Enclosed; MWFRS (directional) and C-C Zone3 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) All bearings are assumed to be SP No.2 .
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 57 lb uplift at joint 2, 57 lb uplift at joint 6, 43 lb uplift at joint 8, 57 lb uplift at joint 2 and 57 lb uplift at joint 6.
11) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

REVIEWED FOR CODE COMPLIANCE
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Scope of Review Performed by: Timothy Hunt
02/02/2025
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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

November 1,2024

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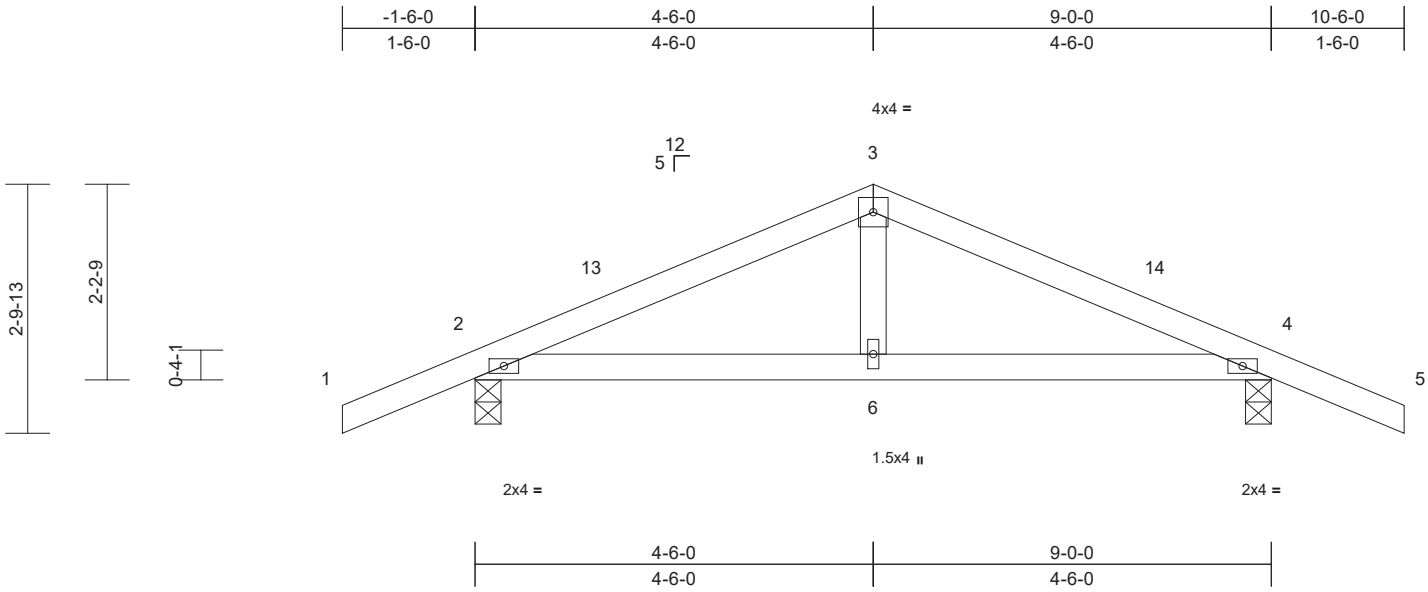
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	
1024-049	E02	Common	1	1	T35433090 Job Reference (optional)

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

Run: 8.73 S Sep 25 2024 Print: 8.730 S Sep 25 2024 MiTek Industries, Inc. Thu Oct 31 14:32:27 ID:SXfRTII3GvSn101PgbgvmnyRAv9-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:26

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)	0.02	6-12	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.23	Vert(CT)	-0.03	6-9	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	4	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.
BOT CHORD Rigid ceiling directly applied.

REACTIONS (size) 2=0-3-8, 4=0-3-8
Max Horiz 2=-35 (LC 10)
Max Uplift 2=-78 (LC 12), 4=-78 (LC 12)
Max Grav 2=450 (LC 1), 4=450 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-507/186, 3-4=-507/186, 4-5=0/35
BOT CHORD 2-6=-59/424, 4-6=-59/424
WEBS 3-6=0/205

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; Partially Enclosed; MWFRS (directional) and C-C Zone3 -1-6-0 to 1-6-0, Zone1 1-6-0 to 4-6-0, Zone2 4-6-0 to 9-0-0, Zone1 9-0-0 to 10-6-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
6) All bearings are assumed to be SP No.2 .
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 78 lb uplift at joint 2 and 78 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

REVIEWED FOR CODE COMPLIANCE
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02/02/2025
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Date:

November 1,2024

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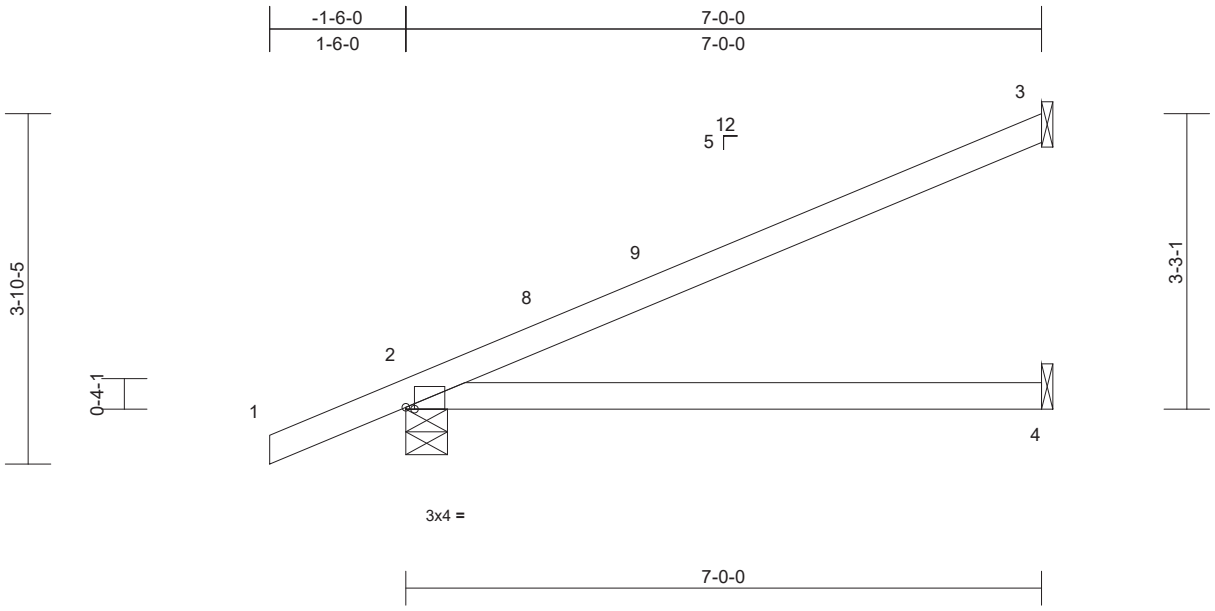
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	
1024-049	J01	Jack-Open	24	1	T35433091 Job Reference (optional)

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

Run: 8.73 S Sep 25 2024 Print: 8.730 S Sep 25 2024 MiTek Industries, Inc. Thu Oct 31 14:32:27 ID:FnScrzYs1ZC67HcuZImGB0yRBAw-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:25.4

Plate Offsets (X, Y): [2:0-1-2,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	0.59	Vert(LL)	-0.08	4-7	>992	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.49	Vert(CT)	-0.21	4-7	>404	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 24 lb	FT = 20%

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

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

REACTIONS (size) 2=0-5-8, 3= Mechanical, 4= Mechanical
Max Horiz 2=92 (LC 12)
Max Uplift 2=-27 (LC 12), 3=-38 (LC 12)
Max Grav 2=377 (LC 1), 3=185 (LC 1), 4=124 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-116/57
BOT CHORD 2-4=-27/93

NOTES
1) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -1-6-0 to 1-6-0, Zone1 1-6-0 to 6-11-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
5) Bearings are assumed to be: , Joint 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 38 lb uplift at joint 3 and 27 lb uplift at joint 2.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

REVIEWED FOR CODE COMPLIANCE
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02/02/2025
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Date:

November 1,2024

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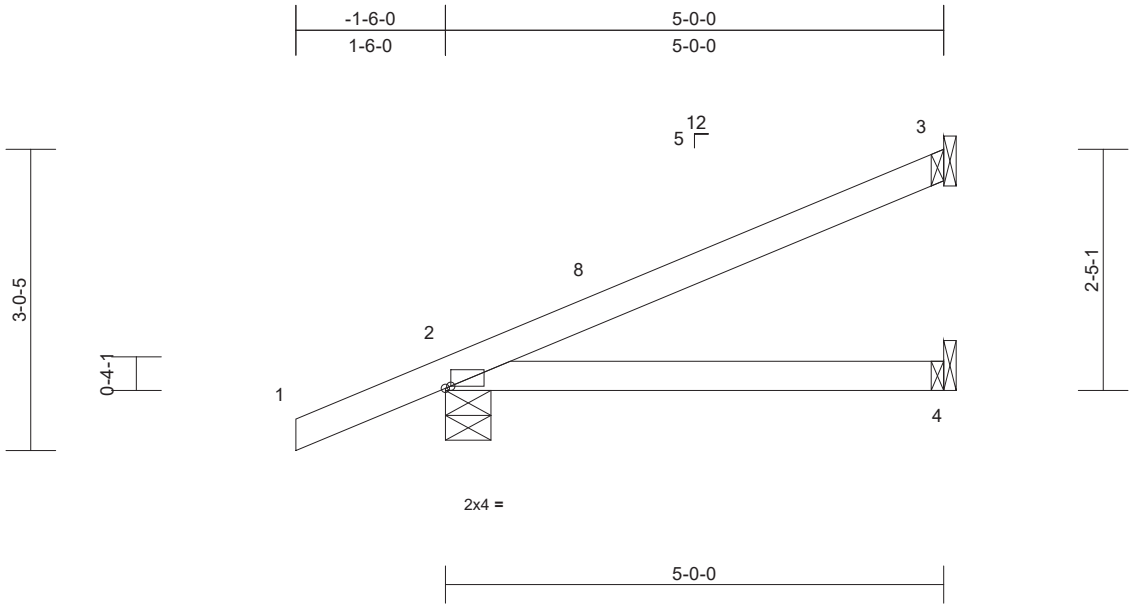
Job	Truss	Truss Type	Qty	Ply	
1024-049	J02	Jack-Open	4	1	T35433092 Job Reference (optional)

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

Run: 8.73 S Sep 25 2024 Print: 8.730 S Sep 25 2024 MiTek Industries, Inc. Thu Oct 31 14:32:27 ID:FnScrzYs1ZC67HcuZImGB0yRBAw-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:23.1

Plate Offsets (X, Y): [2:0-0-10,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	0.28	Vert(LL)	0.03	4-7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.23	Vert(CT)	-0.05	4-7	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 18 lb	FT = 20%

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

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

REACTIONS (size) 2=0-5-8, 3= Mechanical, 4= Mechanical
Max Horiz 2=72 (LC 12)
Max Uplift 2=-33 (LC 12), 3=-25 (LC 12)
Max Grav 2=301 (LC 1), 3=125 (LC 1), 4=87 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-107/38
BOT CHORD 2-4=-19/62

NOTES
1) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -1-6-0 to 1-6-0, Zone1 1-6-0 to 4-11-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
5) Bearings are assumed to be: , Joint 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 25 lb uplift at joint 3 and 33 lb uplift at joint 2.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

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November 1,2024

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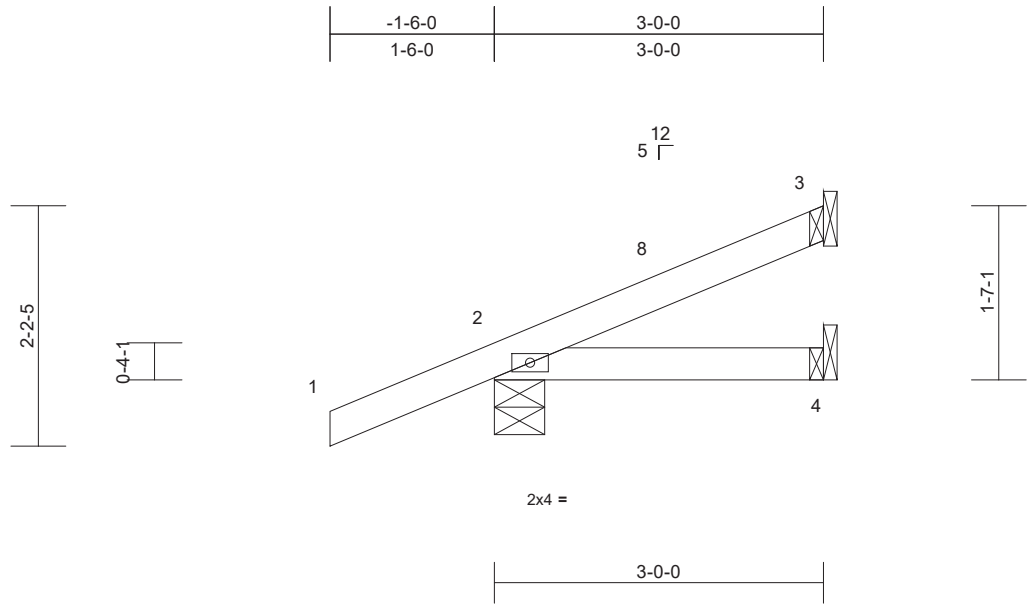
Job	Truss	Truss Type	Qty	Ply	
1024-049	J03	Jack-Open	4	1	T35433093 Job Reference (optional)

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

Run: 8.73 S Sep 25 2024 Print: 8.730 S Sep 25 2024 MiTek Industries, Inc. Thu Oct 31 14:32:27 ID:FnScrzYs1ZC67HcuZImGB0yRBAw-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:21

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.14	Vert(LL)	0.00	4-7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.07	Vert(CT)	-0.01	4-7	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MP							Weight: 12 lb	FT = 20%

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

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

REACTIONS (size) 2=0-5-8, 3= Mechanical, 4= Mechanical
Max Horiz 2=52 (LC 12)
Max Uplift 2=-42 (LC 12), 3=-10 (LC 12)
Max Grav 2=230 (LC 1), 3=64 (LC 1), 4=50 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-93/28
BOT CHORD 2-4=-31/69

NOTES
1) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -1-6-0 to 1-6-0, Zone1 1-6-0 to 2-11-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
5) Bearings are assumed to be: , Joint 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 10 lb uplift at joint 3 and 42 lb uplift at joint 2.

LOAD CASE(S) Standard

REVIEWED FOR CODE COMPLIANCE
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02/02/2025
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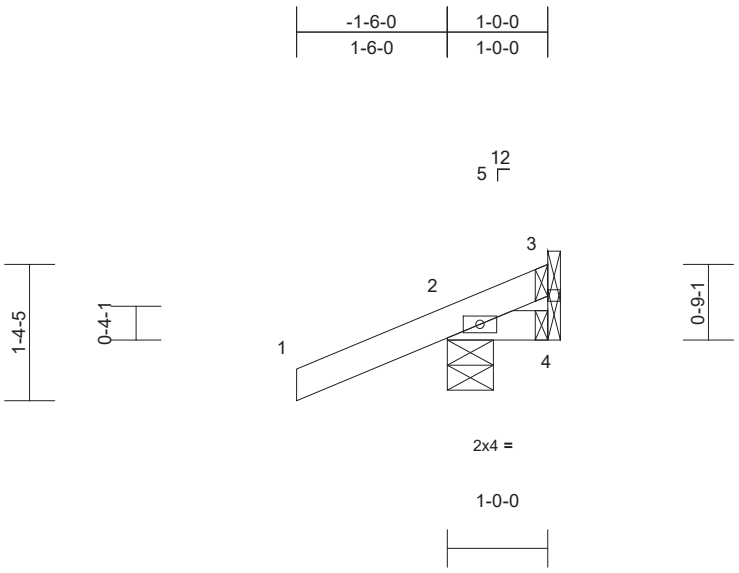
Job	Truss	Truss Type	Qty	Ply	
1024-049	J04	Jack-Open	4	1	T35433094 Job Reference (optional)

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

Run: 8.73 S Sep 25 2024 Print: 8.730 S Sep 25 2024 MiTek Industries, Inc. Thu Oct 31 14:32:27 ID:FnScrzYs1ZC67HcuZImGB0yRBAw-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:22.9

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	0.14	Vert(LL)	0.00	7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.02	Vert(CT)	0.00	7	>999	180		
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-MP							Weight: 6 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 1-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-5-8, 3= Mechanical, 4= Mechanical
Max Horiz 2=33 (LC 12)
Max Uplift 2=-69 (LC 12), 3=-6 (LC 1), 4=-23 (LC 1)
Max Grav 2=198 (LC 1), 3=11 (LC 12), 4=21 (LC 12)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-61/43
BOT CHORD 2-4=-47/64

NOTES
1) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
5) Bearings are assumed to be: , Joint 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 69 lb uplift at joint 2, 23 lb uplift at joint 4 and 6 lb uplift at joint 3.

LOAD CASE(S) Standard

REVIEWED FOR CODE COMPLIANCE
These plans have been reviewed for compliance with the current building codes. Performance of this review shall not alleviate the applicant from full responsibility to comply with all applicable requirements.
Scope of Review Performed by: Timothy Hunt
02/02/2025
PX3903 • PEP690
CT SOLUTIONS OF FLORIDA LLC
Any deviation from this plan is not permitted without prior written authorization.

JOAQUIN VELEZ LICENSE No 68182 STATE OF FLORIDA PROFESSIONAL ENGINEER

Joaquin Velez PE No.68182
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

November 1,2024

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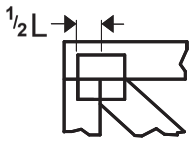
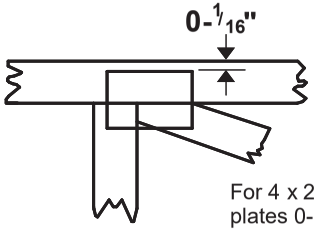
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

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.

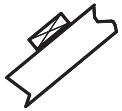
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 x 4

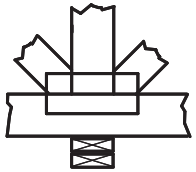
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

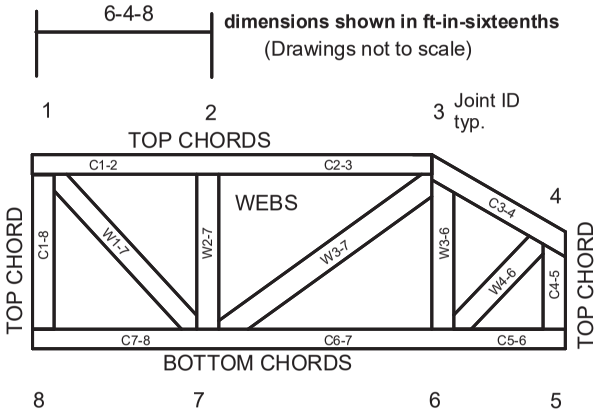


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

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

Numbering System



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

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

Product Code Approvals

ICC-ES Reports:

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

Design General Notes

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

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

MiTek®

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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