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

RE: 1024-057 - Wheeler Repair

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

Site Information:

Customer Info: Oneal Companies 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

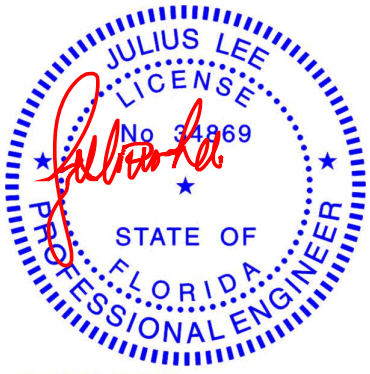
This package includes 2 individual, Truss Design Drawings and 0 Additional Drawings.
With my seal affixed to this sheet, I hereby certify that I am the Truss Design Engineer and this index sheet conforms to 61G15-31.003, section 5 of the Florida Board of Professional Engineers Rules.

No.	Seal#	Truss Name	Date
1	T35339897	AGE	10/23/24
2	T35339898	J01	10/23/24

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

Truss Design Engineer's Name: Lee, Julius
My license renewal date for the state of Florida is February 28, 2025.

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



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

October 23,2024

Job	Truss	Truss Type	Qty	Ply	Wheeler Repair	Units: 1.0 Eng: D.R	T35339897
1024-057	AGE	Hip Girder	1	1	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. Tue Oct 22 13:31:08
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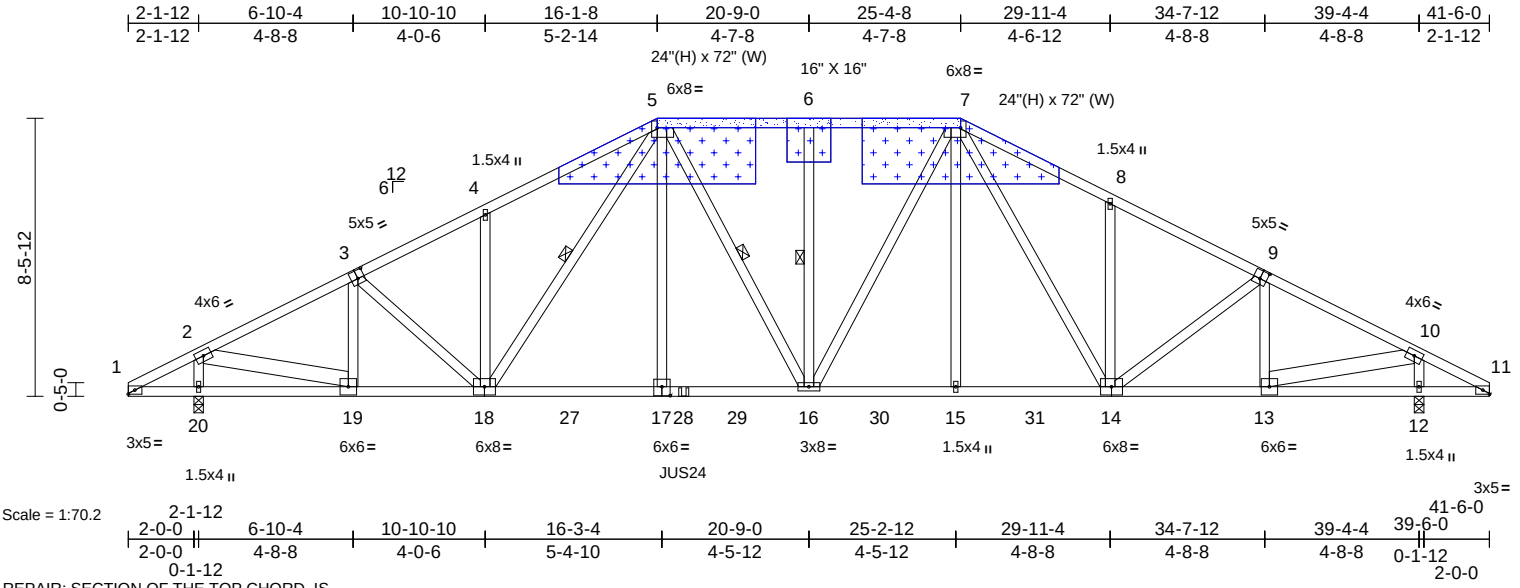
Page: 1



Scale = 1:70.2

REPAIR: SECTION OF THE TOP CHORD IS
DAMAGED FROM JNT 5 TO JNT 6
PLATES DAMAGED AT JNT 5 AND JNT 6

INSTALL 2 X 4 SP NO.2
CUT TO FIT TIGHT.

ATTACH 1/2" PLYWOOD OR OSB GUSSET (15/32" RATED SHEATHING 32/16 EXP 1)
TO EACH FACE OF TRUSS WITH (0.131" X 2.5" MIN.) NAILS PER THE FOLLOWING NAIL SCHEDULE:
2 X 3'S - 2 ROWS, 2 X 4'S - 3 ROWS, 2 X 6'S AND LARGER - 4 ROWS: SPACED @ 4" O.C.
NAILS TO BE DRIVEN FROM BOTH FACES. STAGGER SPACING FROM FRONT TO BACK FACE
FOR A NET 2" O.C. SPACING IN EACH COVERED TRUSS MEMBER. USE 2" MEMBER END DISTANCE.

Plate Offsets (X, Y): [3:0-2-8,0-3-0], [5:0-6-0,0-2-8], [7:0-6-0,0-2-8], [9:0-2-8,0-3-0], [17:0-3-0,0-3-4]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.59	Vert(LL)	-0.16	16-17	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.97	Vert(CT)	-0.31	16-17	>999	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.38	Horz(CT)	0.10	12	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 284 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2 *Except* 13-10,2-19:2x6 SP No.2

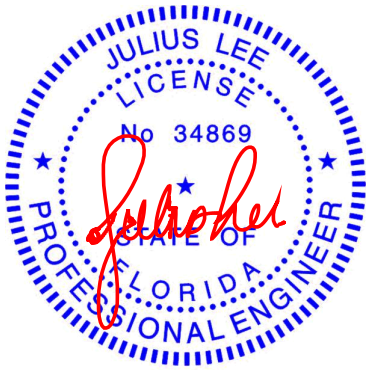
BRACING
TOP CHORD Structural wood sheathing directly applied or 3-0-5 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 5-16, 6-16, 5-18

REACTIONS (size) 12=0-3-8, 20=0-3-8
Max Horiz 20=149 (LC 7)
Max Uplift 12=-11 (LC 8), 20=-58 (LC 8)
Max Grav 12=2098 (LC 14), 20=2210 (LC 13)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 5-6=-2427/127, 6-7=-2427/127, 1-2=-38/62, 2-4=-2925/89, 4-5=-2974/157, 7-8=-2760/148, 8-10=-2729/83, 10-11=-34/70
BOT CHORD 1-20=-8/36, 19-20=-143/166, 16-19=0/2509, 15-16=0/2202, 13-15=0/2256, 12-13=-17/31, 11-12=-17/31
WEBS 5-17=0/746, 5-16=-126/176, 6-16=-309/58, 7-16=-31/612, 7-15=0/257, 2-20=-2050/93, 10-12=-1939/62, 7-14=-90/449, 8-14=-296/87, 9-14=-2/207, 9-13=-423/53, 10-13=0/2315, 2-19=-10/2451, 3-18=0/260, 3-19=-455/53, 4-18=-303/89, 5-18=-137/365

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=42ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) All bearings are assumed to be SP No.2 .
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 58 lb uplift at joint 20 and 11 lb uplift at joint 12.
9) Use MiTek JUS24 (With 4-10d nails into Girder & 2-10d nails into Truss) or equivalent at 16-11-4 from the left end to connect truss(es) to back face of bottom chord.
10) Fill all nail holes where hanger is in contact with lumber.
11) 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: 5-7=-60, 21-24=-20, 1-5=-60, 7-11=-60
Concentrated Loads (lb)
Vert: 28=-540 (B)



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

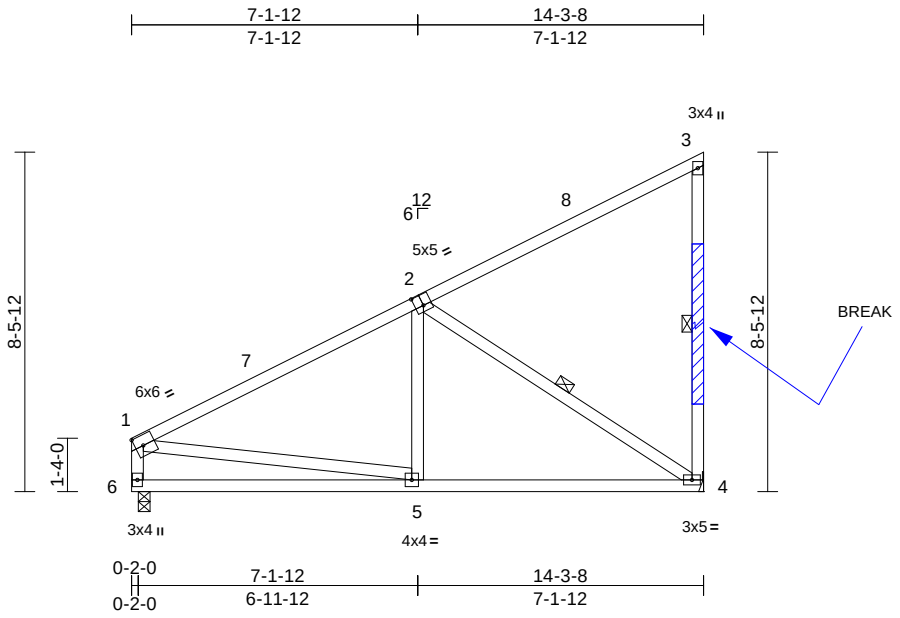
October 23,2024

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

Job	Truss	Truss Type	Qty	Ply	Wheeler Repair	Units: 1.0 Eng: D.R	T35339898
1024-057	J01	Jack-Closed	1	1	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. Tue Oct 22 13:31:09 ID:EOxqgNxxk09yjgCpWKseL7yQrva-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:57.6

REPAIR: TRUSS MEMBER(S) BROKEN.

APPLY 2 X 4 X 4' SP NO.2 SCAB TO ONE FACE OF TRUSS CENTERED ON DAMAGE/SPLICE OR AS SHOWN. ATTACH WITH (0.131" X 3") NAILS PER THE FOLLOWING NAIL SCHEDULE: 2 x 3'S - 1 ROW, 2 x 4'S - 2 ROWS, 2 x 6'S AND LARGER - 3 ROWS: SPACED @ 2" O.C. USE 2" MEMBER END DISTANCE.

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

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	0.48	Vert(LL)	-0.06	4-5	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.47	Vert(CT)	-0.11	4-5	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.19	Horz(CT)	0.01	4	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 87 lb	FT = 20%

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

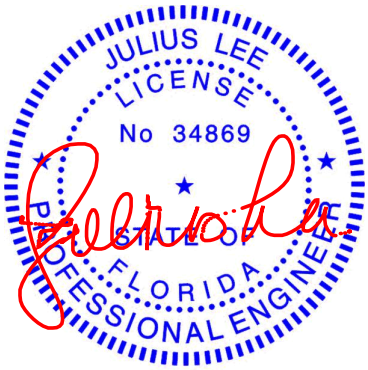
BRACING
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 3-4, 2-4

REACTIONS (size) 4= Mechanical, 6=0-3-8
Max Horiz 6=241 (LC 9)
Max Uplift 4=-24 (LC 9)
Max Grav 4=560 (LC 1), 6=560 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-6=-495/91, 1-3=-654/124, 3-4=-166/109
BOT CHORD 5-6=-376/406, 4-5=-186/520
WEBS 1-5=0/351, 2-5=0/277, 2-4=-594/128

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 0-1-12 to 3-1-12, Zone1 3-1-12 to 14-1-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
5) Bearings are assumed to be: Joint 6 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 24 lb uplift at joint 4.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard



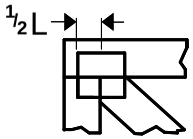
Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

October 23,2024

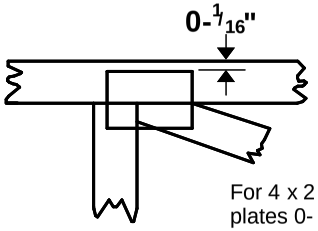
MiTek®
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

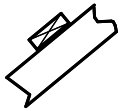
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 x 4

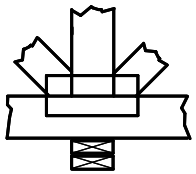
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

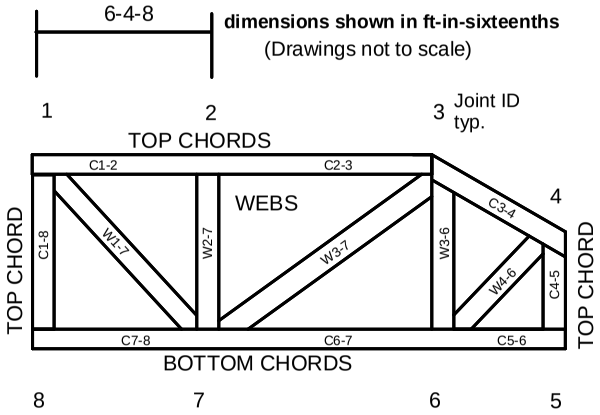


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

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

Numbering System



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

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

Product Code Approvals

ICC-ES Reports:

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

Design General Notes

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

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

MiTek®

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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

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

RE: 1024-057 - Wheeler New

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

Site Information:

Customer Info: Oneal Companies 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):

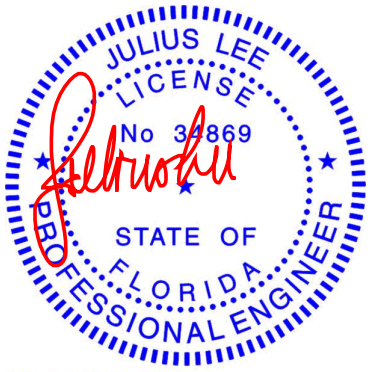
Design Code: FBC2023/TPI2014 Design Program: MiTek 20/20 8.7
Wind Code: ASCE 7-22 Wind Speed: 130 mph
Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 8 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
1	T35450274	A	11/4/24
2	T35450275	A1	11/4/24
3	T35450276	A1B	11/4/24
4	T35450277	A2	11/4/24
5	T35450278	A3	11/4/24
6	T35450279	A4	11/4/24
7	T35450280	A5	11/4/24
8	T35450281	AB	11/4/24

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

Truss Design Engineer's Name: Lee, Julius
My license renewal date for the state of Florida is February 28, 2025.



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

November 4,2024

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

Job	Truss	Truss Type	Qty	Ply	Wheeler New
1024-057	A	Common	1	1	T35450274
					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. Mon Nov 04 07:49:42 Page: 1
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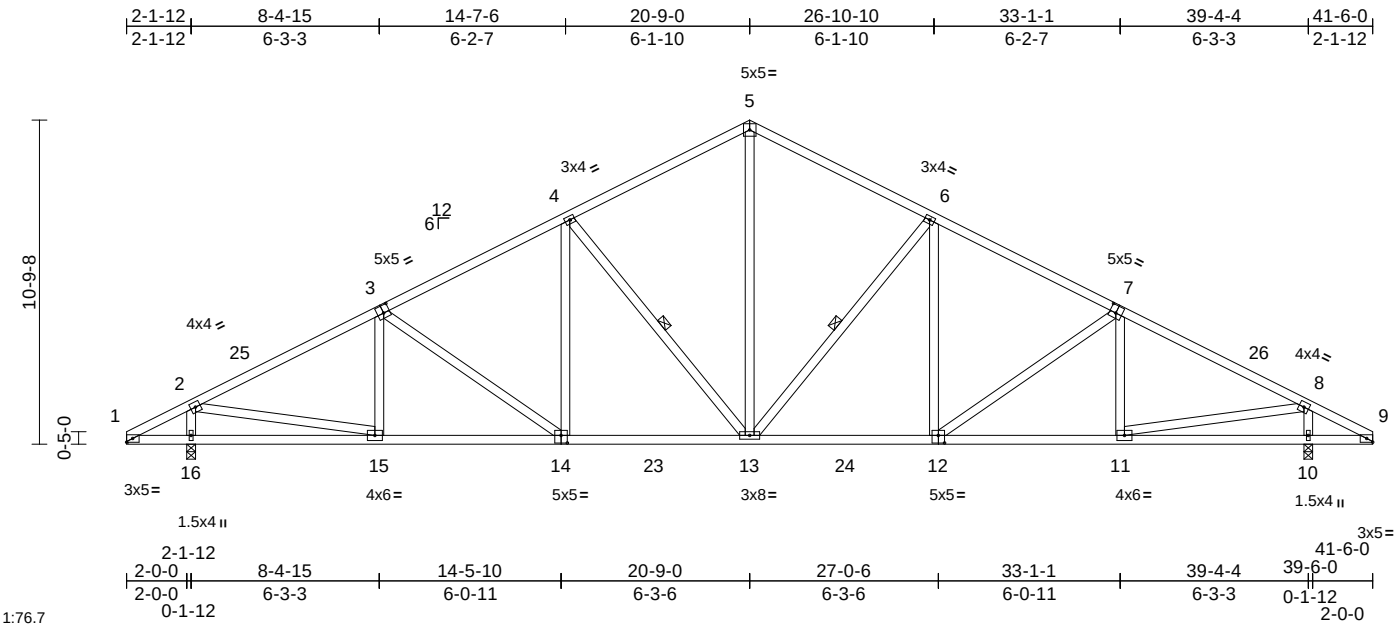


Scale = 1:76.7

Plate Offsets (X, Y): [3:0-2-8,0-3-0], [7:0-2-8,0-3-0], [12:0-2-8,0-3-0], [14:0-2-8,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.36	Vert(LL)	-0.15	12-13	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.63	Vert(CT)	-0.28	12-13	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.44	Horz(CT)	0.08	10	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 249 lb	FT = 20%

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

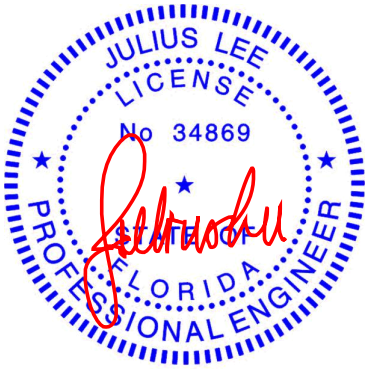
BRACING
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 4-13, 6-13

REACTIONS (size) 10=0-3-8, 16=0-3-8
Max Horiz 16=191 (LC 11)
Max Uplift 16=-36 (LC 12)
Max Grav 10=1854 (LC 18), 16=1854 (LC 17)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-124/7, 2-4=-2356/147, 4-5=-1741/192, 5-6=-1741/192, 6-8=-2356/147, 8-9=-124/9
BOT CHORD 1-16=-1/106, 15-16=-155/253, 13-15=0/2170, 11-13=0/2026, 10-11=0/106, 9-10=-1/106
WEBS 2-16=-1662/242, 8-10=-1661/242, 5-13=-43/1185, 4-13=-689/100, 3-15=-213/92, 2-15=-74/1960, 3-14=-211/43, 4-14=0/377, 6-13=-690/100, 6-12=0/377, 7-12=-211/49, 7-11=-213/92, 8-11=-74/1957

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=42ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 0-0-0 to 4-1-13, Zone1 4-1-13 to 20-9-0, Zone2 20-9-0 to 26-10-10, Zone1 26-10-10 to 41-6-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) All bearings are assumed to be SP No.2 .
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 36 lb uplift at joint 16.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard



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

November 4,2024

Job	Truss	Truss Type	Qty	Ply	Wheeler New
1024-057	A1	Hip	1	1	T35450275
					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. Mon Nov 04 07:49:43
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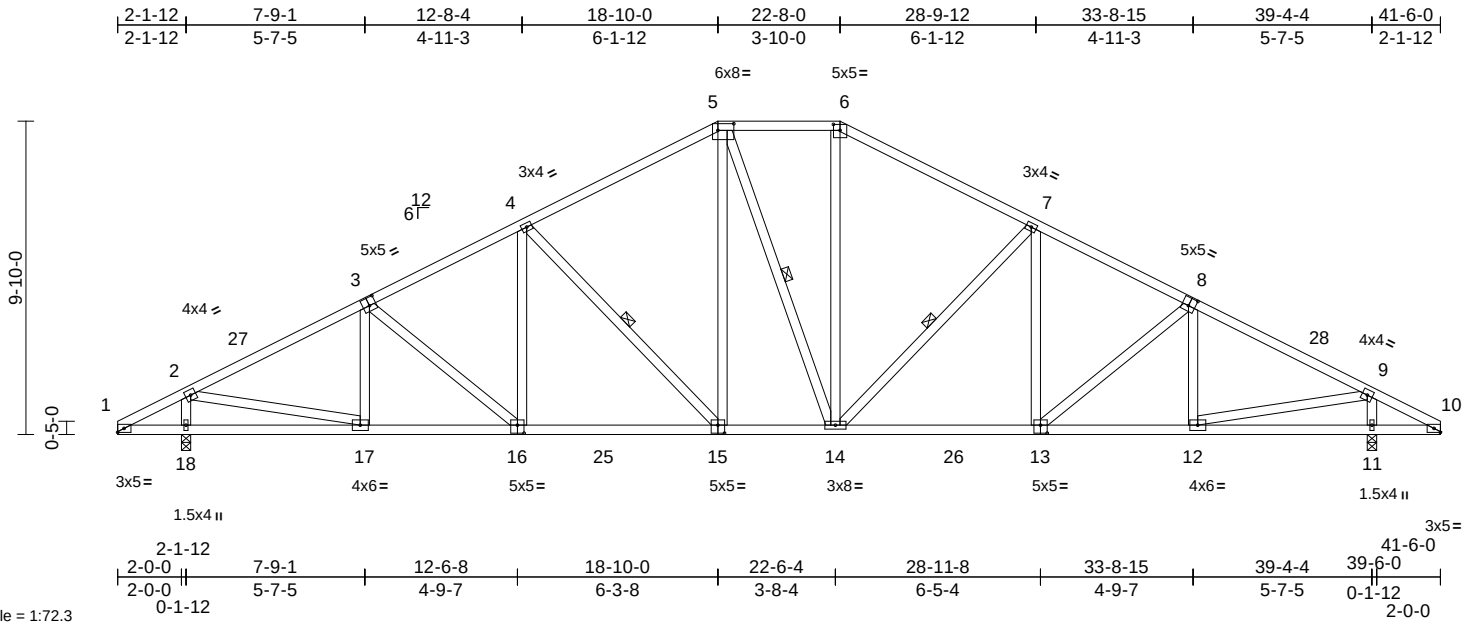
Page: 1



Scale = 1:72.3

Plate Offsets (X, Y): [3:0-2-8,0-3-0], [5:0-6-0,0-2-8], [6:0-2-8,0-2-4], [8:0-2-8,0-3-0], [13:0-2-8,0-3-0], [15:0-2-8,0-3-0], [16:0-2-8,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.36	Vert(LL)	-0.15	15-16	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.62	Vert(CT)	-0.29	15-16	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.43	Horz(CT)	0.08	11	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 264 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.
WEBS 1 Row at midpt 5-14, 4-15, 7-14

REACTIONS (size) 11=0-3-8, 18=0-3-8
Max Horiz 18=173 (LC 11)
Max Uplift 18=-36 (LC 12)
Max Grav 11=1851 (LC 18), 18=1851 (LC 17)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 5-6=-1606/172, 1-2=-92/20, 2-4=-2296/122, 4-5=-1856/161, 6-7=-1848/161, 7-9=-2296/122, 9-10=-92/20
BOT CHORD 1-18=-2/78, 17-18=-146/222, 14-17=0/2109, 12-14=0/1979, 11-12=0/78, 10-11=-2/78
WEBS 5-15=0/599, 5-14=-171/181, 6-14=0/574, 2-18=-1665/174, 2-17=-53/1945, 3-17=-275/74, 3-16=-66/56, 4-16=0/279, 4-15=-586/74, 9-11=-1664/174, 9-12=-53/1942, 7-14=-588/73, 7-13=0/281, 8-13=-66/56, 8-12=-275/73

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=42ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 0-0-0 to 4-1-13, Zone1 4-1-13 to 18-10-0, Zone3 18-10-0 to 22-8-0, Zone2 22-8-0 to 28-9-12, Zone1 28-9-12 to 41-6-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) All bearings are assumed to be SP No.2 .
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 36 lb uplift at joint 18.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

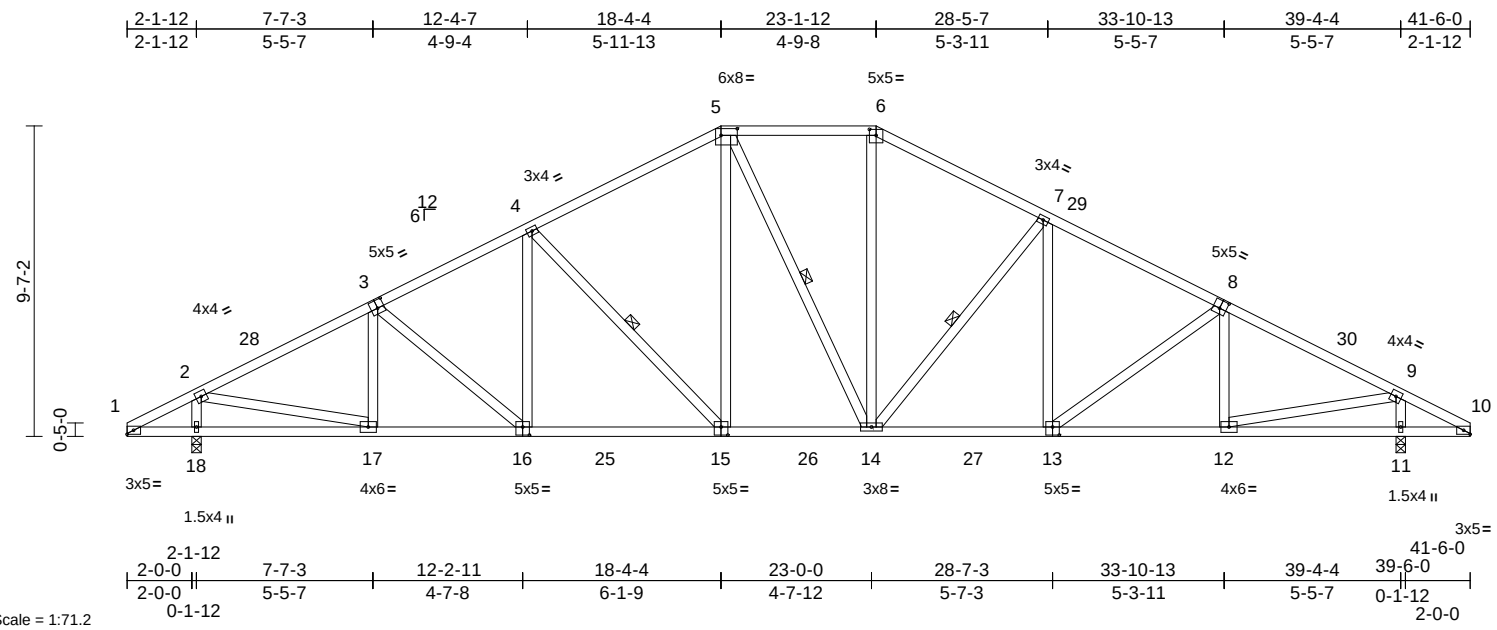
Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

November 4,2024

Job	Truss	Truss Type	Qty	Ply	Wheeler New
1024-057	A1B	Hip	1	1	T35450276
					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. Mon Nov 04 07:49:43 Page: 1
ID:pfwOQ_f3JxfNOhMvshFAjlyQrhI-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:71.2

Plate Offsets (X, Y): [3:0-2-8,0-3-0], [5:0-6-0,0-2-8], [6:0-2-8,0-2-4], [8:0-2-8,0-3-0], [13:0-2-8,0-3-0], [15:0-2-8,0-3-0], [16:0-2-8,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.33	Vert(LL)	-0.15	15-16	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.59	Vert(CT)	-0.27	15-16	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.44	Horz(CT)	0.08	11	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 262 lb	FT = 20%

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

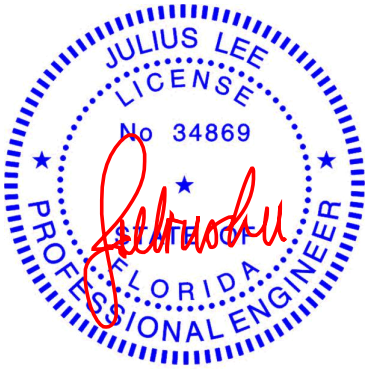
BRACING
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 5-14, 4-15, 7-14

REACTIONS (size) 11=0-3-8, 18=0-3-8
Max Horiz 18=-169 (LC 10)
Max Uplift 18=-36 (LC 12)
Max Grav 11=1867 (LC 18), 18=1871 (LC 17)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 5-6=-1667/172, 1-2=-92/26, 2-4=-2314/125, 4-5=-1931/162, 6-7=-1909/165, 7-9=-2317/127, 9-10=-92/35
BOT CHORD 1-18=-3/78, 17-18=-146/212, 14-17=0/2124, 12-14=0/2002, 11-12=0/79, 10-11=-3/79
WEBS 5-15=0/622, 5-14=-170/163, 6-14=0/598, 2-18=-1688/173, 2-17=-56/1975, 3-16=-53/76, 3-17=-289/73, 4-16=0/247, 4-15=-542/71, 9-11=-1688/169, 7-14=-554/71, 7-13=0/271, 8-13=-87/50, 8-12=-281/80, 9-12=-58/1990

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=42ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 0-0-0 to 4-1-13, Zone1 4-1-13 to 18-4-4, Zone3 18-4-4 to 23-1-12, Zone2 23-1-12 to 29-0-3, Zone1 29-0-3 to 41-6-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) All bearings are assumed to be SP No.2 .
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 36 lb uplift at joint 18.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard



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

November 4,2024

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

Job	Truss	Truss Type	Qty	Ply	Wheeler New
1024-057	A2	Hip	1	1	T35450277
					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. Mon Nov 04 07:49:43 Page: 1
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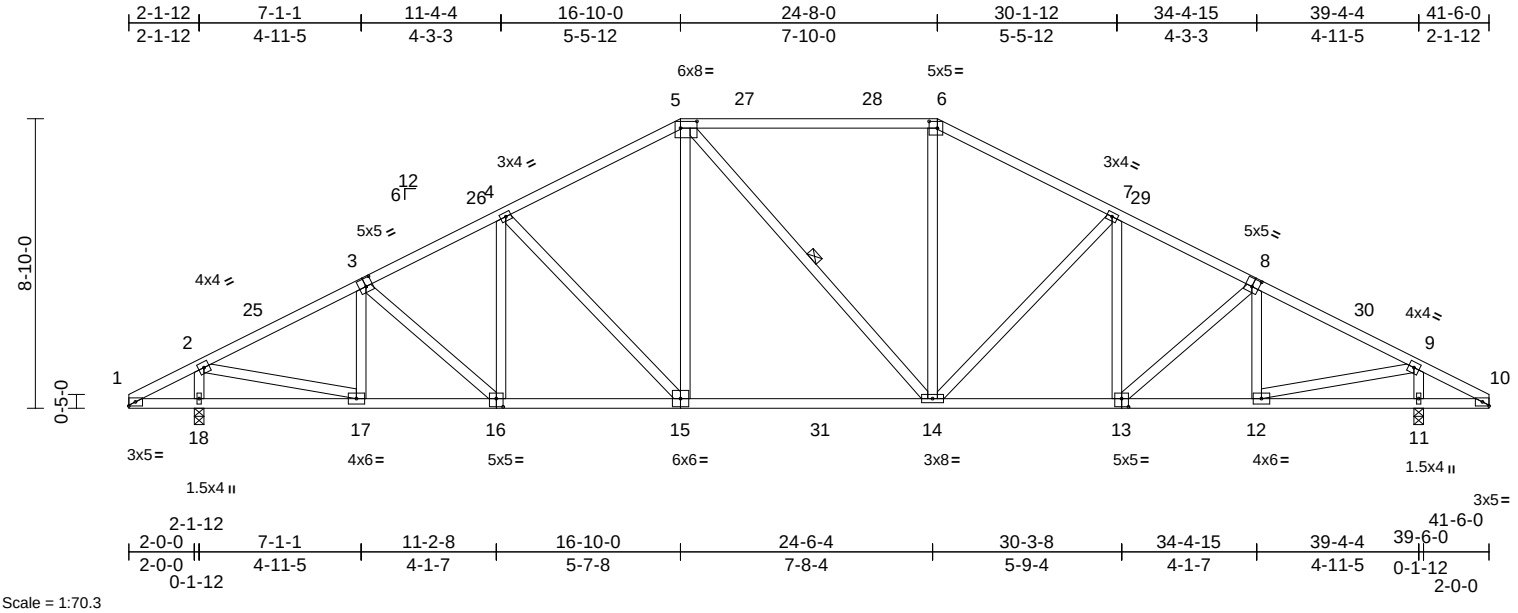


Scale = 1:70.3

Plate Offsets (X, Y): [3:0-2-8,0-3-0], [5:0-6-0,0-2-8], [6:0-3-0,0-2-8], [8:0-2-8,0-3-0], [13:0-2-8,0-3-0], [16:0-2-8,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.75	Vert(LL)	-0.20	14-15	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.73	Vert(CT)	-0.36	14-15	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.43	Horz(CT)	0.08	11	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 253 lb	FT = 20%

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

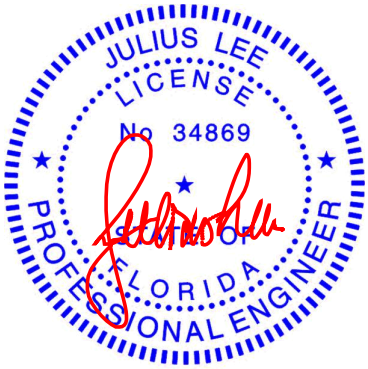
BRACING
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 5-14

REACTIONS (size) 11=0-3-8, 18=0-3-8
Max Horiz 18=155 (LC 11)
Max Uplift 18=-36 (LC 12)
Max Grav 11=1840 (LC 18), 18=1847 (LC 17)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-91/48, 2-4=-2277/124, 4-5=-2020/155, 5-6=-1756/167, 6-7=-2000/155, 7-9=-2267/123, 9-10=-91/48
BOT CHORD 1-18=-4/80, 17-18=-143/182, 14-17=0/2075, 12-14=0/1950, 11-12=0/80, 10-11=-4/80
WEBS 5-15=0/577, 5-14=-157/162, 6-14=0/526, 2-18=-1679/165, 2-17=-60/1949, 3-16=-13/111, 3-17=-333/73, 4-16=0/144, 4-15=-374/65, 9-11=-1671/165, 9-12=-60/1938, 7-14=-382/64, 7-13=0/147, 8-13=-12/110, 8-12=-334/72

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=42ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 0-0-0 to 4-1-13, Zone1 4-1-13 to 16-10-0, Zone2 16-10-0 to 22-8-7, Zone1 22-8-7 to 24-8-0, Zone2 24-8-0 to 30-6-7, Zone1 30-6-7 to 41-6-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) All bearings are assumed to be SP No.2 .
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 36 lb uplift at joint 18.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard



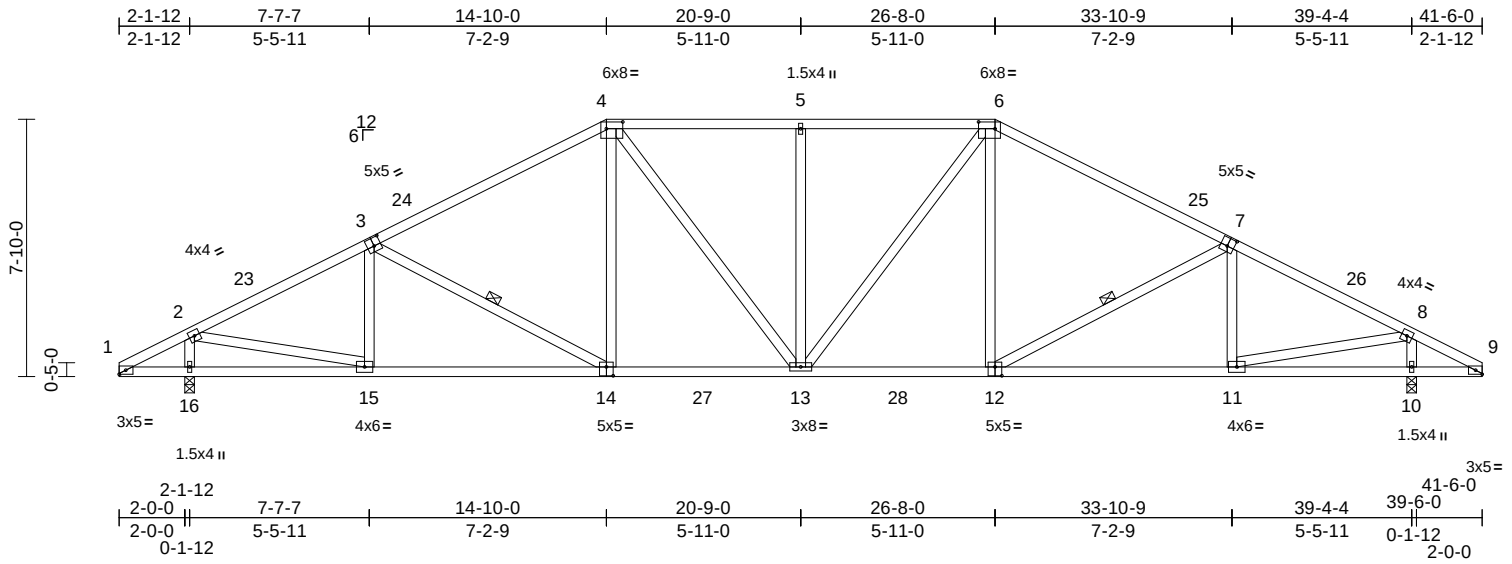
Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

November 4,2024

Job	Truss	Truss Type	Qty	Ply	Wheeler New
1024-057	A3	Hip	1	1	T35450278
					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. Mon Nov 04 07:49:43 ID:ovdAUJx4klKJJx6hrMncUyyQsOZ-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:70.2

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

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	0.53	Vert(LL)	-0.14	13-14	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.68	Vert(CT)	-0.27	14-15	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.45	Horz(CT)	0.08	10	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 242 lb	FT = 20%

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

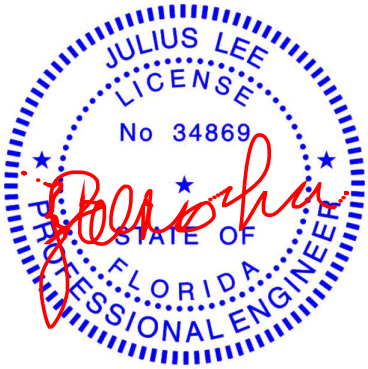
BRACING
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 3-14, 7-12

REACTIONS (size) 10=0-3-8, 16=0-3-8
Max Horiz 16=-137 (LC 10)
Max Uplift 16=-36 (LC 12)
Max Grav 10=1855 (LC 18), 16=1855 (LC 17)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-91/58, 2-4=-2329/134, 4-5=-2056/157, 5-6=-2056/157, 6-8=-2329/134, 8-9=-91/58
BOT CHORD 1-16=-5/82, 15-16=-127/154, 13-15=-10/2123, 11-13=-6/2021, 10-11=-5/82, 9-10=-5/82
WEBS 4-14=0/382, 4-13=-19/418, 5-13=-374/85, 6-13=-19/418, 6-12=0/382, 2-16=-1690/160, 2-15=-78/2047, 3-15=-267/100, 3-14=-213/59, 7-11=-267/100, 7-12=-213/59, 8-11=-78/2045, 8-10=-1689/160

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=42ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 0-0-0 to 4-1-13, Zone1 4-1-13 to 14-10-0, Zone2 14-10-0 to 20-9-0, Zone1 20-9-0 to 26-8-0, Zone2 26-8-0 to 32-6-7, Zone1 32-6-7 to 41-6-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) All bearings are assumed to be SP No.2 .
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 36 lb uplift at joint 16.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard



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

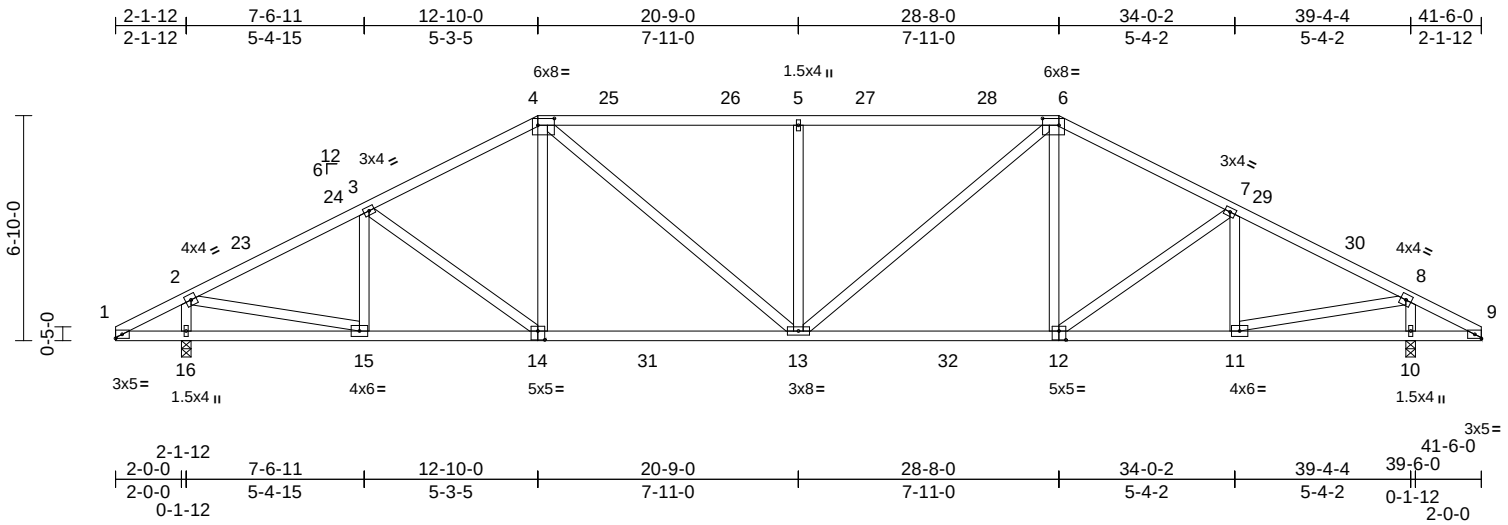
November 4,2024

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

Job	Truss	Truss Type	Qty	Ply	Wheeler New
1024-057	A4	Hip	1	1	T35450279
					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. Mon Nov 04 07:49:43 ID:oA8b379kkzTvsYvzLQbcgXyQsOI-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:70

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

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	0.63	Vert(LL)	-0.20	13-14	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.80	Vert(CT)	-0.37	13-14	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.44	Horz(CT)	0.08	10	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 233 lb	FT = 20%

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

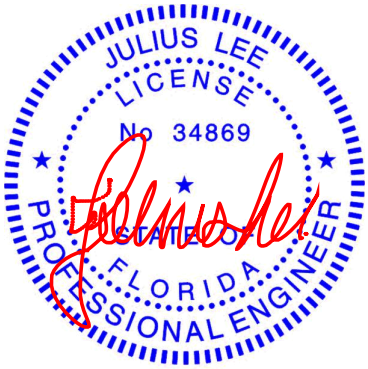
BRACING
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

REACTIONS (size) 10=0-3-8, 16=0-3-8
Max Horiz 16=-118 (LC 10)
Max Uplift 16=-36 (LC 12)
Max Grav 10=1858 (LC 18), 16=1858 (LC 17)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-93/31, 2-3=-2296/82, 3-4=-2276/122, 4-5=-2414/145, 5-6=-2414/145, 6-7=-2277/122, 7-8=-2292/81, 8-9=-93/35
BOT CHORD 1-16=-2/81, 15-16=-96/155, 13-15=-6/2069, 11-13=-2/1977, 10-11=0/82, 9-10=-2/82
WEBS 4-14=0/320, 4-13=-21/666, 5-13=-537/124, 6-13=-21/666, 6-12=0/320, 2-16=-1671/171, 3-14=-75/131, 3-15=-295/78, 2-15=-73/1975, 8-10=-1673/170, 7-12=-73/135, 7-11=-300/79, 8-11=-74/1976

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=42ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 0-0-0 to 4-1-13, Zone1 4-1-13 to 12-10-0, Zone2 12-10-0 to 18-8-7, Zone1 18-8-7 to 28-8-0, Zone2 28-8-0 to 34-6-7, Zone1 34-6-7 to 41-6-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) All bearings are assumed to be SP No.2 .
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 36 lb uplift at joint 16.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard



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

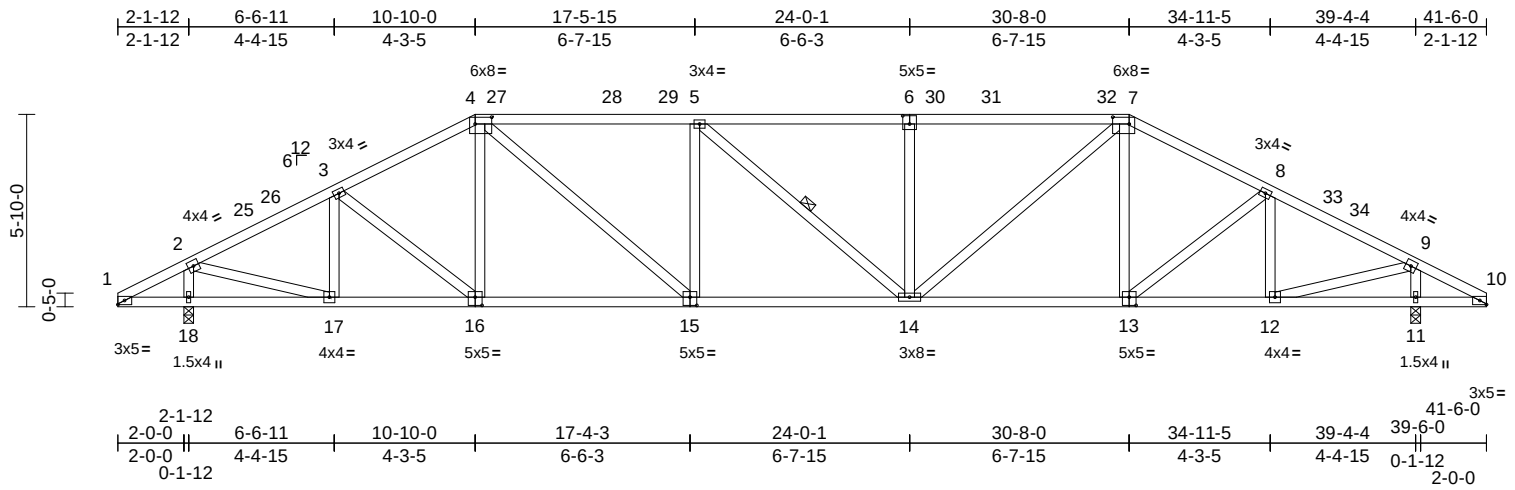
November 4,2024

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

Job	Truss	Truss Type	Qty	Ply	Wheeler New	
1024-057	A5	Hip	1	1	Job Reference (optional)	T35450280

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

Run: 8.73 S Sep 25 2024 Print: 8.730 S Sep 25 2024 MiTek Industries, Inc. Mon Nov 04 07:49:44 Page: 1
ID:VMHojMUgNGs4biT9QbaxGEyQsNt-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:69.9

Plate Offsets (X, Y): [4:0-6-0,0-2-8], [6:0-2-8,0-3-0], [7:0-6-0,0-2-8], [13:0-2-8,0-3-0], [15:0-2-8,0-3-0], [16:0-2-8,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.46	Vert(LL)	-0.15	14-15	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.63	Vert(CT)	-0.31	14-15	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.39	Horz(CT)	0.09	11	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 235 lb	FT = 20%

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

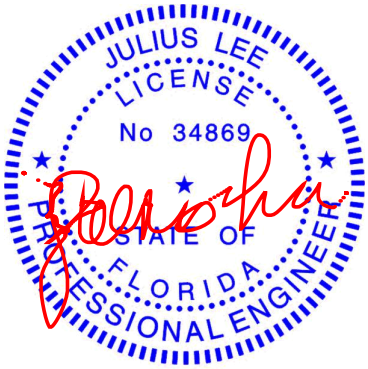
BRACING
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 5-14

REACTIONS (size) 11=0-3-8, 18=0-3-8
Max Horiz 18=-100 (LC 10)
Max Uplift 18=-36 (LC 12)
Max Grav 11=1660 (LC 1), 18=1660 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-91/65, 2-3=-1935/69, 3-4=-2053/107, 4-5=-2428/131, 5-7=-2441/132, 7-8=-2054/106, 8-9=-1934/69, 9-10=-91/65
BOT CHORD 1-18=-14/83, 17-18=-95/111, 14-17=-1/2439, 12-14=0/1788, 11-12=-14/83, 10-11=-14/83
WEBS 4-16=-35/157, 7-13=-33/161, 5-15=-454/97, 4-15=-25/907, 5-14=-55/59, 6-14=-415/103, 7-14=-26/915, 2-18=-1546/155, 3-16=-4/248, 3-17=-393/69, 2-17=-68/1746, 9-11=-1545/155, 8-13=-3/249, 8-12=-394/69, 9-12=-68/1746

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=42ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 0-0-0 to 4-1-13, Zone1 4-1-13 to 10-10-0, Zone2 10-10-0 to 16-8-7, Zone1 16-8-7 to 30-8-0, Zone2 30-8-0 to 36-6-7, Zone1 36-6-7 to 41-6-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) All bearings are assumed to be SP No.2 .
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 36 lb uplift at joint 18.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard



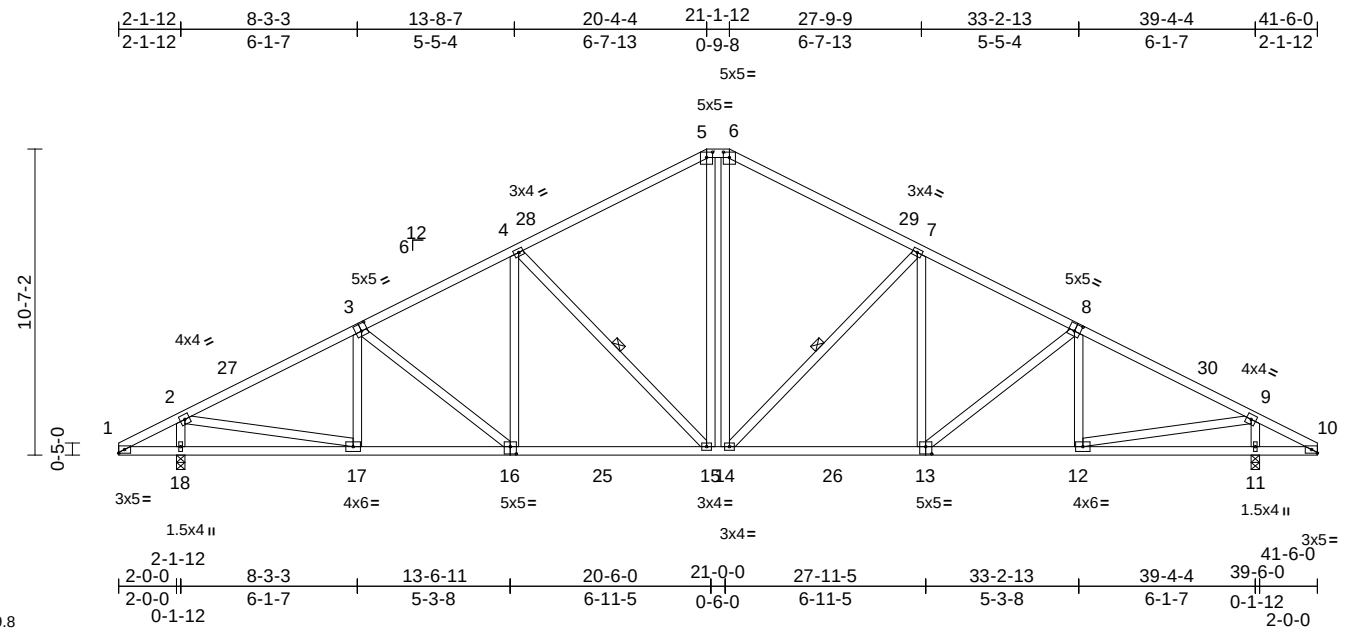
Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

November 4,2024

Job	Truss	Truss Type	Qty	Ply	Wheeler New
1024-057	AB	Hip	1	1	T35450281
					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. Mon Nov 04 07:49:44 Page: 1
ID:S2tWICExdujK8cCTYRJoShyQrwV-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:79.8

Plate Offsets (X, Y): [3:0-2-8,0-3-0], [5:0-2-8,0-2-4], [6:0-2-8,0-2-4], [8:0-2-8,0-3-0], [13:0-2-8,0-3-0], [16:0-2-8,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.37	Vert(LL)	-0.17	15-16	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.68	Vert(CT)	-0.31	15-16	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.43	Horz(CT)	0.08	11	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 260 lb	FT = 20%

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

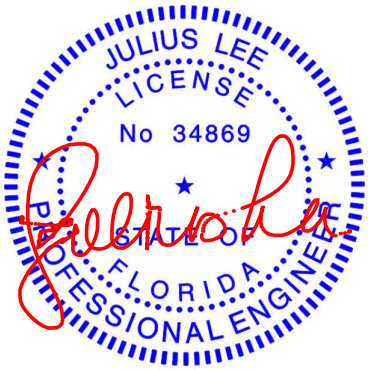
BRACING
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 7-14, 4-15

REACTIONS (size) 11=0-3-8, 18=0-3-8
Max Horiz 18=187 (LC 11)
Max Uplift 18=-36 (LC 12)
Max Grav 11=1857 (LC 18), 18=1857 (LC 17)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 5-6=-1512/164, 1-2=-93/7, 2-4=-2340/113, 4-5=-1770/156, 6-7=-1770/156, 7-9=-2340/113, 9-10=-95/9
BOT CHORD 1-18=-1/102, 17-18=-151/253, 15-17=0/2153, 14-15=0/1576, 12-14=0/2012, 11-12=0/105, 10-11=-1/105
WEBS 5-15=-25/616, 6-14=-25/616, 2-18=-1660/176, 9-11=-1659/176, 9-12=-42/1939, 7-14=-682/81, 7-13=0/348, 8-13=-140/44, 8-12=-232/76, 2-17=-42/1942, 3-17=-232/76, 3-16=-140/38, 4-16=0/348, 4-15=-682/81

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=42ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 0-0-0 to 4-1-13, Zone1 4-1-13 to 20-4-4, Zone3 20-4-4 to 21-1-12, Zone2 21-1-12 to 27-0-3, Zone1 27-0-3 to 41-6-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) All bearings are assumed to be SP No.2 .
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 36 lb uplift at joint 18.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard



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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

November 4,2024

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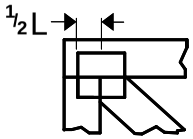
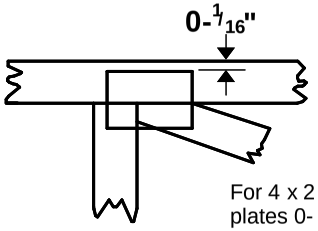
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

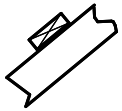
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 x 4

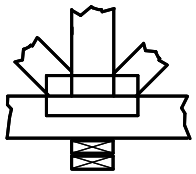
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

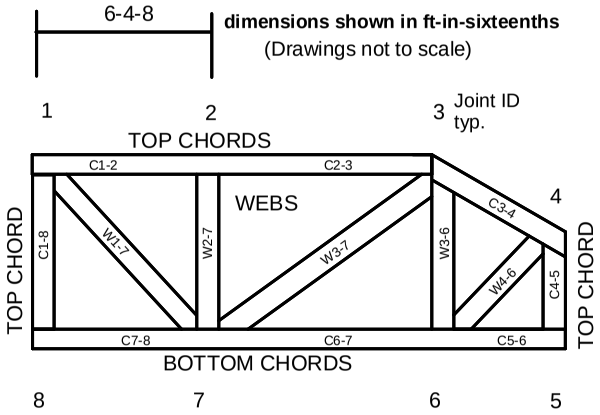


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

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

Numbering System



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

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

Product Code Approvals

ICC-ES Reports:

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

Design General Notes

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

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

MiTek®

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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