



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

RE: Bay V - Bay V

MiTek, Inc.

16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200

Site Information:

Customer Info: FL Homes Project Name: . Model: Bay V
Lot/Block: . Subdivision: .
Address: ., .
City: Columbia County State: FL

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

Name: License #:
Address:
City: State:

General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):

Design Code: FBC2023/TPI2014 Design Program: MiTek 20/20 8.8
Wind Code: ASCE 7-22 Wind Speed: 130 mph
Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 15 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.

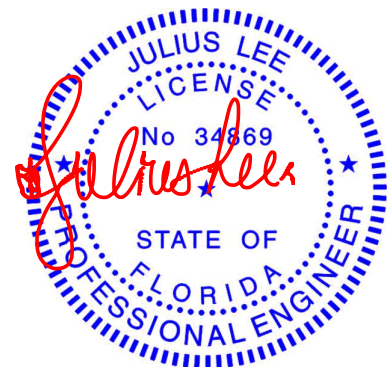
No.	Seal#	Truss Name	Date
1	T37759588	A01	6/29/25
2	T37759589	A02	6/29/25
3	T37759590	A02A	6/29/25
4	T37759591	A03	6/29/25
5	T37759592	A03A	6/29/25
6	T37759593	A04	6/29/25
7	T37759594	A04A	6/29/25
8	T37759595	A04B	6/29/25
9	T37759596	B01	6/29/25
10	T37759597	B02	6/29/25
11	T37759598	CJ01	6/29/25
12	T37759599	J01	6/29/25
13	T37759600	J02	6/29/25
14	T37759601	J03	6/29/25
15	T37759602	J04	6/29/25

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

Truss Design Engineer's Name: Lee, Julius

My license renewal date for the state of Florida is February 28, 2027.

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



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

June 30, 2025

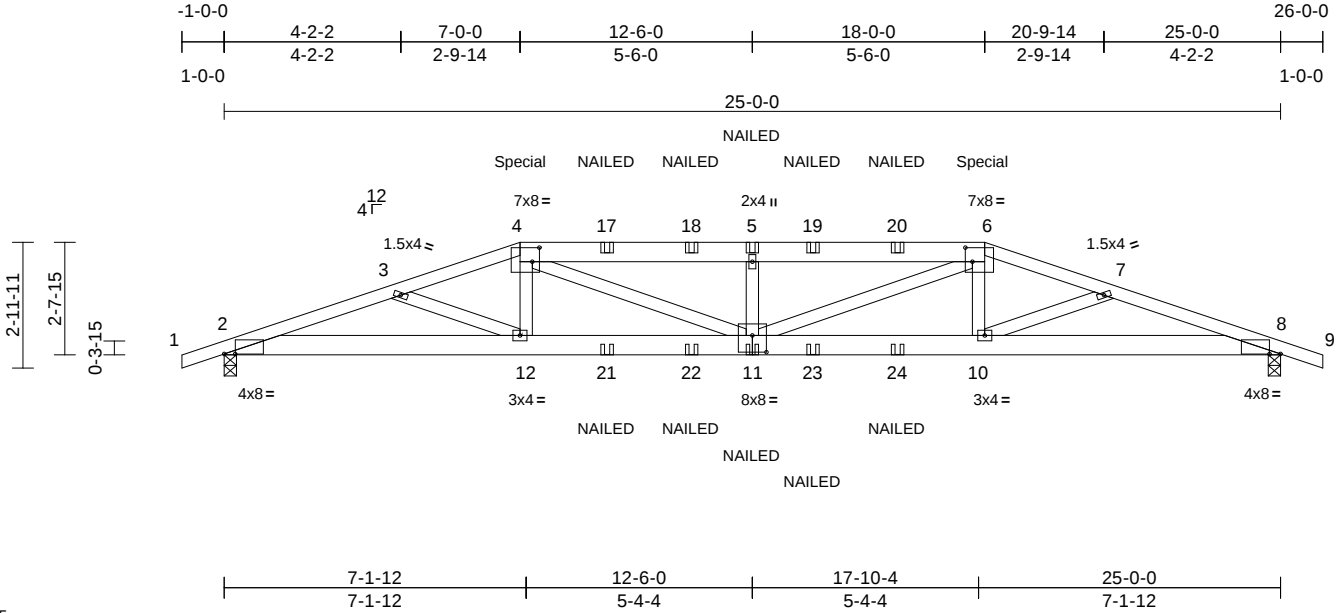
Job	Truss	Truss Type	Qty	Ply	Bay V	T37759588
Bay V	A01	Hip Girder	2	1	Job Reference (optional)	

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

Run: 8.83 S Jun 11 2025 Print: 8.830 S Jun 11 2025 MiTek Industries, Inc. Fri Jun 27 11:22:39

Page: 1

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Scale = 1:54.5

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

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	0.79	Vert(LL)	-0.30	11	>980	240	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.51	Vert(CT)	-0.61	11	>490	180	
BCLL	0.0*	Rep Stress Incr	NO	WB	0.37	Horz(CT)	0.10	8	n/a	n/a	
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							
Weight: 143 lb FT = 20%											

LUMBER

TOP CHORD 2x4 SP No.2 *Except* 4-6:2x6 SP No.2
BOT CHORD 2x6 SP 2400F 2.0E
WEBS 2x4 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or
2-0-7 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc
bracing.

REACTIONS (size) 2=0-3-8, 8=0-3-8
Max Horiz 2=-28 (LC 6)
Max Uplift 2=-170 (LC 8), 8=-170 (LC 8)
Max Grav 2=2126 (LC 1), 8=2126 (LC 1)

FORCES (lb) - Maximum Compression/Maximum
Tension
TOP CHORD 1-2=0/22, 2-3=-5805/457, 3-4=-5683/447,
4-5=-6896/571, 5-6=-6896/571,
6-7=-5683/447, 7-8=-5805/457, 8-9=0/22
BOT CHORD 2-12=-392/5465, 10-12=-359/5430,
8-10=-392/5465
WEBS 4-12=0/738, 4-11=-155/1651, 5-11=-962/284,
6-11=-155/1651, 6-10=0/738, 3-12=-89/167,
7-10=-89/167

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=25ft; 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
- 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) Provide mechanical connection (by others) of truss to
bearing plate capable of withstanding 170 lb uplift at joint
2 and 170 lb uplift at joint 8.
- 8) "NAILED" indicates 3-10d (0.148"x3") or 3-12d
(0.148"x3.25") toe-nails per NDS guidelines.
- 9) Hanger(s) or other connection device(s) shall be
provided sufficient to support concentrated load(s) 221
lb down and 116 lb up at 7-0-0, and 221 lb down and
116 lb up at 18-0-0 on top chord, and 423 lb down at
7-0-0, and 423 lb down at 17-11-4 on bottom chord.
The design/selection of such connection device(s) is the
responsibility of others.
- 10) 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, 4-6=-60, 6-9=-60, 2-8=-20
Concentrated Loads (lb)
Vert: 4=-174 (F), 6=-174 (F), 12=-412 (F), 11=-66 (F),
5=-127 (F), 10=-412 (F), 17=-127 (F), 18=-127 (F),
19=-127 (F), 20=-127 (F), 21=-66 (F), 22=-66 (F),
23=-66 (F), 24=-66 (F)



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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

June 30,2025

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

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

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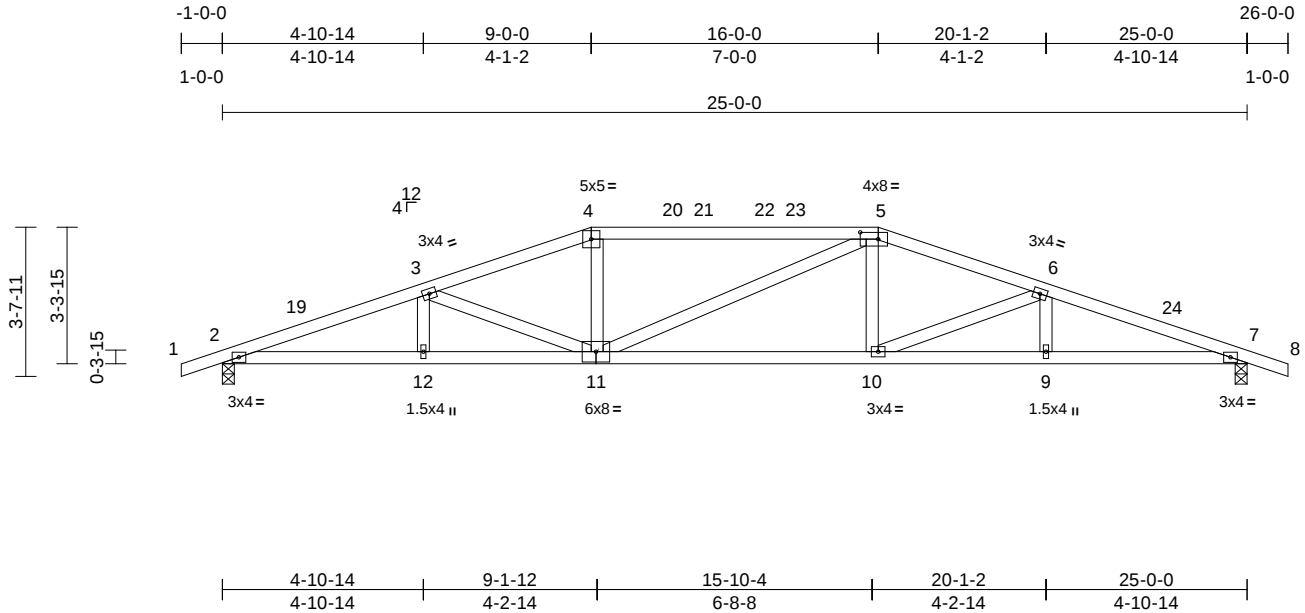
Job	Truss	Truss Type	Qty	Ply	Bay V	T37759589
Bay V	A02	Hip	1	1	Job Reference (optional)	

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

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Scale = 1:56.2

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

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	0.66	Vert(LL)	-0.14	10-11	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.61	Vert(CT)	-0.32	10-11	>952	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.09	7	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

BRACING

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

REACTIONS

(size) 2=0-3-8, 7=0-3-8
Max Horiz 2=-35 (LC 10)
Max Uplift 2=-23 (LC 12), 7=-23 (LC 12)
Max Grav 2=1060 (LC 1), 7=1060 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/19, 2-3=-2531/224, 3-4=-2082/207,
4-5=-1956/215, 5-6=-2080/208,
6-7=-2531/224, 7-8=0/19

BOT CHORD 2-12=-171/2374, 10-12=-171/2374,
9-10=-175/2374, 7-9=-175/2374

WEBS 3-11=-467/61, 4-11=0/371, 5-11=-164/163,
5-10=0/371, 6-10=-469/60, 3-12=0/149,
6-9=0/150

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-22; Vult=130mph (3-second gust)
Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft;
B=45ft; L=25ft; eave=4ft; Cat. II; Exp B; Enclosed;
MWFRS (directional) and C-C Zone3 1-0-0 to 2-0-0,
Zone1 2-0-0 to 9-0-0, Zone2 9-0-0 to 13-2-15, Zone1
13-2-15 to 16-0-0, Zone2 16-0-0 to 20-1-2, Zone1 20-1-2
to 26-0-0 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
- Building Designer / Project engineer responsible for
verifying applied roof live load shown covers rain loading
requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.

- This truss has been designed for a 10.0 psf bottom
chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf
on the bottom chord in all areas where a rectangle
3-06-00 tall by 2-00-00 wide will fit between the bottom
chord and any other members.
- Provide mechanical connection (by others) of truss to
bearing plate capable of withstanding 23 lb uplift at joint
2 and 23 lb uplift at joint 7.
- This truss design requires that a minimum of 7/16"
structural wood sheathing be applied directly to the top
chord and 1/2" gypsum sheetrock be applied directly to
the bottom chord.

LOAD CASE(S) Standard



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Date:

June 30,2025

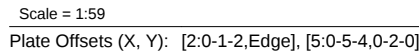
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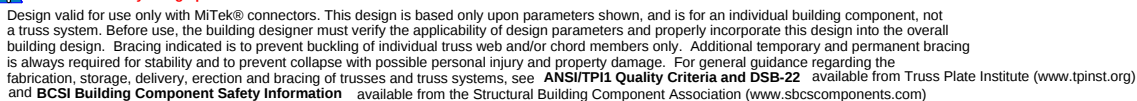


LUMBER		5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
TOP CHORD	2x4 SP No.2	6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
BOT CHORD	2x4 SP No.2	7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 77 lb uplift at joint 2 and 19 lb uplift at joint 7.
WEBS	2x4 SP No.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.
BRACING		LOAD CASE(S) Standard
TOP CHORD	Structural wood sheathing directly applied.	
BOT CHORD	Rigid ceiling directly applied.	
REACTIONS	(size) 2=0-3-8, 7=0-3-8	
	Max Horiz 2=44 (LC 11)	
	Max Uplift 2=-77 (LC 12), 7=-19 (LC 12)	
	Max Grav 2=1190 (LC 1), 7=1050 (LC 1)	
FORCES	(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=0/57, 2-3=-2390/199, 3-4=-2024/198, 4-5=-1909/207, 5-6=-2049/191, 6-7=-2502/197, 7-8=0/19	
BOT CHORD	2-12=-145/2225, 10-12=-145/2225, 9-10=-149/2347, 7-9=-149/2347	
WEBS	3-11=-355/42, 4-11=0/363, 5-11=-170/144, 5-10=0/370, 6-10=-470/62, 3-12=0/136, 6-9=0/150	

- 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=25ft; eave=4ft; Cat. II; Exp B; Enclosed;
 MWFRS (directional) and C-C Zone3 -3-0-0 to 0-0-0,
 Zone1 0-0-0 to 9-0-0, Zone2 9-0-0 to 13-2-15, Zone1
 13-2-15 to 16-0-0, Zone2 16-0-0 to 20-1-2, Zone1 20-1-2
 to 26-0-0 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.



June 30, 2025



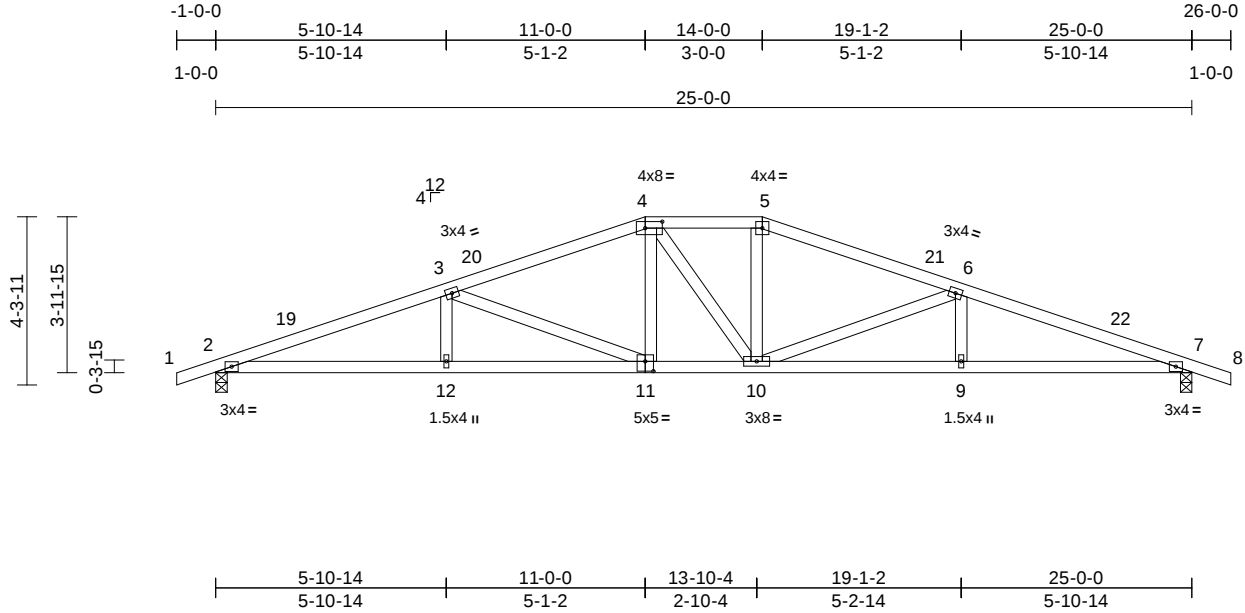
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Chesterfield, MO 63017
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Job	Truss	Truss Type	Qty	Ply	Bay V	T37759591
Bay V	A03	Hip	1	1	Job Reference (optional)	

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

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Page: 1



Scale = 1:59

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	0.36	Vert(LL)	-0.13	10-11	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.64	Vert(CT)	-0.27	11-12	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.38	Horz(CT)	0.09	7	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 117 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, 7=0-3-8
Max Horiz 2=43 (LC 11)
Max Uplift 2=-23 (LC 12), 7=-23 (LC 12)
Max Grav 2=1060 (LC 1), 7=1060 (LC 1)

FORCES

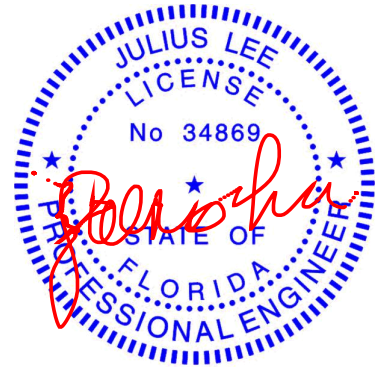
(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/19, 2-3=-2488/205, 3-4=-1823/193,
4-5=-1681/213, 5-6=-1812/204,
6-7=-2487/216, 7-8=0/19
BOT CHORD 2-12=-148/2331, 10-12=-148/2331,
9-10=-163/2331, 7-9=-163/2331
WEBS 3-12=0/229, 3-11=-707/68, 4-11=0/341,
4-10=-131/141, 5-10=0/343, 6-10=-715/68,
6-9=0/231

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-22; Vult=130mph (3-second gust)
Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft;
B=45ft; L=25ft; eave=4ft; Cat. II; Exp B; Enclosed;
MWFRS (directional) and C-C Zone3 1-0-0 to 2-0-0,
Zone1 2-0-0 to 11-0-0, Zone3 11-0-0 to 14-0-0, Zone2
14-0-0 to 18-2-15, Zone1 18-2-15 to 26-0-0 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
- Building Designer / Project engineer responsible for
verifying applied roof live load shown covers rain loading
requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.

- This truss has been designed for a 10.0 psf bottom
chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf
on the bottom chord in all areas where a rectangle
3-06-00 tall by 2-00-00 wide will fit between the bottom
chord and any other members.
- Provide mechanical connection (by others) of truss to
bearing plate capable of withstanding 23 lb uplift at joint
2 and 23 lb uplift at joint 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



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

June 30,2025

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

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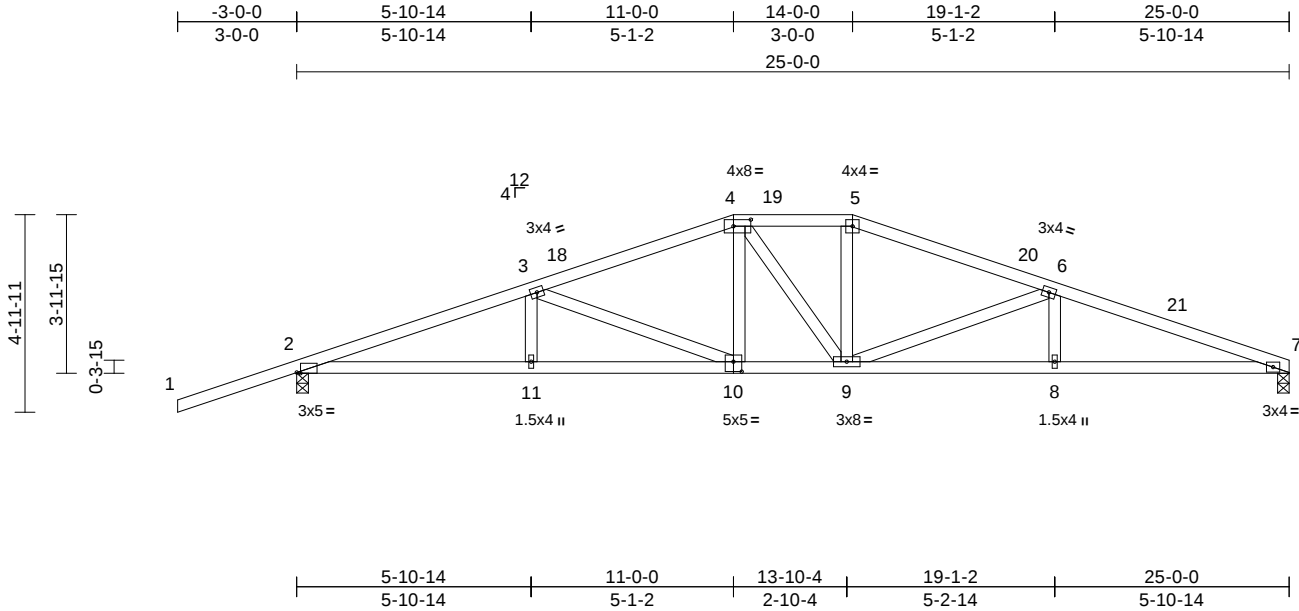
Job	Truss	Truss Type	Qty	Ply	Bay V	T37759592
Bay V	A03A	Hip	1	1	Job Reference (optional)	

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Page: 1

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Scale = 1:58

Plate Offsets (X, Y): [2:0-1-2,Edge], [4:0-5-4,0-2-0], [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	0.57	Vert(LL)	-0.13	10-11	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.66	Vert(CT)	-0.27	10-11	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.39	Horz(CT)	0.08	7	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 118 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
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, 7=0-3-8
Max Horiz 2=51 (LC 11)
Max Uplift 2=-77 (LC 12)
Max Grav 2=1191 (LC 1), 7=989 (LC 1)

FORCES

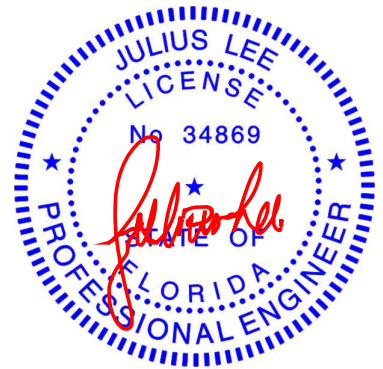
(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/57, 2-3=-2381/192, 3-4=-1791/195,
4-5=-1656/186, 5-6=-1786/185,
6-7=-2473/196
BOT CHORD 2-11=-148/2213, 9-11=-148/2213,
8-9=-146/2319, 7-8=-146/2319
WEBS 3-11=0/219, 3-10=-611/51, 4-10=0/333,
4-9=-127/143, 5-9=0/342, 6-9=-728/71,
6-8=0/232

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-22; Vult=130mph (3-second gust)
Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft;
B=45ft; L=25ft; eave=4ft; Cat. II; Exp B; Enclosed;
MWFRS (directional) and C-C Zone3 -3-0-0 to 0-0-0,
Zone1 0-0-0 to 11-0-0, Zone3 11-0-0 to 14-0-0, Zone2
14-0-0 to 18-2-15, Zone1 18-2-15 to 25-0-0 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
- Building Designer / Project engineer responsible for
verifying applied roof live load shown covers rain loading
requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.

- This truss has been designed for a 10.0 psf bottom
chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf
on the bottom chord in all areas where a rectangle
3-06-00 tall by 2-00-00 wide will fit between the bottom
chord and any other members.
- Provide mechanical connection (by others) of truss to
bearing plate capable of withstanding 77 lb uplift at joint
2.
- This truss design requires that a minimum of 7/16"
structural wood sheathing be applied directly to the top
chord and 1/2" gypsum sheetrock be applied directly to
the bottom chord.

LOAD CASE(S) Standard



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

June 30,2025

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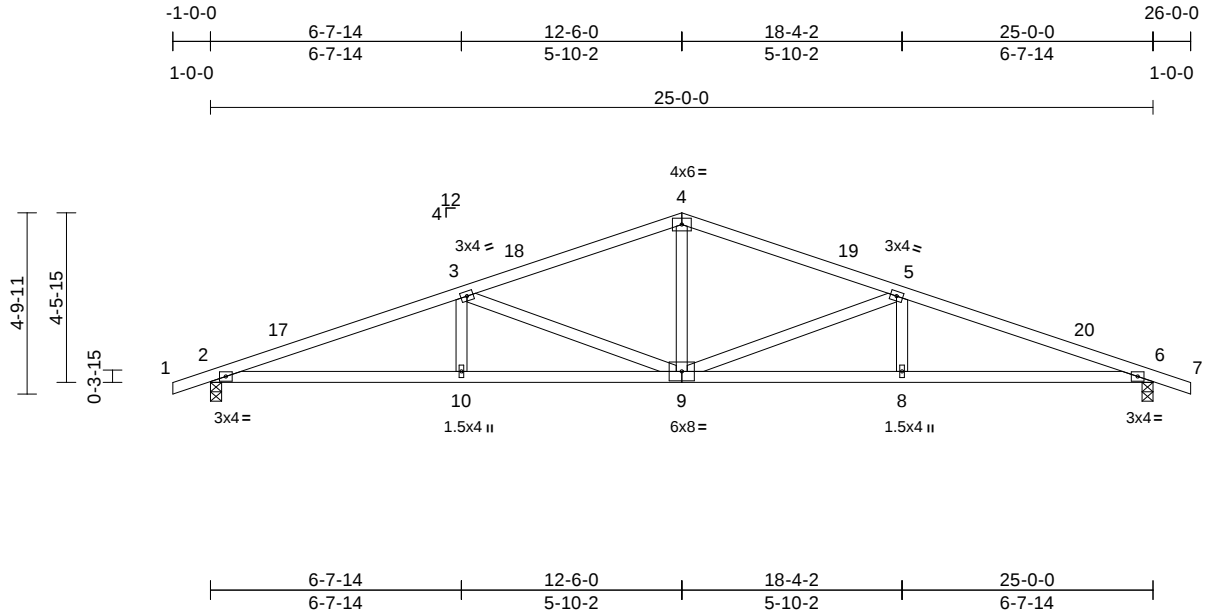
Job	Truss	Truss Type	Qty	Ply	Bay V	T37759593
Bay V	A04	Common	2	1	Job Reference (optional)	

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

Run: 8.83 S Jun 11 2025 Print: 8.830 S Jun 11 2025 MiTek Industries, Inc. Fri Jun 27 11:22:42

Page: 1

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Scale = 1:61.1

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.43	Vert(LL)	-0.13	9	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.69	Vert(CT)	-0.27	9-10	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.56	Horz(CT)	0.09	6	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 109 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=48 (LC 11)
Max Uplift 2=-23 (LC 12), 6=-23 (LC 12)
Max Grav 2=1060 (LC 1), 6=1060 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/19, 2-3=-2429/142, 3-4=-1663/139,
4-5=-1663/139, 5-6=-2430/142, 6-7=0/19
BOT CHORD 2-10=-74/2273, 8-10=-88/2273, 6-8=-88/2273
WEBS 3-10=0/256, 3-9=-826/76, 4-9=0/691,
5-9=-826/75, 5-8=0/256

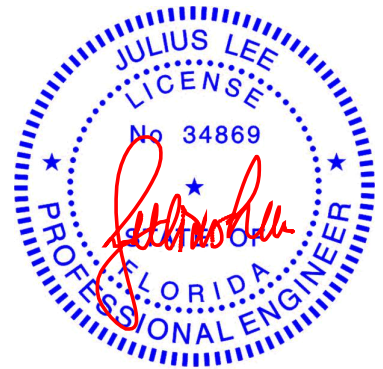
NOTES

- 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=25ft; eave=4ft; Cat. II; Exp B; Enclosed;
MWFRS (directional) and C-C Zone3 -1-0-0 to 2-0-0,
Zone1 2-0-0 to 12-6-0, Zone2 12-6-0 to 16-8-15, Zone1
16-8-15 to 26-0-0 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) Provide mechanical connection (by others) of truss to
bearing plate capable of withstanding 23 lb uplift at joint
2 and 23 lb uplift at joint 6.
- 7) This truss design requires that a minimum of 7/16"
structural wood sheathing be applied directly to the top
chord and 1/2" gypsum sheetrock be applied directly to
the bottom chord.

LOAD CASE(S)

Standard



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

June 30,2025

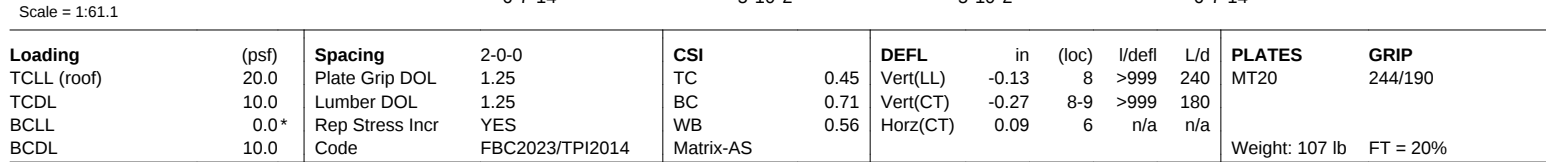
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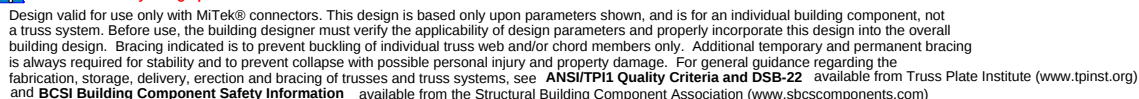
Mayo Truss Company, Inc., Mayo, FL - 32066, Run: 8.83 S Jun 11 2025 Print: 8.830 S Jun 11 2025 MiTek Industries, Inc. Fri Jun 27 11:22:42 Page: 1
ID:OS5h2q10OFTR1clohplVNmz26uC-RfC?PsB70Hg3NSgPqnL8w3ulTXbGKWRcDoi7J4zJC?f



- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 24 lb uplift at joint 2.
- 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

June 30, 2025



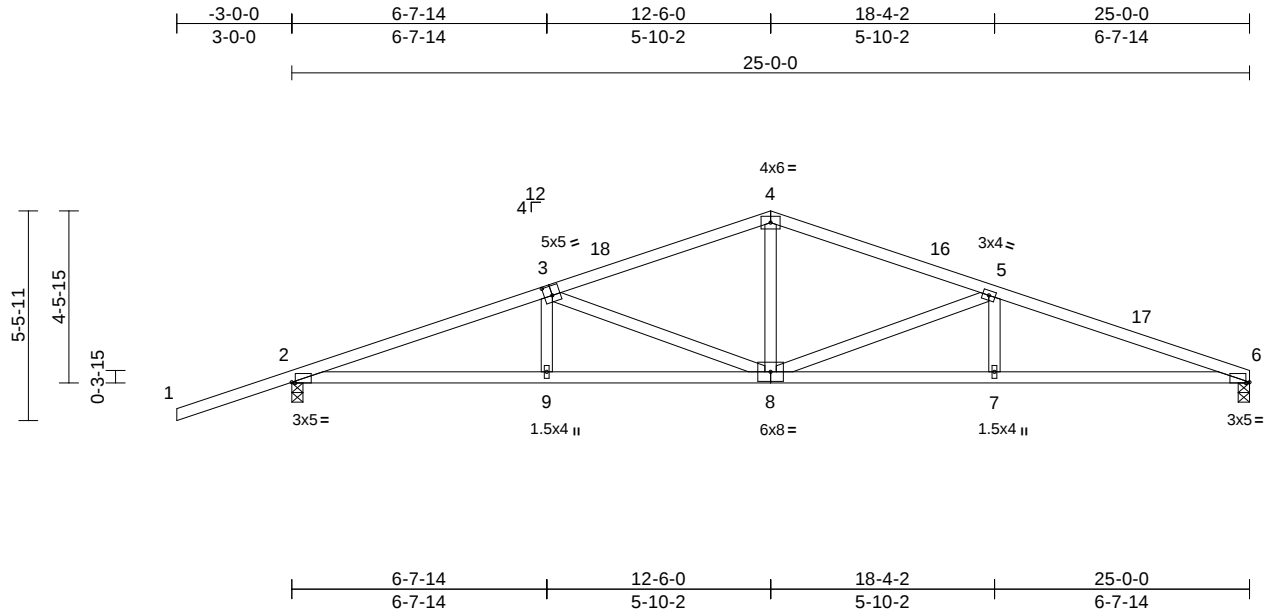
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Chesterfield, MO 63017
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Job	Truss	Truss Type	Qty	Ply	Bay V	T37759595
Bay V	A04B	Common	1	1	Job Reference (optional)	

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

Run: 8.83 S Jun 11 2025 Print: 8.830 S Jun 11 2025 MiTek Industries, Inc. Fri Jun 27 11:22:42
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Page: 1



Scale = 1:60.1

Plate Offsets (X, Y): [2:0-1-2,Edge], [3:0-2-8,0-3-0], [6:0-1-2,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	0.57	Vert(LL)	-0.13	8-9	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.71	Vert(CT)	-0.27	8-9	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.56	Horz(CT)	0.08	6	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 111 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=57 (LC 11)
Max Uplift 2=-77 (LC 12)
Max Grav 2=1191 (LC 1), 6=989 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 4-5=-1639/147, 5-6=-2412/166, 1-2=0/57, 2-4=-2335/135
BOT CHORD 2-9=-79/2164, 7-9=-96/2257, 6-7=-96/2257
WEBS 3-9=0/248, 3-8=-732/64, 4-8=0/673, 5-8=-836/78, 5-7=0/256

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=25ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Zone3 -3-0-0 to 0-0-0, Zone1 0-0-0 to 12-6-0, Zone2 12-6-0 to 16-8-15, Zone1 16-8-15 to 25-0-0 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 77 lb uplift at joint 2.
- 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard



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

June 30,2025

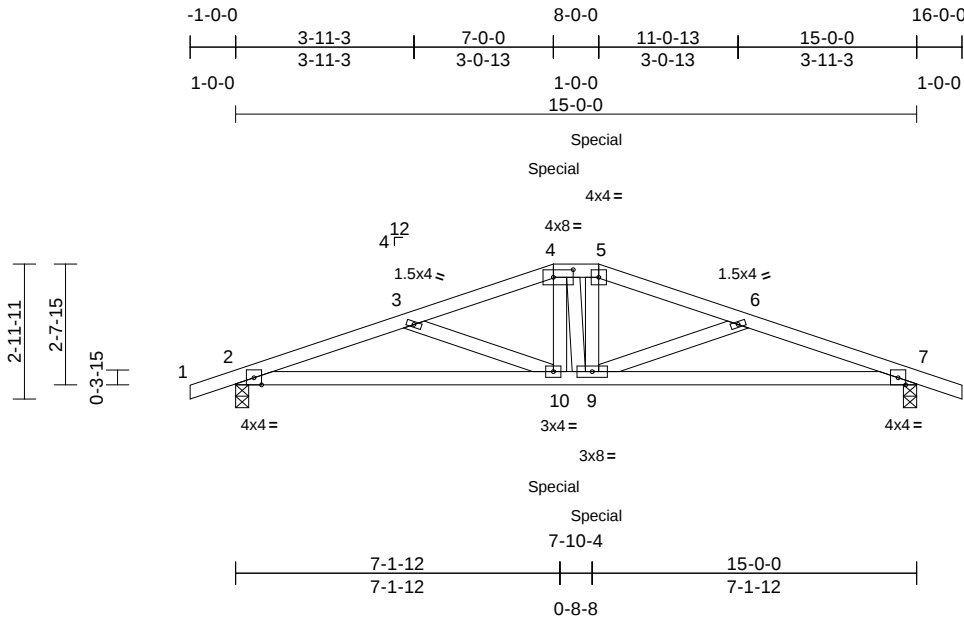
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Job	Truss	Truss Type	Qty	Ply	Bay V	T37759596
Bay V	B01	Hip Girder	1	1	Job Reference (optional)	



Scale = 1:50.7
Plate Offsets (X, Y): [4:0-5-4,0-2-0]

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	0.32	Vert(LL)	-0.10	10	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.90	Vert(CT)	-0.22	10-13	>821	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.13	Horz(CT)	0.06	7	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 69 lb	FT = 20%

- LUMBER**
- TOP CHORD 2x4 SP No.2
- BOT CHORD 2x4 SP No.2
- WEBS 2x4 SP No.2
- BRACING**
- TOP CHORD Structural wood sheathing directly applied or 3-1-9 oc purlins.
- BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
- REACTIONS** (size) 2=0-3-8, 7=0-3-8
- Max Horiz 2=-28 (LC 6)
- Max Uplift 2=-152 (LC 8), 7=-152 (LC 8)
- Max Grav 2=1246 (LC 1), 7=1246 (LC 1)
- FORCES** (lb) - Maximum Compression/Maximum Tension
- TOP CHORD 1-2=0/19, 2-3=-3145/367, 3-4=-2870/304, 4-5=-2752/300, 5-6=-2879/304, 6-7=-3145/367, 7-8=0/19
- BOT CHORD 2-10=-302/2968, 9-10=-211/2726, 7-9=-302/2964
- WEBS 4-10=0/585, 4-9=-44/99, 5-9=0/593, 3-10=-303/154, 6-9=-293/159

- 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); 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.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 152 lb uplift at joint 2 and 152 lb uplift at joint 7.
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 221 lb down and 93 lb up at 7-0-0, and 221 lb down and 93 lb up at 8-0-0 on top chord, and 423 lb down at 7-0-0, and 423 lb down at 7-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 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, 4-5=-60, 5-8=-60, 11-14=-20
- Concentrated Loads (lb)
- Vert: 4=-174 (F), 5=-174 (F), 10=-412 (F), 9=-412 (F)



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

June 30,2025

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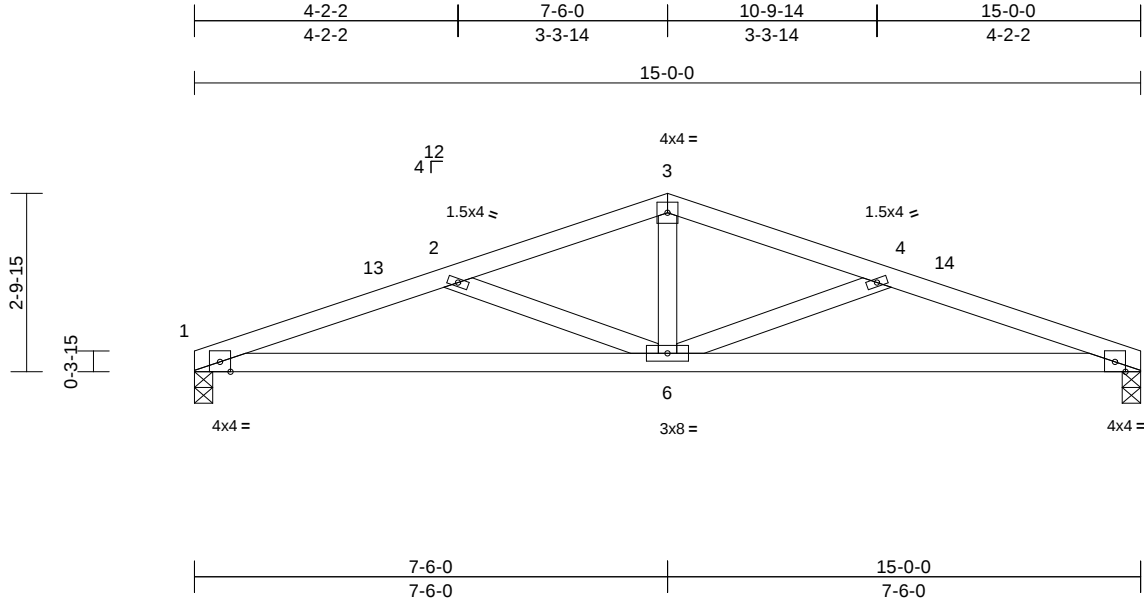
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Chesterfield, MO 63017
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Job	Truss	Truss Type	Qty	Ply	Bay V	T37759597
Bay V	B02	Common	1	1	Job Reference (optional)	

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

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Page: 1



Scale = 1:36.5

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.28	Vert(LL)	-0.05	6-9	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.54	Vert(CT)	-0.13	6-9	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.03	5	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 60 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS

(size) 1=0-3-8, 5=0-3-8
Max Horiz 1=-26 (LC 10)
Max Uplift 1=-69 (LC 12), 5=-69 (LC 12)
Max Grav 1=600 (LC 1), 5=600 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

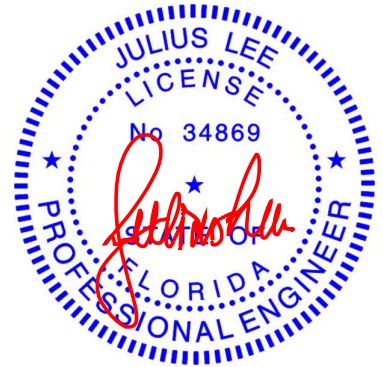
TOP CHORD 1-2=-1376/506, 2-3=-1033/344,
3-4=-1033/351, 4-5=-1376/507
BOT CHORD 1-6=-435/1295, 5-6=-429/1295
WEBS 3-6=-81/447, 2-6=-393/229, 4-6=-393/224

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-22; Vult=130mph (3-second gust)
Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft;
B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Partially Enclosed; MWFRS (directional) and C-C Zone3 0-0-0 to 3-0-0, Zone1 3-0-0 to 7-6-0, Zone2 7-6-0 to 11-8-15, Zone1 11-8-15 to 15-0-0 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
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 69 lb uplift at joint 1 and 69 lb uplift at joint 5.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard



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

June 30,2025

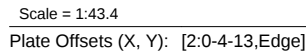
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Mayo Truss Company, Inc., Mayo, FL - 32066, Run: 8.83 S Jun 11 2025 Print: 8.830 S Jun 11 2025 MiTek Industries, Inc. Fri Jun 27 11:22:43 Page: 1
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LUMBER		6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 48 lb uplift at joint 4, 75 lb uplift at joint 2 and 7 lb uplift at joint 5.
TOP CHORD	2x4 SP No.2	
BOT CHORD	2x4 SP No.2	7) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidelines.
WEBS	2x4 SP No.2	8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
BRACING		
TOP CHORD	Structural wood sheathing directly applied or 5-3-2 or purlins	

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/19, 2-3=-1160/73, 3-4=-51/24

BOT CHORD 2-7=-120/1130, 6-7=-120/1130, 5-6=0/0

WEBS 3-7=0/290, 3-6=-1182/125

-

June 30, 2025

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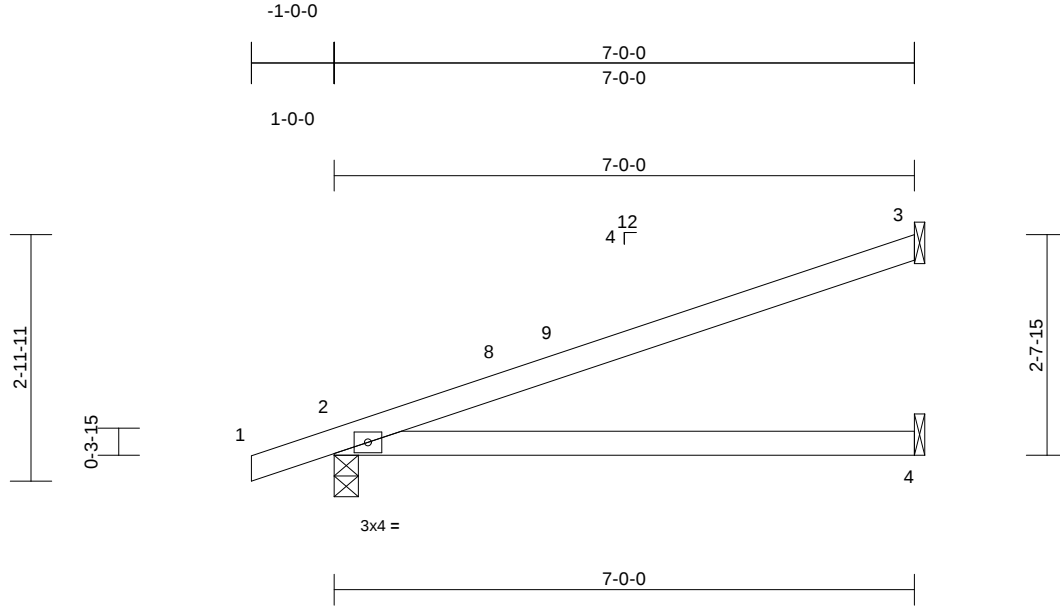
Job	Truss	Truss Type	Qty	Ply	Bay V	T37759599
Bay V	J01	Jack-Open	16	1	Job Reference (optional)	

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Page: 1

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Scale = 1:27.8

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.61	0.12	4-7	>703	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.49	Vert(CT)	-0.22	4-7	>386	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: 23 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=0-3-8, 3= Mechanical, 4= Mechanical

Max Horiz 2=89 (LC 12)

Max Uplift 2=-45 (LC 12), 3=-65 (LC 12)

Max Grav 2=342 (LC 1), 3=188 (LC 17), 4=123 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/19, 2-3=-137/50

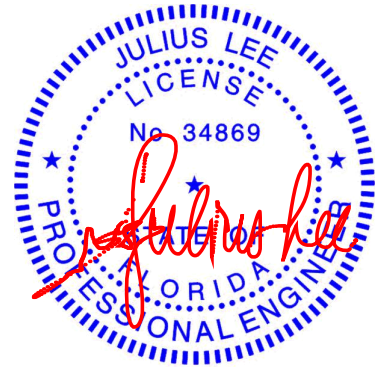
BOT CHORD 2-4=-89/145

NOTES

- 1) Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Partially Enclosed; MWFRS (directional) and C-C Zone3 -1-0-0 to 2-0-0, Zone1 2-0-0 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) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 65 lb uplift at joint 3 and 45 lb uplift at joint 2.

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

LOAD CASE(S) Standard



Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
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Date:

June 30,2025

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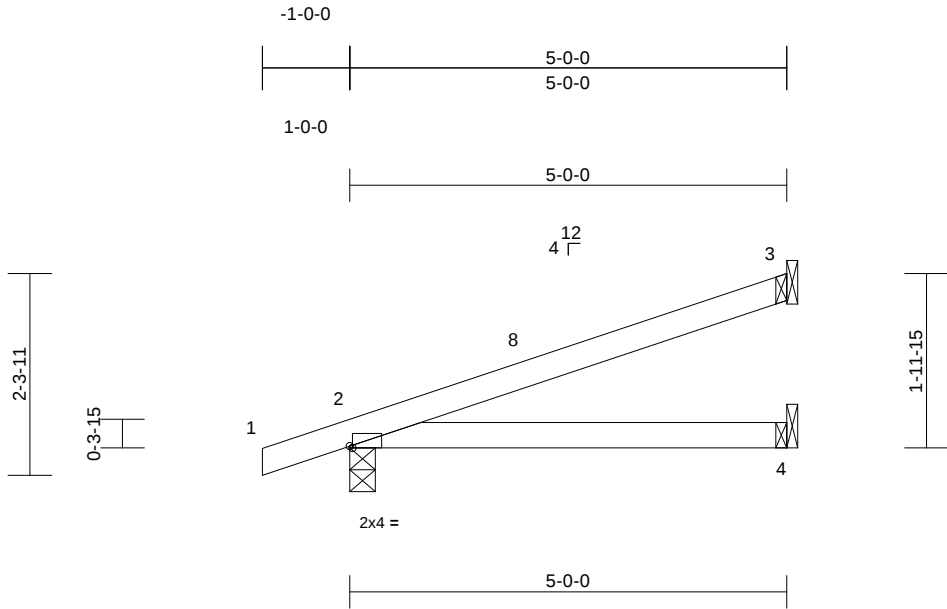
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Job	Truss	Truss Type	Qty	Ply	Bay V	
Bay V	J02	Jack-Open	12	1	Job Reference (optional)	T37759600

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Run: 8.83 S Jun 11 2025 Print: 8.830 S Jun 11 2025 MiTek Industries, Inc. Fri Jun 27 11:22:43
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Scale = 1:26.4

Plate Offsets (X, Y): [2:0-0-6,Edge]											
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.29	Vert(LL)	0.04	4-7	>999	240	GRIP
TCDL	10.0	Lumber DOL	1.25	BC	0.24	Vert(CT)	-0.06	4-7	>999	180	MT20
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a	244/190
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-AS							Weight: 17 lb
											FT = 20%

LUMBER		7) This truss design requires that a minimum of 7/16"
TOP CHORD	2x4 SP No.2	structural wood sheathing be applied directly to the top
BOT CHORD	2x4 SP No.2	chord and 1/2" gypsum sheetrock be applied directly to
BRACING		the bottom chord.
TOP CHORD	Structural wood sheathing directly applied.	LOAD CASE(S) Standard
BOT CHORD	Rigid ceiling directly applied.	
REACTIONS (size)		
	2=0-3-8, 3= Mechanical, 4= Mechanical	
	Max Horiz 2=67 (LC 12)	
	Max Uplift 2=-41 (LC 12), 3=-44 (LC 12)	
	Max Grav 2=264 (LC 1), 3=129 (LC 17), 4=88 (LC 3)	
FORCES (lb) - Maximum Compression/Maximum Tension		
TOP CHORD	1-2=0/19, 2-3=-87/36	
BOT CHORD	2-4=-69/100	

- NOTES**
 - 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 -1-0-0 to 2-0-0, Zone1 2-0-0 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
 - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 44 lb uplift at joint 3 and 41 lb uplift at joint 2.
- Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

June 30,2025

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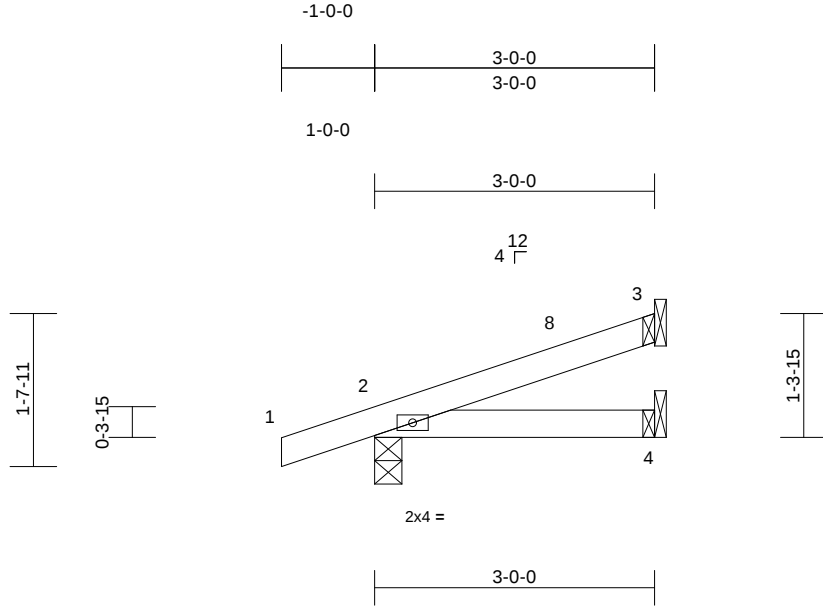
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Job	Truss	Truss Type	Qty	Ply	Bay V	T37759601
Bay V	J03	Jack-Open	12	1	Job Reference (optional)	

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Page: 1



Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.08	Vert(LL)	0.00	4-7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.08	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: 11 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=0-3-8, 3=Mechanical, 4=Mechanical
Max Horiz 2=45 (LC 12)
Max Uplift 2=-37 (LC 12), 3=-22 (LC 12)
Max Grav 2=188 (LC 1), 3=71 (LC 17), 4=51 (LC 3)

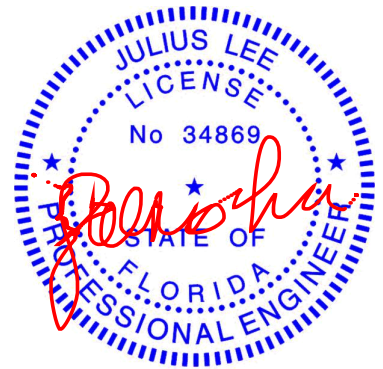
FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/19, 2-3=-45/20
BOT CHORD 2-4=-22/52

NOTES

- 1) Wind: ASCE 7-22; Vult=130mph (3-second gust)
Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft;
B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Partially Enclosed; MWFRS (directional) and C-C Zone3 -1-0-0 to 2-0-0, Zone1 2-0-0 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) Refer to girder(s) for truss to truss connections.

- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 22 lb uplift at joint 3 and 37 lb uplift at joint 2.
- LOAD CASE(S)** Standard



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Date:

June 30,2025

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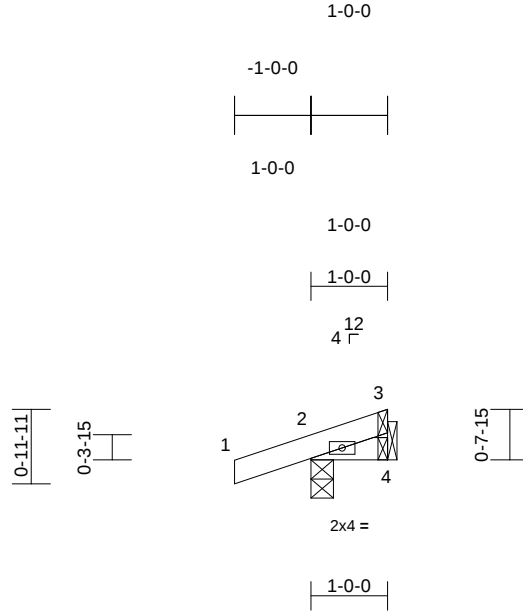
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Job	Truss	Truss Type	Qty	Ply	Bay V	T37759602
Bay V	J04	Jack-Open	12	1	Job Reference (optional)	

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

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Page: 1



Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.07	Vert(LL)	0.00	5	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.01	Vert(CT)	0.00	5	>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: 5 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=0-3-8, 4= Mechanical
Max Horiz 2=22 (LC 12)
Max Uplift 2=-41 (LC 12)
Max Grav 2=129 (LC 1), 4=20 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/19, 2-3=-24/14
BOT CHORD 2-4=-12/22

NOTES

- 1) Wind: ASCE 7-22; Vult=130mph (3-second gust)
Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft;
B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Partially Enclosed; MWFRS (directional) and C-C Zone3 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) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 41 lb uplift at joint 2.

LOAD CASE(S) Standard



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Date:

June 30,2025

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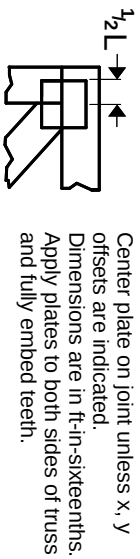
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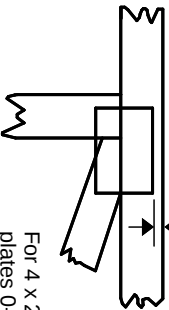
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Symbols

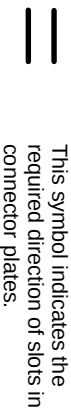
PLATE LOCATION AND ORIENTATION



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



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



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

PLATE SIZE

4 X 4

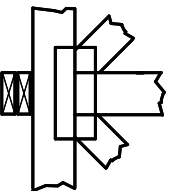
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING



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

Industry Standards:

ANSI/TPI-1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-22: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses.

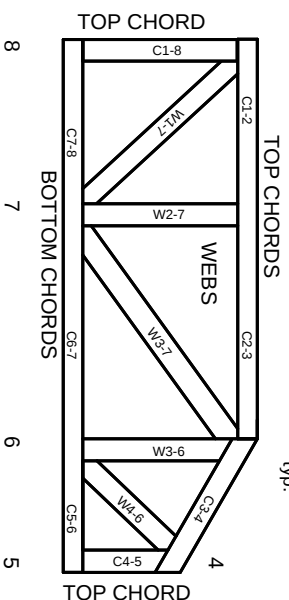
Numbering System

6-4-8 dimensions shown in ft-in-sixteenths (Drawings not to scale)

1

2

3 Joint ID typ.



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

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

Product Code Approvals

ICC-ES Reports:

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

Design General Notes

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

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

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



General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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