

RE: 1655-A - Spec Lt 4

MiTek, Inc.

16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200

Site Information:

Customer Info: CJ Custom Carpentry Inc. Project Name: Spec Lt4 Model: .
Lot/Block: . Subdivision: .
Address: 493 SW Legion Drive, .
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 8.8

Wind Code: ASCE 7-22

Wind Speed: 130 mph

Roof Load: 40.0 psf

Floor Load: N/A psf

This package includes 23 individual, Truss Design Drawings and 0 Additional Drawings.

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

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	T35088399	G1	9/24/24	23	T35088421	V8	9/24/24
2	T35088400	G2	9/24/24				
3	T35088401	G3	9/24/24				
4	T35088402	GR1	9/24/24				
5	T35088403	PB1	9/24/24				
6	T35088404	T1	9/24/24				
7	T35088405	T2	9/24/24				
8	T35088406	T3	9/24/24				
9	T35088407	T4	9/24/24				
10	T35088408	T5	9/24/24				
11	T35088409	T6	9/24/24				
12	T35088410	T7	9/24/24				
13	T35088411	T8	9/24/24				
14	T35088412	T9	9/24/24				
15	T35088413	T10	9/24/24				
16	T35088414	V1	9/24/24				
17	T35088415	V2	9/24/24				
18	T35088416	V3	9/24/24				
19	T35088417	V4	9/24/24				
20	T35088418	V5	9/24/24				
21	T35088419	V6	9/24/24				
22	T35088420	V7	9/24/24				

The truss drawing(s) referenced above have been prepared by MiTek USA, Inc. under my direct supervision based on the parameters provided by 19 Lumber, 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:

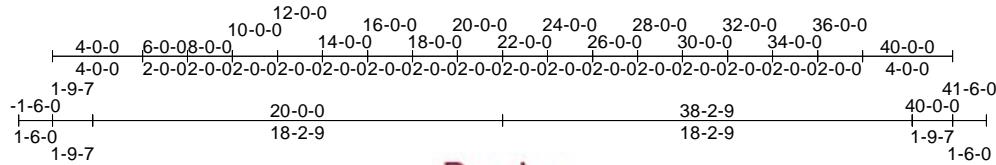
September 24, 2024

Job 1655-A	Truss G1	Truss Type Common Supported Gable	Qty 1	Ply 1	Spec Lt 4 Job Reference (optional)	T35088399
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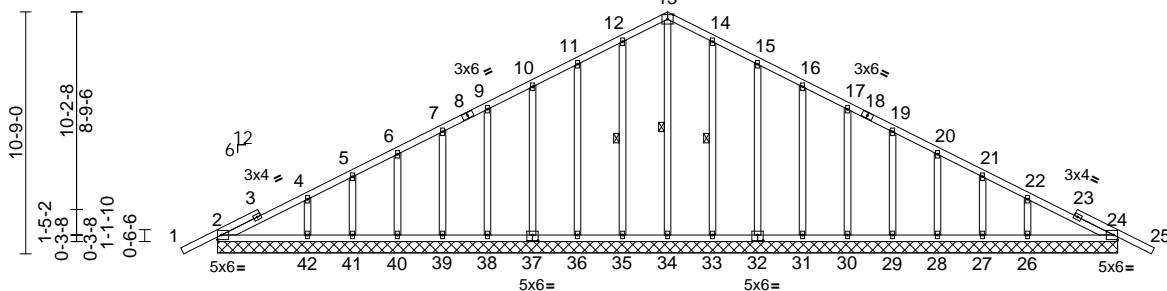
19 Lumber, Inc., Old Town, FL - 32680,

Run: 8.82 S Sep 12 2024 Print: 8.820 S Sep 12 2024 MiTek Industries, Inc. Tue Sep 24 08:57:39
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Page: 1



Bracing



Scale = 1:85.9

Plate Offsets (X, Y): [32:0-3-0,0-3-0], [37:0-3-0,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.16	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.09	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.01	24	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS							Weight: 274 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.

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

WEBS 1 Row at midpt 13-34, 12-35, 14-33

REACTIONS (size) 2=40-0-0, 24=40-0-0, 26=40-0-0, 27=40-0-0, 28=40-0-0, 29=40-0-0, 30=40-0-0, 31=40-0-0, 32=40-0-0, 33=40-0-0, 34=40-0-0, 35=40-0-0, 36=40-0-0, 37=40-0-0, 38=40-0-0, 39=40-0-0, 40=40-0-0, 41=40-0-0, 42=40-0-0, 43=40-0-0, 46=40-0-0

Max Horiz 2=174 (LC 12), 43=174 (LC 12)
Max Uplift 2=31 (LC 13), 24=21 (LC 13), 26=89 (LC 13), 27=44 (LC 13), 28=60 (LC 13), 29=56 (LC 13), 30=57 (LC 13), 31=56 (LC 13), 32=61 (LC 13), 33=50 (LC 13), 35=53 (LC 12), 36=59 (LC 12), 37=56 (LC 12), 38=57 (LC 12), 39=56 (LC 12), 40=59 (LC 12), 41=45 (LC 12), 42=87 (LC 12), 43=31 (LC 13), 46=21 (LC 13)

Max Grav 2=253 (LC 1), 24=253 (LC 1), 26=281 (LC 1), 27=113 (LC 26), 28=172 (LC 1), 29=157 (LC 1), 30=161 (LC 26), 31=160 (LC 1), 32=159 (LC 26), 33=168 (LC 26), 34=208 (LC 22), 35=168 (LC 25), 36=159 (LC 25), 37=160 (LC 1), 38=161 (LC 25), 39=157 (LC 1), 40=172 (LC 1), 41=113 (LC 25), 42=281 (LC 1), 43=253 (LC 1), 46=253 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/42, 2-4=-200/94, 4-5=-140/94, 5-6=-105/110, 6-7=-74/128, 7-9=-57/153, 9-10=-63/177, 10-11=-81/219, 11-12=-100/272, 12-13=-118/319, 13-14=-118/319, 14-15=-100/272, 15-16=-81/219, 16-17=-63/168, 17-19=-45/117, 19-20=-32/66, 20-21=-39/41, 21-22=-70/24, 22-24=-143/63, 24-25=0/42

BOT CHORD 2-42=-61/184, 41-42=-61/184, 40-41=-61/184, 39-40=-61/184, 38-39=-61/184, 36-38=-61/184, 35-36=-61/184, 34-35=-61/184, 33-34=-61/184, 31-33=-61/184, 30-31=-61/184, 29-30=-61/184, 28-29=-61/184, 27-28=-61/184, 26-27=-61/184, 24-26=-61/184

WEBS 13-34=-200/47, 12-35=-128/84, 11-36=-119/100, 10-37=-120/93, 9-38=-120/95, 7-39=-119/94, 6-40=-127/98, 5-41=-92/83, 4-42=-198/136, 14-33=-128/84, 15-32=-119/100, 16-31=-120/93, 17-30=-120/95, 19-29=-119/94, 20-28=-127/98, 21-27=-92/83, 22-26=-198/135

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=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 5) All plates are 2x4 (I) MT20 unless otherwise indicated.
- 6) Gable requires continuous bottom chord bearing.
- 7) Gable studs spaced at 2-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-0 tall by 2-00-0 wide will fit between the bottom chord and any other members.
- 10) All bearings are assumed to be SP No.2.



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

September 24, 2024

Continued on page 2

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 the Truss Plate Institute (www.tpiinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcsccomponents.com)

Job 1655-A	Truss G1	Truss Type Common Supported Gable	Qty 1	Ply 1	Spec Lt 4 Job Reference (optional)	T35088399
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19 Lumber, Inc., Old Town, FL - 32680,

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Page: 2

11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 31 lb uplift at joint 2, 21 lb uplift at joint 24, 53 lb uplift at joint 35, 59 lb uplift at joint 36, 56 lb uplift at joint 37, 57 lb uplift at joint 38, 56 lb uplift at joint 39, 59 lb uplift at joint 40, 45 lb uplift at joint 41, 87 lb uplift at joint 42, 50 lb uplift at joint 33, 61 lb uplift at joint 32, 56 lb uplift at joint 31, 57 lb uplift at joint 30, 56 lb uplift at joint 29, 60 lb uplift at joint 28, 44 lb uplift at joint 27, 89 lb uplift at joint 26, 31 lb uplift at joint 2 and 21 lb uplift at joint 24.

LOAD CASE(S) Standard



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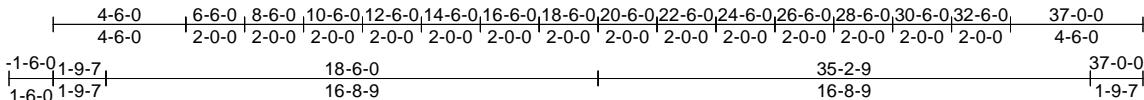
Job 1655-A	Truss G2	Truss Type Common Supported Gable	Qty 1	Ply 1	Spec Lt 4 Job Reference (optional)	T35088400
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19 Lumber, Inc., Old Town, FL - 32680,

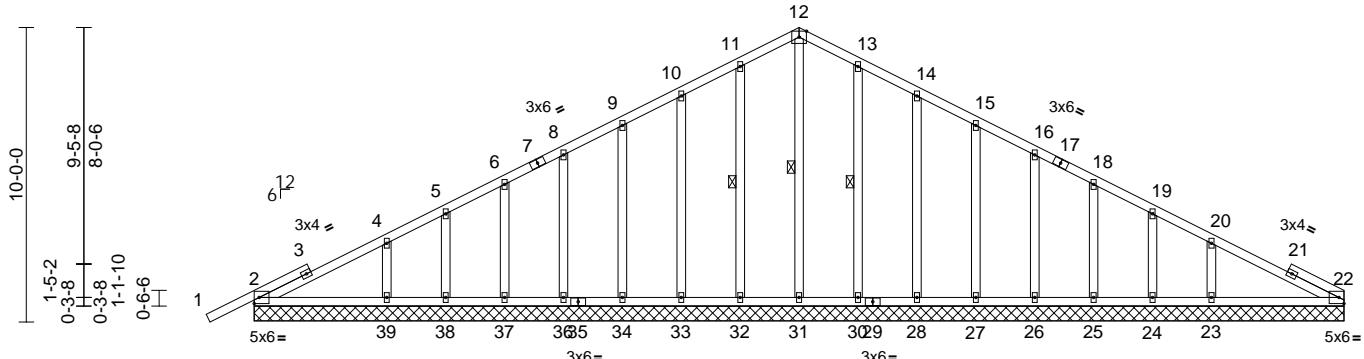
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Page: 1



Bracing



Scale = 1:71.3

37-0-0

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	Horz(CT)	0.01	22	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS						Weight: 240 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.

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

WEBS 1 Row at midpt 12-31, 11-32, 13-30

REACTIONS (size) 2=37-0-0, 22=37-0-0, 23=37-0-0, 24=37-0-0, 25=37-0-0, 26=37-0-0, 27=37-0-0, 28=37-0-0, 30=37-0-0, 31=37-0-0, 32=37-0-0, 33=37-0-0, 34=37-0-0, 36=37-0-0, 37=37-0-0, 38=37-0-0, 39=37-0-0, 40=37-0-0, 43=37-0-0

Max Horiz 2=175 (LC 12), 40=175 (LC 12)

Max Uplift 2=27 (LC 13), 23=122 (LC 13), 24=28 (LC 13), 25=63 (LC 13), 26=55 (LC 13), 27=56 (LC 13), 28=60 (LC 13), 30=52 (LC 13), 32=55 (LC 12), 33=59 (LC 12), 34=56 (LC 12), 36=56 (LC 12), 37=61 (LC 12), 38=36 (LC 12), 39=104 (LC 12), 40=27 (LC 13)

Max Grav 2=263 (LC 25), 22=148 (LC 26), 23=363 (LC 26), 24=70 (LC 1), 25=182 (LC 26), 26=155 (LC 26), 27=161 (LC 1), 28=158 (LC 26), 30=168 (LC 26), 31=197 (LC 22), 32=168 (LC 25), 33=159 (LC 25), 34=161 (LC 1), 36=156 (LC 25), 37=178 (LC 1), 38=88 (LC 1), 39=328 (LC 25), 40=263 (LC 25), 43=148 (LC 26)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/42, 2-4=-188/97, 4-5=-118/81, 5-6=-87/98, 6-8=-57/120, 8-9=-46/145, 9-10=-64/170, 10-11=-83/223, 11-12=-100/271, 12-13=-100/271, 13-14=-83/223, 14-15=-64/170, 15-16=-46/119, 16-18=-29/68, 18-19=-25/45, 19-20=-65/19, 20-22=-125/67

BOT CHORD 2-39=-52/146, 38-39=-52/146, 37-38=-52/146, 36-37=-52/146, 34-36=-52/146, 33-34=-52/146, 32-33=-52/146, 31-32=-52/146, 30-31=-52/146, 28-30=-52/146, 27-28=-52/146, 26-27=-52/146, 25-26=-52/146, 24-25=-52/146, 23-24=-52/146, 22-23=-52/146

WEBS 12-31=-161/33, 11-32=-128/87, 10-33=-119/99, 9-34=-121/94, 8-36=-118/94, 6-37=-130/100, 5-38=-76/74, 4-39=-229/156, 13-30=-128/87, 14-28=-119/99, 15-27=-121/94, 16-26=-117/93, 18-25=-132/101, 19-24=-68/65, 20-23=-247/168

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=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 5) All plates are 2x4 (||) MT20 unless otherwise indicated.

- 6) Gable requires continuous bottom chord bearing.
- 7) Gable studs spaced at 2-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 10) All bearings are assumed to be SP No.2 .
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 27 lb uplift at joint 2, 55 lb uplift at joint 32, 59 lb uplift at joint 33, 56 lb uplift at joint 34, 56 lb uplift at joint 36, 61 lb uplift at joint 37, 36 lb uplift at joint 38, 104 lb uplift at joint 39, 52 lb uplift at joint 30, 60 lb uplift at joint 28, 56 lb uplift at joint 27, 55 lb uplift at joint 26, 63 lb uplift at joint 25, 28 lb uplift at joint 24, 122 lb uplift at joint 23 and 27 lb uplift at joint 2.

LOAD CASE(S)

Standard



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

September 24, 2024

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

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

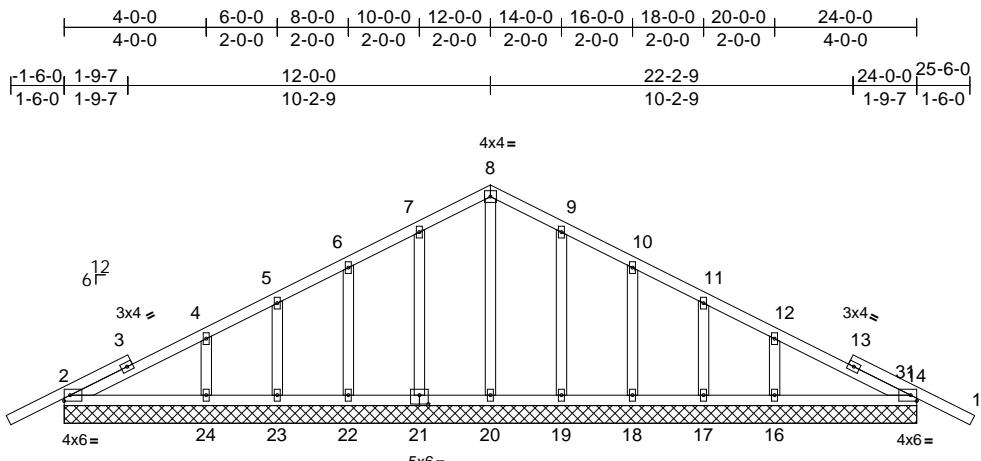
MiTek[®]
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-Us.com

Job 1655-A	Truss G3	Truss Type Common Supported Gable	Qty 1	Ply 1	Spec Lt 4 Job Reference (optional)	T35088401
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19 Lumber, Inc., Old Town, FL - 32680,

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Page: 1



Scale = 1:58.7

Plate Offsets (X, Y): [21:0-3-0,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	Horz(CT)	0.00	14	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS						Weight: 132 lb	FT = 20%

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

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

REACTIONS (size) 2=24-0-0, 14=24-0-0, 16=24-0-0, 17=24-0-0, 18=24-0-0, 19=24-0-0, 20=24-0-0, 21=24-0-0, 22=24-0-0, 23=24-0-0, 24=24-0-0, 25=24-0-0, 28=24-0-0

Max Horiz 2=108 (LC 12), 25=108 (LC 12)

Max Uplift 2=30 (LC 12), 14=48 (LC 13), 16=91 (LC 13), 17=43 (LC 13), 18=61 (LC 13), 19=57 (LC 13), 21=58 (LC 12), 22=60 (LC 12), 23=43 (LC 12), 24=90 (LC 12), 25=30 (LC 12), 28=48 (LC 13)

Max Grav 2=251 (LC 25), 14=239 (LC 26), 16=280 (LC 26), 17=114 (LC 26), 18=170 (LC 1), 19=166 (LC 26), 20=169 (LC 22), 21=166 (LC 25), 22=170 (LC 1), 23=113 (LC 25), 24=281 (LC 25), 25=251 (LC 25), 28=239 (LC 26)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/42, 2-4=118/81, 4-5=62/75, 5-6=37/97, 6-7=51/133, 7-8=70/183, 8-9=70/183, 9-10=51/133, 10-11=31/80, 11-12=37/34, 12-14=119/59, 14-15=0/42

BOT CHORD 2-24=-45/122, 23-24=-39/122, 22-23=-39/122, 20-22=-39/122, 19-20=-39/122, 18-19=-39/122, 17-18=-39/122, 16-17=-39/122, 14-16=-47/133

WEBS 8-20=-128/8, 7-21=-128/93, 6-22=-125/100, 5-23=-92/82, 4-24=-198/138, 9-19=-128/93, 10-18=-125/99, 11-17=-92/82, 12-16=-198/138

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=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 5) All plates are 2x4 (||) MT20 unless otherwise indicated.
- 6) Gable requires continuous bottom chord bearing.
- 7) Gable studs spaced at 2-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-0-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 10) All bearings are assumed to be SP No.2.

11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 30 lb uplift at joint 2, 48 lb uplift at joint 14, 58 lb uplift at joint 21, 60 lb uplift at joint 22, 43 lb uplift at joint 23, 90 lb uplift at joint 24, 57 lb uplift at joint 19, 61 lb uplift at joint 18, 43 lb uplift at joint 17, 91 lb uplift at joint 16, 30 lb uplift at joint 2 and 48 lb uplift at joint 14.

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:

September 24, 2024

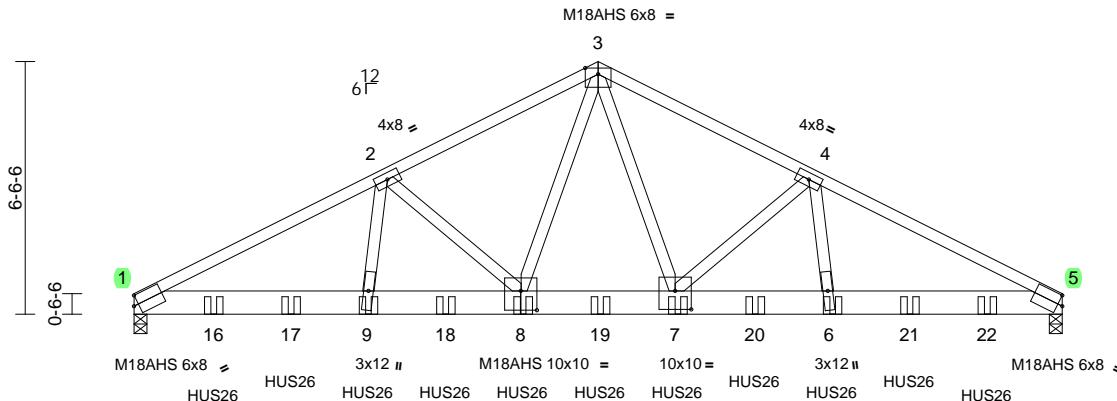
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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

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

Job 1655-A	Truss GR1	Truss Type Common Girder	Qty 1	Ply 2	Spec Lt 4 Job Reference (optional)
19 Lumber, Inc., Old Town, FL - 32680,			Run: 8.820 S Sep 12 2024 Print: 8.820 S Sep 12 2024 MiTek Industries, Inc. Tue Sep 24 08:57:41 ID:VYEjBi63cliHKil1jwOTq2ycMEQ-RIC?PsB70Hq3NSgPqnL8w3uTxbGKWrCDoi7J4zJC?f		T35088402 Page: 1

6-4-12 12-0-0 17-7-4 24-0-0
6-4-12 5-7-4 5-7-4 6-4-12



6-0-12 10-0-2 13-11-14 17-11-4 24-0-0
6-0-12 3-11-6 3-11-13 3-11-6 6-0-12

Scale = 1:59.6

Plate Offsets (X, Y): [7:0-5-0,0-5-12], [8:0-5-0,0-6-0]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	Vert(LL)	-0.21	7-8	>999	240	M18AHS	186/179
TCDL	10.0	Lumber DOL	1.25	BC	Vert(CT)	-0.39	7-8	>741	180	MT20	244/190
BCLL	0.0*	Rep Stress Incr	NO	WB	Horz(CT)	0.09	5	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS						Weight: 308 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP 2400F 2.0E
BOT CHORD 2x8 SP DSS
WEBS 2x4 SP No.2

BRACING

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

REACTIONS (size) 1=0-4-0, (req. 0-4-14), 5=0-4-0, (req. 0-4-14)
Max Horiz 1=100 (LC 8)

Max Uplift 1=-1568 (LC 8), 5=-1577 (LC 9)
Max Grav 1=9626 (LC 2), 5=9684 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-17389/2828, 2-3=-13634/2242, 3-4=-13624/2240, 4-5=-17366/2826

BOT CHORD 1-9=-2553/15519, 7-9=-2481/15037, 6-7=-2379/15020, 5-6=-2451/15499

WEBS 4-6=-607/4053, 2-9=-609/4074, 3-8=-1038/6238, 2-8=-3939/772, 3-7=-1037/6230, 4-7=-3923/770

NOTES

- 1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-6-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-6-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design.

- 4) Wind: ASCE 7-22; Vult=130mph (3-second gust)
Vasd=101mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 5) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 6) All plates are MT20 plates unless otherwise indicated.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 9) WARNING: Required bearing size at joint(s) 1, 5 greater than input bearing size.
- 10) All bearings are assumed to be SP DSS .
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1568 lb uplift at joint 1 and 1577 lb uplift at joint 5.
- 12) Use MiTek HUS26 (With 14-16d nails into Girder & 6-16d nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 2-0-12 from the left end to 22-0-12 to connect truss(es) to front face of bottom chord.
- 13) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (lb/ft)
Vert: 1-3=-60, 3-5=-60, 10-13=-20
Concentrated Loads (lb)
Vert: 6=-1458 (F), 9=-1458 (F), 8=-1458 (F), 7=-1458 (F), 16=-1458 (F), 17=-1458 (F), 18=-1458 (F), 19=-1458 (F), 20=-1458 (F), 21=-1458 (F), 22=-1458 (F)



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

September 24, 2024

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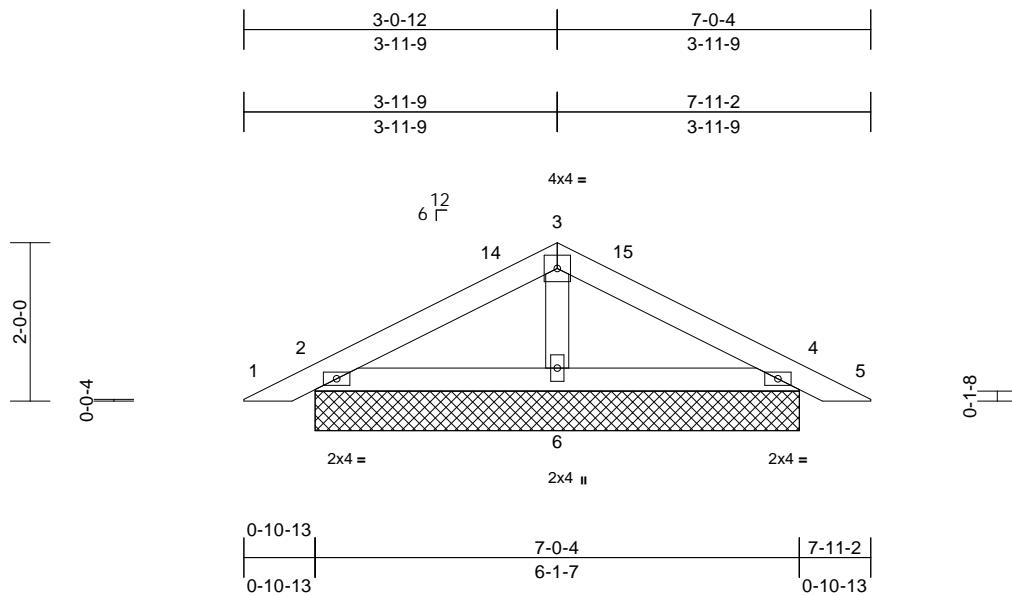
MiTek®
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job 1655-A	Truss PB1	Truss Type Piggyback	Qty 17	Ply 1	Spec Lt 4 Job Reference (optional)	T35088403
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19 Lumber, Inc., Old Town, FL - 32680,

Run: 8.82 S Sep 12 2024 Print: 8.820 S Sep 12 2024 MiTek Industries, Inc. Tue Sep 24 08:57:41
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Page: 1



Scale = 1:20.5

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MP						Weight: 24 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.

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

REACTIONS (size) 2=6-1-7, 4=6-1-7, 6=6-1-7, 7=6-1-7, 11=6-1-7

Max Horiz 2=31 (LC 12), 7=31 (LC 12)

Max Uplift 2=45 (LC 12), 4=51 (LC 13), 6=20 (LC 12), 7=45 (LC 12), 11=51 (LC 13)

Max Grav 2=163 (LC 1), 4=163 (LC 1), 6=235 (LC 1), 7=163 (LC 1), 11=163 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/16, 2-3=-71/103, 3-4=-71/93, 4-5=0/16

BOT CHORD 2-6=-12/39, 4-6=-15/39

WEBS 3-6=-111/71

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-22; Vult=130mph (3-second gust)
Vasd=101mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 0-4-3 to 3-4-3, Zone1 3-4-3 to 4-0-1, Zone3 4-0-1 to 7-7-15 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 45 lb uplift at joint 2, 51 lb uplift at joint 4, 20 lb uplift at joint 6, 45 lb uplift at joint 2 and 51 lb uplift at joint 4.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard



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

September 24, 2024

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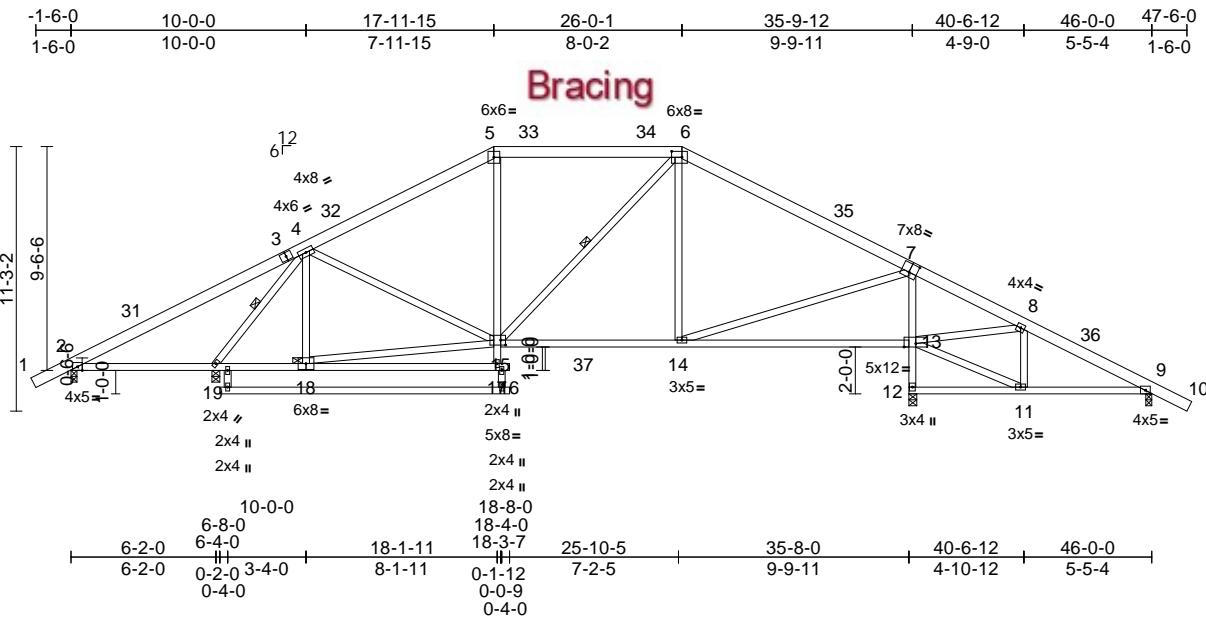
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Job 1655-A	Truss T3	Truss Type Piggyback Base	Qty 6	Ply 1	Spec Lt 4 Job Reference (optional)	T35088406
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19 Lumber, Inc., Old Town, FL - 32680,

Run: 8.82 S Sep 12 2024 Print: 8.820 S Sep 12 2024 MiTek Industries, Inc. Tue Sep 24 08:57:42
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Page: 1



Scale = 1:92.5

Plate Offsets (X, Y): [6:0-5-4,0-3-0], [7:0-4-0,0-4-8], [15:0-2-8,0-2-8]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	Vert(LL)	0.06	19-27	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	Vert(CT)	-0.46	13-14	>783	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	Horz(CT)	0.04	9	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS						Weight: 338 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 5-8-9 oc purlins.

BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.

WEBS 1 Row at midpt 4-19, 6-15

JOINTS 1 Brace at Jt(s): 18

REACTIONS (size) 2=0-3-0, 9=0-3-0, 12=0-4-0, 19=0-4-0

Max Horiz 2=-203 (LC 13)

Max Uplift 2=-125 (LC 12), 9=-150 (LC 13), 12=-229 (LC 13), 19=-186 (LC 12)

Max Grav 2=400 (LC 25), 9=491 (LC 2), 12=1775 (LC 2), 19=1516 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/43, 2-4=-114/246, 4-5=-1402/296, 5-6=-1167/308, 6-8=-1371/262,

8-9=-453/146, 9-10=0/43

BOT CHORD 2-19=-88/114, 17-19=-199/1005, 16-17=0/0, 14-15=-13/1119, 13-14=0/135,

12-13=-1706/250, 7-13=-1322/268,

11-12=-31/0, 9-11=-37/373

WEBS 4-19=-1673/227, 4-18=0/225, 6-15=-104/202, 6-14=-87/230, 7-14=-32/1070,

11-13=-24/429, 8-13=-352/122, 8-11=-41/85,

15-17=0/161, 5-15=10/279, 15-18=-202/971,

4-15=-22/277

NOTES

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

- Wind: ASCE 7-22; Vult=130mph (3-second gust)
Vasd=101mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 1-1-7-4 to 3-0-0, Zone1 3-0-0 to 17-11-15, Zone2 17-11-15 to 24-6-0, Zone1 24-6-0 to 26-0-1, Zone2 26-0-1 to 32-6-2, Zone1 32-6-2 to 47-7-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- All bearings are assumed to be SP No.2 .
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 125 lb uplift at joint 2, 229 lb uplift at joint 12, 150 lb uplift at joint 9 and 186 lb uplift at joint 19.

LOAD CASE(S)

Standard



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

September 24, 2024

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MiTek®
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
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Job	Truss	Truss Type	Qty	Ply	Spec Lt 4	
1655-A	T5	Piggyback Base	1	1	Job Reference (optional)	T35088408

19 Lumber, Inc., Old Town, FL - 32680,

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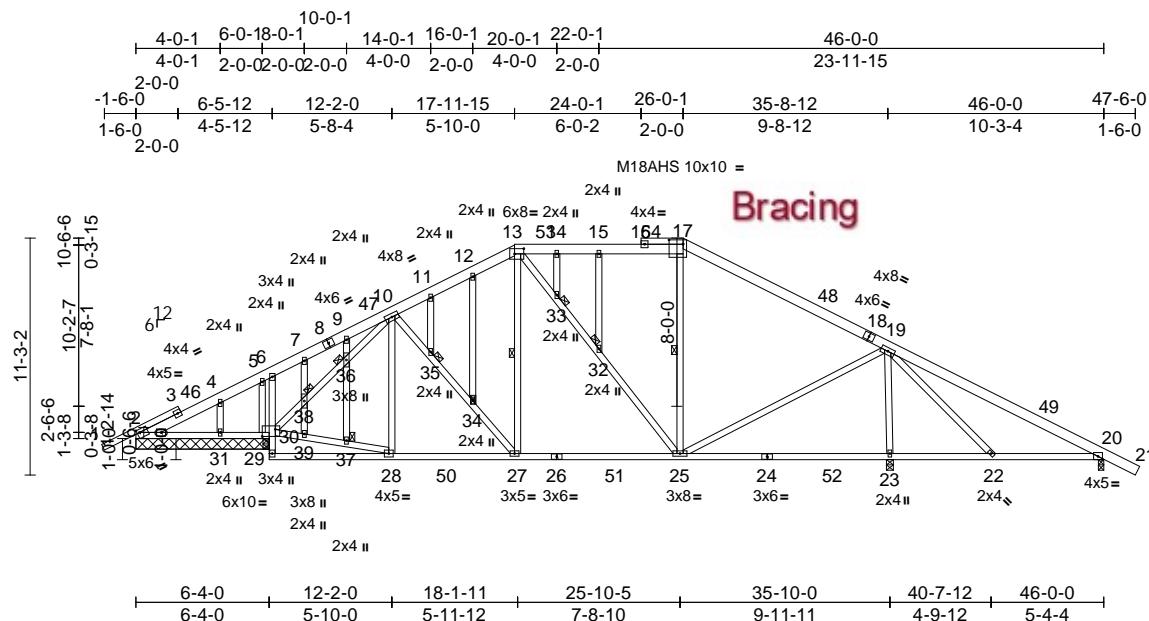


Plate Offsets (X, Y): [2:0-1-6,0-1-12], [13:0-5-4,0-3-0], [17:0-8-0,0-2-8], [30:0-7-8,0-4-0]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	Vert(LL)	-0.20	23-25	>999	240	M18AHS	186/179
TCDL	10.0	Lumber DOL	1.25	BC	Vert(CT)	-0.40	23-25	>885	180	MT20	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	Horz(CT)	0.03	23	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS						Weight: 368 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP No.2 *Except* 1-3,16-17:2x4 SP No.2

BOT CHORD 2x4 SP No.2

WEBS 2x4 SP No.2

OTHERS 2x4 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.

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

6-0-0 oc bracing: 23-25,22-23.

WEBS 1 Row at midpt 13-27, 17-25

JOINTS 1 Brace at Jt(s): 32, 33, 34, 35, 36, 37, 38

REACTIONS (size) 2=6-4-0, 20=0-3-0, 23=0-4-0,

30=6-4-0, 31=6-4-0, 40=6-4-0

Max Horiz 2=204 (LC 13), 40=204 (LC 13)

Max Uplift 2=51 (LC 13), 20=167 (LC 13),

23=200 (LC 13), 30=246 (LC 12),

31=54 (LC 12), 40=51 (LC 13)

Max Grav 2=259 (LC 1), 20=492 (LC 26),

23=1813 (LC 2), 30=1467 (LC 2),

31=207 (LC 19), 40=259 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/42, 2-4=108/112, 4-5=70/138,

5-6=57/199, 6-7=201/160, 7-9=105/176,

9-10=74/192, 10-11=115/266,

11-12=111/276, 12-13=1068/286,

17-19=1109/267, 19-20=358/156,

20-21=0/43, 13-14=885/280,

14-15=883/279, 15-17=883/279

BOT CHORD 2-31=40/154, 30-31=40/154, 29-30=0/124,

6-30=639/188, 28-29=0/112, 27-28=76/933,

25-27=39/997, 23-25=4/129,

22-23=24/100, 20-22=39/244

WEBS

30-39=-81/822, 37-39=-82/834,

28-37=-82/847, 30-38=-1202/129,

36-38=-1232/130, 10-36=-1265/134,

10-28=-68/121, 10-35=-39/165,

34-35=-37/160, 27-34=-42/169,

13-27=-24/301, 13-33=-222/76,

32-33=-219/75, 25-32=-245/80,

17-25=-115/190, 19-25=-46/900,

19-23=-1484/294, 19-22=-6/231,

15-32=-36/16, 14-33=-4/6, 12-34=-7/12,

11-35=-6/4, 9-36=-6/105, 36-37=-3/63,

7-38=-7/145, 38-39=-6/102, 5-30=-1/145,

4-31=-94/71

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=5.0psf; BCDL=5.0psf; h=25ft; Cat.

II; Exp B; Enclosed; MWFRS (envelope) exterior (2)

zone and C-C Zone3 1-6-13 to 3-0-7, Zone1 3-0-7 to

17-11-15, Zone2 17-11-15 to 24-6-0, Zone1 24-6-0 to

26-0-1, Zone2 26-0-1 to 32-6-2, Zone1 32-6-2 to 47-7-4

zone; cantilever left and right exposed; end vertical left

and right exposed; C-C for members and forces &

MWFRS for reactions shown; Lumber DOL=1.60 plate

grip DOL=1.60

3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face),

see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

4) Building Designer / Project engineer responsible for

verifying applied roof live load shown covers rain loading

requirements specific to the use of this truss component.

5) Provide adequate drainage to prevent water ponding.

6) All plates are MT20 plates unless otherwise indicated.

7) Gable studs spaced at 2-0-0 oc.

8) This truss has been designed for a 10.0 psf bottom

9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-0 tall by 2-00-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

10) All bearings are assumed to be SP No.2.

11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 51 lb uplift at joint 2, 246 lb uplift at joint 30, 200 lb uplift at joint 23, 54 lb uplift at joint 31, 167 lb uplift at joint 20 and 51 lb uplift at joint 2.

LOAD CASE(S)

Standard



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

September 24, 2024



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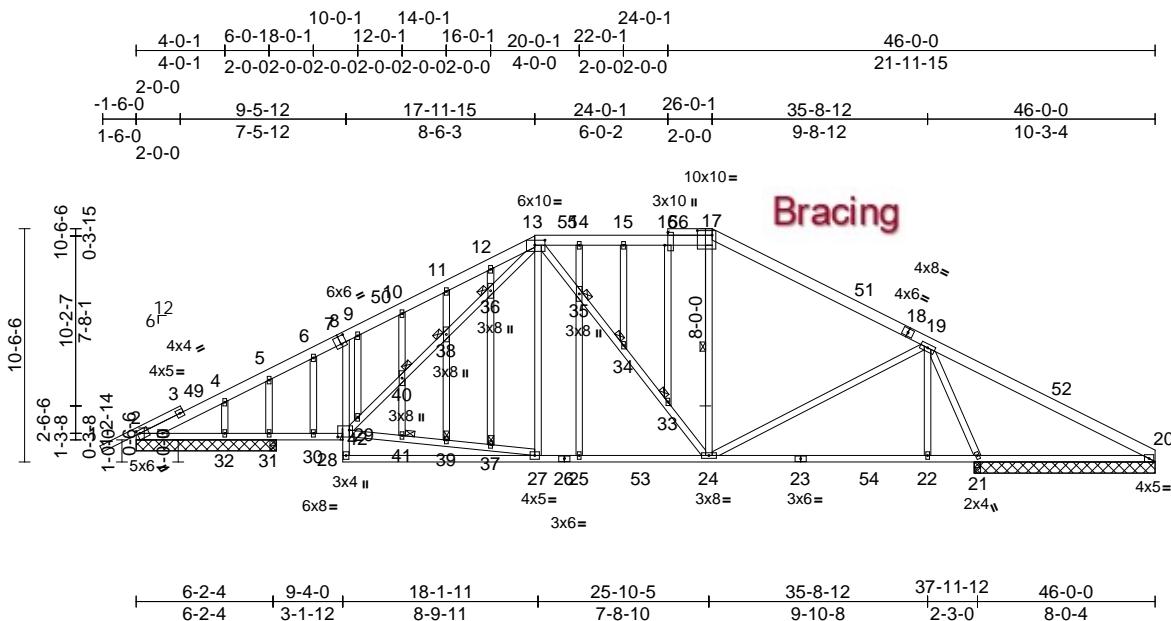
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Job	Truss	Truss Type	Qty	Ply	Spec Lt 4	
1655-A	T6	Piggyback Base	1	1	Job Reference (optional)	T35088409

19 Lumber, Inc., Old Town, FL - 32680,

Run: 8.82 S Sep 12 2024 Print: 8.820 S Sep 12 2024 MiTek Industries, Inc. Tue Sep 24 08:57:43
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Page: 1



Scale = 1:88.5

Plate Offsets (X, Y): [2:0-1-6,0-1-12], [8:0-3-0,0-4-4], [13:0-5-8,0-2-12], [16:Edge,0-1-12], [17:0-8-0,0-2-8], [29:0-6-4,0-3-12]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	Vert(LL)	0.08	21-48	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	Vert(CT)	-0.42	22-24	>821	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	Horz(CT)	0.04	46	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS						Weight: 389 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP No.2 *Except* 1-3,16-17:2x4 SP No.2

BOT CHORD 2x4 SP No.2

WEBS 2x4 SP No.2

OTHERS 2x4 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.

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

6-0-0 oc bracing: 20-21.

WEBS 1 Row at midpt 17-24

JOINTS 1 Brace at Jt(s): 33, 34, 35, 36, 37, 38, 39, 40, 41

REACTIONS (size) 2=6-4-0, 20=8-2-0, 21=0-3-8, 29= Mechanical, 31=6-4-0, 32=6-4-0, 43=6-4-0, 46=8-2-0

Max Horiz 2=178 (LC 13), 43=178 (LC 13)

Max Uplift 2=39 (LC 13), 20=108 (LC 13), 21=204 (LC 13), 29=231 (LC 12), 32=103 (LC 12), 43=39 (LC 13), 46=108 (LC 13)

Max Grav 2=330 (LC 1), 20=351 (LC 28), 21=1622 (LC 2), 29=1383 (LC 2), 31=74 (LC 18), 32=333 (LC 19), 43=330 (LC 1), 46=351 (LC 28)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/42, 2-4=268/68, 4-5=278/100, 5-6=238/118, 6-8=149/123, 8-9=333/180, 9-10=304/189, 10-11=245/197, 11-12=230/214, 12-13=153/226, 17-19=1168/260, 19-20=179/151, 13-14=935/283, 14-15=933/283, 15-16=935/284, 16-17=932/288

BOT CHORD

2-32=-19/267, 31-32=-5/267, 30-31=-5/267, 29-30=-5/266, 28-29=0/159, 8-29=-588/296, 27-28=0/157, 25-27=-32/865, 24-25=-32/865, 22-24=-80/678, 21-22=-80/678, 20-21=-90/133

WEBS

29-41=-57/716, 39-41=-57/717, 37-39=-56/714, 27-37=-58/726, 29-42=-928/66, 40-42=-949/69, 38-40=-954/69, 36-38=-936/61, 13-36=-1003/69, 13-27=0/273, 13-35=-81/196, 34-35=-86/217, 33-34=-80/189, 24-33=-86/196, 17-24=-42/216, 19-24=-48/379, 19-22=0/339, 19-21=1573/212, 16-33=-7/15, 15-34=-40/15, 14-35=-45/32, 25-35=-72/29, 12-36=-25/183, 36-37=-14/90, 11-38=-75/40, 38-39=-45/24, 10-40=-3/22, 40-41=-3/15, 9-42=-7/30, 6-30=-17/116, 5-31=-42/32, 4-32=-240/115

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=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 1-6-13 to 3-0-7, Zone1 3-0-7 to 17-11-15, Zone2 17-11-15 to 24-6-0, Zone1 24-6-0 to 26-0-1, Zone2 26-0-1 to 32-6-2, Zone1 32-6-2 to 46-0-0 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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.

5) Provide adequate drainage to prevent water ponding.
6) All plates are 2x4 (l) MT20 unless otherwise indicated.

7) Gable studs spaced at 2-0-0 oc.

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

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

10) Bearings are assumed to be: Joint 2 SP No.2 , Joint 20 SP No.2 , Joint 31 SP No.2 , Joint 21 SP No.2 .

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

12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 39 lb uplift at joint 2, 231 lb uplift at joint 29, 103 lb uplift at joint 32, 108 lb uplift at joint 20, 204 lb uplift at joint 21, 39 lb uplift at joint 2 and 108 lb uplift at joint 20.

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:

September 24, 2024



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

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

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

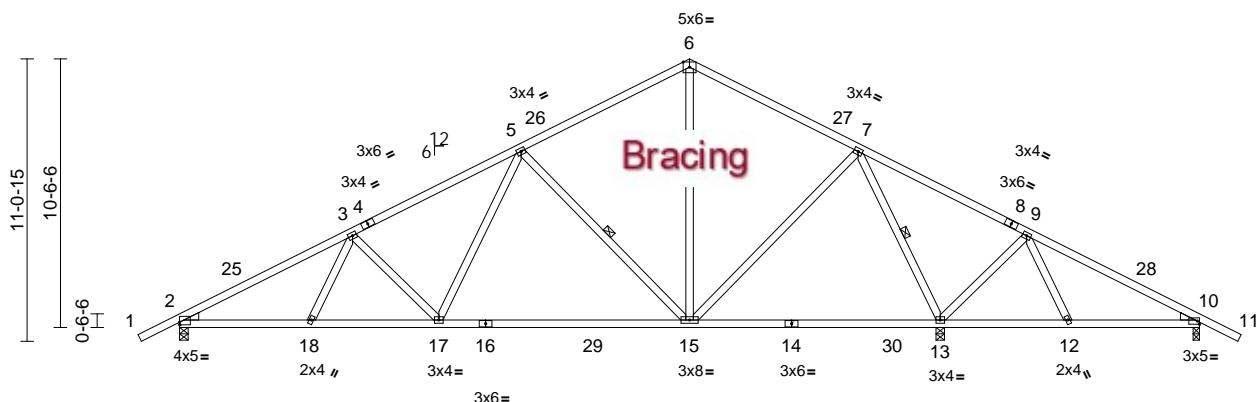
Job 1655-A	Truss T7	Truss Type Common	Qty 7	Ply 1	Spec Lt 4 Job Reference (optional)	T35088410
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19 Lumber, Inc., Old Town, FL - 32680,

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Page: 1

-1-6-0 6-9-6 13-4-11 20-0-0 26-7-5 33-2-10 40-0-0 41-6-0
1-6-0 6-9-6 6-7-5 6-7-5 6-7-5 6-7-5 6-9-6 1-6-0



5-2-0 10-2-0 20-0-0 29-10-0 34-10-0 40-0-0
5-2-0 5-0-0 9-10-0 9-10-0 5-0-0 5-2-0

Scale = 1:89.6

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	Vert(LL)	-0.24	13-15	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	Vert(CT)	-0.40	13-15	>904	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	Horz(CT)	0.04	13	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS						Weight: 222 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP 2400F 2.0E *Except* 14-10:2x4 SP
No.2
WEBS 2x4 SP No.2
WEDGE Left: 2x4 SP No.3
Right: 2x4 SP No.3

2) Wind: ASCE 7-22; Vult=130mph (3-second gust)
Vasd=101mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat.
II; Exp B; Enclosed; MWFRS (envelope) exterior (2)
zone and C-C Zone3 1-6-13 to 2-5-3, Zone1 2-5-3 to
20-0-0, Zone2 20-0-0 to 25-7-14, Zone1 25-7-14 to
41-6-13 zone; cantilever left and right exposed; end
vertical left and right exposed; C-C for members and
forces & MWFRS for reactions shown; Lumber
DOL=1.60 plate grip DOL=1.60

3) 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) Bearings are assumed to be: Joint 2 SP 2400F 2.0E ,
Joint 13 SP No.2 , Joint 10 SP No.2 .
7) Provide mechanical connection (by others) of truss to
bearing plate capable of withstanding 249 lb uplift at joint
2, 236 lb uplift at joint 13 and 128 lb uplift at joint 10.

REACTIONS (size)

2=0-4-0, 10=0-3-0, 13=0-4-0
Max Horiz 2=180 (LC 12)
Max Uplift 2=249 (LC 12), 10=128 (LC 13),
13=236 (LC 13)
Max Grav 2=1300 (LC 2), 10=364 (LC 26),
13=2123 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/42, 2-3=-2090/351, 3-5=-1782/346,
5-6=-903/255, 6-7=-902/258, 7-9=-31/602,
9-10=-233/264, 10-11=0/42

BOT CHORD 2-18=-389/1846, 17-18=-402/1811,
15-17=-222/1301, 13-15=0/254,
12-13=-250/76, 10-12=-177/102

WEBS 3-18=0/135, 3-17=-383/213, 5-17=-82/651,
5-15=-762/308, 6-15=-75/438, 7-15=-58/776,
7-13=-1631/256, 9-13=-476/226, 9-12=0/206

LOAD CASE(S) Standard

NOTES

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



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

September 24, 2024



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

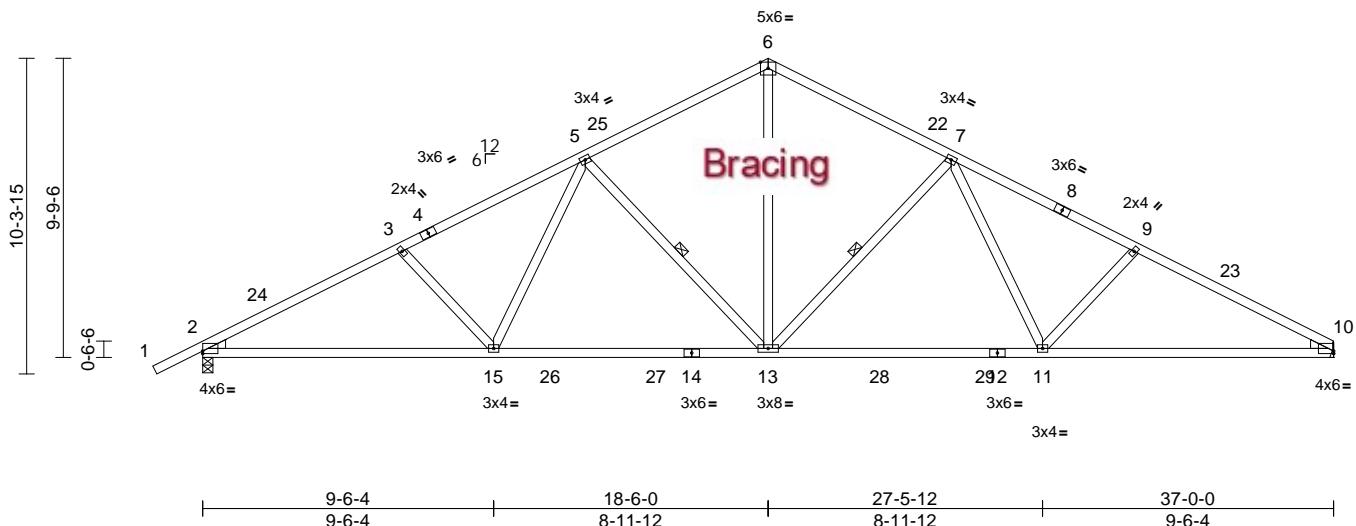
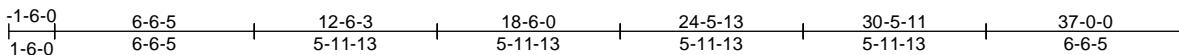
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

Job 1655-A	Truss T8	Truss Type Common	Qty 11	Ply 1	Spec Lt 4 Job Reference (optional)	T35088411
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19 Lumber, Inc., Old Town, FL - 32680,

Run: 8.82 S Sep 12 2024 Print: 8.820 S Sep 12 2024 MiTek Industries, Inc. Tue Sep 24 08:57:43
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Page: 1



Scale = 1:74.7

Plate Offsets (X, Y): [2:Edge,0-1-0], [10:Edge,0-1-0]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	Vert(LL)	-0.26	13-15	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	Vert(CT)	-0.44	13-15	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	Horz(CT)	0.09	10	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS						Weight: 194 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP 2400F 2.0E
WEBS 2x4 SP No.2
WEDGE Left: 2x4 SP No.3
Right: 2x4 SP No.3

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-10-15 oc purlins.

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

WEBS 1 Row at midpt 5-13, 7-13

REACTIONS (size) 2=0-4-0, 10= Mechanical
Max Horiz 2=180 (LC 16)
Max Uplift 2=284 (LC 12), 10=247 (LC 13)
Max Grav 2=1704 (LC 2), 10=1623 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 6-7=1912/366, 7-9=2698/427,
9-10=2908/456, 1-2=0/42, 2-3=2897/449,
3-5=2688/420, 5-6=1913/358

BOT CHORD 2-15=477/2519, 13-15=309/2106,
11-13=186/2109, 10-11=331/2532

WEBS 6-13=177/1374, 5-13=691/275,
5-15=65/588, 3-15=318/210,
7-13=696/278, 7-11=71/600, 9-11=327/214

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=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 1-6-13 to 2-1-10, Zone1 2-1-10 to 18-6-0, Zone2 18-6-0 to 23-8-13, Zone1 23-8-13 to 37-0-0 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, with BCDL = 10.0psf.
- 6) Bearings are assumed to be: Joint 2 SP 2400F 2.0E .
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 247 lb uplift at joint 10 and 284 lb uplift at joint 2.

LOAD CASE(S)

Standard



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

September 24, 2024

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

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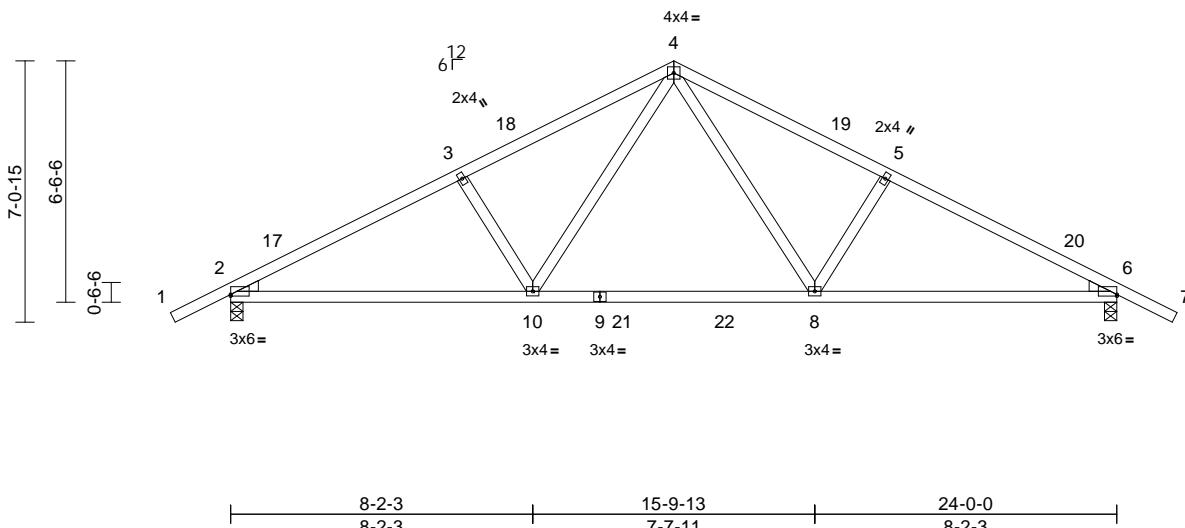
Job 1655-A	Truss T9	Truss Type Common	Qty 5	Ply 1	Spec Lt 4 Job Reference (optional)	T35088412
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19 Lumber, Inc., Old Town, FL - 32680,

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Page: 1

-1-6-0 6-3-4 12-0-0 17-8-12 24-0-0 25-6-0
1-6-0 6-3-4 5-8-12 5-8-12 6-3-4 1-6-0



8-2-3 15-9-13 24-0-0
8-2-3 7-7-11 8-2-3

Scale = 1:61.7

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	Vert(LL)	-0.15	8-10	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	Vert(CT)	-0.25	8-10	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	Horz(CT)	0.05	6	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS						Weight: 114 lb	FT = 20%

LUMBER

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

- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- All bearings are assumed to be SP No.2 .
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 197 lb uplift at joint 2 and 197 lb uplift at joint 6.

LOAD CASE(S) Standard

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-3-11 oc purlins.

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

REACTIONS

(size) 2=0-4-0, 6=0-4-0
Max Horiz 2=113 (LC 13)
Max Uplift 2=197 (LC 12), 6=197 (LC 13)
Max Grav 2=1119 (LC 2), 6=1119 (LC 2)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/42, 2-3=-1710/268, 3-4=-1555/277, 4-5=-1555/277, 5-6=-1710/268, 6-7=0/42
BOT CHORD 2-10=-254/1469, 8-10=-75/1003, 6-8=-151/1468
WEBS 4-8=-129/635, 5-8=-340/218, 4-10=-129/635, 3-10=-340/218

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-22; Vult=130mph (3-second gust)
Vasd=101mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 -1-6-13 to 1-5-3, Zone1 1-5-3 to 12-0-0, Zone2 12-0-0 to 16-2-15, Zone1 16-2-15 to 25-6-13 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.



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

September 24, 2024

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

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

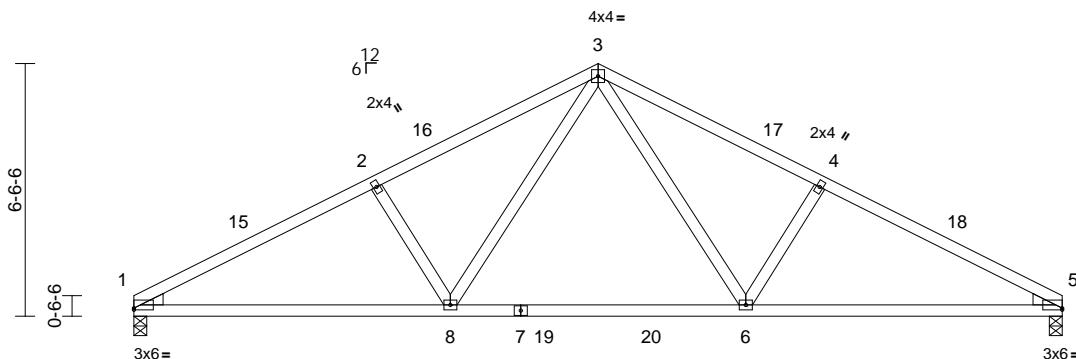
Job 1655-A	Truss T10	Truss Type Common	Qty 1	Ply 1	Spec Lt 4 Job Reference (optional)	T35088413
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19 Lumber, Inc., Old Town, FL - 32680,

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Page: 1

6-3-4 12-0-0 17-8-12 24-0-0
6-3-4 5-8-12 5-8-12 6-3-4



8-2-3 15-9-13 24-0-0
8-2-3 7-7-11 8-2-3

Scale = 1:59.6

Plate Offsets (X, Y): [1:Edge,0-0-8], [5:Edge,0-0-8]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	Vert(LL)	-0.14	6-8	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	Vert(CT)	-0.23	6-8	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	Horz(CT)	0.05	5	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS						Weight: 109 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-2-12 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

LOAD CASE(S) Standard

REACTIONS

(size) 1=0-4-0, 5=0-4-0
Max Horiz 1=100 (LC 13)
Max Uplift 1=160 (LC 12), 5=160 (LC 13)
Max Grav 1=1041 (LC 2), 5=1041 (LC 2)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-1730/285, 2-3=-1574/299,
3-4=-1574/299, 4-5=-1730/285
BOT CHORD 1-8=-277/1489, 6-8=-91/1013, 5-6=-186/1489
WEBS 3-6=-136/648, 4-6=-349/222, 3-8=-136/648,
2-8=-349/222

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-22; Vult=130mph (3-second gust)
Vasd=101mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 0-0-0 to 3-0-0, Zone1 3-0-0 to 12-0-0, Zone2 12-0-0 to 16-2-15, Zone1 16-2-15 to 24-0-0 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, with BCDL = 10.0psf.
- All bearings are assumed to be SP No.2 .
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 160 lb uplift at joint 1 and 160 lb uplift at joint 5.



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

September 24, 2024

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

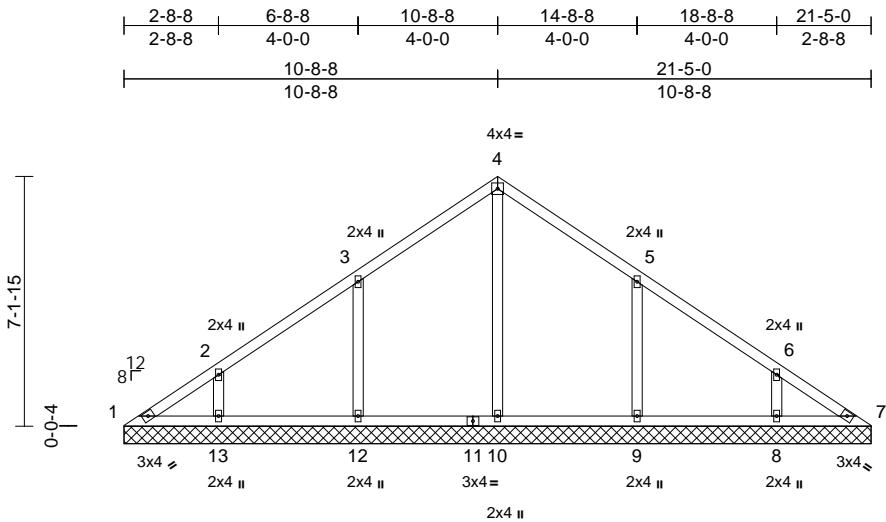
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

Job 1655-A	Truss V2	Truss Type Valley	Qty 1	Ply 1	Spec Lt 4 Job Reference (optional)	T35088415
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19 Lumber, Inc., Old Town, FL - 32680,

Run: 8.82 S Sep 12 2024 Print: 8.820 S Sep 12 2024 MiTek Industries, Inc. Tue Sep 24 08:57:44
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Page: 1



Scale = 1:60.3

21-5-0

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	Horiz(TL)	0.00	7	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS						Weight: 94 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS (size) 1=21-5-0, 7=21-5-0, 8=21-5-0, 9=21-5-0, 10=21-5-0, 12=21-5-0, 13=21-5-0
Max Horiz 1=173 (LC 8)
Max Uplif 1=36 (LC 8), 8=-112 (LC 13), 9=-162 (LC 13), 12=-162 (LC 12), 13=-114 (LC 12)
Max Grav 1=117 (LC 20), 7=87 (LC 19), 8=353 (LC 20), 9=458 (LC 20), 10=403 (LC 22), 12=458 (LC 19), 13=356 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-165/145, 2-3=-136/117, 3-4=-115/163, 4-5=-112/142, 5-6=-87/69, 6-7=-121/81
BOT CHORD 1-13=-60/133, 12-13=-60/115, 10-12=-60/115, 9-10=-60/115, 8-9=-60/115, 7-8=-60/115

WEBS 4-10=-196/0, 3-12=-287/203, 2-13=-226/149, 5-9=-287/203, 6-8=-225/148

NOTES

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

- Wind: ASCE 7-22; Vult=130mph (3-second gust)
Vasd=101mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 0-0 to 2-8-14, Zone1 2-8-14 to 10-8-14, Zone2 10-8-14 to 14-8-14, Zone1 14-8-14 to 21-5-6 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- All bearings are assumed to be SP No.2 .
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 36 lb uplift at joint 1, 162 lb uplift at joint 12, 114 lb uplift at joint 13, 162 lb uplift at joint 9 and 112 lb uplift at joint 8.

LOAD CASE(S) Standard



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

September 24, 2024

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

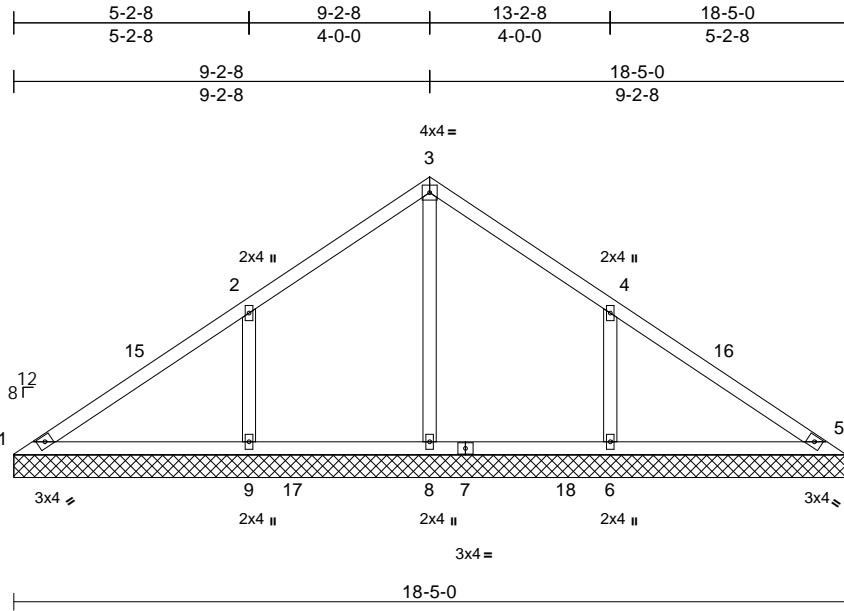
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

Job 1655-A	Truss V3	Truss Type Valley	Qty 1	Ply 1	Spec Lt 4 Job Reference (optional)	T35088416
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19 Lumber, Inc., Old Town, FL - 32680,

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Scale = 1:44.8

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	Horiz(TL)	-0.01	5	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS						Weight: 76 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS (size) 1=18-5-0, 5=18-5-0, 6=18-5-0, 8=18-5-0, 9=18-5-0, 14=18-5-0
Max Horiz 1=147 (LC 9)
Max Uplift 1=49 (LC 26), 6=193 (LC 13), 9=199 (LC 12)
Max Grav 1=99 (LC 25), 5=1 (LC 20), 6=549 (LC 20), 8=654 (LC 19), 9=555 (LC 19), 14=1 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-107/423, 2-3=0/349, 3-4=0/334, 4-5=-181/383

BOT CHORD 1-9=-272/113, 8-9=-272/113, 6-8=-272/113, 5-6=-272/113

WEBS 3-8=-491/33, 2-9=-336/221, 4-6=-334/219

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-22; Vult=130mph (3-second gust)
Vasd=101mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 0-0-6 to 3-0-6, Zone1 3-0-6 to 9-2-14, Zone2 9-2-14 to 13-2-14, Zone1 13-2-14 to 18-5-6 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- All bearings are assumed to be SP No.2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 49 lb uplift at joint 1, 199 lb uplift at joint 9 and 193 lb uplift at joint 6.

LOAD CASE(S)

Standard



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

September 24, 2024



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

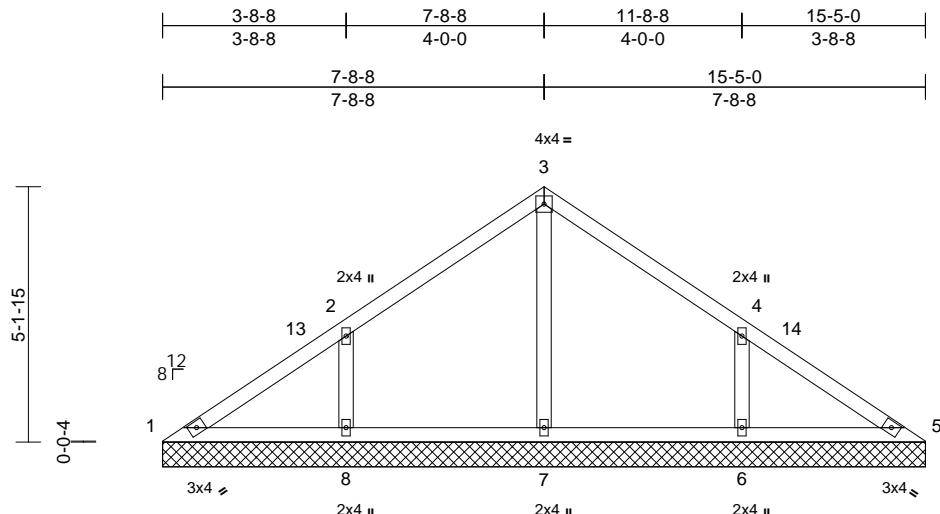
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

Job 1655-A	Truss V4	Truss Type Valley	Qty 1	Ply 1	Spec Lt 4 Job Reference (optional)	T35088417
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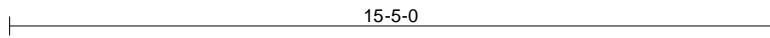
19 Lumber, Inc., Old Town, FL - 32680,

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Page: 1



Scale = 1:40.9



Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS						Weight: 61 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2

BOT CHORD 2x4 SP No.2

OTHERS 2x4 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 10-0-0 oc purlins.

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

REACTIONS (size) 1=15-5-0, 5=15-5-0, 6=15-5-0, 7=15-5-0, 8=15-5-0

Max Horiz 1=123 (LC 9)

Max Uplift 1=16 (LC 13), 6=158 (LC 13), 8=159 (LC 12)

Max Grav 1=102 (LC 20), 5=95 (LC 26), 6=379 (LC 20), 7=336 (LC 1), 8=381 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-136/163, 2-3=-53/135, 3-4=-39/119, 4-5=-114/126

BOT CHORD 1-8=-78/126, 7-8=-78/87, 6-7=-78/87, 5-6=-78/90

WEBS 3-7=-265/22, 2-8=-280/187, 4-6=-279/186

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=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 0-0-6 to 3-0-6, Zone1 3-0-6 to 7-8-14, Zone2 7-8-14 to 11-8-14, Zone1 11-8-14 to 15-5-6 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

- 4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 4-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 9) All bearings are assumed to be SP No.2.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 16 lb uplift at joint 1, 159 lb uplift at joint 8 and 158 lb uplift at joint 6.

LOAD CASE(S) Standard



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

September 24, 2024

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

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

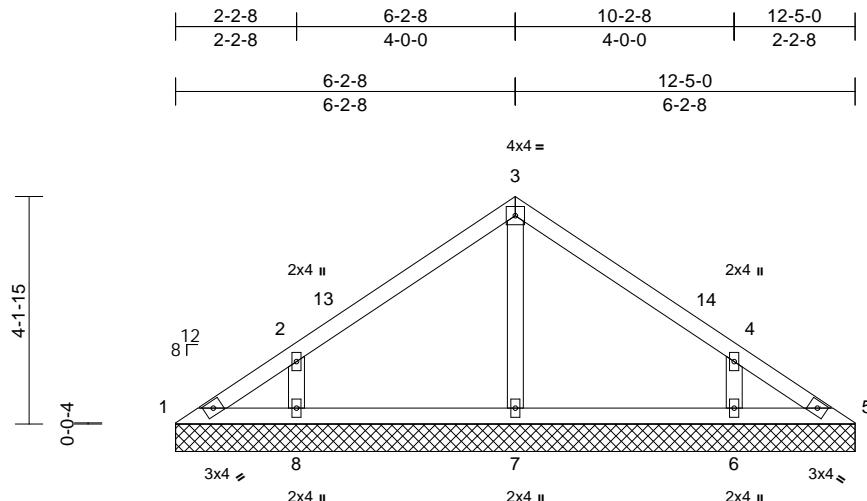
MiTek®
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-Us.com

Job 1655-A	Truss V5	Truss Type Valley	Qty 1	Ply 1	Spec Lt 4 Job Reference (optional)	T35088418
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19 Lumber, Inc., Old Town, FL - 32680,

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Page: 1



Scale = 1:37

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS						Weight: 47 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2

BOT CHORD 2x4 SP No.2

OTHERS 2x4 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.

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

REACTIONS (size) 1=12-5-0, 5=12-5-0, 6=12-5-0, 7=12-5-0, 8=12-5-0

Max Horiz 1=98 (LC 11)

Max Uplift 1=22 (LC 8), 5=1 (LC 12), 6=133 (LC 13), 8=135 (LC 12)

Max Grav 1=79 (LC 20), 5=61 (LC 19), 6=320 (LC 20), 7=269 (LC 1), 8=322 (LC 19)

4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.

5) Gable requires continuous bottom chord bearing.

6) Gable studs spaced at 4-0-0 oc.

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

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

9) All bearings are assumed to be SP No.2.

10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 22 lb uplift at joint 1, 1 lb uplift at joint 5, 135 lb uplift at joint 8 and 133 lb uplift at joint 6.

LOAD CASE(S)

Standard

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-104/87, 2-3=-118/109, 3-4=-107/111, 4-5=-76/51

BOT CHORD 1-8=-27/73, 7-8=-25/55, 6-7=-25/55, 5-6=-25/61

WEBS 3-7=-184/22, 2-8=-262/215, 4-6=-261/215

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=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 0-0-6 to 3-0-6, Zone1 3-0-6 to 6-2-14, Zone2 6-2-14 to 10-2-14, Zone1 10-2-14 to 12-5-6 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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



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

September 24, 2024

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

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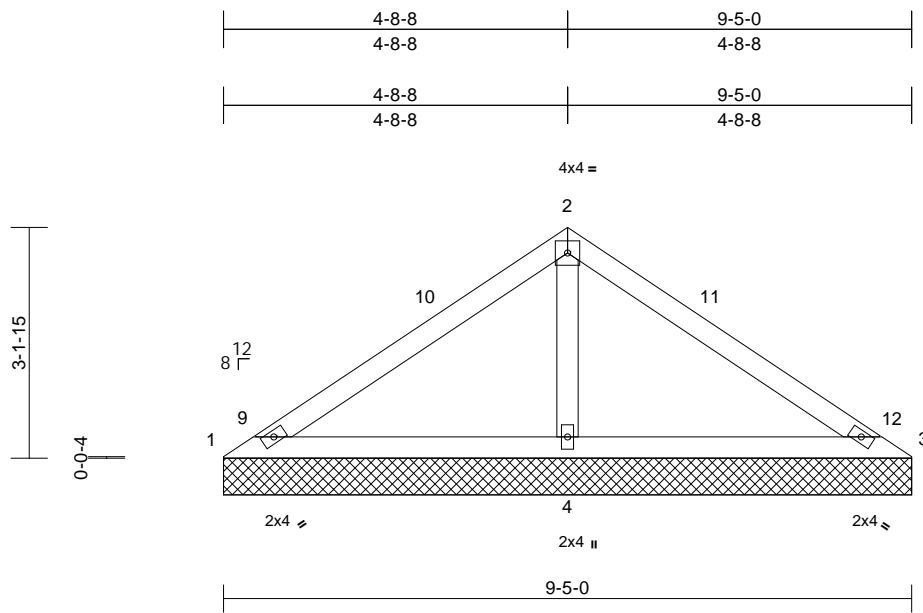
MiTek®
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-Us.com

Job 1655-A	Truss V6	Truss Type Valley	Qty 1	Ply 1	Spec Lt 4 Job Reference (optional)	T35088419
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19 Lumber, Inc., Old Town, FL - 32680,

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Page: 1



Scale = 1:21.6

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MS						Weight: 33 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 9-5-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size) 1=9-5-0, 3=9-5-0, 4=9-5-0
Max Horiz 1=74 (LC 11)
Max Uplift 1=21 (LC 26), 3=21 (LC 25), 4=125 (LC 12)
Max Grav 1=73 (LC 25), 3=73 (LC 26), 4=684 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-145/312, 2-3=-149/312
BOT CHORD 1-4=-225/208, 3-4=-225/208
WEBS 2-4=-520/311

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-22; Vult=130mph (3-second gust)
Vasd=101mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 0-6 to 3-0-6, Zone1 3-0-6 to 4-8-14, Zone2 4-8-14 to 8-11-13, Zone1 8-11-13 to 9-5-6 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.



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

September 24, 2024

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

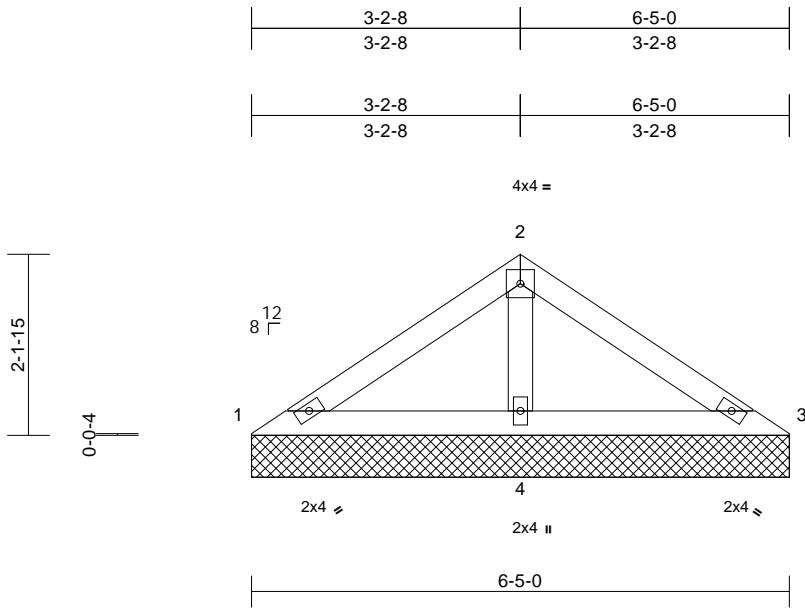
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

Job 1655-A	Truss V7	Truss Type Valley	Qty 1	Ply 1	Spec Lt 4 Job Reference (optional)	T35088420
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19 Lumber, Inc., Old Town, FL - 32680,

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Page: 1



Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MP						Weight: 22 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 6-5-0 oc purlins.

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

REACTIONS (size) 1=6-5-0, 3=6-5-0, 4=6-5-0
Max Horiz 1=49 (LC 11)
Max Uplift 1=5 (LC 12), 3=14 (LC 13), 4=-72 (LC 12)
Max Grav 1=68 (LC 25), 3=68 (LC 26), 4=417 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-99/164, 2-3=-99/164

BOT CHORD 1-4=-136/171, 3-4=-136/171

WEBS 2-4=-282/232

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-22; Vult=130mph (3-second gust)
Vasd=101mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.

- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2 .
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 5 lb uplift at joint 1, 14 lb uplift at joint 3 and 72 lb uplift at joint 4.

LOAD CASE(S)

Standard



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

September 24, 2024



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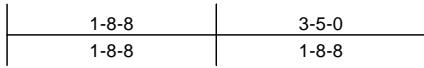
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Job 1655-A	Truss V8	Truss Type Valley	Qty 1	Ply 1	Spec Lt 4 Job Reference (optional)	T35088421
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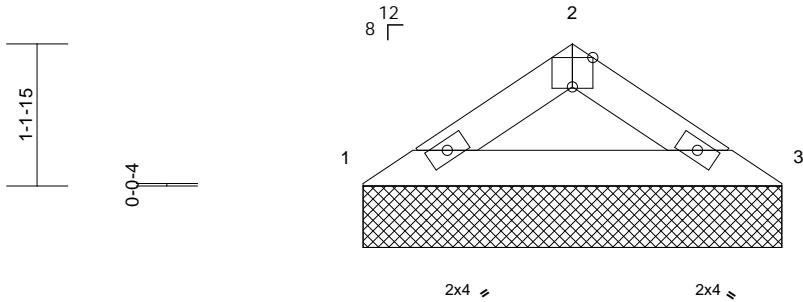
19 Lumber, Inc., Old Town, FL - 32680,

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ID:IRE?dEdjYyRoqNBj0xPccycLyz-RfC?PsB70Hq3NSgPqnL8w3uTxbGKWrCDoi7J4zJC?f

Page: 1



3x4 =



2x4 ♂ 2x4 ♀

3-5-0

Scale = 1:14

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	FBC2023/TPI2014	Matrix-MP						Weight: 10 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 3-5-0 oc purlins.

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

REACTIONS (size) 1=3-5-0, 3=3-5-0

Max Horiz 1=-24 (LC 10)

Max Uplift 1=-22 (LC 12), 3=-22 (LC 13)

Max Grav 1=137 (LC 1), 3=137 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-199/138, 2-3=-199/138

BOT CHORD 1-3=-98/161

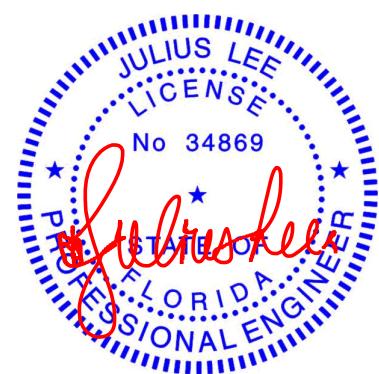
NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-22; Vult=130mph (3-second gust)
Vasd=101mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (2) zone and C-C Zone3 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

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

9) All bearings are assumed to be SP No.2 .
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 22 lb uplift at joint 1 and 22 lb uplift at joint 3.

LOAD CASE(S) Standard



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

September 24, 2024



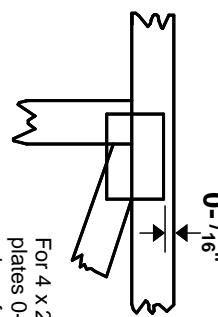
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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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.

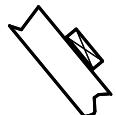
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 x 4

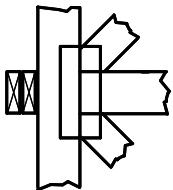
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING



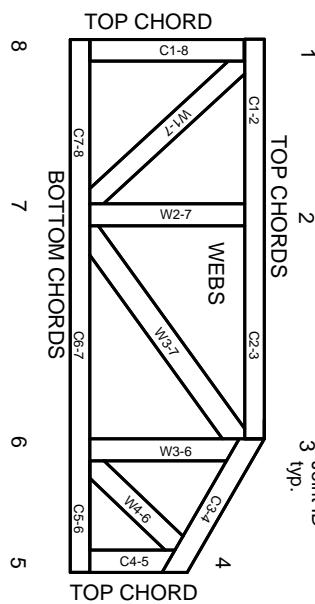
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

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

Numbering System

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



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

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

Product Code Approvals

ICC-ES Reports:

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

Design General Notes

Trusses are designed for wind loads in the plane of the truss unless otherwise shown.
Lumber design values are in accordance with ANSI/TP1 section 6.3. These truss designs rely on lumber values established by others.

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Failure to Follow Could Cause Property Damage or Personal Injury

General Safety Notes

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! 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/TP1.

7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1.

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/TP1 Quality Criteria.

21. The design does not take into account any dynamic or other loads other than those expressly stated.

MiTek®