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

RE: 0646-A - Thomas

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

Site Information:

Customer Info: Parrish Builders Group Project Name: Thomas Model: .
Lot/Block: . Subdivision: .
Address: ., .
City: Lake City State: FL

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

Name: License #:
Address:
City: State:

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

Design Code: FBC2020/TPI2014 Design Program: MiTek 20/20 8.5
Wind Code: ASCE 7-16 Wind Speed: 140 mph
Roof Load: 40.0 psf Floor Load: N/A psf

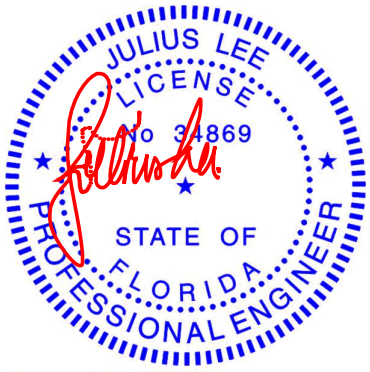
This package includes 8 individual, Truss Design Drawings and 0 Additional Drawings.
With my seal affixed to this sheet, I hereby certify that I am the Truss Design Engineer and this index sheet conforms to 61G15-31.003, section 5 of the Florida Board of Professional Engineers Rules.

No.	Seal#	Truss Name	Date
1	T28230206	BJ3	7/11/22
2	T28230207	BJ5	7/11/22
3	T28230208	CJ7	7/11/22
4	T28230209	EJ7	7/11/22
5	T28230210	G1	7/11/22
6	T28230211	HGR21	7/11/22
7	T28230212	HGR23	7/11/22
8	T28230213	T1	7/11/22

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, 2023.

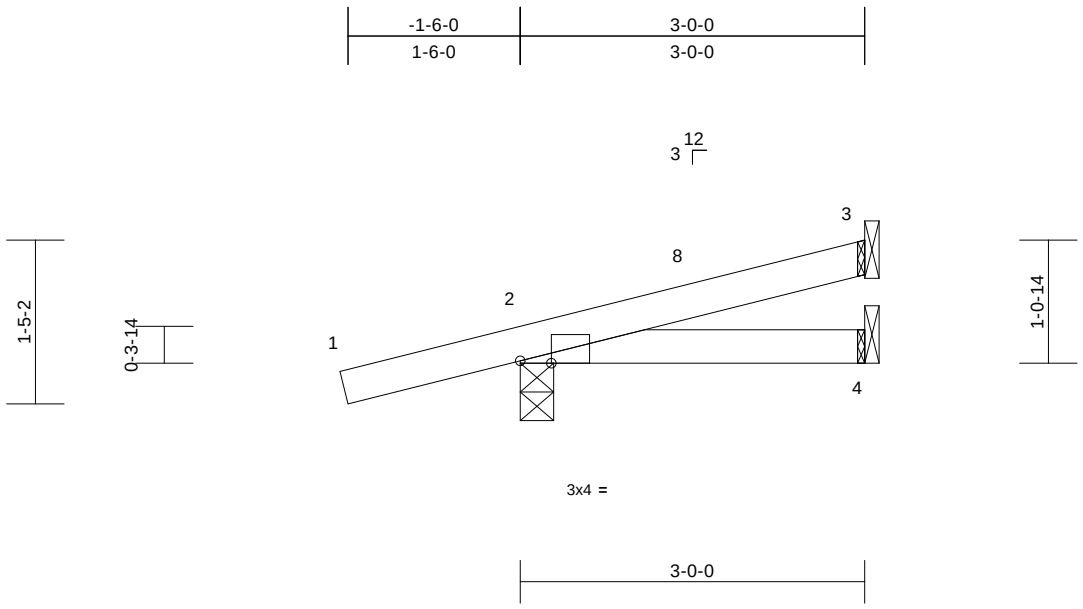
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which 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:

July 12,2022

Job	Truss	Truss Type	Qty	Ply	Thomas
0646-A	BJ3	Corner Jack	8	1	T28230206
					Job Reference (optional)



Scale = 1:20.1

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.21	Vert(LL)	0.00	4-7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.10	Vert(CT)	-0.01	4-7	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MP							Weight: 11 lb	FT = 20%

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

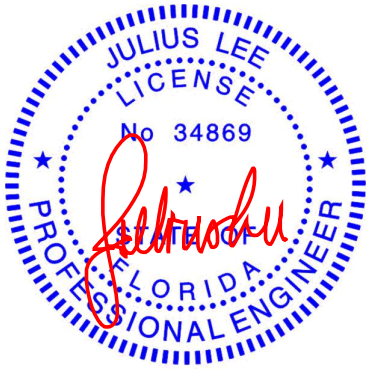
BRACING
TOP CHORD Structural wood sheathing directly applied or 3-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 2=234/0-3-8, 3=61/ Mechanical, 4=32/ Mechanical
Max Horiz 2=75 (LC 8)
Max Uplift 2=-192 (LC 8), 3=-47 (LC 12), 4=-1 (LC 12)
Max Grav 2=234 (LC 1), 3=61 (LC 1), 4=47 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/22, 2-3=-93/19
BOT CHORD 2-4=-1/102

NOTES
1) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=108mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-6-7 to 1-5-9, Interior (1) 1-5-9 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) All plates are 3x4 MT20 unless otherwise indicated.
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) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 47 lb uplift at joint 3, 192 lb uplift at joint 2 and 1 lb uplift at joint 4.

LOAD CASE(S) Standard



Julius Lee PE No. 34869
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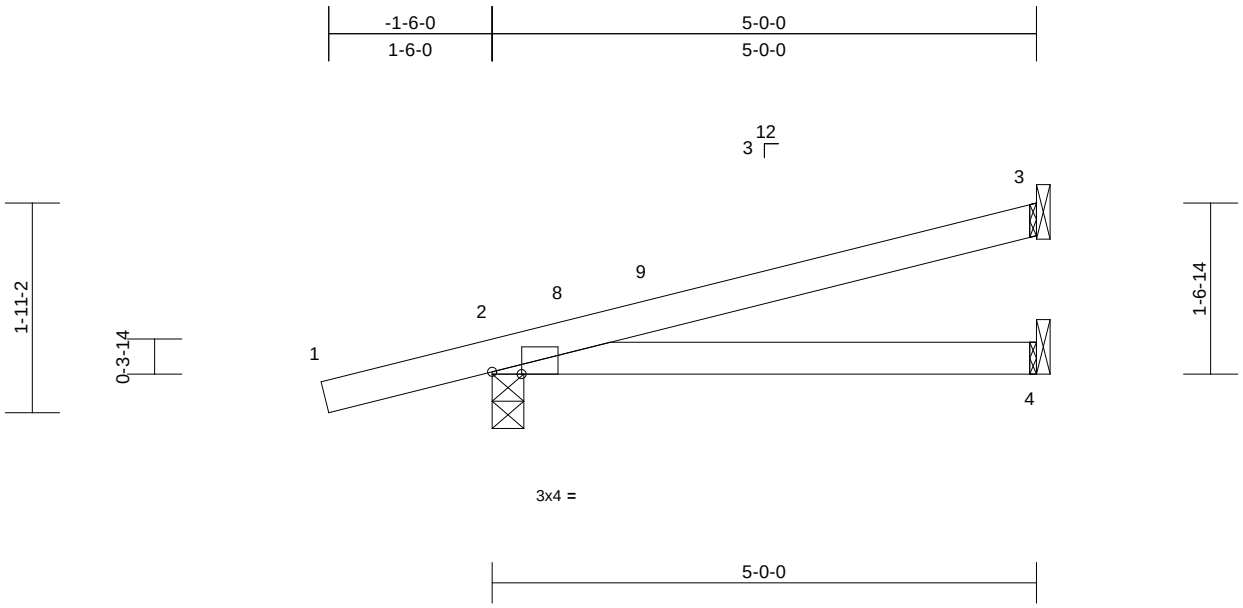
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

July 12,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Thomas
0646-A	BJ5	Corner Jack	8	1	T28230207
					Job Reference (optional)



Scale = 1:21.2

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.39	Vert(LL)	0.06	4-7	>980	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.38	Vert(CT)	-0.06	4-7	>992	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MP							Weight: 18 lb	FT = 20%

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

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

REACTIONS (lb/size) 2=304/0-3-8, 3=121/ Mechanical, 4=63/ Mechanical
Max Horiz 2=106 (LC 8)
Max Uplift 2=-216 (LC 8), 3=-97 (LC 12), 4=-2 (LC 12)
Max Grav 2=304 (LC 1), 3=121 (LC 1), 4=87 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/22, 2-3=-163/58
BOT CHORD 2-4=-122/179

NOTES
1) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=108mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-6-7 to 1-5-9, Interior (1) 1-5-9 to 4-11-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
3) All plates are 3x4 MT20 unless otherwise indicated.
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) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 97 lb uplift at joint 3, 216 lb uplift at joint 2 and 2 lb uplift at joint 4.

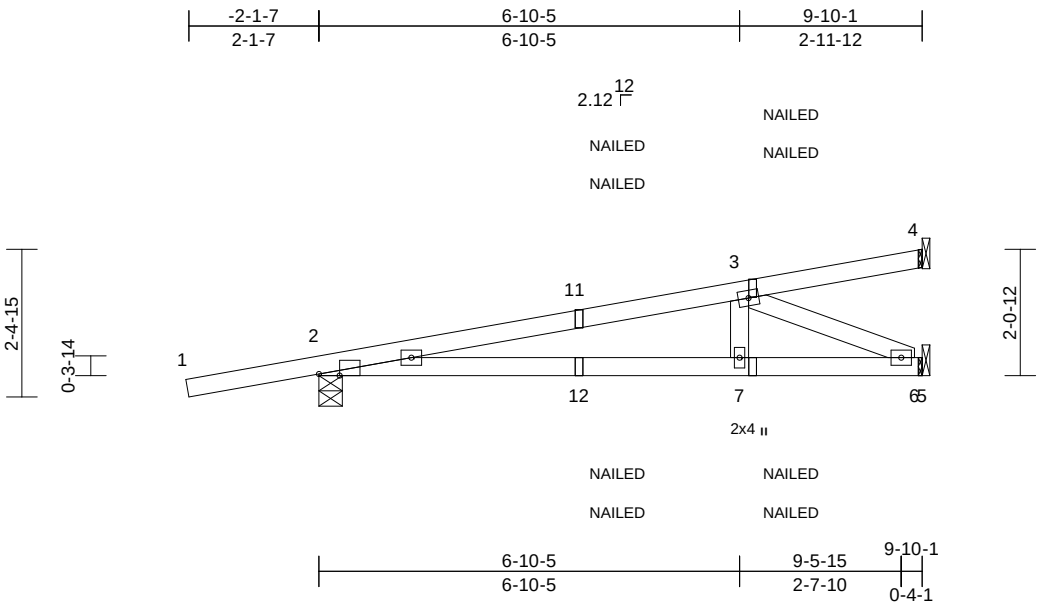
LOAD CASE(S) Standard

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

July 12,2022

Job	Truss	Truss Type	Qty	Ply	Thomas
0646-A	CJ7	Diagonal Hip Girder	4	1	T28230208
					Job Reference (optional)

19 Lumber, Inc., Old Town, FL - 32680, Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon Jul 11 11:34:01 Page: 1
ID:vwvCGSeObivwhhEl?RrB?2z_Rrr-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:37.6

Plate Offsets (X, Y): [2:0-4-1,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	0.49	Vert(LL)	0.12	7-10	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.60	Vert(CT)	-0.15	7-10	>768	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.22	Horz(CT)	0.01	6	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MS							Weight: 38 lb	FT = 20%

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

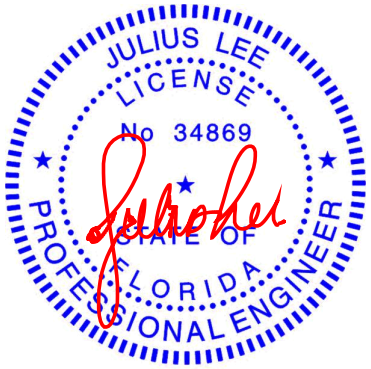
BRACING
TOP CHORD Structural wood sheathing directly applied or 4-10-7 oc purlins.
BOT CHORD Rigid ceiling directly applied or 7-5-6 oc bracing.

REACTIONS (lb/size) 2=581/0-4-9, 4=33/ Mechanical, 6=452/ Mechanical
Max Horiz 2=135 (LC 4)
Max Uplift 2=-395 (LC 4), 4=-50 (LC 21), 6=-234 (LC 8)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/22, 2-3=-1072/538, 3-4=-25/3
BOT CHORD 2-7=-588/1040, 6-7=-588/1040, 5-6=0/0
WEBS 3-6=-1134/641, 3-7=-34/298

NOTES
1) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=108mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
3) All plates are 3x4 MT20 unless otherwise indicated.
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) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 50 lb uplift at joint 4, 395 lb uplift at joint 2 and 234 lb uplift at joint 6.
8) "NAILED" indicates Girder: 3-16d (0.162" x 3.5") toe-nails per NDS guidelines.
9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (lb/ft)
Vert: 1-4=-60, 5-8=-20
Concentrated Loads (lb)
Vert: 3=-71 (F=-36, B=-36), 7=-69 (F=-34, B=-34), 12=-14 (F=-7, B=-7)



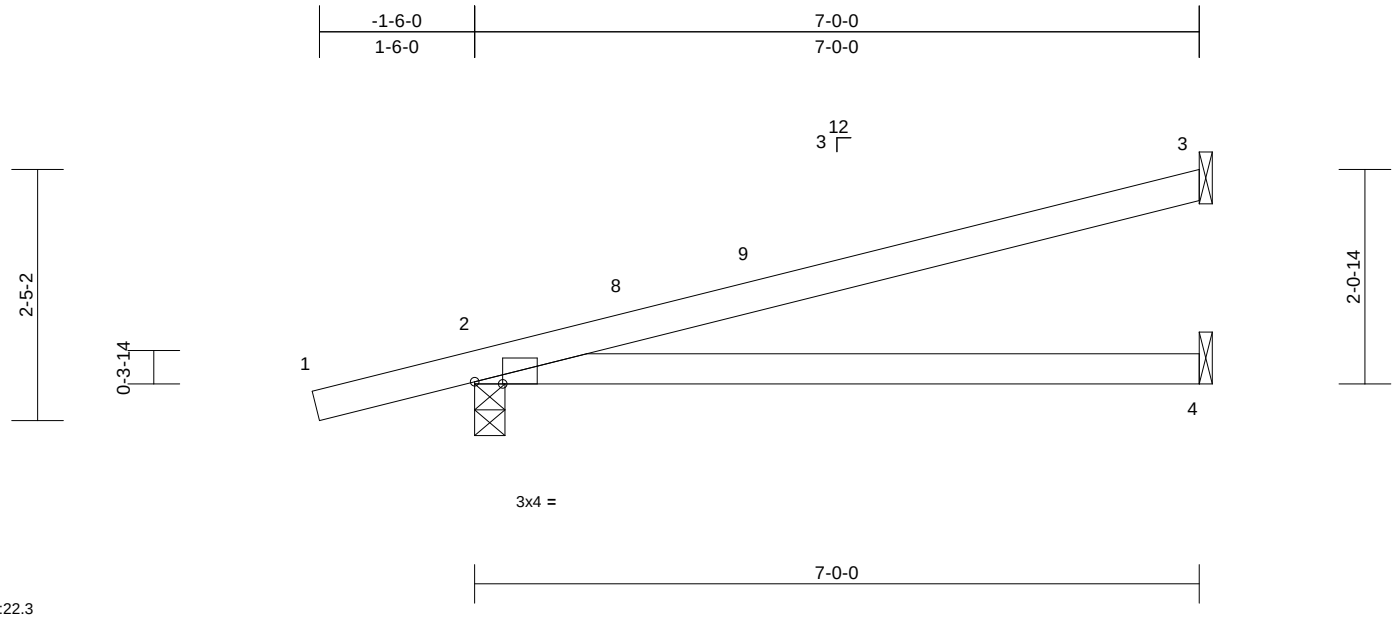
Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

July 12,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Thomas
0646-A	EJ7	Jack-Open	11	1	T28230209
					Job Reference (optional)

19 Lumber, Inc., Old Town, FL - 32680, Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon Jul 11 11:34:01 Page: 1
ID:YQ2T47Awnj?SWilFDkf1wqz_RsS-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:22.3

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.79	Vert(LL)	0.20	4-7	>423	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.67	Vert(CT)	-0.23	4-7	>365	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MP							Weight: 24 lb	FT = 20%

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

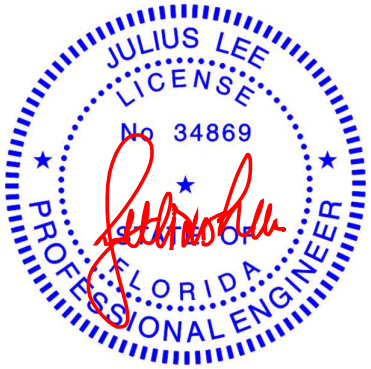
BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 2=380/0-3-8, 3=177/ Mechanical, 4=90/ Mechanical
Max Horiz 2=136 (LC 8)
Max Uplift 2=-248 (LC 8), 3=-144 (LC 12), 4=-2 (LC 12)
Max Grav 2=380 (LC 1), 3=177 (LC 1), 4=125 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/22, 2-3=-213/53
BOT CHORD 2-4=-142/237

NOTES
1) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=108mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-6-7 to 1-5-9, Interior (1) 1-5-9 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) All plates are 3x4 MT20 unless otherwise indicated.
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) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 144 lb uplift at joint 3, 248 lb uplift at joint 2 and 2 lb uplift at joint 4.

LOAD CASE(S) Standard

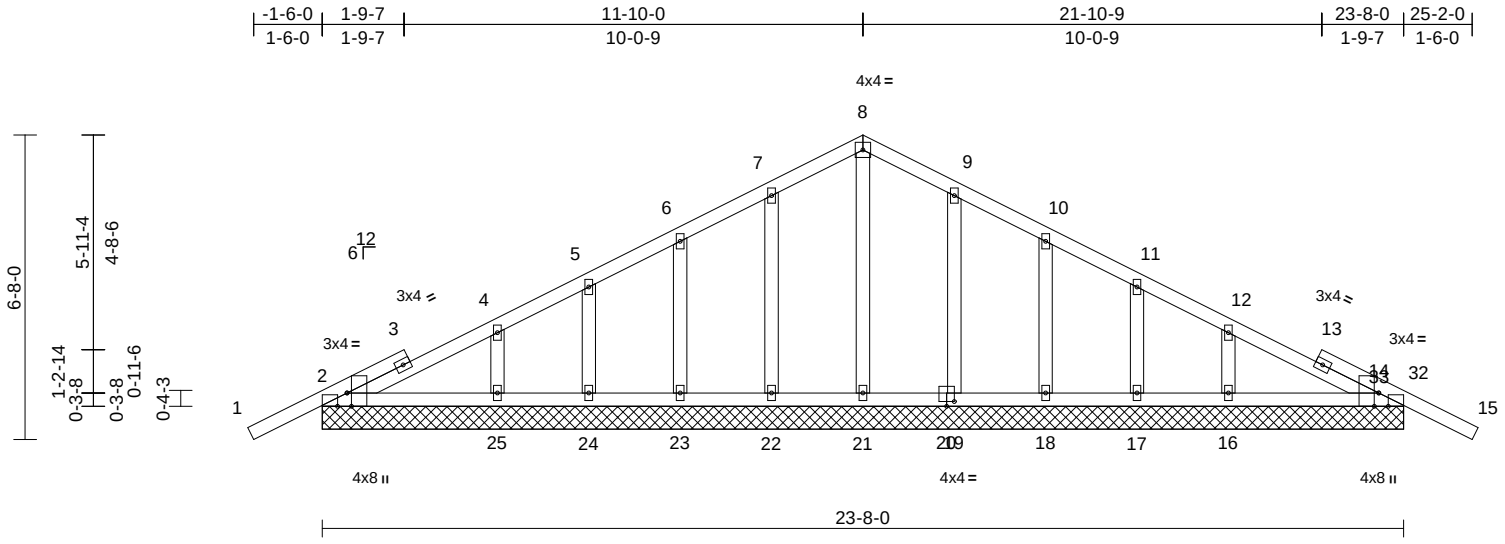


Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

July 12,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Thomas
0646-A	G1	Common Supported Gable	2	1	T28230210
					Job Reference (optional)



Scale = 1:50.4

Plate Offsets (X, Y): [2:0-3-8,Edge], [2:0-2-8,Edge], [14:0-3-8,Edge], [14:0-2-8,Edge], [20:0-2-0,0-1-4]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.40	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.08	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.01	14	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MS							Weight: 126 lb	FT = 20%

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

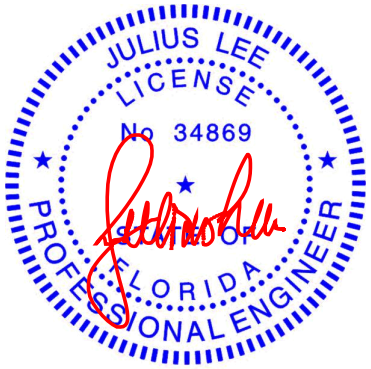
BRACING
TOP CHORD Structural wood sheathing directly applied or 10-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (lb/size) 2=239/23-8-0, 14=210/23-8-0, 16=261/23-8-0, 17=122/23-8-0, 18=168/23-8-0, 19=165/23-8-0, 21=167/23-8-0, 22=165/23-8-0, 23=168/23-8-0, 24=121/23-8-0, 25=264/23-8-0, 26=210/23-8-0, 29=239/23-8-0
Max Horiz 2=-167 (LC 17), 29=-167 (LC 17)
Max Uplift 2=-88 (LC 12), 14=-114 (LC 13), 16=-160 (LC 13), 17=-93 (LC 13), 18=-117 (LC 13), 19=-113 (LC 13), 22=-115 (LC 12), 23=-115 (LC 12), 24=-96 (LC 12), 25=-152 (LC 12), 26=-114 (LC 13), 29=-88 (LC 12)
Max Grav 2=241 (LC 25), 14=211 (LC 26), 16=262 (LC 26), 17=122 (LC 1), 18=168 (LC 1), 19=167 (LC 26), 21=200 (LC 22), 22=167 (LC 25), 23=168 (LC 1), 24=121 (LC 1), 25=265 (LC 25), 26=211 (LC 26), 29=241 (LC 25)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/42, 2-4=-160/111, 4-5=-75/115, 5-6=-30/139, 6-7=-47/187, 7-8=-74/261, 8-9=-74/261, 9-10=-47/187, 10-11=-20/110, 11-12=-18/55, 12-14=-115/81, 14-15=0/41
BOT CHORD 2-25=-71/187, 24-25=-71/187, 23-24=-71/187, 22-23=-71/187, 21-22=-71/187, 19-21=-71/187, 18-19=-71/187, 17-18=-71/187, 16-17=-71/187, 14-16=-71/187
WEBS 8-21=-159/0, 7-22=-128/147, 6-23=-123/152, 5-24=-99/138, 4-25=-182/192, 9-19=-129/147, 10-18=-123/152, 11-17=-99/138, 12-16=-180/191

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=108mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -1-6-13 to 1-2-5, Exterior(2N) 1-2-5 to 11-10-0, Corner(3R) 11-10-0 to 14-10-0, Exterior(2N) 14-10-0 to 25-2-13 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
5) 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 114 lb uplift at joint 14, 88 lb uplift at joint 2, 115 lb uplift at joint 22, 115 lb uplift at joint 23, 96 lb uplift at joint 24, 152 lb uplift at joint 25, 113 lb uplift at joint 19, 117 lb uplift at joint 18, 93 lb uplift at joint 17, 160 lb uplift at joint 16, 114 lb uplift at joint 14 and 88 lb uplift at joint 2.

LOAD CASE(S) Standard



Julius Lee PE No. 34869
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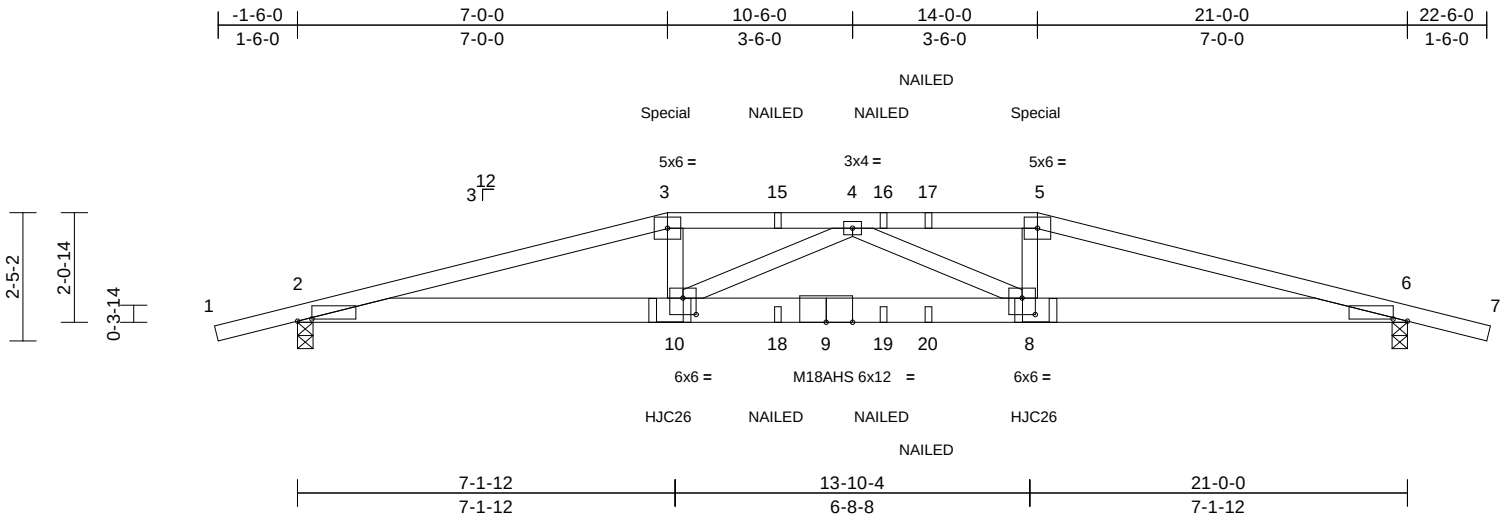
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

July 12,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Thomas	T28230211
0646-A	HGR21	Hip Girder	1	1	Job Reference (optional)	



Scale = 1:43.6

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

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	0.97	Vert(LL)	0.45	8-10	>553	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.59	Vert(CT)	-0.60	8-10	>417	180	M18AHS	186/179
BCLL	0.0*	Rep Stress Incr	NO	WB	0.24	Horz(CT)	0.09	6	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MS							Weight: 100 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP DSS *Except* 3-5:2x4 SP No.2
BOT CHORD 2x6 SP DSS
WEBS 2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied or 4-7-6 oc bracing.

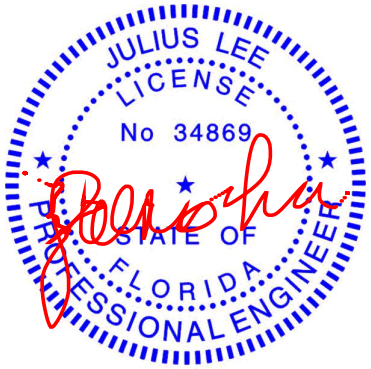
REACTIONS (lb/size) 2=1816/0-3-8, 6=1827/0-3-8
Max Horiz 2=-58 (LC 33)
Max Uplift 2=-1044 (LC 4), 6=-1050 (LC 5)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/24, 2-3=-5990/3191, 3-4=-5862/3164, 4-5=-5911/3190, 5-6=-6041/3219, 6-7=0/24
BOT CHORD 2-10=-3046/5771, 8-10=-3455/6379, 6-8=-3016/5821
WEBS 3-10=-464/1065, 5-8=-451/1052, 4-10=-706/526, 4-8=-650/496

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=108mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; 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) All plates are MT20 plates unless otherwise indicated.
6) All plates are 5x6 MT20 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1044 lb uplift at joint 2 and 1050 lb uplift at joint 6.
10) Use MiTek HJC26 (With 16-16d nails into Girder & 10d nails into Truss) or equivalent spaced at 6-11-2 oc max. starting at 7-0-9 from the left end to 13-11-10 to connect truss(es) to front face of bottom chord.
11) Fill all nail holes where hanger is in contact with lumber.
12) "NAILED" indicates Girder: 3-16d (0.162" x 3.5") toe-nails per NDS guidelines.
13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 178 lb down and 182 lb up at 7-0-0, and 178 lb down and 182 lb up at 14-0-0 on top chord. The design/selection of such connection device(s) is the responsibility of others.
14) 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: 1-3=-60, 3-5=-60, 5-7=-60, 2-6=-20
Concentrated Loads (lb)
Vert: 3=-117 (F), 5=-117 (F), 10=-494 (F), 8=-494 (F), 15=-117 (F), 16=-117 (F), 17=-117 (F), 18=-70 (F), 19=-70 (F), 20=-70 (F)

"Special" indicates special hanger(s) or other connection device(s) required at location(s) shown. The design/selection of such special connection device(s) is the responsibility of others. This applies to all applicable truss designs in this job.



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

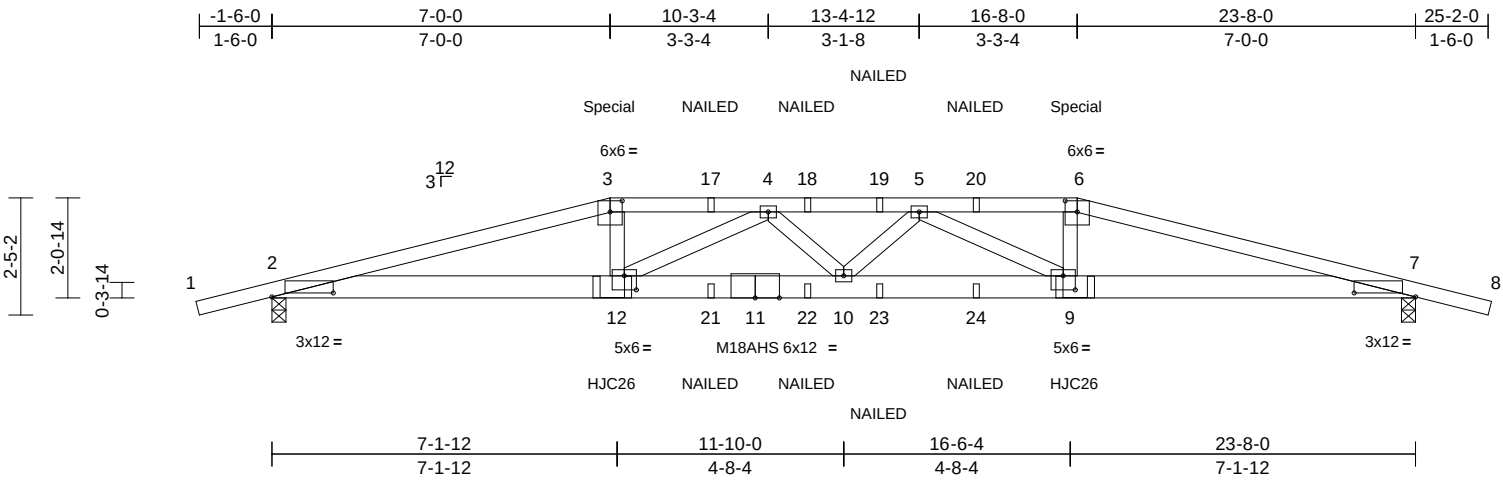
July 12,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Thomas	T28230212
0646-A	HGR23	Hip Girder	1	1	Job Reference (optional)	

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

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon Jul 11 11:34:03 Page: 1
ID:kaC1_avJcsAQrIqILD8f?Hz_RjI-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:47.7

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

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	0.81	Vert(LL)	0.57	10	>489	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.66	Vert(CT)	-0.74	10	>378	180	M18AHS	186/179
BCLL	0.0*	Rep Stress Incr	NO	WB	0.28	Horz(CT)	0.12	7	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MS							Weight: 116 lb	FT = 20%

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

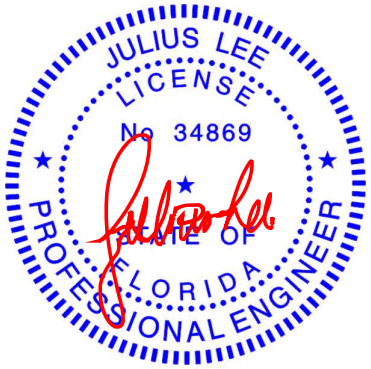
BRACING
TOP CHORD Structural wood sheathing directly applied or 2-2-2 oc purlins.
BOT CHORD Rigid ceiling directly applied or 4-3-0 oc bracing.

REACTIONS (lb/size) 2=2022/0-3-8, 7=2022/0-3-8
Max Horiz 2=-58 (LC 5)
Max Uplift 2=-1156 (LC 4), 7=-1156 (LC 5)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/24, 2-3=-6800/3655, 3-4=-6664/3623, 4-5=-7739/4143, 5-6=-6664/3623, 6-7=-6800/3654, 7-8=0/24
BOT CHORD 2-12=-3496/6557, 10-12=-4086/7620, 9-10=-4055/7620, 7-9=-3438/6557
WEBS 3-12=-572/1249, 6-9=-572/1249, 4-10=-21/272, 4-12=-1217/715, 5-10=-21/272, 5-9=-1217/715

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=108mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; 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) All plates are MT20 plates unless otherwise indicated.
6) All plates are 3x4 MT20 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1156 lb uplift at joint 2 and 1156 lb uplift at joint 7.
10) Use MiTek HJC26 (With 16-16d nails into Girder & 10d nails into Truss) or equivalent spaced at 9-6-15 oc max. starting at 7-0-9 from the left end to 16-7-8 to connect truss(es) to back face of bottom chord.
11) Fill all nail holes where hanger is in contact with lumber.
12) "NAILED" indicates Girder: 3-16d (0.162" x 3.5") toe-nails per NDS guidelines.
13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 178 lb down and 182 lb up at 7-0-0, and 178 lb down and 182 lb up at 16-8-0 on top chord. The design/selection of such connection device(s) is the responsibility of others.
14) 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: 1-3=-60, 3-6=-60, 6-8=-60, 2-7=-20
Concentrated Loads (lb)
Vert: 3=-117 (B), 6=-117 (B), 12=-494 (B), 9=-494 (B), 17=-117 (B), 18=-117 (B), 19=-117 (B), 20=-117 (B), 21=-70 (B), 22=-70 (B), 23=-70 (B), 24=-70 (B)



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

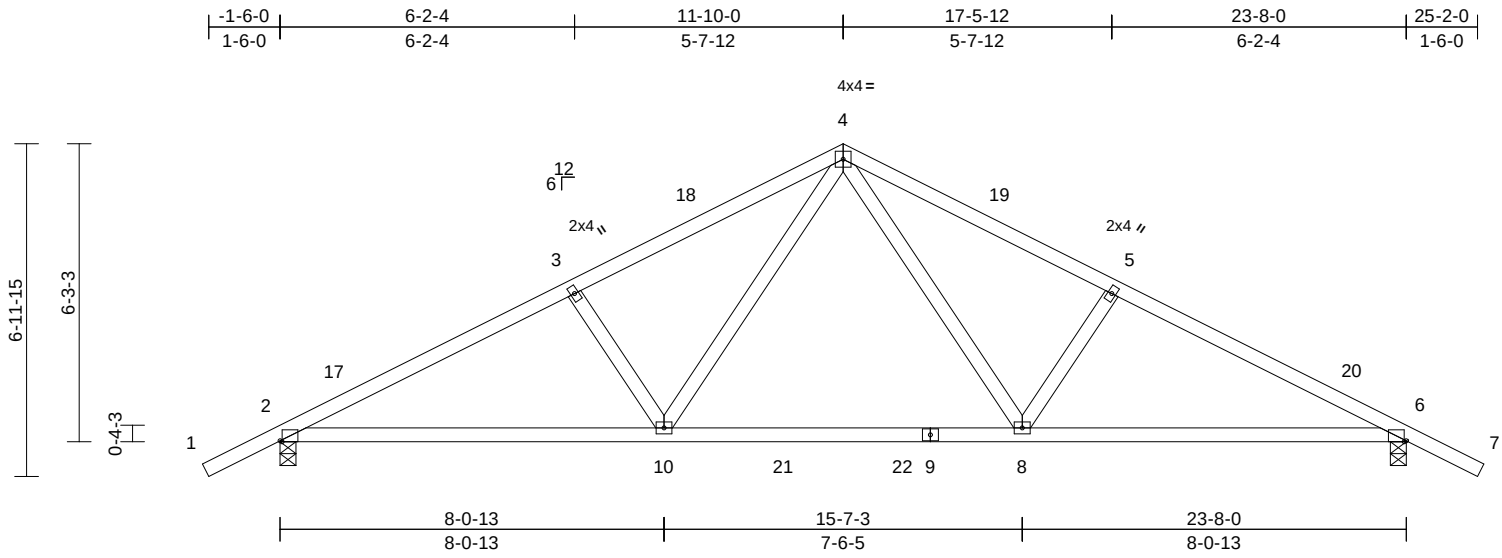
July 12,2022

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Thomas
0646-A	T1	Common	20	1	T28230213
					Job Reference (optional)

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

Run: 8.53 S Apr 27 2022 Print: 8.530 S Apr 27 2022 MiTek Industries, Inc. Mon Jul 11 11:34:03
ID:eiyoa9NSUqOVsLQD2Tcfc?z_RSM-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:48.4

Plate Offsets (X, Y): [2:0-0-8,Edge], [6:0-0-8,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	0.42	Vert(LL)	-0.12	8-10	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.74	Vert(CT)	-0.23	8-16	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.26	Horz(CT)	0.05	6	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MS							Weight: 110 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-0-6 oc purlins.
BOT CHORD Rigid ceiling directly applied or 7-5-4 oc bracing.

REACTIONS (lb/size) 2=1041/0-4-0, 6=1041/0-4-0
Max Horiz 2=-175 (LC 13)
Max Uplift 2=-449 (LC 12), 6=-449 (LC 13)
Max Grav 2=1103 (LC 2), 6=1103 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/42, 2-3=-1754/744, 3-4=-1610/736, 4-5=-1610/736, 5-6=-1754/744, 6-7=0/42
BOT CHORD 2-10=-606/1539, 8-10=-249/1019, 6-8=-538/1539
WEBS 4-8=-293/676, 5-8=-362/374, 4-10=-293/676, 3-10=-362/374

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=108mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-6-13 to 1-5-3, Interior (1) 1-5-3 to 11-10-0, Exterior(2R) 11-10-0 to 14-10-0, Interior (1) 14-10-0 to 25-2-13 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) All plates are 3x4 MT20 unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 449 lb uplift at joint 2 and 449 lb uplift at joint 6.

LOAD CASE(S) Standard

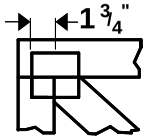
Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

July 12,2022

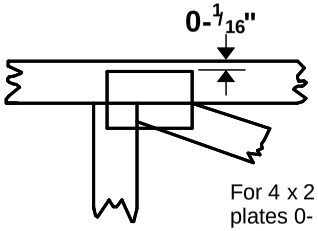
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

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.

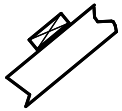
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

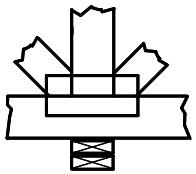
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

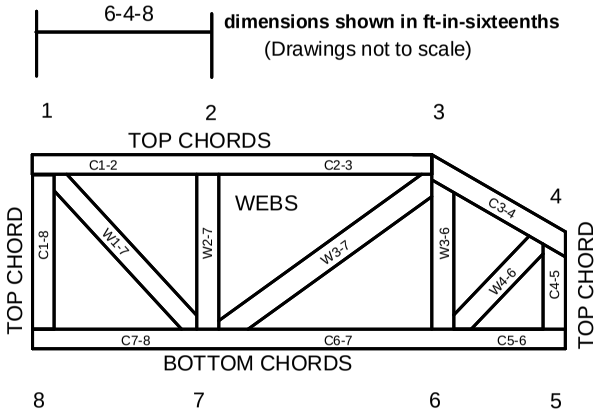


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

ESR-1311, ESR-1352, ESR1988
ER-3907, ESR-2362, ESR-1397, ESR-3282

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

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

MiTek Engineering Reference Sheet: MII-7473 rev. 5/19/2020

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.