MiTek®

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

RE: 1110-A - Royster Res.

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

Site Information:

Customer Info: Parrish Builders Group Project Name: Royster Model: .
Lot/Block: . Subdivision: .
Address: ., .
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):

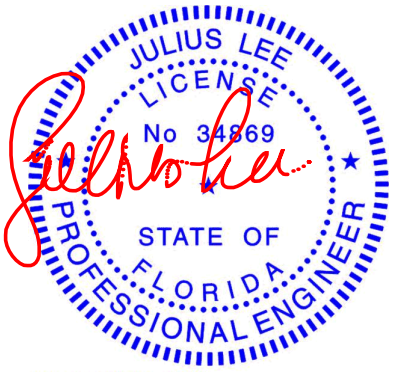
Design Code: FBC2020/TPI2014 Design Program: MiTek 20/20 8.6
Wind Code: ASCE 7-16 Wind Speed: 140 mph
Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 15 individual, Truss Design Drawings and 0 Additional Drawings.
With my seal affixed to this sheet, I hereby certify that I am the Truss Design Engineer and this index sheet conforms to 61G15-31.003, section 5 of the Florida Board of Professional Engineers Rules.

No.	Seal#	Truss Name	Date
1	T31279879	G1	8/10/23
2	T31279880	GA1	8/10/23
3	T31279881	GA4	8/10/23
4	T31279882	GA5	8/10/23
5	T31279883	PB1	8/10/23
6	T31279884	T1	8/10/23
7	T31279885	T3	8/10/23
8	T31279886	T5	8/10/23
9	T31279887	T6	8/10/23
10	T31279888	V1	8/10/23
11	T31279889	V2	8/10/23
12	T31279890	V3	8/10/23
13	T31279891	V4	8/10/23
14	T31279892	V5	8/10/23
15	T31279893	V6	8/10/23

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.



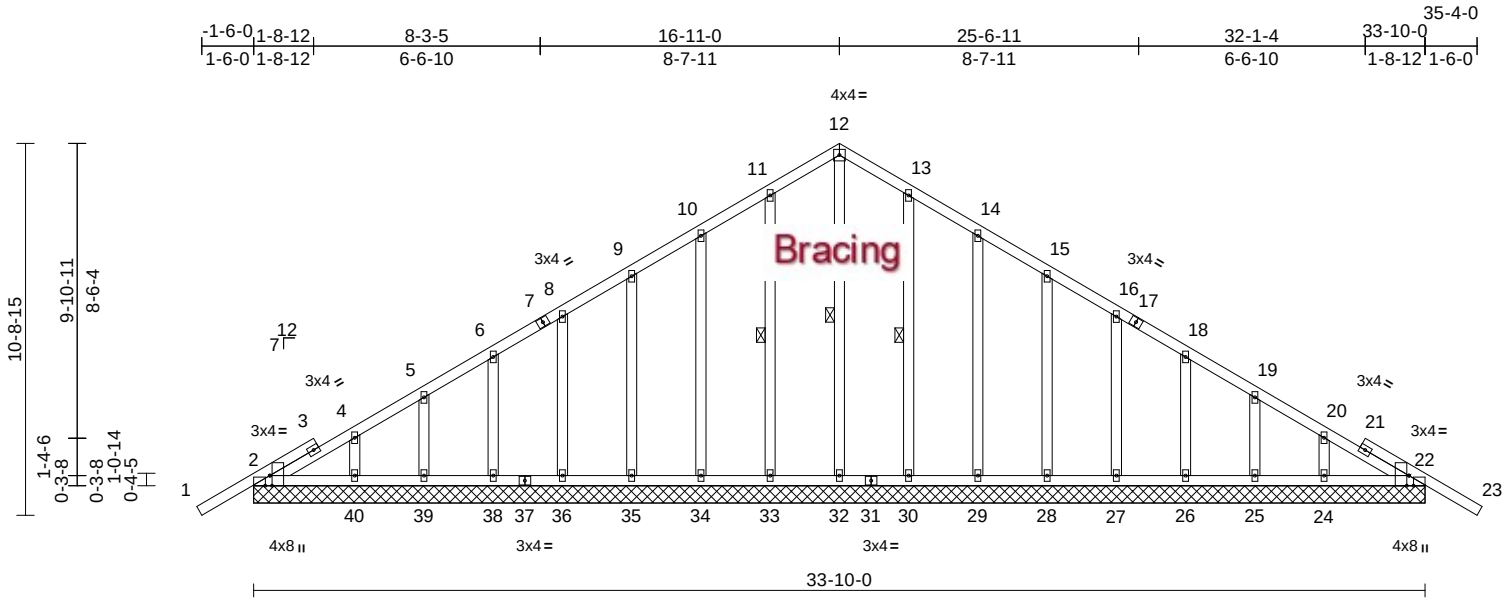
Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 10,2023

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.

Job	Truss	Truss Type	Qty	Ply	Royster Res. T31279879
1110-A	G1	Common Supported Gable	1	1	Job Reference (optional)

19 Lumber, Inc., Old Town, FL - 32680, Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Thu Aug 10 10:10:11 Page: 1
ID:8g_eVXihuK_xQv?sIprTccyxDHC-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:66.6

Plate Offsets (X, Y): [2:0-3-8,Edge], [2:0-1-9,Edge], [22:0-3-8,Edge], [22:0-1-9,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)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.07	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.02	44	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MS							Weight: 230 lb	FT = 20%

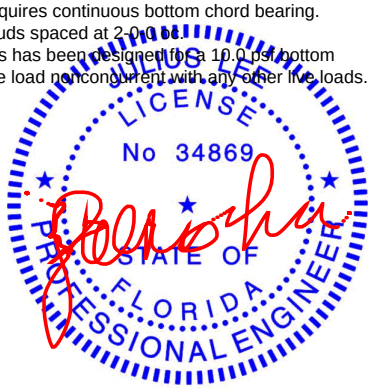
LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x4 SP No.2

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 12-32, 11-33, 13-30

REACTIONS (size) 2=33-10-0, 22=33-10-0, 24=33-10-0, 25=33-10-0, 26=33-10-0, 27=33-10-0, 28=33-10-0, 29=33-10-0, 30=33-10-0, 32=33-10-0, 33=33-10-0, 34=33-10-0, 35=33-10-0, 36=33-10-0, 38=33-10-0, 39=33-10-0, 40=33-10-0, 41=33-10-0, 44=33-10-0
Max Horiz 2=-404 (LC 10), 41=-404 (LC 10)
Max Uplift 2=-79 (LC 8), 22=-51 (LC 13), 24=-101 (LC 13), 25=-127 (LC 13), 26=-121 (LC 13), 27=-123 (LC 13), 28=-121 (LC 13), 29=-129 (LC 13), 30=-112 (LC 13), 32=-11 (LC 11), 33=-118 (LC 12), 34=-127 (LC 12), 35=-121 (LC 12), 36=-123 (LC 12), 38=-120 (LC 12), 39=-129 (LC 12), 40=-89 (LC 12), 41=-79 (LC 8), 44=-51 (LC 13)
Max Grav 2=229 (LC 1), 22=229 (LC 1), 24=209 (LC 20), 25=177 (LC 20), 26=186 (LC 20), 27=183 (LC 20), 28=184 (LC 20), 29=184 (LC 20), 30=189 (LC 20), 32=297 (LC 13), 33=195 (LC 19), 34=181 (LC 19), 35=184 (LC 19), 36=183 (LC 19), 38=185 (LC 19), 39=179 (LC 19), 40=196 (LC 19), 41=229 (LC 1), 44=229 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/48, 2-4=-316/289, 4-5=-274/265, 5-6=-234/235, 6-8=-212/218, 8-9=-189/239, 9-10=-166/285, 10-11=-185/334, 11-12=-227/390, 12-13=-227/390, 13-14=-185/320, 14-15=-138/239, 15-16=-94/163, 16-18=-62/85, 18-19=-78/73, 19-20=-141/102, 20-22=-211/134, 22-23=0/48
BOT CHORD 2-40=-134/281, 39-40=-134/281, 38-39=-134/281, 36-38=-134/281, 35-36=-134/281, 34-35=-134/281, 33-34=-134/281, 32-33=-134/281, 30-32=-134/281, 29-30=-134/281, 28-29=-134/281, 27-28=-134/281, 26-27=-134/281, 25-26=-134/281, 24-25=-134/281, 22-24=-134/281
WEBS 12-32=-283/110, 11-33=-155/138, 10-34=-141/147, 9-35=-144/141, 8-36=-144/143, 6-38=-144/141, 5-39=-143/148, 4-40=-159/120, 13-30=-149/132, 14-29=-144/149, 15-28=-144/141, 16-27=-144/143, 18-26=-144/141, 19-25=-141/146, 20-24=-157/123

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) -1-6-14 to 1-9-11, Exterior(2N) 1-9-11 to 16-11-0, Corner(3R) 16-11-0 to 20-3-10, Exterior(2N) 20-3-10 to 35-4-14 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.



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

August 10,2023

Continued on page 2

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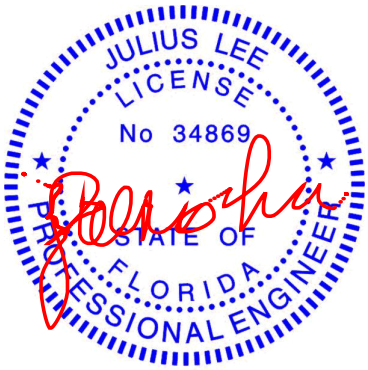
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 79 lb uplift at joint 2, 51 lb uplift at joint 22, 11 lb uplift at joint 32, 118 lb uplift at joint 33, 127 lb uplift at joint 34, 121 lb uplift at joint 35, 123 lb uplift at joint 36, 120 lb uplift at joint 38, 129 lb uplift at joint 39, 89 lb uplift at joint 40, 112 lb uplift at joint 30, 129 lb uplift at joint 29, 121 lb uplift at joint 28, 123 lb uplift at joint 27, 121 lb uplift at joint 26, 127 lb uplift at joint 25, 101 lb uplift at joint 24, 79 lb uplift at joint 2 and 51 lb uplift at joint 22.

LOAD CASE(S) Standard



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Date:

August 10,2023

Job	Truss	Truss Type	Qty	Ply	Royster Res. T31279880
1110-A	GA1	Common Supported Gable	1	1	Job Reference (optional)

19 Lumber, Inc., Old Town, FL - 32680, Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Thu Aug 10 10:10:15 Page: 1
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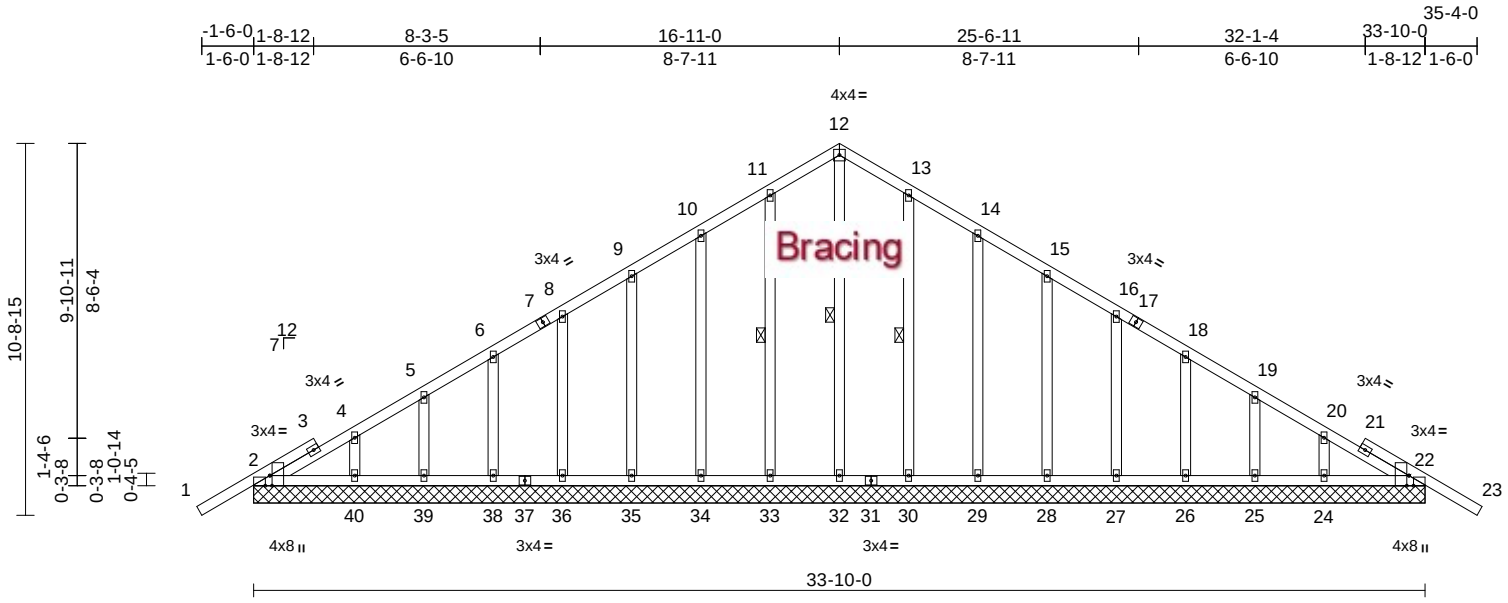

Scale = 1:66.6

Plate Offsets (X, Y): [2:0-3-8,Edge], [2:0-1-9,Edge], [22:0-3-8,Edge], [22:0-1-9,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)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.07	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.02	44	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MS							Weight: 230 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 12-32, 11-33, 13-30

REACTIONS (size) 2=33-10-0, 22=33-10-0, 24=33-10-0, 25=33-10-0, 26=33-10-0, 27=33-10-0, 28=33-10-0, 29=33-10-0, 30=33-10-0, 32=33-10-0, 33=33-10-0, 34=33-10-0, 35=33-10-0, 36=33-10-0, 38=33-10-0, 39=33-10-0, 40=33-10-0, 41=33-10-0, 44=33-10-0
Max Horiz 2=-404 (LC 10), 41=-404 (LC 10)
Max Uplift 2=-79 (LC 8), 22=-51 (LC 13), 24=-101 (LC 13), 25=-127 (LC 13), 26=-121 (LC 13), 27=-123 (LC 13), 28=-121 (LC 13), 29=-129 (LC 13), 30=-112 (LC 13), 32=-11 (LC 11), 33=-118 (LC 12), 34=-127 (LC 12), 35=-121 (LC 12), 36=-123 (LC 12), 38=-120 (LC 12), 39=-129 (LC 12), 40=-89 (LC 12), 41=-79 (LC 8), 44=-51 (LC 13)
Max Grav 2=229 (LC 1), 22=229 (LC 1), 24=209 (LC 20), 25=177 (LC 20), 26=186 (LC 20), 27=183 (LC 20), 28=184 (LC 20), 29=184 (LC 20), 30=189 (LC 20), 32=297 (LC 13), 33=195 (LC 19), 34=181 (LC 19), 35=184 (LC 19), 36=183 (LC 19), 38=185 (LC 19), 39=179 (LC 19), 40=196 (LC 19), 41=229 (LC 1), 44=229 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/48, 2-4=-316/289, 4-5=-274/265, 5-6=-234/235, 6-8=-212/218, 8-9=-189/239, 9-10=-166/285, 10-11=-185/334, 11-12=-227/390, 12-13=-227/390, 13-14=-185/320, 14-15=-138/239, 15-16=-94/163, 16-18=-62/85, 18-19=-78/73, 19-20=-141/102, 20-22=-211/134, 22-23=0/48
BOT CHORD 2-40=-134/281, 39-40=-134/281, 38-39=-134/281, 36-38=-134/281, 35-36=-134/281, 34-35=-134/281, 33-34=-134/281, 32-33=-134/281, 30-32=-134/281, 29-30=-134/281, 28-29=-134/281, 27-28=-134/281, 26-27=-134/281, 25-26=-134/281, 24-25=-134/281, 22-24=-134/281
WEBS 12-32=-283/110, 11-33=-155/138, 10-34=-141/147, 9-35=-144/141, 8-36=-144/143, 6-38=-144/141, 5-39=-143/148, 4-40=-159/120, 13-30=-149/132, 14-29=-144/149, 15-28=-144/141, 16-27=-144/143, 18-26=-144/141, 19-25=-141/146, 20-24=-157/123

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) -1-6-14 to 1-9-11, Exterior(2N) 1-9-11 to 16-11-0, Corner(3R) 16-11-0 to 20-3-10, Exterior(2N) 20-3-10 to 35-4-14 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.

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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 10,2023

Continued on page 2

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Chesterfield, MO 63017
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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 crushing capacity of 565 psi.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 79 lb uplift at joint 2, 51 lb uplift at joint 22, 11 lb uplift at joint 32, 118 lb uplift at joint 33, 127 lb uplift at joint 34, 121 lb uplift at joint 35, 123 lb uplift at joint 36, 120 lb uplift at joint 38, 129 lb uplift at joint 39, 89 lb uplift at joint 40, 112 lb uplift at joint 30, 129 lb uplift at joint 29, 121 lb uplift at joint 28, 123 lb uplift at joint 27, 121 lb uplift at joint 26, 127 lb uplift at joint 25, 101 lb uplift at joint 24, 79 lb uplift at joint 2 and 51 lb uplift at joint 22.

LOAD CASE(S) Standard

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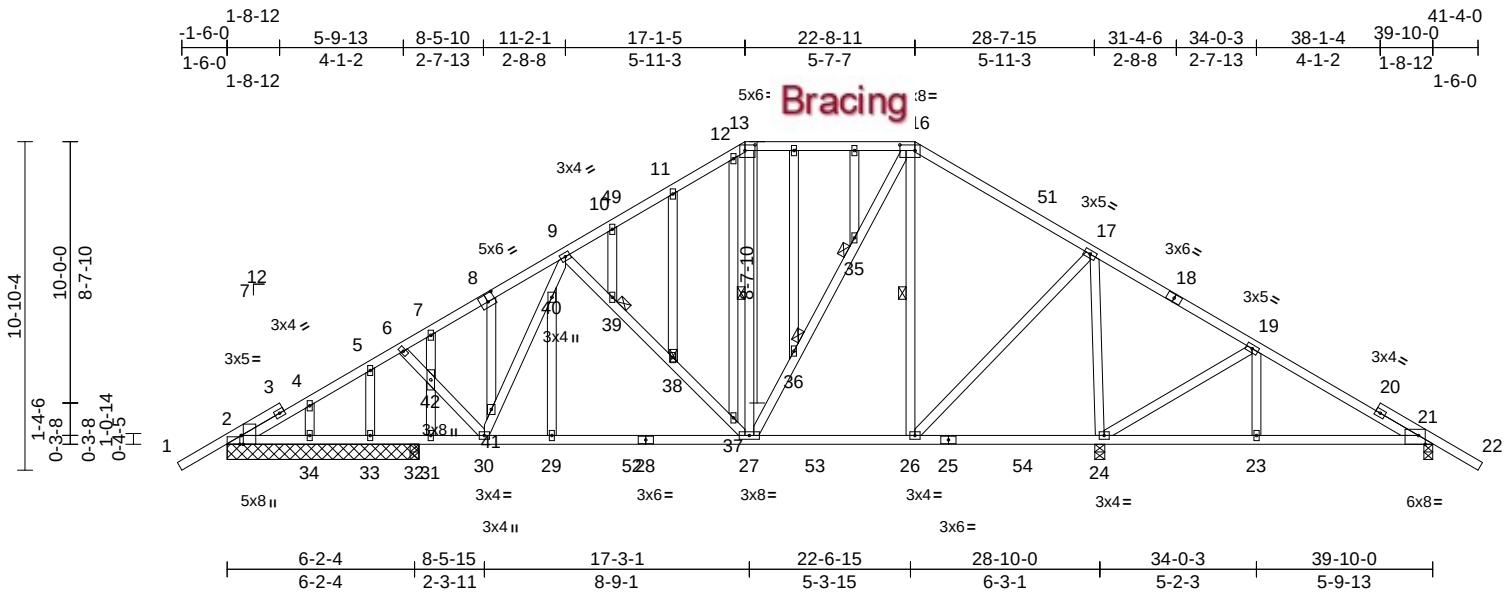
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 10,2023

Job	Truss	Truss Type	Qty	Ply	Royster Res. T31279881
1110-A	GA4	Piggyback Base Structural Gable	1	1	Job Reference (optional)

19 Lumber, Inc., Old Town, FL - 32680, Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Thu Aug 10 10:10:16 Page: 1

ID:426OwCjxQxEfgC8EQEtxi1yxDHA-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:76.1

Plate Offsets (X, Y): [2:0-3-8,Edge], [2:0-0-9,Edge], [8:0-3-0,0-3-0], [13:0-4-0,0-2-4], [16:0-6-0,0-2-4], [21:0-2-11,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.41	Vert(LL)	0.05	23-48	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.43	Vert(CT)	-0.14	27-29	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.85	Horz(CT)	0.02	21	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MS							Weight: 305 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 24-26.
WEBS 1 Row at midpt 13-27, 16-26
JOINTS 1 Brace at Jt(s): 35, 36, 38, 39

REACTIONS (size) 2=6-4-0, 21=0-3-8, 24=0-4-0, 32=0-3-8, 33=6-4-0, 34=6-4-0, 43=6-4-0
Max Horiz 2=-410 (LC 10), 43=-410 (LC 10)
Max Uplift 2=-86 (LC 13), 21=-224 (LC 13), 24=-584 (LC 13), 32=-331 (LC 12), 33=-159 (LC 12), 34=-84 (LC 12), 43=-86 (LC 13)
Max Grav 2=278 (LC 23), 21=451 (LC 20), 24=1791 (LC 20), 32=844 (LC 19), 33=367 (LC 19), 34=195 (LC 19), 43=278 (LC 23)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/48, 2-4=-271/174, 4-5=-259/177, 5-6=-379/187, 6-7=-475/204, 7-9=-666/332, 9-10=-719/397, 10-11=-671/401, 11-12=-651/450, 12-13=-561/389, 13-14=-603/453, 14-15=-603/453, 15-16=-603/453, 16-17=-529/379, 17-19=-31/387, 19-21=-266/123, 21-22=0/52

BOT CHORD 2-34=-166/272, 33-34=-166/272, 32-33=-166/272, 31-32=-166/272, 30-31=-166/272, 29-30=-286/840, 27-29=-286/840, 26-27=-172/536, 24-26=-320/323, 23-24=0/208, 21-23=0/208

WEBS 6-42=-168/558, 30-42=-197/642, 30-41=-407/133, 40-41=-433/98, 9-40=-277/148, 9-39=-254/224, 38-39=-241/214, 37-38=-305/274, 27-37=-220/197, 13-27=-132/168, 27-36=-204/470, 35-36=-193/460, 16-35=-192/442, 16-26=-412/158, 17-26=-142/842, 17-24=-1263/516, 19-24=-607/340, 19-23=0/218, 15-35=-12/26, 14-36=-28/31, 12-37=-109/120, 11-38=-91/85, 10-39=-15/21, 29-40=0/254, 8-41=0/60, 7-42=-550/266, 31-42=-665/304, 5-33=-526/266, 4-34=-97/87

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) -1-6-14 to 2-4-15, Interior (1) 2-4-15 to 17-1-5, Exterior(2R) 17-1-5 to 21-1-1, Interior (1) 21-1-1 to 22-8-11, Exterior(2R) 22-8-11 to 26-8-8, Interior (1) 26-8-8 to 41-4-14 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 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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 86 lb uplift at joint 2, 584 lb uplift at joint 24, 224 lb uplift at joint 21, 159 lb uplift at joint 33, 84 lb uplift at joint 34, 331 lb uplift at joint 32 and 86 lb uplift at joint 2.

LOAD CASE(S) Standard

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Job	Truss	Truss Type	Qty	Ply	Royster Res. T31279882
1110-A	GA5	Piggyback Base	1	1	Job Reference (optional)

19 Lumber, Inc., Old Town, FL - 32680, Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Thu Aug 10 10:10:17 Page: 1

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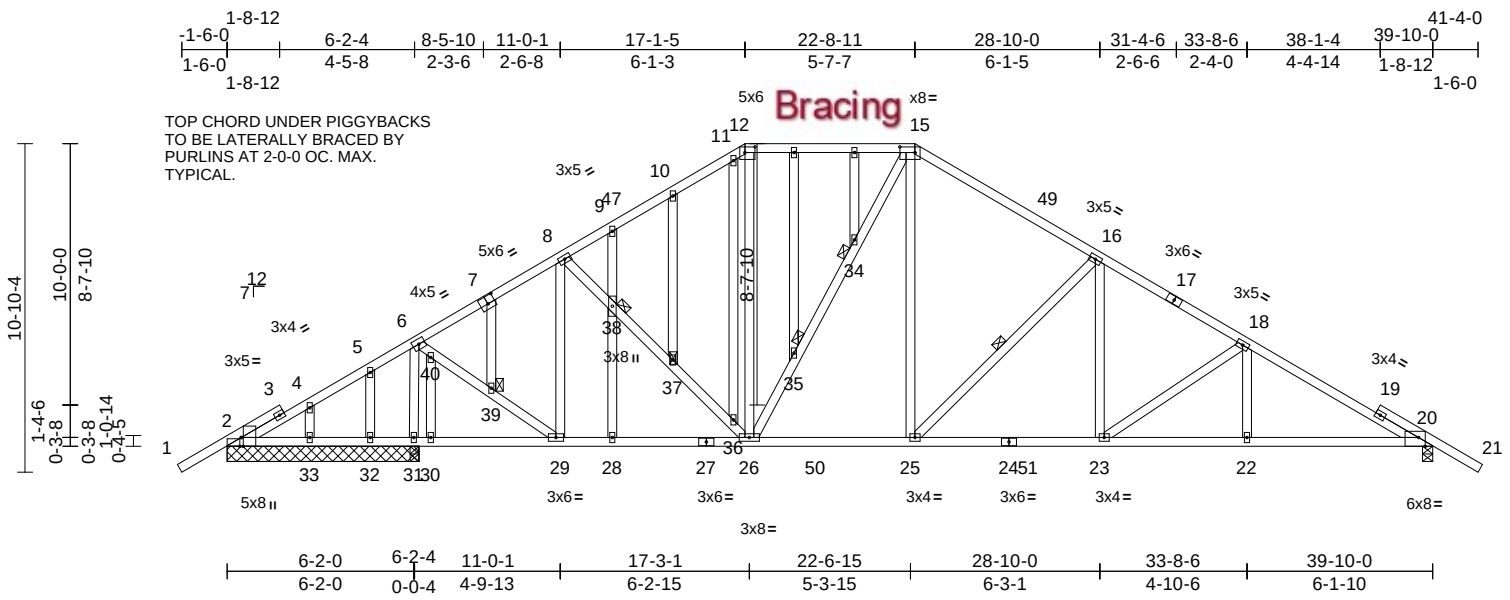

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Plate Offsets (X, Y): [2:0-3-8,Edge], [2:0-0-9,Edge], [7:0-3-0,0-3-0], [12:0-4-0,0-2-4], [15:0-6-0,0-2-4], [20:0-2-11,Edge]

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	0.92	Vert(LL)	0.14	22-46	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.90	Vert(CT)	-0.26	23-25	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.53	Horz(CT)	0.05	20	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MS							Weight: 308 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD	Structural wood sheathing directly applied or 1-11-5 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	1 Row at midpt 16-25
JOINTS	1 Brace at Jt(s): 34, 35, 37, 38, 39

REACTIONS (size) 2=6-4-0, 20=0-4-0, 31=6-4-0, 32=6-4-0, 33=6-4-0, 41=6-4-0

Max Horiz 2=-410 (LC 10), 41=-410 (LC 10)

Max Uplift 2=-176 (LC 26), 20=-601 (LC 13), 31=-684 (LC 12), 32=-34 (LC 12), 33=-85 (LC 12), 41=-176 (LC 26)

Max Grav 2=43 (LC 23), 20=1579 (LC 20), 31=2097 (LC 19), 32=34 (LC 10), 33=167 (LC 19), 41=43 (LC 23)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/48, 2-4=-363/810, 4-5=-304/832, 5-6=-249/814, 6-8=-877/421, 8-9=-1214/542, 9-10=-1176/587, 10-11=-1159/628, 11-12=-1038/583, 12-13=-1001/601, 13-14=-1001/601, 14-15=-1001/601, 15-16=-1448/668, 16-18=-2054/774, 18-20=-2569/898, 20-21=0/53

BOT CHORD 2-33=-732/417, 32-33=-732/417, 31-32=-732/417, 30-31=-721/415, 29-30=-721/415, 28-29=-239/863, 26-28=-239/863, 25-26=-142/1191, 23-25=-404/1691, 22-23=-626/2195, 20-22=-626/2195

WEBS 6-40=-402/1502, 39-40=-496/1624, 29-39=-457/1594, 8-29=-668/215, 8-38=-146/443, 37-38=-137/441, 36-37=-157/421, 26-36=-162/491, 12-26=-114/325, 26-35=-515/232, 34-35=-533/234, 15-34=-507/224, 15-25=-284/876, 16-25=-895/494, 16-23=-131/588, 18-23=-676/353, 6-31=-1646/525, 18-22=0/247, 14-34=-49/29, 13-35=-10/31, 11-36=-89/132, 10-37=-98/83, 9-38=-49/91, 28-38=-73/125, 7-39=-69/80, 30-40=-253/193, 5-32=-107/89, 4-33=-91/104

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) -1-6-14 to 2-4-15, Interior (1) 2-4-15 to 17-1-5, Exterior(2R) 17-1-5 to 21-1-1, Interior (1) 21-1-1 to 22-8-11, Exterior(2R) 22-8-11 to 26-8-8, Interior (1) 26-8-8 to 41-4-14 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 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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 176 lb uplift at joint 2, 601 lb uplift at joint 20, 684 lb uplift at joint 31, 34 lb uplift at joint 32, 85 lb uplift at joint 33 and 176 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:

August 10,2023

Job	Truss	Truss Type	Qty	Ply	Royster Res. T31279883
1110-A	PB1	Piggyback	17	1	Job Reference (optional)

19 Lumber, Inc., Old Town, FL - 32680, Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Thu Aug 10 10:10:18 Page: 1
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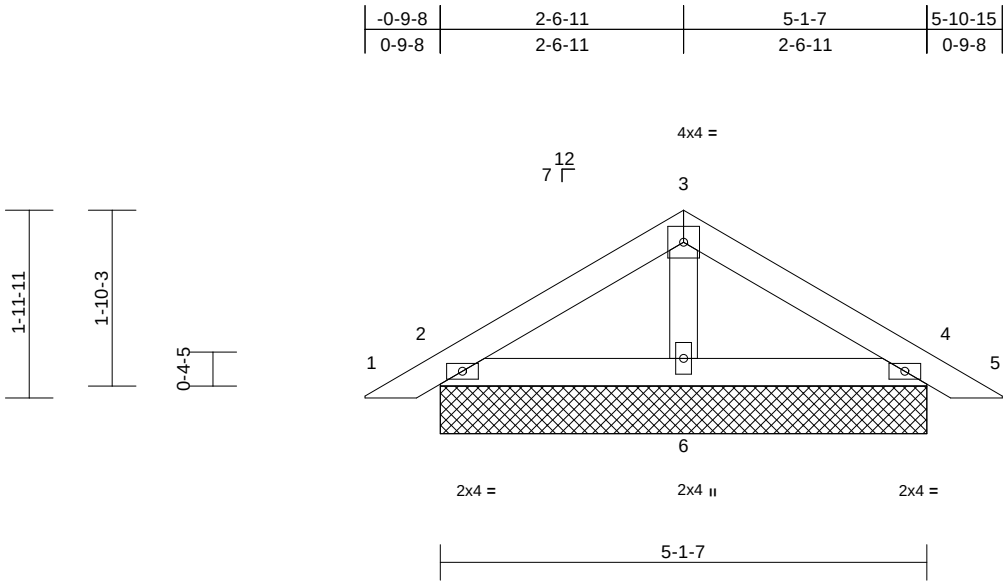


Scale = 1:24.2

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.10	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.11	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.01	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MP							Weight: 21 lb	FT = 20%

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

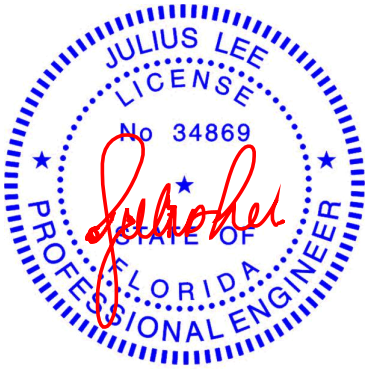
BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=5-1-7, 4=5-1-7, 6=5-1-7, 7=5-1-7, 11=5-1-7
Max Horiz 2=70 (LC 11), 7=70 (LC 11)
Max Uplift 2=-77 (LC 12), 4=-87 (LC 13), 6=-52 (LC 12), 7=-77 (LC 12), 11=-87 (LC 13)
Max Grav 2=141 (LC 1), 4=146 (LC 20), 6=191 (LC 1), 7=141 (LC 1), 11=146 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/16, 2-3=-76/102, 3-4=-79/102, 4-5=0/16
BOT CHORD 2-6=-19/44, 4-6=-11/50
WEBS 3-6=-87/66

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) 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 crushing capacity of 565 psi.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 77 lb uplift at joint 2, 87 lb uplift at joint 4, 52 lb uplift at joint 6, 77 lb uplift at joint 2 and 87 lb uplift at joint 4.
11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard



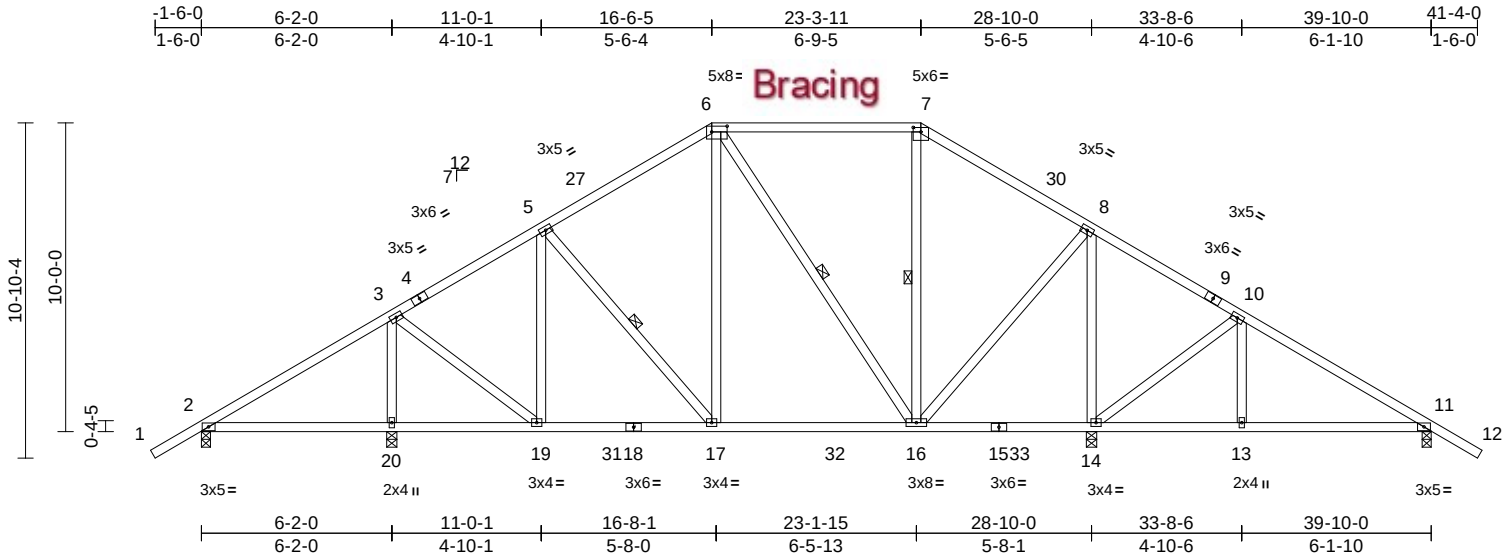
Julius Lee PE No. 34869
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 10,2023

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

Job	Truss	Truss Type	Qty	Ply	Royster Res. T31279884
1110-A	T1	Piggyback Base	5	1	Job Reference (optional)

19 Lumber, Inc., Old Town, FL - 32680, Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Thu Aug 10 10:10:18 Page: 1
ID:vCTfAGoi0n?oO7cOmV_LxlyxDH4-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:74.6

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

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	0.61	Vert(LL)	0.06	13-26	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.44	Vert(CT)	-0.08	13-26	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.80	Horz(CT)	0.01	11	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MS							Weight: 247 lb	FT = 20%

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

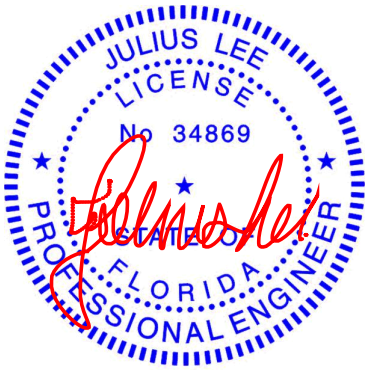
BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 5-17, 6-16, 7-16

REACTIONS (size) 2=0-3-8, 11=0-3-8, 14=0-4-0, 20=0-4-0
Max Horiz 2=-410 (LC 10)
Max Uplift 2=-154 (LC 13), 11=-261 (LC 13), 14=-524 (LC 13), 20=-527 (LC 12)
Max Grav 2=311 (LC 23), 11=567 (LC 20), 14=1590 (LC 2), 20=1459 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/48, 2-3=-215/276, 3-5=-708/362, 5-6=-721/436, 6-7=-477/390, 7-8=-533/378, 8-10=-4/193, 10-11=-459/195, 11-12=0/48
BOT CHORD 2-20=-189/207, 19-20=-189/207, 17-19=-256/697, 16-17=-235/703, 14-16=-207/274, 13-14=0/306, 11-13=0/306
WEBS 3-20=-1212/546, 3-19=-148/744, 5-19=-297/151, 5-17=-143/205, 6-17=-94/352, 6-16=-374/170, 7-16=-192/153, 8-16=-172/750, 8-14=-1106/450, 10-14=-602/338, 10-13=0/238

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) -1-6-14 to 2-4-15, Interior (1) 2-4-15 to 16-6-5, Exterior(2R) 16-6-5 to 20-6-2, Interior (1) 20-6-2 to 23-3-11, Exterior(2R) 23-3-11 to 27-3-7, Interior (1) 27-3-7 to 41-4-14 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 154 lb uplift at joint 2, 527 lb uplift at joint 20, 524 lb uplift at joint 14 and 261 lb uplift at joint 11.

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:

August 10,2023

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

Job	Truss	Truss Type	Qty	Ply	Royster Res. T31279885
1110-A	T3	GABLE	10	1	Job Reference (optional)

19 Lumber, Inc., Old Town, FL - 32680, Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Thu Aug 10 10:10:19 Page: 1

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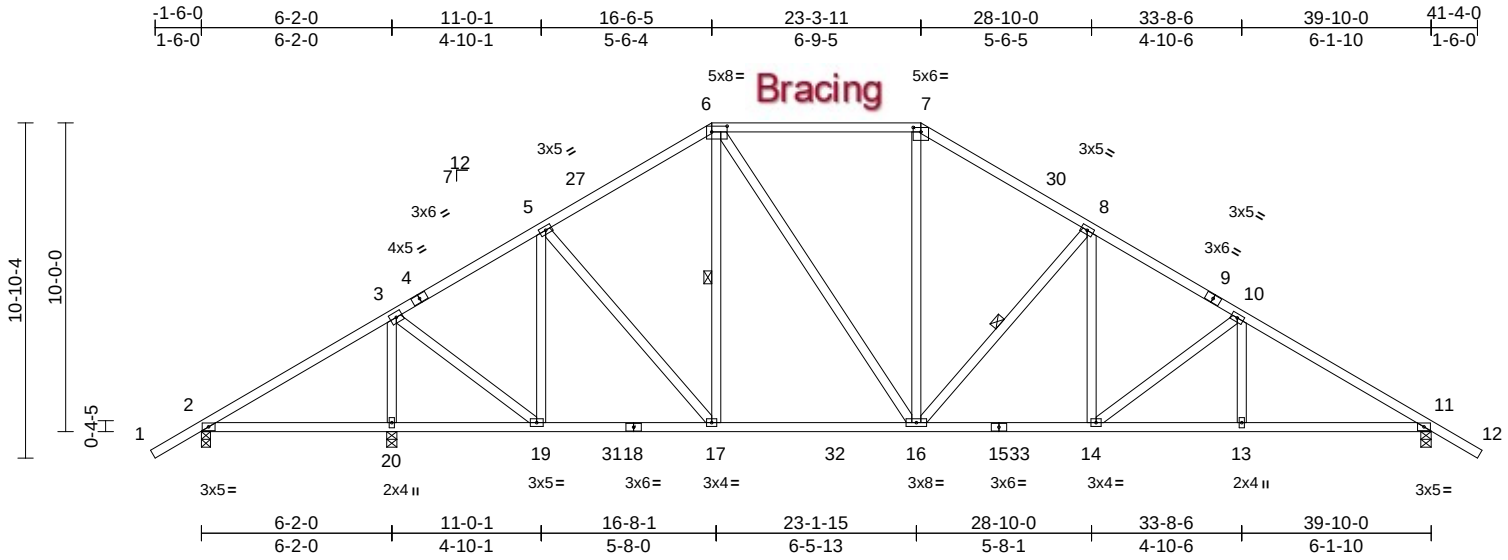


Scale = 1:74.6

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

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	0.70	Vert(LL)	-0.11	16-17	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.67	Vert(CT)	-0.20	16-17	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.54	Horz(CT)	0.06	11	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MS							Weight: 247 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-3-3 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 6-17, 8-16

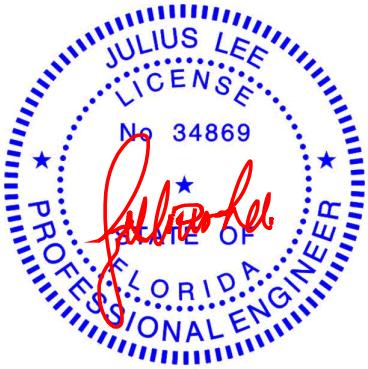
REACTIONS (size) 2=0-3-8, 11=0-4-0, 20=0-4-0
Max Horiz 2=-410 (LC 10)
Max Uplift 2=-78 (LC 13), 11=-599 (LC 13), 20=-703 (LC 12)
Max Grav 2=170 (LC 23), 11=1593 (LC 20), 20=2153 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/48, 2-3=-204/666, 3-5=-942/441, 5-6=-1253/615, 6-7=-1236/673, 7-8=-1496/692, 8-10=-1980/769, 10-11=-2458/855, 11-12=0/48
BOT CHORD 2-20=-545/329, 19-20=-545/329, 17-19=-250/874, 16-17=-222/1037, 14-16=-383/1653, 13-14=-567/2028, 11-13=-567/2028
WEBS 3-20=-1899/720, 3-19=-385/1467, 5-19=-705/288, 5-17=-150/450, 6-17=-177/176, 6-16=-227/497, 7-16=-102/456, 8-16=-821/466, 8-14=-139/535, 10-14=-575/329, 10-13=0/229

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) -1-6-14 to 2-4-15, Interior (1) 2-4-15 to 16-6-5, Exterior(2R) 16-6-5 to 20-6-2, Interior (1) 20-6-2 to 23-3-11, Exterior(2R) 23-3-11 to 27-3-7, Interior (1) 27-3-7 to 41-4-14 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 78 lb uplift at joint 2, 703 lb uplift at joint 20 and 599 lb uplift at joint 11.

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:

August 10,2023

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

Job	Truss	Truss Type	Qty	Ply	Royster Res. T31279886
1110-A	T5	Common	5	1	Job Reference (optional)

19 Lumber, Inc., Old Town, FL - 32680, Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Thu Aug 10 10:10:19 Page: 1
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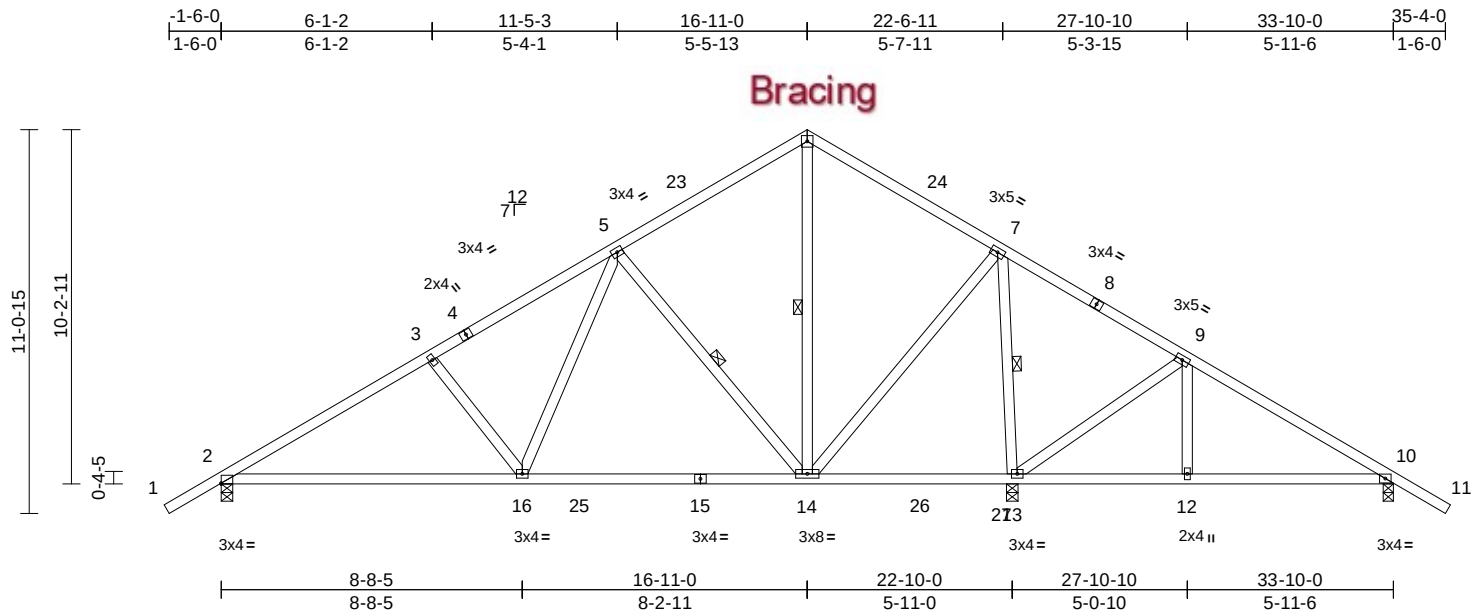


Scale = 1:66.5

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

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)	-0.15	14-16	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.78	Vert(CT)	-0.24	16-19	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.40	Horz(CT)	0.02	13	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MS							Weight: 193 lb	FT = 20%

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

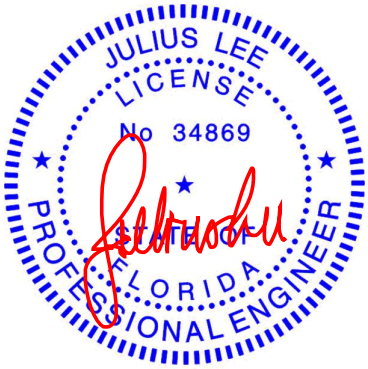
BRACING
TOP CHORD Structural wood sheathing directly applied or 4-4-9 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 5-14, 6-14, 7-13

REACTIONS (size) 2=0-4-0, 10=0-3-8, 13=0-4-0
Max Horiz 2=-417 (LC 10)
Max Uplift 2=-418 (LC 12), 10=-231 (LC 13), 13=-571 (LC 12)
Max Grav 2=1088 (LC 19), 10=446 (LC 20), 13=1857 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/48, 2-3=-1413/510, 3-5=-1241/496, 5-6=-462/325, 6-7=-451/326, 7-9=-84/512, 9-10=-291/148, 10-11=0/48
BOT CHORD 2-16=-554/1464, 14-16=-262/958, 13-14=-361/312, 12-13=-67/189, 10-12=-67/189
WEBS 3-16=-386/347, 5-16=-218/724, 5-14=-802/495, 6-14=-102/155, 7-14=-282/1069, 7-13=-1432/535, 9-13=-618/349, 9-12=0/239

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) -1-6-14 to 1-9-11, Interior (1) 1-9-11 to 16-11-0, Exterior(2R) 16-11-0 to 20-3-10, Interior (1) 20-3-10 to 35-4-14 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 418 lb uplift at joint 2, 571 lb uplift at joint 13 and 231 lb uplift at joint 10.

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:

August 10,2023

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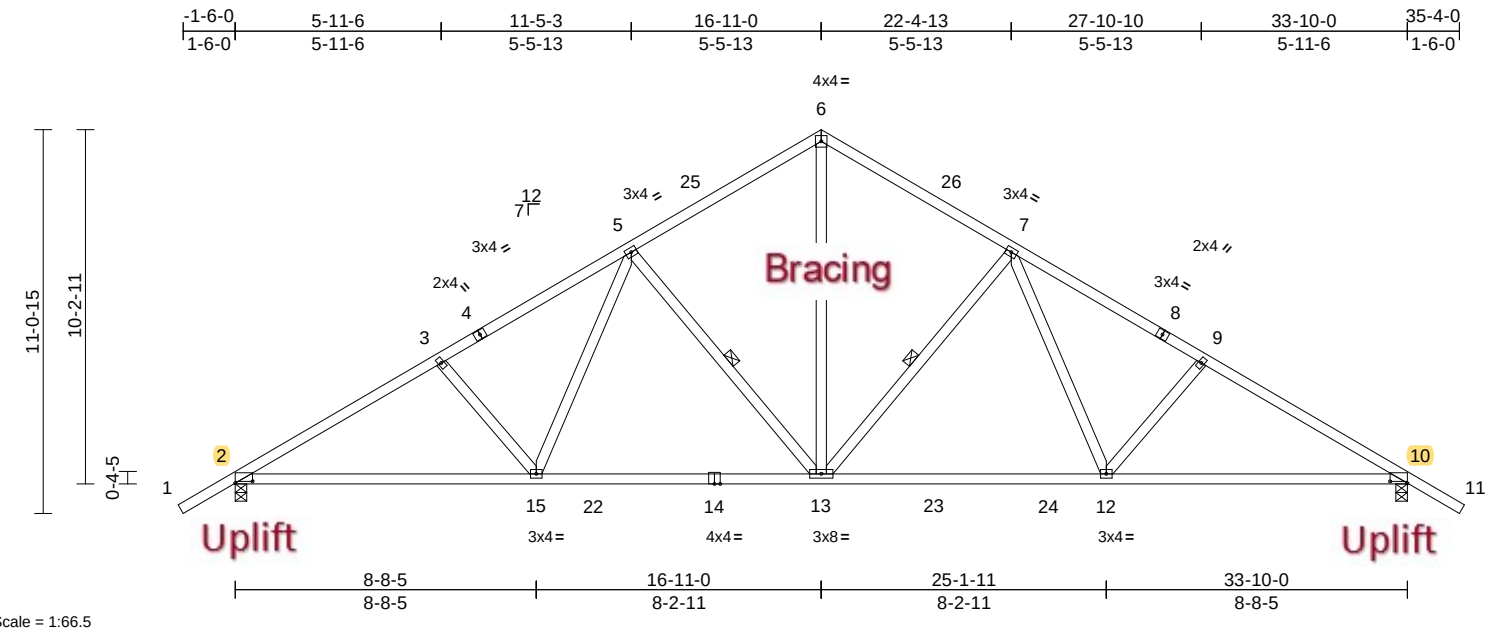
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Royster Res. T31279887
1110-A	T6	Common	5	1	Job Reference (optional)

19 Lumber, Inc., Old Town, FL - 32680, Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Thu Aug 10 10:10:20 Page: 1
ID:UdoXYEmpjscEXgtp5NQeJgyxDH7-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:66.5

Plate Offsets (X, Y): [2:0-6-0,0-0-10], [10:0-6-0,0-0-10]

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	0.44	Vert(LL)	-0.21	13-15	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.93	Vert(CT)	-0.35	13-15	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.82	Horz(CT)	0.10	10	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MS							Weight: 187 lb	FT = 20%

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

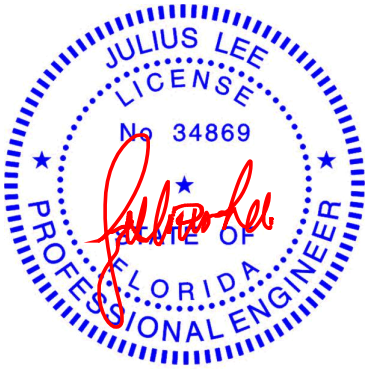
BRACING
TOP CHORD Structural wood sheathing directly applied or 3-2-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 7-13, 5-13

REACTIONS (size) 2=0-4-0, 10=0-4-0
Max Horiz 2=-417 (LC 10)
Max Uplift 2=-603 (LC 12), 10=-603 (LC 13)
Max Grav 2=1696 (LC 19), 10=1695 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/48, 2-3=-2608/880, 3-5=-2425/853, 5-6=-1655/695, 6-7=-1655/695, 7-9=-2424/853, 9-10=-2607/880, 10-11=0/48
BOT CHORD 2-15=-876/2497, 13-15=-578/1993, 12-13=-399/1794, 10-12=-594/2183
WEBS 6-13=-472/1307, 7-13=-789/496, 7-12=-206/690, 9-12=-382/346, 5-13=-790/495, 5-15=-206/691, 3-15=-381/346

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) -1-6-14 to 1-9-11, Interior (1) 1-9-11 to 16-11-0, Exterior(2R) 16-11-0 to 20-3-10, Interior (1) 20-3-10 to 35-4-14 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 603 lb uplift at joint 2 and 603 lb uplift at joint 10.

LOAD CASE(S) Standard



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Date:

August 10,2023

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

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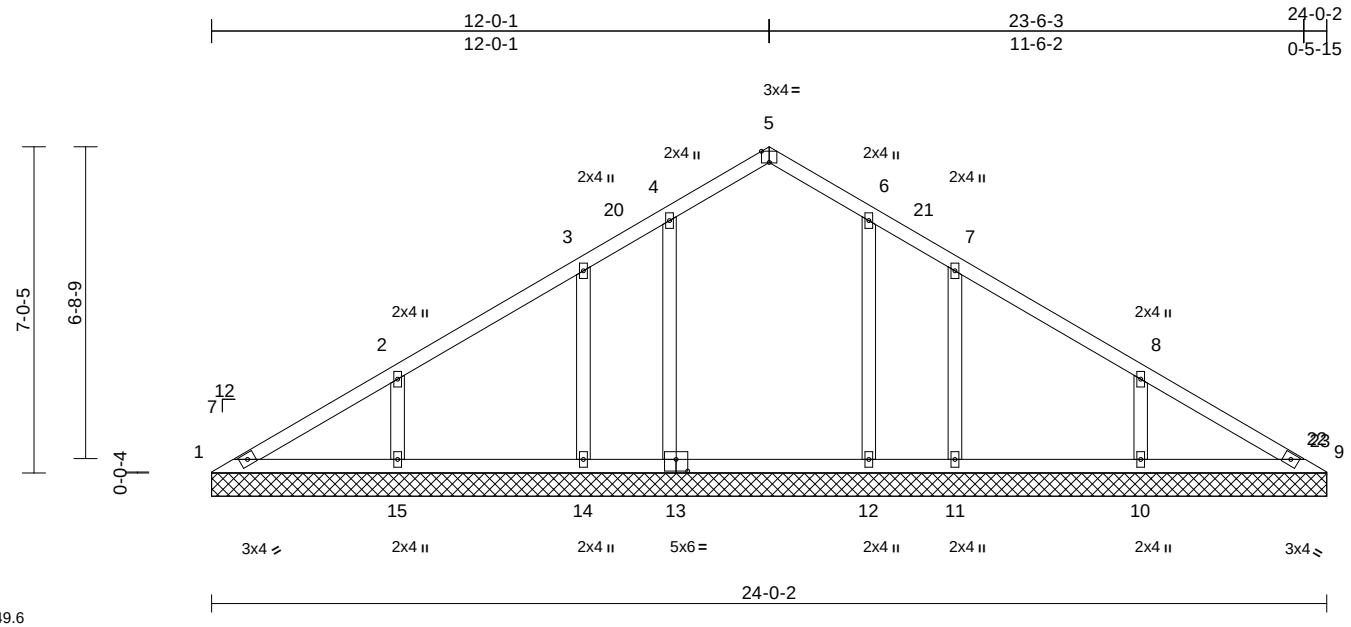
Job	Truss	Truss Type	Qty	Ply	Royster Res.
1110-A	V1	Valley	1	1	T31279888
					Job Reference (optional)

19 Lumber, Inc., Old Town, FL - 32680, Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Thu Aug 10 10:10:20 Page: 1
ID:yqMvmamSUAl58qS0f4xtstyxDH6-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:49.6

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.19	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.17	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.08	Horiz(TL)	0.01	9	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MS							Weight: 109 lb	FT = 20%

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

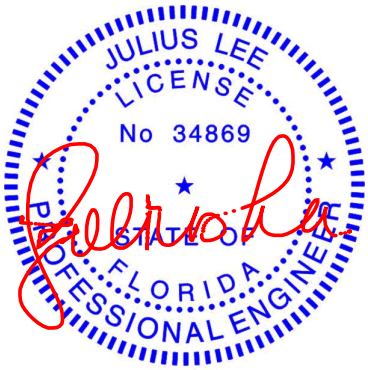
BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=24-0-2, 9=24-0-2, 10=24-0-2, 11=24-0-2, 12=24-0-2, 13=24-0-2, 14=24-0-2, 15=24-0-2
Max Horiz 1=264 (LC 9)
Max Uplift 1=-7 (LC 8), 10=-248 (LC 13), 11=-215 (LC 13), 12=-54 (LC 13), 13=-69 (LC 12), 14=-204 (LC 12), 15=-260 (LC 12)
Max Grav 1=182 (LC 20), 9=150 (LC 22), 10=492 (LC 20), 11=284 (LC 20), 12=300 (LC 20), 13=316 (LC 19), 14=277 (LC 19), 15=506 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-301/149, 2-3=-194/80, 3-4=-138/99, 4-5=-129/122, 5-6=-130/118, 6-7=-119/77, 7-8=-173/58, 8-9=-272/122
BOT CHORD 1-15=-114/324, 14-15=-104/269, 12-14=-104/270, 11-12=-103/270, 10-11=-103/270, 9-10=-103/270
WEBS 4-13=-157/98, 6-12=-142/86, 3-14=-207/237, 2-15=-318/282, 7-11=-216/246, 8-10=-311/276

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) 0-0-7 to 3-0-7, Interior (1) 3-0-7 to 12-0-8, Exterior(2R) 12-0-8 to 15-0-8, Interior (1) 15-0-8 to 23-6-8 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, with BCDL = 10.0psf.
9) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 7 lb uplift at joint 1, 69 lb uplift at joint 13, 54 lb uplift at joint 12, 204 lb uplift at joint 14, 260 lb uplift at joint 15, 215 lb uplift at joint 11 and 248 lb uplift at joint 10.

LOAD CASE(S) Standard



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Date:

August 10,2023

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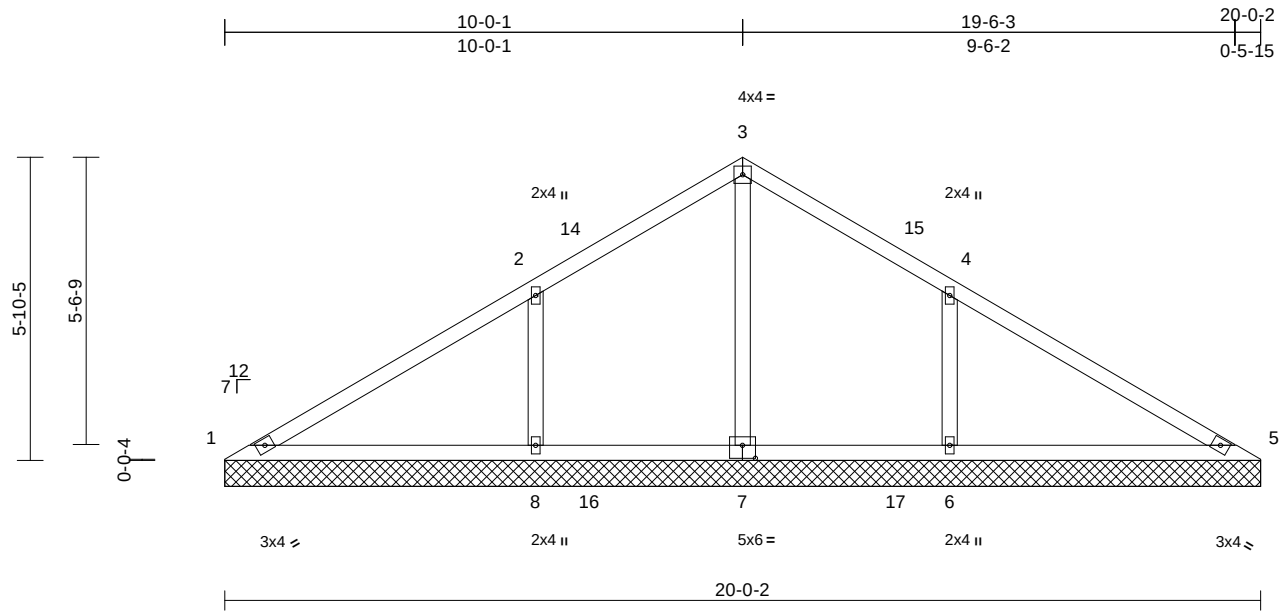
Job	Truss	Truss Type	Qty	Ply	Royster Res. T31279889
1110-A	V2	Valley	1	1	Job Reference (optional)

19 Lumber, Inc., Old Town, FL - 32680, Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Thu Aug 10 10:10:21 Page: 1
ID:yqMvmamSUAl58qS0f4xtstyxDH6-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:44.5

Plate Offsets (X, Y): [7:0-3-0,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.43	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.28	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.32	Horiz(TL)	-0.01	13	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MS							Weight: 79 lb	FT = 20%

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

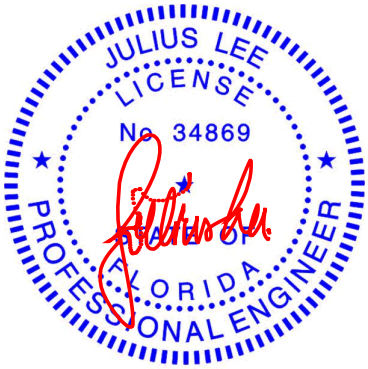
BRACING
TOP CHORD Structural wood sheathing directly applied or 10-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size) 1=20-0-2, 5=20-0-2, 6=20-0-2, 7=20-0-2, 8=20-0-2, 13=20-0-2
Max Horiz 1=220 (LC 11)
Max Uplift 1=-97 (LC 24), 5=-1 (LC 13), 6=-367 (LC 13), 7=-34 (LC 13), 8=-377 (LC 12), 13=-1 (LC 13)
Max Grav 1=95 (LC 23), 5=1 (LC 20), 6=652 (LC 20), 7=736 (LC 20), 8=660 (LC 19), 13=1 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-201/579, 2-3=0/477, 3-4=0/476, 4-5=-326/591
BOT CHORD 1-8=-471/278, 6-8=-471/278, 5-6=-493/301
WEBS 3-7=-607/108, 2-8=-410/379, 4-6=-409/377

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) 0-0-7 to 3-0-7, Interior (1) 3-0-7 to 10-0-8, Exterior(2R) 10-0-8 to 13-0-8, Interior (1) 13-0-8 to 20-0-9 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, with BCDL = 10.0psf.
9) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 97 lb uplift at joint 1, 1 lb uplift at joint 5, 34 lb uplift at joint 7, 377 lb uplift at joint 8, 367 lb uplift at joint 6 and 1 lb uplift at joint 5.

LOAD CASE(S) Standard



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Date:

August 10,2023

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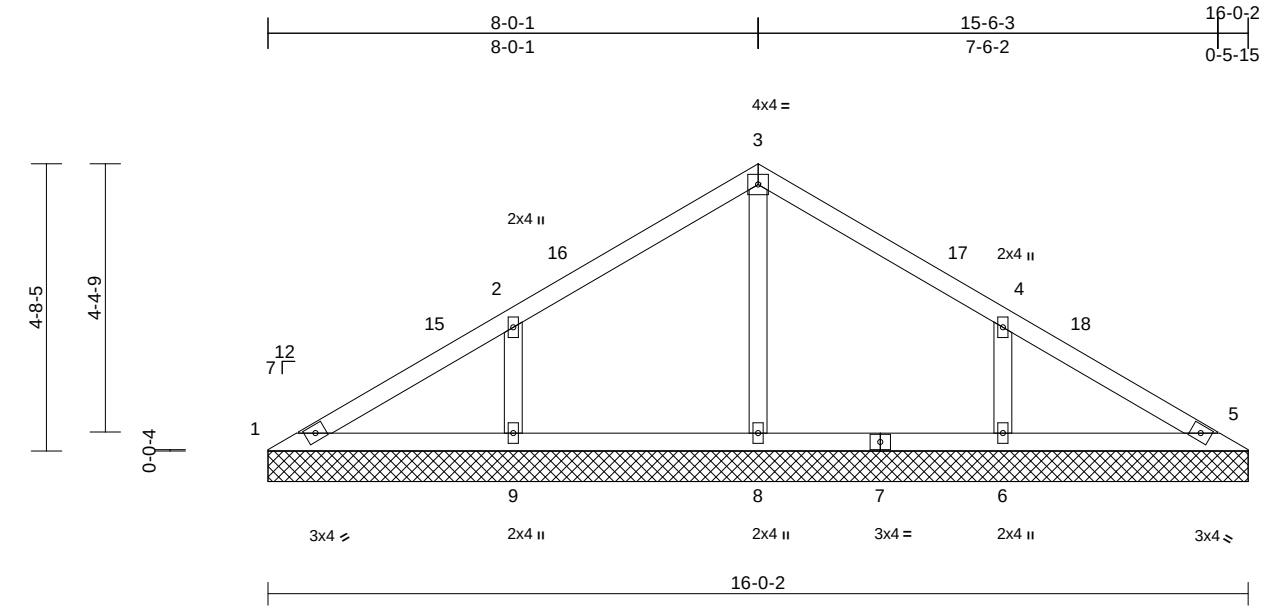
Job	Truss	Truss Type	Qty	Ply	Royster Res. T31279890
1110-A	V3	Valley	1	1	Job Reference (optional)

19 Lumber, Inc., Old Town, FL - 32680, Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Thu Aug 10 10:10:21 Page: 1
ID:yqMvmamSUAl58qS0f4xtstyxDH6-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:37.6

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.25	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.12	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.14	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	FBC2020/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

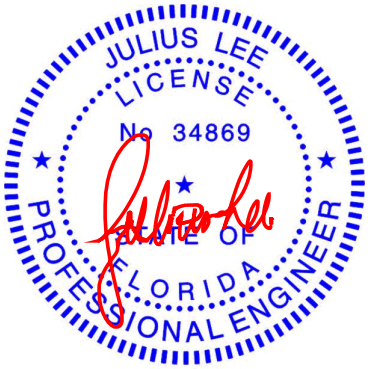
BRACING
TOP CHORD Structural wood sheathing directly applied or 10-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size) 1=16-0-2, 5=16-0-2, 6=16-0-2, 8=16-0-2, 9=16-0-2, 14=16-0-2
Max Horiz 1=174 (LC 9)
Max Uplift 1=-31 (LC 13), 6=-279 (LC 13), 8=-40 (LC 12), 9=-284 (LC 12)
Max Grav 1=80 (LC 23), 5=0 (LC 11), 6=419 (LC 20), 8=477 (LC 1), 9=419 (LC 19), 14=0 (LC 11)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-141/314, 2-3=-9/256, 3-4=0/249, 4-5=-151/263
BOT CHORD 1-9=-195/133, 8-9=-195/133, 6-8=-195/133, 5-6=-195/133
WEBS 3-8=-409/99, 2-9=-315/300, 4-6=-315/298

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) 0-0-7 to 3-0-7, Interior (1) 3-0-7 to 8-0-8, Exterior(2R) 8-0-8 to 11-0-8, Interior (1) 11-0-8 to 16-0-9 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 crushing capacity of 565 psi.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 31 lb uplift at joint 1, 40 lb uplift at joint 8, 284 lb uplift at joint 9 and 279 lb uplift at joint 6.

LOAD CASE(S) Standard



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Date:

August 10,2023

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Job	Truss	Truss Type	Qty	Ply	Royster Res.
1110-A	V4	Valley	1	1	T31279891
					Job Reference (optional)

19 Lumber, Inc., Old Town, FL - 32680, Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Thu Aug 10 10:10:22 Page: 1
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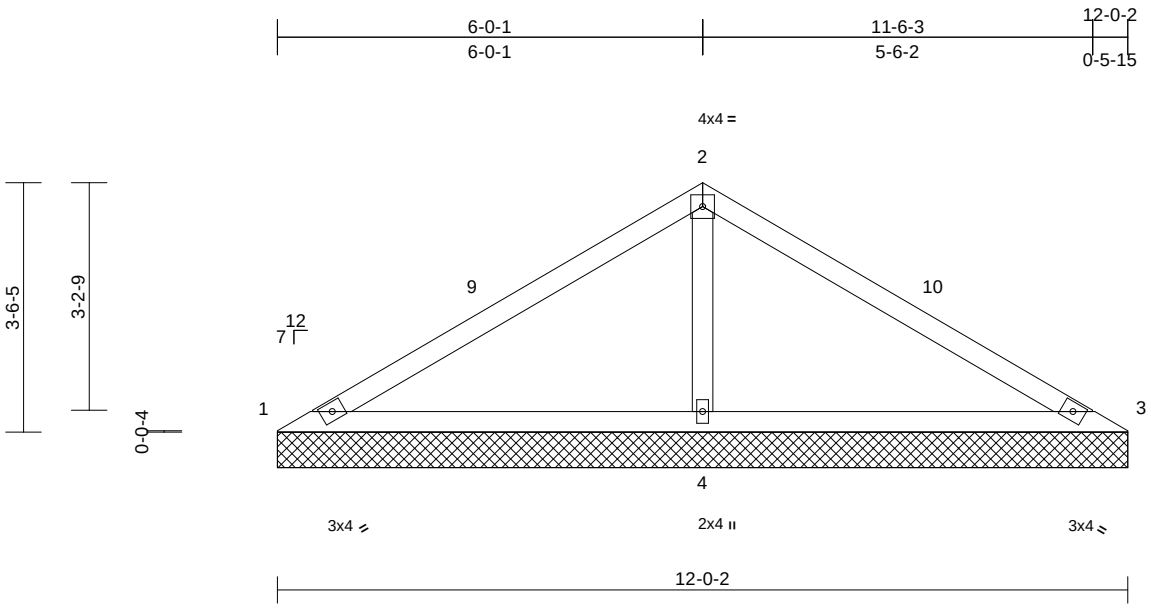


Scale = 1:32.5

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.25	TC	0.40	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.34	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.14	Horiz(TL)	0.01	4	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MS							Weight: 41 lb	FT = 20%

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

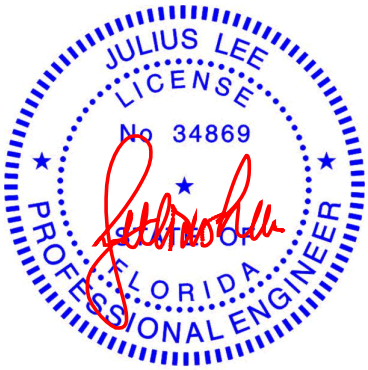
BRACING
TOP CHORD Structural wood sheathing directly applied or 10-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size) 1=12-0-2, 3=12-0-2, 4=12-0-2
Max Horiz 1=130 (LC 11)
Max Uplift 1=-55 (LC 24), 3=-55 (LC 23), 4=-398 (LC 12)
Max Grav 1=65 (LC 23), 3=65 (LC 24), 4=949 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-291/502, 2-3=-290/502
BOT CHORD 1-4=-456/358, 3-4=-456/358
WEBS 2-4=-766/548

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) 0-0-7 to 3-0-7, Interior (1) 3-0-7 to 6-0-8, Exterior(2R) 6-0-8 to 9-0-8, Interior (1) 9-0-8 to 12-0-9 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 crushing capacity of 565 psi.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 55 lb uplift at joint 1, 55 lb uplift at joint 3 and 398 lb uplift at joint 4.

LOAD CASE(S) Standard



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16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

August 10,2023

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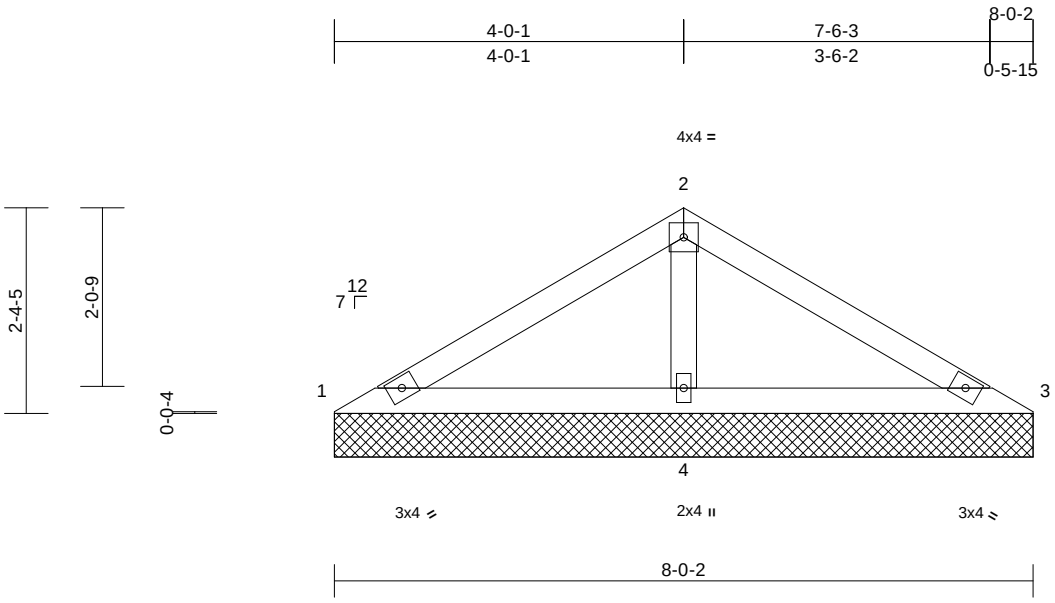
Job	Truss	Truss Type	Qty	Ply	Royster Res. T31279892
1110-A	V5	Valley	1	1	Job Reference (optional)

19 Lumber, Inc., Old Town, FL - 32680, Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Thu Aug 10 10:10:22 Page: 1
ID:Q0wHzwn4FTtxm_1CCnT6P5yxDH5-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:26.4

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	0.18	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.23	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.07	Horiz(TL)	0.00	4	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MP							Weight: 27 lb	FT = 20%

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

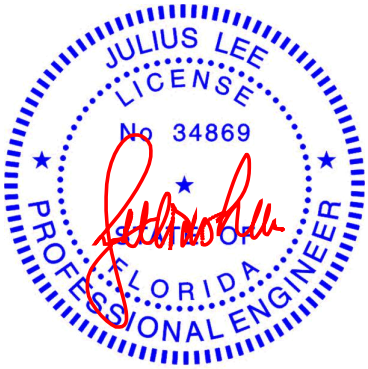
BRACING
TOP CHORD Structural wood sheathing directly applied or 8-0-2 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size) 1=8-0-2, 3=8-0-2, 4=8-0-2
Max Horiz 1=85 (LC 11)
Max Uplift 1=-16 (LC 12), 3=-31 (LC 8), 4=-225 (LC 12)
Max Grav 1=72 (LC 23), 3=72 (LC 24), 4=556 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-192/258, 2-3=-192/258
BOT CHORD 1-4=-276/272, 3-4=-276/272
WEBS 2-4=-432/372

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) 0-0-7 to 3-0-7, Interior (1) 3-0-7 to 4-0-8, Exterior(2R) 4-0-8 to 7-0-1, Interior (1) 7-0-1 to 8-0-9 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 crushing capacity of 565 psi.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 16 lb uplift at joint 1, 31 lb uplift at joint 3 and 225 lb uplift at joint 4.

LOAD CASE(S) Standard



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Date:

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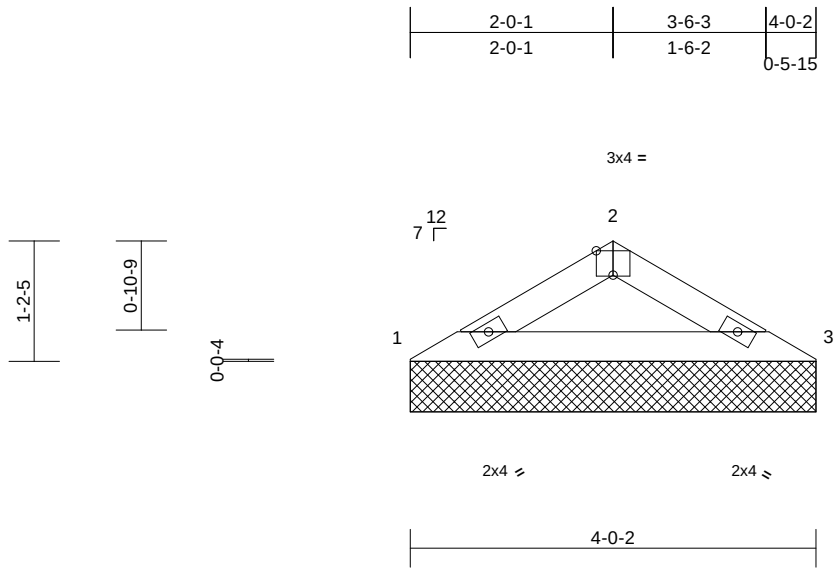
Job	Truss	Truss Type	Qty	Ply	Royster Res.
1110-A	V6	Valley	1	1	T31279893
					Job Reference (optional)

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

Run: 8.63 S Jul 28 2023 Print: 8.630 S Jul 28 2023 MiTek Industries, Inc. Thu Aug 10 10:10:22 Page: 1
ID:Q0wHzwn4FTtxm_1CCnT6P5yxDH5-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:22.8

Plate Offsets (X, Y): [2:0-2-0,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	0.11	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.10	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	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

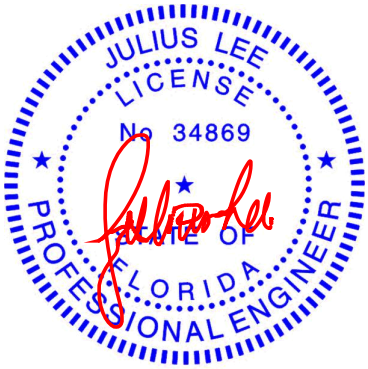
BRACING
TOP CHORD Structural wood sheathing directly applied or 4-0-2 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=4-0-2, 3=4-0-2
Max Horiz 1=-40 (LC 10)
Max Uplift 1=-65 (LC 12), 3=-65 (LC 13)
Max Grav 1=160 (LC 1), 3=160 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-288/236, 2-3=-288/236
BOT CHORD 1-3=-183/236

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) 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 crushing capacity of 565 psi.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 65 lb uplift at joint 1 and 65 lb uplift at joint 3.

LOAD CASE(S) Standard



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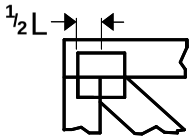
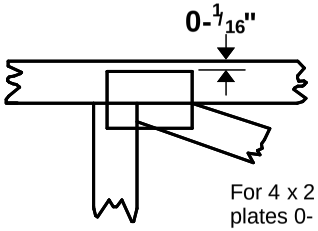
Symbols

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.

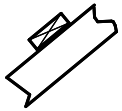
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 x 4

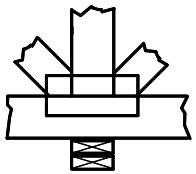
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

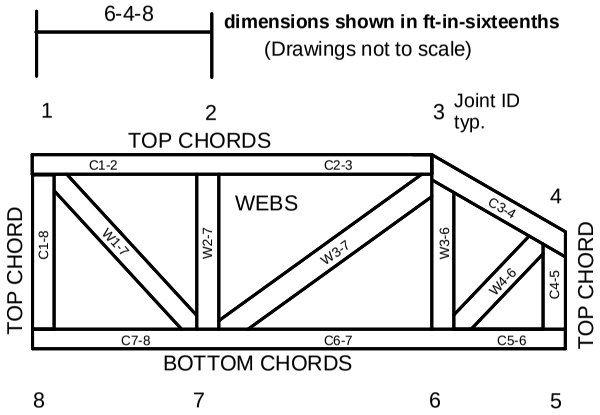


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

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

Numbering System



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

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

Product Code Approvals

ICC-ES Reports:

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

Design General Notes

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

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

MiTek®

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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