RE: 240614
Lot 123 MN

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

Site Information:

Customer: Avital Homes Project Name: 240614
Lot/Block: Model: Crestwood - Craftsman FH 3rd Car
Address: Subdivision:
City: State:

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

Design Code: IRC2018/TPI2014 Design Program: MiTek 20/20 8.7
Wind Code: ASCE 7 - 16[Low Rise] Wind Speed: 115 mph
Roof Load: 45.0 psf Floor Load: N/A psf

This package includes 48 individual, dated Truss Design Drawings and 0 Additional Drawings.

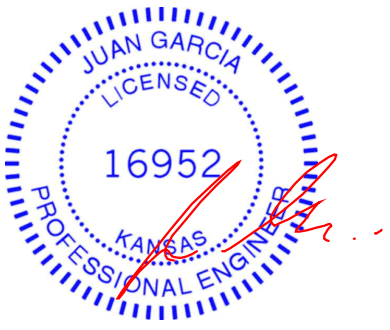
No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I64131335	A1	3/11/2024	21	I64131355	D11	3/11/2024
2	I64131336	A2A	3/11/2024	22	I64131356	G1	3/11/2024
3	I64131337	A3A	3/11/2024	23	I64131357	G2	3/11/2024
4	I64131338	A4A	3/11/2024	24	I64131358	G3	3/11/2024
5	I64131339	A5A	3/11/2024	25	I64131359	G4	3/11/2024
6	I64131340	B1	3/11/2024	26	I64131360	J1	3/11/2024
7	I64131341	B2	3/11/2024	27	I64131361	J2	3/11/2024
8	I64131342	C1	3/11/2024	28	I64131362	J3	3/11/2024
9	I64131343	C2	3/11/2024	29	I64131363	J4	3/11/2024
10	I64131344	C3	3/11/2024	30	I64131364	J5	3/11/2024
11	I64131345	D1	3/11/2024	31	I64131365	J6	3/11/2024
12	I64131346	D2	3/11/2024	32	I64131366	J7	3/11/2024
13	I64131347	D3	3/11/2024	33	I64131367	J8	3/11/2024
14	I64131348	D4	3/11/2024	34	I64131368	J9	3/11/2024
15	I64131349	D5	3/11/2024	35	I64131369	J10	3/11/2024
16	I64131350	D6	3/11/2024	36	I64131370	J11	3/11/2024
17	I64131351	D7	3/11/2024	37	I64131371	LAY1	3/11/2024
18	I64131352	D8	3/11/2024	38	I64131372	LAY2	3/11/2024
19	I64131353	D9	3/11/2024	39	I64131373	LAY4	3/11/2024
20	I64131354	D10	3/11/2024	40	I64131374	V1	3/11/2024

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

Truss Design Engineer's Name: Garcia, Juan

My license renewal date for the state of Kansas is April 30, 2024.

Kansas COA: E-943



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. Any project specific information included is for MiTek customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek 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.

March 11, 2024

Garcia, Juan

RE: 240614 - Lot 123 MN

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

Site Information:

Project Customer: Avital Homes Project Name: 240614
Lot/Block: Subdivision:
Address:
City, County: State:

No.	Seal#	Truss Name	Date
41	I64131375	V2	3/11/2024
42	I64131376	V3	3/11/2024
43	I64131377	V4	3/11/2024
44	I64131378	V5	3/11/2024
45	I64131379	V6	3/11/2024
46	I64131380	V10	3/11/2024
47	I64131381	V11	3/11/2024
48	I64131382	V12	3/11/2024

RE: 240614
Lot 123 MN

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

Site Information:

Customer: Avital Homes Project Name: 240614
Lot/Block: Model: Crestwood - Craftsman FH 3rd Car
Address: Subdivision:
City: State:

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

Design Code: IRC2018/TPI2014 Design Program: MiTek 20/20 8.7
Wind Code: ASCE 7 - 16[Low Rise] Wind Speed: 115 mph
Roof Load: 45.0 psf Floor Load: N/A psf

This package includes 48 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I64131335	A1	3/11/2024	21	I64131355	D11	3/11/2024
2	I64131336	A2A	3/11/2024	22	I64131356	G1	3/11/2024
3	I64131337	A3A	3/11/2024	23	I64131357	G2	3/11/2024
4	I64131338	A4A	3/11/2024	24	I64131358	G3	3/11/2024
5	I64131339	A5A	3/11/2024	25	I64131359	G4	3/11/2024
6	I64131340	B1	3/11/2024	26	I64131360	J1	3/11/2024
7	I64131341	B2	3/11/2024	27	I64131361	J2	3/11/2024
8	I64131342	C1	3/11/2024	28	I64131362	J3	3/11/2024
9	I64131343	C2	3/11/2024	29	I64131363	J4	3/11/2024
10	I64131344	C3	3/11/2024	30	I64131364	J5	3/11/2024
11	I64131345	D1	3/11/2024	31	I64131365	J6	3/11/2024
12	I64131346	D2	3/11/2024	32	I64131366	J7	3/11/2024
13	I64131347	D3	3/11/2024	33	I64131367	J8	3/11/2024
14	I64131348	D4	3/11/2024	34	I64131368	J9	3/11/2024
15	I64131349	D5	3/11/2024	35	I64131369	J10	3/11/2024
16	I64131350	D6	3/11/2024	36	I64131370	J11	3/11/2024
17	I64131351	D7	3/11/2024	37	I64131371	LAY1	3/11/2024
18	I64131352	D8	3/11/2024	38	I64131372	LAY2	3/11/2024
19	I64131353	D9	3/11/2024	39	I64131373	LAY4	3/11/2024
20	I64131354	D10	3/11/2024	40	I64131374	V1	3/11/2024

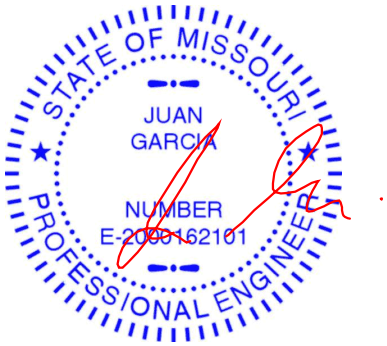
The truss drawing(s) referenced above have been prepared by MiTek USA, Inc under my direct supervision based on the parameters provided by Wheeler - Waverly.

Truss Design Engineer's Name: Garcia, Juan

My license renewal date for the state of Missouri is December 31, 2024.

Missouri COA: 001193

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. Any project specific information included is for MiTek customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek 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.



March 11, 2024

Garcia, Juan

RE: 240614 - Lot 123 MN

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

Site Information:

Project Customer: Avital Homes Project Name: 240614
Lot/Block: Subdivision:
Address:
City, County: State:

No.	Seal#	Truss Name	Date
41	I64131375	V2	3/11/2024
42	I64131376	V3	3/11/2024
43	I64131377	V4	3/11/2024
44	I64131378	V5	3/11/2024
45	I64131379	V6	3/11/2024
46	I64131380	V10	3/11/2024
47	I64131381	V11	3/11/2024
48	I64131382	V12	3/11/2024

Job	Truss	Truss Type	Qty	Ply	Lot 123 MN	
240614	A1	Common Supported Gable	1	1	Job Reference (optional)	I64131335

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.73 S Feb 22 2024 Print: 8.730 S Feb 22 2024 MiTek Industries, Inc. Fri Mar 08 12:19:02
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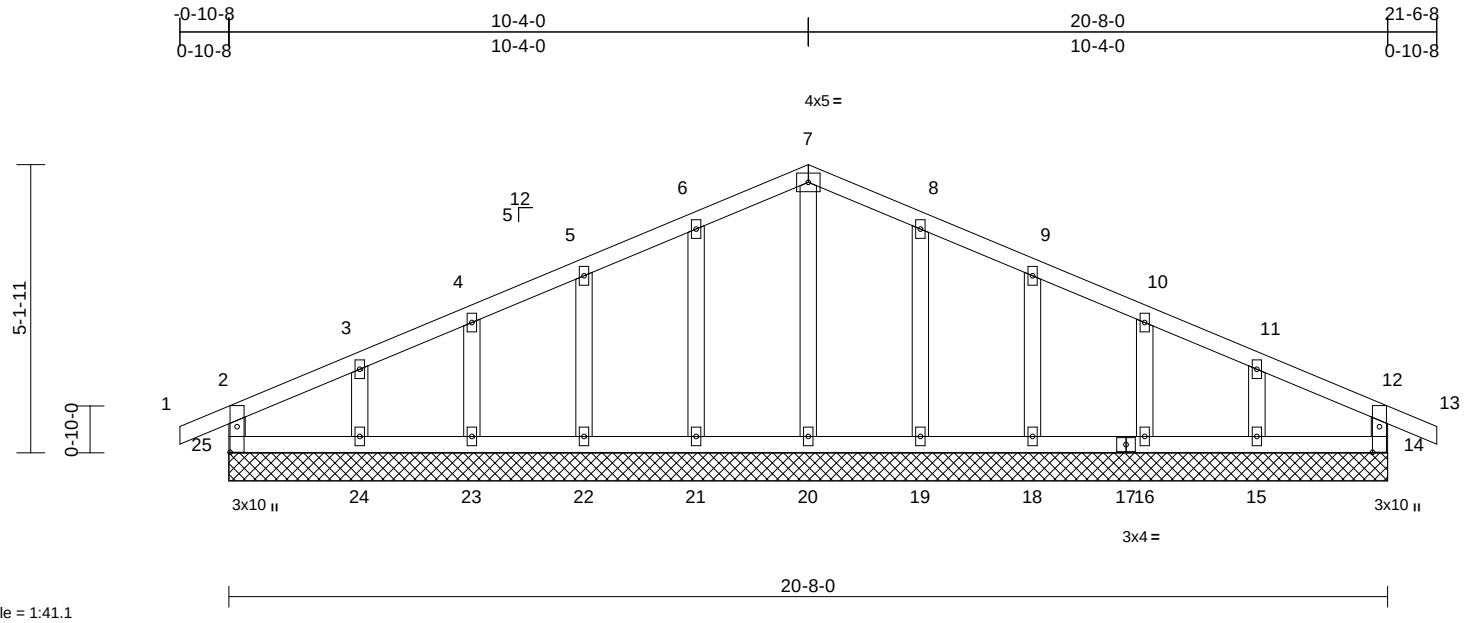
Page: 1



Scale = 1:41.1

Plate Offsets (X, Y): [14:0-5-8,0-1-8], [25:0-5-8,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	14	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 80 lb	FT = 10%

LUMBER

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

BRACING

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

REACTIONS (size) 14=20-8-0, 15=20-8-0, 16=20-8-0, 18=20-8-0, 19=20-8-0, 20=20-8-0, 21=20-8-0, 22=20-8-0, 23=20-8-0, 24=20-8-0, 25=20-8-0
Max Horiz 25=62 (LC 12)
Max Uplift 14=-35 (LC 5), 15=-70 (LC 9), 16=-42 (LC 9), 18=-50 (LC 9), 19=-50 (LC 9), 21=-50 (LC 8), 22=-50 (LC 8), 23=-40 (LC 8), 24=-75 (LC 8), 25=-36 (LC 4)
Max Grav 14=174 (LC 22), 15=187 (LC 1), 16=178 (LC 22), 18=179 (LC 1), 19=191 (LC 22), 20=164 (LC 1), 21=191 (LC 21), 22=179 (LC 1), 23=178 (LC 21), 24=187 (LC 1), 25=174 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	2-25=-154/49, 1-2=0/27, 2-3=-64/53, 3-4=-37/72, 4-5=-30/93, 5-6=-30/115, 6-7=-34/134, 7-8=-34/128, 8-9=-30/102, 9-10=-30/80, 10-11=-31/59, 11-12=-53/43, 12-13=0/27, 12-14=-154/49
BOT CHORD	24-25=-10/50, 23-24=-10/50, 22-23=-10/50, 21-22=-10/50, 20-21=-10/50, 19-20=-10/50, 18-19=-10/50, 16-18=-10/50, 15-16=-10/50, 14-15=-10/50
WEBS	7-20=-124/0, 6-21=-151/74, 5-22=-138/73, 4-23=-140/66, 3-24=-143/91, 8-19=-151/74, 9-18=-138/73, 10-16=-140/67, 11-15=-143/88

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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) 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) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) All bearings are assumed to be SPF No.2 .
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 36 lb uplift at joint 25, 35 lb uplift at joint 14, 50 lb uplift at joint 21, 50 lb uplift at joint 22, 40 lb uplift at joint 23, 75 lb uplift at joint 24, 50 lb uplift at joint 19, 50 lb uplift at joint 18, 42 lb uplift at joint 16 and 70 lb uplift at joint 15.
12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

March 11,2024

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

Job	Truss	Truss Type	Qty	Ply	Lot 123 MN	
240614	A2A	Common	1	1	Job Reference (optional)	I64131336

Wheeler Lumber, Waverly, KS - 66871,

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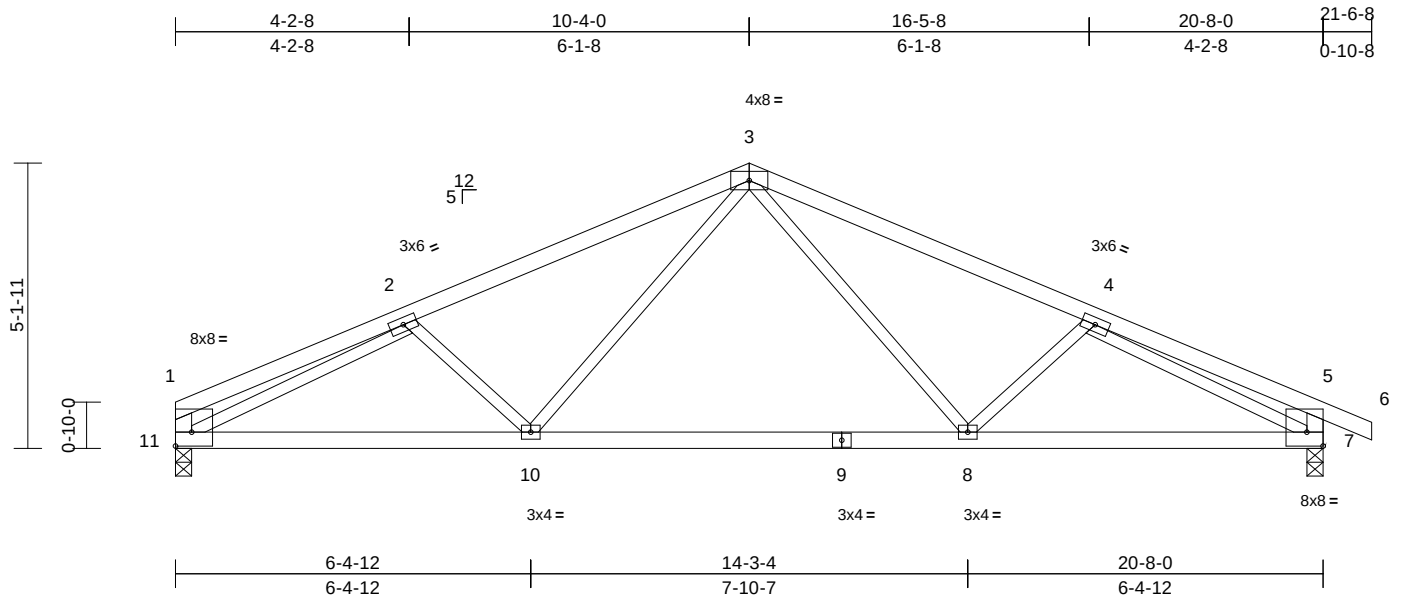

Scale = 1:41.5

Plate Offsets (X, Y): [1:Edge,0-3-0], [7:Edge,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.56	Vert(LL)	-0.09	8-10	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.48	Vert(CT)	-0.20	8-10	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.72	Horz(CT)	0.04	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.05	8-10	>999	240	Weight: 73 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except* 11-1,7-5:2x4 SPF No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-9-14 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 7=0-3-8, 11=0-3-8
Max Horiz 11=-70 (LC 9)
Max Uplift 7=-140 (LC 9), 11=-117 (LC 8)
Max Grav 7=990 (LC 1), 11=915 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-251/33, 2-3=-1406/191, 3-4=-1400/189, 4-5=-271/40, 5-6=0/27, 1-11=-188/44, 5-7=-279/73
BOT CHORD 10-11=-233/1375, 8-10=-62/976, 7-8=-168/1361
WEBS 3-8=-51/417, 4-8=-256/190, 3-10=-52/426, 2-10=-266/192, 2-11=-1358/207, 4-7=-1326/197

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
5) All bearings are assumed to be SPF No.2 .
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 117 lb uplift at joint 11 and 140 lb uplift at joint 7.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

March 11,2024

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

Job	Truss	Truss Type	Qty	Ply	Lot 123 MN	
240614	A3A	Common	3	1	Job Reference (optional)	I64131337

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.73 S Feb 22 2024 Print: 8.730 S Feb 22 2024 MiTek Industries, Inc. Fri Mar 08 12:19:03

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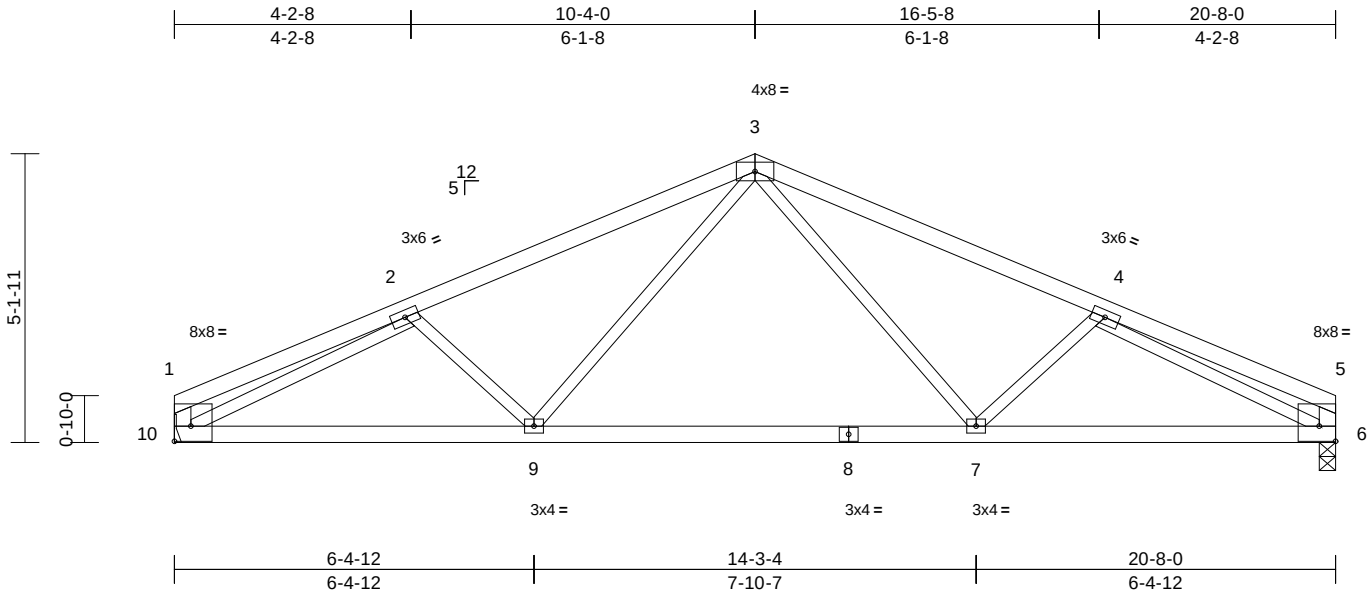

Scale = 1:41

Plate Offsets (X, Y): [1:Edge,0-3-4], [5:Edge,0-3-4]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.54	Vert(LL)	-0.09	7-9	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.49	Vert(CT)	-0.20	7-9	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.73	Horz(CT)	0.04	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.05	7-9	>999	240	Weight: 72 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except* 10-1,6-5:2x4 SPF No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-10-11 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 6=0-3-8, 10= Mechanical
Max Horiz 10=55 (LC 12)
Max Uplift 6=-117 (LC 9), 10=-117 (LC 8)
Max Grav 6=917 (LC 1), 10=917 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-251/33, 2-3=-1410/191, 3-4=-1410/191, 4-5=-251/33, 1-10=-188/44, 5-6=-188/44
BOT CHORD 9-10=-240/1378, 7-9=-69/980, 6-7=-186/1378
WEBS 3-7=-53/426, 4-7=-266/193, 3-9=-53/426, 2-9=-266/192, 2-10=-1361/207, 4-6=-1361/207

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
5) All bearings are assumed to be SPF No.2 .
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 117 lb uplift at joint 10 and 117 lb uplift at joint 6.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

March 11,2024

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

Job	Truss	Truss Type	Qty	Ply	Lot 123 MN	
240614	A4A	Common	1	1	Job Reference (optional)	I64131338

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.73 S Feb 22 2024 Print: 8.730 S Feb 22 2024 MiTek Industries, Inc. Fri Mar 08 12:19:03
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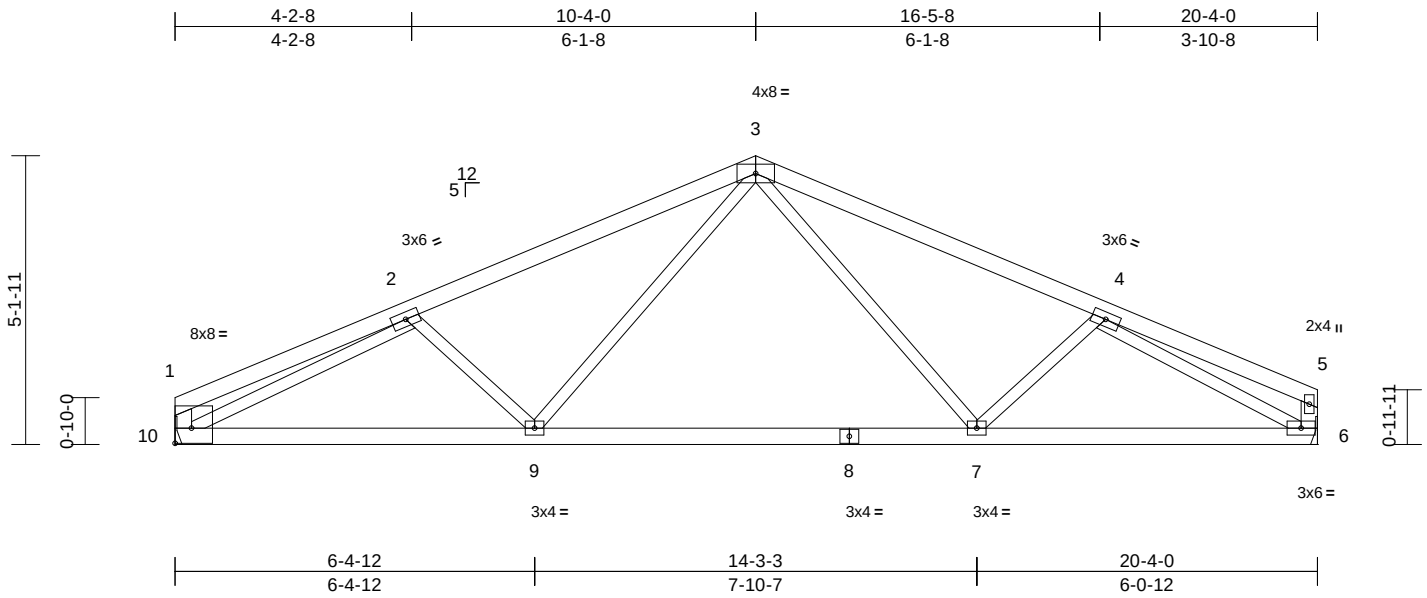
Page: 1



Scale = 1:41

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.53	Vert(LL)	-0.09	7-9	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.48	Vert(CT)	-0.20	7-9	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.71	Horz(CT)	0.04	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.04	7-9	>999	240	Weight: 71 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except* 10-1,6-5:2x4 SPF No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-11-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 6= Mechanical, 10= Mechanical
Max Horiz 10=55 (LC 8)
Max Uplift 6=-113 (LC 9), 10=-116 (LC 8)
Max Grav 6=902 (LC 1), 10=902 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-248/33, 2-3=-1379/189, 3-4=-1338/181, 4-5=-163/22, 1-10=-187/44, 5-6=-138/31
BOT CHORD 9-10=-239/1352, 7-9=-68/948, 6-7=-177/1269
WEBS 3-7=-45/378, 4-7=-215/182, 3-9=-52/429, 2-9=-268/193, 2-10=-1334/205, 4-6=-1352/207

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
5) All bearings are assumed to be SPF No.2 .
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 116 lb uplift at joint 10 and 113 lb uplift at joint 6.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

March 11,2024

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

Job	Truss	Truss Type	Qty	Ply	Lot 123 MN	
240614	A5A	Monopitch	1	1	Job Reference (optional)	I64131339

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.73 S Feb 22 2024 Print: 8.730 S Feb 22 2024 MiTek Industries, Inc. Fri Mar 08 12:19:03
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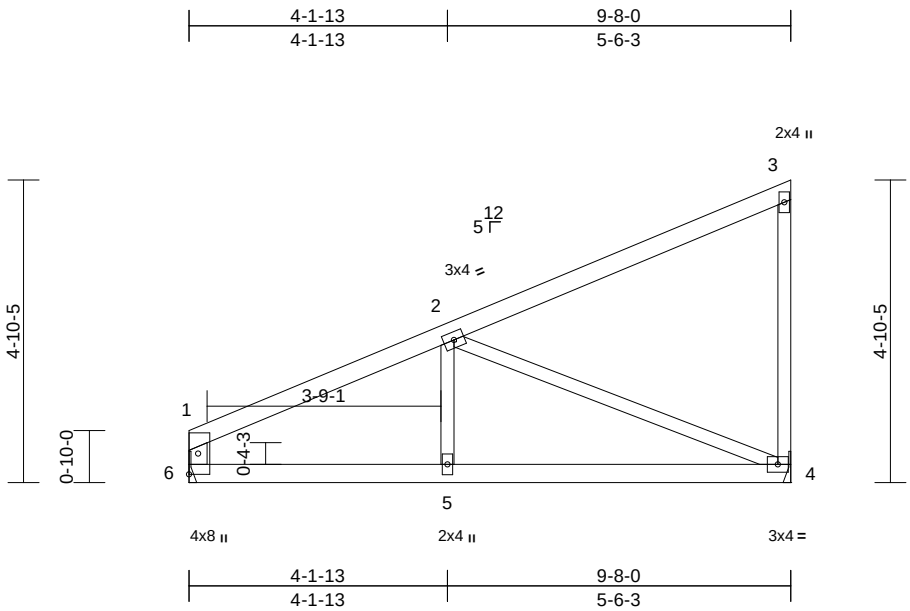

Scale = 1:37

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.39	Vert(LL)	-0.04	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.36	Vert(CT)	-0.09	4-5	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.43	Horz(CT)	0.01	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.03	4-5	>999	240	Weight: 33 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except* 6-1:2x4 SPF No.2

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

REACTIONS (size) 4= Mechanical, 6= Mechanical
Max Horiz 6=194 (LC 7)
Max Uplift 4=-101 (LC 8), 6=-58 (LC 8)
Max Grav 4=424 (LC 1), 6=424 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-6=-345/71, 1-2=-579/82, 2-3=-138/37, 3-4=-167/67
BOT CHORD 5-6=-114/484, 4-5=-114/484
WEBS 2-4=-509/164, 2-5=0/187

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * 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.
4) All bearings are assumed to be SPF No.2 .
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 58 lb uplift at joint 6 and 101 lb uplift at joint 4.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

March 11,2024

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

Job	Truss	Truss Type	Qty	Ply	Lot 123 MN	
240614	B1	Monopitch Supported Gable	1	1	Job Reference (optional)	I64131340

Wheeler Lumber, Waverly, KS - 66871,

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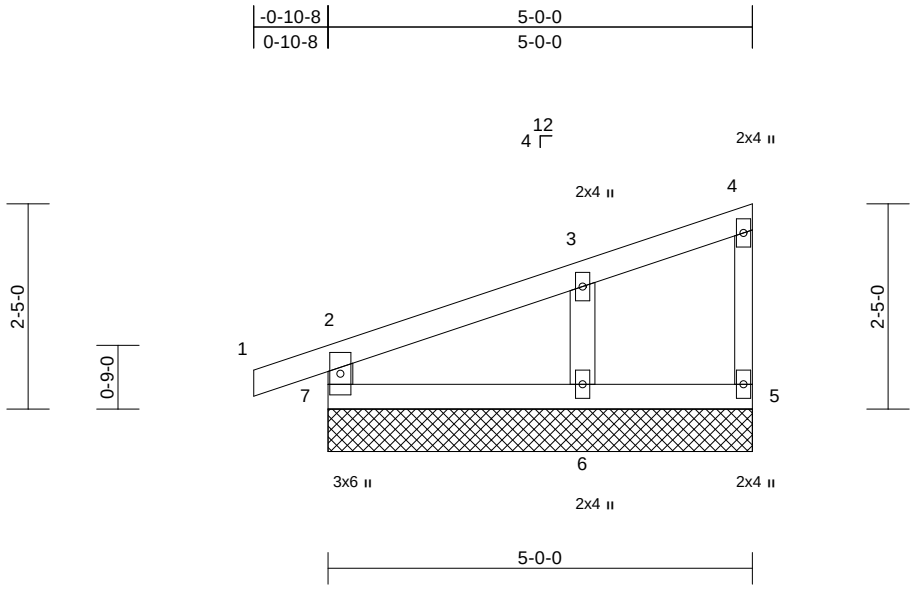

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 16 lb	FT = 10%

LUMBER

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.2 *Except* 4-5:2x3 SPF No.2
OTHERS	2x4 SPF No.2

BRACING

TOP CHORD	Structural wood sheathing directly applied or 5-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 5=5-0-0, 6=5-0-0, 7=5-0-0
Max Horiz 7=97 (LC 7)
Max Uplift 5=-6 (LC 5), 6=-70 (LC 8), 7=-53 (LC 4)
Max Grav 5=56 (LC 1), 6=250 (LC 1), 7=193 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	2-7=-170/73, 1-2=0/23, 2-3=-65/30, 3-4=-48/18, 4-5=-44/15
BOT CHORD	6-7=-30/21, 5-6=-30/21
WEBS	3-6=-189/95

NOTES

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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) 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.
3) Gable requires continuous bottom chord bearing.
4) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
5) Gable studs spaced at 2-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * 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.
8) All bearings are assumed to be SPF No.2 .
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 53 lb uplift at joint 7, 6 lb uplift at joint 5 and 70 lb uplift at joint 6.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

March 11,2024

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

Job	Truss	Truss Type	Qty	Ply	Lot 123 MN	
240614	B2	Monopitch	8	1	Job Reference (optional)	I64131341

Wheeler Lumber, Waverly, KS - 66871,

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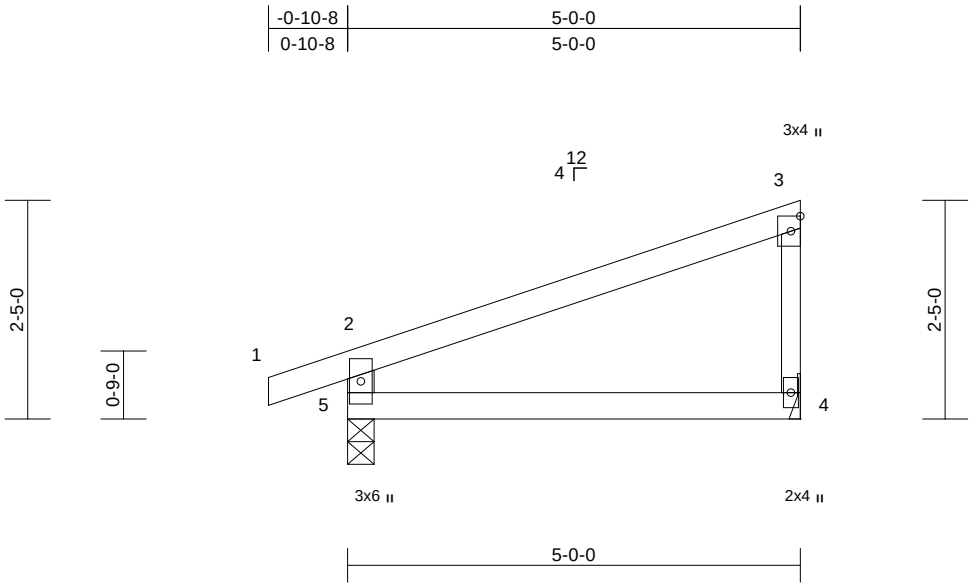

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.29	Vert(LL)	-0.02	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	-0.04	4-5	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R		Wind(LL)	0.01	4-5	>999	240	Weight: 15 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except* 5-2:2x4 SPF No.2

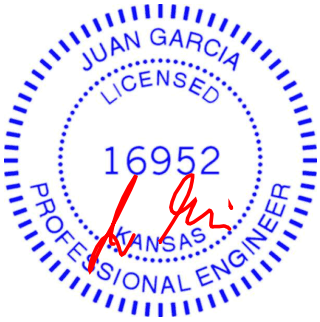
BRACING
TOP CHORD Structural wood sheathing directly applied or 5-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 4= Mechanical, 5=0-3-8
Max Horiz 5=97 (LC 5)
Max Uplift 4=-46 (LC 8), 5=-79 (LC 4)
Max Grav 4=206 (LC 1), 5=293 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/23, 2-3=-105/12, 3-4=-147/67, 2-5=-257/115
BOT CHORD 4-5=-25/40

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * 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.
4) All bearings are assumed to be SPF No.2 .
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 46 lb uplift at joint 4 and 79 lb uplift at joint 5.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



March 11,2024

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

Job	Truss	Truss Type	Qty	Ply	Lot 123 MN	
240614	C1	Common Supported Gable	1	1	Job Reference (optional)	I64131342

Wheeler Lumber, Waverly, KS - 66871,

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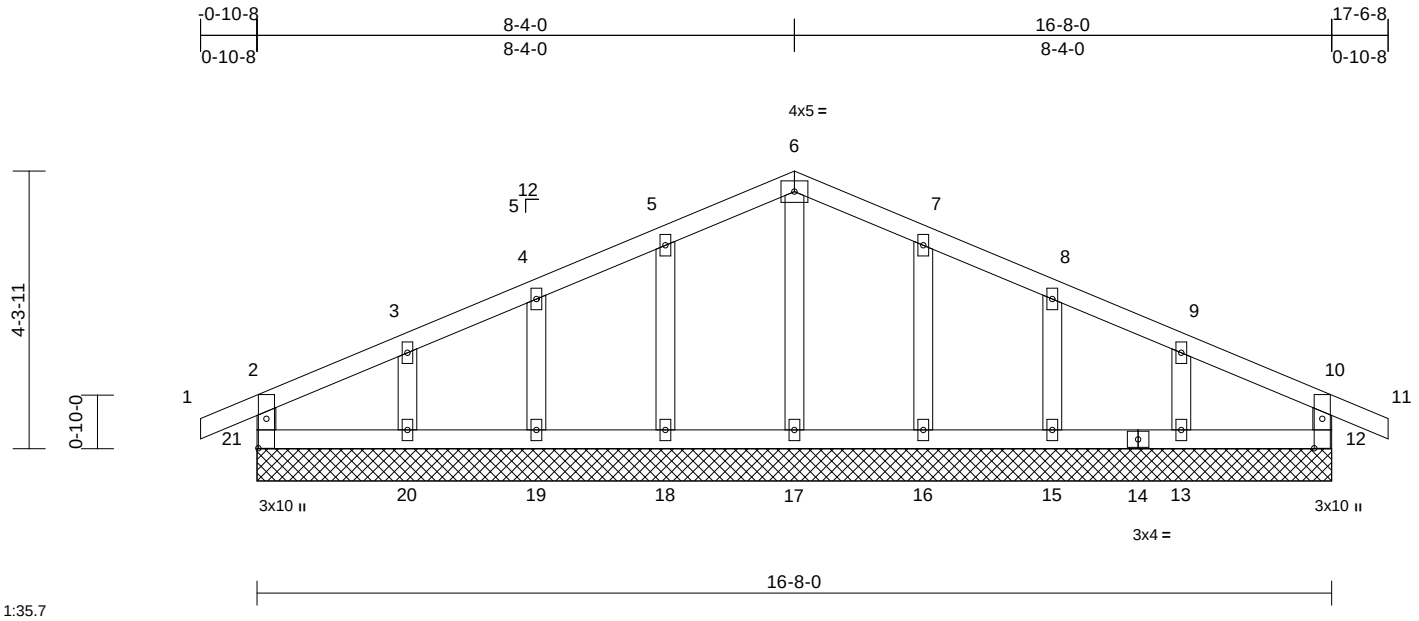

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Plate Offsets (X, Y): [12:0-5-8,0-1-8], [21:0-5-8,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	12	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 61 lb	FT = 10%

LUMBER

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

BRACING

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

REACTIONS (size) 12=16-8-0, 13=16-8-0, 15=16-8-0, 16=16-8-0, 17=16-8-0, 18=16-8-0, 19=16-8-0, 20=16-8-0, 21=16-8-0
Max Horiz 21=-48 (LC 9)
Max Uplift 12=-40 (LC 5), 13=-65 (LC 9), 15=-43 (LC 9), 16=-52 (LC 9), 18=-53 (LC 8), 19=-42 (LC 8), 20=-68 (LC 8), 21=-40 (LC 4)
Max Grav 12=174 (LC 22), 13=188 (LC 1), 15=176 (LC 1), 16=192 (LC 22), 17=164 (LC 1), 18=192 (LC 21), 19=176 (LC 1), 20=188 (LC 1), 21=174 (LC 21)

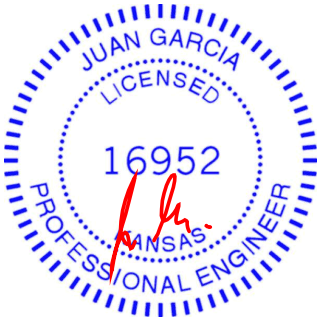
FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	2-21=-154/53, 1-2=0/27, 2-3=-52/49, 3-4=-30/68, 4-5=-29/90, 5-6=-34/110, 6-7=-34/104, 7-8=-29/81, 8-9=-30/60, 9-10=-45/42, 10-11=0/27, 10-12=-154/53
BOT CHORD	20-21=-9/38, 19-20=-9/38, 18-19=-9/38, 17-18=-9/38, 16-17=-9/38, 15-16=-9/38, 13-15=-9/38, 12-13=-9/38
WEBS	6-17=-125/0, 5-18=-151/76, 4-19=-137/67, 3-20=-143/87, 7-16=-151/76, 8-15=-137/68, 9-13=-143/85

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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) 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) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) All bearings are assumed to be SPF No.2 .
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 40 lb uplift at joint 21, 40 lb uplift at joint 12, 53 lb uplift at joint 18, 42 lb uplift at joint 19, 68 lb uplift at joint 20, 52 lb uplift at joint 16, 43 lb uplift at joint 15 and 65 lb uplift at joint 13.
12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



March 11,2024

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

Job	Truss	Truss Type	Qty	Ply	Lot 123 MN	
240614	C2	Common Structural Gable	1	1	Job Reference (optional)	I64131343

Wheeler Lumber, Waverly, KS - 66871,

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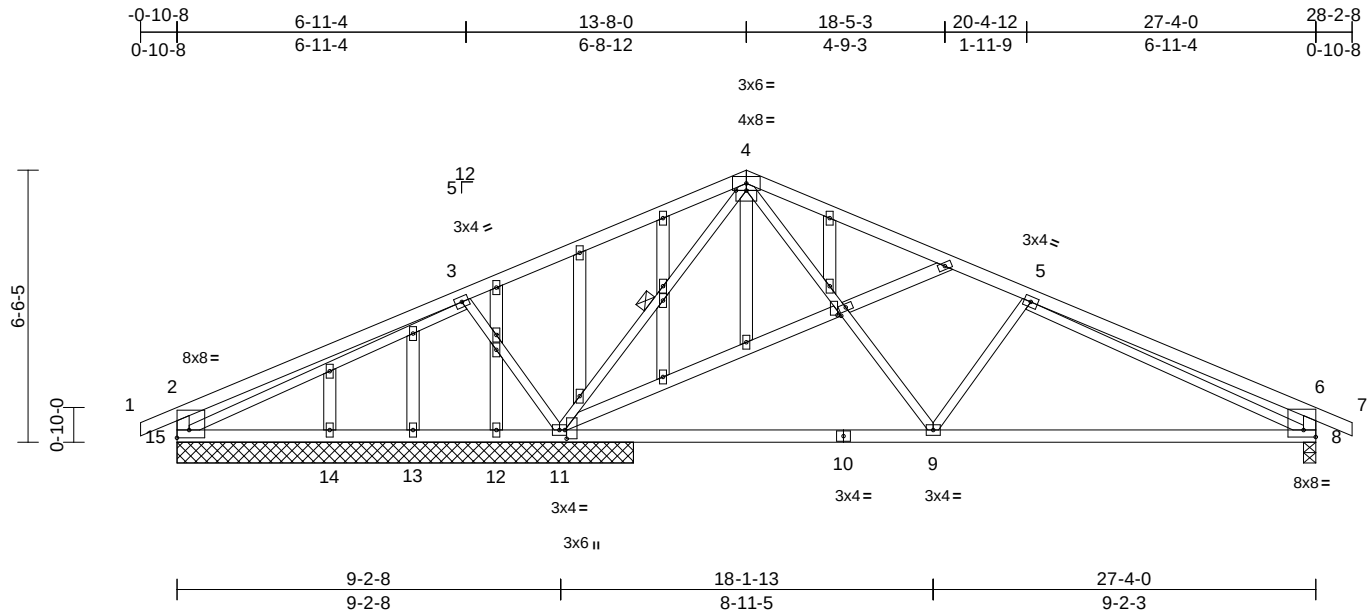

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Plate Offsets (X, Y): [2:Edge,0-2-4], [4:0-3-0,Edge], [8:Edge,0-2-0], [11:0-2-8,0-0-8], [17:0-0-3,0-1-1]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.59	Vert(LL)	-0.14	8-9	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.67	Vert(CT)	-0.30	8-9	>729	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.80	Horz(CT)	0.02	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.03	8-9	>999	240	Weight: 133 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except* 15-2,8-6,16-17,17-11:2x4 SPF No.2
OTHERS 2x4 SPF No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-3-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 4-11

REACTIONS (size) 8=0-3-8, 11=10-11-8, 12=10-11-8, 13=10-11-8, 14=10-11-8, 15=10-11-8
Max Horiz 15=-87 (LC 9)
Max Uplift 8=-154 (LC 9), 11=-143 (LC 8), 12=-129 (LC 3), 15=-109 (LC 8)
Max Grav 8=831 (LC 1), 11=1374 (LC 1), 12=-34 (LC 9), 13=98 (LC 3), 14=129 (LC 3), 15=371 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/27, 2-3=-356/193, 3-4=0/315, 4-5=-889/218, 5-6=-592/173, 6-7=0/27, 2-15=-390/179, 6-8=-492/173
BOT CHORD 14-15=-102/160, 13-14=-102/160, 12-13=-102/160, 11-12=-102/160, 9-11=0/334, 8-9=-143/974
WEBS 4-9=-106/689, 5-9=-448/248, 4-11=-940/122, 3-11=-507/263, 3-15=-100/195, 5-8=-568/64

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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) 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) All plates are 2x4 MT20 unless otherwise indicated.
5) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
6) Gable studs spaced at 2-0-0 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 SPF No.2 .
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 143 lb uplift at joint 11, 109 lb uplift at joint 15, 154 lb uplift at joint 8 and 129 lb uplift at joint 12.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

March 11,2024

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

Job	Truss	Truss Type	Qty	Ply	Lot 123 MN	
240614	C3	Common Girder	1	**3**	Job Reference (optional)	I64131344

Wheeler Lumber, Waverly, KS - 66871,

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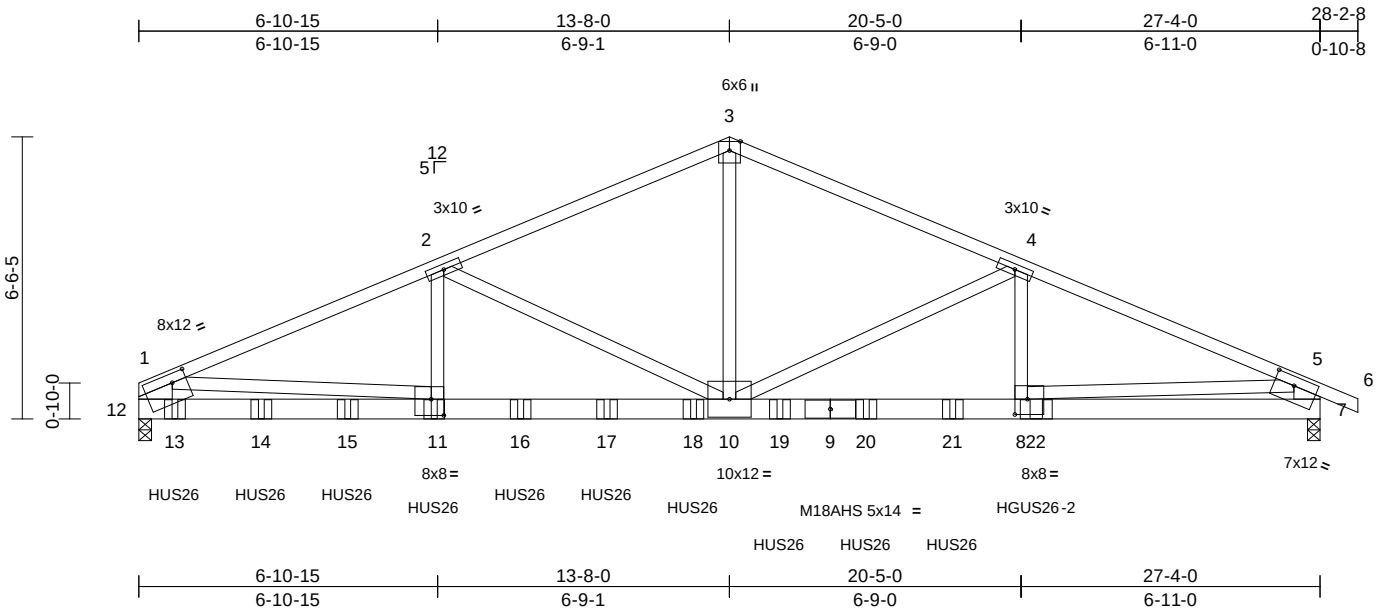

Scale = 1:53.3

Plate Offsets (X, Y): [1:0-4-0,0-2-8], [7:0-5-8,0-2-8], [8:0-3-8,0-4-4], [11:0-3-8,0-4-8]

Loading	(psf)	**Spacing**	2-0-0	**CSI**		**DEFL**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.87	Vert(LL)	-0.26	8-10	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.83	Vert(CT)	-0.46	8-10	>691	240	M18AHS	186/179
BCLL	0.0*	Rep Stress Incr	NO	WB	0.94	Horz(CT)	0.07	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.15	8-10	>999	240	Weight: 435 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF 2100F 1.8E
BOT CHORD 2x6 SP 2400F 2.0E
WEBS 2x4 SPF No.2 *Except* 12-1:2x10 SP 2400F 2.0E, 7-5:2x8 SP 2400F 2.0E, 8-5:2x4 SPF 2100F 1.8E

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-9-13 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 7=0-3-8, (req. 0-4-9), 12=0-3-8, (req. 0-5-14)
Max Horiz 12=-96 (LC 28)
Max Uplift 7=-804 (LC 9), 12=-118 (LC 8)
Max Grav 7=8680 (LC 1), 12=11203 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-18078/889, 2-3=-13428/868, 3-4=-13423/867, 4-5=-17897/1564, 5-6=0/32, 1-12=-8256/480, 5-7=-8399/806
BOT CHORD 11-12=-186/5147, 10-11=-832/16652, 8-10=-1363/16397, 7-8=-378/3241
WEBS 3-10=-522/9748, 4-10=-4587/869, 4-8=-468/3434, 2-10=-4986/180, 2-11=0/3846, 1-11=-649/11589, 5-8=-991/13205

NOTES
1) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-4-0 oc, 2x10 - 2 rows staggered at 0-9-0 oc, 2x8 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 3 rows staggered at 0-4-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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
5) All plates are MT20 plates unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * 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.
8) WARNING: Required bearing size at joint(s) 12, 7 greater than input bearing size.
9) All bearings are assumed to be SPF No.2 .
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 118 lb uplift at joint 12 and 804 lb uplift at joint 7.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
12) Use Simpson Strong-Tie HUS26 (14-10d Girder, 6-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 0-10-0 from the left end to 18-10-0 to connect truss(es) to back face of bottom chord.
13) Use Simpson Strong-Tie HGUS26-2 (20-10d Girder, 8-10d Truss) or equivalent at 20-9-3 from the left end to connect truss(es) to back face of bottom chord.
14) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (lb/ft)
Vert: 1-3=-70, 3-5=-70, 5-6=-70, 7-12=-20
Concentrated Loads (lb)
Vert: 11=-1443 (B), 13=-1445 (B), 14=-1436 (B), 15=-1443 (B), 16=-1443 (B), 17=-1443 (B), 18=-1443 (B), 19=-1441 (B), 20=-1445 (B), 21=-1445 (B), 22=-2974 (B)

March 11,2024

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

Job	Truss	Truss Type	Qty	Ply	Lot 123 MN	
240614	D1	Hip Girder	1	2	Job Reference (optional)	I64131345

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.73 S Feb 22 2024 Print: 8.730 S Feb 22 2024 MiTek Industries, Inc. Fri Mar 08 12:19:04
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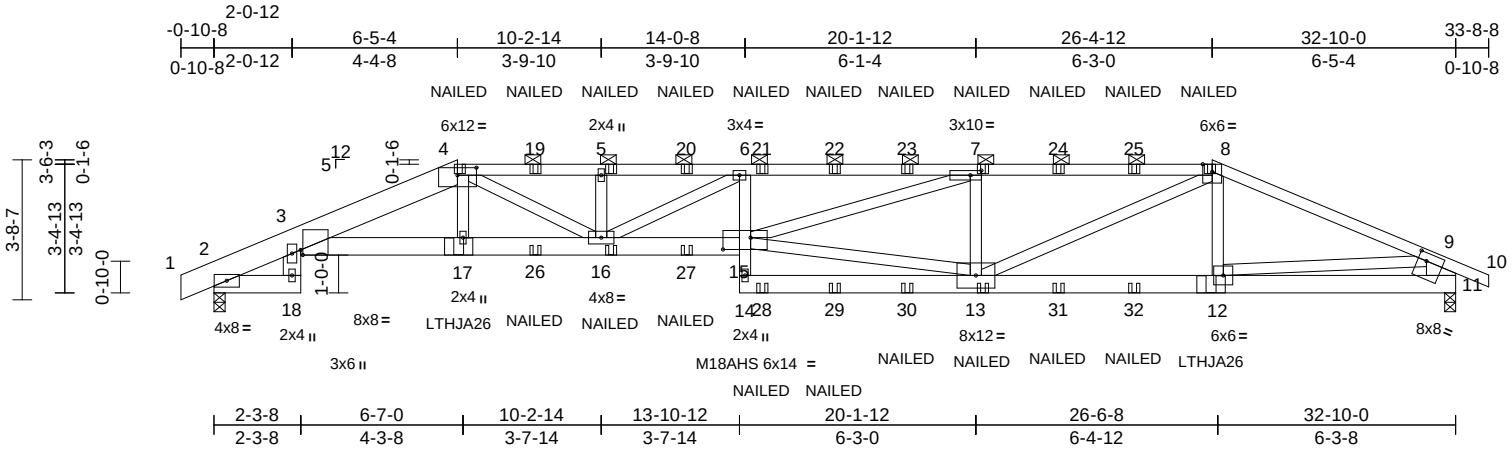

Scale = 1:60.9

Plate Offsets (X, Y): [3:0-0-11,Edge], [4:0-6-0,0-2-6], [7:0-3-8,0-1-8], [11:0-2-12,0-2-8], [15:0-8-12,0-3-12]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.70	Vert(LL)	-0.47	15	>830	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.61	Vert(CT)	-0.84	15	>460	240	M18AHS	142/136
BCLL	0.0*	Rep Stress Incr	NO	WB	0.93	Horz(CT)	0.30	11	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.39	15	>990	240	Weight: 348 lb	FT = 10%

LUMBER

TOP CHORD 2x8 SP 2400F 2.0E *Except* 4-8:2x4 SPF 2100F 1.8E, 8-10:2x4 SPF No.2

BOT CHORD 2x6 SPF No.2 *Except* 3-15:2x6 SP 2400F 2.0E

WEBS 2x4 SPF No.2 *Except* 18-3:2x6 SPF No.2, 11-9:2x10 SP 2400F 2.0E

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-7-1 oc purlins, except end verticals, and 2-0-0 oc purlins (4-0-10 max.): 4-8.

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

REACTIONS (size) 2=0-3-8, 11=0-3-8
Max Horiz 2=49 (LC 12)
Max Uplift 2=-550 (LC 4), 11=-599 (LC 5)
Max Grav 2=2980 (LC 1), 11=3011 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/6, 2-3=-1591/303, 3-4=-8878/1684, 4-5=-10671/2082, 5-6=-10668/2082, 6-7=-12061/2459, 7-8=-8105/1687, 8-9=-5700/1153, 9-10=0/34, 9-11=-2882/611

BOT CHORD 2-18=0/0, 3-17=-1545/8477, 16-17=-1550/8545, 15-16=-2431/12389, 13-14=-117/648, 12-13=-1009/5182, 11-12=-254/1065

WEBS 3-18=-31/249, 14-15=0/290, 6-15=0/388, 4-17=-60/877, 13-15=-1504/7548, 7-15=-814/4162, 7-13=-2298/714, 8-13=-666/3323, 8-12=0/327, 9-12=-816/4181, 6-16=-1993/495, 5-16=-319/176, 4-16=-506/2486

NOTES

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-6-0 oc, 2x10 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Web connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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
5) Provide adequate drainage to prevent water ponding.
6) All plates are MT20 plates unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) All bearings are assumed to be SPF No.2 .
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 550 lb uplift at joint 2 and 599 lb uplift at joint 11.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
13) Use Simpson Strong-Tie LTHJA26 (LTHJA26 on 2 ply, Left Hand Hip) or equivalent at 6-5-10 from the left end to connect truss(es) to front face of bottom chord.
14) Use Simpson Strong-Tie LTHJA26 (LTHJA26 on 2 ply, Right Hand Hip) or equivalent at 26-4-6 from the left end to connect truss(es) to front face of bottom chord.
15) Fill all nail holes where hanger is in contact with lumber.
16) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-4=-70, 4-8=-70, 8-9=-70, 9-10=-70, 2-18=-20, 3-15=-20, 11-14=-20
Concentrated Loads (lb)
Vert: 4=-118 (F), 8=-126 (F), 17=-515 (F), 7=-126 (F), 13=-58 (F), 12=-493 (F), 5=-118 (F), 16=-72 (F), 19=-118 (F), 20=-118 (F), 21=-126 (F), 22=-126 (F), 23=-126 (F), 24=-126 (F), 25=-126 (F), 26=-72 (F), 27=-72 (F), 28=-58 (F), 29=-58 (F), 30=-58 (F), 31=-58 (F), 32=-58 (F)

March 11,2024

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

Job	Truss	Truss Type	Qty	Ply	Lot 123 MN	
240614	D2	Hip	1	1	Job Reference (optional)	I64131346

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.73 S Feb 22 2024 Print: 8.730 S Feb 22 2024 MiTek Industries, Inc. Fri Mar 08 12:19:04
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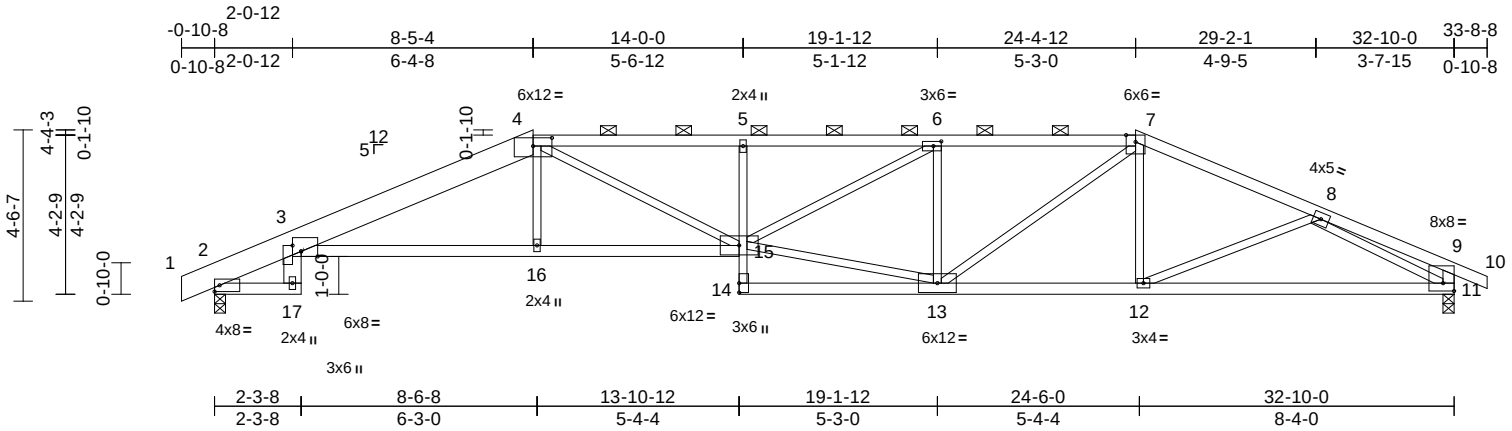

Scale = 1:61

Plate Offsets (X, Y): [3:0-5-4,Edge], [3:0-1-14,0-2-11], [4:0-6-0,0-2-10], [6:0-2-8,0-1-8], [9:Edge,0-2-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.73	Vert(LL)	-0.38	5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.69	Vert(CT)	-0.68	15-16	>576	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.97	Horz(CT)	0.37	11	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.28	5	>999	240	Weight: 138 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF No.2 *Except* 1-4:2x8 SP 2400F 2.0E

BOT CHORD 2x4 SPF No.2 *Except* 3-15:2x4 SPF 2100F 1.8E, 5-14:2x3 SPF No.2

WEBS 2x3 SPF No.2 *Except* 17-3:2x6 SPF No.2, 11-9:2x4 SPF No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-0-13 oc purlins, except end verticals, and 2-0-0 oc purlins (2-4-2 max.): 4-7.

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

REACTIONS (size) 2=0-3-8, 11=0-3-8
Max Horiz 2=63 (LC 8)
Max Uplift 2=-208 (LC 4), 11=-208 (LC 5)
Max Grav 2=1536 (LC 1), 11=1536 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/0, 2-3=-785/112, 3-4=-3408/473, 4-5=-3996/647, 5-6=-3968/644, 6-7=-2991/507, 7-8=-2553/374, 8-9=-425/21, 9-10=0/27, 9-11=-355/61

BOT CHORD 2-17=0/0, 3-16=-370/3212, 15-16=-366/3213, 14-15=0/104, 5-15=-353/154, 13-14=-25/203, 12-13=-260/2305, 11-12=-294/2190

WEBS 3-17=0/56, 4-16=0/240, 4-15=-204/1018, 13-15=-382/2838, 6-15=-162/1134, 6-13=-988/244, 7-13=-186/949, 7-12=0/229, 8-12=0/319, 8-11=-2150/376

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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) Provide adequate drainage to prevent water ponding.
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) All bearings are assumed to be SPF No.2 .
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 208 lb uplift at joint 2 and 208 lb uplift at joint 11.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

March 11,2024

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

Job	Truss	Truss Type	Qty	Ply	Lot 123 MN	
240614	D3	Hip	1	1	Job Reference (optional)	I64131347

Wheeler Lumber, Waverly, KS - 66871,

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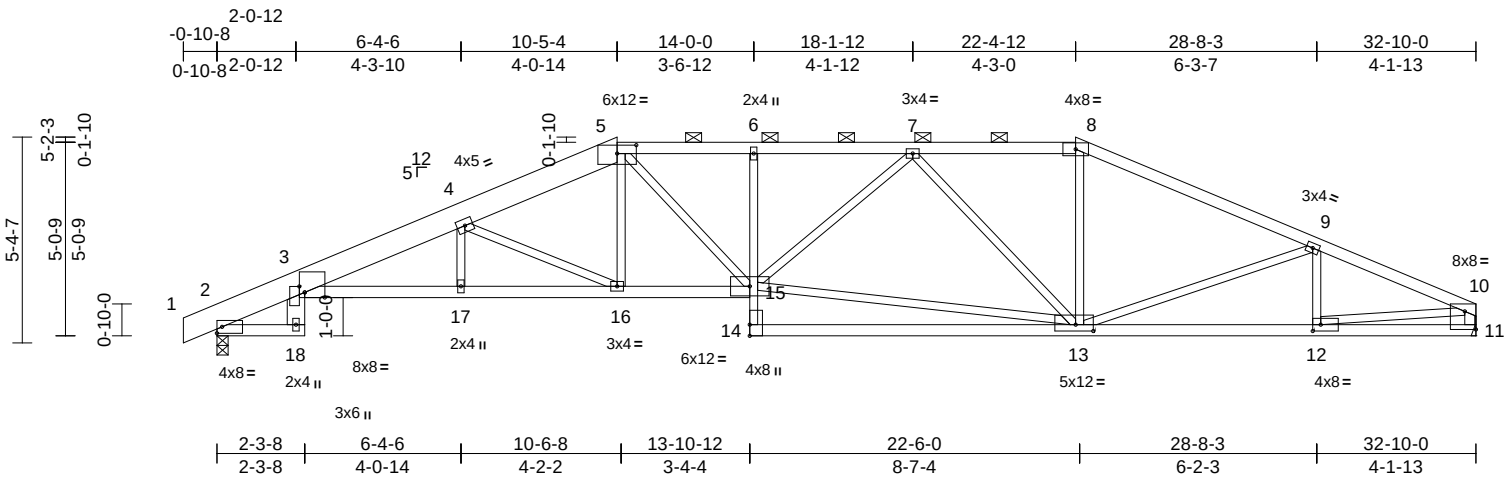

Scale = 1:60.1

Plate Offsets (X, Y): [3:0-6-4,Edge], [3:0-1-14,0-1-11], [5:0-6-0,0-2-10], [10:Edge,0-5-11], [12:0-2-8,0-2-0], [13:0-5-8,0-2-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.84	Vert(LL)	-0.29	15-16	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.55	13-14	>709	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.94	Horz(CT)	0.31	11	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.14	15-16	>999	240	Weight: 149 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF No.2 *Except* 1-5:2x8 SP 2400F 2.0E

BOT CHORD 2x4 SPF No.2 *Except* 3-15:2x4 SPF 2100F 1.8E, 6-14:2x3 SPF No.2

WEBS 2x3 SPF No.2 *Except* 18-3:2x6 SPF No.2, 11-10:2x4 SPF No.2

BRACING

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (3-1-10 max.): 5-8.

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

REACTIONS (size) 2=0-3-8, 11= Mechanical
Max Horiz 2=51 (LC 10)
Max Uplift 2=-16 (LC 4)
Max Grav 2=1537 (LC 1), 11=1463 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/0, 2-3=-786/15, 3-4=-3872/34, 4-5=-3072/67, 5-6=-3089/92, 6-7=-3071/93, 7-8=-2178/62, 8-9=-2446/53, 9-10=-2590/24, 10-11=-1402/16

BOT CHORD 2-18=0/0, 3-17=-2/3746, 16-17=-1/3740, 15-16=0/2784, 14-15=0/157, 6-15=-260/65, 13-14=0/260, 12-13=-2/2350, 11-12=0/251

WEBS 3-18=0/56, 4-16=-1079/71, 5-16=0/605, 5-15=-37/562, 13-15=-60/2499, 7-15=0/502, 7-13=-917/77, 8-13=0/556, 9-13=-208/110, 9-12=-248/57, 10-12=-5/2122, 4-17=-88/62

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
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) All bearings are assumed to be SPF No.2 .
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 16 lb uplift at joint 2.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

March 11,2024

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

Job	Truss	Truss Type	Qty	Ply	Lot 123 MN	
240614	D4	Hip	1	1	Job Reference (optional)	I64131348

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.73 S Feb 22 2024 Print: 8.730 S Feb 22 2024 MiTek Industries, Inc. Fri Mar 08 12:19:05 Page: 1
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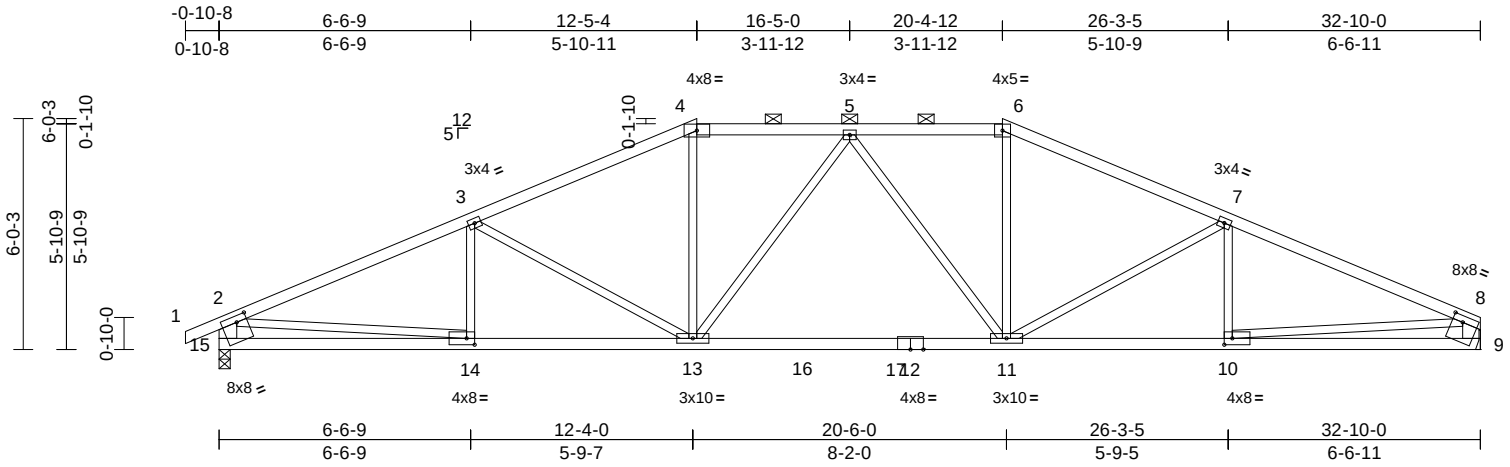

Scale = 1:60

Plate Offsets (X, Y): [8:0-3-4,0-2-0], [10:0-2-8,0-2-0], [14:0-2-8,0-2-0], [15:0-3-4,0-2-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.61	Vert(LL)	-0.27	11-13	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.90	Vert(CT)	-0.48	11-13	>808	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.69	Horz(CT)	0.09	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.07	11	>999	240	Weight: 125 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except* 15-2,9-8:2x6 SPF No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-11-1 oc purlins, except end verticals, and 2-0-0 oc purlins (3-11-7 max.): 4-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 9= Mechanical, 15=0-3-8
Max Horiz 15=49 (LC 8)
Max Uplift 9=-1 (LC 9), 15=-12 (LC 8)
Max Grav 9=1515 (LC 2), 15=1580 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/30, 2-3=-2707/7, 3-4=-2339/41, 4-5=-2095/49, 5-6=-2095/49, 6-7=-2342/41, 7-8=-2714/8, 2-15=-1461/49, 8-9=-1392/37
BOT CHORD 14-15=-86/565, 13-14=0/2428, 11-13=0/2197, 10-11=0/2443, 9-10=-16/448
WEBS 3-14=-79/103, 3-13=-419/96, 4-13=0/611, 6-11=0/619, 7-11=-438/98, 7-10=-95/97, 2-14=0/1873, 8-10=0/2005, 5-13=-360/49, 5-11=-358/49

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
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 SPF No.2 .
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 12 lb uplift at joint 15 and 1 lb uplift at joint 9.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

March 11,2024

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

Job	Truss	Truss Type	Qty	Ply	Lot 123 MN	
240614	D5	Hip	1	1	Job Reference (optional)	I64131349

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.73 S Feb 22 2024 Print: 8.730 S Feb 22 2024 MiTek Industries, Inc. Fri Mar 08 12:19:05 Page: 1
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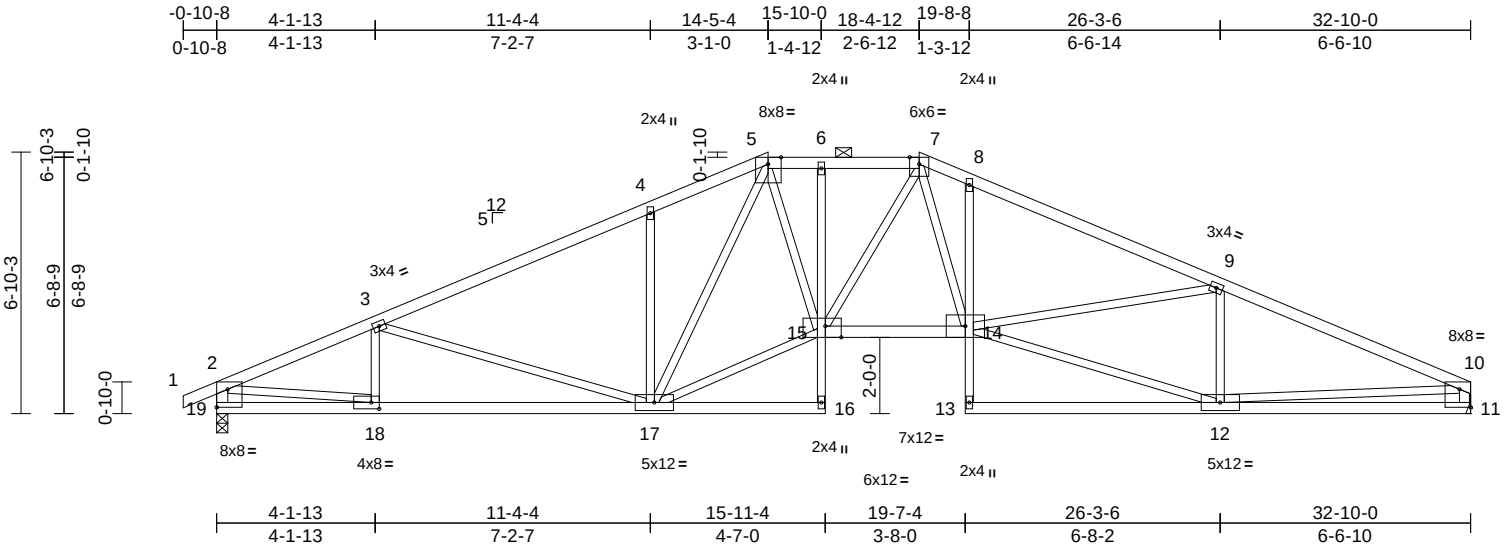

Scale = 1:60.3

Plate Offsets (X, Y): [5:0-4-2,Edge], [10:Edge,0-5-11], [15:0-5-0,Edge], [18:0-2-8,0-2-0], [19:Edge,0-5-11]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.71	Vert(LL)	-0.24	14-15	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.44	14-15	>887	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.85	Horz(CT)	0.19	11	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.11	14-15	>999	240	Weight: 143 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except* 16-6,8-13:2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except* 19-2,11-10:2x4 SPF 2400F 2.0E

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-6-0 oc purlins, except end verticals, and 2-0-0 oc purlins (3-5-5 max.): 5-7.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 11= Mechanical, 19=0-3-8
Max Horiz 19=58 (LC 8)
Max Uplift 11=-12 (LC 9), 19=-22 (LC 8)
Max Grav 11=1463 (LC 1), 19=1537 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/27, 2-3=-2604/29, 3-4=-2376/26, 4-5=-2339/89, 5-6=-2675/7, 6-7=-2682/6, 7-8=-3125/32, 8-9=-3219/0, 9-10=-2682/24, 2-19=-1485/36, 10-11=-1392/44
BOT CHORD 18-19=-49/256, 17-18=-54/2362, 16-17=0/25, 15-16=0/58, 6-15=-278/43, 14-15=0/2609, 13-14=0/117, 8-14=-251/117, 12-13=0/47, 11-12=-26/439
WEBS 5-15=0/1297, 12-14=0/2460, 9-14=0/543, 9-12=-775/81, 2-18=-4/2128, 10-12=0/1970, 7-15=-46/310, 7-14=-82/984, 3-18=-219/78, 3-17=-331/87, 4-17=-420/133, 5-17=-574/0, 15-17=0/2476

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
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) All bearings are assumed to be SPF No.2 .
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 22 lb uplift at joint 19 and 12 lb uplift at joint 11.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

March 11,2024

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

Job	Truss	Truss Type	Qty	Ply	Lot 123 MN	
240614	D6	Common	3	1	Job Reference (optional)	I64131350

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.73 S Feb 22 2024 Print: 8.730 S Feb 22 2024 MiTek Industries, Inc. Fri Mar 08 12:19:05 Page: 1
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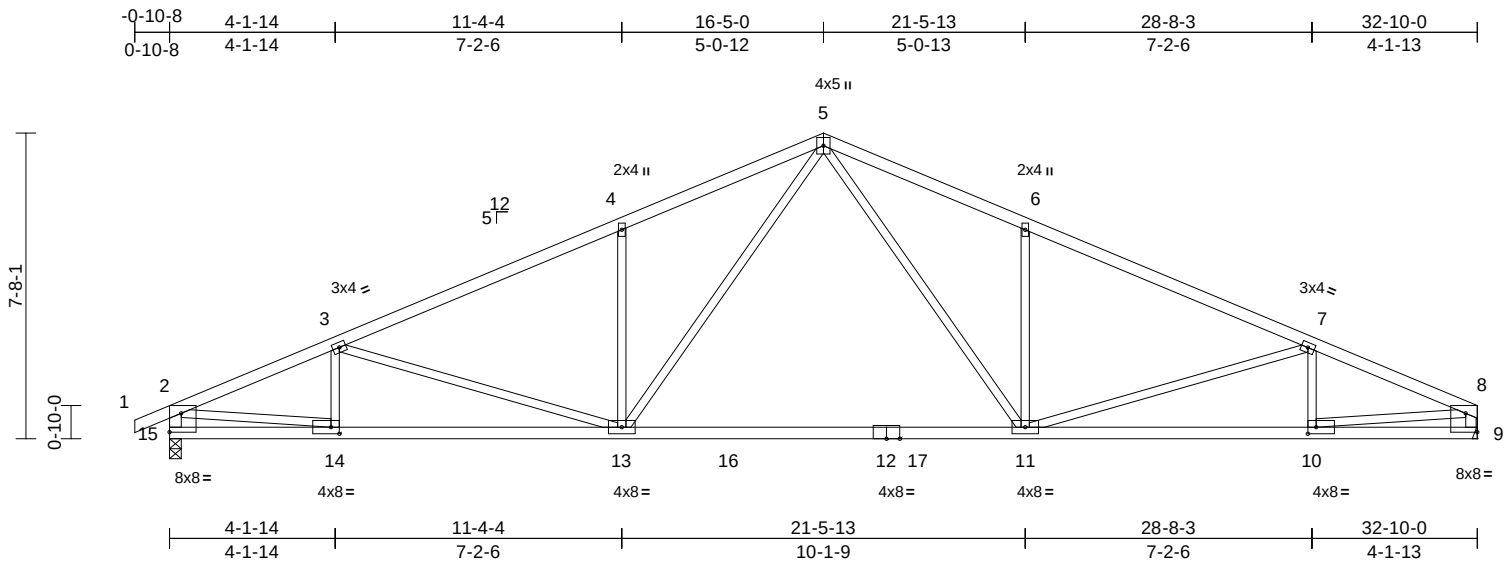


Scale = 1:57.8

Plate Offsets (X, Y): [9:Edge,0-5-11], [10:0-2-8,0-2-0], [14:0-2-8,0-2-0], [15:Edge,0-5-11]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.70	Vert(LL)	-0.38	11-13	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.60	Vert(CT)	-0.65	11-13	>604	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.76	Horz(CT)	0.07	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.07	13-14	>999	240	Weight: 124 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF 2100F 1.8E
WEBS 2x3 SPF No.2 *Except* 15-2,9-8:2x4 SPF No.2

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

REACTIONS (size) 9= Mechanical, 15=0-3-8
Max Horiz 15=67 (LC 10)
Max Uplift 9=-21 (LC 9), 15=-31 (LC 8)
Max Grav 9=1540 (LC 2), 15=1600 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/27, 2-3=-2710/52, 3-4=-2543/39, 4-5=-2536/118, 2-15=-1506/49, 8-9=-1445/38, 5-6=-2537/119, 6-7=-2546/39, 7-8=-2719/53
BOT CHORD 14-15=-58/334, 13-14=-83/2464, 11-13=0/1703, 10-11=-27/2478, 9-10=-2/285
WEBS 2-14=-25/2175, 8-10=-26/2216, 3-14=-239/69, 3-13=-321/95, 4-13=-484/146, 5-13=-76/1039, 5-11=-76/1042, 6-11=-483/146, 7-11=-334/96, 7-10=-245/70

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) All bearings are assumed to be SPF No.2 .
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 31 lb uplift at joint 15 and 21 lb uplift at joint 9.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

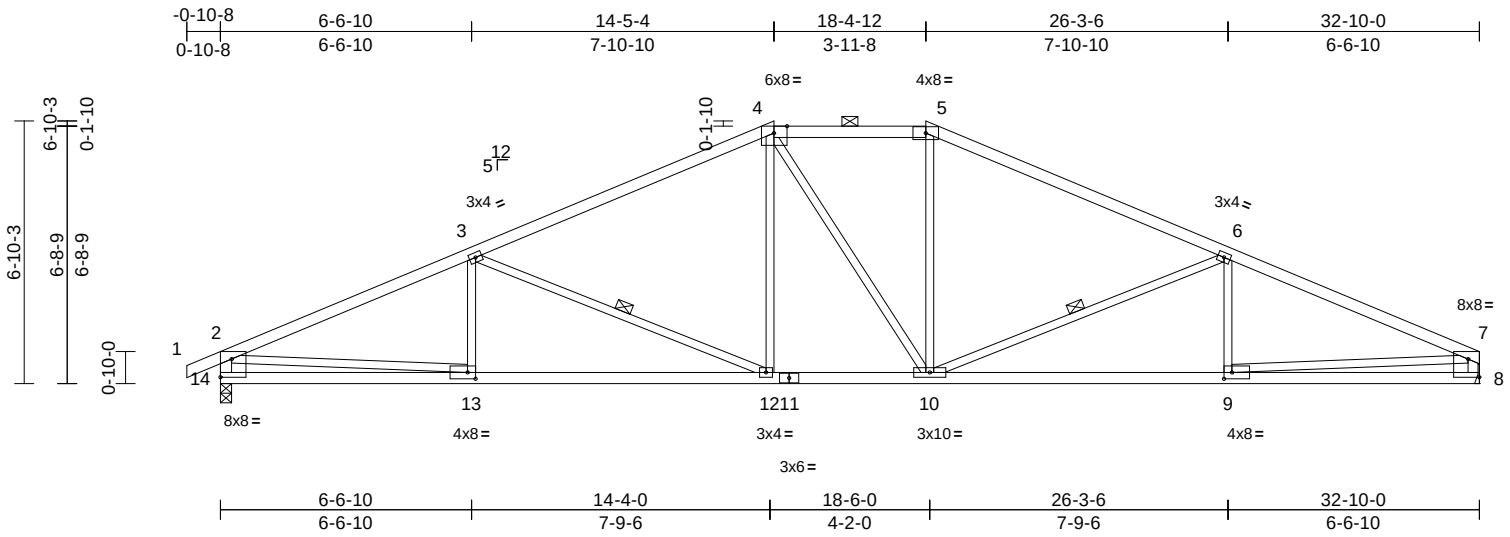
March 11,2024

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

Job	Truss	Truss Type	Qty	Ply	Lot 123 MN	
240614	D7	Hip	1	1	Job Reference (optional)	I64131351

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.73 S Feb 22 2024 Print: 8.730 S Feb 22 2024 MiTek Industries, Inc. Fri Mar 08 12:19:05 Page: 1
ID:WzVwjfspMFkJCX3Fdhn1_jzitcI-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:60.1

Plate Offsets (X, Y): [4:0-4-2,Edge], [7:Edge,0-5-11], [9:0-2-8,0-2-0], [13:0-2-8,0-2-0], [14:Edge,0-5-11]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.66	Vert(LL)	-0.15	12-13	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.74	Vert(CT)	-0.34	12-13	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.70	Horz(CT)	0.08	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.07	12-13	>999	240	Weight: 124 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF 2100F 1.8E *Except* 4-5:2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except* 14-2,8-7:2x4 SPF 2400F 2.0E

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-9-12 oc purlins, except end verticals, and 2-0-0 oc purlins (4-0-15 max.): 4-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 3-12, 6-10

REACTIONS (size) 8= Mechanical, 14=0-3-8
Max Horiz 14=58 (LC 10)
Max Uplift 8=-12 (LC 9), 14=-22 (LC 8)
Max Grav 8=1463 (LC 1), 14=1537 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/27, 2-3=-2707/30, 3-4=-2108/23, 4-5=-1842/48, 5-6=-2110/23, 6-7=-2713/31, 2-14=-1469/54, 7-8=-1394/43
BOT CHORD 13-14=-81/518, 12-13=-33/2423, 10-12=0/1841, 9-10=0/2436, 8-9=-14/411
WEBS 3-13=-39/185, 3-12=-667/110, 4-12=0/390, 4-10=-214/216, 5-10=0/393, 6-10=-680/111, 6-9=-52/178, 2-13=0/1913, 7-9=0/2034

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
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) All bearings are assumed to be SPF No.2 .
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 22 lb uplift at joint 14 and 12 lb uplift at joint 8.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

March 11,2024

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

Job	Truss	Truss Type	Qty	Ply	Lot 123 MN	
240614	D8	Half Hip	1	1	Job Reference (optional)	I64131352

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.73 S Feb 22 2024 Print: 8.730 S Feb 22 2024 MiTek Industries, Inc. Fri Mar 08 12:19:05

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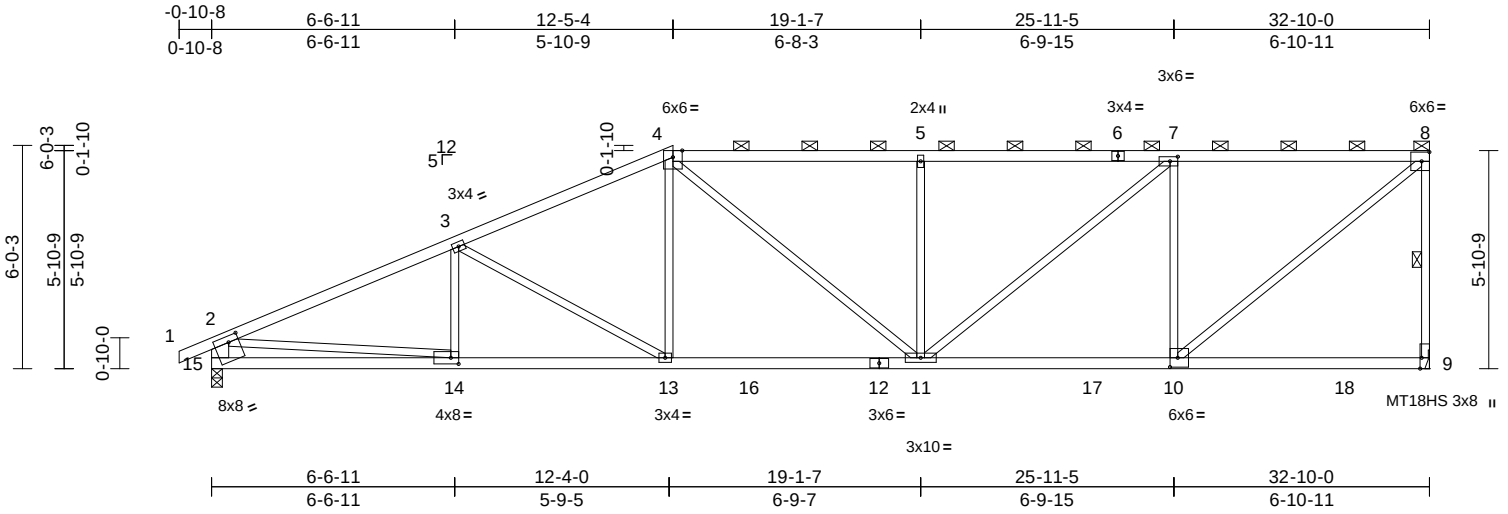
Page: 1



Scale = 1:62.1

Plate Offsets (X, Y): [7:0-2-8,0-1-8], [9:0-3-8,Edge], [10:0-2-8,0-3-0], [14:0-2-8,0-2-0], [15:0-3-4,0-2-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.74	Vert(LL)	-0.20	11-13	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.78	Vert(CT)	-0.35	11-13	>999	240	MT18HS	197/144
BCLL	0.0*	Rep Stress Incr	YES	WB	0.82	Horz(CT)	0.07	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.08	11-13	>999	240	Weight: 129 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF No.2

BOT CHORD 2x4 SPF No.2

WEBS 2x3 SPF No.2 *Except* 15-2:2x6 SPF No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-0-1 oc purlins, except end verticals, and 2-0-0 oc purlins (3-0-7 max.): 4-8.

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

WEBS 1 Row at midpt 8-9

REACTIONS (size) 9= Mechanical, 15=0-3-8

Max Horiz 15=192 (LC 7)

Max Uplift 9=-71 (LC 5), 15=-19 (LC 4)

Max Grav 9=1572 (LC 2), 15=1596 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/30, 2-3=-2743/28, 3-4=-2368/79, 4-5=-2253/115, 5-7=-2251/114, 7-8=-1569/102, 8-9=-1445/101, 2-15=-1477/55

BOT CHORD 14-15=-188/569, 13-14=-140/2460, 11-13=-127/2125, 10-11=-106/1569, 9-10=-64/49

WEBS 2-14=0/1901, 4-13=0/443, 8-10=-91/2013, 4-11=-39/347, 5-11=-515/118, 7-11=-42/881, 7-10=-1055/153, 3-13=-381/91, 3-14=-73/117

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates 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) All bearings are assumed to be SPF No.2 .
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 71 lb uplift at joint 9 and 19 lb uplift at joint 15.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

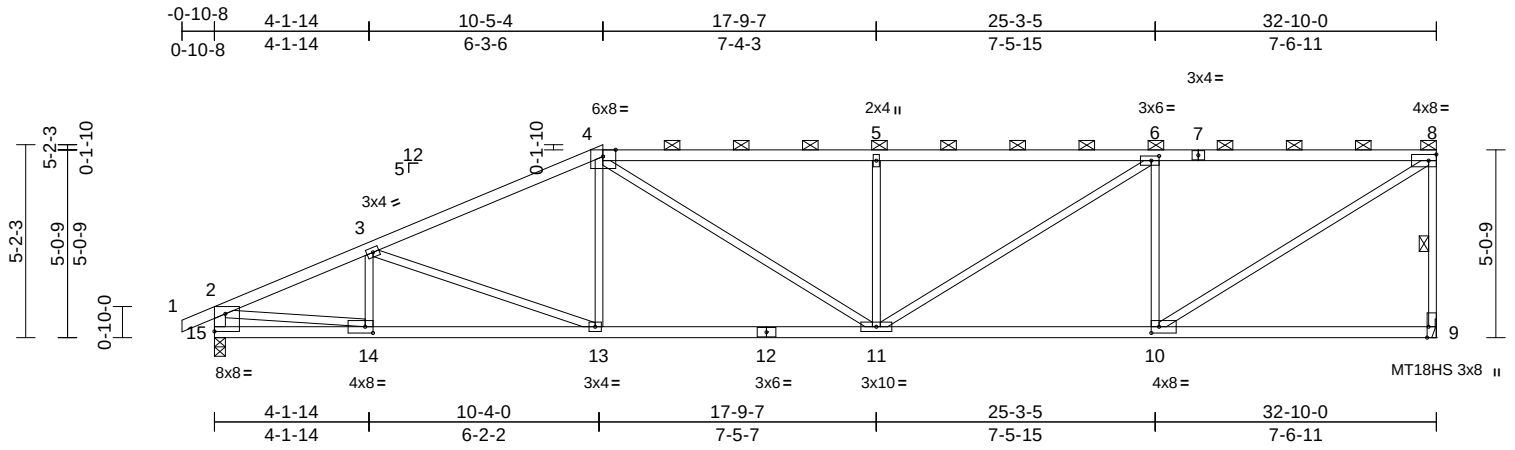
March 11,2024

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

Job	Truss	Truss Type	Qty	Ply	Lot 123 MN	
240614	D9	Half Hip	1	1	Job Reference (optional)	I64131353

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.73 S Feb 22 2024 Print: 8.730 S Feb 22 2024 MiTek Industries, Inc. Fri Mar 08 12:19:05 ID:dwk_JTceJo5IBlyCunv5dHzitcd-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:61.9

Plate Offsets (X, Y): [4:0-4-2,Edge], [6:0-2-8,0-1-8], [9:0-3-8,Edge], [10:0-2-8,0-2-0], [14:0-2-8,0-2-0], [15:Edge,0-5-11]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.81	Vert(LL)	-0.17	11	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.68	Vert(CT)	-0.34	11-13	>999	240	MT18HS	197/144
BCLL	0.0*	Rep Stress Incr	YES	WB	0.75	Horz(CT)	0.08	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.09	11	>999	240	Weight: 123 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF 2100F 1.8E *Except* 1-4:2x4 SPF No.2

BOT CHORD 2x4 SPF No.2

WEBS 2x3 SPF No.2 *Except* 15-2:2x4 SPF No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (4-2-3 max.): 4-8.

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

WEBS 1 Row at midpt 8-9

REACTIONS (size) 9= Mechanical, 15=0-3-8
Max Horiz 15=164 (LC 5)
Max Uplift 9=-71 (LC 5), 15=-27 (LC 4)
Max Grav 9=1465 (LC 1), 15=1539 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/27, 2-3=-2579/32, 3-4=-2450/82, 4-5=-2579/134, 5-6=-2576/132, 6-8=-1869/115, 8-9=-1399/106, 2-15=-1479/46

BOT CHORD 14-15=-144/282, 13-14=-144/2334, 11-13=-131/2188, 10-11=-120/1869, 9-10=-51/42

WEBS 2-14=-12/2074, 4-13=0/319, 8-10=-107/2193, 3-13=-150/122, 3-14=-235/65, 4-11=-52/624, 5-11=-568/129, 6-11=-42/837, 6-10=-1019/160

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates 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.
7) All bearings are assumed to be SPF No.2 .
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 71 lb uplift at joint 9 and 27 lb uplift at joint 15.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

March 11,2024

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

Job	Truss	Truss Type	Qty	Ply	Lot 123 MN
240614	D10	Half Hip	1	1	I64131354
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.73 S Feb 22 2024 Print: 8.730 S Feb 22 2024 MiTek Industries, Inc. Fri Mar 08 12:19:05 Page: 1
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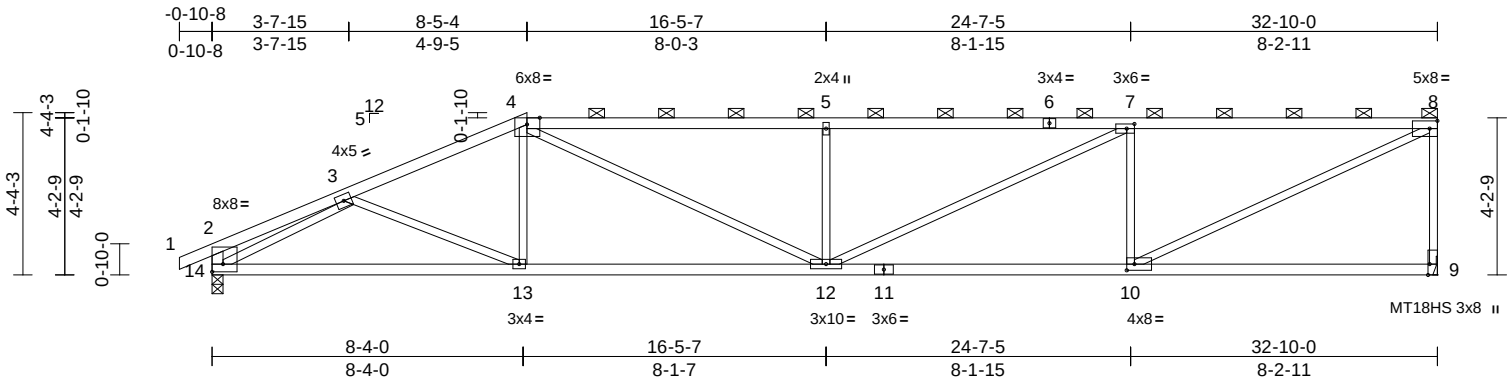


Scale = 1:61.7

Plate Offsets (X, Y): [2:Edge,0-2-8], [4:0-4-2,Edge], [7:0-2-8,0-1-8], [9:0-3-8,Edge], [10:0-2-8,0-2-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.91	Vert(LL)	-0.23	10-12	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.76	Vert(CT)	-0.44	10-12	>888	240	MT18HS	197/144
BCLL	0.0*	Rep Stress Incr	YES	WB	0.91	Horz(CT)	0.09	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.13	10-12	>999	240	Weight: 118 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF 2100F 1.8E *Except* 1-4:2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except* 14-2:2x4 SPF No.2

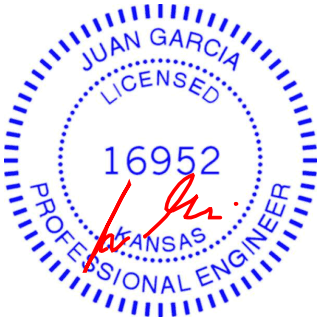
BRACING
TOP CHORD Structural wood sheathing directly applied or 3-3-4 oc purlins, except end verticals, and 2-0-0 oc purlins (2-2-0 max.): 4-8.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 9= Mechanical, 14=0-3-8
Max Horiz 14=136 (LC 5)
Max Uplift 9=-72 (LC 5), 14=-39 (LC 4)
Max Grav 9=1465 (LC 1), 14=1539 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/27, 2-3=-429/0, 3-4=-2577/82, 4-5=-3167/162, 5-7=-3164/161, 7-8=-2415/136, 8-9=-1392/111, 2-14=-364/26
BOT CHORD 13-14=-168/2188, 12-13=-127/2334, 10-12=-142/2415, 9-10=-37/36
WEBS 3-13=0/353, 4-13=0/267, 3-14=-2147/111, 5-12=-620/141, 4-12=-80/1049, 7-12=-45/831, 7-10=-976/167, 8-10=-130/2642

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates 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.
7) All bearings are assumed to be SPF No.2 .
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 72 lb uplift at joint 9 and 39 lb uplift at joint 14.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



March 11,2024

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

Job	Truss	Truss Type	Qty	Ply	Lot 123 MN	
240614	D11	Half Hip Girder	1	**2**	Job Reference (optional)	I64131355

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.73 S Feb 22 2024 Print: 8.730 S Feb 22 2024 MiTek Industries, Inc. Fri Mar 08 12:19:06 Page: 1
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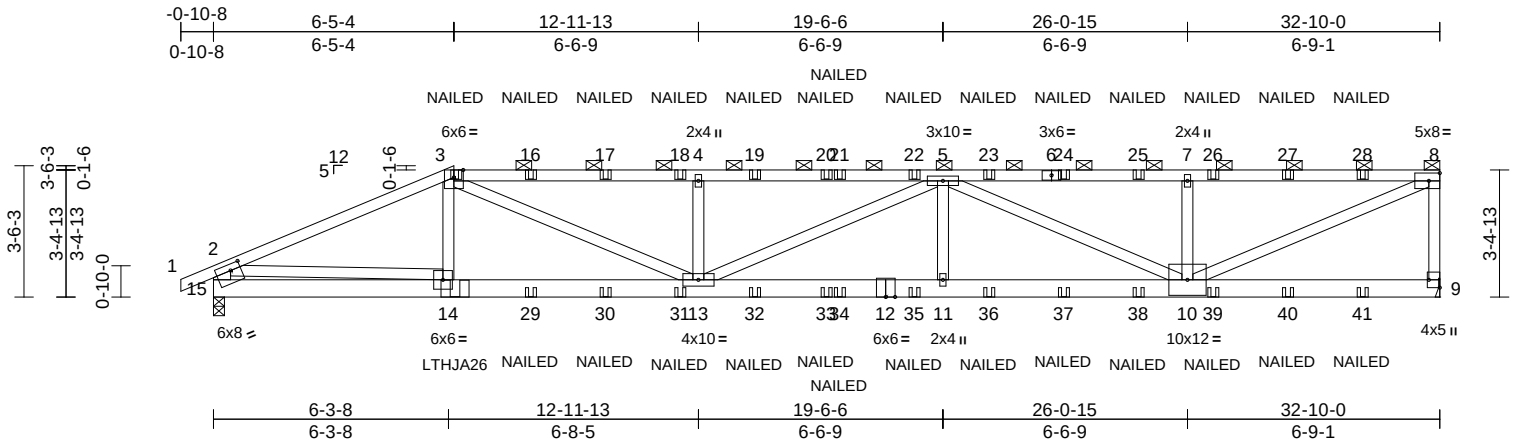

Scale = 1:61.7

Plate Offsets (X, Y): [9:Edge,0-3-8], [15:0-3-4,0-2-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.73	Vert(LL)	-0.28	11-13	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.91	Vert(CT)	-0.52	11-13	>749	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.74	Horz(CT)	0.08	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.23	11-13	>999	240	Weight: 303 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF 2100F 1.8E *Except* 1-3:2x4 SPF No.2
BOT CHORD 2x6 SPF No.2
WEBS 2x4 SPF No.2 *Except* 15-2:2x6 SPF No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-4-12 oc purlins, except end verticals, and 2-0-0 oc purlins (4-11-11 max.): 3-8.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 9= Mechanical, 15=0-3-8
Max Horiz 15=106 (LC 24)
Max Uplift 9=-548 (LC 5), 15=-506 (LC 4)
Max Grav 9=2994 (LC 1), 15=3022 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/30, 2-3=-5899/1065, 3-4=-8368/1593, 4-5=-8364/1591, 5-7=-5578/1058, 7-8=-5578/1058, 8-9=-2844/595, 2-15=-2895/519
BOT CHORD 14-15=-278/1242, 13-14=-1036/5360, 11-13=-1602/8344, 10-11=-1602/8344, 9-10=-47/111
WEBS 3-14=0/391, 3-13=-651/3394, 4-13=-1070/461, 5-13=-30/22, 5-11=0/547, 5-10=-3047/597, 7-10=-924/402, 8-10=-1114/6012, 2-14=-771/4212

NOTES
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * 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.
8) All bearings are assumed to be SPF No.2 .
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 548 lb uplift at joint 9 and 506 lb uplift at joint 15.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
13) Use Simpson Strong-Tie LTHJA26 (LTHJA26 on 2 ply, Right Hand Hip) or equivalent at 6-5-10 from the left end to connect truss(es) to back face of bottom chord.
14) Fill all nail holes where hanger is in contact with lumber.
15) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (lb/ft)
Vert: 1-2=-70, 2-3=-70, 3-8=-70, 9-15=-20
Concentrated Loads (lb)
Vert: 3=-126 (B), 14=-493 (B), 16=-126 (B), 17=-126 (B), 18=-126 (B), 19=-126 (B), 20=-126 (B), 21=-126 (B), 22=-126 (B), 23=-126 (B), 24=-126 (B), 25=-126 (B), 26=-126 (B), 27=-126 (B), 28=-126 (B), 29=-58 (B), 30=-58 (B), 31=-58 (B), 32=-58 (B), 33=-58 (B), 34=-58 (B), 35=-58 (B), 36=-58 (B), 37=-58 (B), 38=-58 (B), 39=-58 (B), 40=-58 (B), 41=-58 (B)

STATE OF MISSOURI JUAN GARCIA NUMBER E-2000162101 PROFESSIONAL ENGINEER

JUAN GARCIA LICENSED 16952 KANSAS PROFESSIONAL ENGINEER

March 11,2024

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

Job	Truss	Truss Type	Qty	Ply	Lot 123 MN	I64131356
240614	G1	Hip Girder	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.73 S Feb 22 2024 Print: 8.730 S Feb 22 2024 MiTek Industries, Inc. Fri Mar 08 12:19:06 Page: 1
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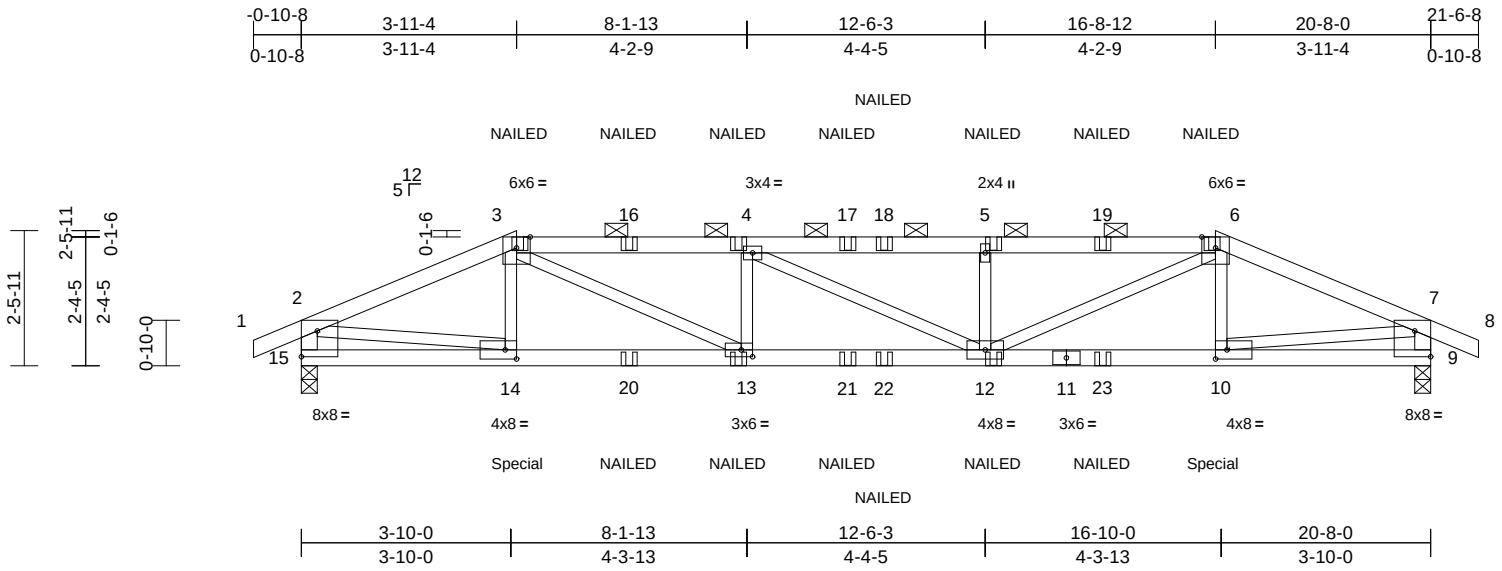

Scale = 1:42.2

Plate Offsets (X, Y): [9:Edge,0-5-11], [10:0-2-8,0-2-0], [13:0-2-8,0-1-8], [14:0-2-8,0-2-0], [15:Edge,0-5-11]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.69	Vert(LL)	-0.18	12-13	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	1.00	Vert(CT)	-0.33	12-13	>732	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.64	Horz(CT)	0.06	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.16	12-13	>999	240	Weight: 74 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except* 15-2,9-7:2x4 SPF No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-6-11 oc purlins, except end verticals, and 2-0-0 oc purlins (2-8-8 max.): 3-6.
BOT CHORD Rigid ceiling directly applied or 6-9-14 oc bracing.

REACTIONS (size) 9=0-3-8, 15=0-3-8
Max Horiz 15=-18 (LC 6)
Max Uplift 9=-319 (LC 5), 15=-319 (LC 4)
Max Grav 9=1451 (LC 1), 15=1451 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/27, 2-3=-2384/537, 3-4=-3397/806, 4-5=-3392/803, 5-6=-3395/804, 6-7=-2384/537, 7-8=0/27, 2-15=-1399/332, 7-9=-1399/332
BOT CHORD 14-15=-93/303, 13-14=-459/2155, 12-13=-753/3394, 10-12=-461/2155, 9-10=-79/303
WEBS 3-14=-10/97, 6-10=-10/97, 2-14=-408/1875, 7-10=-409/1875, 3-13=-328/1421, 6-12=-327/1418, 4-13=-489/226, 4-12=-28/23, 5-12=-478/225

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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) Provide adequate drainage to prevent water ponding.
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) All bearings are assumed to be SPF No.2 .
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 319 lb uplift at joint 15 and 319 lb uplift at joint 9.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 214 lb down and 55 lb up at 3-11-4, and 214 lb down and 55 lb up at 16-8-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
12) 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=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-2=-70, 2-3=-70, 3-6=-70, 6-7=-70, 7-8=-70, 9-15=-20
Concentrated Loads (lb)
Vert: 3=-45 (F), 6=-45 (F), 14=-214 (F), 10=-214 (F), 13=-23 (F), 12=-23 (F), 4=-45 (F), 5=-45 (F), 16=-45 (F), 17=-45 (F), 18=-45 (F), 19=-45 (F), 20=-23 (F), 21=-23 (F), 22=-23 (F), 23=-23 (F)

March 11,2024

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

Job	Truss	Truss Type	Qty	Ply	Lot 123 MN	
240614	G2	Hip	1	1	Job Reference (optional)	I64131357

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.73 S Feb 22 2024 Print: 8.730 S Feb 22 2024 MiTek Industries, Inc. Fri Mar 08 12:19:06 Page: 1
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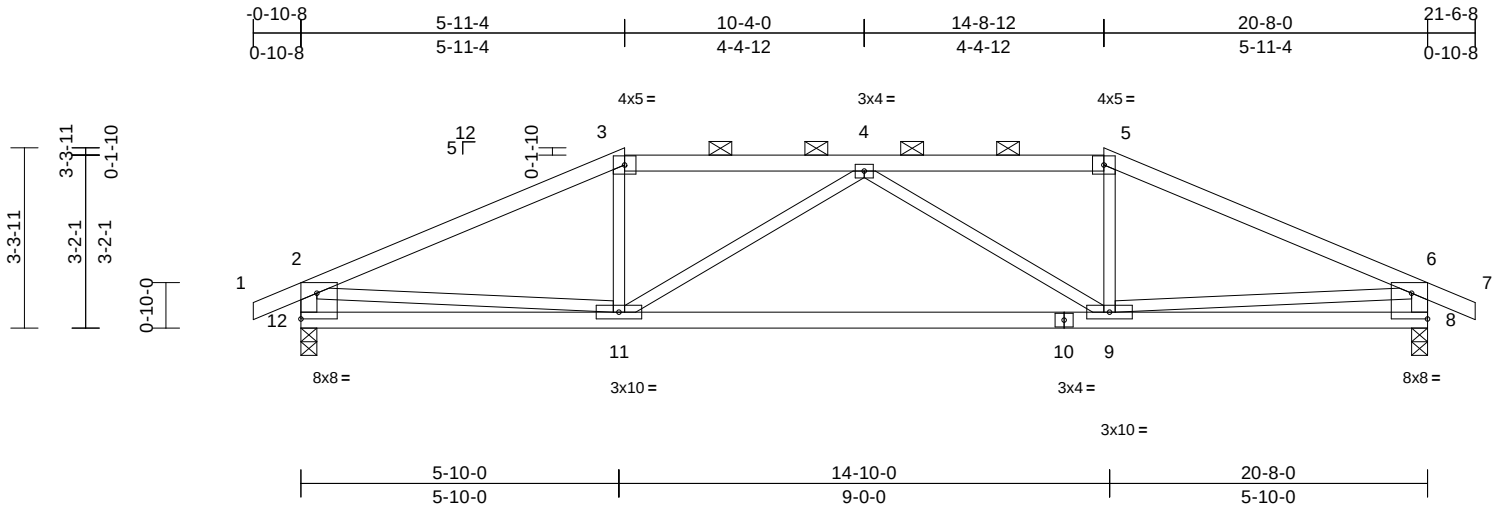


Scale = 1:42.3

Plate Offsets (X, Y): [8:Edge,0-5-11], [12:Edge,0-5-11]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.46	Vert(LL)	-0.15	9-11	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.64	Vert(CT)	-0.34	9-11	>723	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.32	Horz(CT)	0.03	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.05	9-11	>999	240	Weight: 73 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except* 12-2,8-6:2x4 SPF No.2

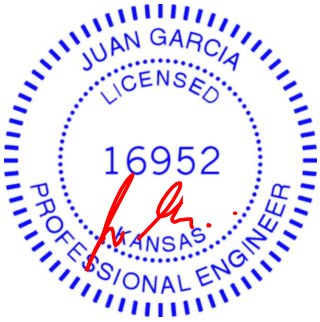
BRACING
TOP CHORD Structural wood sheathing directly applied or 4-3-7 oc purlins, except end verticals, and 2-0-0 oc purlins (4-10-15 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 8=0-3-8, 12=0-3-8
Max Horiz 12=-29 (LC 13)
Max Uplift 8=-135 (LC 5), 12=-135 (LC 4)
Max Grav 8=988 (LC 1), 12=988 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/27, 2-3=-1533/188, 3-4=-1333/194, 4-5=-1333/194, 5-6=-1533/188, 6-7=0/27, 2-12=-943/157, 6-8=-943/157
BOT CHORD 11-12=-163/422, 9-11=-226/1613, 8-9=-136/422
WEBS 3-11=0/310, 4-11=-427/136, 4-9=-427/136, 5-9=0/310, 2-11=-38/932, 6-9=-38/932

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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) Provide adequate drainage to prevent water ponding.
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) All bearings are assumed to be SPF No.2 .
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 135 lb uplift at joint 12 and 135 lb uplift at joint 8.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



March 11,2024

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

Job	Truss	Truss Type	Qty	Ply	Lot 123 MN	
240614	G3	Hip	1	1	Job Reference (optional)	I64131358

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.73 S Feb 22 2024 Print: 8.730 S Feb 22 2024 MiTek Industries, Inc. Fri Mar 08 12:19:06
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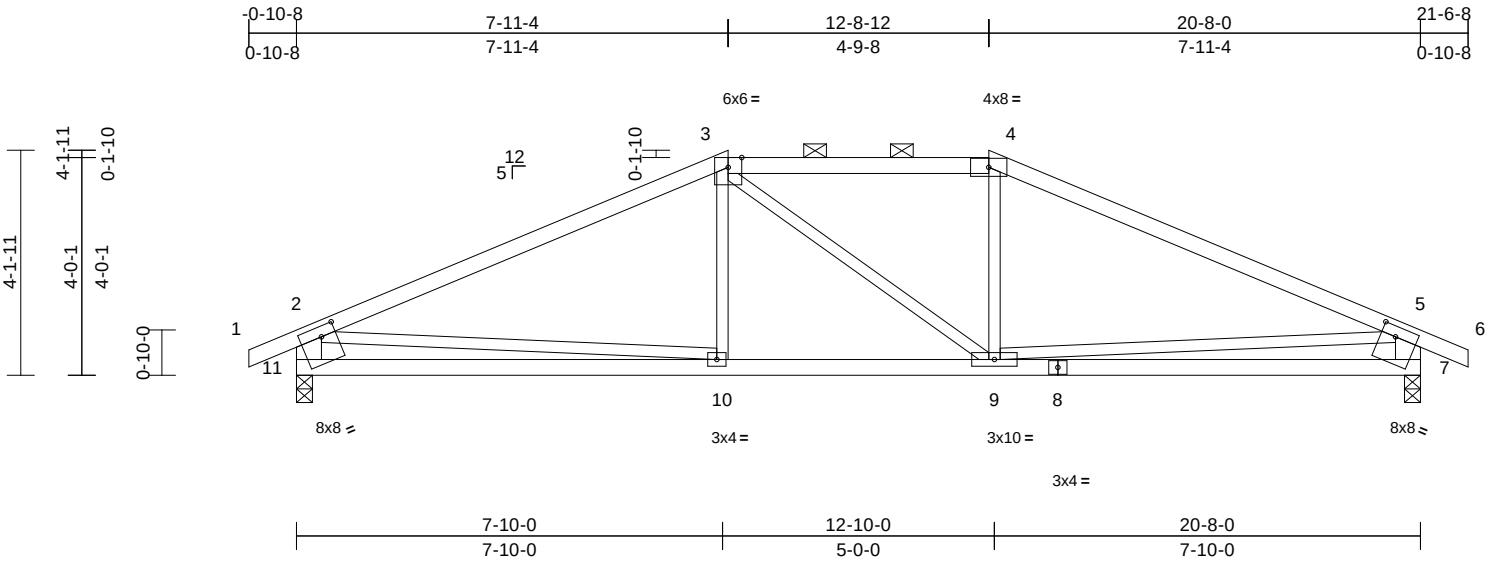

Scale = 1:42.4

Plate Offsets (X, Y): [7:0-3-4,0-2-4], [11:0-3-4,0-2-4]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.80	Vert(LL)	-0.10	10-11	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.42	Vert(CT)	-0.20	10-11	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.21	Horz(CT)	0.03	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.03	9-10	>999	240	Weight: 75 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except* 11-2,7-5:2x6 SPF No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-4-15 oc purlins, except end verticals, and 2-0-0 oc purlins (5-2-10 max.): 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 7=0-3-8, 11=0-3-8
Max Horiz 11=-42 (LC 13)
Max Uplift 7=-122 (LC 9), 11=-122 (LC 8)
Max Grav 7=987 (LC 1), 11=987 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/30, 2-3=-1404/152, 3-4=-1189/169, 4-5=-1405/152, 5-6=0/30, 2-11=-911/168, 5-7=-912/167
BOT CHORD 10-11=-276/731, 9-10=-62/1189, 7-9=-237/730
WEBS 3-10=0/221, 3-9=-150/150, 4-9=0/221, 2-10=0/619, 5-9=0/620

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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) Provide adequate drainage to prevent water ponding.
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) All bearings are assumed to be SPF No.2 .
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 122 lb uplift at joint 11 and 122 lb uplift at joint 7.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

March 11,2024

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16023 Swingley Ridge Rd.
Chesterfield, MO 63017
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Job	Truss	Truss Type	Qty	Ply	Lot 123 MN	
240614	G4	Hip Girder	1	**2**	Job Reference (optional)	I64131359

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.73 S Feb 22 2024 Print: 8.730 S Feb 22 2024 MiTek Industries, Inc. Fri Mar 08 12:19:07 Page: 1
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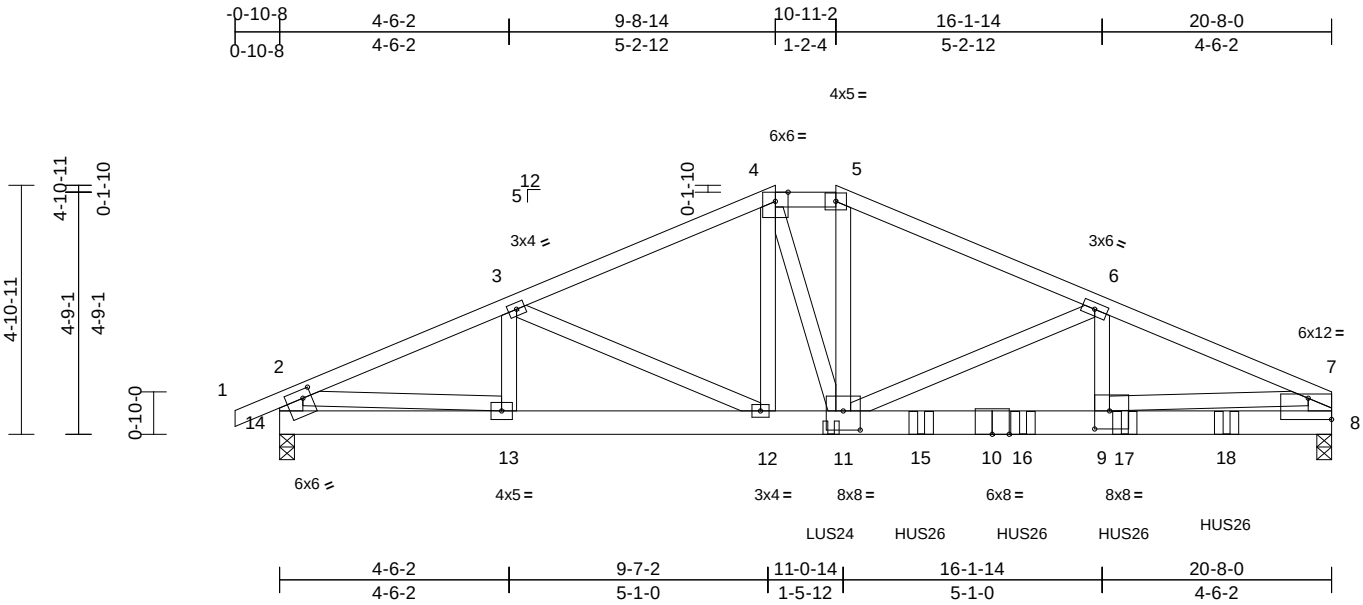

Scale = 1:45.3

Plate Offsets (X, Y): [7:Edge,0-5-0], [9:0-3-8,0-4-4], [11:0-4-0,0-4-8], [14:0-2-0,0-2-0]

Loading	(psf)	**Spacing**	2-0-0	**CSI**		**DEFL**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.37	Vert(LL)	-0.11	9-11	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.95	Vert(CT)	-0.19	9-11	>999	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.55	Horz(CT)	0.03	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.07	9-11	>999	240	Weight: 208 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x6 SPF No.2
WEBS 2x4 SPF No.2 *Except* 14-2,8-7:2x6 SPF No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-9-4 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 8=0-3-8, 14=0-3-8
Max Horiz 14=66 (LC 8)
Max Uplift 8=-540 (LC 9), 14=-292 (LC 8)
Max Grav 8=3844 (LC 1), 14=2028 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/30, 2-3=-3531/484, 3-4=-3607/499, 4-5=-3762/566, 5-6=-4173/582, 6-7=-6450/906, 2-14=-1896/302, 7-8=-3186/473
BOT CHORD 13-14=-159/675, 12-13=-461/3200, 11-12=-393/3292, 9-11=-802/5895, 8-9=-211/1431
WEBS 3-13=-352/117, 3-12=-137/353, 4-12=-550/133, 4-11=-304/1791, 5-11=-197/1354, 6-11=-2343/422, 6-9=-166/1628, 2-13=-304/2545, 7-9=-596/4500

NOTES
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * 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.
8) All bearings are assumed to be SPF No.2 .
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 292 lb uplift at joint 14 and 540 lb uplift at joint 8.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
12) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss) or equivalent at 10-10-0 from the left end to connect truss(es) to back face of bottom chord.
13) Use Simpson Strong-Tie HUS26 (14-10d Girder, 6-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 12-7-4 from the left end to 18-7-4 to connect truss(es) to back face of bottom chord.
14) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-2=-70, 2-4=-70, 4-5=-70, 5-7=-70, 8-14=-20
Concentrated Loads (lb)
Vert: 11=-404 (B), 15=-882 (B), 16=-897 (B), 17=-897 (B), 18=-897 (B)

March 11,2024

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16023 Swingley Ridge Rd.
Chesterfield, MO 63017
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Job	Truss	Truss Type	Qty	Ply	Lot 123 MN	
240614	J1	Diagonal Hip Girder	1	1	Job Reference (optional)	I64131360

Wheeler Lumber, Waverly, KS - 66871,

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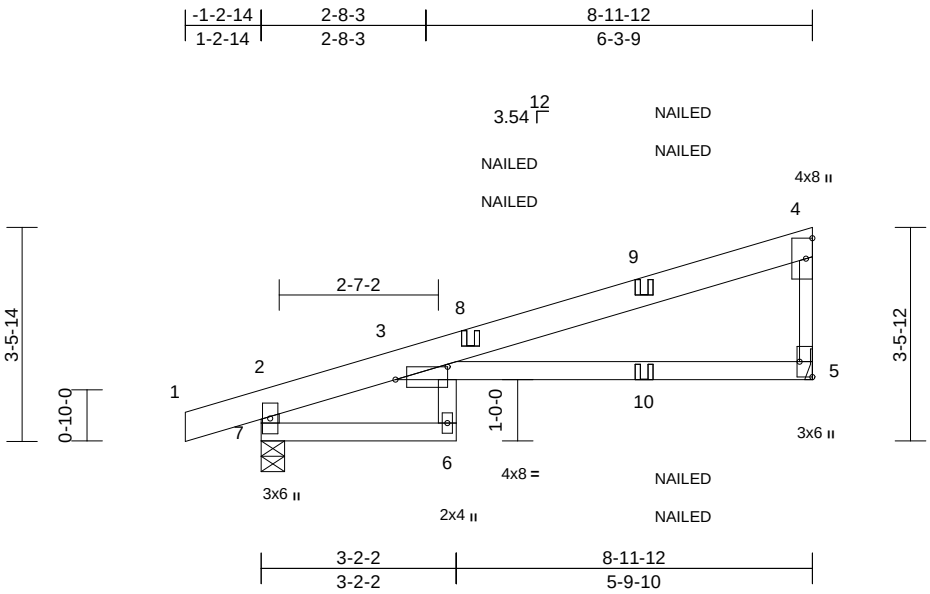

Scale = 1:37.5

Plate Offsets (X, Y): [3:0-10-3,0-2-8], [5:Edge,0-2-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.86	Vert(LL)	-0.20	6	>532	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.60	Vert(CT)	-0.37	6	>284	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.02	Horz(CT)	0.14	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R		Wind(LL)	0.19	6	>551	240	Weight: 33 lb	FT = 10%

LUMBER
TOP CHORD 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2 *Except* 4-5:2x3 SPF No.2

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

REACTIONS (size) 5= Mechanical, 7=0-4-9
Max Horiz 7=123 (LC 22)
Max Uplift 5=-86 (LC 8), 7=-120 (LC 4)
Max Grav 5=471 (LC 1), 7=546 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-7=-521/141, 1-2=0/27, 2-3=-154/18, 3-4=-177/20, 4-5=-338/129
BOT CHORD 6-7=-50/0, 3-5=-22/104
WEBS 3-6=0/78

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * 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.
4) All bearings are assumed to be SPF No.2 .
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 120 lb uplift at joint 7 and 86 lb uplift at joint 5.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
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=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-2=-70, 2-4=-70, 6-7=-20, 3-5=-20
Concentrated Loads (lb)
Vert: 8=0 (F=0, B=0), 9=-44 (F=-22, B=-22), 10=-72 (F=-36, B=-36)

March 11,2024

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Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Lot 123 MN	
240614	J2	Jack-Closed	2	1	Job Reference (optional)	I64131361

Wheeler Lumber, Waverly, KS - 66871,

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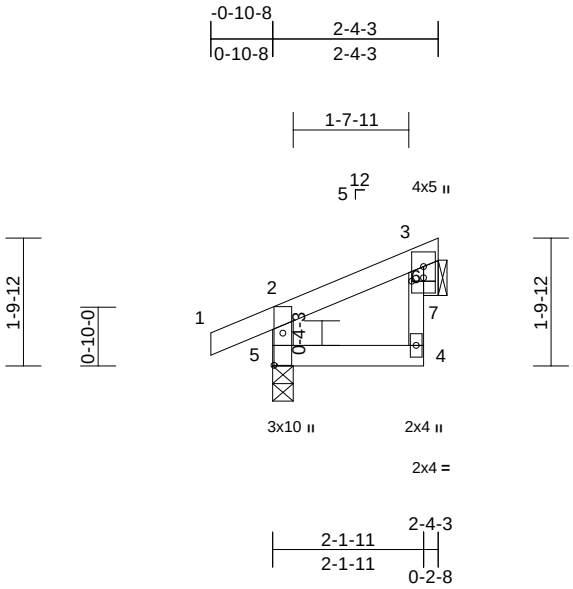

Scale = 1:32.7

Plate Offsets (X, Y): [5:0-5-8,0-1-8], [6:0-2-0,0-0-9]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	0.00	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	0.00	4-5	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R		Wind(LL)	0.00	4	>999	240	Weight: 8 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2 *Except* 3-4:2x3 SPF No.2
OTHERS 2x3 SPF No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-4-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 5=0-3-8, 7= Mechanical
Max Horiz 5=57 (LC 5)
Max Uplift 5=-36 (LC 4), 7=-21 (LC 8)
Max Grav 5=184 (LC 1), 7=58 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-5=-162/51, 1-2=0/27, 2-3=-50/5, 4-6=0/36, 3-6=-21/28
BOT CHORD 4-5=-20/16
WEBS 3-7=-26/3

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * 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.
4) All bearings are assumed to be SPF No.2 .
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 36 lb uplift at joint 5 and 21 lb uplift at joint 7.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

March 11,2024

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Job	Truss	Truss Type	Qty	Ply	Lot 123 MN	
240614	J3	Jack-Open	2	1	Job Reference (optional)	I64131362

Wheeler Lumber, Waverly, KS - 66871,

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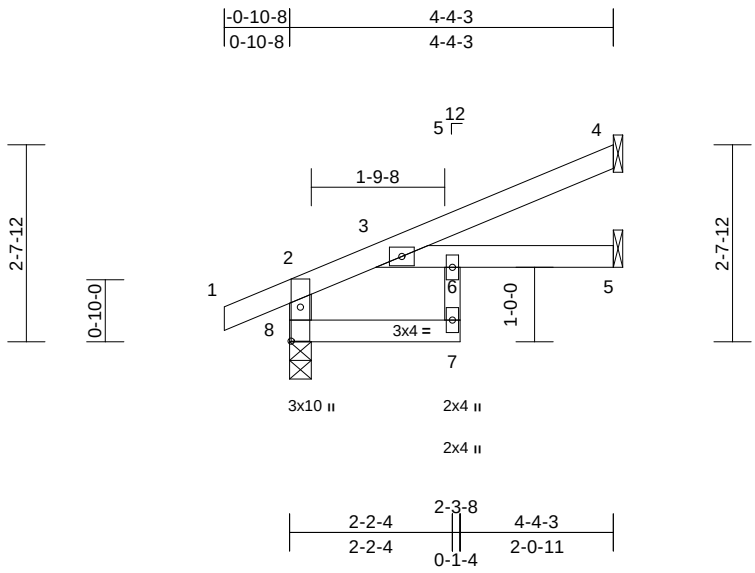

Scale = 1:30.9

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	-0.02	3-6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	-0.04	6	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.01	Horz(CT)	0.03	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.02	3-6	>999	240	Weight: 14 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2 *Except* 7-6:2x3 SPF No.2

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

REACTIONS (size) 4= Mechanical, 5= Mechanical, 8=0-3-8
Max Horiz 8=77 (LC 8)
Max Uplift 4=-56 (LC 8), 8=-28 (LC 8)
Max Grav 4=121 (LC 1), 5=84 (LC 3), 8=280 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-8=-269/55, 1-2=0/27, 2-3=-82/0, 3-4=-40/38
BOT CHORD 7-8=0/0, 3-6=0/0, 5-6=0/0
WEBS 6-7=-2/46

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * 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.
4) All bearings are assumed to be SPF No.2 .
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 28 lb uplift at joint 8 and 56 lb uplift at joint 4.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

March 11,2024

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Job	Truss	Truss Type	Qty	Ply	Lot 123 MN	
240614	J4	Jack-Open	4	1	Job Reference (optional)	I64131363

Wheeler Lumber, Waverly, KS - 66871,

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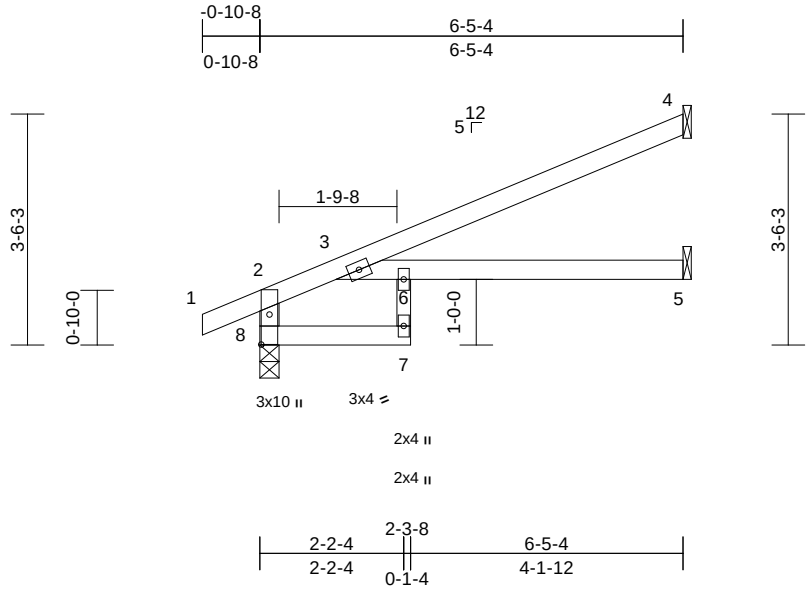

Scale = 1:35

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.56	Vert(LL)	-0.09	5-6	>814	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.46	Vert(CT)	-0.19	5-6	>392	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.11	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.11	5-6	>682	240	Weight: 19 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2 *Except* 7-6:2x3 SPF No.2

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

REACTIONS (size) 4= Mechanical, 5= Mechanical, 8=0-3-8
Max Horiz 8=112 (LC 8)
Max Uplift 4=-87 (LC 8), 8=-36 (LC 8)
Max Grav 4=188 (LC 1), 5=120 (LC 3), 8=373 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-8=-375/73, 1-2=0/27, 2-3=-125/0, 3-4=-70/58
BOT CHORD 7-8=0/0, 3-6=0/0, 5-6=0/0
WEBS 6-7=-13/52

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * 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.
4) All bearings are assumed to be SPF No.2 .
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 36 lb uplift at joint 8 and 87 lb uplift at joint 4.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

March 11,2024

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

Job	Truss	Truss Type	Qty	Ply	Lot 123 MN	
240614	J5	Jack-Open	21	1	Job Reference (optional)	I64131364

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.73 S Feb 22 2024 Print: 8.730 S Feb 22 2024 MiTek Industries, Inc. Fri Mar 08 12:19:07
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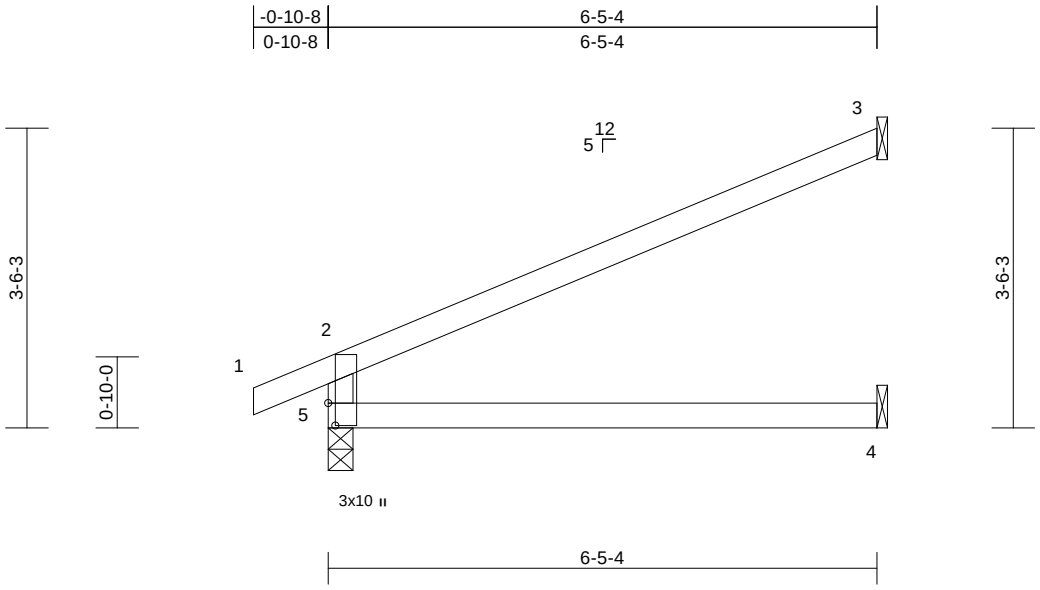

Scale = 1:27

Plate Offsets (X, Y): [5:0-3-3,0-1-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.63	Vert(LL)	-0.07	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.38	Vert(CT)	-0.16	4-5	>476	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.06	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R		Wind(LL)	0.08	4-5	>987	240	Weight: 17 lb	FT = 10%

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

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

REACTIONS (size) 3= Mechanical, 4= Mechanical, 5=0-3-8
Max Horiz 5=112 (LC 8)
Max Uplift 3=-99 (LC 8), 5=-45 (LC 8)
Max Grav 3=196 (LC 1), 4=118 (LC 3), 5=358 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-5=-311/104, 1-2=0/27, 2-3=-103/59
BOT CHORD 4-5=0/0

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * 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.
4) All bearings are assumed to be SPF No.2 .
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 45 lb uplift at joint 5 and 99 lb uplift at joint 3.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

March 11,2024

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

Job	Truss	Truss Type	Qty	Ply	Lot 123 MN	
240614	J6	Jack-Open	4	1	Job Reference (optional)	I64131365

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.73 S Feb 22 2024 Print: 8.730 S Feb 22 2024 MiTek Industries, Inc. Fri Mar 08 12:19:07 Page: 1
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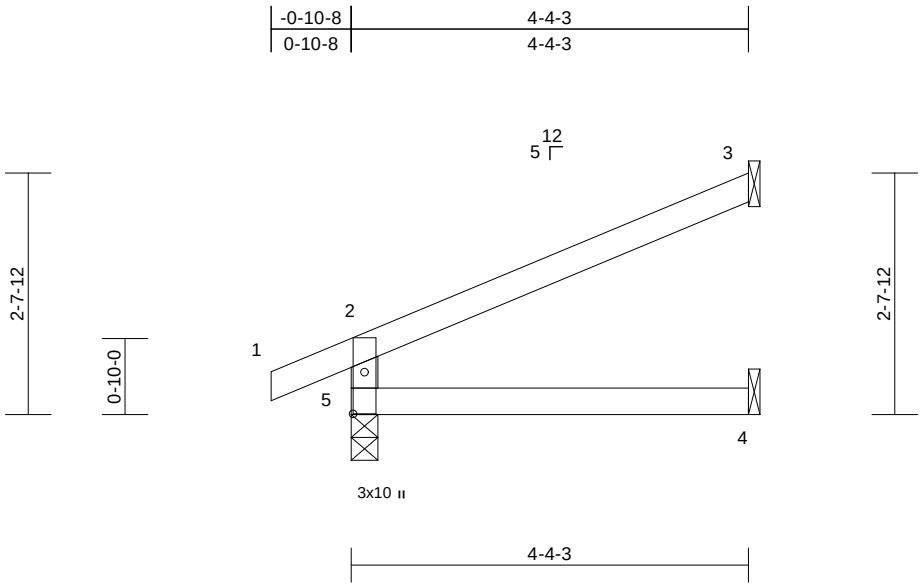

Scale = 1:25.2

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.25	Vert(LL)	-0.01	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	-0.03	4-5	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.02	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R		Wind(LL)	0.02	4-5	>999	240	Weight: 12 lb	FT = 10%

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

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

REACTIONS (size) 3= Mechanical, 4= Mechanical, 5=0-3-8
Max Horiz 5=77 (LC 8)
Max Uplift 3=-67 (LC 8), 5=-36 (LC 8)
Max Grav 3=128 (LC 1), 4=78 (LC 3), 5=267 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-5=-233/75, 1-2=0/27, 2-3=-69/38
BOT CHORD 4-5=0/0

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * 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.
4) All bearings are assumed to be SPF No.2 .
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 36 lb uplift at joint 5 and 67 lb uplift at joint 3.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

March 11,2024

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

Job	Truss	Truss Type	Qty	Ply	Lot 123 MN	
240614	J7	Jack-Open	4	1	Job Reference (optional)	I64131366

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.73 S Feb 22 2024 Print: 8.730 S Feb 22 2024 MiTek Industries, Inc. Fri Mar 08 12:19:07 Page: 1
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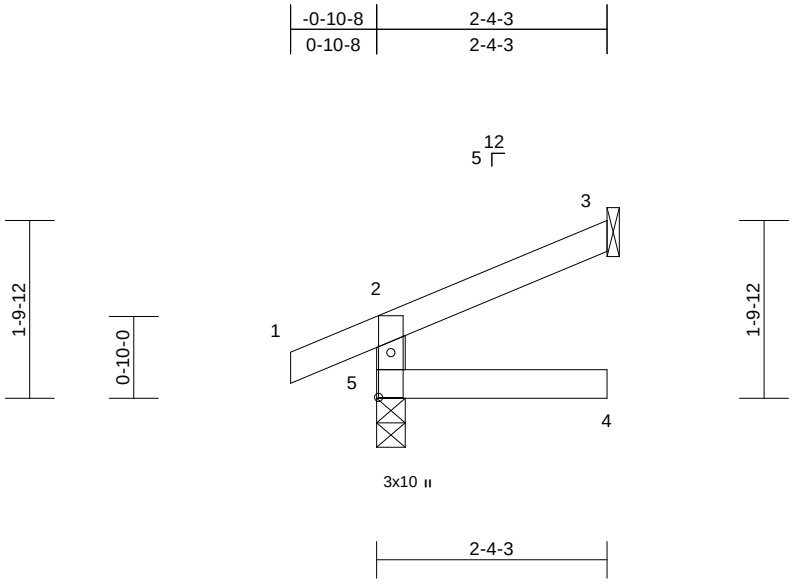

Scale = 1:23.5

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.17	Vert(LL)	-0.05	4	>544	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	-0.09	4	>271	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R		Wind(LL)	0.02	4	>999	240	Weight: 7 lb	FT = 10%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-4-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 3= Mechanical, 5=0-3-8
Max Horiz 5=46 (LC 5)
Max Uplift 3=-31 (LC 8), 5=-30 (LC 4)
Max Grav 3=81 (LC 1), 5=185 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-5=-141/57, 1-2=0/27, 2-3=-26/25
BOT CHORD 4-5=0/0

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * 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.
4) All bearings are assumed to be SPF No.2 .
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 30 lb uplift at joint 5 and 31 lb uplift at joint 3.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

March 11,2024

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

Job	Truss	Truss Type	Qty	Ply	Lot 123 MN	
240614	J8	Diagonal Hip Girder	2	1	Job Reference (optional)	I64131367

Wheeler Lumber, Waverly, KS - 66871,

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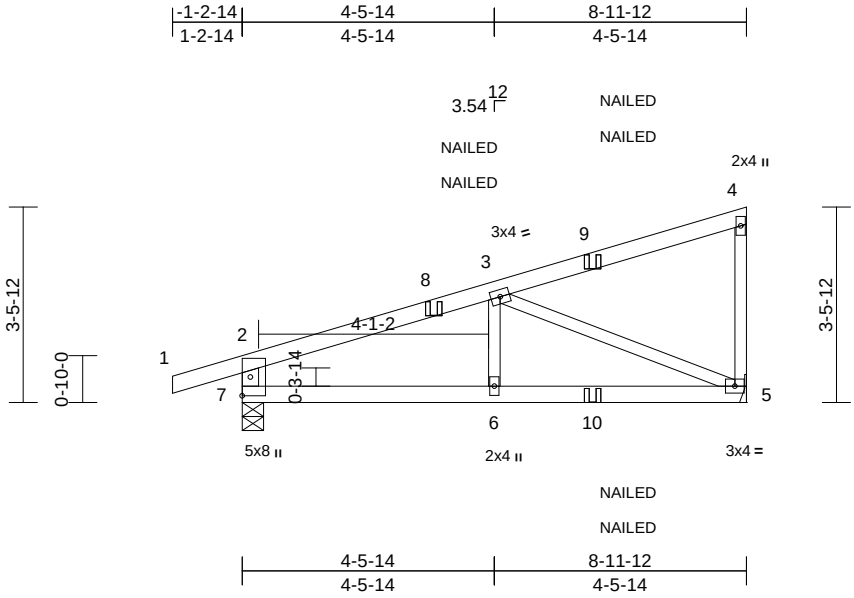

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.55	Vert(LL)	-0.04	5-6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.39	Vert(CT)	-0.07	5-6	>999	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.34	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.03	5-6	>999	240	Weight: 30 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except* 7-2:2x4 SPF 2100F 1.8E

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

REACTIONS (size) 5= Mechanical, 7=0-4-9
Max Horiz 7=143 (LC 5)
Max Uplift 5=-105 (LC 8), 7=-130 (LC 4)
Max Grav 5=463 (LC 1), 7=541 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-7=-466/144, 1-2=0/27, 2-3=-654/109, 3-4=-120/30, 4-5=-161/71
BOT CHORD 6-7=-158/569, 5-6=-158/569
WEBS 3-6=0/193, 3-5=-596/151

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * 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.
4) All bearings are assumed to be SPF No.2 .
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 130 lb uplift at joint 7 and 105 lb uplift at joint 5.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
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=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-2=-70, 2-4=-70, 5-7=-20
Concentrated Loads (lb)
Vert: 8=-22 (F=-11, B=-11), 9=-59 (F=-29, B=-29), 10=-42 (F=-21, B=-21)

March 11,2024

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

Job	Truss	Truss Type	Qty	Ply	Lot 123 MN	
240614	J9	Diagonal Hip Girder	2	1	Job Reference (optional)	I64131368

Wheeler Lumber, Waverly, KS - 66871,

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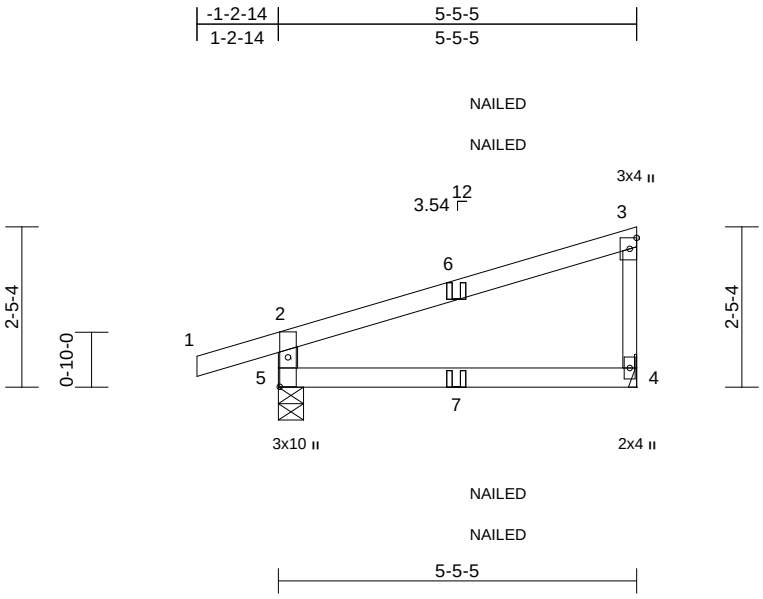


Scale = 1:35

Plate Offsets (X, Y): [5:0-5-6,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.38	Vert(LL)	-0.03	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.24	Vert(CT)	-0.06	4-5	>999	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R		Wind(LL)	0.01	4-5	>999	240	Weight: 16 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2 *Except* 3-4:2x3 SPF No.2

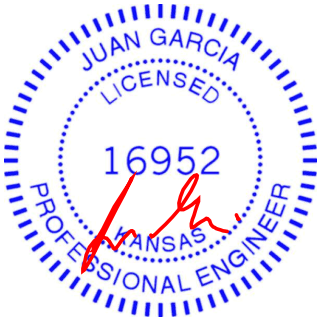
BRACING
TOP CHORD Structural wood sheathing directly applied or 5-5-5 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 4= Mechanical, 5=0-4-9
Max Horiz 5=98 (LC 7)
Max Uplift 4=-48 (LC 8), 5=-102 (LC 4)
Max Grav 4=219 (LC 1), 5=342 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-5=-302/140, 1-2=0/27, 2-3=-126/14, 3-4=-158/71
BOT CHORD 4-5=-26/49

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * 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.
4) All bearings are assumed to be SPF No.2 .
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 102 lb uplift at joint 5 and 48 lb uplift at joint 4.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
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=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-2=-70, 2-3=-70, 4-5=-20
Concentrated Loads (lb)
Vert: 7=4 (F=2, B=2)



March 11,2024

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

Job	Truss	Truss Type	Qty	Ply	Lot 123 MN	
240614	J10	Jack-Open	4	1	Job Reference (optional)	I64131369

Wheeler Lumber, Waverly, KS - 66871,

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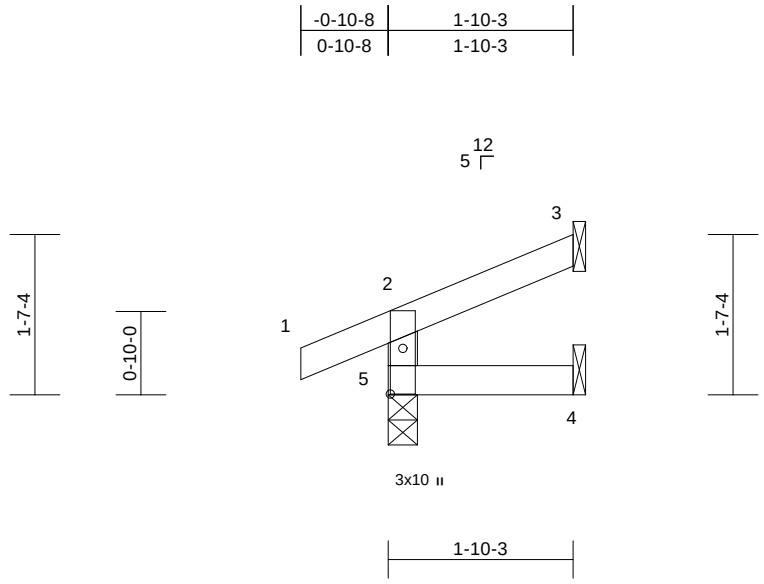

Scale = 1:23

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	0.00	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	0.00	4-5	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R		Wind(LL)	0.00	4-5	>999	240	Weight: 6 lb	FT = 10%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 1-10-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 3= Mechanical, 4= Mechanical, 5=0-3-8
Max Horiz 5=41 (LC 5)
Max Uplift 3=-28 (LC 8), 5=-32 (LC 4)
Max Grav 3=41 (LC 1), 4=30 (LC 3), 5=169 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-5=-148/46, 1-2=0/27, 2-3=-31/11
BOT CHORD 4-5=0/0

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * 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.
4) All bearings are assumed to be SPF No.2 .
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 32 lb uplift at joint 5 and 28 lb uplift at joint 3.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

March 11,2024

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

Job	Truss	Truss Type	Qty	Ply	Lot 123 MN	
240614	J11	Jack-Open	8	1	Job Reference (optional)	I64131370

Wheeler Lumber, Waverly, KS - 66871,

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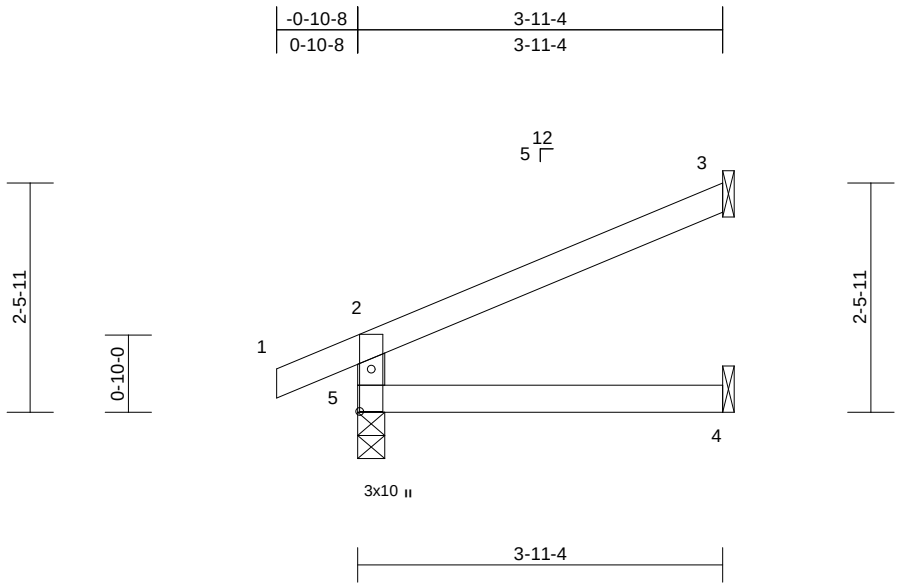

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Plate Offsets (X, Y): [5:0-5-8,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	-0.01	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	-0.02	4-5	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R		Wind(LL)	0.01	4-5	>999	240	Weight: 11 lb	FT = 10%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-11-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 3= Mechanical, 4= Mechanical, 5=0-3-8
Max Horiz 5=70 (LC 8)
Max Uplift 3=-61 (LC 8), 5=-34 (LC 8)
Max Grav 3=115 (LC 1), 4=70 (LC 3), 5=249 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-5=-218/70, 1-2=0/27, 2-3=-63/34
BOT CHORD 4-5=0/0

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * 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.
4) All bearings are assumed to be SPF No.2 .
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 34 lb uplift at joint 5 and 61 lb uplift at joint 3.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

March 11,2024

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

Job	Truss	Truss Type	Qty	Ply	Lot 123 MN
240614	LAY1	Lay-In Gable	1	1	I64131371
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.73 E Jan 4 2024 Print: 8.730 E Jan 4 2024 MiTek Industries, Inc. Mon Mar 11 09:44:14 Page: 1
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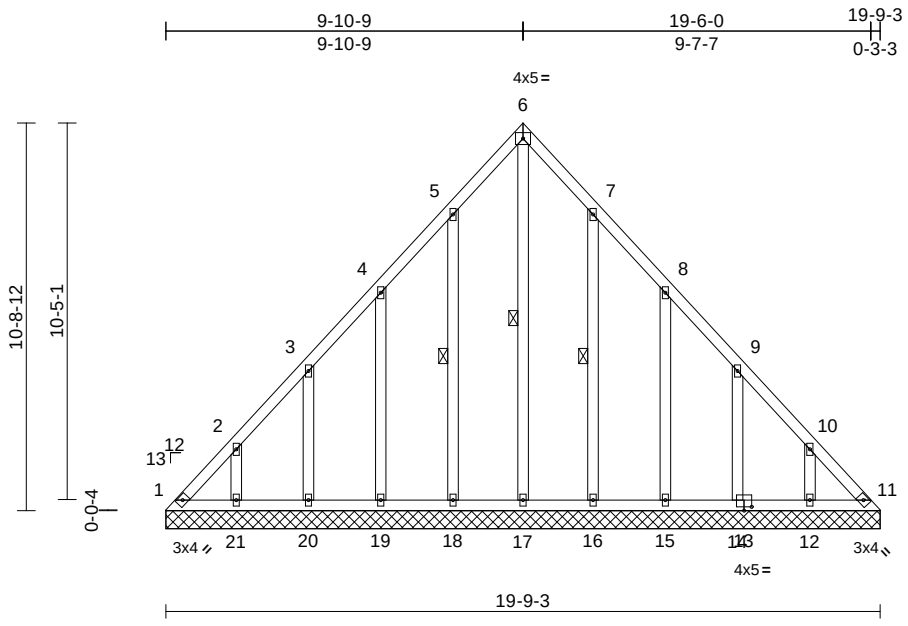

Scale = 1:63.8

Plate Offsets (X, Y): [13:0-2-8,0-1-4]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.11	Horiz(TL)	0.01	11	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 110 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
OTHERS 2x4 SPF 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 5-18, 7-16, 6-17

REACTIONS (lb/size) 1=79/19-9-3, 11=79/19-9-3, 12=182/19-9-3, 14=180/19-9-3, 15=180/19-9-3, 16=183/19-9-3, 17=116/19-9-3, 18=183/19-9-3, 19=180/19-9-3, 20=180/19-9-3, 21=182/19-9-3
Max Horiz 1=-277 (LC 4)
Max Uplift 1=-133 (LC 6), 11=-88 (LC 7), 12=-131 (LC 9), 14=-128 (LC 9), 15=-135 (LC 9), 16=-121 (LC 9), 18=-124 (LC 8), 19=-134 (LC 8), 20=-128 (LC 8), 21=-131 (LC 8)
Max Grav 1=272 (LC 8), 11=242 (LC 9), 12=207 (LC 16), 14=205 (LC 16), 15=206 (LC 16), 16=209 (LC 16), 17=255 (LC 9), 18=212 (LC 15), 19=205 (LC 15), 20=205 (LC 15), 21=207 (LC 15)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-386/241, 2-3=-262/193, 3-4=-170/143, 4-5=-143/144, 5-6=-114/207, 6-7=-89/185, 7-8=-96/102, 8-9=-123/82, 9-10=-221/131, 10-11=-345/179
BOT CHORD 1-21=-123/260, 20-21=-123/260, 19-20=-123/260, 18-19=-123/260, 17-18=-123/260, 16-17=-123/260, 15-16=-123/260, 14-15=-123/260, 13-14=-123/260, 12-13=-123/260, 11-12=-123/260
WEBS 2-21=-162/148, 3-20=-166/154, 4-19=-164/158, 5-18=-173/148, 10-12=-162/149, 9-14=-166/153, 8-15=-166/159, 7-16=-169/145, 6-17=-232/33

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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) 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) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 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 SPF No.2 crushing capacity of 425 psi.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 133 lb uplift at joint 1, 88 lb uplift at joint 11, 131 lb uplift at joint 21, 128 lb uplift at joint 20, 134 lb uplift at joint 19, 124 lb uplift at joint 18, 131 lb uplift at joint 12, 128 lb uplift at joint 14, 135 lb uplift at joint 15 and 121 lb uplift at joint 16.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

March 11,2024

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

Job	Truss	Truss Type	Qty	Ply	Lot 123 MN	
240614	LAY2	Lay-In Gable	1	1	Job Reference (optional)	I64131372

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.73 E Jan 4 2024 Print: 8.730 E Jan 4 2024 MiTek Industries, Inc. Mon Mar 11 09:44:24 Page: 1
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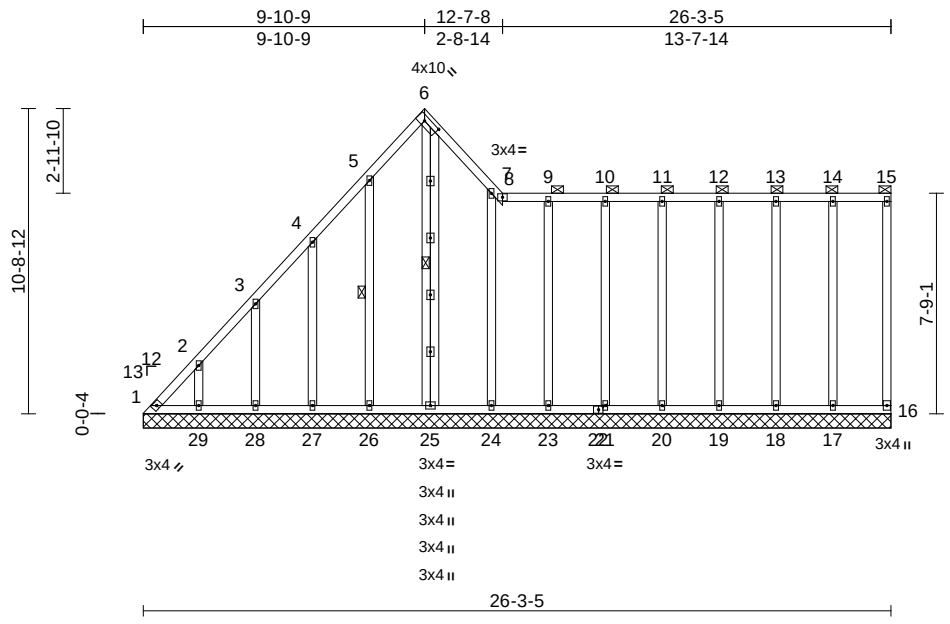

Scale = 1:81

Plate Offsets (X, Y): [6:0-6-10,0-2-0], [22:0-1-14,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.25	Horiz(TL)	0.00	16	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 177 lb	FT = 10%

LUMBER

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

BRACING

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 8-15.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 5-26, 6-25

REACTIONS (lb/size) 1=59/26-3-5, 16=71/26-3-5, 17=191/26-3-5, 18=179/26-3-5, 19=180/26-3-5, 20=180/26-3-5, 21=181/26-3-5, 23=174/26-3-5, 24=206/26-3-5, 25=181/26-3-5, 26=179/26-3-5, 27=181/26-3-5, 28=180/26-3-5, 29=182/26-3-5
Max Horiz 1=373 (LC 5)
Max Uplift 1=-196 (LC 6), 16=-18 (LC 5), 17=-31 (LC 9), 18=-38 (LC 5), 19=-32 (LC 9), 20=-34 (LC 5), 21=-38 (LC 9), 23=-25 (LC 5), 24=-116 (LC 4), 25=-204 (LC 7), 26=-124 (LC 8), 27=-133 (LC 8), 28=-129 (LC 8), 29=-131 (LC 8)
Max Grav 1=316 (LC 5), 16=71 (LC 1), 17=191 (LC 22), 18=179 (LC 1), 19=180 (LC 22), 20=180 (LC 1), 21=181 (LC 22), 23=174 (LC 1), 24=276 (LC 16), 25=299 (LC 4), 26=211 (LC 15), 27=205 (LC 15), 28=205 (LC 15), 29=207 (LC 15)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-432/326, 2-3=-364/279, 3-4=-314/242, 4-5=-281/233, 5-6=-235/210, 6-7=-209/183, 7-8=-90/65, 8-9=-105/80, 9-10=-105/80, 10-11=-105/80, 11-12=-105/80, 12-13=-105/80, 13-14=-105/80, 14-15=-105/80, 15-16=-62/43
BOT CHORD	1-29=-113/88, 28-29=-113/88, 27-28=-113/88, 26-27=-113/88, 25-26=-113/88, 24-25=-107/81, 23-24=-107/81, 22-23=-107/81, 21-22=-107/81, 20-21=-107/81, 19-20=-107/81, 18-19=-107/81, 17-18=-107/81, 16-17=-107/81
WEBS	2-29=-162/148, 3-28=-166/154, 4-27=-165/157, 5-26=-169/149, 6-25=-273/248, 7-24=-235/140, 14-17=-148/92, 13-18=-139/52, 12-19=-140/59, 11-20=-140/57, 10-21=-141/62, 9-23=-135/49

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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) 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) Provide adequate drainage to prevent water ponding.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 196 lb uplift at joint 1, 18 lb uplift at joint 16, 131 lb uplift at joint 29, 129 lb uplift at joint 28, 133 lb uplift at joint 27, 124 lb uplift at joint 26, 204 lb uplift at joint 25, 116 lb uplift at joint 24, 31 lb uplift at joint 17, 38 lb uplift at joint 18, 32 lb uplift at joint 19, 34 lb uplift at joint 20, 38 lb uplift at joint 21 and 25 lb uplift at joint 23.
12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

March 11,2024

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

Job	Truss	Truss Type	Qty	Ply	Lot 123 MN	
240614	LAY4	Lay-In Gable	1	1	Job Reference (optional)	I64131373

Wheeler Lumber, Waverly, KS - 66871,

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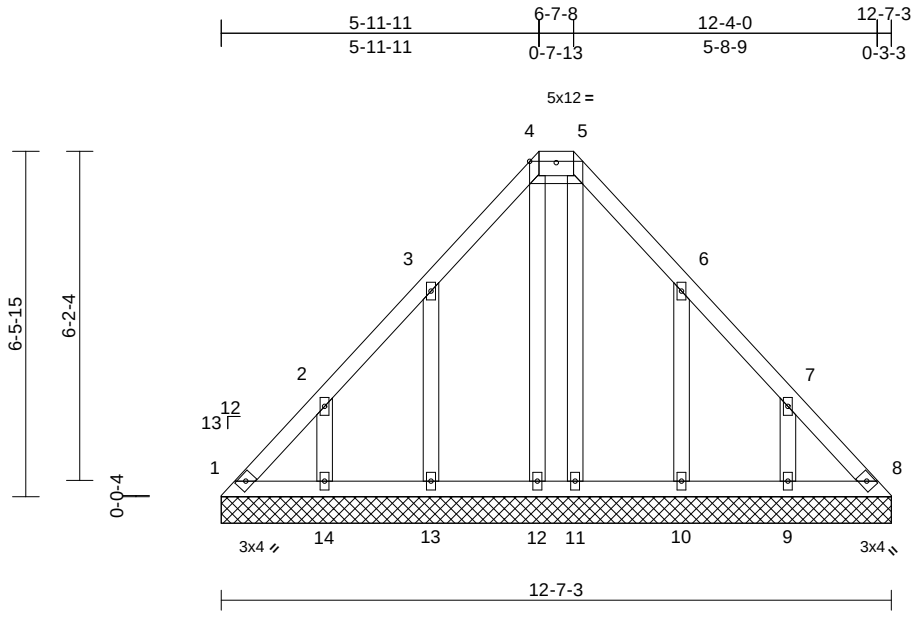

Scale = 1:43.3

Plate Offsets (X, Y): [4:0-6-0,0-0-5]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.06	Horiz(TL)	0.00	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 60 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF No.2 *Except* 4-5:2x6 SPF No.2
BOT CHORD 2x4 SPF No.2
OTHERS 2x4 SPF No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except
2-0-0 oc purlins (6-0-0 max.): 4-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=12-7-3, 8=12-7-3, 9=12-7-3, 10=12-7-3, 11=12-7-3, 12=12-7-3, 13=12-7-3, 14=12-7-3
Max Horiz 1=-164 (LC 4)
Max Uplift 1=-63 (LC 6), 8=-29 (LC 7), 9=-130 (LC 9), 10=-135 (LC 9), 12=-18 (LC 5), 13=-136 (LC 8), 14=-130 (LC 8)
Max Grav 1=132 (LC 17), 8=115 (LC 18), 9=204 (LC 16), 10=218 (LC 16), 11=111 (LC 17), 12=127 (LC 18), 13=219 (LC 15), 14=204 (LC 15)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-188/145, 2-3=-129/99, 3-4=-104/144, 4-5=-31/117, 5-6=-85/119, 6-7=-94/54, 7-8=-158/99
BOT CHORD 1-14=-68/133, 13-14=-68/133, 12-13=-68/133, 11-12=-68/133, 10-11=-68/133, 9-10=-68/133, 8-9=-68/133
WEBS 2-14=-159/148, 3-13=-178/162, 4-12=-102/41, 7-9=-160/148, 6-10=-177/162, 5-11=-85/8

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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) 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) Provide adequate drainage to prevent water ponding.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) All bearings are assumed to be SPF No.2 .
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 63 lb uplift at joint 1, 29 lb uplift at joint 8, 130 lb uplift at joint 14, 136 lb uplift at joint 13, 18 lb uplift at joint 12, 130 lb uplift at joint 9 and 135 lb uplift at joint 10.
12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

March 11,2024

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

Job	Truss	Truss Type	Qty	Ply	Lot 123 MN	
240614	V1	Valley	1	1	Job Reference (optional)	I64131374

Wheeler Lumber, Waverly, KS - 66871,

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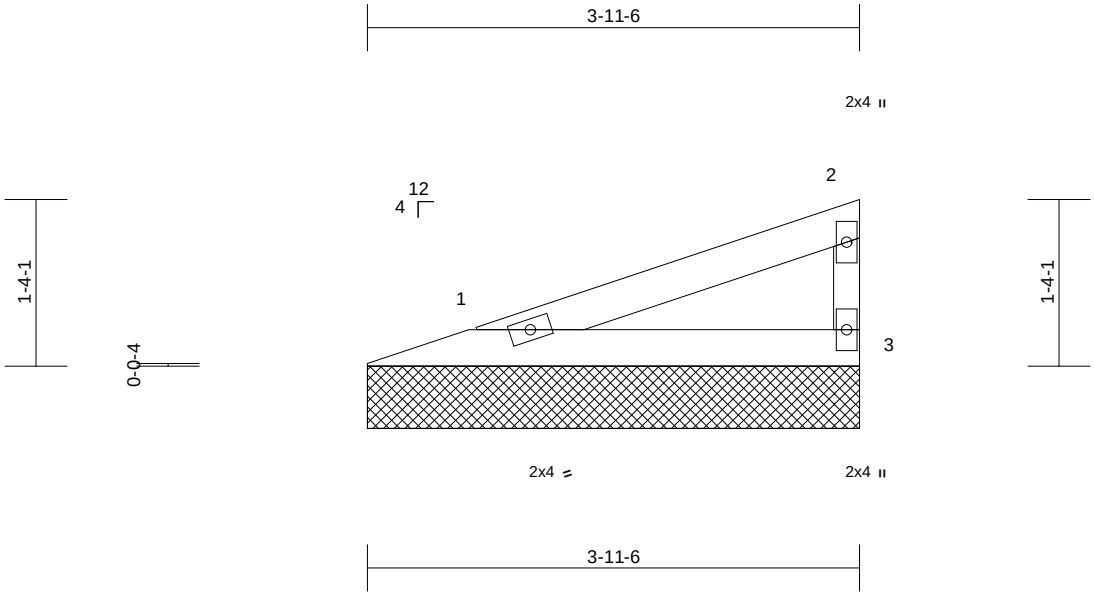

Scale = 1:18.5

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.15	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.08	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	IRC2018/TPI2014	Matrix-P							Weight: 9 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2

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

REACTIONS (size) 1=3-11-6, 3=3-11-6
Max Horiz 1=45 (LC 5)
Max Uplift 1=-22 (LC 4), 3=-28 (LC 8)
Max Grav 1=133 (LC 1), 3=133 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-40/27, 2-3=-104/46
BOT CHORD 1-3=-14/11

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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) 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.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 4-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) All bearings are assumed to be SPF No.2 .
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 22 lb uplift at joint 1 and 28 lb uplift at joint 3.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

March 11,2024

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

Job	Truss	Truss Type	Qty	Ply	Lot 123 MN	
240614	V2	Valley	1	1	Job Reference (optional)	I64131375

Wheeler Lumber, Waverly, KS - 66871,

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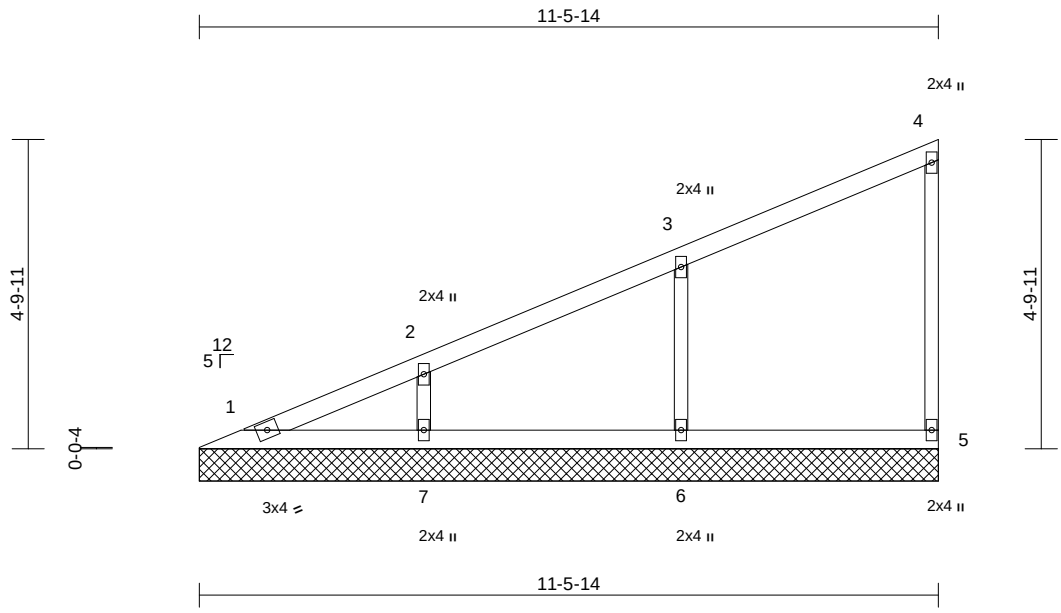

Scale = 1:35.8

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.08	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 33 lb	FT = 10%

LUMBER

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x3 SPF No.2
OTHERS	2x3 SPF No.2

BRACING

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

REACTIONS (size) 1=11-5-14, 5=11-5-14, 6=11-5-14, 7=11-5-14
Max Horiz 1=195 (LC 5)
Max Uplift 5=-28 (LC 5), 6=-106 (LC 8), 7=-88 (LC 8)
Max Grav 1=107 (LC 16), 5=141 (LC 1), 6=399 (LC 1), 7=330 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-162/43, 2-3=-128/53, 3-4=-112/37, 4-5=-109/43
BOT CHORD	1-7=-63/48, 6-7=-63/48, 5-6=-63/48
WEBS	3-6=-312/153, 2-7=-253/131

NOTES

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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) 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.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 4-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) All bearings are assumed to be SPF No.2 .
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 28 lb uplift at joint 5, 106 lb uplift at joint 6 and 88 lb uplift at joint 7.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

March 11,2024

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

Job	Truss	Truss Type	Qty	Ply	Lot 123 MN	
240614	V3	Valley	1	1	Job Reference (optional)	I64131376

Wheeler Lumber, Waverly, KS - 66871,

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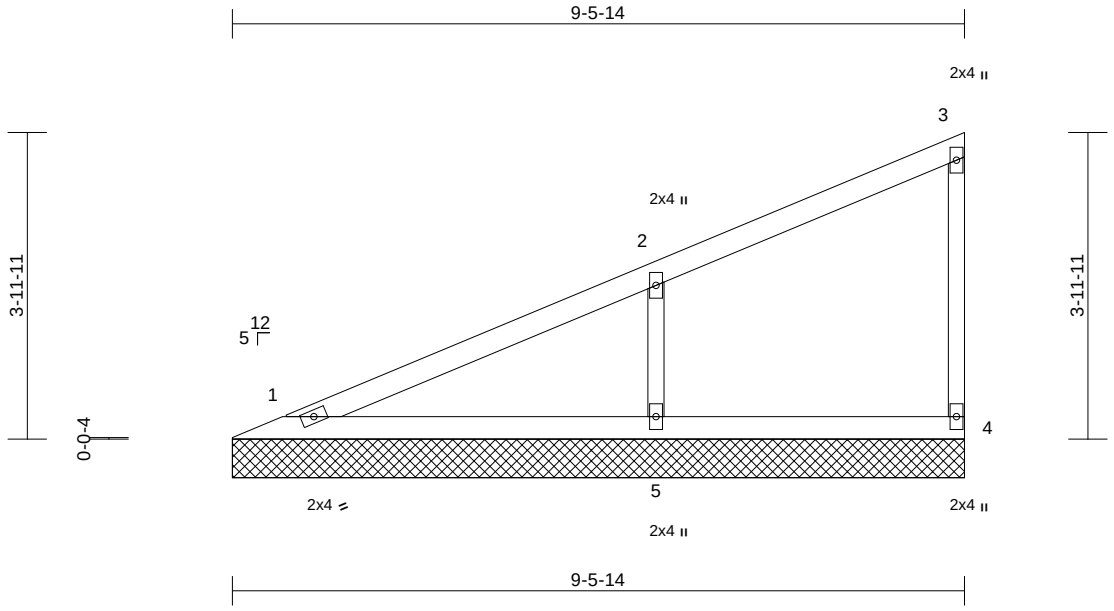

Scale = 1:29.9

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.29	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.16	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	IRC2018/TPI2014	Matrix-S							Weight: 26 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2
OTHERS 2x3 SPF No.2

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

REACTIONS (size) 1=9-5-14, 4=9-5-14, 5=9-5-14
Max Horiz 1=159 (LC 7)
Max Uplift 4=-23 (LC 5), 5=-129 (LC 8)
Max Grav 1=172 (LC 1), 4=122 (LC 1), 5=487 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-123/71, 2-3=-106/29, 3-4=-96/39
BOT CHORD 1-5=-51/39, 4-5=-51/39
WEBS 2-5=-370/182

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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) 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.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 4-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) All bearings are assumed to be SPF No.2 .
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 23 lb uplift at joint 4 and 129 lb uplift at joint 5.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

March 11,2024

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

Job	Truss	Truss Type	Qty	Ply	Lot 123 MN	
240614	V4	Valley	1	1	Job Reference (optional)	I64131377

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.73 S Feb 22 2024 Print: 8.730 S Feb 22 2024 MiTek Industries, Inc. Fri Mar 08 12:19:08
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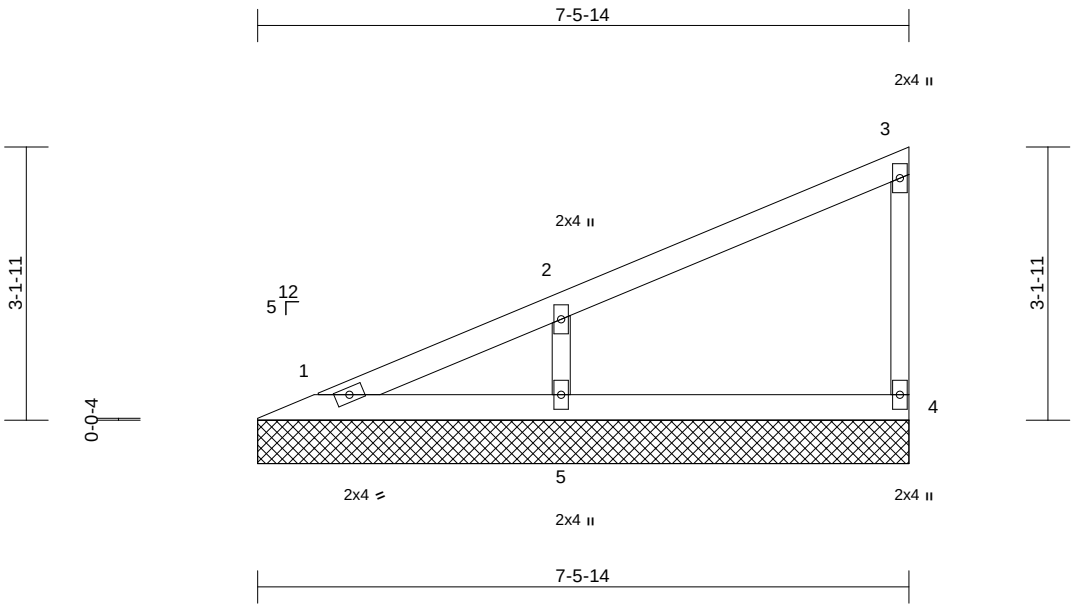

Scale = 1:26.5

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.05	Horiz(TL)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 20 lb	FT = 10%

LUMBER

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x3 SPF No.2
OTHERS	2x3 SPF No.2

BRACING

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

REACTIONS (size) 1=7-5-14, 4=7-5-14, 5=7-5-14
Max Horiz 1=122 (LC 5)
Max Uplift 4=-26 (LC 8), 5=-102 (LC 8)
Max Grav 1=81 (LC 16), 4=141 (LC 1), 5=384 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-99/52, 2-3=-92/32, 3-4=-109/44
BOT CHORD	1-5=-40/30, 4-5=-40/30
WEBS	2-5=-299/153

NOTES

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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) 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.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 4-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) All bearings are assumed to be SPF No.2 .
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 26 lb uplift at joint 4 and 102 lb uplift at joint 5.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

March 11,2024

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

Job	Truss	Truss Type	Qty	Ply	Lot 123 MN	
240614	V5	Valley	1	1	Job Reference (optional)	I64131378

Wheeler Lumber, Waverly, KS - 66871,

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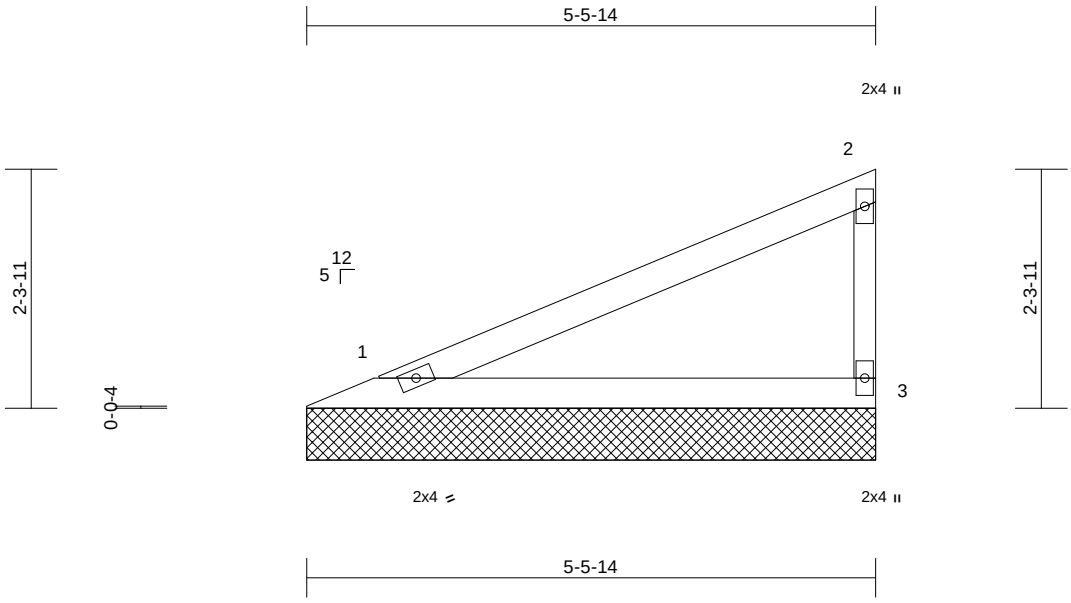

Scale = 1:22.2

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.42	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.23	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	IRC2018/TPI2014	Matrix-P							Weight: 14 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-6-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=5-5-14, 3=5-5-14
Max Horiz 1=86 (LC 5)
Max Uplift 1=-31 (LC 8), 3=-48 (LC 8)
Max Grav 1=211 (LC 1), 3=211 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-76/51, 2-3=-164/76
BOT CHORD 1-3=-28/21

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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) 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.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 4-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) All bearings are assumed to be SPF No.2 .
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 31 lb uplift at joint 1 and 48 lb uplift at joint 3.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

March 11,2024

MiTek®
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
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Job	Truss	Truss Type	Qty	Ply	Lot 123 MN	
240614	V6	Valley	1	1	Job Reference (optional)	I64131379

Wheeler Lumber, Waverly, KS - 66871,

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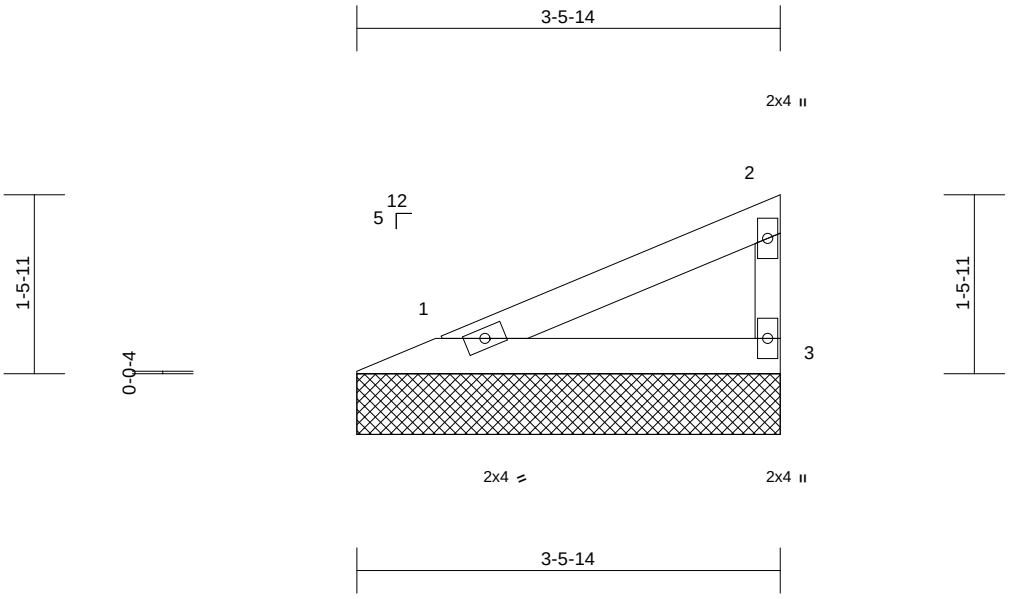

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 8 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-6-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=3-5-14, 3=3-5-14
Max Horiz 1=49 (LC 7)
Max Uplift 1=-18 (LC 8), 3=-28 (LC 8)
Max Grav 1=121 (LC 1), 3=121 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-44/29, 2-3=-94/44
BOT CHORD 1-3=-16/12

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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) 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.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 4-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) All bearings are assumed to be SPF No.2 .
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 18 lb uplift at joint 1 and 28 lb uplift at joint 3.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

March 11,2024

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

Job	Truss	Truss Type	Qty	Ply	Lot 123 MN	
240614	V10	Valley	1	1	Job Reference (optional)	I64131380

Wheeler Lumber, Waverly, KS - 66871,

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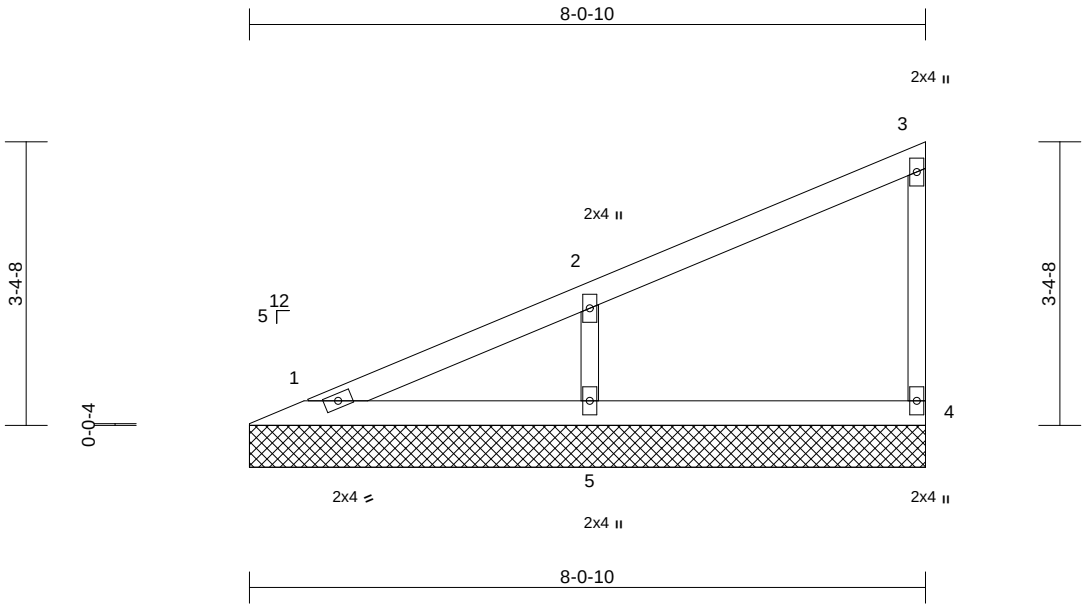


Scale = 1:27.4

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.06	Horiz(TL)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 21 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2
OTHERS 2x3 SPF No.2

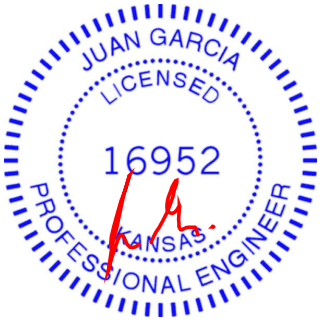
BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=8-0-10, 4=8-0-10, 5=8-0-10
Max Horiz 1=132 (LC 5)
Max Uplift 4=-24 (LC 8), 5=-109 (LC 8)
Max Grav 1=106 (LC 1), 4=137 (LC 1), 5=409 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-106/59, 2-3=-95/30, 3-4=-107/42
BOT CHORD 1-5=-43/33, 4-5=-43/33
WEBS 2-5=-318/163

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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) 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.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 4-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) All bearings are assumed to be SPF No.2 .
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 24 lb uplift at joint 4 and 109 lb uplift at joint 5.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



March 11,2024

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

Job	Truss	Truss Type	Qty	Ply	Lot 123 MN	
240614	V11	Valley	1	1	Job Reference (optional)	I64131381

Wheeler Lumber, Waverly, KS - 66871,

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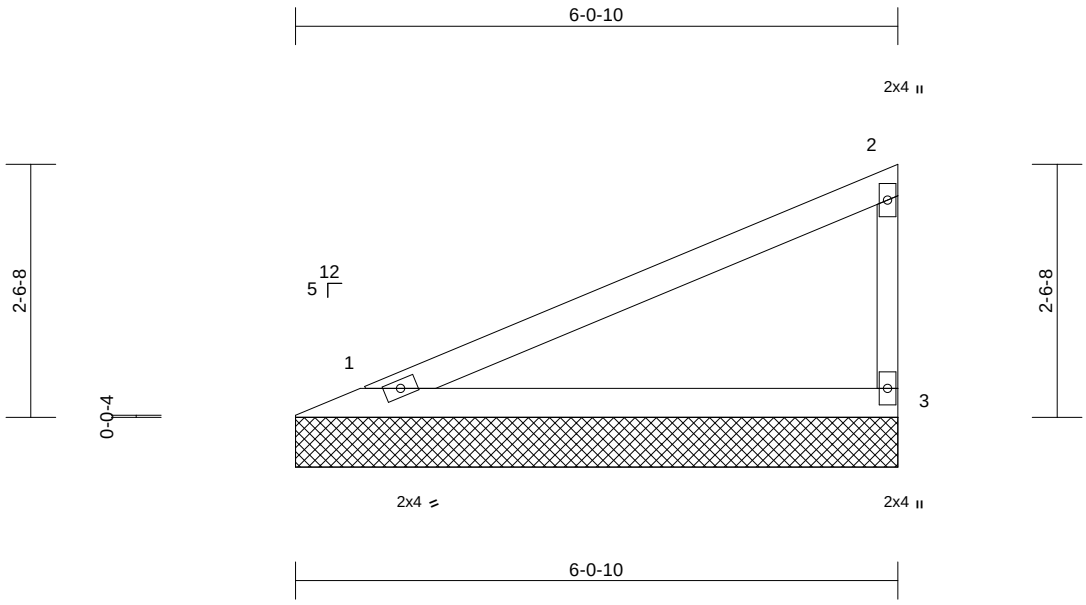

Scale = 1:23.2

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.53	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.29	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	IRC2018/TPI2014	Matrix-P							Weight: 15 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-1-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=6-0-10, 3=6-0-10
Max Horiz 1=96 (LC 7)
Max Uplift 1=-34 (LC 8), 3=-54 (LC 8)
Max Grav 1=236 (LC 1), 3=236 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-86/57, 2-3=-184/85
BOT CHORD 1-3=-31/24

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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) 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.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 4-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) All bearings are assumed to be SPF No.2 .
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 34 lb uplift at joint 1 and 54 lb uplift at joint 3.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

March 11,2024

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

Job	Truss	Truss Type	Qty	Ply	Lot 123 MN	
240614	V12	Valley	1	1	Job Reference (optional)	I64131382

Wheeler Lumber, Waverly, KS - 66871,

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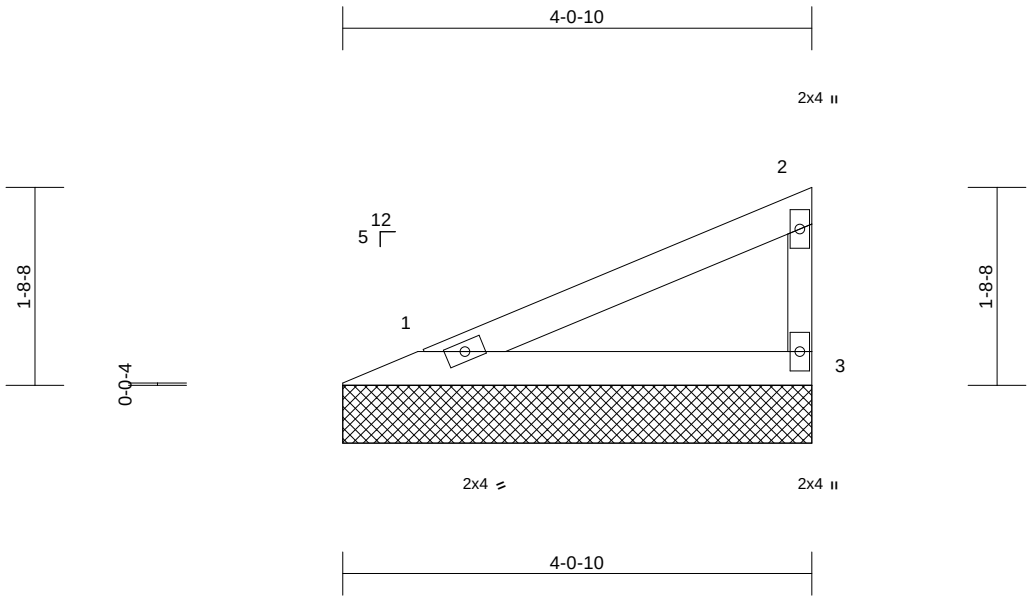

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 10 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-1-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=4-0-10, 3=4-0-10
Max Horiz 1=60 (LC 5)
Max Uplift 1=-21 (LC 8), 3=-33 (LC 8)
Max Grav 1=146 (LC 1), 3=146 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-53/35, 2-3=-114/53
BOT CHORD 1-3=-19/15

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; 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) 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.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 4-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) All bearings are assumed to be SPF No.2 .
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 21 lb uplift at joint 1 and 33 lb uplift at joint 3.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

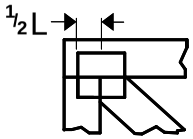
LOAD CASE(S) Standard

March 11,2024

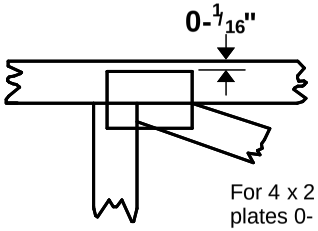
MiTek®
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

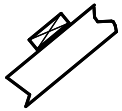
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 x 4

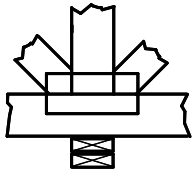
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

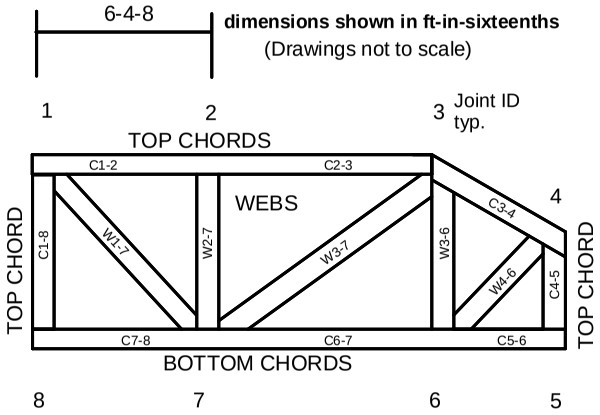


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

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

Numbering System



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

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

Product Code Approvals

ICC-ES Reports:

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

Design General Notes

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

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

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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.