RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
10/22/2021 9:49:51

RE: W097
Lot 97 W0

MiTek USA, Inc.
16023 Swingley Ridge Rd
Chesterfield, MO 63017
314-434-1200

Site Information:

Customer: Project Name: W097
Lot/Block: Model:
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 8.4
Wind Code: ASCE 7 - 16[Low Rise] Wind Speed: 115 mph
Roof Load: 45.0 psf Floor Load: N/A psf

This package includes 75 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I48073493	A1	9/27/2021	21	I48073513	D4	9/27/2021
2	I48073494	A2	9/27/2021	22	I48073514	D5	9/27/2021
3	I48073495	A3	9/27/2021	23	I48073515	D6	9/27/2021
4	I48073496	A4	9/27/2021	24	I48073516	D7	9/27/2021
5	I48073497	A5	9/27/2021	25	I48073517	E1	9/27/2021
6	I48073498	A6	9/27/2021	26	I48073518	E2	9/27/2021
7	I48073499	A7	9/27/2021	27	I48073519	E3	9/27/2021
8	I48073500	A8	9/27/2021	28	I48073520	E4	9/27/2021
9	I48073501	B1	9/27/2021	29	I48073521	E5	9/27/2021
10	I48073502	B2	9/27/2021	30	I48073522	G1	9/27/2021
11	I48073503	B3	9/27/2021	31	I48073523	G2	9/27/2021
12	I48073504	B4	9/27/2021	32	I48073524	G3	9/27/2021
13	I48073505	B5	9/27/2021	33	I48073525	G4	9/27/2021
14	I48073506	C1	9/27/2021	34	I48073526	H1	9/27/2021
15	I48073507	C2	9/27/2021	35	I48073527	H2	9/27/2021
16	I48073508	C3	9/27/2021	36	I48073528	H3	9/27/2021
17	I48073509	C4	9/27/2021	37	I48073529	H4	9/27/2021
18	I48073510	D1	9/27/2021	38	I48073530	J1	9/27/2021
19	I48073511	D2	9/27/2021	39	I48073531	J2	9/27/2021
20	I48073512	D3	9/27/2021	40	I48073532	J3	9/27/2021

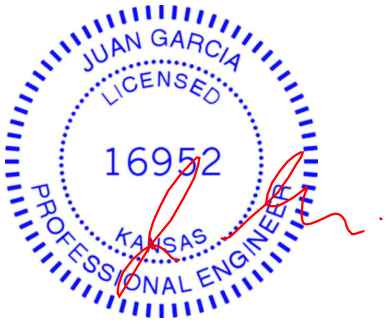
The truss drawing(s) referenced above have been prepared by MiTek USA, Inc under my direct supervision based on the parameters provided by Wheeler - Waverly.

Truss Design Engineer's Name: Garcia, Juan

My license renewal date for the state of Kansas is April 30, 2022.

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.



September 27, 2021

Garcia, Juan

MiTek USA, Inc.
16023 Swingley Ridge Rd
Chesterfield, MO 63017
314-434-1200

RE: W097 - Lot 97 W0

Site Information:

Project Customer: Project Name: W097
Lot/Block: Subdivision:
Address:
City, County: State:

No.	Seal#	Truss Name	Date
41	I48073533	J4	9/27/2021
42	I48073534	J5	9/27/2021
43	I48073535	J7	9/27/2021
44	I48073536	J8	9/27/2021
45	I48073537	J9	9/27/2021
46	I48073538	J10	9/27/2021
47	I48073539	J11	9/27/2021
48	I48073540	J12	9/27/2021
49	I48073541	J13	9/27/2021
50	I48073542	J14	9/27/2021
51	I48073543	J15	9/27/2021
52	I48073544	J16	9/27/2021
53	I48073545	J17	9/27/2021
54	I48073546	J18	9/27/2021
55	I48073547	J19	9/27/2021
56	I48073548	J20	9/27/2021
57	I48073549	J21	9/27/2021
58	I48073550	LAY1	9/27/2021
59	I48073551	LAY2	9/27/2021
60	I48073552	LAY3	9/27/2021
61	I48073553	LAY4	9/27/2021
62	I48073554	LAY5	9/27/2021
63	I48073555	LAY6	9/27/2021
64	I48073556	LAY7	9/27/2021
65	I48073557	LAY8	9/27/2021
66	I48073558	V1	9/27/2021
67	I48073559	V2	9/27/2021
68	I48073560	V3	9/27/2021
69	I48073561	V4	9/27/2021
70	I48073562	V5	9/27/2021
71	I48073563	V6	9/27/2021
72	I48073564	V7	9/27/2021
73	I48073565	V8	9/27/2021
74	I48073566	V9	9/27/2021
75	I48073567	V10	9/27/2021

RE: W097
Lot 97 W0

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16023 Swingley Ridge Rd
Chesterfield, MO 63017
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Site Information:

Customer: Project Name: W097
Lot/Block: Model:
Address: Subdivision:
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General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):

Design Code: IRC2018/TPI2014 Design Program: MiTek 20/20 8.4
Wind Code: ASCE 7 - 16[Low Rise] Wind Speed: 115 mph
Roof Load: 45.0 psf Floor Load: N/A psf

This package includes 75 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I48073493	A1	9/27/2021	21	I48073513	D4	9/27/2021
2	I48073494	A2	9/27/2021	22	I48073514	D5	9/27/2021
3	I48073495	A3	9/27/2021	23	I48073515	D6	9/27/2021
4	I48073496	A4	9/27/2021	24	I48073516	D7	9/27/2021
5	I48073497	A5	9/27/2021	25	I48073517	E1	9/27/2021
6	I48073498	A6	9/27/2021	26	I48073518	E2	9/27/2021
7	I48073499	A7	9/27/2021	27	I48073519	E3	9/27/2021
8	I48073500	A8	9/27/2021	28	I48073520	E4	9/27/2021
9	I48073501	B1	9/27/2021	29	I48073521	E5	9/27/2021
10	I48073502	B2	9/27/2021	30	I48073522	G1	9/27/2021
11	I48073503	B3	9/27/2021	31	I48073523	G2	9/27/2021
12	I48073504	B4	9/27/2021	32	I48073524	G3	9/27/2021
13	I48073505	B5	9/27/2021	33	I48073525	G4	9/27/2021
14	I48073506	C1	9/27/2021	34	I48073526	H1	9/27/2021
15	I48073507	C2	9/27/2021	35	I48073527	H2	9/27/2021
16	I48073508	C3	9/27/2021	36	I48073528	H3	9/27/2021
17	I48073509	C4	9/27/2021	37	I48073529	H4	9/27/2021
18	I48073510	D1	9/27/2021	38	I48073530	J1	9/27/2021
19	I48073511	D2	9/27/2021	39	I48073531	J2	9/27/2021
20	I48073512	D3	9/27/2021	40	I48073532	J3	9/27/2021

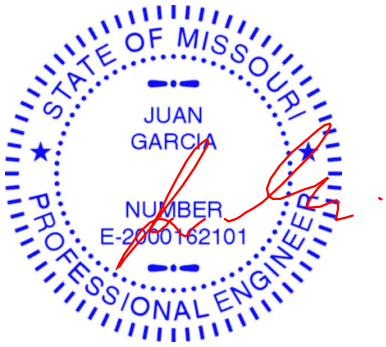
The truss drawing(s) referenced above have been prepared by MiTek USA, Inc under my direct supervision based on the parameters provided by Wheeler - Waverly.

Truss Design Engineer's Name: Garcia, Juan

My license renewal date for the state of Missouri is December 31, 2022.

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.



September 27, 2021

Garcia, Juan

MiTek USA, Inc.
16023 Swingley Ridge Rd
Chesterfield, MO 63017
314-434-1200

RE: W097 - Lot 97 W0

Site Information:

Project Customer: Project Name: W097
Lot/Block: Subdivision:
Address:
City, County: State:

No.	Seal#	Truss Name	Date
41	I48073533	J4	9/27/2021
42	I48073534	J5	9/27/2021
43	I48073535	J7	9/27/2021
44	I48073536	J8	9/27/2021
45	I48073537	J9	9/27/2021
46	I48073538	J10	9/27/2021
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53	I48073545	J17	9/27/2021
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64	I48073556	LAY7	9/27/2021
65	I48073557	LAY8	9/27/2021
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67	I48073559	V2	9/27/2021
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70	I48073562	V5	9/27/2021
71	I48073563	V6	9/27/2021
72	I48073564	V7	9/27/2021
73	I48073565	V8	9/27/2021
74	I48073566	V9	9/27/2021
75	I48073567	V10	9/27/2021

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	A1	Hip Girder	1	1	I48073493
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

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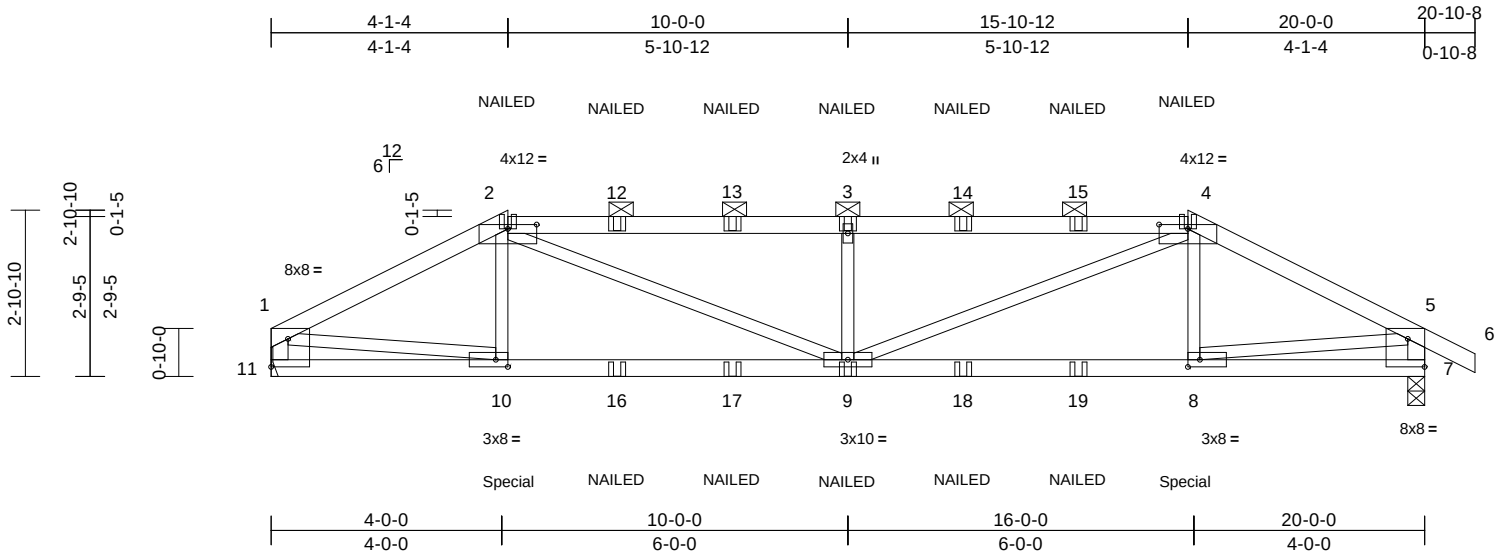

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Plate Offsets (X, Y): [1:Edge,0-5-13], [2:0-6-0,0-0-15], [4:0-6-0,0-0-15], [7:Edge,0-5-13], [8:0-2-8,0-1-8], [10:0-2-8,0-1-8]

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	0.49	Vert(LL)	-0.12	9	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.66	Vert(CT)	-0.22	9-10	>999	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.58	Horz(CT)	0.04	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.11	9	>999	240	Weight: 70 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF No.2 *Except* 2-4:2x4 SPF 2100F 1.8E
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 3-9-10 oc purlins, except end verticals, and 2-0-0 oc purlins (4-1-2 max.): 2-4.
BOT CHORD Rigid ceiling directly applied or 8-10-1 oc bracing.

REACTIONS (lb/size) 7=1431/0-3-8, 11=1356/ Mechanical
Max Horiz 11=-57 (LC 4)
Max Uplift 7=-307 (LC 9), 11=-283 (LC 8)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-2162/495, 2-3=-2923/725, 3-4=-2923/725, 4-5=-2157/496, 5-6=0/32, 1-11=-1317/294, 5-7=-1393/318
BOT CHORD 10-11=-75/221, 9-10=-439/1886, 8-9=-406/1874, 7-8=-79/246
WEBS 2-10=0/202, 2-9=-317/1174, 3-9=-689/350, 4-9=-317/1181, 4-8=0/206, 1-10=-395/1694, 5-8=-395/1652

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) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 283 lb uplift at joint 11 and 307 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.
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) 231 lb down and 59 lb up at 4-1-4, and 231 lb down and 59 lb up at 15-10-0 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, 2-4=-70, 4-5=-70, 5-6=-70, 7-11=-20
Concentrated Loads (lb)
Vert: 2=-50 (F), 4=-50 (F), 10=-231 (F), 9=-26 (F), 3=-50 (F), 8=-231 (F), 12=-50 (F), 13=-50 (F), 14=-50 (F), 15=-50 (F), 16=-26 (F), 17=-26 (F), 18=-26 (F), 19=-26 (F)

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

September 27,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	A2	Roof Special Girder	1	1	I48073494
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

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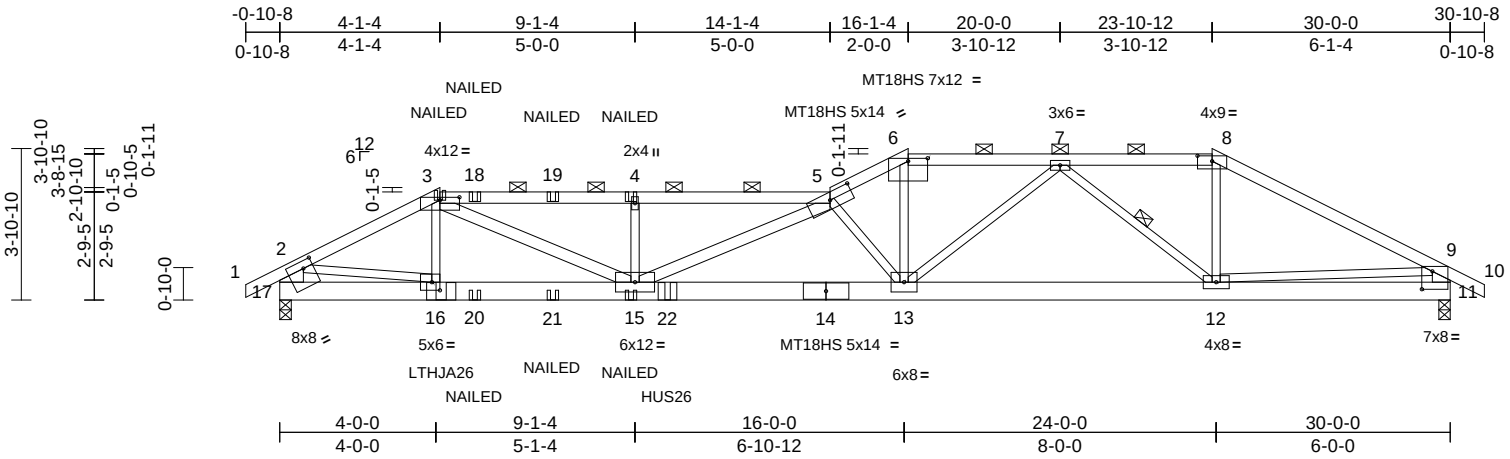

Scale = 1:59.1

Plate Offsets (X, Y): [3:0-6-0,0-0-15], [5:0-7-0,0-2-5], [6:0-6-0,0-0-15], [8:0-4-8,0-1-11], [11:0-3-4,0-5-8], [16:0-2-8,0-2-8], [17:0-3-0,0-2-4]

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	0.92	Vert(LL)	-0.37	13-15	>958	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.78	Vert(CT)	-0.66	13-15	>536	240	MT18HS	197/144
BCLL	0.0*	Rep Stress Incr	NO	WB	0.84	Horz(CT)	0.09	11	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.30	13-15	>999	240	Weight: 140 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF No.2 *Except* 3-5:2x4 SPF 2100F 1.8E

BOT CHORD 2x6 SP DSS *Except* 14-11:2x6 SPF 1650F 1.4E

WEBS 2x3 SPF No.2 *Except* 15-3,15-5:2x4 SPF No.2, 17-2:2x8 SP DSS, 11-9:2x6 SP DSS

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-4-14 oc purlins, except end verticals, and 2-0-0 oc purlins (2-3-3 max.): 3-5, 6-8.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
8-1-1 oc bracing: 13-15.

WEBS 1 Row at midpt 7-12

REACTIONS (lb/size) 11=1764/0-3-8, 17=2393/0-3-8
Max Horiz 17=-66 (LC 6)
Max Uplift 11=-237 (LC 4), 17=-514 (LC 8)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/37, 2-3=-3699/785, 3-4=-6327/1309, 4-5=-6326/1310, 5-6=-4908/881, 6-7=-4324/782, 7-8=-2405/408, 8-9=-2816/438, 9-10=0/35, 2-17=-2222/500, 9-11=-1669/257

BOT CHORD 16-17=-228/850, 15-16=-690/3270, 13-15=-1084/6206, 12-13=-585/3592, 11-12=-187/836

WEBS 3-16=-216/139, 3-15=-696/3401, 4-15=-605/271, 5-13=-2978/662, 6-13=-347/2010, 8-12=-109/965, 2-16=-521/2441, 9-12=-218/1643, 5-15=-382/609, 7-13=-225/994, 7-12=-1617/354

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) 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 514 lb uplift at joint 17 and 237 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.
10) Use Simpson Strong-Tie LTHJA26 (LTHJA26 on 1 ply, Left Hand Hip) or equivalent at 4-1-10 from the left end to connect truss(es) to front face of bottom chord.
11) Use Simpson Strong-Tie HUS26 (14-10d Girder, 6-10d Truss, Single Ply Girder) or equivalent at 9-11-4 from the left end to connect truss(es) to front face of bottom chord.
12) Fill all nail holes where hanger is in contact with lumber.
13) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
14) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-2=-70, 2-3=-70, 3-5=-70, 5-6=-70, 6-8=-70, 8-9=-70, 9-10=-70, 11-17=-20
Concentrated Loads (lb)
Vert: 3=-50 (F), 16=-231 (F), 15=-26 (F), 4=-50 (F), 18=-50 (F), 19=-50 (F), 20=-26 (F), 21=-26 (F), 22=-836 (F)

September 27,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	A3	Roof Special	1	1	I48073495
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Aug 16 2021 Print: 8.430 S Aug 16 2021 MiTek Industries, Inc. Fri Sep 24 10:55:12
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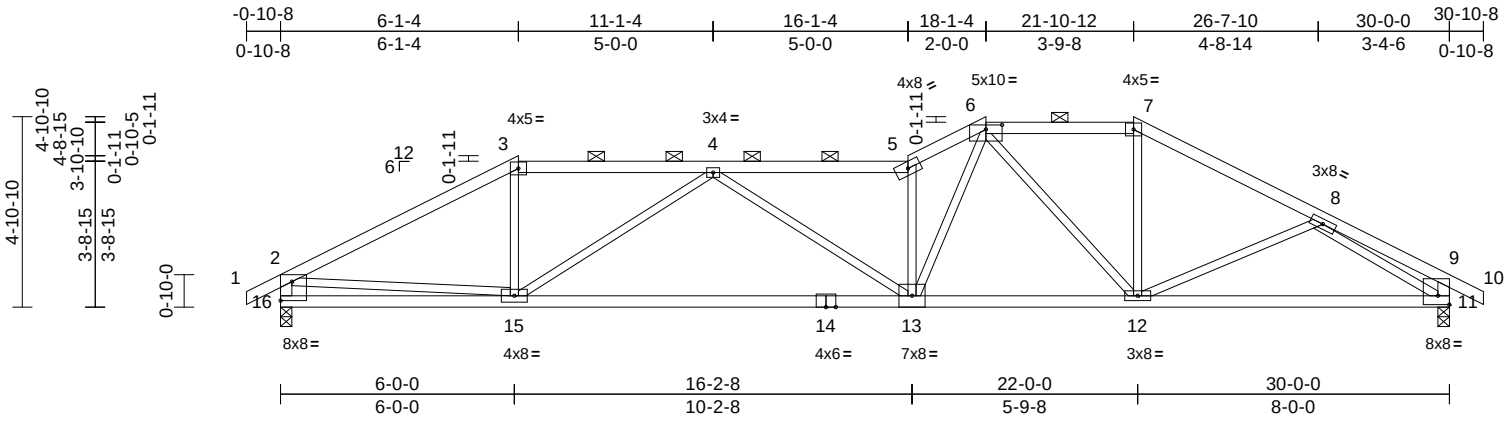

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Plate Offsets (X, Y): [6:0-5-0,0-1-7], [11:Edge,0-2-12], [16:Edge,0-5-13]

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)	-0.30	13-15	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.95	Vert(CT)	-0.67	13-15	>533	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.96	Horz(CT)	0.09	11	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.14	13-15	>999	240	Weight: 113 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except* 16-2,11-9:2x4 SPF No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-2-9 oc purlins, except end verticals, and 2-0-0 oc purlins (3-0-8 max.): 3-5, 6-7.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
2-2-0 oc bracing: 13-15.

REACTIONS (lb/size) 11=1408/0-3-8, 16=1408/0-3-8
Max Horiz 16=-80 (LC 6)
Max Uplift 11=-127 (LC 9), 16=-227 (LC 8)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/32, 2-3=-2178/303, 3-4=-1846/312, 4-5=-2839/362, 5-6=-3143/426, 6-7=-1739/206, 7-8=-2024/213, 8-9=-362/0, 9-10=0/32, 2-16=-1365/246, 9-11=-329/47
BOT CHORD 15-16=-233/473, 13-15=-390/2678, 12-13=-181/2111, 11-12=-134/1711
WEBS 3-15=-9/601, 4-15=-1007/239, 4-13=0/330, 5-13=-1557/279, 6-12=-654/132, 7-12=-39/541, 8-12=-57/214, 2-15=-106/1395, 8-11=-1749/219, 6-13=-265/1752

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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 227 lb uplift at joint 16 and 127 lb uplift at joint 11.
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) 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

September 27,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	A4	Roof Special	1	1	I48073496
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Aug 16 2021 Print: 8.430 S Aug 16 2021 MiTek Industries, Inc. Fri Sep 24 10:55:13
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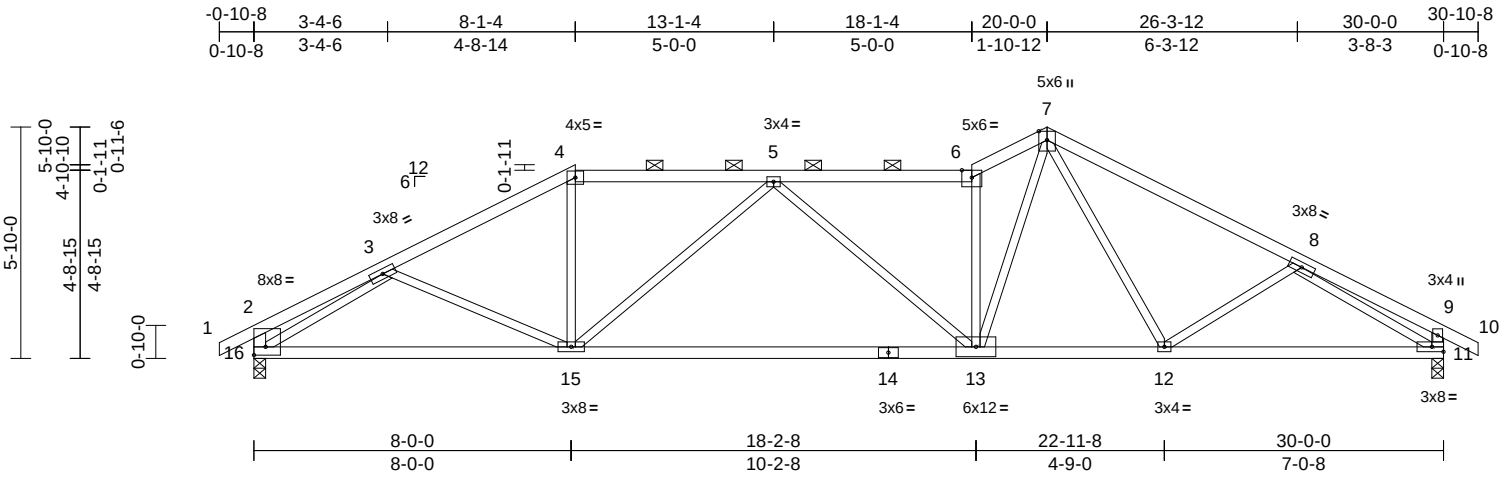

Scale = 1:58.1

Plate Offsets (X, Y): [2: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	0.77	Vert(LL)	-0.26	13-15	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.90	Vert(CT)	-0.58	13-15	>616	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.83	Horz(CT)	0.09	11	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.11	13-15	>999	240	Weight: 115 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except* 16-2,11-9:2x4 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 (3-7-11 max.): 4-6.
BOT CHORD Rigid ceiling directly applied or 9-7-14 oc bracing.

REACTIONS (lb/size) 11=1408/0-3-8, 16=1408/0-3-8
Max Horiz 16=-93 (LC 6)
Max Uplift 11=-148 (LC 9), 16=-236 (LC 8)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/32, 2-3=-327/41, 3-4=-2046/328, 4-5=-1761/329, 5-6=-2123/317, 6-7=-2364/379, 7-8=-2003/266, 8-9=-319/9, 9-10=0/32, 2-16=-315/73, 9-11=-289/37
BOT CHORD 15-16=-355/1720, 13-15=-328/2198, 12-13=-139/1618, 11-12=-176/1788
WEBS 3-15=-13/148, 4-15=-10/557, 5-15=-583/170, 5-13=-216/137, 6-13=-1230/253, 7-13=-259/1537, 7-12=-56/231, 8-12=-202/203, 3-16=-1799/348, 8-11=-1863/269

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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 236 lb uplift at joint 16 and 148 lb uplift at joint 11.
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) 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

September 27,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	A5	Hip	1	1	I48073497
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Aug 16 2021 Print: 8.430 S Aug 16 2021 MiTek Industries, Inc. Fri Sep 24 10:55:13
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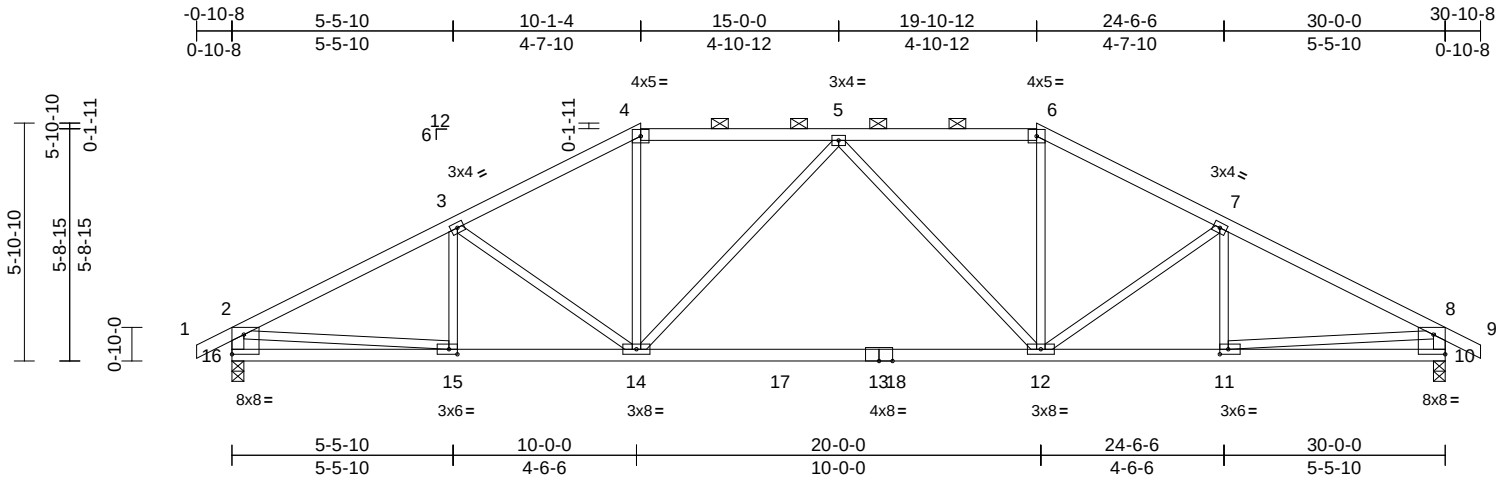

Scale = 1:57

Plate Offsets (X, Y): [10:Edge,0-5-13], [11:0-2-8,0-1-8], [15:0-2-8,0-1-8], [16:Edge,0-5-13]

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)	-0.29	12-14	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.52	12-14	>686	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.54	Horz(CT)	0.05	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.06	12-14	>999	240	Weight: 116 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF 2100F 1.8E
WEBS 2x3 SPF No.2 *Except* 16-2,10-8:2x4 SPF No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-8-4 oc purlins, except end verticals, and 2-0-0 oc purlins (4-3-0 max.): 4-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 10=1408/0-3-8, 16=1408/0-3-8
Max Horiz 16=-93 (LC 6)
Max Uplift 10=-149 (LC 9), 16=-149 (LC 8)
Max Grav 10=1454 (LC 2), 16=1454 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/32, 2-3=-2192/195, 3-4=-2007/165, 4-5=-1740/175, 5-6=-1740/175, 6-7=-2007/165, 7-8=-2192/195, 8-9=0/32, 2-16=-1338/181, 8-10=-1338/181
BOT CHORD 15-16=-152/480, 14-15=-175/1893, 12-14=-152/1899, 11-12=-99/1893, 10-11=-81/446
WEBS 3-15=-111/48, 3-14=-235/165, 4-14=0/620, 5-14=-400/152, 5-12=-400/152, 6-12=0/620, 7-12=-235/165, 7-11=-111/48, 2-15=-39/1456, 8-11=-39/1456

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, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 149 lb uplift at joint 16 and 149 lb uplift at joint 10.
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) 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

September 27,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	A6	Hip	1	1	I48073498
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

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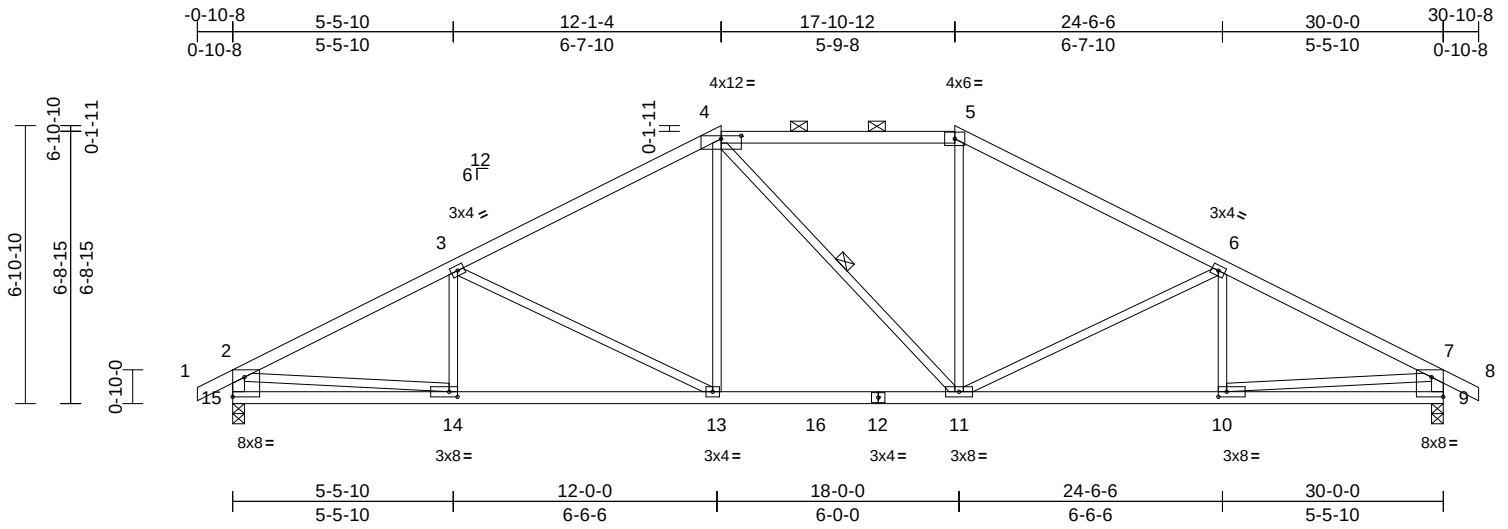

Scale = 1:57.1

Plate Offsets (X, Y): [4:0-6-0,0-0-15], [9:Edge,0-5-13], [10:0-2-8,0-1-8], [14:0-2-8,0-1-8], [15:Edge,0-5-13]

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)	-0.12	13-14	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.67	Vert(CT)	-0.23	13-14	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.57	Horz(CT)	0.06	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.06	13-14	>999	240	Weight: 117 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 2-10-13 oc purlins, except end verticals, and 2-0-0 oc purlins (4-0-10 max.): 4-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 4-11

REACTIONS (lb/size) 9=1408/0-3-8, 15=1408/0-3-8
Max Horiz 15=-106 (LC 6)
Max Uplift 9=-167 (LC 9), 15=-167 (LC 8)
Max Grav 9=1449 (LC 2), 15=1453 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/32, 2-3=-2242/232, 3-4=-1851/188, 4-5=-1568/214, 5-6=-1842/188, 6-7=-2234/232, 7-8=0/32, 2-15=-1360/193, 7-9=-1356/193
BOT CHORD 14-15=-146/397, 13-14=-231/1946, 11-13=-55/1576, 10-11=-138/1939, 9-10=-59/346
WEBS 3-14=-64/128, 3-13=-435/196, 4-13=-13/449, 4-11=-176/177, 5-11=-1/429, 6-11=-434/196, 6-10=-64/128, 2-14=-86/1609, 7-10=-80/1602

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, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 167 lb uplift at joint 15 and 167 lb uplift at joint 9.
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) 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

September 27,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	A7	Hip	1	1	I48073499
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Aug 16 2021 Print: 8.430 S Aug 16 2021 MiTek Industries, Inc. Fri Sep 24 10:55:14 Page: 1
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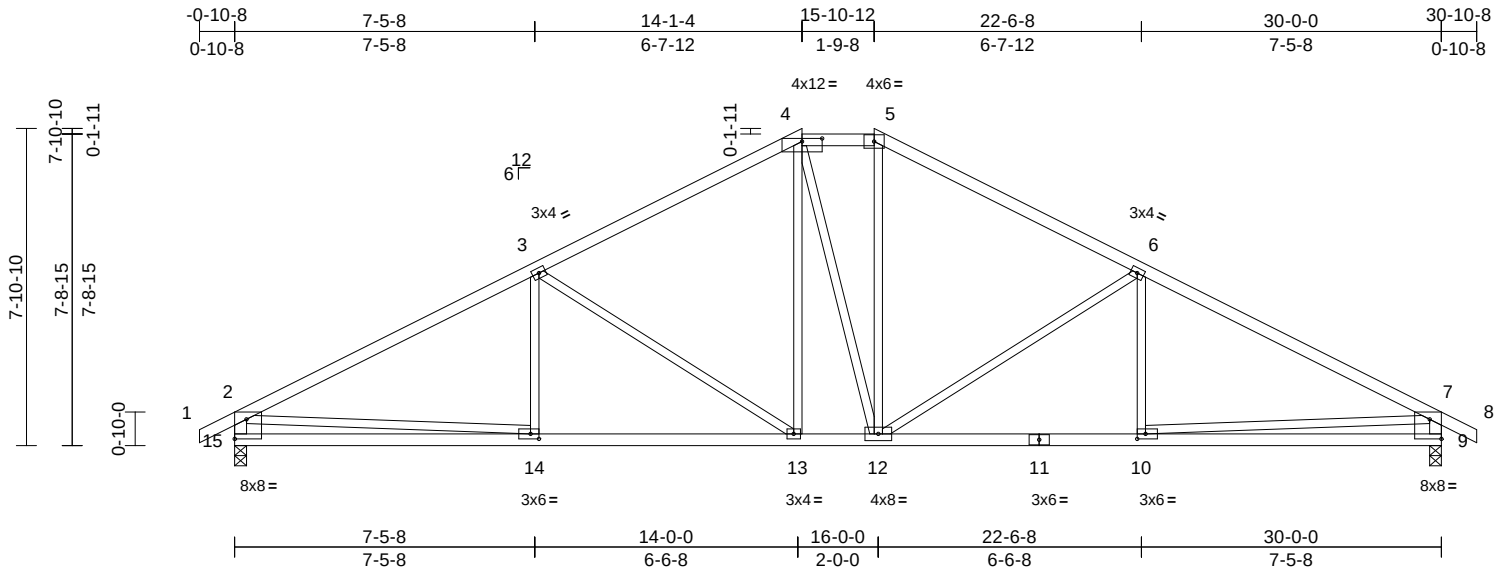

Scale = 1:57.3

Plate Offsets (X, Y): [4:0-6-0,0-0-15], [9:Edge,0-5-13], [10:0-2-8,0-1-8], [14:0-2-8,0-1-8], [15:Edge,0-5-13]

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	0.62	Vert(LL)	-0.10	13-14	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.55	Vert(CT)	-0.21	13-14	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.90	Horz(CT)	0.06	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 No.2
WEBS 2x3 SPF No.2 *Except* 15-2,9-7:2x4 SPF 2100F 1.8E

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-4-14 oc purlins, except end verticals, and 2-0-0 oc purlins (4-10-1 max.): 4-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 9=1408/0-3-8, 15=1408/0-3-8
Max Horiz 15=-118 (LC 6)
Max Uplift 9=-183 (LC 9), 15=-183 (LC 8)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/32, 2-3=-2142/249, 3-4=-1604/216, 4-5=-1333/235, 5-6=-1606/216, 6-7=-2141/249, 7-8=0/32, 2-15=-1334/223, 7-9=-1334/223
BOT CHORD 14-15=-276/609, 13-14=-234/1812, 12-13=-53/1331, 10-12=-123/1811, 9-10=-173/611
WEBS 3-14=0/232, 3-13=-598/215, 4-13=-69/398, 4-12=-199/215, 5-12=-64/397, 6-12=-595/214, 6-10=0/229, 2-14=-1/1207, 7-10=-9/1204

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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 183 lb uplift at joint 15 and 183 lb uplift at joint 9.
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) 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

September 27,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	A8	Common	3	1	I48073500
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

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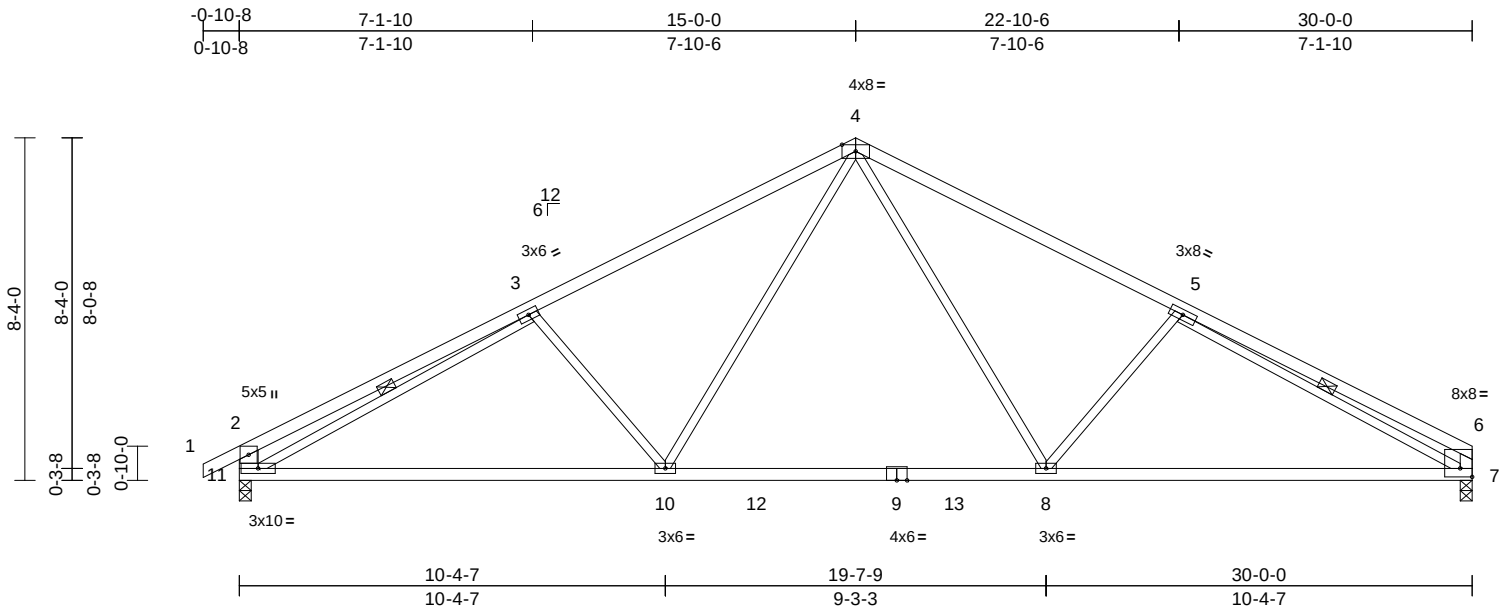

Scale = 1:56.1

Plate Offsets (X, Y): [6: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	0.54	Vert(LL)	-0.23	8-10	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.43	7-8	>824	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.92	Horz(CT)	0.06	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.07	8-10	>999	240	Weight: 110 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF 2100F 1.8E
WEBS 2x3 SPF No.2 *Except* 11-2:2x6 SPF No.2, 7-6:2x4 SPF 2400F 2.0E

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-6-12 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 3-11, 5-7

REACTIONS (lb/size) 7=1332/0-3-8, 11=1412/0-3-8
Max Horiz 11=129 (LC 7)
Max Uplift 7=-165 (LC 9), 11=-190 (LC 8)
Max Grav 7=1405 (LC 2), 11=1471 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-817/174, 3-4=-1987/281, 4-5=-2002/285, 5-6=-731/111, 2-11=-610/181, 6-7=-472/121
BOT CHORD 10-11=-303/1869, 8-10=-65/1325, 7-8=-200/1896
WEBS 4-8=-118/763, 5-8=-457/292, 4-10=-114/741, 3-10=-434/284, 3-11=-1415/128, 5-7=-1522/197

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, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 190 lb uplift at joint 11 and 165 lb uplift at joint 7.
6) 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

September 27,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	B1	Half Hip Girder	1	3	I48073501
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Aug 16 2021 Print: 8.430 S Aug 16 2021 MiTek Industries, Inc. Fri Sep 24 10:55:15 Page: 1
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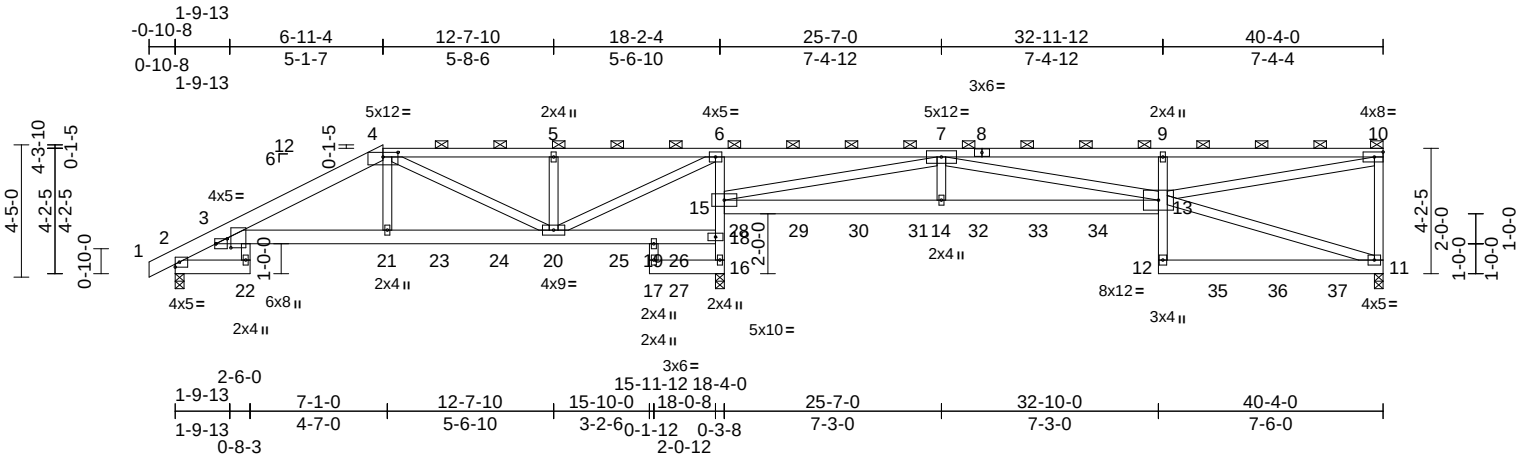

Scale = 1:76.9

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

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)	-0.18	13-14	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.63	Vert(CT)	-0.31	13-14	>847	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.56	Horz(CT)	0.13	11	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.11	13-14	>999	240	Weight: 667 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF No.2 *Except* 1-4:2x6 SPF No.2
BOT CHORD 2x6 SP 2400F 2.0E *Except* 16-6,9-12:2x4 SPF 2100F 1.8E
WEBS 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.): 4-10.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (lb/size) 2=1595/0-3-8, 11=2216/0-3-8, 16=5227/0-3-8
Max Horiz 2=127 (LC 7)
Max Uplift 2=-206 (LC 8), 11=-255 (LC 4), 16=-675 (LC 5)
Max Grav 2=1595 (LC 1), 11=2223 (LC 20), 16=5227 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/6, 2-3=-946/136, 3-4=-3393/550, 4-5=-1971/313, 5-6=-1971/313, 6-7=-303/2090, 7-9=-5943/720, 9-10=-5669/698, 10-11=-1648/222
BOT CHORD 2-22=-159/13, 3-21=-566/3035, 20-21=-580/3113, 19-20=-1909/234, 18-19=-1909/234, 16-17=0/0, 16-18=-5251/694, 15-18=-5013/676, 6-15=-2507/400, 14-15=-609/5233, 13-14=-609/5233, 12-13=-16/471, 9-13=-530/137, 11-12=-36/364
WEBS 3-22=-18/220, 17-19=0/71, 7-15=-7478/890, 7-14=-74/1125, 7-13=-125/764, 11-13=-292/62, 10-13=-695/5751, 4-21=-274/1506, 5-20=-336/125, 4-20=-1274/285, 6-20=-627/4351

NOTES

1) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row 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) All plates are 2x4 MT20 unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 255 lb uplift at joint 11, 206 lb uplift at joint 2 and 675 lb uplift at joint 16.
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) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 934 lb down and 274 lb up at 6-11-4, 275 lb down and 42 lb up at 8-10-0, 275 lb down and 42 lb up at 10-10-0, 275 lb down and 42 lb up at 12-10-0, 275 lb down and 42 lb up at 14-10-0, 275 lb down and 41 lb up at 16-10-0, 275 lb down and 46 lb up at 18-10-0, 275 lb down and 46 lb up at 20-10-0, 275 lb down and 46 lb up at 22-10-0, 275 lb down and 46 lb up at 24-10-0, 275 lb down and 46 lb up at 26-10-0, 275 lb down and 46 lb up at 28-10-0, 275 lb down and 46 lb up at 30-10-0, 275 lb down and 46 lb up at 32-11-12, 275 lb down and 41 lb up at 34-10-0, and 275 lb down and 41 lb up at 36-10-0, and 275 lb down and 41 lb up at 38-10-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

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, 4-10=-70, 2-22=-20, 3-19=-20, 16-17=-20, 13-15=-20, 11-12=-20
Concentrated Loads (lb)

September 27,2021

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Vert: 13=-275 (F), 21=-934 (F), 20=-275 (F), 23=-275 (F), 24=-275 (F), 25=-275 (F), 26=-275 (F), 28=-275 (F), 29=-275 (F), 30=-275 (F), 31=-275 (F), 32=-275 (F), 33=-275 (F), 34=-275 (F), 35=-275 (F), 36=-275 (F), 37=-275 (F)

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	B2	Half Hip	1	1	I48073502
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

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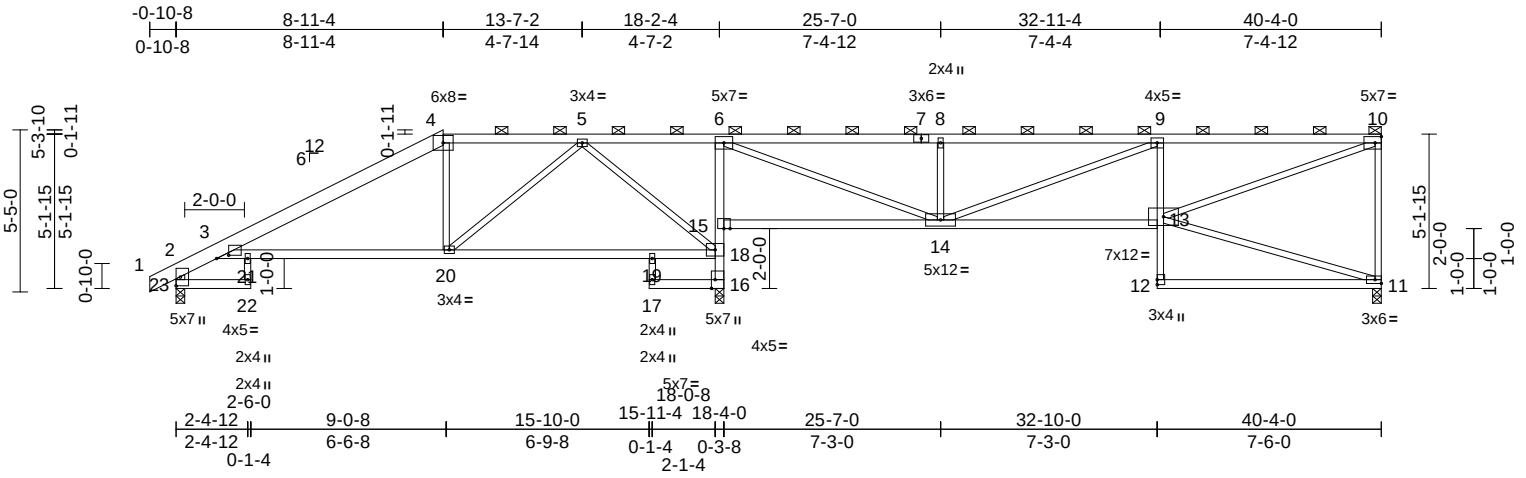

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Plate Offsets (X, Y): [3:0-4-13,0-1-5], [16:0-3-8,Edge]

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	0.95	Vert(LL)	-0.21	20-21	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.73	Vert(CT)	-0.41	20-21	>532	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.88	Horz(CT)	0.27	16	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.20	20-21	>999	240	Weight: 159 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF No.2 *Except* 1-4:2x6 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except* 9-12:2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except* 23-2:2x4 SPF No.2

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

REACTIONS (lb/size) 11=906/0-3-8, 16=1992/0-3-8, 23=781/0-3-8
Max Horiz 23=211 (LC 5)
Max Uplift 11=-182 (LC 4), 16=-400 (LC 5), 23=-110 (LC 8)
Max Grav 11=926 (LC 22), 16=1992 (LC 1), 23=781 (LC 1)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-340/45, 3-4=-958/71, 4-5=-802/125, 5-6=-208/412, 6-7=-1492/334, 7-8=-1492/334, 8-9=-1492/334, 9-10=-1745/389, 10-11=-853/214, 2-23=-785/141
BOT CHORD 3-21=-123/805, 20-21=-123/805, 19-20=-65/341, 18-19=-65/341, 16-18=-1975/428, 15-18=-1293/297, 6-15=-1212/332, 14-15=-503/136, 13-14=-370/1757, 9-13=-458/209
WEBS 6-14=-405/2029, 8-14=-506/212, 9-14=-335/137, 10-13=-360/1838, 5-18=-985/251, 5-20=-75/605

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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 182 lb uplift at joint 11, 110 lb uplift at joint 23 and 400 lb uplift at joint 16.
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) 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

September 27,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	B3	Half Hip	1	1	I48073503
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

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Page: 1

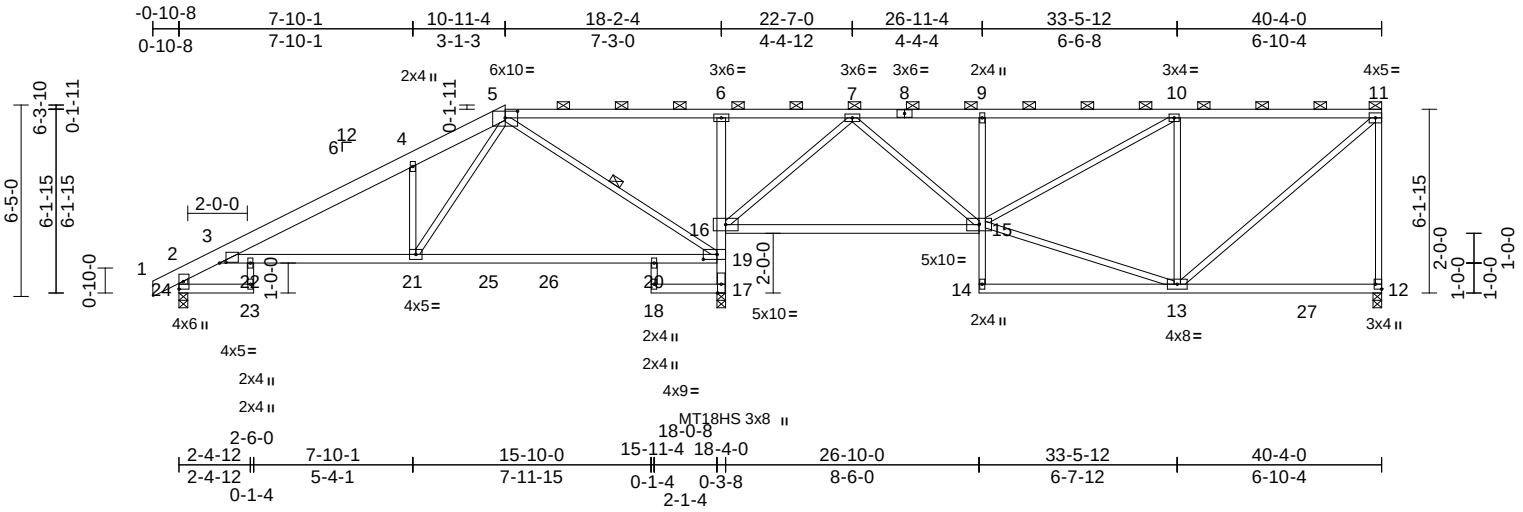

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Plate Offsets (X, Y): [3:0-2-9,0-0-5], [5:0-5-0,0-2-11], [12:Edge,0-2-8], [19:0-5-8,0-2-0]

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	0.97	Vert(LL)	-0.28	20-21	>786	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.78	Vert(CT)	-0.50	20-21	>432	240	MT18HS	197/144
BCLL	0.0*	Rep Stress Incr	YES	WB	1.00	Horz(CT)	0.25	17	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.14	21-22	>999	240	Weight: 170 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF No.2 *Except* 1-5:2x6 SPF No.2

BOT CHORD 2x4 SPF No.2 *Except* 3-19:2x4 SPF 2100F 1.8E, 9-14:2x3 SPF No.2

WEBS 2x3 SPF No.2 *Except* 24-2:2x4 SPF No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-7-5 oc purlins, except end verticals, and 2-0-0 oc purlins (4-9-9 max.): 5-11.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
4-0-11 oc bracing: 17-19
3-4-5 oc bracing: 16-19
6-0-0 oc bracing: 13-14.

WEBS 1 Row at midpt 5-19

REACTIONS (lb/size) 12=904/0-3-8, 17=1996/0-3-8, 24=778/0-3-8
Max Horiz 24=252 (LC 5)
Max Uplift 12=-181 (LC 4), 17=-415 (LC 5), 24=-118 (LC 8)
Max Grav 12=998 (LC 24), 17=2065 (LC 2), 24=835 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/32, 2-3=-435/43, 3-4=-1288/138, 4-5=-1345/278, 5-6=-215/314, 6-7=-239/399, 7-9=-1265/276, 9-10=-1251/283, 10-11=-831/218, 11-12=-872/218, 2-24=-821/147

BOT CHORD 23-24=0/0, 3-22=-137/1141, 21-22=-137/1141, 20-21=-89/570, 19-20=-89/570, 17-18=0/0, 17-19=-2004/442, 16-19=-1365/341, 6-16=-482/195, 15-16=-84/642, 14-15=0/105, 9-15=-381/159, 13-14=-17/3, 12-13=-82/61

WEBS 22-23=-7/68, 18-20=-2/20, 5-21=-212/1088, 5-19=-978/249, 7-15=-146/857, 13-15=-157/877, 10-15=-75/488, 10-13=-760/249, 11-13=-202/1084, 7-16=-1187/299, 4-21=-517/272

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) 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 181 lb uplift at joint 12, 118 lb uplift at joint 24 and 415 lb uplift at joint 17.
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

September 27,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	B4	Half Hip	1	1	I48073504
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

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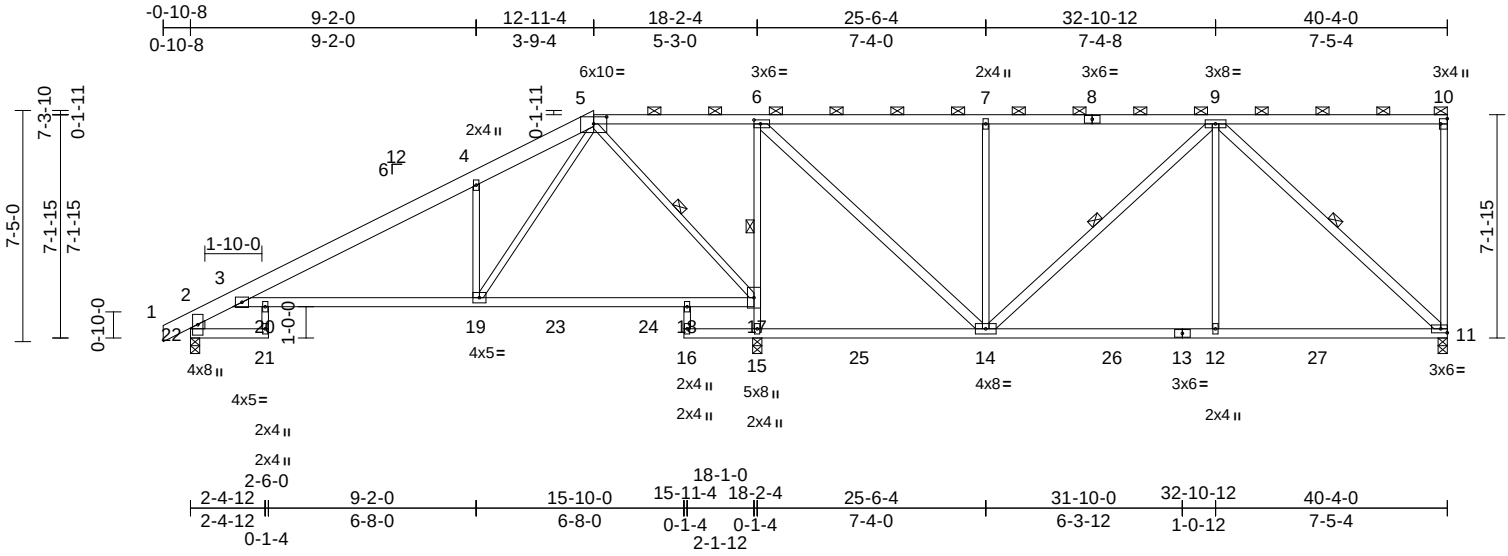


Scale = 1:73.9

Plate Offsets (X, Y): [5:0-5-0,0-2-11], [6:0-2-8,0-1-8], [10: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	0.79	Vert(LL)	-0.24	19-20	>912	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.83	Vert(CT)	-0.43	19-20	>496	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.70	Horz(CT)	0.11	11	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.22	19-20	>994	240	Weight: 180 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF No.2 *Except* 1-5:2x6 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except* 22-2:2x6 SPF No.2, 11-9,14-6,14-9:2x4 SPF No.2

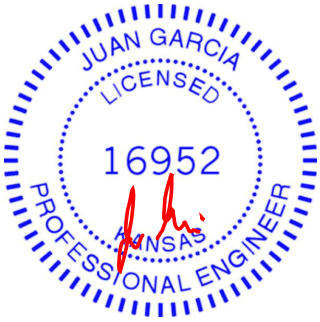
BRACING
TOP CHORD Structural wood sheathing directly applied or 3-5-6 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-10.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 14-15.
WEBS 1 Row at midpt 5-17, 9-11, 6-15, 9-14

REACTIONS (lb/size) 11=950/0-3-8, 15=1890/0-3-8, 22=837/0-3-8
Max Horiz 22=294 (LC 5)
Max Uplift 11=-207 (LC 4), 15=-371 (LC 5), 22=-155 (LC 8)
Max Grav 11=1050 (LC 24), 15=2098 (LC 2), 22=866 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-476/59, 3-4=-1174/219, 4-5=-1249/389, 5-6=-178/152, 6-7=-770/265, 7-9=-770/265, 9-10=-99/76, 10-11=-212/94, 2-22=-857/193
BOT CHORD 21-22=0/0, 3-20=-215/1028, 19-20=-215/1028, 18-19=-98/408, 17-18=-98/408, 15-16=0/0, 14-15=-73/22, 12-14=-178/826, 11-12=-178/826
WEBS 20-21=-13/70, 16-18=-106/0, 5-19=-286/1159, 5-17=-741/164, 9-11=-1116/228, 15-17=-1740/464, 6-17=-1185/351, 4-19=-659/331, 7-14=-505/212, 6-14=-221/1089, 9-14=-131/36, 9-12=0/447

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) All plates are 2x4 MT20 unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 207 lb uplift at joint 11, 155 lb uplift at joint 22 and 371 lb uplift at joint 15.
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



September 27,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	B5	Half Hip	1	1	I48073505
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

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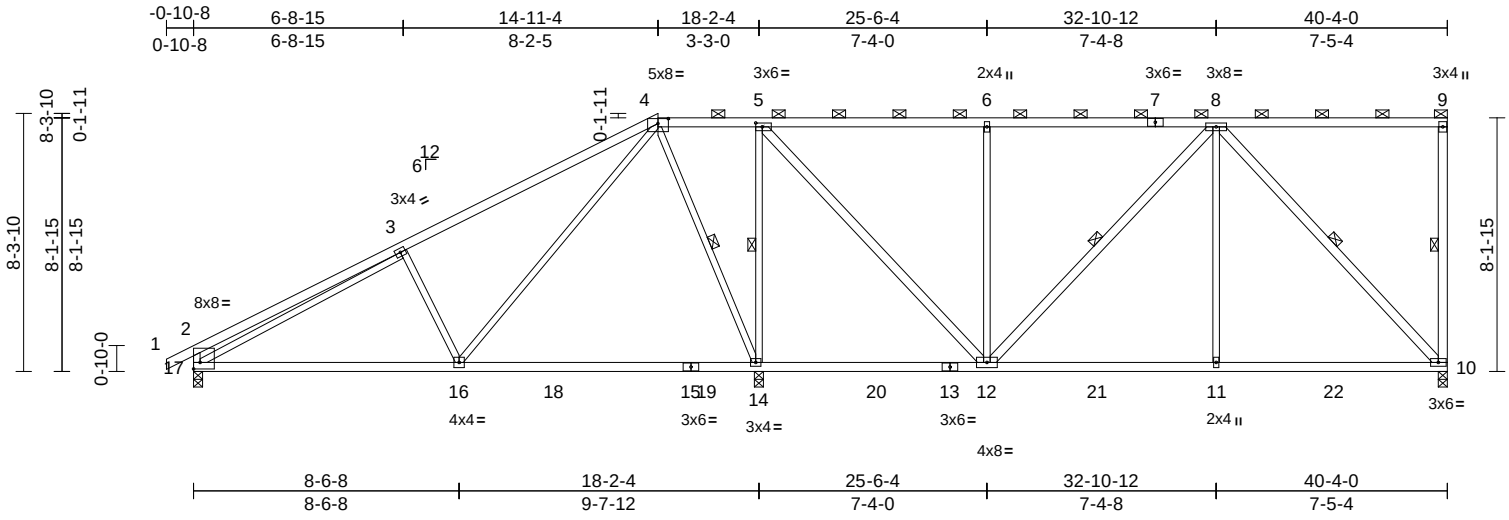

Scale = 1:74.1

Plate Offsets (X, Y): [2:Edge,0-2-8], [4:0-4-0,0-1-15], [5:0-2-8,0-1-8]

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	0.81	Vert(LL)	-0.29	14-16	>760	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.71	Vert(CT)	-0.43	14-16	>506	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.80	Horz(CT)	0.02	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	-0.03	10-11	>999	240	Weight: 182 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except* 9-10,8-10,12-5,12-8:2x4 SPF No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-1-9 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-9.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 9-10, 4-14, 5-14, 8-10, 8-12

REACTIONS (lb/size) 10=834/0-3-8, 14=2147/0-3-8, (req. 0-3-12), 17=695/0-3-8
Max Horiz 17=334 (LC 5)
Max Uplift 10=-193 (LC 4), 14=-320 (LC 5), 17=-120 (LC 8)
Max Grav 10=969 (LC 24), 14=2385 (LC 2), 17=699 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/31, 2-3=-426/143, 3-4=-683/209, 4-5=-72/430, 5-6=-486/226, 6-8=-486/226, 8-9=-114/88, 9-10=-216/96, 2-17=-409/153
BOT CHORD 16-17=-213/716, 14-16=-196/88, 12-14=-465/116, 11-12=-187/640, 10-11=-187/640
WEBS 3-16=-496/294, 4-16=-187/944, 4-14=-854/221, 3-17=-470/19, 5-14=-1187/301, 8-10=-918/192, 6-12=-521/215, 5-12=-186/1210, 8-12=-286/13, 8-11=0/454

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, with BCDL = 10.0psf.
6) WARNING: Required bearing size at joint(s) 14 greater than input bearing size.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 193 lb uplift at joint 10, 320 lb uplift at joint 14 and 120 lb uplift at joint 17.
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

September 27,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	C1	Hip	1	1	I48073506
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Aug 16 2021 Print: 8.430 S Aug 16 2021 MiTek Industries, Inc. Fri Sep 24 10:55:18 Page: 1
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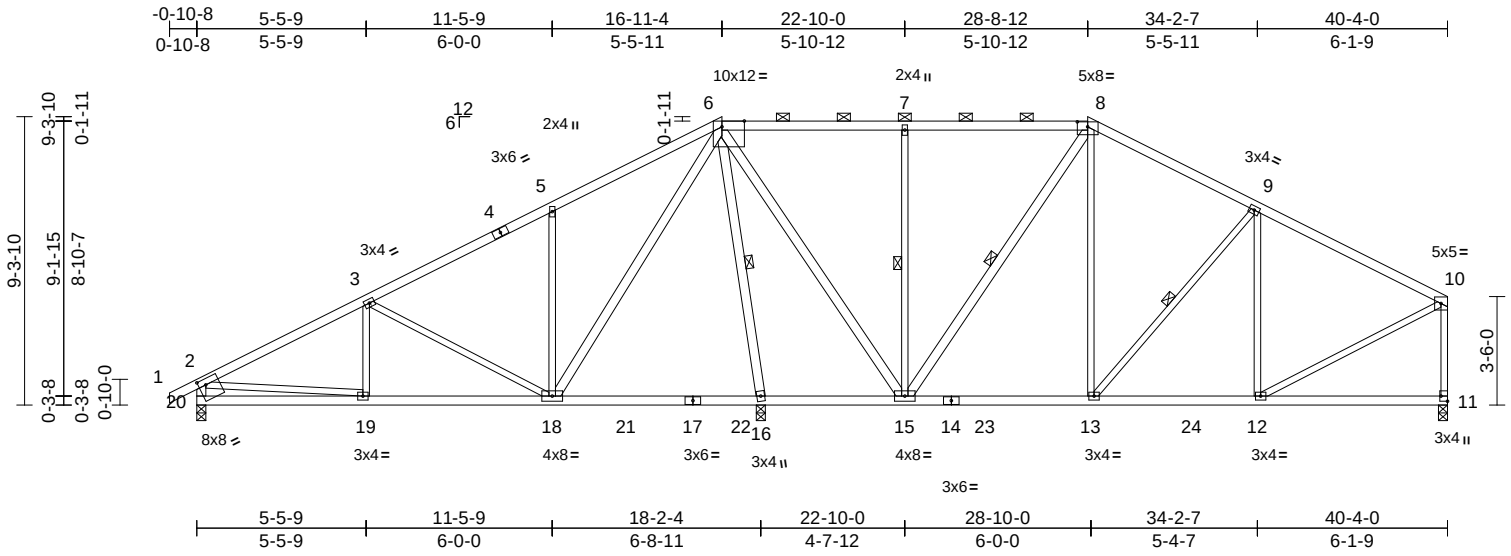

Scale = 1:74.3

Plate Offsets (X, Y): [6:0-8-10,Edge], [8:0-4-0,0-1-15], [11:Edge,0-2-8], [20:0-2-12,0-2-4]

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	0.47	Vert(LL)	-0.08	16-18	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.43	Vert(CT)	-0.13	13-15	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.72	Horz(CT)	0.02	11	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.03	18-19	>999	240	Weight: 193 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
16-6,15-6,15-8,20-2,18-6:2x4 SPF No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-7-1 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-8.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 16-18,15-16.
WEBS 1 Row at midpt 6-16, 7-15, 8-15, 9-13

REACTIONS (lb/size) 11=873/0-3-8, 16=2063/0-3-8, 20=743/0-3-8
Max Horiz 20=217 (LC 5)
Max Uplift 11=-120 (LC 9), 16=-186 (LC 8), 20=-121 (LC 8)
Max Grav 11=978 (LC 24), 16=2222 (LC 2), 20=761 (LC 23)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/32, 2-3=-968/141, 3-5=-494/105, 5-6=-489/237, 6-7=-325/194, 7-8=-327/196, 8-9=-729/185, 9-10=-874/125, 2-20=-707/150, 10-11=-885/149
BOT CHORD 19-20=-214/333, 18-19=-205/834, 16-18=-220/93, 15-16=-455/129, 13-15=-41/579, 12-13=-88/723, 11-12=-41/34
WEBS 6-16=-1985/255, 6-15=-143/1211, 7-15=-477/200, 8-15=-544/82, 8-13=-42/456, 9-13=-268/143, 2-19=0/549, 3-19=0/191, 3-18=-502/173, 5-18=-418/236, 6-18=-279/982, 9-12=-237/110, 10-12=-66/793

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, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 121 lb uplift at joint 20, 186 lb uplift at joint 16 and 120 lb uplift at joint 11.
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) 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

September 27,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	C2	Hip	1	1	I48073507
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Aug 16 2021 Print: 8.430 S Aug 16 2021 MiTek Industries, Inc. Fri Sep 24 10:55:19 Page: 1
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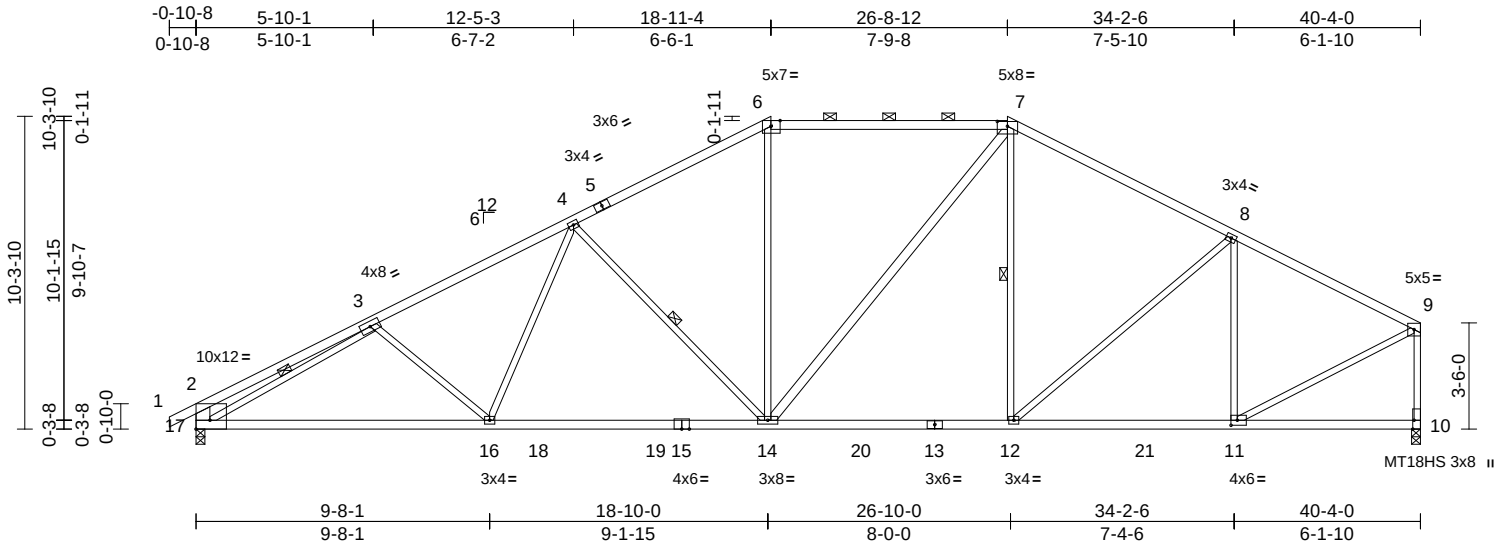

Scale = 1:75.9

Plate Offsets (X, Y): [2:Edge,0-3-8], [6:0-3-10,Edge], [7:0-4-0,0-1-15], [10:0-3-8,Edge], [11:0-2-8,0-2-0]

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	0.82	Vert(LL)	-0.27	14-16	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.60	Vert(CT)	-0.45	14-16	>999	240	MT18HS	197/144
BCLL	0.0*	Rep Stress Incr	YES	WB	0.99	Horz(CT)	0.10	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.11	14-16	>999	240	Weight: 171 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF No.2 *Except* 6-7:2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF 2100F 1.8E
WEBS 2x3 SPF No.2 *Except* 14-7:2x4 SPF No.2, 17-2:2x6 SPF No.2

BRACING

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (3-10-14 max.): 6-7.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 4-14, 7-12, 3-17

REACTIONS (lb/size) 10=1799/0-3-8, 17=1878/0-3-8
Max Horiz 17=229 (LC 5)
Max Uplift 10=-167 (LC 9), 17=-240 (LC 8)
Max Grav 10=1948 (LC 2), 17=1991 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/35, 2-3=-786/147, 3-4=-3042/350, 4-6=-2332/296, 6-7=-2007/309, 7-8=-2119/232, 8-9=-1934/176, 2-17=-573/160, 9-10=-1862/193
BOT CHORD 16-17=-434/2702, 14-16=-274/2478, 12-14=-78/1809, 11-12=-140/1675, 10-11=-40/33
WEBS 3-16=-181/204, 4-16=-12/466, 4-14=-691/270, 6-14=-11/593, 7-14=-124/457, 7-12=-50/298, 3-17=-2434/247, 9-11=-126/1877, 8-12=-70/312, 8-11=-676/150

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) 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 240 lb uplift at joint 17 and 167 lb uplift at joint 10.
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

September 27,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	C3	Hip	1	1	I48073508
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Aug 16 2021 Print: 8.430 S Aug 16 2021 MiTek Industries, Inc. Fri Sep 24 10:55:19 Page: 1
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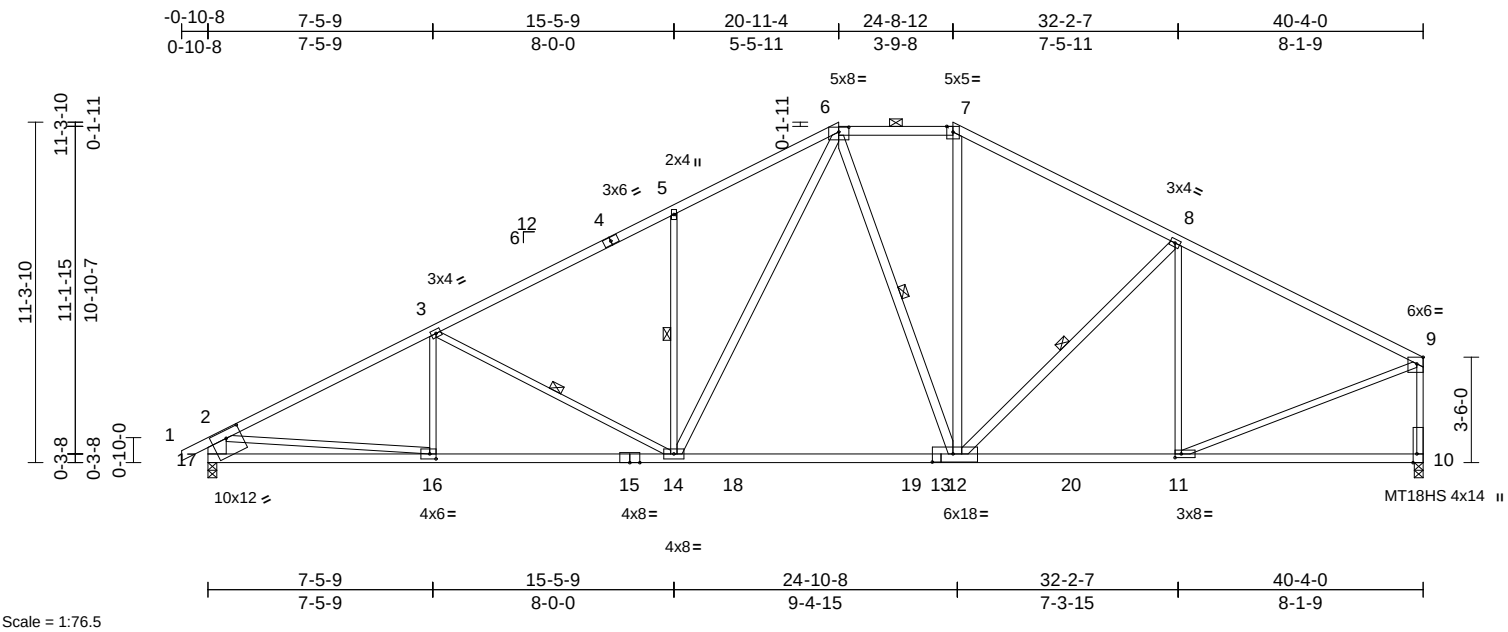

Scale = 1:76.5

Plate Offsets (X, Y): [6:0-4-0,0-1-15], [9:0-2-8,Edge], [10:0-3-8,Edge], [11:0-2-8,0-1-8], [12:0-8-4,0-3-4], [16:0-2-8,0-2-0], [17:0-6-0,0-3-0]

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	0.90	Vert(LL)	-0.35	12-14	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.97	Vert(CT)	-0.57	12-14	>837	240	MT18HS	197/144
BCLL	0.0*	Rep Stress Incr	YES	WB	0.83	Horz(CT)	0.08	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.12	14-16	>999	240	Weight: 187 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF No.2 *Except* 7-9:2x4 SPF 2100F 1.8E

BOT CHORD 2x4 SPF No.2 *Except* 15-13:2x4 SPF 2100F 1.8E

WEBS 2x3 SPF No.2 *Except* 12-6,12-7,12-8,14-6:2x4 SPF No.2, 17-2:2x8 SP DSS

BRACING

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (4-4-7 max.): 6-7.

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

WEBS 1 Row at midpt 3-14, 5-14, 6-12, 8-12

REACTIONS (lb/size) 10=1796/0-3-8, 17=1880/0-3-8
Max Horiz 17=243 (LC 5)
Max Uplift 10=-185 (LC 9), 17=-254 (LC 8)
Max Grav 10=1930 (LC 2), 17=1972 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/37, 2-3=-3142/376, 3-5=-2644/334, 5-6=-2617/488, 6-7=-1722/276, 7-8=-2038/286, 8-9=-2103/213, 2-17=-1844/293, 9-10=-1805/224

BOT CHORD 16-17=-327/680, 14-16=-425/2725, 12-14=-87/1765, 11-12=-147/1803, 10-11=-37/54

WEBS 3-16=-50/168, 3-14=-553/225, 5-14=-497/283, 6-12=-353/157, 7-12=-64/550, 8-12=-234/198, 8-11=-497/147, 9-11=-122/1893, 2-16=-98/2141, 6-14=-312/1149

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) 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 254 lb uplift at joint 17 and 185 lb uplift at joint 10.
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

September 27,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	C4	Common	2	1	I48073509
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Aug 16 2021 Print: 8.430 S Aug 16 2021 MiTek Industries, Inc. Fri Sep 24 10:55:19 Page: 1
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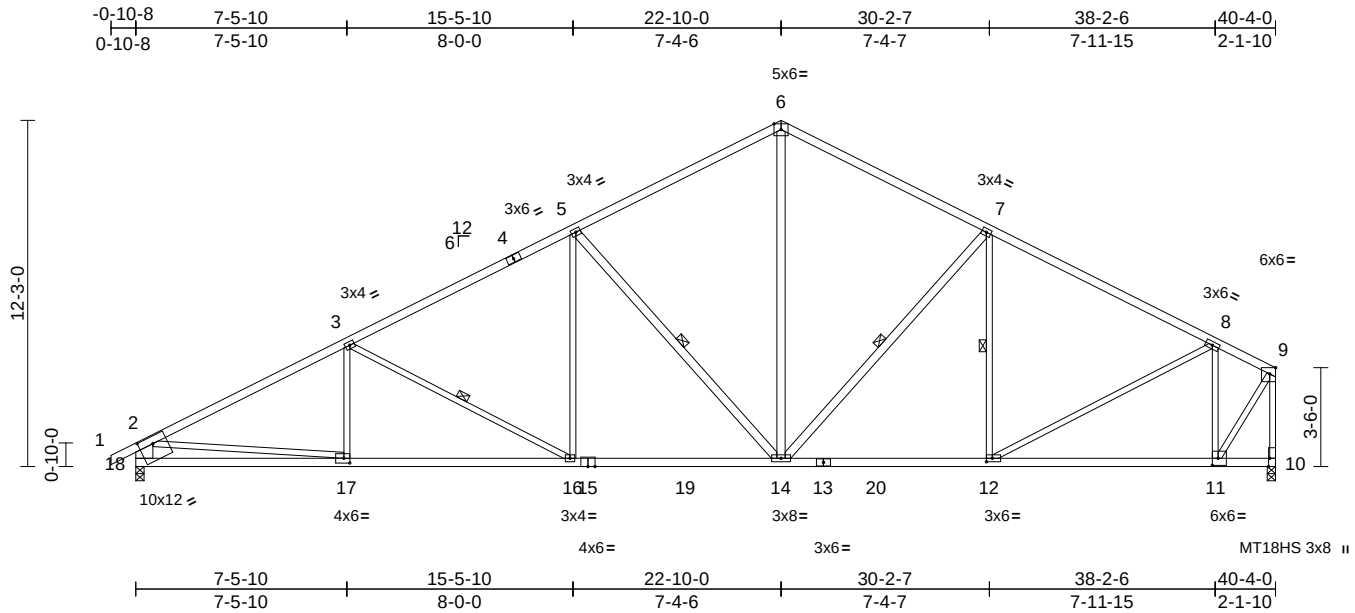

Scale = 1:81.5

Plate Offsets (X, Y): [9:0-2-8,Edge], [10:0-3-8,Edge], [11:0-2-8,0-3-0], [12:0-2-8,0-1-8], [17:0-2-8,0-2-0], [18:0-6-0,0-3-0]

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	0.81	Vert(LL)	-0.23	14-16	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.97	Vert(CT)	-0.40	16-17	>999	240	MT18HS	197/144
BCLL	0.0*	Rep Stress Incr	YES	WB	0.73	Horz(CT)	0.10	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.12	16-17	>999	240	Weight: 183 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except* 18-2:2x8 SP DSS, 14-6,14-7,14-5:2x4 SPF No.2

BRACING
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 7-14, 7-12, 5-14, 3-16

REACTIONS (lb/size) 10=1796/0-3-8, 18=1880/0-3-8
Max Horiz 18=256 (LC 5)
Max Uplift 10=-199 (LC 9), 18=-264 (LC 8)
Max Grav 10=1913 (LC 2), 18=1967 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/37, 2-3=-3137/391, 3-5=-2623/361, 5-6=-1912/318, 6-7=-1912/347, 7-8=-2137/255, 8-9=-1036/102, 2-18=-1844/302, 9-10=-1940/180
BOT CHORD 17-18=-357/696, 16-17=-455/2731, 14-16=-272/2263, 12-14=-134/1824, 11-12=-134/953, 10-11=-46/36
WEBS 2-17=-98/2131, 9-11=-212/1792, 6-14=-153/1243, 7-14=-422/219, 7-12=-265/123, 8-12=-59/986, 8-11=-1298/270, 5-14=-986/307, 3-17=-40/185, 3-16=-549/208, 5-16=-5/576

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) All plates are MT20 plates unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 264 lb uplift at joint 18 and 199 lb uplift at joint 10.
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

September 27,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	D1	Roof Special	2	1	I48073510
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Aug 16 2021 Print: 8.430 S Aug 16 2021 MiTek Industries, Inc. Fri Sep 24 10:55:20 Page: 1
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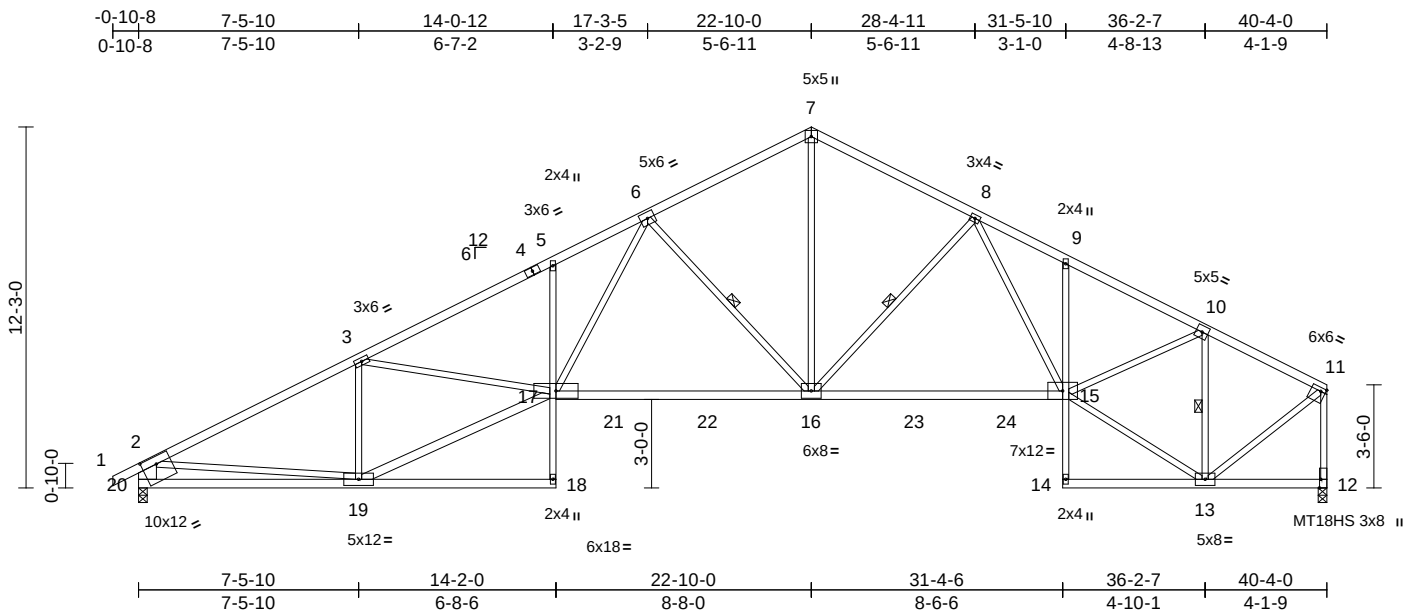


Scale = 1:78.2

Plate Offsets (X, Y): [11:0-2-0,0-1-8], [12:0-3-8,Edge], [20:0-6-0,0-3-0]

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	0.91	Vert(LL)	-0.45	16-17	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.79	16-17	>609	240	MT18HS	197/144
BCLL	0.0*	Rep Stress Incr	YES	WB	0.83	Horz(CT)	0.35	12	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.22	16-17	>999	240	Weight: 184 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except* 18-5,9-14:2x3 SPF No.2, 17-15:2x4 SPF 2100F 1.8E
WEBS 2x3 SPF No.2 *Except* 19-17:2x4 SPF No.2, 20-2:2x8 SP DSS

BRACING
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 6-16, 8-16, 10-13

REACTIONS (lb/size) 12=1796/0-3-8, 20=1880/0-3-8
Max Horiz 20=256 (LC 5)
Max Uplift 12=-199 (LC 9), 20=-264 (LC 8)
Max Grav 12=1899 (LC 2), 20=1957 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/37, 2-3=-3113/389, 3-5=-4341/593, 5-6=-4296/679, 6-7=-2481/345, 7-8=-2481/368, 8-9=-3218/421, 9-10=-3246/355, 10-11=-1546/167, 2-20=-1834/302, 11-12=-1841/214
BOT CHORD 19-20=-368/711, 18-19=-4/13, 17-18=0/109, 5-17=-317/170, 16-17=-330/3021, 15-16=-154/2580, 14-15=0/79, 9-15=-228/121, 13-14=-10/6, 12-13=-42/35
WEBS 3-19=-1196/308, 17-19=-491/2967, 3-17=-39/1125, 6-17=-328/1718, 6-16=-1288/370, 7-16=-197/1839, 8-16=-666/264, 8-15=-131/621, 11-13=-162/1711, 2-19=-84/2091, 10-13=-1751/263, 10-15=-79/1660, 13-15=-173/1595

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) All plates are MT20 plates unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 264 lb uplift at joint 20 and 199 lb uplift at joint 12.
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

September 27,2021

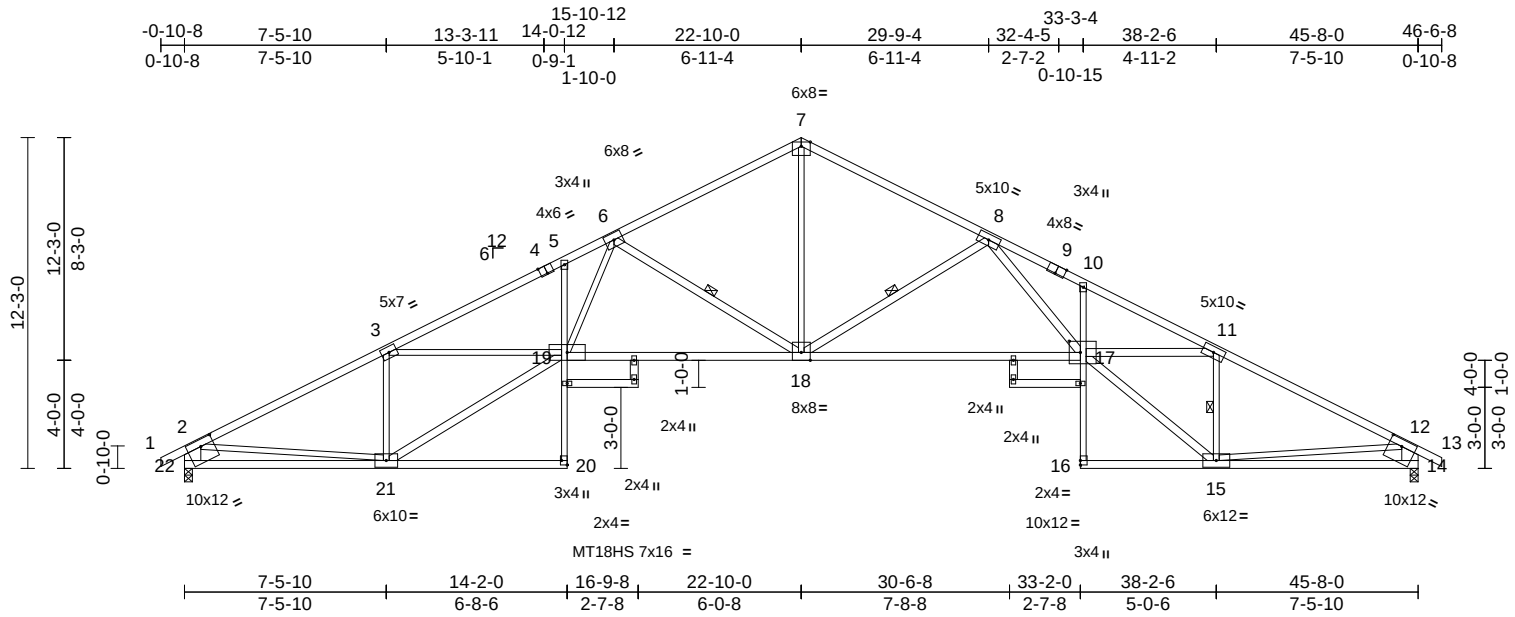
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	D2	Roof Special	3	1	I48073511
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Aug 16 2021 Print: 8.430 S Aug 16 2021 MiTek Industries, Inc. Fri Sep 24 10:55:20 ID:hquPfxpp0CdNHWhMuPizeLzNEki-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:85.3

Plate Offsets (X, Y): [4:0-3-0,Edge], [9:0-4-0,Edge], [14:0-5-12,0-3-0], [17:0-5-0,0-5-0], [20:Edge,0-2-8], [22:0-5-12,0-3-0]

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	0.67	Vert(LL)	-0.59	17-18	>915	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.65	Vert(CT)	-1.26	17-18	>430	240	MT18HS	197/144
BCLL	0.0*	Rep Stress Incr	YES	WB	0.92	Horz(CT)	0.76	14	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.38	18-19	>999	240	Weight: 213 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF 2400F 2.0E

BOT CHORD 2x4 SPF No.2 *Except* 22-20,19-17,16-14:2x4 SPF 2400F 2.0E, 20-5,10-16:2x3 SPF No.2

WEBS 2x3 SPF No.2 *Except* 21-19,15-17,17-11,8-18,8-17,6-18:2x4 SPF No.2, 22-2,14-12:2x8 SP DSS

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-5-6 oc purlins, except end verticals.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 15-16.

WEBS 1 Row at midpt 11-15, 8-18, 6-18

REACTIONS (lb/size) 14=2110/0-3-8, 22=2110/0-3-8
Max Horiz 22=-186 (LC 9)
Max Uplift 14=-279 (LC 9), 22=-279 (LC 8)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/37, 2-3=-3401/416, 3-5=-6210/786, 5-6=-6069/829, 6-7=-3379/382, 7-8=-3379/410, 8-10=-7335/705, 10-11=-7415/660, 11-12=-3383/414, 12-13=0/37, 2-22=-2029/316, 12-14=-2025/318

BOT CHORD 21-22=-356/735, 20-21=-2/15, 19-20=0/109, 5-19=-164/94, 18-19=-514/4648, 17-18=-226/4633, 16-17=0/72, 10-17=-163/90, 15-16=-6/11, 14-15=-195/783

WEBS 3-21=-1844/383, 19-21=-532/3412, 3-19=-186/2521, 7-18=-207/2456, 15-17=-335/3734, 11-17=-157/3637, 11-15=-2444/306, 2-21=-101/2208, 12-15=-72/2137, 8-18=-2037/409, 8-17=-284/3121, 6-18=-2054/485, 6-19=-314/2114

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) All plates are MT20 plates unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 279 lb uplift at joint 22 and 279 lb uplift at joint 14.
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

September 27,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	D3	Hip	1	1	I48073512
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Aug 16 2021 Print: 8.430 S Aug 16 2021 MiTek Industries, Inc. Fri Sep 24 10:55:21 Page: 1
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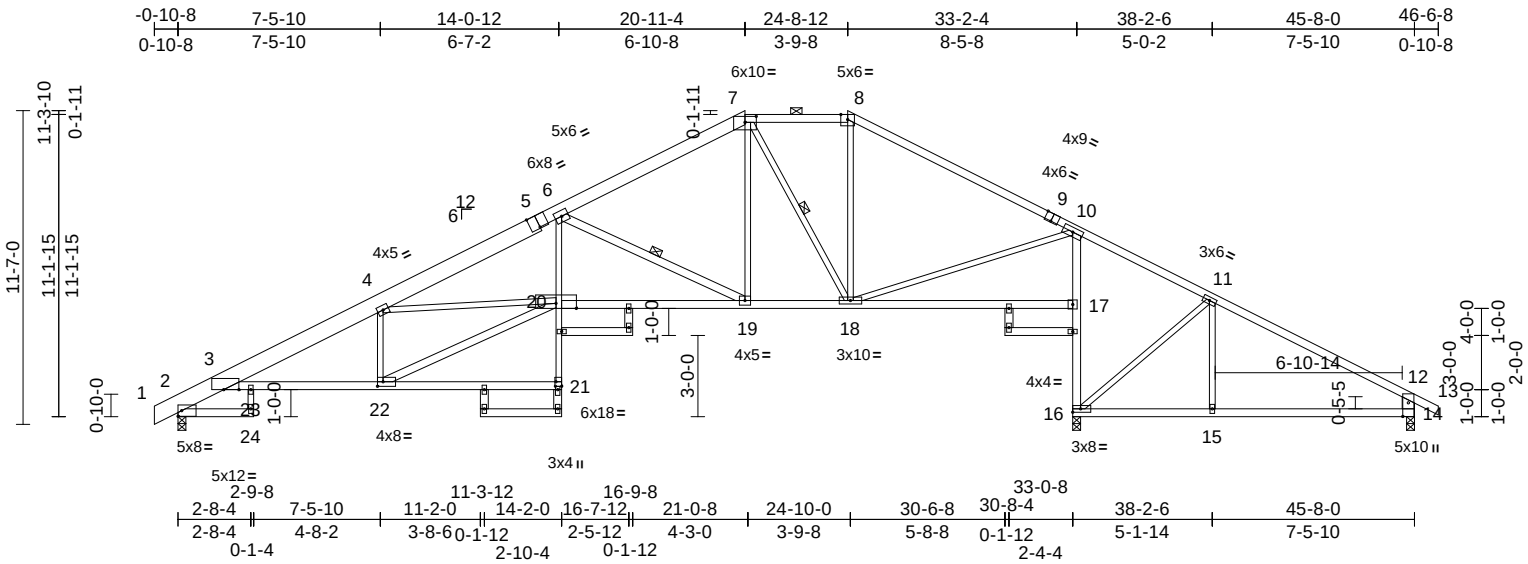

Scale = 1:85.1

Plate Offsets (X, Y): [3:0-6-12,Edge], [5:0-4-0,Edge], [7:0-5-0,0-2-11], [9:0-3-0,Edge], [14:0-6-1,0-2-8], [21:Edge,0-2-8], [21:0-1-8,0-1-0], [22:0-2-8,0-2-0]

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	0.88	Vert(LL)	-0.27	21	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.69	Vert(CT)	-0.51	19-20	>772	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.78	Horz(CT)	0.26	14	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.22	20	>999	240	Weight: 233 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF No.2 *Except* 5-7:2x6 SPF No.2, 8-9:2x4 SPF 2100F 1.8E, 1-5:2x8 SP DSS

BOT CHORD 2x4 SPF No.2 *Except* 3-21,20-17:2x4 SPF 2100F 1.8E, 21-6:2x3 SPF No.2

WEBS 2x3 SPF No.2 *Except* 25-26,29-30,31-32,19-6,22-20,27-21:2x4 SPF No.2, 14-12:2x6 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 (4-9-4 max.): 7-8.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 17-18
4-4-8 oc bracing: 16-17.

WEBS 1 Row at midpt 6-19, 7-18

REACTIONS (lb/size) 2=1548/0-3-8, 14=601/0-3-8, 16=2076/0-3-8
Max Horiz 2=187 (LC 8)
Max Uplift 2=-245 (LC 8), 14=-190 (LC 9), 16=-103 (LC 9)
Max Grav 2=1548 (LC 1), 14=608 (LC 22), 16=2076 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/6, 2-3=-801/200, 3-4=-3189/509, 4-6=-4167/697, 6-7=-1938/322, 7-8=-1337/266, 8-10=-1639/270, 10-11=-68/255, 11-12=-579/251, 12-13=0/35, 12-14=-546/235

BOT CHORD 2-24=0/0, 3-23=-558/2903, 22-23=-558/2903, 21-22=-3/17, 20-21=0/108, 6-20=-201/1574, 19-20=-549/3610, 18-19=-81/1650, 17-18=-39/76, 16-17=-1690/80, 10-17=-1605/126, 15-16=-122/413, 14-15=-122/413

WEBS 23-24=0/64, 6-19=-2203/524, 7-19=-161/1013, 7-18=-731/152, 8-18=-48/382, 10-18=-5/1354, 11-16=-551/151, 11-15=0/292, 20-22=-611/3186, 4-20=0/703, 4-22=-1183/338

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) All plates are 2x4 MT20 unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 245 lb uplift at joint 2, 103 lb uplift at joint 16 and 190 lb uplift at joint 14.
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

September 27,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	D4	Hip	1	1	I48073513
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

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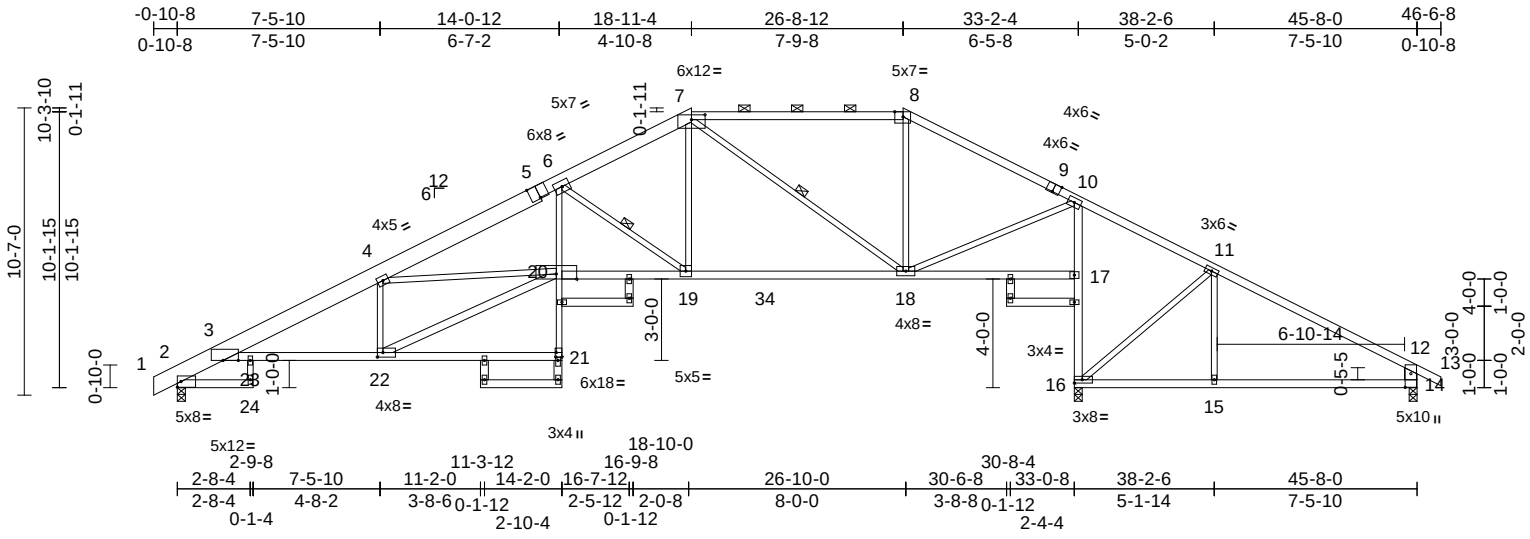

Scale = 1:84.9

Plate Offsets (X, Y): [3:0-6-12,Edge], [5:0-4-0,Edge], [7:0-6-0,0-2-3], [8:0-3-10,Edge], [9:0-3-0,Edge], [14:0-6-1,0-2-8], [21:Edge,0-2-8], [21:0-1-8,0-1-0], [22:0-2-8,0-2-0]

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	0.65	Vert(LL)	-0.29	21-22	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.62	Vert(CT)	-0.53	21-22	>753	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.97	Horz(CT)	0.26	14	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.21	20	>999	240	Weight: 225 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF No.2 *Except* 5-7:2x6 SPF No.2, 7-8:2x4 SPF 2100F 1.8E, 1-5:2x8 SP DSS

BOT CHORD 2x4 SPF No.2 *Except* 3-21,20-17:2x4 SPF 2100F 1.8E, 21-6:2x3 SPF No.2

WEBS 2x3 SPF No.2 *Except* 25-26,29-30,31-32,27-21,22-20:2x4 SPF No.2, 14-12:2x6 SPF No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-5-9 oc purlins, except end verticals, and 2-0-0 oc purlins (5-2-11 max.): 7-8.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 17-18
4-2-14 oc bracing: 16-17.

WEBS 1 Row at midpt 6-19, 7-18

REACTIONS (lb/size) 2=1550/0-3-8, 14=606/0-3-8, 16=2069/0-3-8
Max Horiz 2=170 (LC 8)
Max Uplift 2=-237 (LC 8), 14=-191 (LC 9), 16=-79 (LC 9)
Max Grav 2=1609 (LC 2), 14=612 (LC 22), 16=2153 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/6, 2-3=-831/178, 3-4=-3336/487, 4-6=-4286/615, 6-7=-2491/356, 7-8=-1366/215, 8-10=-1613/218, 10-11=-72/255, 11-12=-590/255, 12-13=0/35, 12-14=-549/236

BOT CHORD 2-24=0/0, 3-23=-520/3058, 22-23=-520/3058, 21-22=0/29, 20-21=0/109, 6-20=-208/1699, 19-20=-454/3707, 18-19=-116/2187, 17-18=-43/15, 16-17=-1714/49, 10-17=-1619/79, 15-16=-126/436, 14-15=-126/436

WEBS 23-24=0/72, 6-19=-1847/414, 7-19=-144/1274, 7-18=-1069/172, 8-18=-14/345, 10-18=-40/1510, 11-16=-594/162, 11-15=0/290, 4-22=-1191/323, 20-22=-573/3345, 4-20=-13/676

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) All plates are 2x4 MT20 unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 237 lb uplift at joint 2, 79 lb uplift at joint 16 and 191 lb uplift at joint 14.
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

September 27,2021

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	D5	Hip	1	1	I48073514
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

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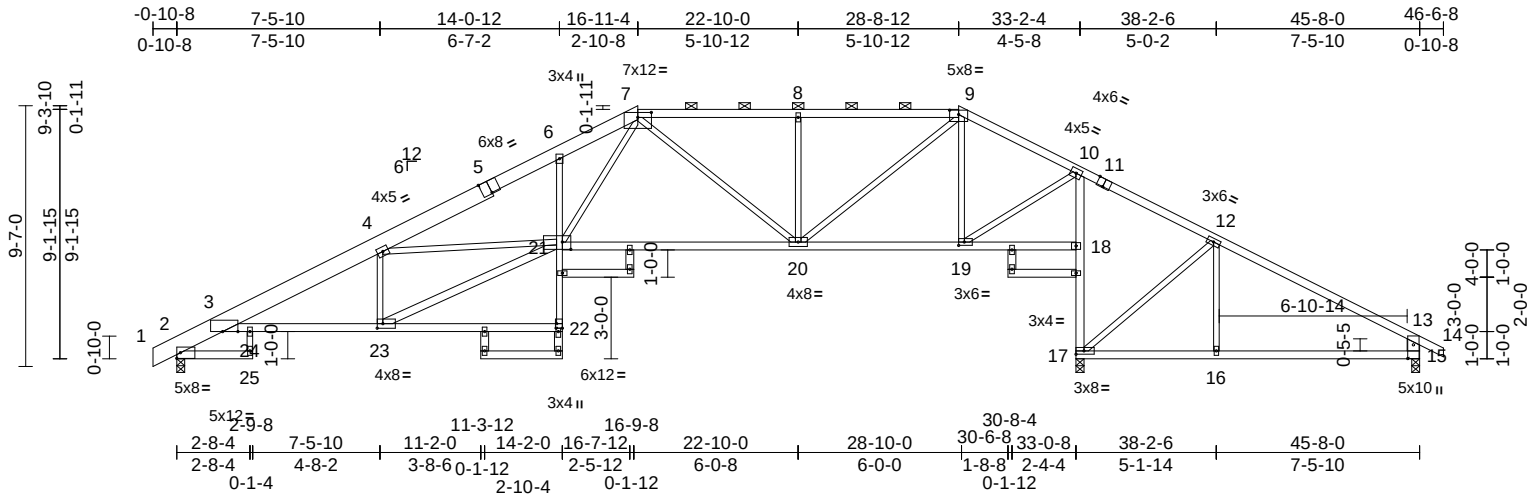

Scale = 1:84.7

Plate Offsets (X, Y): [3:0-6-12,Edge], [5:0-4-0,Edge], [7:0-6-0,0-2-3], [9:0-4-0,0-1-15], [11:0-3-0,Edge], [15:0-6-1,0-2-8], [19:0-2-8,0-1-8], [21:0-3-12,0-3-4], [22:Edge,0-2-8], [22:0-1-8,0-1-0], [23:0-2-8,0-2-0]

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	0.56	Vert(LL)	-0.26	6-21	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.84	Vert(CT)	-0.60	20-21	>666	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.79	Horz(CT)	0.23	15	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.19	6-21	>999	240	Weight: 222 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF No.2 *Except* 5-7:2x6 SPF No.2, 1-5:2x8 SP DSS

BOT CHORD 2x4 SPF No.2 *Except* 3-22:2x4 SPF 2100F 1.8E, 22-6:2x3 SPF No.2

WEBS 2x3 SPF No.2 *Except* 26-27,30-31,32-33,23-21,28-22:2x4 SPF No.2, 15-13:2x6 SPF No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-7-1 oc purlins, except end verticals, and 2-0-0 oc purlins (3-5-1 max.): 7-9.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 22-23
4-3-4 oc bracing: 17-18.

REACTIONS (lb/size) 2=1549/0-3-8, 15=605/0-3-8, 17=2071/0-3-8
Max Horiz 2=152 (LC 12)
Max Uplift 2=-226 (LC 8), 15=-193 (LC 9), 17=-53 (LC 9)
Max Grav 2=1549 (LC 1), 15=611 (LC 22), 17=2071 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/6, 2-3=-802/158, 3-4=-3215/456, 4-6=-3952/512, 6-7=-3791/591, 7-8=-2196/304, 8-9=-2198/306, 9-10=-1309/191, 10-12=-67/256, 12-13=-590/259, 13-14=0/35, 13-15=-548/237

BOT CHORD 2-25=0/0, 3-24=-474/2932, 23-24=-474/2932, 22-23=-5/8, 21-22=0/107, 6-21=-114/158, 20-21=-219/2475, 19-20=-71/1124, 18-19=-58/11, 17-18=-1667/69, 10-18=-1617/92, 16-17=-130/424, 15-16=-130/424

WEBS 24-25=0/64, 7-21=-337/1812, 7-20=-382/148, 8-20=-495/199, 9-20=-171/1422, 9-19=-655/106, 10-19=-94/1373, 12-17=-582/170, 12-16=0/291, 4-23=-1135/290, 4-21=-32/494, 21-23=-513/3200

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) All plates are 2x4 MT20 unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 226 lb uplift at joint 2, 53 lb uplift at joint 17 and 193 lb uplift at joint 15.
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

September 27,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	D6	Hip	1	1	I48073515
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Aug 16 2021 Print: 8.430 S Aug 16 2021 MiTek Industries, Inc. Fri Sep 24 10:55:23 Page: 1
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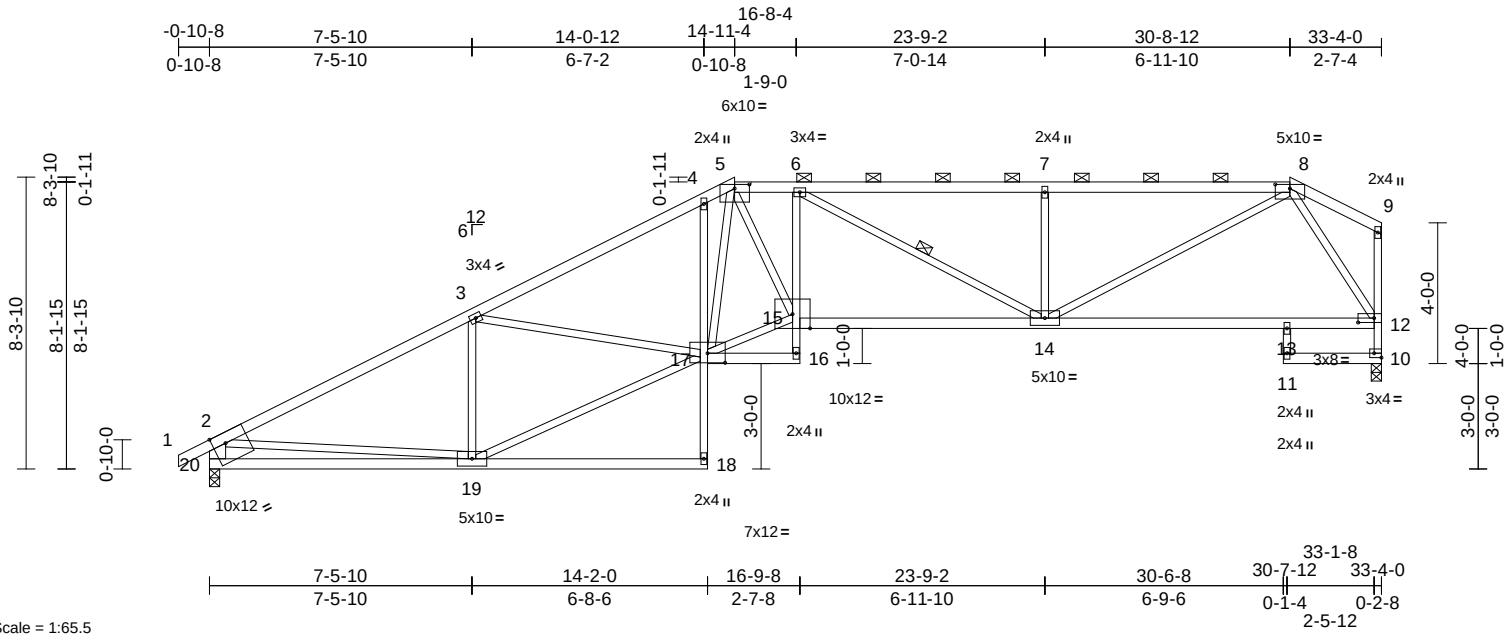

Scale = 1:65.5

Plate Offsets (X, Y): [5:0-5-0,0-1-7], [8:0-5-0,0-1-7], [10:Edge,0-1-8], [12:0-5-8,0-1-8], [17:0-6-0,0-3-4], [20:0-4-6,Edge]

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)	-0.24	14-15	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.51	Vert(CT)	-0.45	14-15	>884	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.96	Horz(CT)	0.25	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.18	14-15	>999	240	Weight: 145 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF No.2 *Except* 5-8:2x4 SPF 2100F 1.8E

BOT CHORD 2x4 SPF No.2 *Except* 18-4,16-6:2x3 SPF No.2, 15-12:2x4 SPF 2100F 1.8E

WEBS 2x3 SPF No.2 *Except* 20-2:2x6 SPF No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-8-5 oc purlins, except end verticals, and 2-0-0 oc purlins (4-0-12 max.): 5-8.

BOT CHORD Rigid ceiling directly applied or 9-7-6 oc bracing.

WEBS 1 Row at midpt 6-14

REACTIONS (lb/size) 10=1484/0-3-8, 20=1564/0-3-8
Max Horiz 20=253 (LC 5)
Max Uplift 10=-186 (LC 5), 20=-192 (LC 8)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/35, 2-3=-2402/256, 3-4=-3068/396, 4-5=-3054/464, 5-6=-3365/529, 6-7=-2710/420, 7-8=-2712/422, 8-9=-96/27, 2-20=-1490/231, 10-12=-1452/204, 9-12=-90/20

BOT CHORD 19-20=-371/618, 18-19=0/23, 17-18=0/109, 4-17=-434/230, 16-17=-22/75, 15-16=0/70, 6-15=-382/218, 14-15=-577/3369, 13-14=-198/880, 12-13=-198/880, 10-11=0/0

WEBS 11-13=0/42, 3-19=-901/246, 17-19=-370/2219, 3-17=-138/616, 5-17=-244/197, 15-17=-451/2794, 5-15=-331/1740, 6-14=-757/189, 7-14=-572/229, 8-14=-313/2113, 2-19=0/1430, 8-12=-1565/322

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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 192 lb uplift at joint 20 and 186 lb uplift at joint 10.
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) 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

September 27,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	D7	Roof Special	1	1	I48073516
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Aug 16 2021 Print: 8.430 S Aug 16 2021 MiTek Industries, Inc. Fri Sep 24 10:55:24 ID:hquPfxpp0CdNHWhMuPizeLzNEki-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1

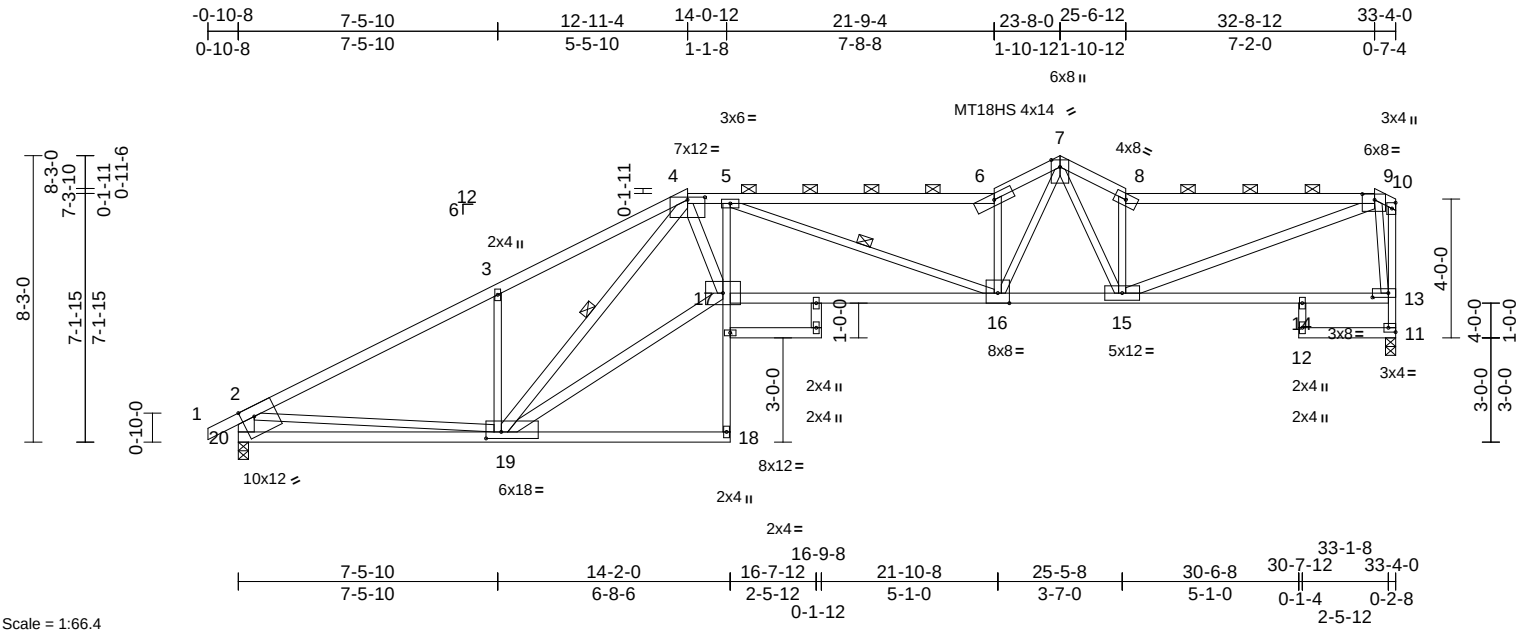

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Plate Offsets (X, Y): [4:0-6-0,0-0-15], [9:0-4-4,0-2-0], [11:Edge,0-1-8], [13:0-5-8,0-1-8], [19:0-5-4,0-2-4], [20:0-4-6,Edge]

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	0.95	Vert(LL)	-0.39	16-17	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.78	16-17	>511	240	MT18HS	197/144
BCLL	0.0*	Rep Stress Incr	YES	WB	0.97	Horz(CT)	0.38	11	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.30	16-17	>999	240	Weight: 155 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF No.2 *Except* 4-6,8-9:2x4 SPF 2100F 1.8E

BOT CHORD 2x4 SPF No.2 *Except* 18-5:2x3 SPF No.2, 17-13:2x4 SPF 2100F 1.8E

WEBS 2x3 SPF No.2 *Except* 22-23,19-4,19-17,17-4,15-9:2x4 SPF No.2, 20-2:2x6 SPF No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-6-7 oc purlins, except end verticals, and 2-0-0 oc purlins (2-2-0 max.): 4-6, 8-9.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
9-5-0 oc bracing: 19-20
8-9-11 oc bracing: 16-17.

WEBS 1 Row at midpt 4-19, 5-16

REACTIONS (lb/size) 11=1484/0-3-8, 20=1564/0-3-8
Max Horiz 20=256 (LC 5)
Max Uplift 11=-154 (LC 8), 20=-257 (LC 8)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/35, 2-3=-2405/381, 3-4=-2348/510, 4-5=-4254/852, 5-6=-3830/613, 6-7=-4285/716, 7-8=-3430/500, 8-9=-3062/434, 9-10=-107/101, 2-20=-1489/297, 11-13=-1452/171, 10-13=-173/267

BOT CHORD 19-20=-386/631, 18-19=-5/16, 17-18=0/100, 5-17=-650/283, 16-17=-786/4277, 15-16=-315/2574, 14-15=-87/322, 13-14=-87/322, 11-12=0/0

WEBS 12-14=0/45, 3-19=-434/257, 4-19=-1916/272, 17-19=-696/3731, 4-17=-536/2962, 5-16=-664/248, 6-16=-2290/474, 7-16=-535/2832, 7-15=-149/1008, 8-15=-1945/289, 9-15=-403/2962, 2-19=-59/1417, 9-13=-1679/356

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) 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 257 lb uplift at joint 20 and 154 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

September 27,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	E1	Roof Special	1	1	I48073517
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Aug 16 2021 Print: 8.430 S Aug 16 2021 MiTek Industries, Inc. Fri Sep 24 10:55:24 Page: 1
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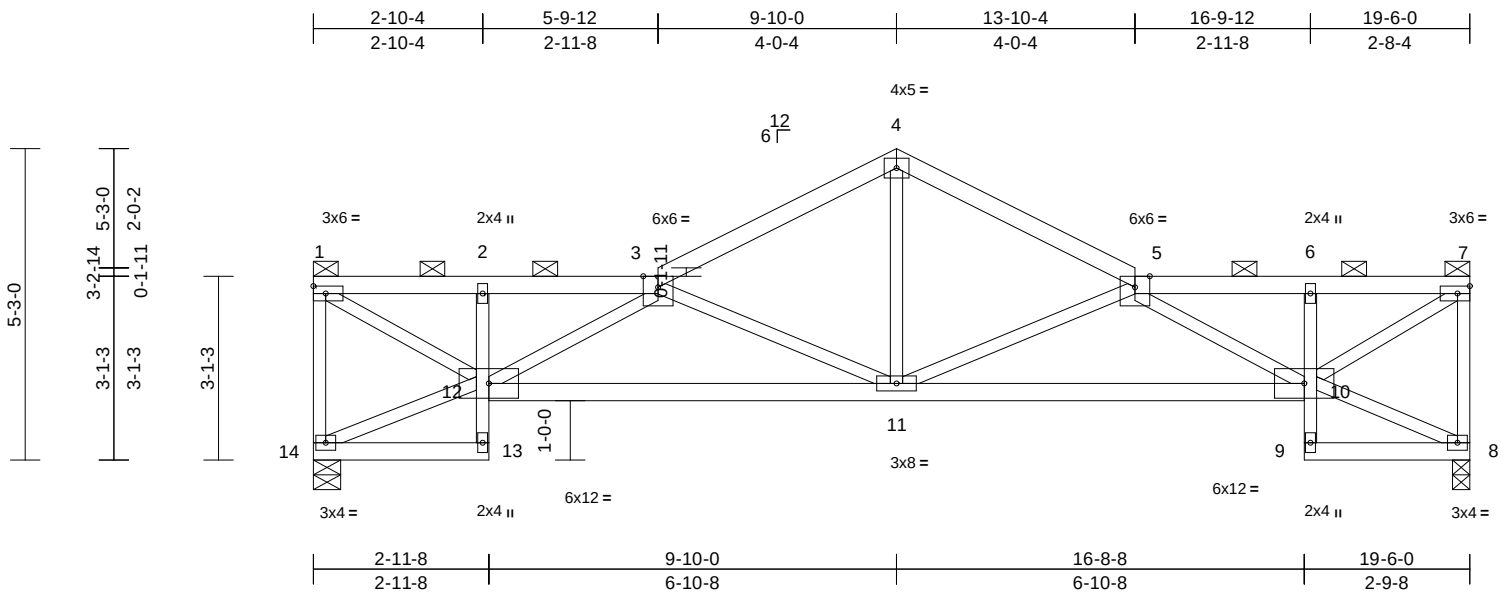

Scale = 1:38.9

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	0.24	Vert(LL)	-0.09	11	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.59	Vert(CT)	-0.18	11-12	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.47	Horz(CT)	0.10	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.06	11	>999	240	Weight: 78 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except* 13-2,6-9:2x3 SPF No.2
WEBS 2x3 SPF No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-9-15 oc purlins, except end verticals, and 2-0-0 oc purlins (5-4-7 max.): 1-3, 5-7.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (lb/size) 8=868/0-3-8, 14=868/0-5-8
Max Horiz 14=133 (LC 7)
Max Uplift 8=-118 (LC 9), 14=-120 (LC 8)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-14=-836/116, 1-2=-1144/110, 2-3=-1173/107, 3-4=-1302/142, 4-5=-1302/127, 5-6=-1115/128, 6-7=-1085/131, 7-8=-838/133
BOT CHORD 13-14=-17/17, 12-13=0/54, 2-12=-239/102, 11-12=-191/1844, 10-11=-273/1812, 9-10=0/50, 6-10=-232/100, 8-9=-16/15
WEBS 12-14=-110/123, 1-12=-155/1360, 3-12=-796/124, 3-11=-815/184, 4-11=-26/832, 5-11=-780/196, 5-10=-827/126, 8-10=-32/44, 7-10=-183/1317

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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 120 lb uplift at joint 14 and 118 lb uplift at joint 8.
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) 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

September 27,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	E2	Roof Special	1	1	I48073518
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

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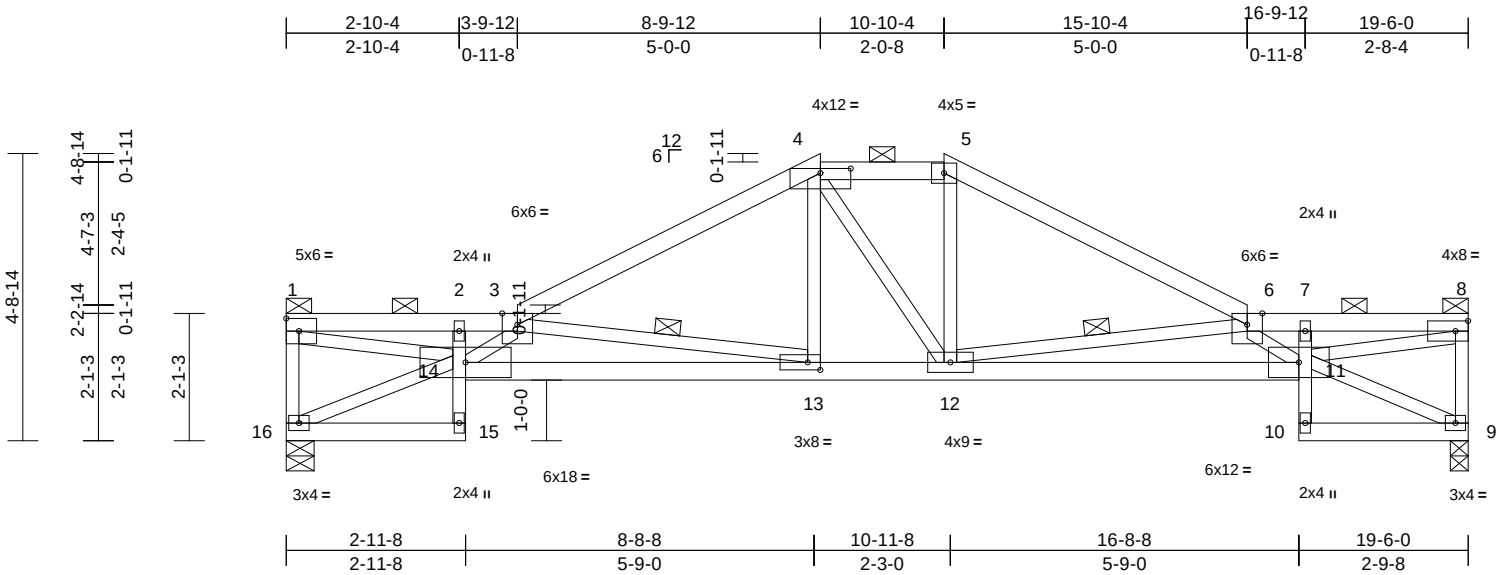

Scale = 1:38

Plate Offsets (X, Y): [4:0-6-0,0-0-15], [13:0-2-8,0-1-8]

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	0.48	Vert(LL)	-0.19	13-14	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.91	Vert(CT)	-0.37	13-14	>623	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.81	Horz(CT)	0.26	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.12	13-14	>999	240	Weight: 77 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF No.2

BOT CHORD 2x4 SPF No.2 *Except* 15-2,7-10:2x3 SPF No.2

WEBS 2x3 SPF No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-11-13 oc purlins, except end verticals, and 2-0-0 oc purlins (3-7-5 max.): 1-3, 4-5, 6-8.

BOT CHORD Rigid ceiling directly applied or 9-3-4 oc bracing.

WEBS 1 Row at midpt 3-13, 6-12

REACTIONS (lb/size) 9=868/0-3-8, 16=868/0-5-8
Max Horiz 16=-102 (LC 4)
Max Uplift 9=-105 (LC 9), 16=-107 (LC 8)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-16=-801/114, 1-2=-2278/246, 2-3=-2404/228, 3-4=-1501/126, 4-5=-1270/157, 5-6=-1497/129, 6-7=-2280/228, 7-8=-2164/245, 8-9=-803/117

BOT CHORD 15-16=-21/138, 14-15=0/55, 2-14=-28/72, 13-14=-383/3129, 12-13=-59/1273, 11-12=-403/3025, 10-11=0/52, 7-11=-20/67, 9-10=-22/127

WEBS 14-16=-152/90, 1-14=-266/2345, 3-14=-949/191, 3-13=-1869/330, 4-13=-7/402, 4-12=-156/148, 5-12=-20/394, 6-12=-1766/331, 6-11=-974/195, 9-11=-108/30, 8-11=-267/2240

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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 107 lb uplift at joint 16 and 105 lb uplift at joint 9.
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) 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

September 27,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	E3	Hip	1	1	I48073519
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

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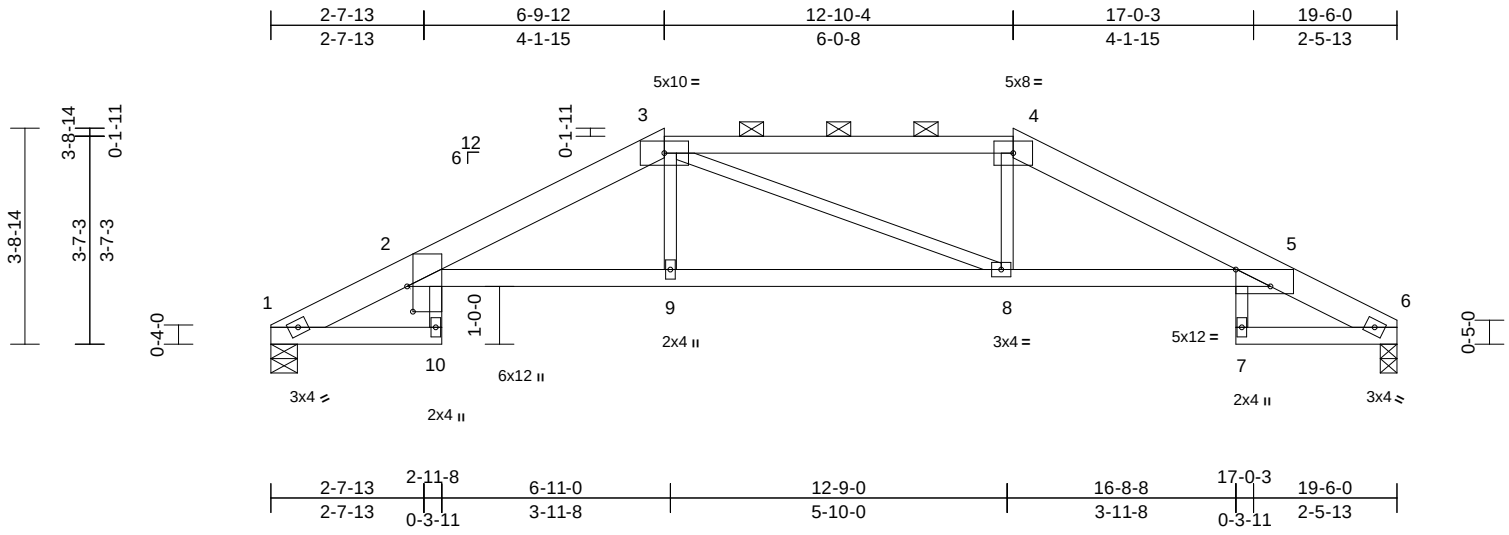

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Plate Offsets (X, Y): [2:0-5-4,0-1-3], [5:0-7-3,Edge]

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	0.90	Vert(LL)	-0.34	10	>683	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.95	Vert(CT)	-0.61	10	>376	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.18	Horz(CT)	0.53	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.23	10	>990	240	Weight: 67 lb	FT = 10%

LUMBER
TOP CHORD 2x6 SPF 1650F 1.4E *Except* 3-4:2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2

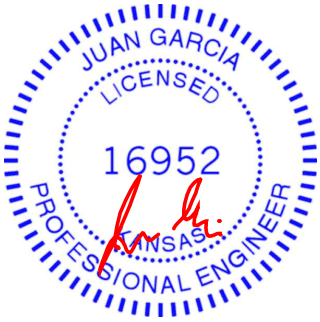
BRACING
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except 2-0-0 oc purlins (3-11-13 max.): 3-4.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (lb/size) 1=873/0-5-8, 6=873/0-3-8
Max Horiz 1=59 (LC 12)
Max Uplift 1=-76 (LC 8), 6=-75 (LC 9)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-371/83, 2-3=-1839/136, 3-4=-1713/125, 4-5=-1831/117, 5-6=-386/62
BOT CHORD 1-10=-39/0, 2-9=-110/1718, 8-9=-107/1725, 5-8=-57/1707, 6-7=-38/0
WEBS 2-10=0/79, 5-7=0/77, 3-9=0/250, 3-8=-183/163, 4-8=0/251

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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 76 lb uplift at joint 1 and 75 lb uplift at joint 6.
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) 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



September 27,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	E4	Hip	1	1	I48073520
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

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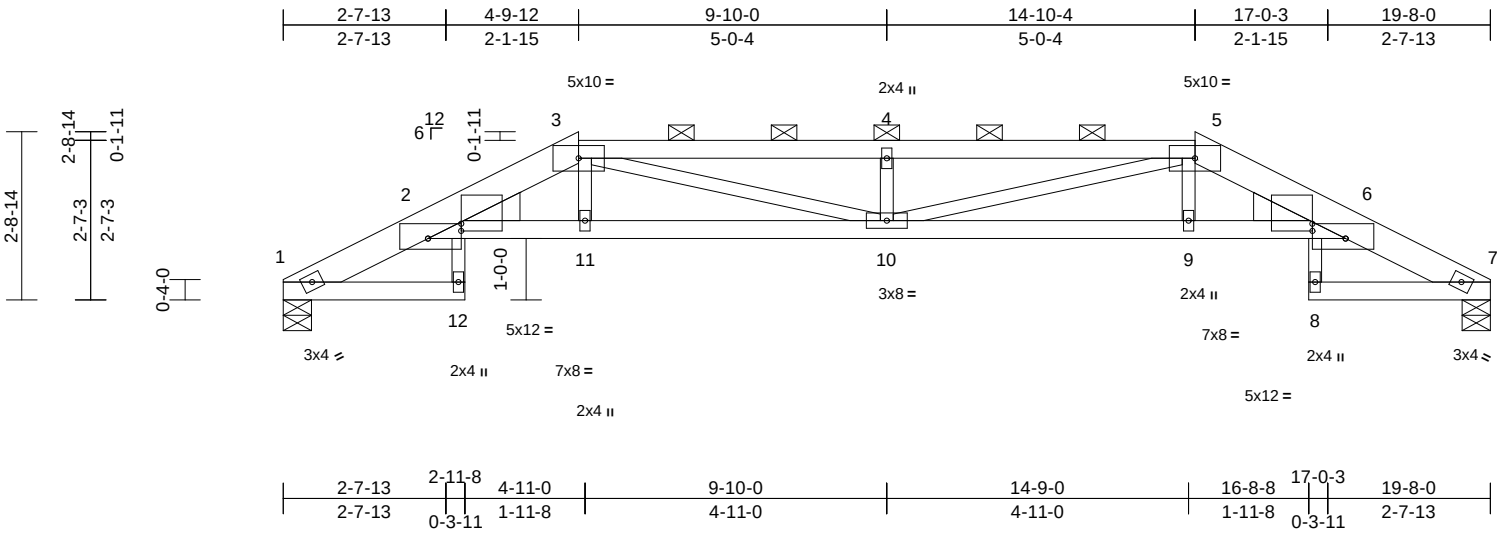

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Plate Offsets (X, Y): [2:0-6-8,0-2-14], [2:0-6-8,0-1-8], [6:0-6-8,0-2-14], [6:0-6-8,0-1-8]

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	0.91	Vert(LL)	-0.35	10	>660	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.65	Vert(CT)	-0.63	10	>363	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.31	Horz(CT)	0.44	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.24	10	>971	240	Weight: 69 lb	FT = 10%

LUMBER

TOP CHORD 2x6 SPF 1650F 1.4E *Except* 3-5:2x4 SPF No.2

BOT CHORD 2x4 SPF No.2 *Except* 2-6:2x4 SPF 2100F 1.8E

WEBS 2x3 SPF No.2

WEDGE Left: 2x6 SPF No.2
Right: 2x6 SPF No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except
2-0-0 oc purlins (2-9-7 max.): 3-5.

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

REACTIONS (lb/size) 1=876/0-5-8, 7=876/0-5-8
Max Horiz 1=41 (LC 8)
Max Uplift 1=-73 (LC 5), 7=-73 (LC 4)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-373/67, 2-3=-2517/301, 3-4=-3208/431, 4-5=-3208/431, 5-6=-2517/280, 6-7=-373/60

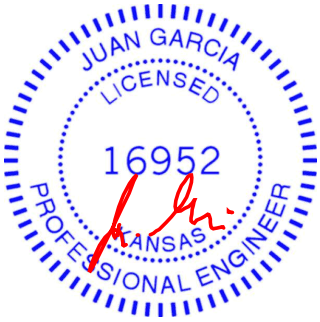
BOT CHORD 1-12=-39/0, 2-11=-278/2443, 10-11=-274/2459, 9-10=-221/2459, 6-9=-225/2443, 7-8=-39/0

WEBS 2-12=0/79, 6-8=0/79, 3-11=0/237, 3-10=-204/895, 4-10=-361/159, 5-10=-203/895, 5-9=0/237

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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 73 lb uplift at joint 1 and 73 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.
8) 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



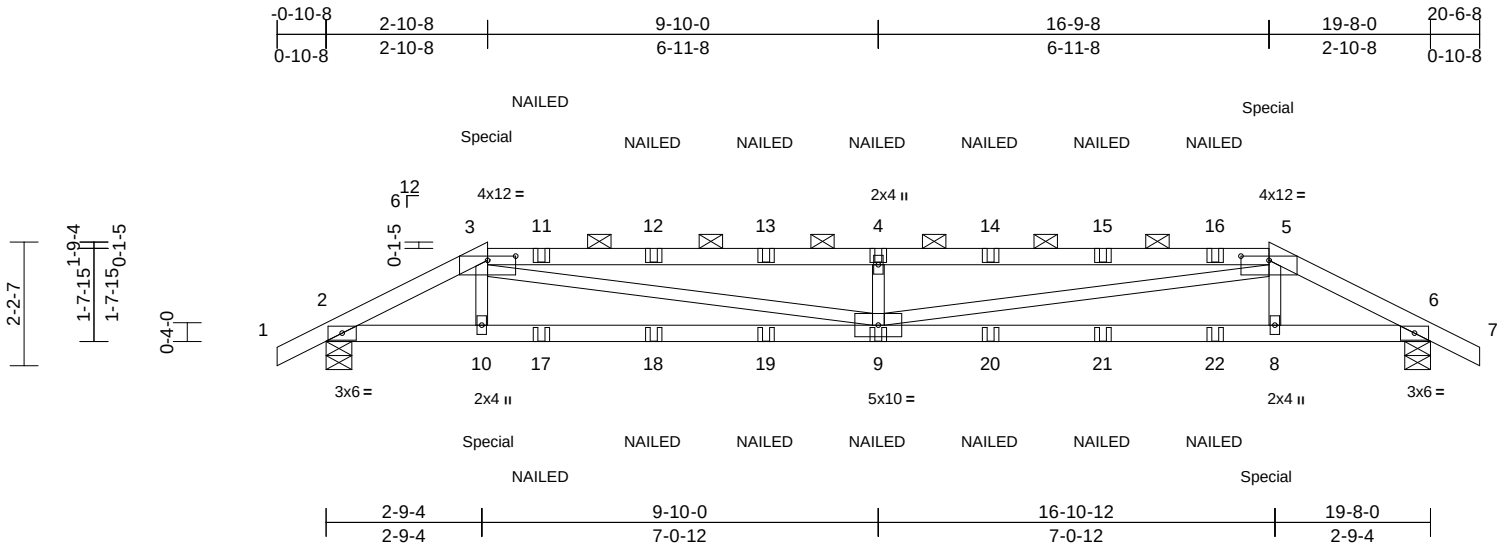
September 27,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	E5	Hip Girder	1	1	I48073521
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Aug 16 2021 Print: 8.430 S Aug 16 2021 MiTek Industries, Inc. Fri Sep 24 10:55:26 ID:S4Lb8sMbVpj55wlhAHAWMgzIIWk-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:41

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

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	0.99	Vert(LL)	-0.28	9	>825	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.71	Vert(CT)	-0.51	9	>454	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.76	Horz(CT)	0.06	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.28	9	>833	240	Weight: 62 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF No.2 *Except* 3-5:2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-9-13 oc purlins, except 2-0-0 oc purlins (2-8-14 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 8-1-5 oc bracing.

REACTIONS (lb/size) 2=1080/0-5-8, 6=1080/0-5-8
Max Horiz 2=-31 (LC 28)
Max Uplift 2=-271 (LC 8), 6=-271 (LC 9)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/27, 2-3=-2113/577, 3-4=-3976/1111, 4-5=-3976/1111, 5-6=-2113/577, 6-7=0/27
BOT CHORD 2-10=-506/1854, 9-10=-512/1842, 8-9=-499/1842, 6-8=-493/1854
WEBS 3-10=0/299, 3-9=-596/2194, 4-9=-712/340, 5-9=-596/2194, 5-8=0/299

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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 271 lb uplift at joint 2 and 271 lb uplift at joint 6.
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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 76 lb down and 136 lb up at 2-10-8, and 76 lb down and 136 lb up at 16-9-8 on top chord, and 21 lb down at 2-10-8, and 21 lb down at 16-8-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
11) 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: 1-3=-70, 3-5=-70, 5-7=-70, 2-6=-20
Concentrated Loads (lb)
Vert: 3=-4 (B), 5=-4 (B), 10=-6 (B), 9=-5 (B), 4=-68 (B), 8=-6 (B), 11=-4 (B), 12=-4 (B), 13=-68 (B), 14=-68 (B), 15=-4 (B), 16=-4 (B), 17=-6 (B), 18=-6 (B), 19=-5 (B), 20=-5 (B), 21=-6 (B), 22=-6 (B)

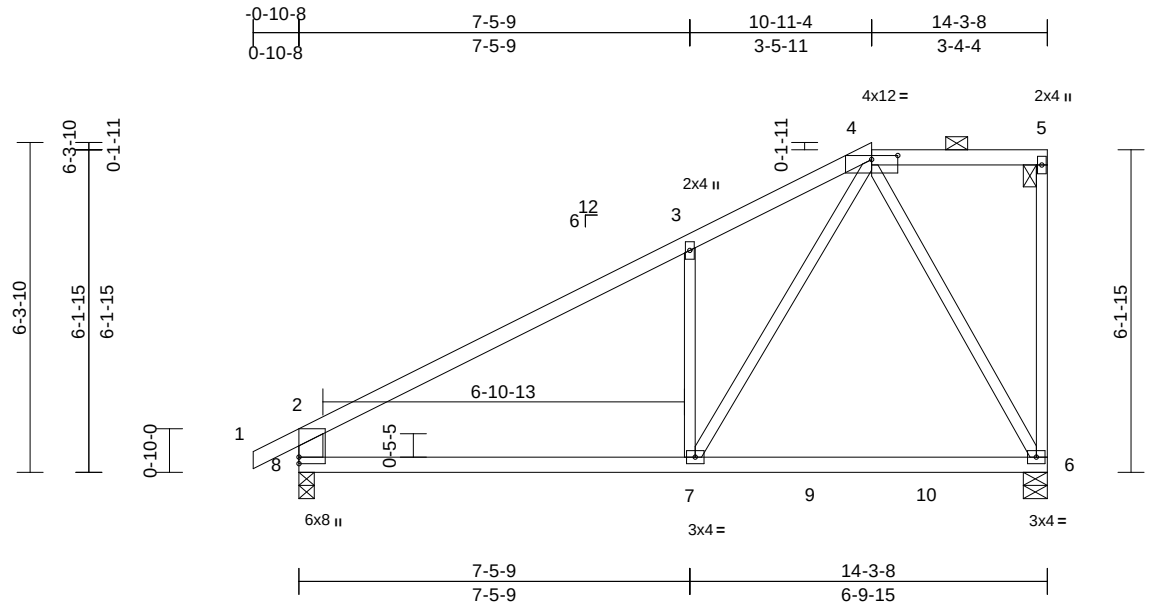
September 27,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	G1	Half Hip	1	1	I48073522
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Aug 16 2021 Print: 8.430 S Aug 16 2021 MiTek Industries, Inc. Fri Sep 24 10:55:27 ID:S4Lb8sMbVpj55wlhAHAWMgzIIWk-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:44

Plate Offsets (X, Y): [4:0-6-0,0-0-15]

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)	-0.10	6-7	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.48	Vert(CT)	-0.16	6-7	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.59	Horz(CT)	0.01	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	-0.03	6-7	>999	240	Weight: 55 lb	FT = 10%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-10-2 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 (lb/size) 6=625/0-5-8, 8=708/0-3-8
Max Horiz 8=252 (LC 5)
Max Uplift 6=-103 (LC 5), 8=-111 (LC 8)
Max Grav 6=669 (LC 2), 8=719 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-794/105, 3-4=-745/238, 4-5=-87/65, 5-6=-110/59, 2-8=-641/160
BOT CHORD 7-8=-129/632, 6-7=-101/274
WEBS 4-7=-214/708, 4-6=-533/113, 3-7=-396/264

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, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 103 lb uplift at joint 6 and 111 lb uplift at joint 8.
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) 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

September 27,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	G2	Half Hip	1	1	I48073523
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

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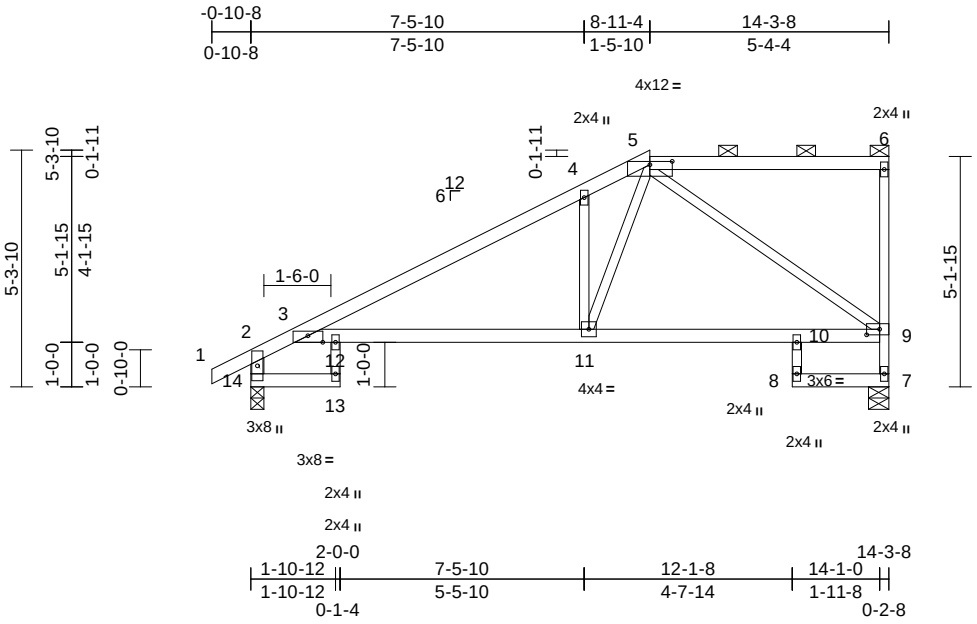


Scale = 1:51.6

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

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	0.49	Vert(LL)	-0.17	11-12	>966	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.82	Vert(CT)	-0.33	11-12	>514	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.72	Horz(CT)	0.21	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.17	11-12	>974	240	Weight: 55 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF 2100F 1.8E *Except* 5-6:2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except* 10-8:2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except* 14-2:2x4 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.): 5-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

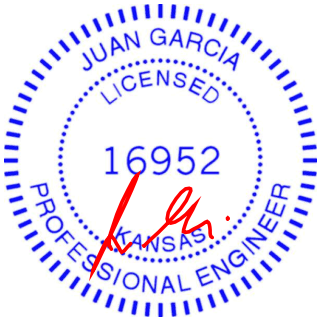
REACTIONS (lb/size) 7=629/0-5-8, 14=706/0-3-8
Max Horiz 14=209 (LC 5)
Max Uplift 7=-109 (LC 5), 14=-107 (LC 8)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/32, 2-3=-338/33, 3-4=-972/132, 4-5=-1003/254, 5-6=-54/41, 7-9=-606/123, 6-9=-175/73, 2-14=-733/145
BOT CHORD 13-14=0/0, 3-12=-177/828, 11-12=-177/828, 10-11=-153/561, 9-10=-164/557, 8-10=0/33, 7-8=-2/16
WEBS 12-13=-31/62, 5-11=-222/761, 5-9=-679/126, 4-11=-491/267

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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 109 lb uplift at joint 7 and 107 lb uplift at joint 14.
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) 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



September 27,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	G3	Half Hip	1	1	I48073524
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Aug 16 2021 Print: 8.430 S Aug 16 2021 MiTek Industries, Inc. Fri Sep 24 10:55:27 ID:S4Lb8sMbVpj55wlhAHAWMgzIIWk-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

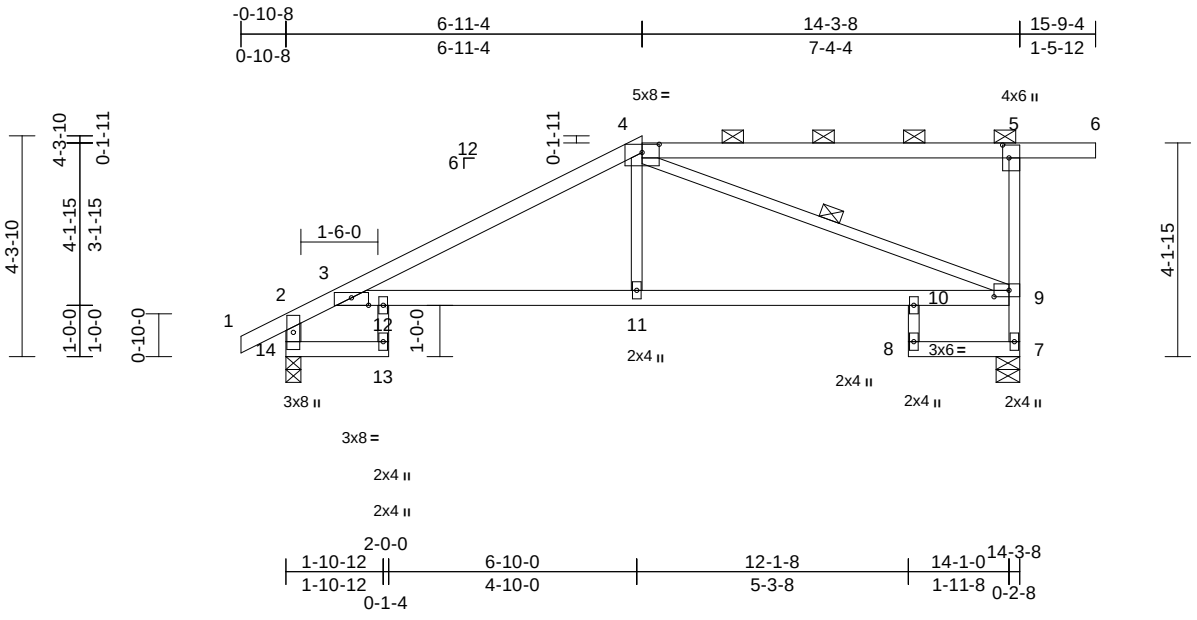


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Plate Offsets (X, Y): [3:0-4-0,Edge], [4:0-4-0,0-1-15], [5:0-3-0,0-1-8], [9:0-3-8,0-1-8]

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	0.69	Vert(LL)	-0.16	11-12	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.81	Vert(CT)	-0.29	11-12	>590	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.50	Horz(CT)	0.20	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.15	11-12	>999	240	Weight: 53 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF 2100F 1.8E *Except* 4-6:2x4 SPF No.2

BOT CHORD 2x4 SPF No.2 *Except* 10-8:2x3 SPF No.2

WEBS 2x3 SPF No.2 *Except* 14-2:2x4 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.): 4-6.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 7-8.

WEBS 1 Row at midpt 4-9

REACTIONS (lb/size) 7=746/0-5-8, 14=700/0-3-8
Max Horiz 14=168 (LC 7)
Max Uplift 7=-185 (LC 5), 14=-98 (LC 8)
Max Grav 7=746 (LC 1), 14=704 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/32, 2-3=-306/35, 3-4=-1017/93, 4-5=-76/46, 5-6=0/0, 7-9=-720/199, 5-9=-372/172, 2-14=-732/131

BOT CHORD 13-14=0/0, 3-12=-176/872, 11-12=-176/872, 10-11=-179/864, 9-10=-183/876, 8-10=0/29, 7-8=-13/9

WEBS 12-13=-24/63, 4-11=0/346, 4-9=-859/140

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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 185 lb uplift at joint 7 and 98 lb uplift at joint 14.
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) 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

September 27,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	G4	Half Hip Girder	1	1	I48073525
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

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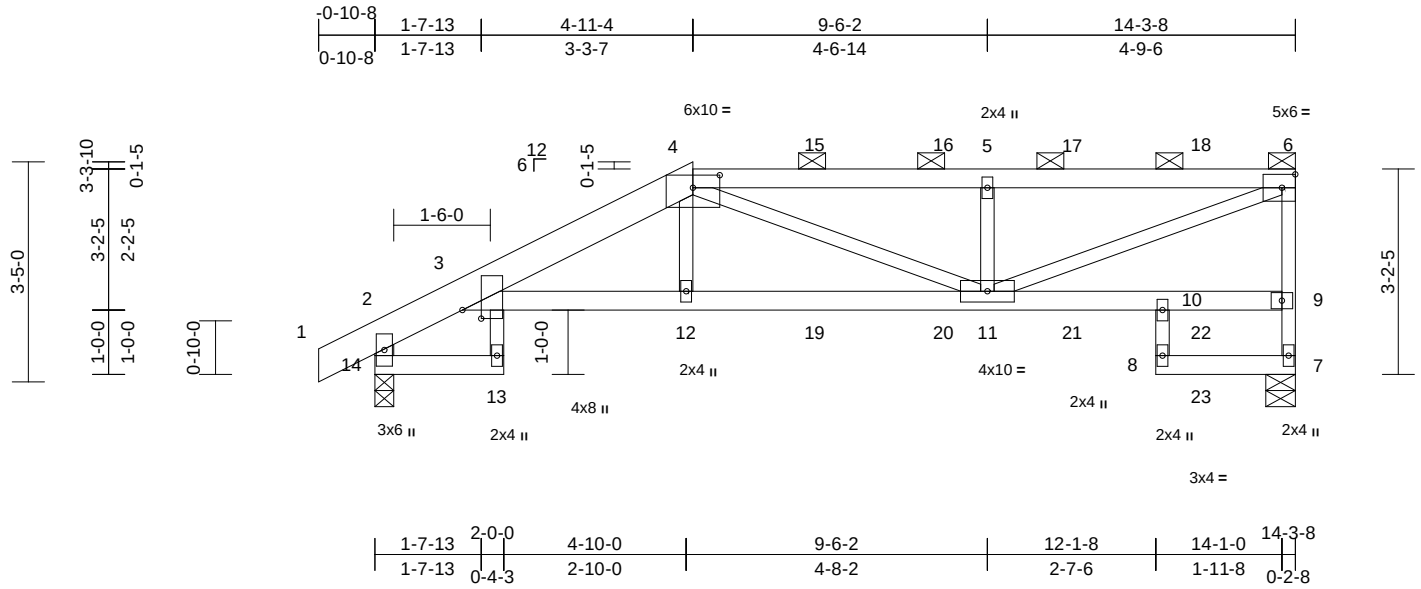

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Plate Offsets (X, Y): [3:0-1-10,0-3-8], [4:0-5-0,0-2-5]

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	0.50	Vert(LL)	-0.10	11-12	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.82	Vert(CT)	-0.19	11-12	>876	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.71	Horz(CT)	0.17	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.11	11-12	>999	240	Weight: 59 lb	FT = 10%

LUMBER
TOP CHORD 2x6 SP DSS *Except* 4-6:2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except* 10-8:2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except* 14-2:2x4 SPF No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-8-11 oc purlins, except end verticals, and 2-0-0 oc purlins (3-8-0 max.): 4-6.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (lb/size) 7=1080/0-5-8, 14=1122/0-3-8
Max Horiz 14=129 (LC 5)
Max Uplift 7=-321 (LC 5), 14=-292 (LC 8)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/32, 2-3=-469/134, 3-4=-2337/703, 4-5=-1988/614, 5-6=-1988/614, 7-9=-1052/333, 6-9=-987/347, 2-14=-1114/309
BOT CHORD 13-14=-25/1, 3-12=-730/2154, 11-12=-724/2129, 10-11=-57/85, 9-10=-68/91, 8-10=0/30, 7-8=-10/16
WEBS 3-13=-2/47, 6-11=-653/2060, 4-12=-104/457, 4-11=-173/103, 5-11=-537/266

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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 321 lb uplift at joint 7 and 292 lb uplift at joint 14.
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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 94 lb down and 70 lb up at 4-11-4, 102 lb down and 68 lb up at 6-10-0, 102 lb down and 68 lb up at 8-10-0, and 102 lb down and 68 lb up at 10-10-0, and 106 lb down and 79 lb up at 12-10-0 on top chord, and 324 lb down and 136 lb up at 4-11-4, 45 lb down and 15 lb up at 6-10-0, 45 lb down and 15 lb up at 8-10-0, and 45 lb down and 15 lb up at 10-10-0, and 49 lb down at 12-10-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-2=-70, 2-4=-70, 4-6=-70, 13-14=-20, 3-10=-20, 7-8=-20
Concentrated Loads (lb)
Vert: 4=-70 (B), 12=-324 (B), 15=-70 (B), 16=-70 (B), 17=-70 (B), 18=-77 (B), 19=-45 (B), 20=-45 (B), 21=-45 (B), 22=-38 (B)

September 27,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0	I48073526
W097	H1	Hip Girder	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

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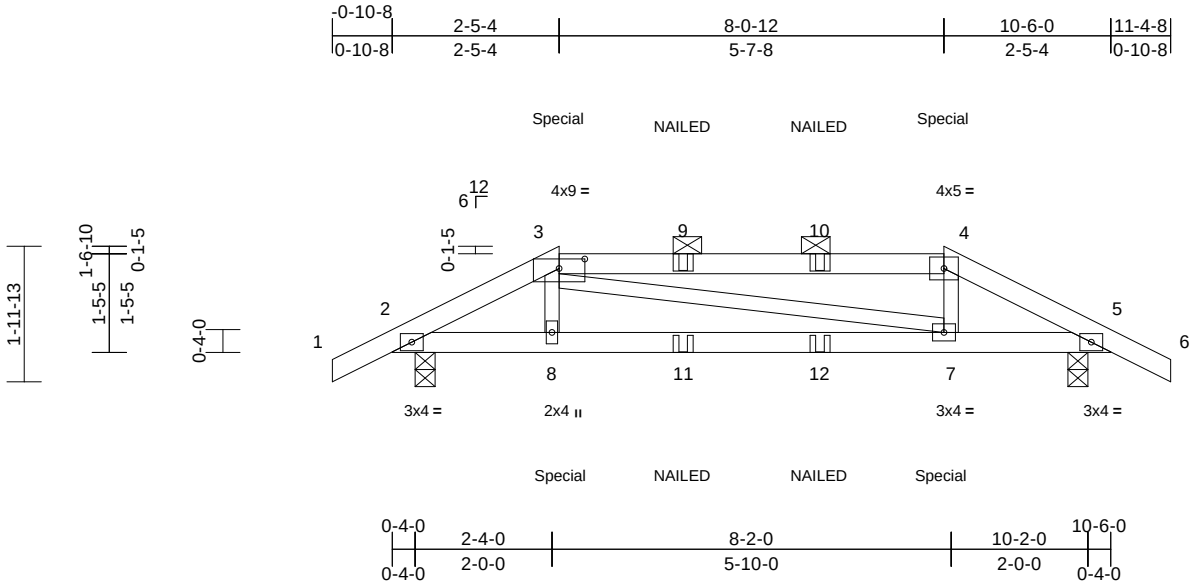

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Plate Offsets (X, Y): [3:0-4-8,0-1-11]

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	0.56	Vert(LL)	-0.04	7-8	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.34	Vert(CT)	-0.08	7-8	>999	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.07	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.02	7-8	>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

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (5-7-3 max.): 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 2=535/0-3-8, 5=535/0-3-8
Max Horiz 2=-28 (LC 9)
Max Uplift 2=-139 (LC 8), 5=-139 (LC 9)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/27, 2-3=-912/232, 3-4=-760/224, 4-5=-890/226, 5-6=0/27
BOT CHORD 2-8=-202/794, 7-8=-208/786, 5-7=-185/768
WEBS 3-8=0/213, 3-7=-59/17, 4-7=0/220

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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 139 lb uplift at joint 2 and 139 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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 111 lb down and 120 lb up at 2-5-4, and 111 lb down and 120 lb up at 8-0-12 on top chord, and 10 lb down at 2-5-4, and 10 lb down at 8-0-0 on bottom chord. The design/ selection of such connection device(s) is the responsibility of others.
11) 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: 1-3=-70, 3-4=-70, 4-6=-70, 2-5=-20
Concentrated Loads (lb)
Vert: 8=-2 (B), 7=-2 (B), 11=-2 (B), 12=-2 (B)

September 27,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	H2	Hip	1	1	I48073527
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

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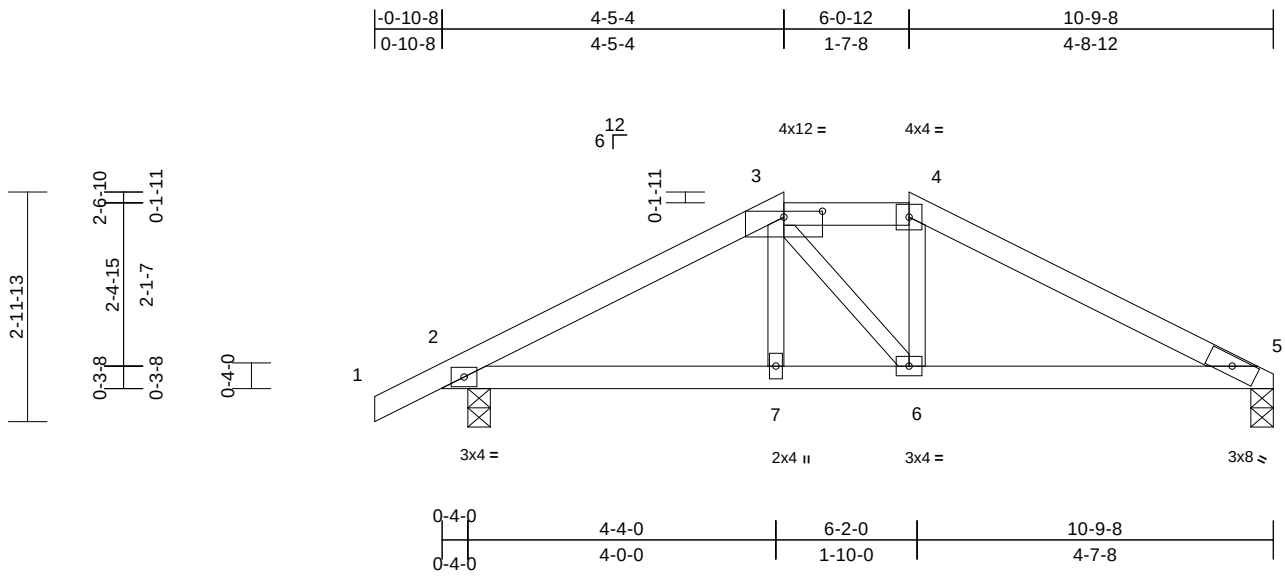

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Plate Offsets (X, Y): [3:0-6-0,0-0-15]

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	0.31	Vert(LL)	-0.02	5-6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.26	Vert(CT)	-0.04	5-6	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.01	5-6	>999	240	Weight: 32 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 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 2=547/0-3-8, 5=469/0-3-8
Max Horiz 2=53 (LC 8)
Max Uplift 2=-77 (LC 8), 5=-54 (LC 9)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/27, 2-3=-716/54, 3-4=-599/91, 4-5=-732/60
BOT CHORD 2-7=-30/576, 6-7=-31/573, 5-6=-5/601
WEBS 3-7=0/120, 3-6=-69/130, 4-6=-13/126

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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 54 lb uplift at joint 5 and 77 lb uplift at joint 2.
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) 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

September 27,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	H3	Common	2	1	I48073528
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

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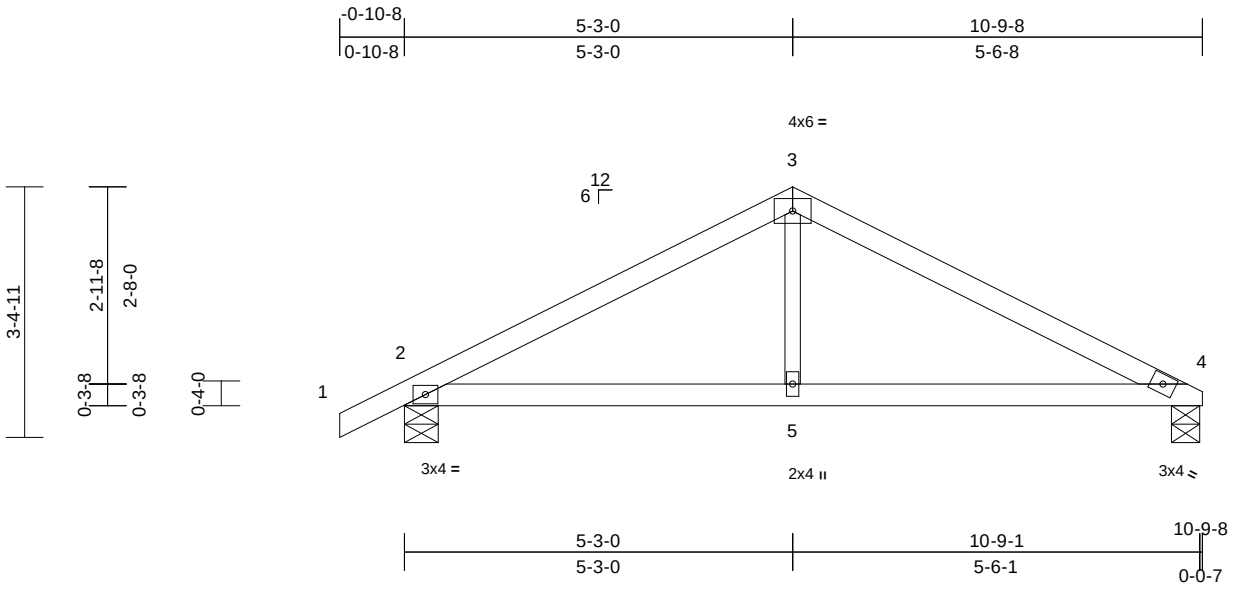

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.43	Vert(LL)	-0.02	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.28	Vert(CT)	-0.05	4-5	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.01	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.02	4-5	>999	240	Weight: 29 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 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 2=546/0-5-8, 4=461/0-4-9
Max Horiz 2=61 (LC 8)
Max Uplift 2=-84 (LC 8), 4=-59 (LC 9)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/27, 2-3=-663/80, 3-4=-655/73
BOT CHORD 2-5=-23/516, 4-5=-23/516
WEBS 3-5=0/251

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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 59 lb uplift at joint 4 and 84 lb uplift at joint 2.
6) 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

September 27,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	H4	Roof Special	3	1	I48073529
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

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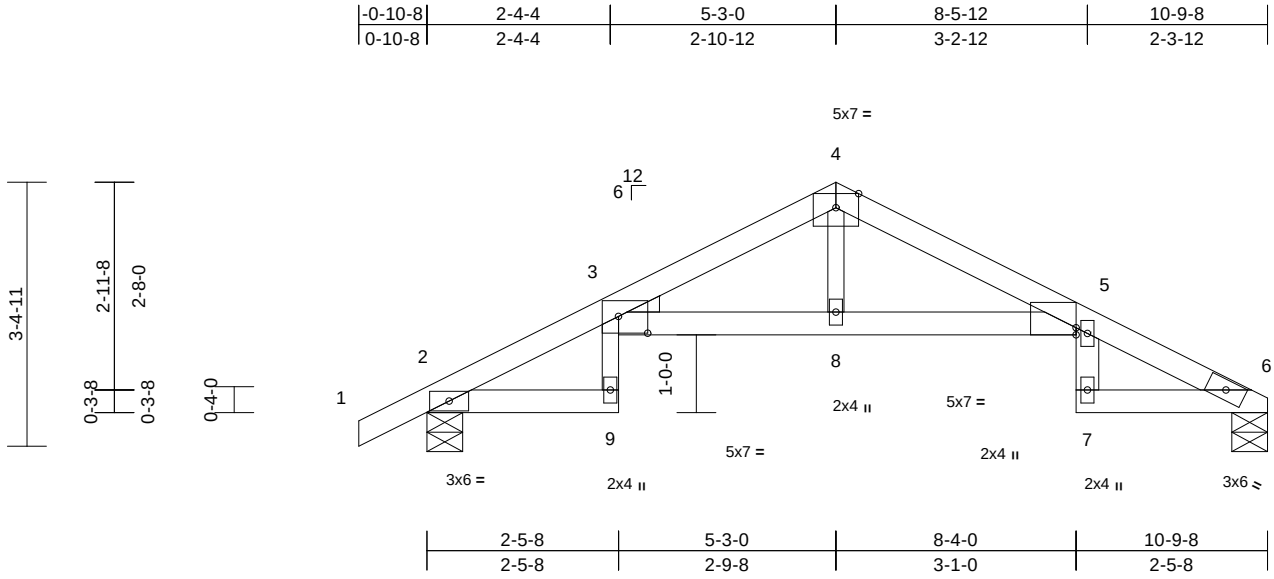


Scale = 1:29.6

Plate Offsets (X, Y): [3:0-4-8,0-2-9], [5:Edge,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	0.91	Vert(LL)	-0.27	5-8	>465	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.48	5-8	>259	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.47	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.18	3-8	>694	240	Weight: 30 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except* 5-7:2x4 SPF No.2
WEDGE Left: 2x3 SPF No.2

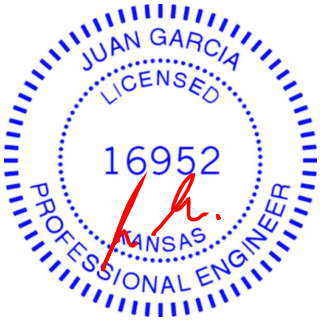
BRACING
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 2=546/0-5-8, 6=461/0-5-8
Max Horiz 2=61 (LC 8)
Max Uplift 2=-84 (LC 8), 6=-59 (LC 9)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-4=-949/80, 4-5=-965/99
BOT CHORD 3-8=-43/895, 5-8=-43/900
WEBS 4-8=0/254

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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 59 lb uplift at joint 6 and 84 lb uplift at joint 2.
6) 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



September 27,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	J1	Diagonal Hip Girder	1	1	I48073530
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

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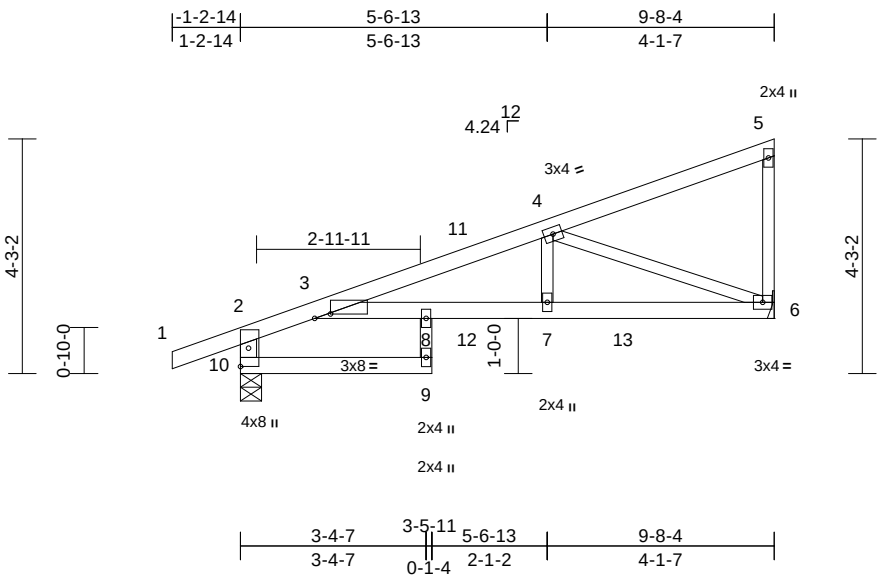

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Plate Offsets (X, Y): [3:0-3-7,0-0-15]

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	0.90	Vert(LL)	-0.11	3-8	>998	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.86	Vert(CT)	-0.21	3-8	>540	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.63	Horz(CT)	0.15	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.13	3-8	>866	240	Weight: 34 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except* 10-2:2x4 SPF No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-10-14 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 8-10-14 oc bracing.

REACTIONS (lb/size) 6=687/ Mechanical, 10=656/0-4-9
Max Horiz 10=166 (LC 5)
Max Uplift 6=-216 (LC 8), 10=-187 (LC 4)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-10=-657/225, 1-2=0/32, 2-3=-256/11, 3-4=-1376/400, 4-5=-105/22, 5-6=-99/60
BOT CHORD 9-10=0/0, 3-8=-410/1288, 7-8=-410/1288, 6-7=-410/1288
WEBS 8-9=-5/82, 4-6=-1355/462, 4-7=-128/513

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) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 187 lb uplift at joint 10 and 216 lb uplift at joint 6.
6) 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.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 73 lb down and 44 lb up at 4-1-7, and 73 lb down and 44 lb up at 4-1-7 on top chord, and 36 lb down and 18 lb up at 4-1-7, 36 lb down and 18 lb up at 4-1-7, and 171 lb down and 73 lb up at 6-11-6, and 171 lb down and 73 lb up at 6-11-6 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
8) 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, 2-5=-70, 9-10=-20, 6-8=-20
Concentrated Loads (lb)
Vert: 12=-56 (F=-28, B=-28), 13=-341 (F=-171, B=-171)

September 27,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	J2	Jack-Closed	2	1	I48073531
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

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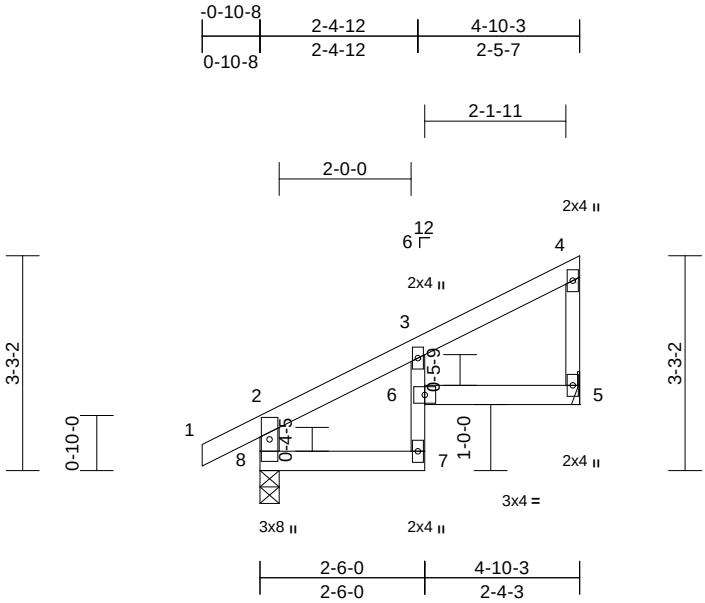

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	-0.03	6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	-0.05	7	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.03	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R		Wind(LL)	0.03	6	>999	240	Weight: 16 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except* 7-3:2x3 SPF No.2
WEBS 2x4 SPF No.2 *Except* 4-5:2x3 SPF No.2

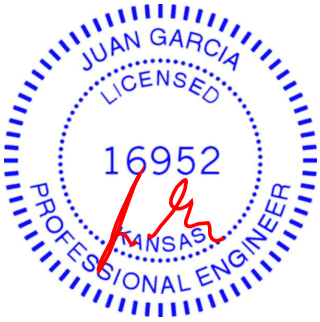
BRACING
TOP CHORD Structural wood sheathing directly applied or 4-10-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 5=199/ Mechanical, 8=286/0-3-8
Max Horiz 8=112 (LC 5)
Max Uplift 5=-56 (LC 8), 8=-44 (LC 8)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-8=-266/68, 1-2=0/32, 2-3=-174/15, 3-4=-61/26, 4-5=-122/49
BOT CHORD 7-8=-42/97, 6-7=-1/47, 3-6=-5/60, 5-6=-23/37

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) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 44 lb uplift at joint 8 and 56 lb uplift at joint 5.
6) 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



September 27,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	J3	Jack-Open	2	1	I48073532
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

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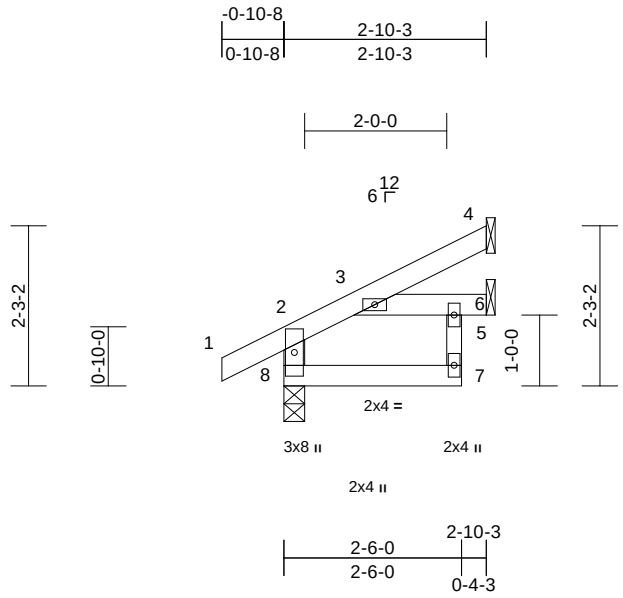

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	0.00	3	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	0.00	3-6	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R		Wind(LL)	0.00	3	>999	240	Weight: 11 lb	FT = 10%

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

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

REACTIONS (lb/size) 4=65/ Mechanical, 5=56/ Mechanical, 8=216/0-3-8
Max Horiz 8=63 (LC 8)
Max Uplift 4=-34 (LC 8), 5=-1 (LC 8), 8=-16 (LC 8)
Max Grav 4=65 (LC 1), 5=83 (LC 3), 8=216 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-8=-195/39, 1-2=0/32, 2-3=-74/0, 3-4=-29/24
BOT CHORD 7-8=-17/26, 6-7=0/46, 3-6=-26/17, 5-6=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) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 16 lb uplift at joint 8, 34 lb uplift at joint 4 and 1 lb uplift at joint 5.
6) 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

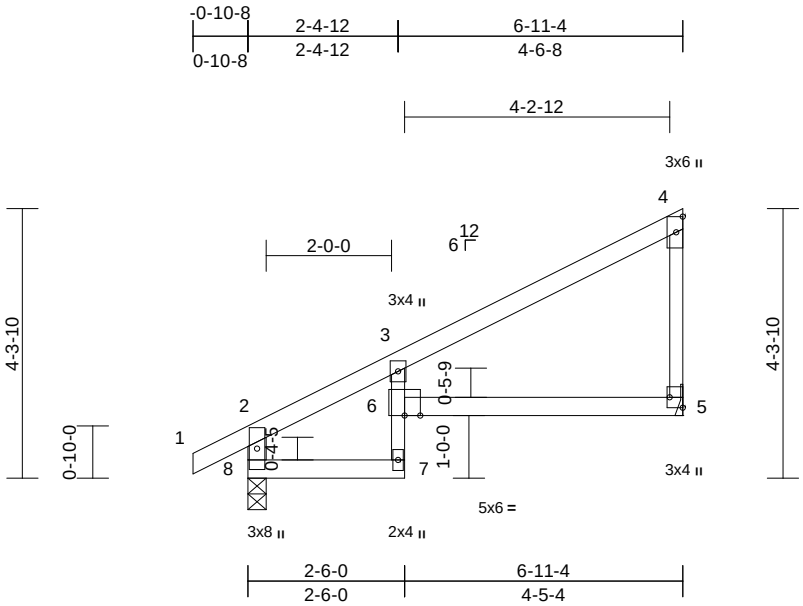
September 27,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	J4	Jack-Closed	5	1	I48073533
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Aug 16 2021 Print: 8.430 S Aug 16 2021 MiTek Industries, Inc. Fri Sep 24 10:55:31 ID:hquPfxpp0CdNHWhMuPizeLzNEki-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:36.8

Plate Offsets (X, Y): [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	0.55	Vert(LL)	-0.12	5-6	>643	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.54	Vert(CT)	-0.22	5-6	>357	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.10	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R		Wind(LL)	0.10	5-6	>845	240	Weight: 22 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except* 7-3:2x3 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 10-0-0 oc bracing.

REACTIONS (lb/size) 5=295/ Mechanical, 8=378/0-3-8
Max Horiz 8=123 (LC 5)
Max Uplift 5=-30 (LC 8), 8=-10 (LC 8)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-8=-359/31, 1-2=0/32, 2-3=-291/7, 3-4=-105/40, 4-5=-192/45
BOT CHORD 7-8=-49/182, 6-7=-2/51, 3-6=0/105, 5-6=-23/54

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); 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) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 10 lb uplift at joint 8 and 30 lb uplift at joint 5.
6) 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

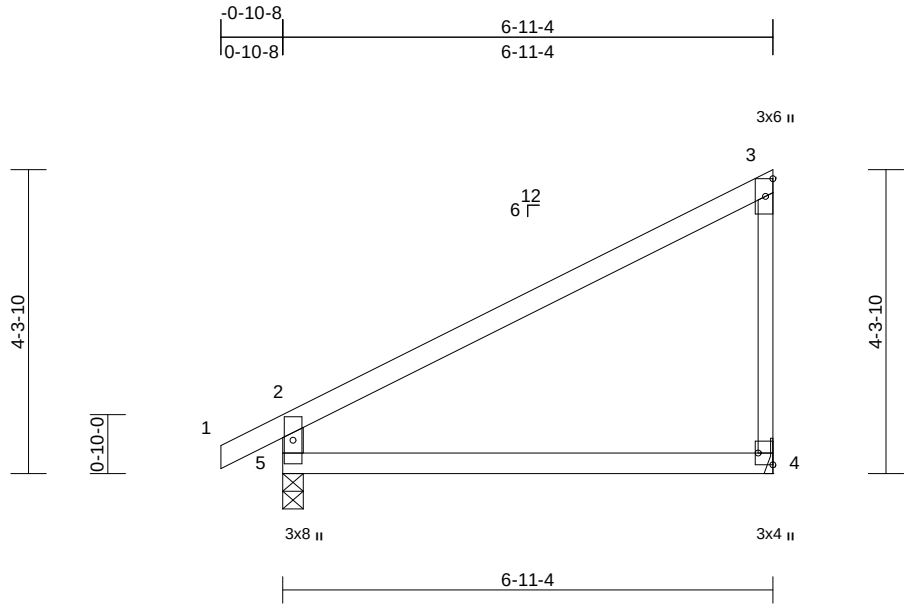
September 27,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	J5	Jack-Closed	4	1	I48073534
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Aug 16 2021 Print: 8.430 S Aug 16 2021 MiTek Industries, Inc. Fri Sep 24 10:55:31 ID:hquPfxpp0CdNHWhMuPizeLzNEki-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:32.6

Plate Offsets (X, Y): [4: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	0.66	Vert(LL)	-0.08	4-5	>966	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.39	Vert(CT)	-0.18	4-5	>447	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)	0.04	4-5	>999	240	Weight: 21 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 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 4=295/ Mechanical, 5=378/0-3-8
Max Horiz 5=136 (LC 5)
Max Uplift 4=-29 (LC 8), 5=-11 (LC 8)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-5=-330/61, 1-2=0/32, 2-3=-170/60, 3-4=-210/59
BOT CHORD 4-5=-38/43

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); 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) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 11 lb uplift at joint 5 and 29 lb uplift at joint 4.
6) 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

September 27,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	J7	Jack-Closed	8	1	I48073535
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

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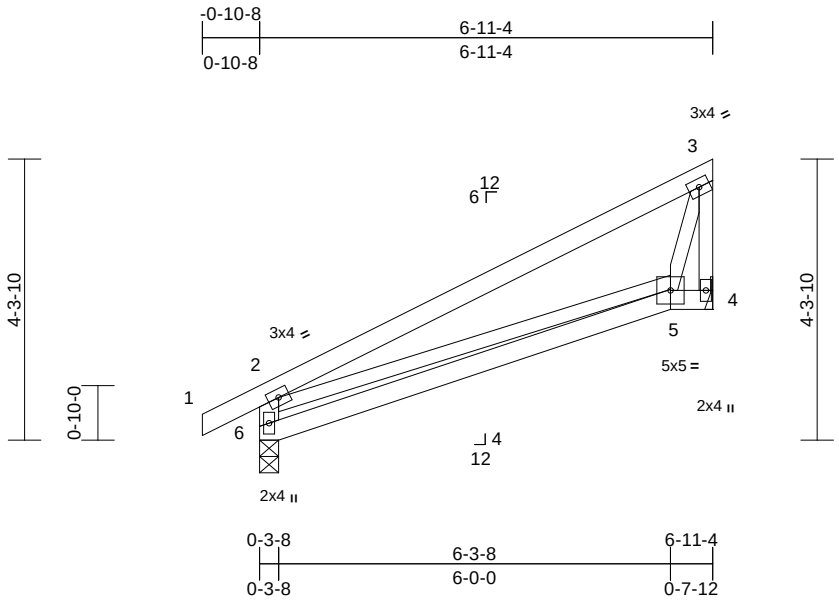

Scale = 1:35.3

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)	-0.09	5-6	>886	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.41	Vert(CT)	-0.18	5-6	>443	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P		Wind(LL)	0.00	6	>999	240	Weight: 27 lb	FT = 10%

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

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

REACTIONS (lb/size) 4=295/ Mechanical, 6=378/0-3-8
Max Horiz 6=111 (LC 5)
Max Uplift 4=-34 (LC 8), 6=-6 (LC 8)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-6=-316/68, 1-2=0/32, 2-3=-121/59, 3-4=-290/37
BOT CHORD 5-6=-121/44, 4-5=-23/17
WEBS 2-5=-5/104, 3-5=0/148

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); 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) Refer to girder(s) for truss to truss connections.
5) Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 6 lb uplift at joint 6 and 34 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

September 27,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	J8	Diagonal Hip Girder	1	1	I48073536
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

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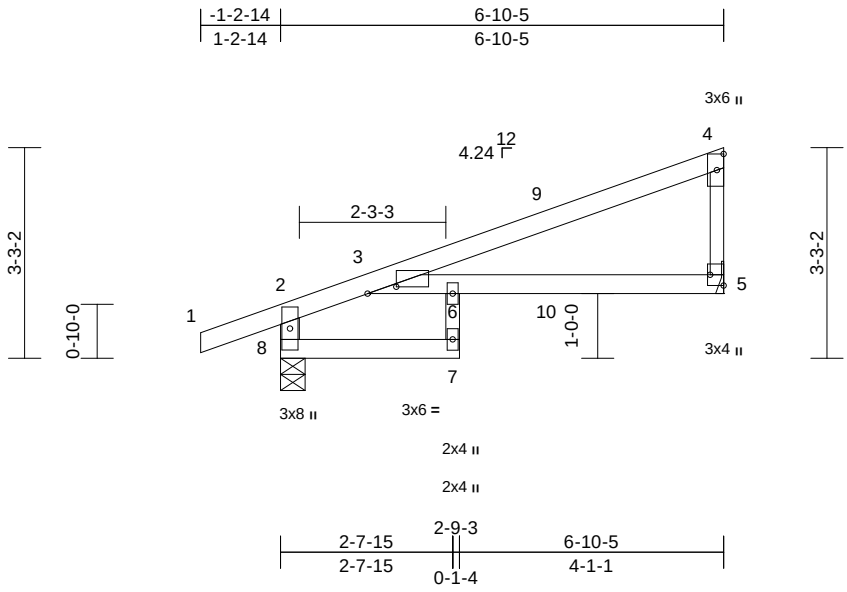

Scale = 1:35.7

Plate Offsets (X, Y): [3:0-5-5,0-1-4], [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	0.62	Vert(LL)	-0.12	5-6	>688	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.52	Vert(CT)	-0.21	5-6	>381	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.02	Horz(CT)	0.11	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R		Wind(LL)	0.14	5-6	>572	240	Weight: 22 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except* 8-2:2x4 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 (lb/size) 5=307/ Mechanical, 8=418/0-4-9
Max Horiz 8=121 (LC 5)
Max Uplift 5=-104 (LC 8), 8=-131 (LC 4)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-8=-411/161, 1-2=0/32, 2-3=-151/4, 3-4=-157/25, 4-5=-185/82
BOT CHORD 7-8=0/0, 3-6=-45/89, 5-6=-45/89
WEBS 6-7=-5/59

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) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 131 lb uplift at joint 8 and 104 lb uplift at joint 5.
6) 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.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 77 lb down and 40 lb up at 4-1-7, and 77 lb down and 40 lb up at 4-1-7 on top chord, and 20 lb down and 31 lb up at 4-1-7, and 20 lb down and 31 lb up at 4-1-7 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
8) 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, 7-8=-20, 5-6=-20
Concentrated Loads (lb)
Vert: 10=-34 (F=-17, B=-17)

September 27,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	J9	Jack-Open	2	1	I48073537
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

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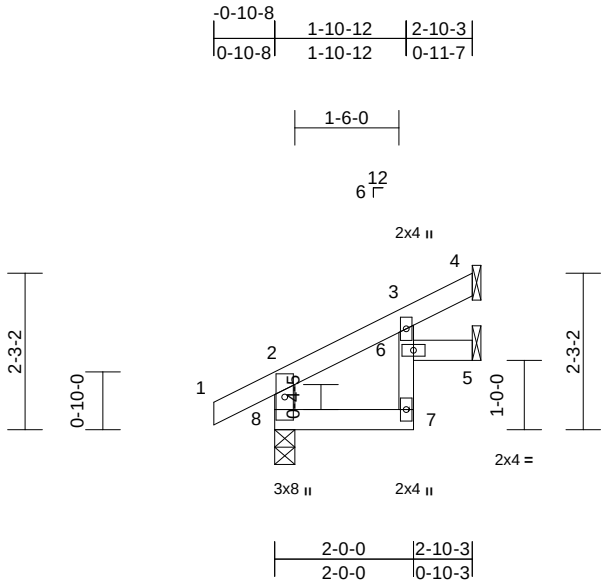

Scale = 1:33.2

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	0.08	Vert(LL)	0.00	6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	0.00	7	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R		Wind(LL)	0.00	7	>999	240	Weight: 10 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except* 7-3:2x3 SPF No.2
WEBS 2x4 SPF No.2

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

REACTIONS (lb/size) 4=65/ Mechanical, 5=40/ Mechanical, 8=204/0-3-8
Max Horiz 8=63 (LC 8)
Max Uplift 4=-28 (LC 8), 5=-17 (LC 8), 8=-23 (LC 8)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-8=-185/45, 1-2=0/32, 2-3=-75/0, 3-4=-17/26
BOT CHORD 7-8=-24/27, 6-7=-1/35, 3-6=-6/30, 5-6=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) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 23 lb uplift at joint 8, 28 lb uplift at joint 4 and 17 lb uplift at joint 5.
6) 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

September 27,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	J10	Jack-Open	4	1	I48073538
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

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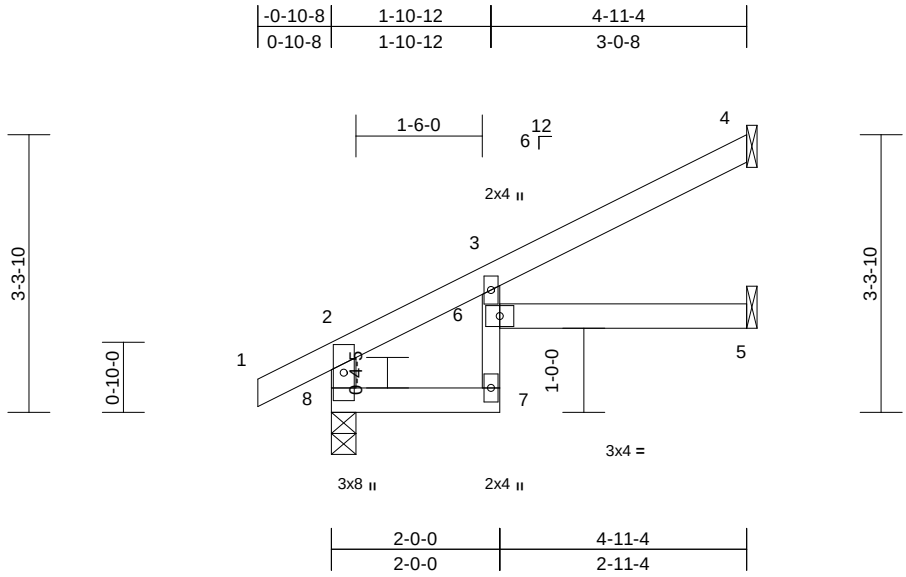

Scale = 1:27.4

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	0.29	Vert(LL)	-0.04	5-6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.28	Vert(CT)	-0.07	5-6	>852	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.04	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R		Wind(LL)	0.05	5-6	>999	240	Weight: 15 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except* 7-3:2x3 SPF No.2
WEBS 2x4 SPF No.2

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

REACTIONS (lb/size) 4=140/ Mechanical, 5=65/ Mechanical, 8=292/0-3-8
Max Horiz 8=106 (LC 8)
Max Uplift 4=-71 (LC 8), 5=-3 (LC 8), 8=-29 (LC 8)
Max Grav 4=140 (LC 1), 5=78 (LC 3), 8=292 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-8=-275/58, 1-2=0/32, 2-3=-174/0, 3-4=-46/53
BOT CHORD 7-8=-63/93, 6-7=-8/38, 3-6=0/78, 5-6=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) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 29 lb uplift at joint 8, 71 lb uplift at joint 4 and 3 lb uplift at joint 5.
6) 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

September 27,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	J11	Jack-Open	1	1	I48073539
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

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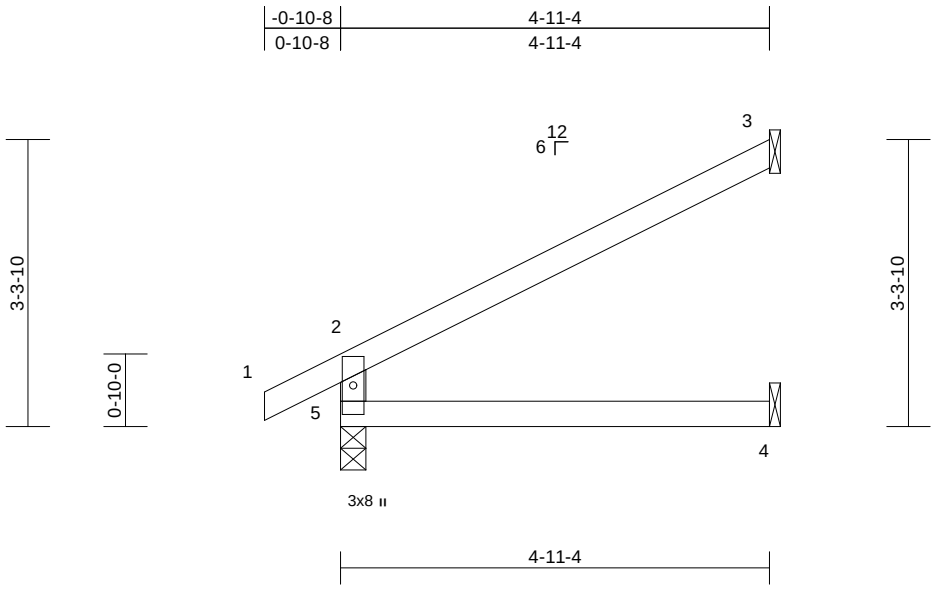

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.34	Vert(LL)	-0.02	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.21	Vert(CT)	-0.05	4-5	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.02	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R		Wind(LL)	0.03	4-5	>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

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

REACTIONS (lb/size) 3=147/ Mechanical, 4=58/ Mechanical, 5=292/0-3-8
Max Horiz 5=106 (LC 8)
Max Uplift 3=-84 (LC 8), 5=-29 (LC 8)
Max Grav 3=147 (LC 1), 4=89 (LC 3), 5=292 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-5=-255/76, 1-2=0/32, 2-3=-93/51
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) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 29 lb uplift at joint 5 and 84 lb uplift at joint 3.
6) 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

September 27,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	J12	Diagonal Hip Girder	2	1	I48073540
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

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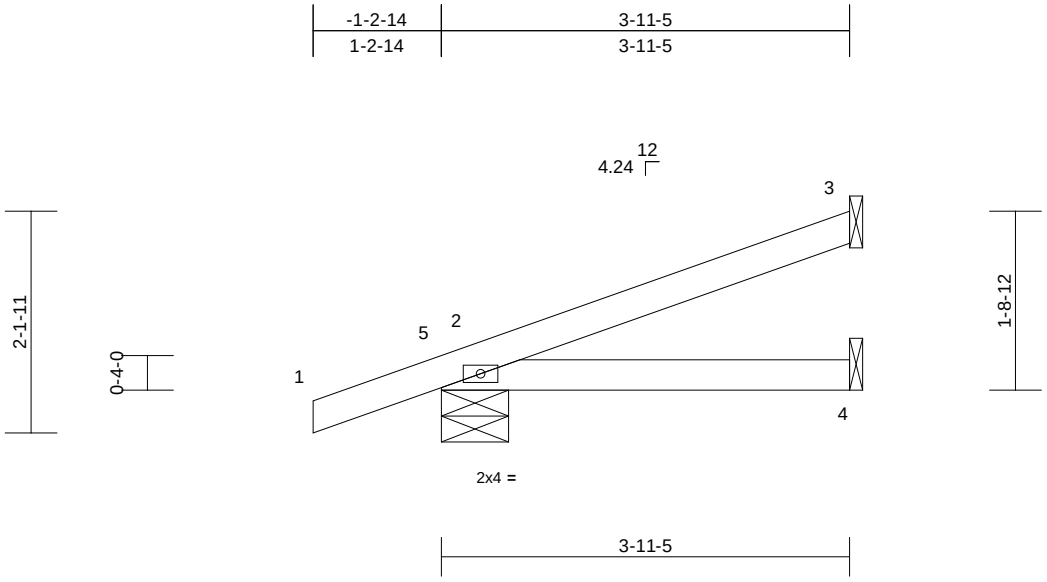

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.16	Vert(LL)	-0.01	2-4	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	-0.01	2-4	>999	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 11 lb	FT = 10%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-11-5 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 2=141/0-7-12, 3=63/ Mechanical, 4=24/ Mechanical
Max Horiz 2=88 (LC 6)
Max Uplift 2=-107 (LC 6), 3=-52 (LC 6)
Max Grav 2=141 (LC 1), 3=63 (LC 1), 4=60 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-5/17, 2-3=-39/15
BOT CHORD 2-4=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) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 52 lb uplift at joint 3 and 107 lb uplift at joint 2.
6) 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.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 29 lb down and 11 lb up at -1-2-14, and 29 lb down and 11 lb up at -1-2-14 on top chord. The design/selection of such connection device(s) is the responsibility of others.
8) 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
Concentrated Loads (lb)
Vert: 1=-44 (F=-22, B=-22)
Trapezoidal Loads (lb/ft)
Vert: 1=0 (F=35, B=35)-to-5=-22 (F=24, B=24), 5=0 (F=35, B=35)-to-2=-6 (F=32, B=32), 2=-6 (F=32, B=32)-to-3=-69 (F=1, B=1), 2=-2 (F=9, B=9)-to-4=-20 (F=0, B=0)

September 27,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	J13	Jack-Open	6	1	I48073541
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

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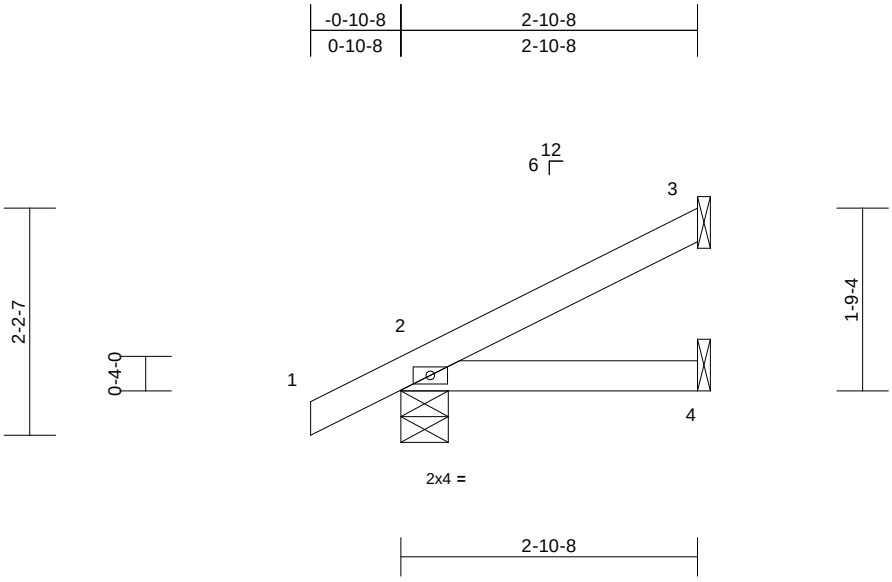

Scale = 1:22.3

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	0.08	Vert(LL)	0.00	2-4	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	-0.01	2-4	>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-P							Weight: 8 lb	FT = 10%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-10-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 2=210/0-5-8, 3=74/ Mechanical, 4=26/ Mechanical
Max Horiz 2=73 (LC 8)
Max Uplift 2=-37 (LC 8), 3=-47 (LC 8)
Max Grav 2=210 (LC 1), 3=74 (LC 1), 4=52 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/27, 2-3=-57/27
BOT CHORD 2-4=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) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 47 lb uplift at joint 3 and 37 lb uplift at joint 2.
6) 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

September 27,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	J14	Jack-Open	3	1	I48073542
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

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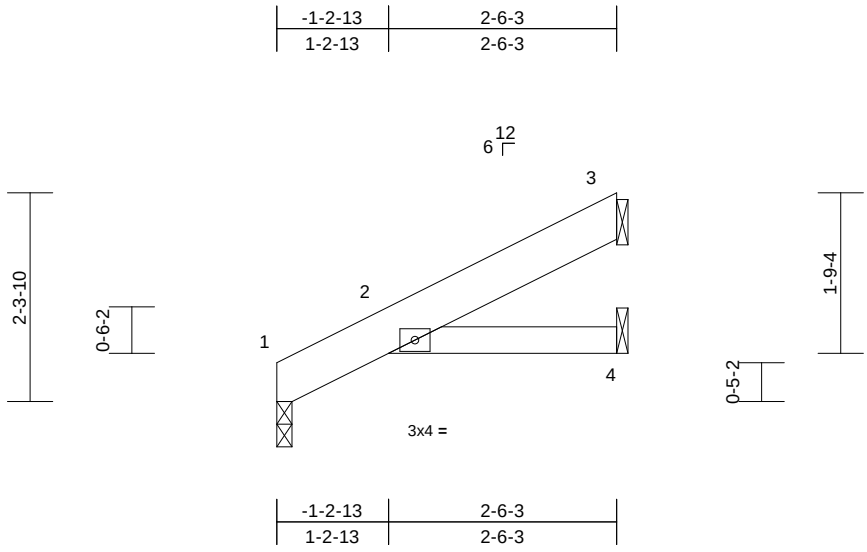

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	-0.01	2	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	-0.01	2	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P		Wind(LL)	0.01	2	>999	240	Weight: 11 lb	FT = 10%

LUMBER
TOP CHORD 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2

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

REACTIONS (lb/size) 1=164/0-2-0, 3=138/ Mechanical, 4=25/ Mechanical
Max Horiz 1=74 (LC 8)
Max Uplift 1=-11 (LC 8), 3=-63 (LC 8)
Max Grav 1=164 (LC 1), 3=138 (LC 1), 4=49 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-75/0, 2-3=-43/58
BOT CHORD 2-4=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) Refer to girder(s) for truss to truss connections.
5) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 1.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 63 lb uplift at joint 3 and 11 lb uplift at joint 1.
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

September 27,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	J15	Diagonal Hip Girder	3	1	I48073543
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

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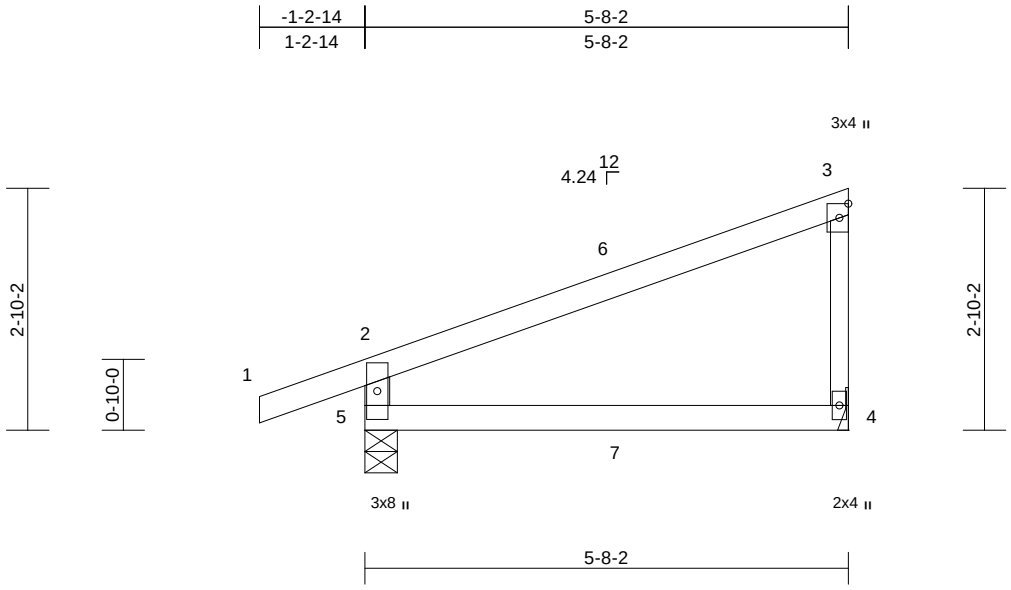

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.43	Vert(LL)	-0.04	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.26	Vert(CT)	-0.07	4-5	>889	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R		Wind(LL)	0.02	4-5	>999	240	Weight: 17 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 5-8-2 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 4=234/ Mechanical, 5=355/0-4-9
Max Horiz 5=119 (LC 5)
Max Uplift 4=-53 (LC 8), 5=-101 (LC 4)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-5=-311/141, 1-2=0/32, 2-3=-142/17, 3-4=-166/76
BOT CHORD 4-5=-31/45

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) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 101 lb uplift at joint 5 and 53 lb uplift at joint 4.
6) 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.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 71 lb down and 44 lb up at 2-11-4, and 70 lb down and 39 lb up at 2-11-4 on top chord, and 6 lb down at 2-11-4, and 4 lb down and 1 lb up at 2-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
8) 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=-3 (F=1, B=-4)

September 27,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	J16	Jack-Open	11	1	I48073544
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

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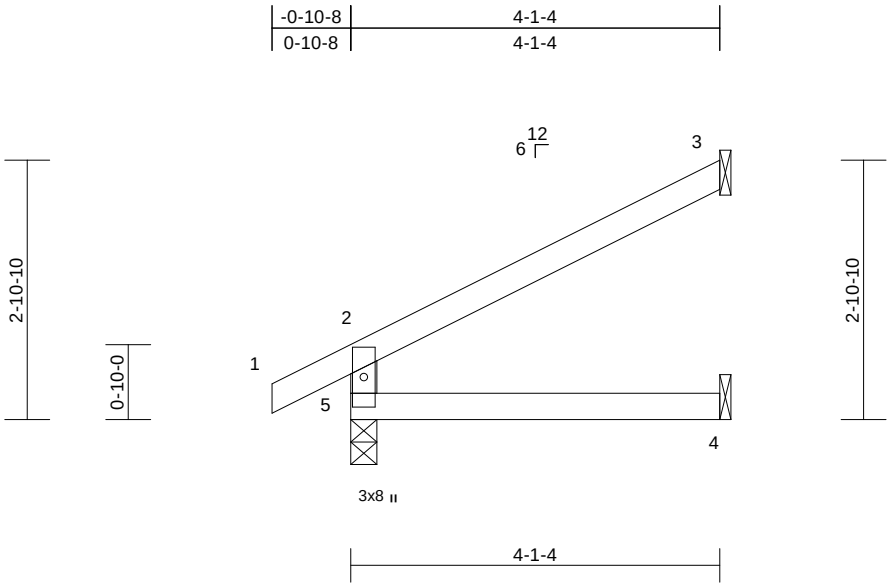

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	-0.01	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	-0.02	4-5	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	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: 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 4-1-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 3=120/ Mechanical, 4=46/ Mechanical, 5=256/0-3-8
Max Horiz 5=89 (LC 8)
Max Uplift 3=-70 (LC 8), 5=-26 (LC 8)
Max Grav 3=120 (LC 1), 4=73 (LC 3), 5=256 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-5=-224/66, 1-2=0/32, 2-3=-77/41
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) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 26 lb uplift at joint 5 and 70 lb uplift at joint 3.
6) 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

September 27,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	J17	Jack-Open	5	1	I48073545
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

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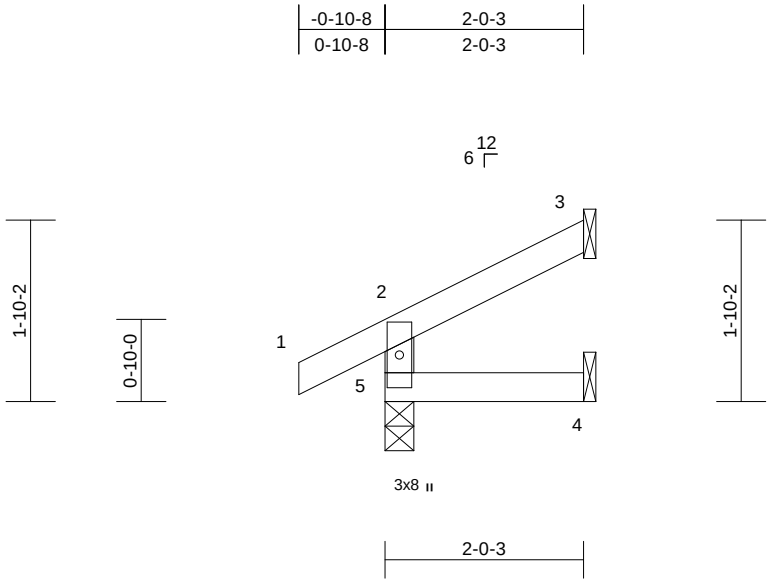

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	0.00	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	0.00	4-5	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	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: 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 2-0-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 3=46/ Mechanical, 4=15/ Mechanical, 5=173/0-3-8
Max Horiz 5=46 (LC 8)
Max Uplift 3=-33 (LC 8), 5=-22 (LC 8)
Max Grav 3=46 (LC 1), 4=33 (LC 3), 5=173 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-5=-152/42, 1-2=0/32, 2-3=-39/15
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) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 22 lb uplift at joint 5 and 33 lb uplift at joint 3.
6) 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

September 27,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	J18	Jack-Open	1	1	I48073546 Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

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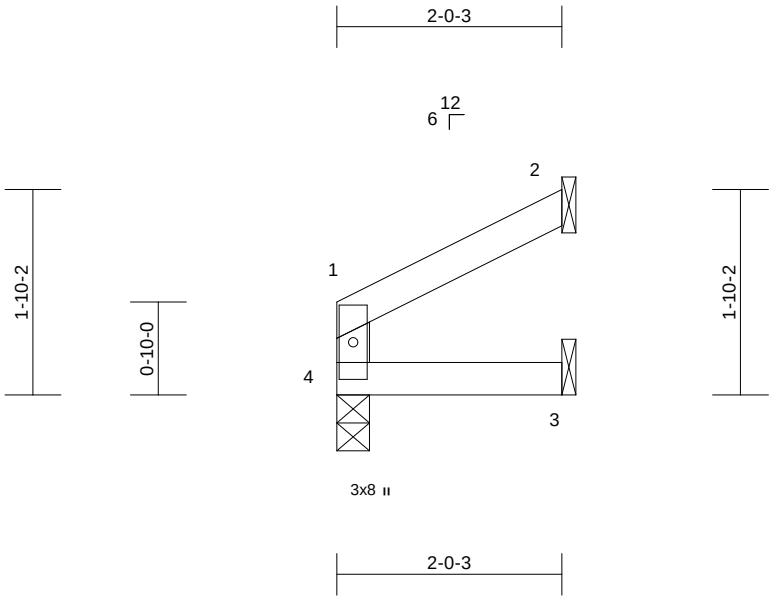

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	0.00	3-4	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	0.00	3-4	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R		Wind(LL)	0.00	3-4	>999	240	Weight: 5 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 2-0-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 2=59/ Mechanical, 3=22/ Mechanical, 4=81/0-3-8
Max Horiz 4=35 (LC 5)
Max Uplift 2=-36 (LC 8)
Max Grav 2=59 (LC 1), 3=35 (LC 3), 4=81 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-4=-67/16, 1-2=-36/21
BOT CHORD 3-4=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) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 36 lb uplift at joint 2.
6) 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

September 27,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	J19	Jack-Closed Girder	1	1	I48073547
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Aug 16 2021 Print: 8.430 S Aug 16 2021 MiTek Industries, Inc. Fri Sep 24 10:55:34
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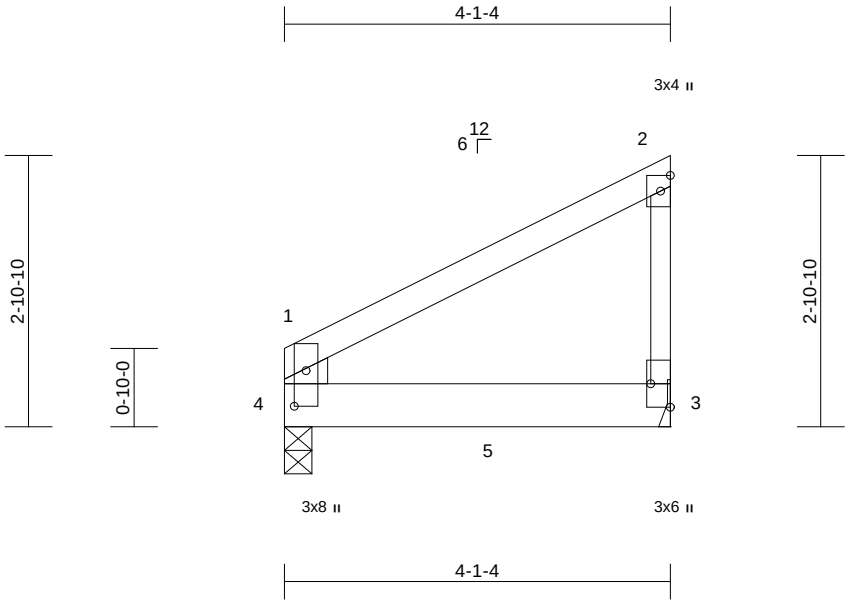

Scale = 1:24.5

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

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	0.44	Vert(LL)	-0.05	3-4	>989	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.87	Vert(CT)	-0.08	3-4	>549	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R		Wind(LL)	0.04	3-4	>999	240	Weight: 15 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x6 SPF 1650F 1.4E
WEBS 2x6 SPF No.2 *Except* 2-3:2x3 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 7-9-4 oc bracing.

REACTIONS (lb/size) 3=856/ Mechanical, 4=819/0-3-8
Max Horiz 4=100 (LC 5)
Max Uplift 3=-197 (LC 8), 4=-161 (LC 8)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-4=-137/57, 1-2=-126/33, 2-3=-127/59
BOT CHORD 3-4=-36/68

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) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 161 lb uplift at joint 4 and 197 lb uplift at joint 3.
6) 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.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1336 lb down and 295 lb up at 2-2-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
8) 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, 3-4=-20
Concentrated Loads (lb)
Vert: 5=-1336 (F)

September 27,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	J20	Diagonal Hip Girder	2	1	I48073548
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

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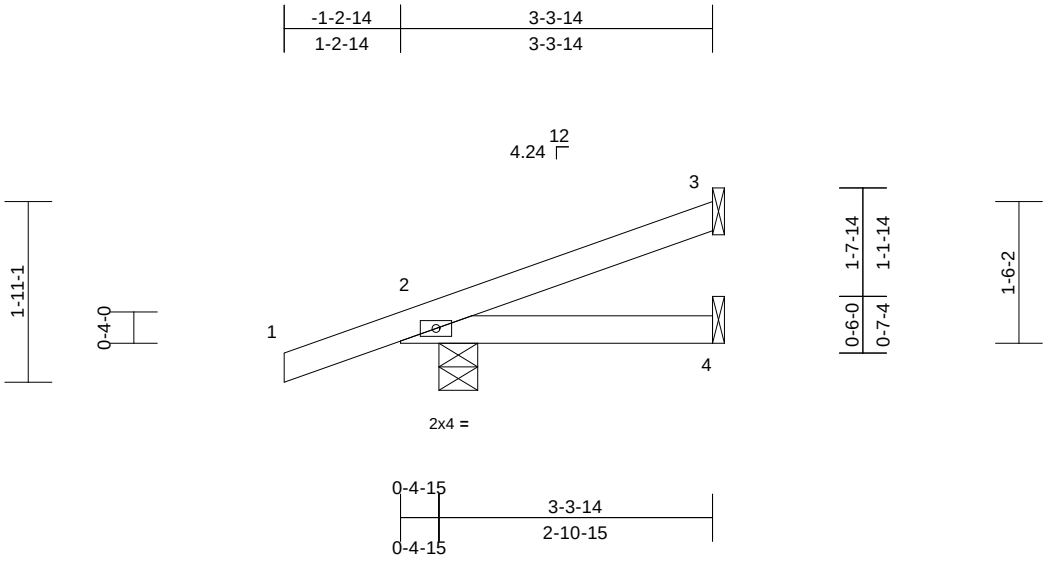

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.15	Vert(LL)	-0.01	2-4	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	-0.01	2-4	>999	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.00	Horz(CT)	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

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

REACTIONS (lb/size) 2=118/0-4-15, 3=41/ Mechanical, 4=17/ Mechanical
Max Horiz 2=81 (LC 6)
Max Uplift 2=-106 (LC 6), 3=-52 (LC 6)
Max Grav 2=118 (LC 1), 3=41 (LC 1), 4=47 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-5/17, 2-3=-33/9
BOT CHORD 2-4=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) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 52 lb uplift at joint 3 and 106 lb uplift at joint 2.
6) 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.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 24 lb down and 9 lb up at -1-2-14, and 24 lb down and 9 lb up at -1-2-14 on top chord. The design/selection of such connection device(s) is the responsibility of others.
8) 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
Concentrated Loads (lb)
Vert: 1=-37 (F=-19, B=-19)
Trapezoidal Loads (lb/ft)
Vert: 1=0 (F=35, B=35)-to-2=-25 (F=22, B=22), 2=-4 (F=33, B=33)-to-3=-58 (F=6, B=6), 2=0 (F=10, B=10)-to-4=-17 (F=2, B=2)

September 27,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	J21	Jack-Open	4	1	I48073549
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

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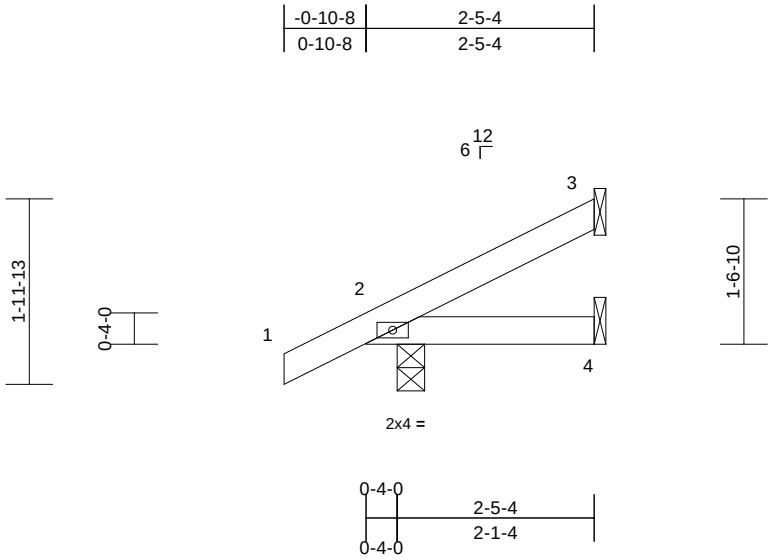

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	0.00	2-4	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	0.00	2-4	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 7 lb	FT = 10%

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

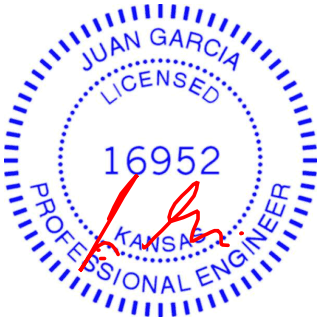
BRACING
TOP CHORD Structural wood sheathing directly applied or 2-5-4 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 2=188/0-3-8, 3=62/ Mechanical, 4=22/ Mechanical
Max Horiz 2=64 (LC 8)
Max Uplift 2=-35 (LC 8), 3=-39 (LC 8)
Max Grav 2=188 (LC 1), 3=62 (LC 1), 4=45 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/27, 2-3=-49/22
BOT CHORD 2-4=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) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 39 lb uplift at joint 3 and 35 lb uplift at joint 2.
6) 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



September 27,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	LAY1	Lay-In Gable	1	1	I48073550
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

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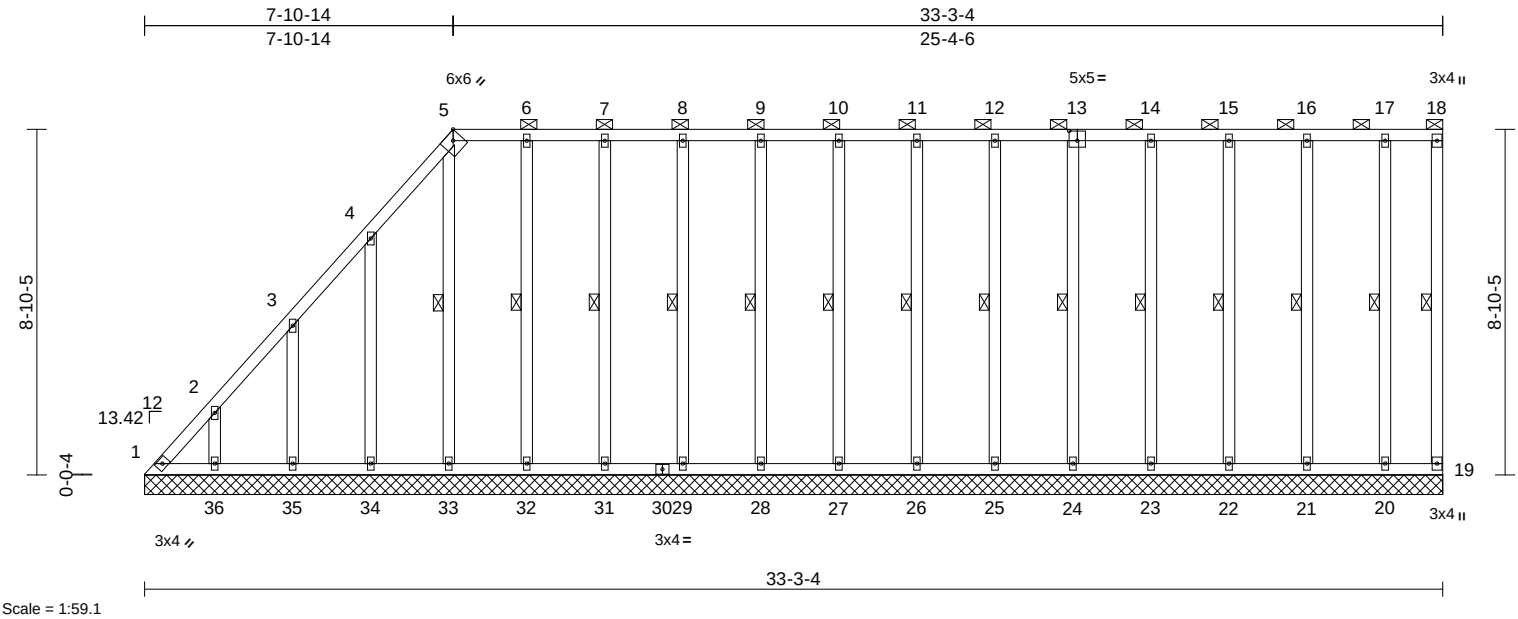

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Plate Offsets (X, Y): [5:0-2-10,Edge], [13:0-2-8,0-3-0]

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	0.33	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.12	Horiz(TL)	-0.01	19	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 225 lb	FT = 10%

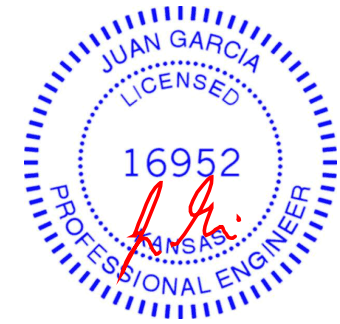
LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
OTHERS 2x4 SPF No.2

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.): 5-18.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing, Except:
10-0-0 oc bracing:
23-24,22-23,21-22,20-21,19-20.
WEBS 1 Row at midpt 18-19, 5-33, 6-32, 7-31, 8-29, 9-28, 10-27, 11-26, 12-25, 13-24, 14-23, 15-22, 16-21, 17-20

REACTIONS (lb/size) 1=44/33-3-4, 19=45/33-3-4, 20=160/33-3-4, 21=185/33-3-4, 22=180/33-3-4, 23=175/33-3-4, 24=180/33-3-4, 25=186/33-3-4, 26=179/33-3-4, 27=180/33-3-4, 28=180/33-3-4, 29=180/33-3-4, 31=180/33-3-4, 32=182/33-3-4, 33=171/33-3-4, 34=193/33-3-4, 35=178/33-3-4, 36=175/33-3-4
Max Horiz 1=341 (LC 5)
Max Uplift 1=-156 (LC 6), 19=-17 (LC 5), 20=-45 (LC 4), 21=-43 (LC 5), 22=-38 (LC 4), 23=-33 (LC 5), 24=-34 (LC 4), 25=-36 (LC 5), 26=-33 (LC 4), 27=-34 (LC 5), 28=-34 (LC 4), 29=-34 (LC 5), 31=-36 (LC 4), 32=-39 (LC 5), 33=-119 (LC 5), 34=-152 (LC 8), 35=-134 (LC 8), 36=-132 (LC 8)
Max Grav 1=289 (LC 5), 19=45 (LC 1), 20=160 (LC 1), 21=185 (LC 1), 22=180 (LC 1), 23=175 (LC 1), 24=180 (LC 1), 25=186 (LC 1), 26=179 (LC 1), 27=180 (LC 1), 28=180 (LC 1), 29=180 (LC 1), 31=180 (LC 1), 32=182 (LC 1), 33=188 (LC 15), 34=226 (LC 15), 35=205 (LC 15), 36=202 (LC 15)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-389/261, 2-3=-321/213, 3-4=-263/168, 4-5=-221/148, 5-6=-122/91, 6-7=-121/91, 7-8=-121/91, 8-9=-121/91, 9-10=-121/91, 10-11=-121/91, 11-12=-121/91, 12-14=-121/92, 14-15=-121/92, 15-16=-121/92, 16-17=-121/92, 17-18=-121/92, 18-19=-82/78
BOT CHORD 1-36=-120/92, 35-36=-120/92, 34-35=-120/92, 33-34=-120/92, 32-33=-122/93, 31-32=-122/93, 29-31=-122/93, 28-29=-122/93, 27-28=-122/93, 26-27=-122/93, 25-26=-122/93, 24-25=-122/93, 23-24=-122/93, 22-23=-122/93, 21-22=-122/93, 20-21=-122/93, 19-20=-122/93
WEBS 2-36=-159/149, 3-35=-165/159, 4-34=-186/175, 5-33=-148/144, 6-32=-142/63, 7-31=-140/60, 8-29=-140/58, 9-28=-140/58, 10-27=-140/58, 11-26=-139/57, 12-25=-146/60, 13-24=-140/58, 14-23=-134/56, 15-22=-140/58, 16-21=-145/64, 17-20=-124/105

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) Provide adequate drainage to prevent water ponding.
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.



September 27,2021

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 156 lb uplift at joint 1, 17 lb uplift at joint 19, 132 lb uplift at joint 36, 134 lb uplift at joint 35, 152 lb uplift at joint 34, 119 lb uplift at joint 33, 39 lb uplift at joint 32, 36 lb uplift at joint 31, 34 lb uplift at joint 29, 34 lb uplift at joint 28, 34 lb uplift at joint 27, 33 lb uplift at joint 26, 36 lb uplift at joint 25, 34 lb uplift at joint 24, 33 lb uplift at joint 23, 38 lb uplift at joint 22, 43 lb uplift at joint 21 and 45 lb uplift at joint 20.
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

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	LAY2	Lay-In Gable	1	1	I48073551
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

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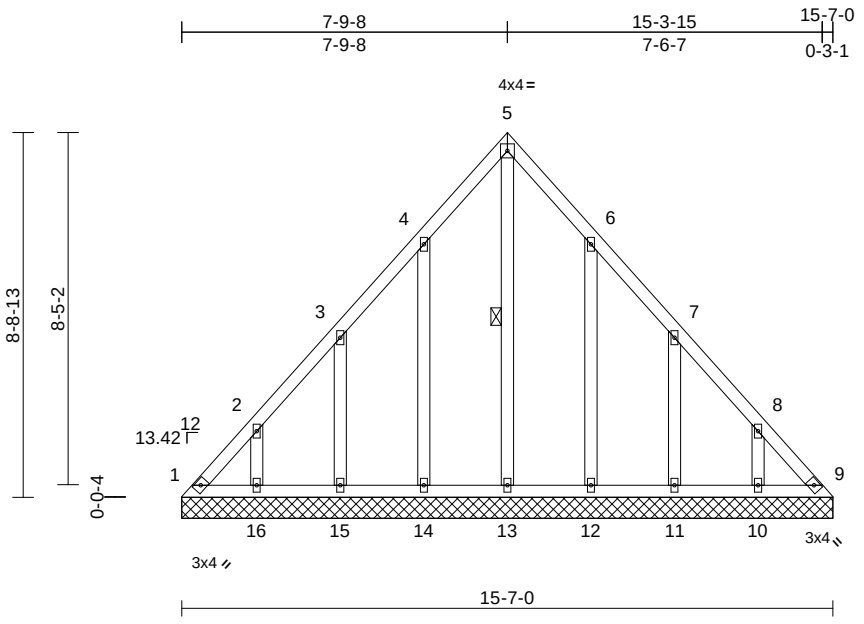

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.11	Horiz(TL)	0.01	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 78 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 5-13

REACTIONS (lb/size) 1=74/15-7-0, 9=74/15-7-0, 10=174/15-7-0, 11=181/15-7-0, 12=186/15-7-0, 13=118/15-7-0, 14=186/15-7-0, 15=181/15-7-0, 16=174/15-7-0
Max Horiz 1=226 (LC 5)
Max Uplift 1=-107 (LC 6), 9=-71 (LC 7), 10=-130 (LC 9), 11=-139 (LC 9), 12=-136 (LC 9), 14=-138 (LC 8), 15=-139 (LC 8), 16=-130 (LC 8)
Max Grav 1=221 (LC 8), 9=197 (LC 9), 10=201 (LC 16), 11=209 (LC 16), 12=217 (LC 16), 13=198 (LC 9), 14=219 (LC 15), 15=208 (LC 15), 16=201 (LC 15)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-309/196, 2-3=-186/148, 3-4=-142/105, 4-5=-113/165, 5-6=-91/141, 6-7=-105/61, 7-8=-155/100, 8-9=-278/148
BOT CHORD 1-16=-100/209, 15-16=-100/209, 14-15=-100/209, 13-14=-100/209, 12-13=-100/209, 11-12=-100/209, 10-11=-100/209, 9-10=-100/209
WEBS 5-13=-174/21, 4-14=-178/162, 3-15=-168/164, 2-16=-158/148, 6-12=-177/160, 7-11=-169/165, 8-10=-158/148

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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 107 lb uplift at joint 1, 71 lb uplift at joint 9, 138 lb uplift at joint 14, 139 lb uplift at joint 15, 130 lb uplift at joint 16, 136 lb uplift at joint 12, 139 lb uplift at joint 11 and 130 lb uplift at joint 10.
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

September 27,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	LAY3	Lay-In Gable	1	1	I48073552
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

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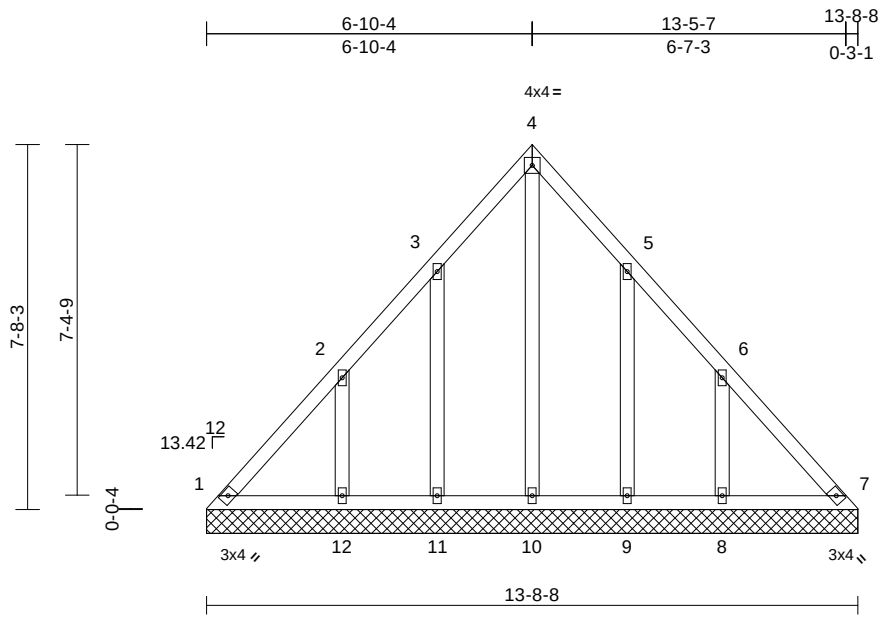

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.13	Horiz(TL)	0.00	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 63 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.

REACTIONS (lb/size) 1=119/13-8-8, 7=119/13-8-8, 8=241/13-8-8, 9=167/13-8-8, 10=125/13-8-8, 11=167/13-8-8, 12=241/13-8-8
Max Horiz 1=-197 (LC 4)
Max Uplift 1=-50 (LC 6), 7=-18 (LC 7), 8=-183 (LC 9), 9=-125 (LC 9), 11=-126 (LC 8), 12=-182 (LC 8)
Max Grav 1=177 (LC 17), 7=161 (LC 18), 8=278 (LC 16), 9=195 (LC 16), 10=175 (LC 18), 11=197 (LC 15), 12=277 (LC 15)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-230/163, 2-3=-143/94, 3-4=-109/144, 4-5=-90/119, 5-6=-111/51, 6-7=-202/121
BOT CHORD 1-12=-86/180, 11-12=-86/180, 10-11=-86/180, 9-10=-86/180, 8-9=-86/180, 7-8=-86/180
WEBS 4-10=-142/14, 3-11=-165/152, 2-12=-213/202, 5-9=-164/150, 6-8=-214/203

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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 50 lb uplift at joint 1, 18 lb uplift at joint 7, 126 lb uplift at joint 11, 182 lb uplift at joint 12, 125 lb uplift at joint 9 and 183 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.

LOAD CASE(S) Standard

September 27,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	LAY4	Lay-In Gable	1	1	I48073553
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

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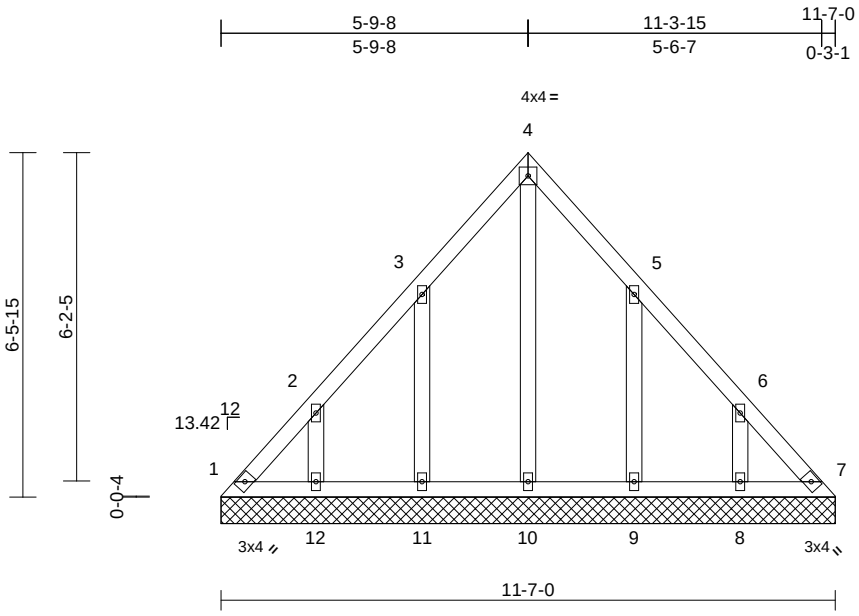

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.07	Horiz(TL)	0.00	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 50 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.

REACTIONS (lb/size) 1=74/11-7-0, 7=74/11-7-0, 8=173/11-7-0, 9=189/11-7-0, 10=117/11-7-0, 11=189/11-7-0, 12=173/11-7-0
Max Horiz 1=-165 (LC 4)
Max Uplift 1=-65 (LC 6), 7=-39 (LC 7), 8=-131 (LC 9), 9=-142 (LC 9), 11=-143 (LC 8), 12=-131 (LC 8)
Max Grav 1=147 (LC 8), 7=130 (LC 9), 8=199 (LC 16), 9=221 (LC 16), 10=154 (LC 18), 11=222 (LC 15), 12=198 (LC 15)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-210/140, 2-3=-134/94, 3-4=-106/121, 4-5=-91/99, 5-6=-107/58, 6-7=-188/105
BOT CHORD 1-12=-71/149, 11-12=-71/149, 10-11=-71/149, 9-10=-71/149, 8-9=-71/149, 7-8=-71/149
WEBS 4-10=-114/9, 3-11=-182/169, 2-12=-156/149, 5-9=-181/168, 6-8=-156/149

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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 65 lb uplift at joint 1, 39 lb uplift at joint 7, 143 lb uplift at joint 11, 131 lb uplift at joint 12, 142 lb uplift at joint 9 and 131 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.

LOAD CASE(S) Standard

September 27,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	LAY5	Lay-In Gable	1	1	I48073554
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

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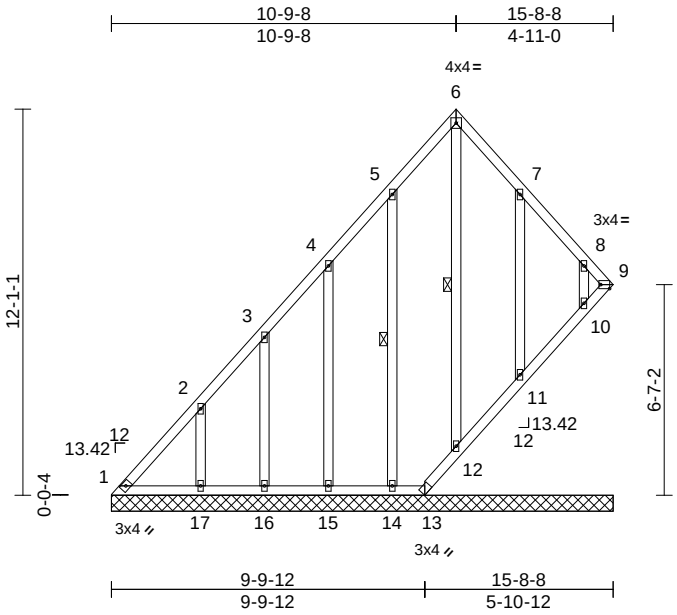

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Plate Offsets (X, Y): [9:Edge,0-1-8]

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	0.09	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.15	Horiz(TL)	0.00	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 95 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, Except:
6-0-0 oc bracing: 9-10.
WEBS 1 Row at midpt 6-12, 5-14

REACTIONS (lb/size) 1=116/15-8-8, 9=52/15-8-8, 10=149/15-8-8, 11=192/15-8-8, 12=112/15-8-8, 13=-17/15-8-8, 14=178/15-8-8, 15=185/15-8-8, 16=162/15-8-8, 17=237/15-8-8
Max Horiz 1=356 (LC 8)
Max Uplift 1=-111 (LC 6), 9=-153 (LC 7), 10=-118 (LC 9), 11=-138 (LC 9), 13=-108 (LC 9), 14=-138 (LC 8), 15=-141 (LC 8), 16=-122 (LC 8), 17=-178 (LC 8)
Max Grav 1=332 (LC 8), 9=219 (LC 9), 10=172 (LC 16), 11=225 (LC 16), 12=168 (LC 9), 13=91 (LC 7), 14=209 (LC 15), 15=213 (LC 15), 16=187 (LC 15), 17=274 (LC 15)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-471/243, 2-3=-302/169, 3-4=-174/123, 4-5=-122/77, 5-6=-94/143, 6-7=-97/146, 7-8=-124/82, 8-9=-147/113
BOT CHORD 1-17=-69/97, 16-17=-69/97, 15-16=-69/97, 14-15=-69/97, 13-14=-69/97, 12-13=-109/157, 11-12=-117/156, 10-11=-119/154, 9-10=-114/146
WEBS 6-12=-144/0, 5-14=-176/158, 4-15=-170/165, 3-16=-155/148, 2-17=-211/198, 7-11=-182/163, 8-10=-138/138

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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 111 lb uplift at joint 1, 153 lb uplift at joint 9, 108 lb uplift at joint 13, 138 lb uplift at joint 14, 141 lb uplift at joint 15, 122 lb uplift at joint 16, 178 lb uplift at joint 17, 138 lb uplift at joint 11 and 118 lb uplift at joint 10.
10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 9, 12, 11, 10.
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

September 27,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	LAY6	Lay-In Gable	1	1	I48073555
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

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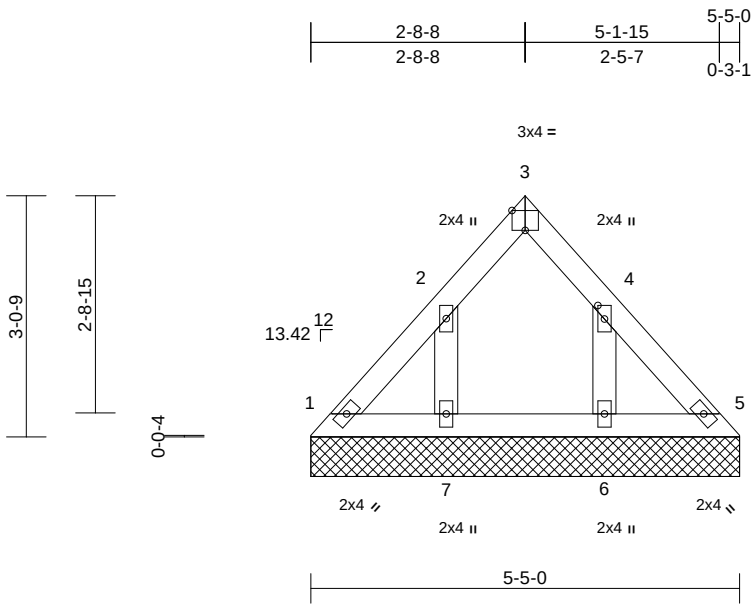

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Plate Offsets (X, Y): [3:Edge,0-3-0], [4:0-2-1,0-1-0]

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	0.03	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.02	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 18 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 5-5-7 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 1=72/5-5-0, 5=71/5-5-0, 6=145/5-5-0, 7=145/5-5-0
Max Horiz 1=-72 (LC 4)
Max Uplift 6=-92 (LC 9), 7=-93 (LC 8)
Max Grav 1=85 (LC 17), 5=84 (LC 18), 6=164 (LC 16), 7=165 (LC 15)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-98/50, 2-3=-65/17, 3-4=-65/17, 4-5=-97/48
BOT CHORD 1-7=-34/90, 6-7=-34/90, 5-6=-34/90
WEBS 2-7=-127/116, 4-6=-126/115

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) Gable requires continuous bottom chord bearing.
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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 93 lb uplift at joint 7 and 92 lb uplift at joint 6.
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

September 27,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	LAY7	Lay-In Gable	1	1	I48073556
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

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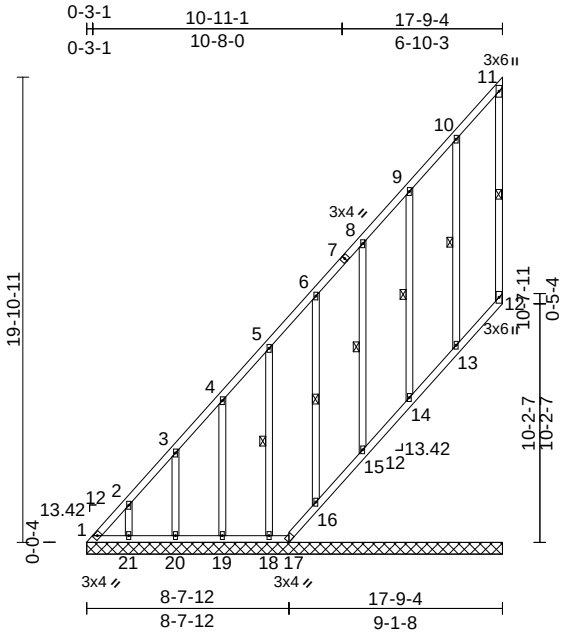

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.40	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.17	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.11	Horiz(TL)	-0.01	12	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 130 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 5-11-1 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 14-15,12-13.
WEBS 1 Row at midpt 11-12, 5-18, 6-16, 8-15, 9-14, 10-13

REACTIONS (lb/size) 1=49/17-9-4, 12=68/17-9-4, 13=187/17-9-4, 14=179/17-9-4, 15=181/17-9-4, 16=175/17-9-4, 17=9/17-9-4, 18=173/17-9-4, 19=181/17-9-4, 20=181/17-9-4, 21=174/17-9-4
Max Horiz 1=606 (LC 8)
Max Uplift 1=-348 (LC 6), 12=-286 (LC 7), 13=-138 (LC 8), 14=-134 (LC 8), 15=-137 (LC 8), 16=-133 (LC 8), 17=-111 (LC 4), 18=-140 (LC 8), 19=-135 (LC 8), 20=-137 (LC 8), 21=-131 (LC 8)
Max Grav 1=743 (LC 8), 12=249 (LC 4), 13=213 (LC 15), 14=209 (LC 15), 15=208 (LC 15), 16=205 (LC 15), 17=163 (LC 7), 18=200 (LC 15), 19=209 (LC 15), 20=209 (LC 15), 21=201 (LC 15)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-1008/519, 2-3=-886/472, 3-4=-747/418, 4-5=-610/366, 5-6=-474/314, 6-8=-388/261, 8-9=-309/208, 9-10=-276/185, 10-11=-172/119, 11-12=-82/77
BOT CHORD 1-21=-132/100, 20-21=-132/100, 19-20=-132/100, 18-19=-132/100, 17-18=-132/100, 16-17=-207/162, 15-16=-211/159, 14-15=-216/161, 13-14=-197/149, 12-13=-271/200
WEBS 2-21=-157/146, 3-20=-170/163, 4-19=-168/159, 5-18=-168/159, 6-16=-168/160, 8-15=-169/158, 9-14=-163/172, 10-13=-197/134

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) All plates are 2x4 MT20 unless otherwise indicated.
4) Gable requires continuous bottom chord bearing.
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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 286 lb uplift at joint 12, 348 lb uplift at joint 1, 111 lb uplift at joint 17, 131 lb uplift at joint 21, 137 lb uplift at joint 20, 135 lb uplift at joint 19, 140 lb uplift at joint 18, 133 lb uplift at joint 16, 137 lb uplift at joint 15, 134 lb uplift at joint 14 and 138 lb uplift at joint 13.
9) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 12, 16, 15, 14, 13.
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

September 27,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	LAY8	Lay-In Gable	1	1	I48073557
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

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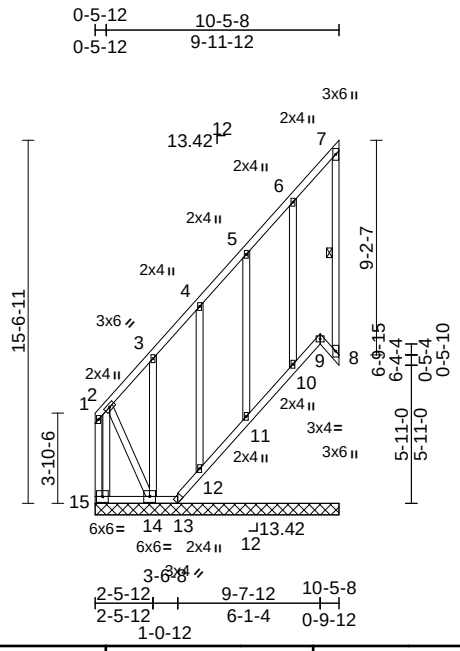

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.35	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.16	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.22	Horiz(TL)	-0.01	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 90 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 6-0-0 oc bracing.
WEBS 1 Row at midpt 7-8

REACTIONS (lb/size) 8=59/10-5-8, 9=15/10-5-8, 10=181/10-5-8, 11=182/10-5-8, 12=172/10-5-8, 13=6/10-5-8, 14=201/10-5-8, 15=96/10-5-8
Max Horiz 15=489 (LC 5)
Max Uplift 8=-131 (LC 7), 9=-55 (LC 7), 10=-117 (LC 5), 11=-145 (LC 8), 12=-140 (LC 8), 13=-118 (LC 4), 14=-766 (LC 8), 15=-648 (LC 6)
Max Grav 8=119 (LC 4), 9=66 (LC 8), 10=234 (LC 15), 11=204 (LC 15), 12=211 (LC 15), 13=164 (LC 7), 14=646 (LC 6), 15=999 (LC 5)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-15=-265/88, 1-2=-214/43, 2-3=-467/294, 3-4=-386/262, 4-5=-301/203, 5-6=-263/175, 6-7=-167/115, 7-8=-82/77
BOT CHORD 14-15=-412/291, 13-14=-129/98, 12-13=-202/159, 11-12=-207/156, 10-11=-211/156, 9-10=-193/142, 8-9=-46/38
WEBS 2-15=-806/562, 3-14=-151/133, 4-12=-174/166, 5-11=-162/169, 6-10=-195/128, 2-14=-554/757

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) All plates are 2x4 MT20 unless otherwise indicated.
4) Gable requires continuous bottom chord bearing.
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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 648 lb uplift at joint 15, 131 lb uplift at joint 8, 118 lb uplift at joint 13, 55 lb uplift at joint 9, 766 lb uplift at joint 14, 140 lb uplift at joint 12, 145 lb uplift at joint 11 and 117 lb uplift at joint 10.
10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 8, 9, 12, 11, 10.
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

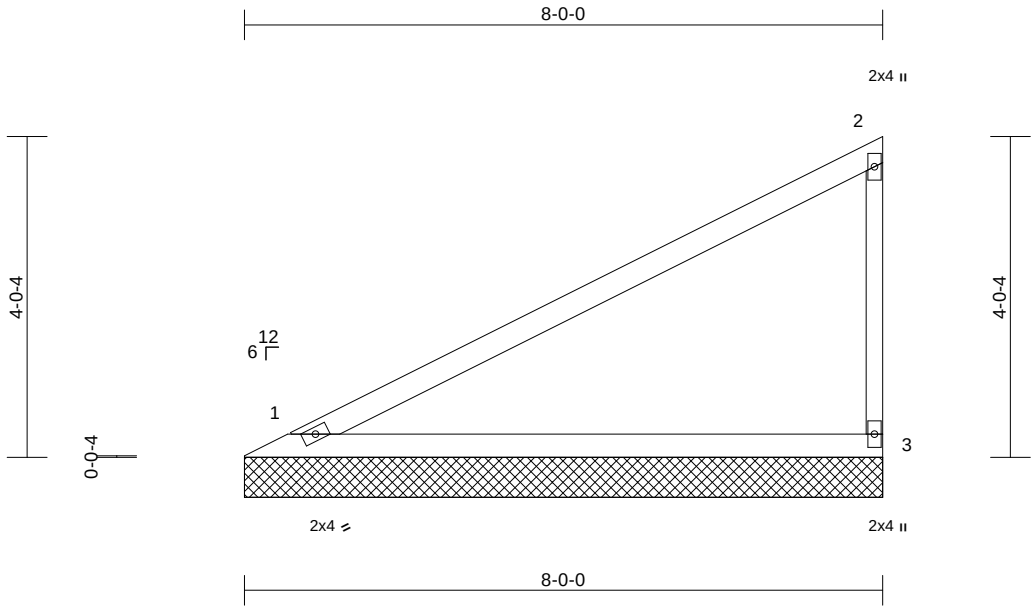
September 27,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	V1	Valley	1	1	I48073558
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Aug 16 2021 Print: 8.430 S Aug 16 2021 MiTek Industries, Inc. Fri Sep 24 10:55:38 ID:hquPfxpp0CdNHWhMuPizeLzNEki-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



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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	0.69	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.59	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: 21 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2

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

REACTIONS (lb/size) 1=329/8-0-0, 3=329/8-0-0
Max Horiz 1=152 (LC 5)
Max Uplift 1=-42 (LC 8), 3=-81 (LC 8)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-139/92, 2-3=-256/124
BOT CHORD 1-3=-52/39

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) Gable requires continuous bottom chord bearing.
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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 42 lb uplift at joint 1 and 81 lb uplift at joint 3.
6) 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

September 27,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	V2	Valley	1	1	I48073559
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

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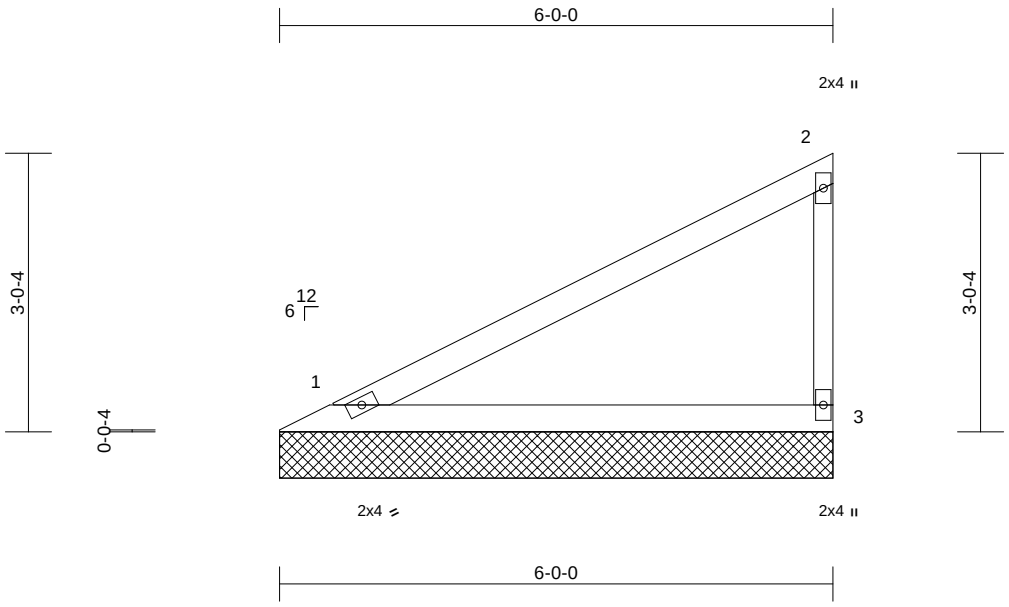

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.55	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.30	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 16 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 6-0-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 1=239/6-0-0, 3=239/6-0-0
Max Horiz 1=111 (LC 5)
Max Uplift 1=-31 (LC 8), 3=-59 (LC 8)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-101/67, 2-3=-186/90
BOT CHORD 1-3=-38/29

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) Gable requires continuous bottom chord bearing.
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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 31 lb uplift at joint 1 and 59 lb uplift at joint 3.
6) 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

September 27,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	V3	Valley	1	1	I48073560
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

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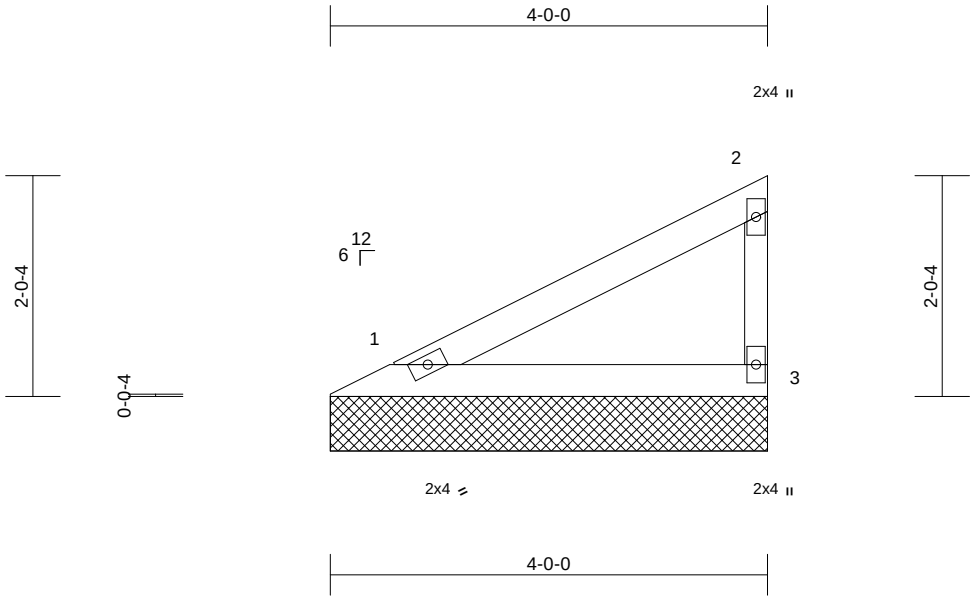

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	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 4-0-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 1=149/4-0-0, 3=149/4-0-0
Max Horiz 1=69 (LC 5)
Max Uplift 1=-19 (LC 8), 3=-36 (LC 8)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-63/42, 2-3=-116/56
BOT CHORD 1-3=-24/18

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) Gable requires continuous bottom chord bearing.
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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 19 lb uplift at joint 1 and 36 lb uplift at joint 3.
6) 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

September 27,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	V4	Valley	1	1	I48073561
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

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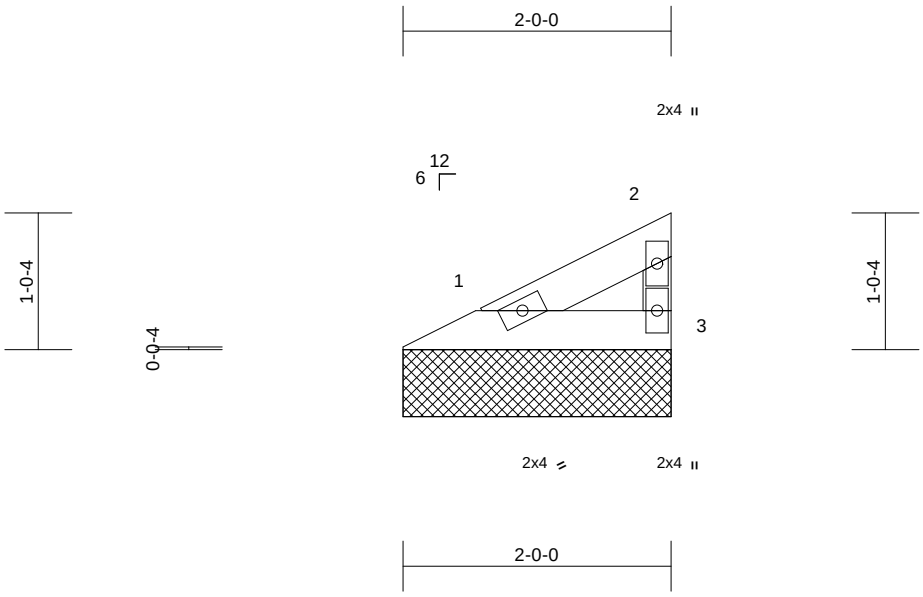

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.03	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.01	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 4 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 2-0-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 1=59/2-0-0, 3=59/2-0-0
Max Horiz 1=27 (LC 5)
Max Uplift 1=-8 (LC 8), 3=-14 (LC 8)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-25/16, 2-3=-46/22
BOT CHORD 1-3=-9/7

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) Gable requires continuous bottom chord bearing.
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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 8 lb uplift at joint 1 and 14 lb uplift at joint 3.
6) 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

September 27,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	V5	Valley	1	1	I48073562
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

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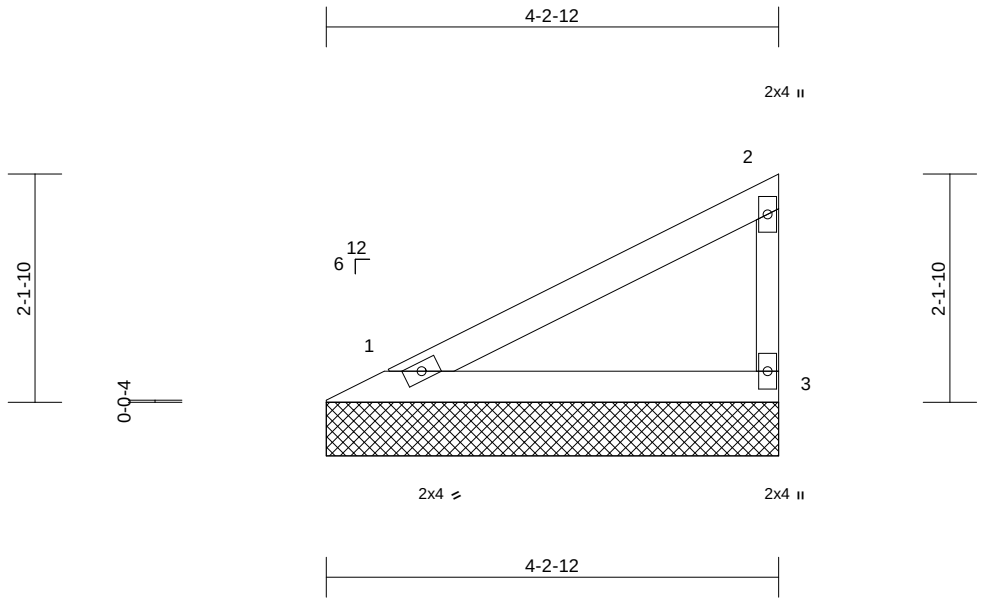

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 11 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 4-3-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 1=159/4-2-12, 3=159/4-2-12
Max Horiz 1=74 (LC 7)
Max Uplift 1=-20 (LC 8), 3=-39 (LC 8)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-67/44, 2-3=-124/60
BOT CHORD 1-3=-25/19

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) Gable requires continuous bottom chord bearing.
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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 20 lb uplift at joint 1 and 39 lb uplift at joint 3.
6) 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

September 27,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	V6	Valley	1	1	I48073563
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

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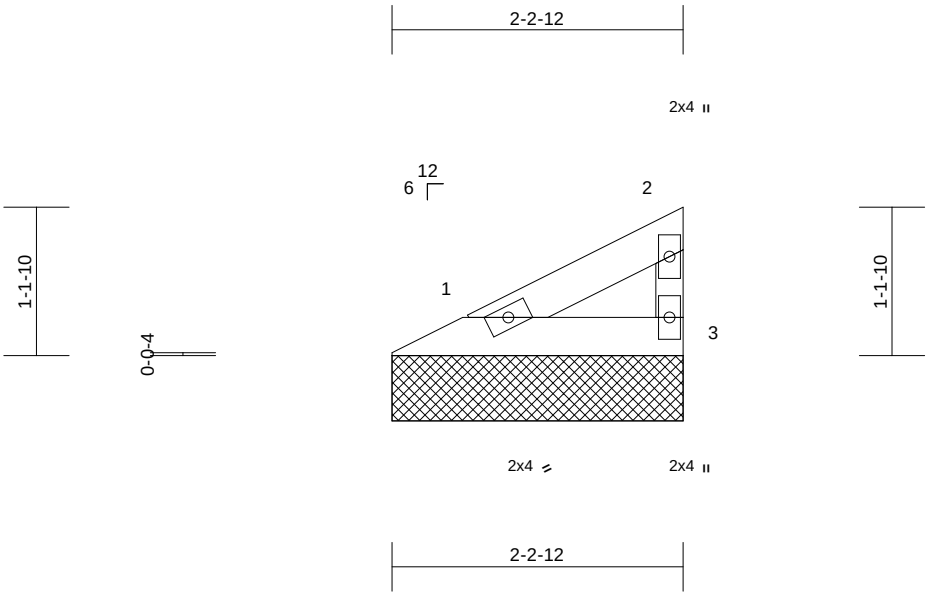

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.04	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 5 lb	FT = 10%

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

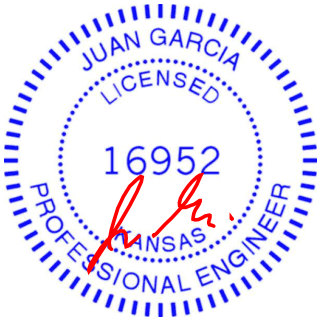
BRACING
TOP CHORD Structural wood sheathing directly applied or 2-3-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 1=69/2-2-12, 3=69/2-2-12
Max Horiz 1=32 (LC 5)
Max Uplift 1=-9 (LC 8), 3=-17 (LC 8)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-29/19, 2-3=-54/26
BOT CHORD 1-3=-11/8

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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 9 lb uplift at joint 1 and 17 lb uplift at joint 3.
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



September 27,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	V7	Valley	1	1	I48073564
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

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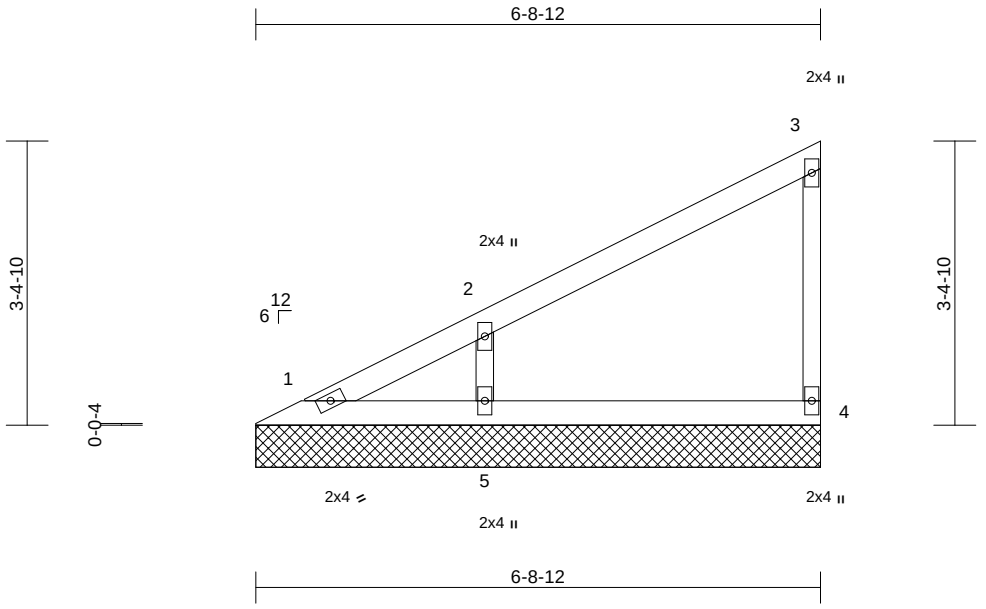

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.05	Horiz(TL)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 18 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 (lb/size) 1=37/6-8-12, 4=143/6-8-12, 5=364/6-8-12
Max Horiz 1=126 (LC 5)
Max Uplift 4=-28 (LC 8), 5=-109 (LC 8)
Max Grav 1=58 (LC 16), 4=143 (LC 1), 5=364 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-108/56, 2-3=-104/43, 3-4=-111/47
BOT CHORD	1-5=-43/33, 4-5=-43/33
WEBS	2-5=-283/158

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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 28 lb uplift at joint 4 and 109 lb uplift at joint 5.
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

September 27,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	V8	Valley	1	1	I48073565
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Aug 16 2021 Print: 8.430 S Aug 16 2021 MiTek Industries, Inc. Fri Sep 24 10:55:40
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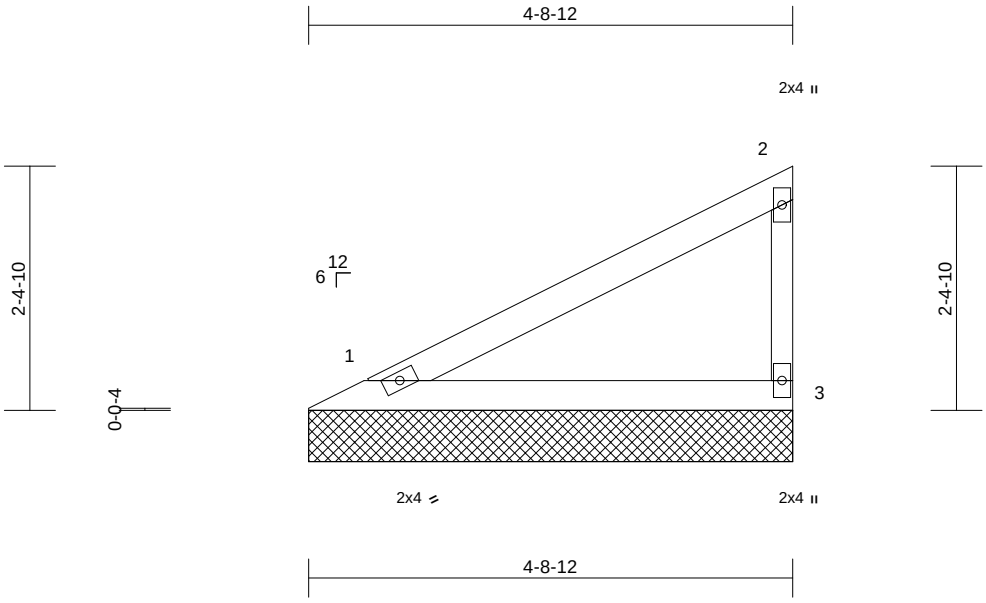

Scale = 1:22.5

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	0.30	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	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 12 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 4-9-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 1=182/4-8-12, 3=182/4-8-12
Max Horiz 1=84 (LC 5)
Max Uplift 1=-23 (LC 8), 3=-45 (LC 8)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-77/51, 2-3=-141/69
BOT CHORD 1-3=-29/22

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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 23 lb uplift at joint 1 and 45 lb uplift at joint 3.
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

September 27,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	V9	Valley	1	1	I48073566
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Aug 16 2021 Print: 8.430 S Aug 16 2021 MiTek Industries, Inc. Fri Sep 24 10:55:40 Page: 1
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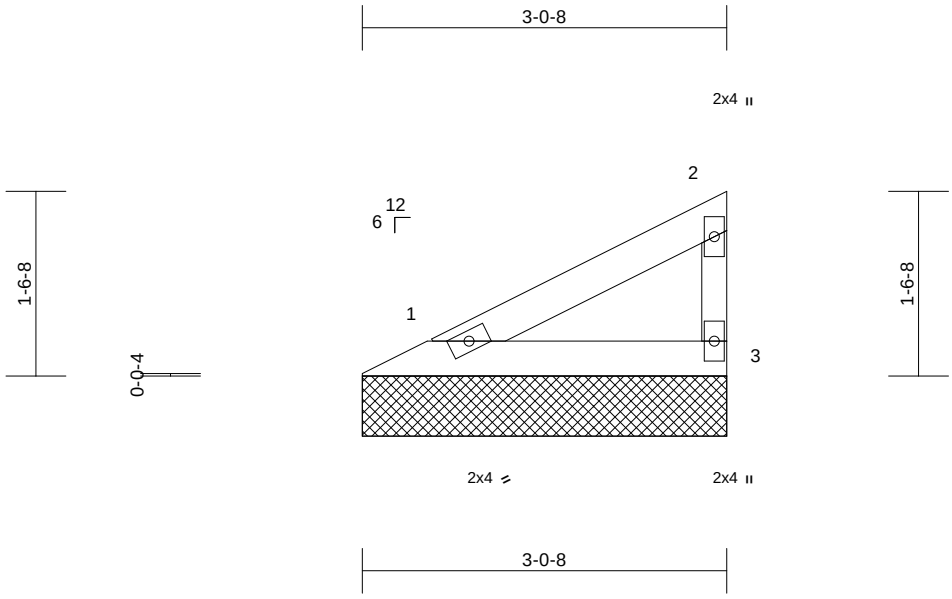


Scale = 1:19.2

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	0.09	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	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 7 lb	FT = 10%

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

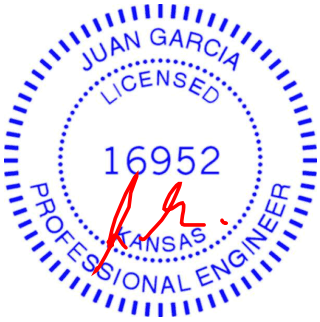
BRACING
TOP CHORD Structural wood sheathing directly applied or 3-1-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 1=106/3-0-8, 3=106/3-0-8
Max Horiz 1=49 (LC 7)
Max Uplift 1=-14 (LC 8), 3=-26 (LC 8)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-45/30, 2-3=-82/40
BOT CHORD 1-3=-17/13

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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 14 lb uplift at joint 1 and 26 lb uplift at joint 3.
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



September 27,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 97 W0
W097	V10	Valley	1	1	I48073567
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Aug 16 2021 Print: 8.430 S Aug 16 2021 MiTek Industries, Inc. Fri Sep 24 10:55:40 Page: 1
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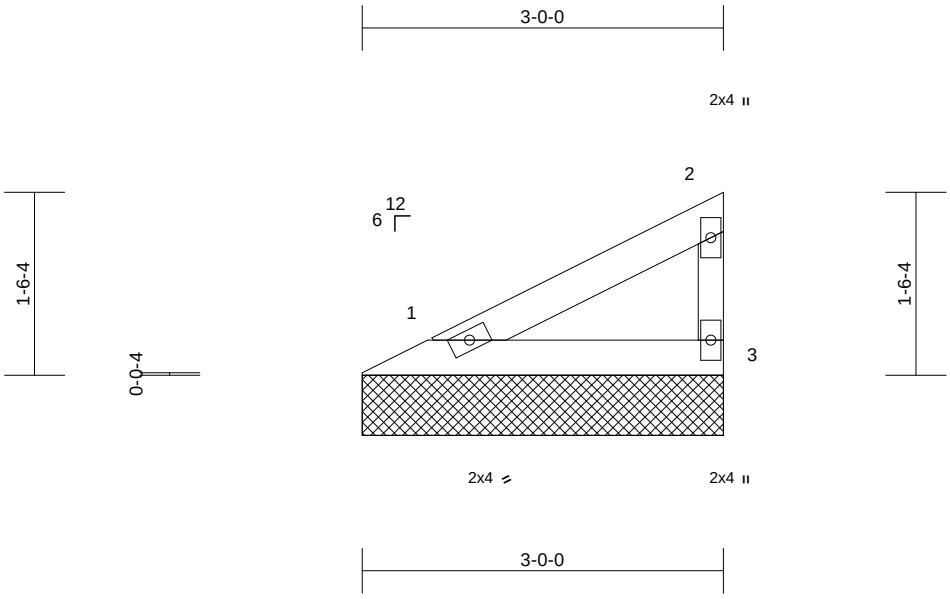


Scale = 1:19.1

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	0.09	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	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 7 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 3-0-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 1=104/3-0-0, 3=104/3-0-0
Max Horiz 1=48 (LC 5)
Max Uplift 1=-13 (LC 8), 3=-25 (LC 8)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-44/29, 2-3=-81/39
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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 13 lb uplift at joint 1 and 25 lb uplift at joint 3.
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.

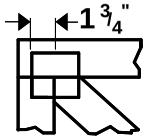
LOAD CASE(S) Standard

September 27,2021

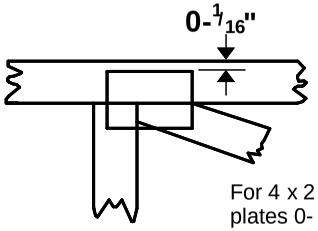
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

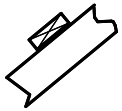
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

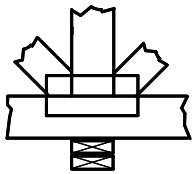
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

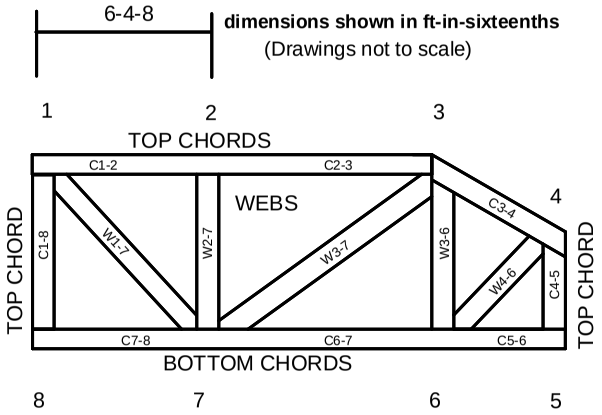


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

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

Numbering System



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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

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