RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/15/2021 10:36:04

RE: MN111
Lot 111 MN

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

Site Information:

Customer: Project Name: MN111
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 58 individual, dated Truss Design Drawings and 0 Additional Drawings.

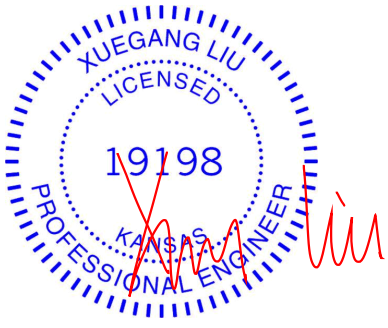
No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I48693611	A1	11/8/2021	21	I48693631	D5	11/8/2021
2	I48693612	A2	11/8/2021	22	I48693632	D6	11/8/2021
3	I48693613	A3	11/8/2021	23	I48693633	E1	11/8/2021
4	I48693614	A4	11/8/2021	24	I48693634	G1	11/8/2021
5	I48693615	A5	11/8/2021	25	I48693635	G2	11/8/2021
6	I48693616	B1	11/8/2021	26	I48693636	G3	11/8/2021
7	I48693617	B2	11/8/2021	27	I48693637	G4	11/8/2021
8	I48693618	B3	11/8/2021	28	I48693638	G5	11/8/2021
9	I48693619	B4	11/8/2021	29	I48693639	J1	11/8/2021
10	I48693620	B5	11/8/2021	30	I48693640	J2	11/8/2021
11	I48693621	B6	11/8/2021	31	I48693641	J3	11/8/2021
12	I48693622	C1	11/8/2021	32	I48693642	J4	11/8/2021
13	I48693623	C2	11/8/2021	33	I48693643	J5	11/8/2021
14	I48693624	C3	11/8/2021	34	I48693644	J6	11/8/2021
15	I48693625	C4	11/8/2021	35	I48693645	LAY1	11/8/2021
16	I48693626	C5	11/8/2021	36	I48693646	LAY2	11/8/2021
17	I48693627	D1	11/8/2021	37	I48693647	LAY3	11/8/2021
18	I48693628	D2	11/8/2021	38	I48693648	LAY4	11/8/2021
19	I48693629	D3	11/8/2021	39	I48693649	P1	11/8/2021
20	I48693630	D4	11/8/2021	40	I48693650	P2	11/8/2021

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: Liu, Xuegang

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.

November 08, 2021

Liu, Xuegang

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

RE: MN111 - Lot 111 MN

Site Information:

Project Customer: Project Name: MN111
Lot/Block: Subdivision:
Address:
City, County: State:

No.	Seal#	Truss Name	Date
41	I48693651	V1	11/8/2021
42	I48693652	V2	11/8/2021
43	I48693653	V3	11/8/2021
44	I48693654	V4	11/8/2021
45	I48693655	V5	11/8/2021
46	I48693656	V6	11/8/2021
47	I48693657	V7	11/8/2021
48	I48693658	V8	11/8/2021
49	I48693659	V9	11/8/2021
50	I48693660	V10	11/8/2021
51	I48693661	V11	11/8/2021
52	I48693662	V12	11/8/2021
53	I48693663	V13	11/8/2021
54	I48693664	V14	11/8/2021
55	I48693665	V15	11/8/2021
56	I48693666	V16	11/8/2021
57	I48693667	V17	11/8/2021
58	I48693668	V18	11/8/2021

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Wind Code: ASCE 7 - 16[Low Rise] Wind Speed: 115 mph
Roof Load: 45.0 psf Floor Load: N/A psf

This package includes 58 individual, dated Truss Design Drawings and 0 Additional Drawings.

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4	I48693614	A4	11/8/2021	24	I48693634	G1	11/8/2021
5	I48693615	A5	11/8/2021	25	I48693635	G2	11/8/2021
6	I48693616	B1	11/8/2021	26	I48693636	G3	11/8/2021
7	I48693617	B2	11/8/2021	27	I48693637	G4	11/8/2021
8	I48693618	B3	11/8/2021	28	I48693638	G5	11/8/2021
9	I48693619	B4	11/8/2021	29	I48693639	J1	11/8/2021
10	I48693620	B5	11/8/2021	30	I48693640	J2	11/8/2021
11	I48693621	B6	11/8/2021	31	I48693641	J3	11/8/2021
12	I48693622	C1	11/8/2021	32	I48693642	J4	11/8/2021
13	I48693623	C2	11/8/2021	33	I48693643	J5	11/8/2021
14	I48693624	C3	11/8/2021	34	I48693644	J6	11/8/2021
15	I48693625	C4	11/8/2021	35	I48693645	LAY1	11/8/2021
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20	I48693630	D4	11/8/2021	40	I48693650	P2	11/8/2021

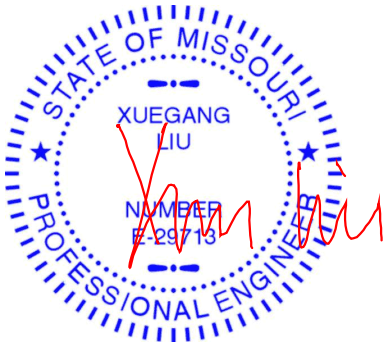
The truss drawing(s) referenced above have been prepared by MiTek USA, Inc under my direct supervision based on the parameters provided by Wheeler - Waverly.

Truss Design Engineer's Name: Liu, Xuegang

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.



November 08, 2021

Liu, Xuegang

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

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52	I48693662	V12	11/8/2021
53	I48693663	V13	11/8/2021
54	I48693664	V14	11/8/2021
55	I48693665	V15	11/8/2021
56	I48693666	V16	11/8/2021
57	I48693667	V17	11/8/2021
58	I48693668	V18	11/8/2021

Job	Truss	Truss Type	Qty	Ply	Lot 111 MN	
MN111	A1	Hip Girder	1	1	Job Reference (optional)	I48693611

Wheeler Lumber, Waverly, KS - 66871,

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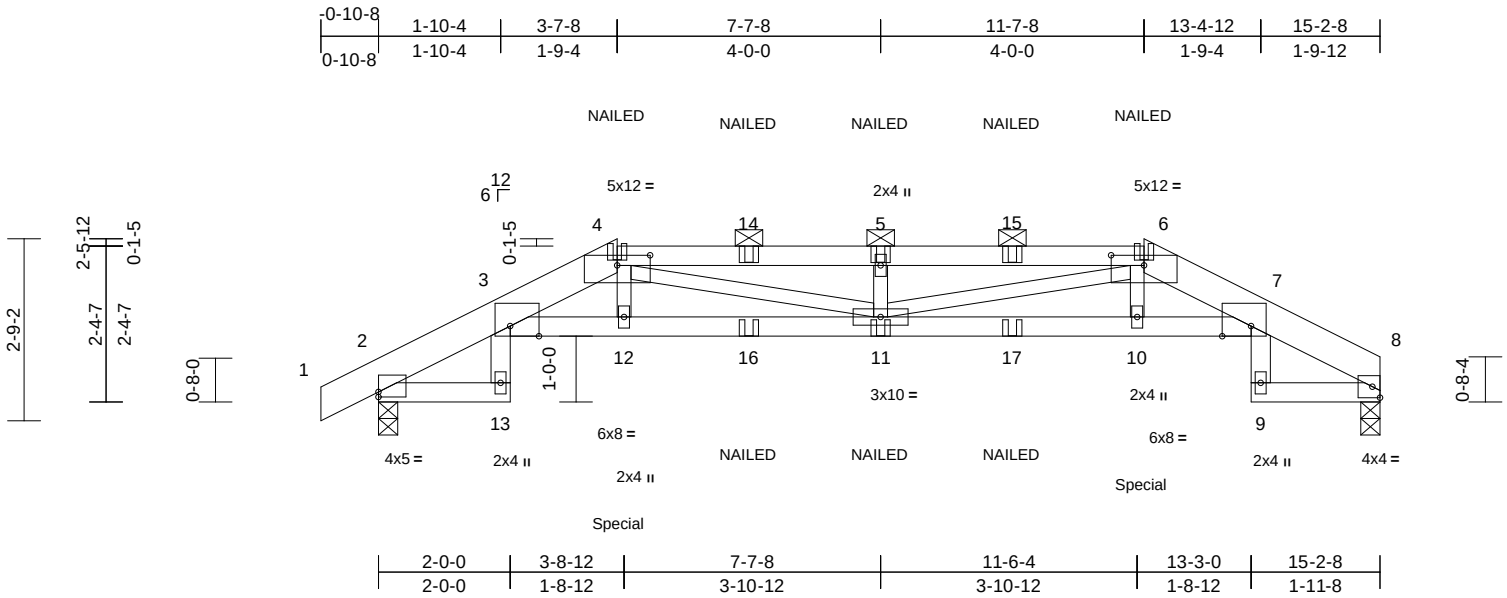

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Plate Offsets (X, Y): [2:Edge,0-0-15], [3:0-5-4,Edge], [4:0-6-0,0-1-13], [6:0-6-0,0-1-13], [7:0-5-4,Edge]

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	0.99	Vert(LL)	-0.25	11	>713	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.64	Vert(CT)	-0.46	11	>391	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.26	Horz(CT)	0.39	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.24	11	>761	240	Weight: 53 lb	FT = 10%

LUMBER

TOP CHORD 2x6 SPF 1650F 1.4E *Except* 4-6:2x4 SPF No.2

BOT CHORD 2x4 SPF No.2 *Except* 3-7:2x4 SPF 2100F 1.8E

WEBS 2x3 SPF No.2 *Except* 13-3,7-9:2x4 SPF No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 1-11-14 oc purlins, except 2-0-0 oc purlins (2-8-9 max.): 4-6.

BOT CHORD Rigid ceiling directly applied or 9-3-2 oc bracing.

REACTIONS (lb/size) 2=1066/0-3-8, 8=992/0-3-8
Max Horiz 2=43 (LC 8)
Max Uplift 2=-246 (LC 8), 8=-222 (LC 9)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/12, 2-3=-596/160, 3-4=-2845/731, 4-5=-3523/917, 5-6=-3523/917, 6-7=-2843/707, 7-8=-603/156

BOT CHORD 2-13=0/0, 3-12=-713/2827, 11-12=-714/2848, 10-11=-670/2845, 7-10=-670/2824, 8-9=0/0

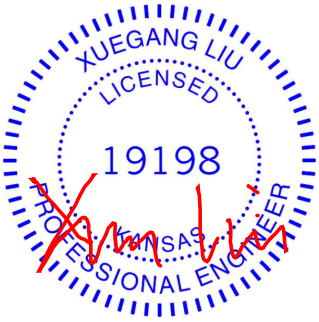
WEBS 3-13=-8/81, 7-9=-5/79, 4-12=-30/210, 6-10=-30/210, 6-11=-229/765, 4-11=-229/757, 5-11=-297/149

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) 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 222 lb uplift at joint 8 and 246 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.
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) 211 lb down and 74 lb up at 3-7-8, and 211 lb down and 74 lb up at 11-6-12 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: 1-4=-70, 4-6=-70, 6-8=-70, 2-13=-20, 3-7=-20, 8-9=-20
   Concentrated Loads (lb)
   Vert: 4=-23 (B), 6=-23 (B), 12=-211 (B), 10=-211 (B), 11=-35 (B), 5=-23 (B), 14=-23 (B), 15=-23 (B), 16=-35 (B), 17=-35 (B)



November 8,2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 111 MN	
MN111	A2	Hip	1	1	Job Reference (optional)	I48693612

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Oct 11 2021 Print: 8.430 S Oct 11 2021 MiTek Industries, Inc. Fri Nov 05 14:15:45 Page: 1
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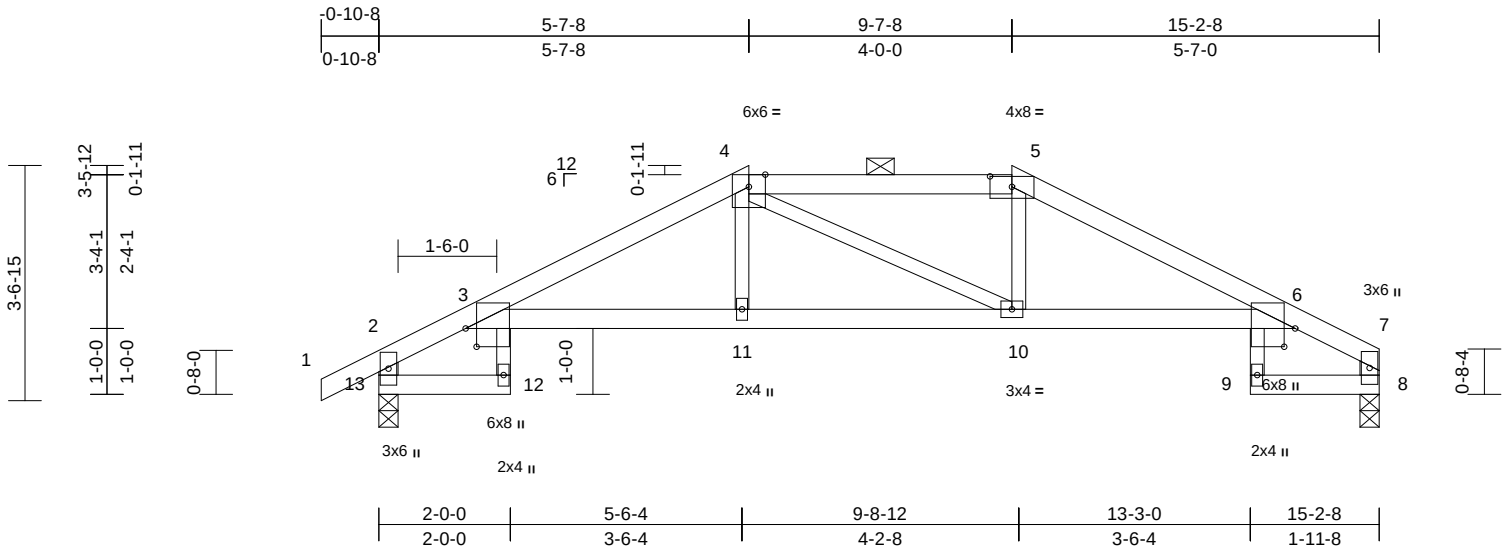


Scale = 1:35

Plate Offsets (X, Y): [3:0-3-5,0-2-0], [5:0-4-0,0-1-15], [6:0-3-5,0-2-0]

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	0.76	Vert(LL)	-0.21	12	>860	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.94	Vert(CT)	-0.38	12	>470	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.47	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.16	12	>999	240	Weight: 47 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF 2100F 1.8E *Except* 4-5:2x4 SPF No.2

BOT CHORD 2x4 SPF No.2 *Except* 12-3,6-9:2x3 SPF No.2

WEBS 2x3 SPF No.2 *Except* 13-2,8-7:2x4 SPF No.2

BRACING

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

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

REACTIONS (lb/size) 8=681/0-3-8, 13=757/0-3-8
Max Horiz 13=61 (LC 5)
Max Uplift 8=-59 (LC 9), 13=-84 (LC 8)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/32, 2-3=-297/55, 3-4=-1331/87, 4-5=-1191/104, 5-6=-1333/72, 6-7=-296/37, 2-13=-775/102, 7-8=-700/73

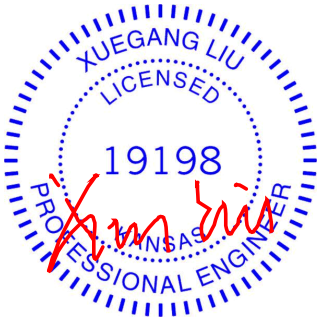
BOT CHORD 12-13=-26/0, 3-12=0/66, 3-11=-71/1197, 10-11=-73/1189, 6-10=-26/1199, 6-9=0/64, 8-9=-25/0

WEBS 4-11=0/227, 4-10=-143/145, 5-10=0/228

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 84 lb uplift at joint 13 and 59 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



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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 111 MN	I48693613
MN111	A3	Roof Special	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Oct 11 2021 Print: 8.430 S Oct 11 2021 MiTek Industries, Inc. Fri Nov 05 14:15:46
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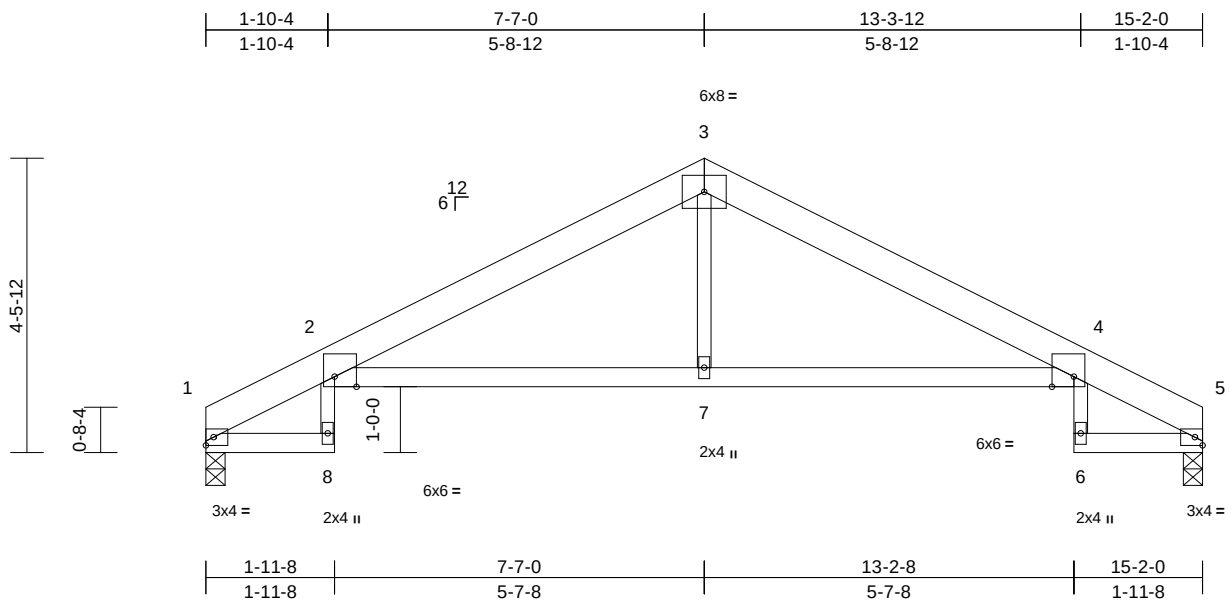

Scale = 1:35.1

Plate Offsets (X, Y): [2:0-4-0,Edge], [4:0-4-0,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	0.86	Vert(LL)	-0.20	4-7	>890	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.57	Vert(CT)	-0.37	4-7	>479	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.42	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.16	2-7	>999	240	Weight: 52 lb	FT = 10%

LUMBER
TOP CHORD 2x6 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.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 1=669/0-3-8, 5=669/0-3-8
Max Horiz 1=72 (LC 12)
Max Uplift 1=-82 (LC 8), 5=-82 (LC 9)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-401/98, 2-3=-1090/105, 3-4=-1090/133, 4-5=-401/69
BOT CHORD 1-8=0/0, 2-7=-52/983, 4-7=-52/983, 5-6=0/0
WEBS 2-8=0/58, 4-6=0/58, 3-7=0/263

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 82 lb uplift at joint 1 and 82 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

November 8,2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
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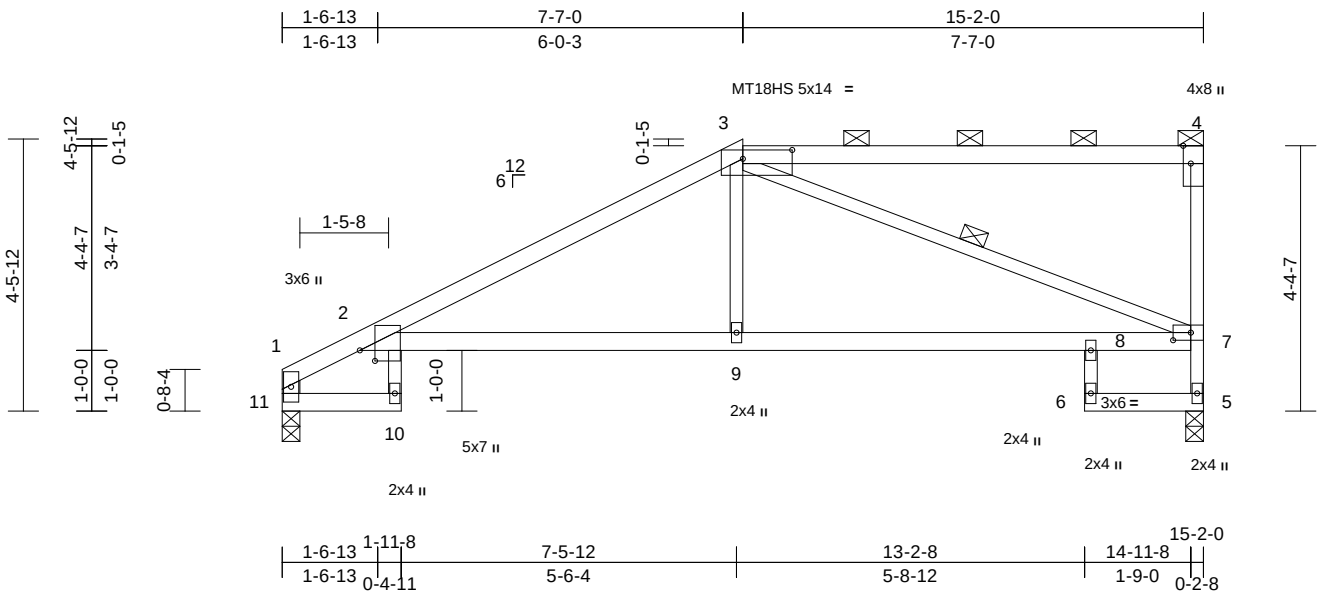
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 111 MN
MN111	A4	Half Hip	1	1	I48693614
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Oct 11 2021 Print: 8.430 S Oct 11 2021 MiTek Industries, Inc. Fri Nov 05 14:15:46
ID:18uo7Qoy6BPd8Gdhg8CMtByMGCt-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:37.9

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

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	0.83	Vert(LL)	-0.29	10	>618	360	MT18HS	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.92	Vert(CT)	-0.51	10	>350	240	MT20	197/144
BCLL	0.0*	Rep Stress Incr	YES	WB	0.60	Horz(CT)	0.36	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.27	10	>663	240	Weight: 52 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF 2100F 1.8E *Except* 3-4:2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except* 8-6:2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except* 11-1:2x4 SPF No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-11-15 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-4.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 3-7

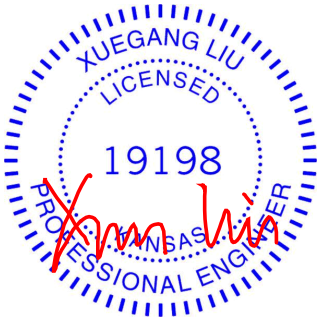
REACTIONS (lb/size) 5=672/0-3-8, 11=682/0-3-8
Max Horiz 11=167 (LC 7)
Max Uplift 5=-118 (LC 5), 11=-74 (LC 8)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-322/41, 2-3=-1086/98, 3-4=-71/43, 5-7=-648/131, 4-7=-252/107, 1-11=-693/97
BOT CHORD 10-11=-32/8, 2-9=-189/945, 8-9=-192/938, 7-8=-197/947, 6-8=0/24, 5-6=-15/5
WEBS 2-10=-15/62, 3-9=0/361, 3-7=-956/149

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) 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 118 lb uplift at joint 5 and 74 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



November 8,2021

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 111 MN	
MN111	A5	Half Hip	1	1	Job Reference (optional)	I48693615

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Oct 11 2021 Print: 8.430 S Oct 11 2021 MiTek Industries, Inc. Fri Nov 05 14:15:46 Page: 1
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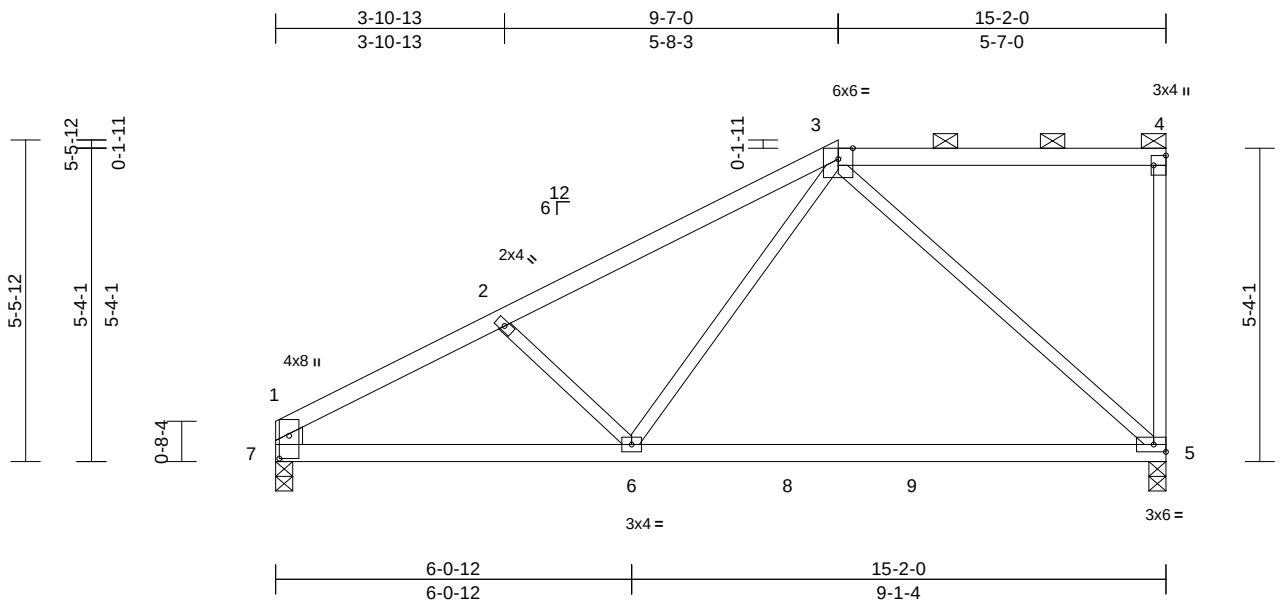


Scale = 1:39.3

Plate Offsets (X, Y): [1:0-4-11,0-2-0], [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	0.46	Vert(LL)	-0.24	5-6	>751	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.47	Vert(CT)	-0.43	5-6	>416	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.83	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.05	5-6	>999	240	Weight: 54 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF 2100F 1.8E
WEBS 2x3 SPF No.2 *Except* 7-1:2x6 SP DSS

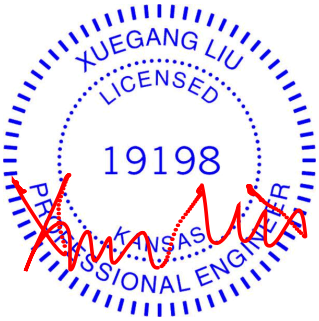
BRACING
TOP CHORD Structural wood sheathing directly applied or 4-11-13 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 5=668/0-3-8, 7=668/0-3-8
Max Horiz 7=207 (LC 7)
Max Uplift 5=-113 (LC 5), 7=-89 (LC 8)
Max Grav 5=707 (LC 2), 7=697 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-1063/161, 2-3=-911/129, 3-4=-77/56, 4-5=-184/81, 1-7=-600/105
BOT CHORD 6-7=-193/888, 5-6=-136/459
WEBS 2-6=-257/196, 3-6=-29/535, 3-5=-600/128

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 113 lb uplift at joint 5 and 89 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



November 8,2021

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 111 MN	
MN111	B1	Piggyback Base Supported Gable	1	1	Job Reference (optional)	I48693616

Wheeler Lumber, Waverly, KS - 66871, Run: 8.43 S Oct 11 2021 Print: 8.430 S Oct 11 2021 MiTek Industries, Inc. Fri Nov 05 14:15:47 Page: 1

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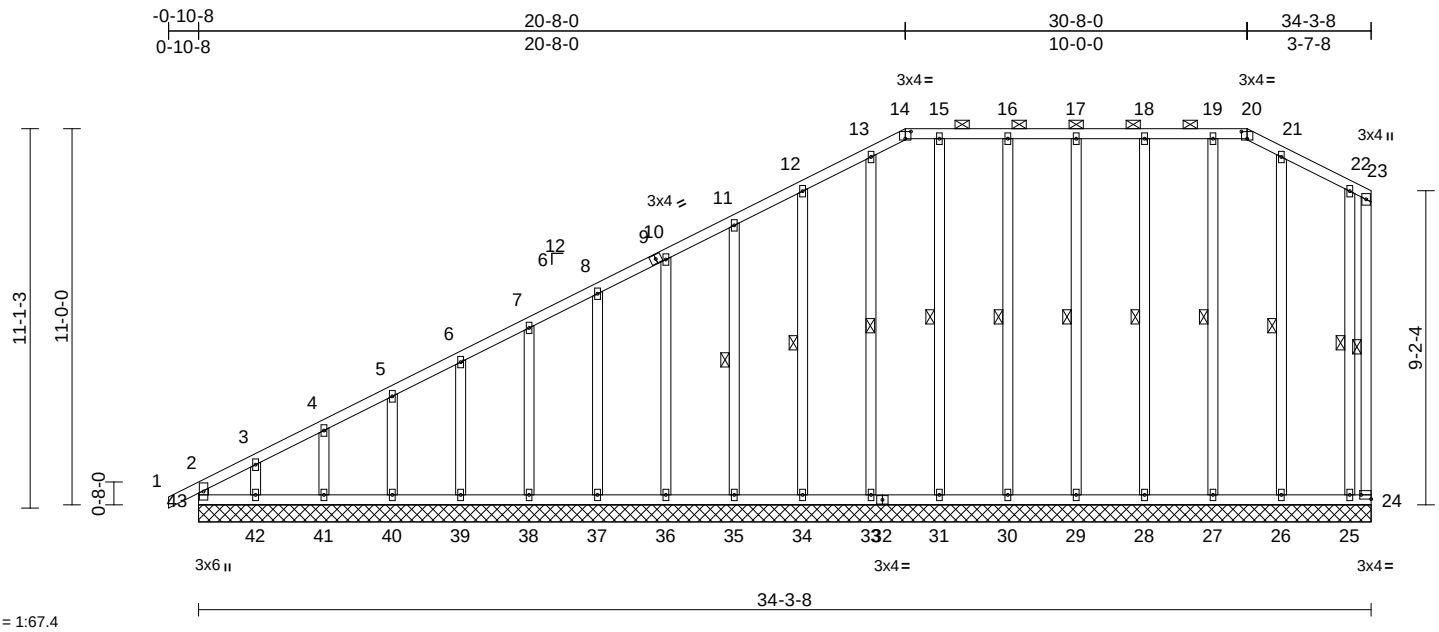


Scale = 1:67.4

Plate Offsets (X, Y): [14:0-2-0,0-2-8], [20:0-2-0,0-2-8], [24: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	0.37	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.13	Horz(CT)	-0.01	24	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 236 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.): 14-20.

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

WEBS 1 Row at midpt 23-24, 11-35, 12-34, 13-33, 15-31, 16-30, 17-29, 18-28, 19-27, 21-26, 22-25

REACTIONS (lb/size) 24=1/34-3-8, 25=122/34-3-8, 26=191/34-3-8, 27=179/34-3-8, 28=179/34-3-8, 29=180/34-3-8, 30=179/34-3-8, 31=181/34-3-8, 33=180/34-3-8, 34=179/34-3-8, 35=180/34-3-8, 36=180/34-3-8, 37=180/34-3-8, 38=180/34-3-8, 39=180/34-3-8, 40=178/34-3-8, 41=188/34-3-8, 42=141/34-3-8, 43=151/34-3-8

Max Horiz 43=403 (LC 5)

Max Uplift 24=-96 (LC 7), 25=-151 (LC 4), 26=-72 (LC 9), 27=-38 (LC 5), 28=-41 (LC 4), 29=-34 (LC 5), 30=-43 (LC 4), 31=-48 (LC 5), 33=-32 (LC 5), 34=-63 (LC 8), 35=-53 (LC 8), 36=-54 (LC 8), 37=-54 (LC 8), 38=-54 (LC 8), 39=-53 (LC 8), 40=-59 (LC 8), 41=-34 (LC 8), 42=-161 (LC 8), 43=-27 (LC 4)

Max Grav 24=61 (LC 4), 25=257 (LC 7), 26=191 (LC 22), 27=179 (LC 1), 28=182 (LC 21), 29=180 (LC 1), 30=182 (LC 22), 31=181 (LC 21), 33=180 (LC 21), 34=179 (LC 1), 35=180 (LC 21), 36=180 (LC 1), 37=180 (LC 1), 38=180 (LC 21), 39=180 (LC 1), 40=178 (LC 21), 41=188 (LC 1), 42=145 (LC 15), 43=266 (LC 16)

FORCES (lb) - Maximum Compression/Maximum Tension

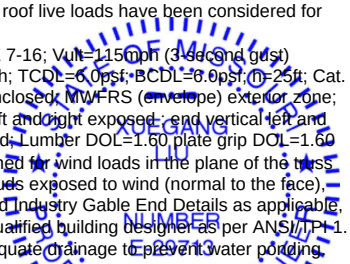
TOP CHORD 2-43=-221/31, 1-2=0/32, 2-3=-367/83, 3-4=-311/79, 4-5=-288/80, 5-6=-259/80, 6-7=-237/81, 7-8=-223/93, 8-10=-208/107, 10-11=-193/120, 11-12=-178/133, 12-13=-167/150, 13-14=-134/142, 14-15=-125/139, 15-16=-125/139, 16-17=-125/139, 17-18=-125/139, 18-19=-125/139, 19-20=-125/139, 20-21=-130/139, 21-22=-163/144, 22-23=-202/156, 23-24=-201/154

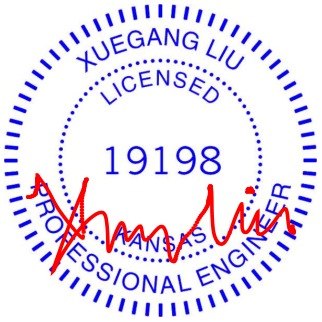
BOT CHORD 42-43=-129/98, 41-42=-129/98, 40-41=-129/98, 39-40=-129/98, 38-39=-129/98, 37-38=-129/98, 36-37=-129/98, 35-36=-129/98, 34-35=-129/98, 33-34=-129/98, 31-33=-129/98, 30-31=-129/98, 29-30=-129/98, 28-29=-129/98, 27-28=-129/98, 26-27=-129/98, 25-26=-129/98, 24-25=-129/98

WEBS 3-42=-109/133, 4-41=-146/68, 5-40=-139/80, 6-39=-140/77, 7-38=-140/78, 8-37=-140/78, 10-36=-140/78, 11-35=-140/77, 12-34=-139/87, 13-33=-140/56, 15-31=-141/72, 16-30=-142/67, 17-29=-140/58, 18-28=-142/65, 19-27=-140/64, 21-26=-150/92, 22-25=-89/122

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Provide adequate drainage to prevent water ponding.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
8) Gable studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.





November 8,2021

Continued on page 2

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

10) * 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.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 27 lb uplift at joint 43, 96 lb uplift at joint 24, 161 lb uplift at joint 42, 34 lb uplift at joint 41, 59 lb uplift at joint 40, 53 lb uplift at joint 39, 54 lb uplift at joint 38, 54 lb uplift at joint 37, 54 lb uplift at joint 36, 53 lb uplift at joint 35, 63 lb uplift at joint 34, 32 lb uplift at joint 33, 48 lb uplift at joint 31, 43 lb uplift at joint 30, 34 lb uplift at joint 29, 41 lb uplift at joint 28, 38 lb uplift at joint 27, 72 lb uplift at joint 26 and 151 lb uplift at joint 25.
12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 111 MN	
MN111	B2	Piggyback Base	1	1	Job Reference (optional)	I48693617

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Oct 11 2021 Print: 8.430 S Oct 11 2021 MiTek Industries, Inc. Fri Nov 05 14:15:48
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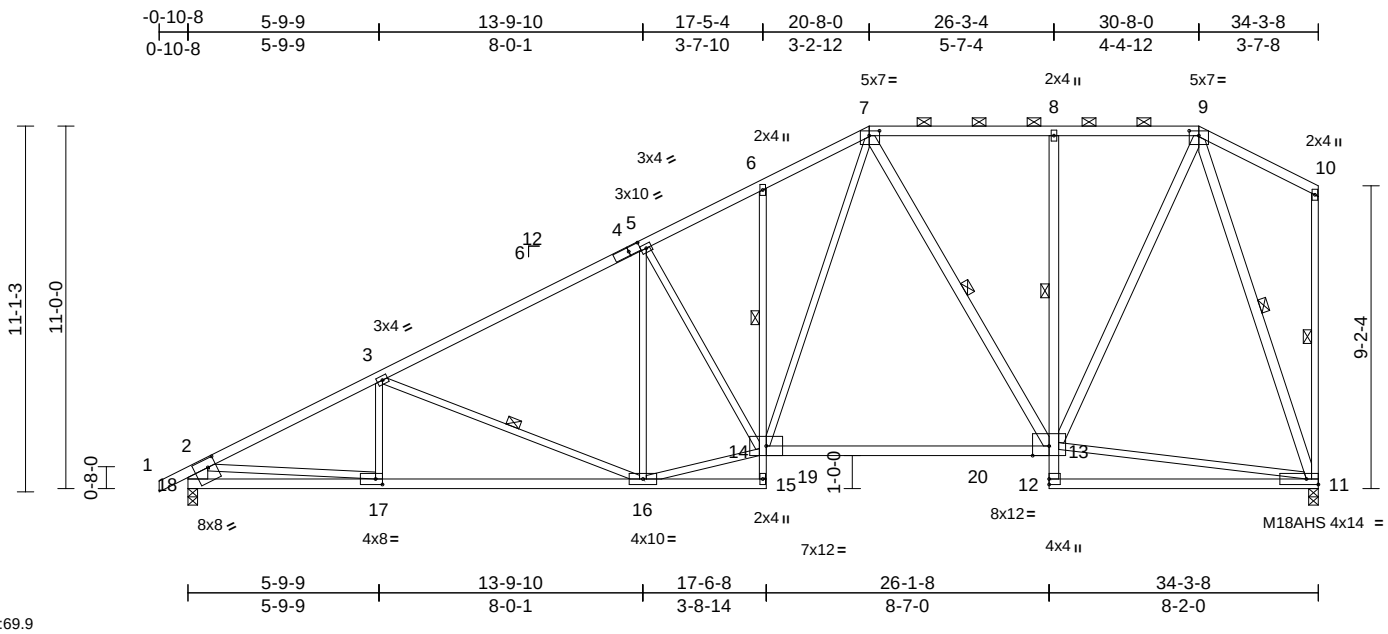

Scale = 1:69.9

Plate Offsets (X, Y): [4:0-4-5,0-1-8], [7:0-3-12,0-1-12], [9:0-3-8,0-1-12], [17:0-2-8,0-2-0], [18:0-3-0,0-3-0]

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	0.84	Vert(LL)	-0.32	13-14	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.87	Vert(CT)	-0.56	13-14	>731	240	M18AHS	142/136
BCLL	0.0*	Rep Stress Incr	YES	WB	0.90	Horz(CT)	0.09	11	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.10	16-17	>999	240	Weight: 189 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except* 15-6:2x3 SPF No.2, 14-13:2x4 SPF 2100F 1.8E
WEBS 2x3 SPF No.2 *Except* 13-7,13-9,11-9:2x4 SPF No.2, 18-2:2x8 SP DSS

BRACING

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (5-4-8 max.): 7-9.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. Except:
1 Row at midpt 6-14, 8-13
WEBS 1 Row at midpt 7-13, 10-11, 9-11, 3-16

REACTIONS (lb/size) 11=1523/0-3-8, 18=1609/0-3-8
Max Horiz 18=388 (LC 8)
Max Uplift 11=-150 (LC 8), 18=-208 (LC 8)
Max Grav 11=1614 (LC 2), 18=1665 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/37, 2-3=-2707/303, 3-5=-2184/251, 5-6=-2000/302, 6-7=-1944/357, 7-8=-1053/161, 8-9=-1045/161, 9-10=-49/63, 10-11=-115/63, 2-18=-1575/232
BOT CHORD 17-18=-422/470, 16-17=-586/2360, 15-16=-170/0, 14-15=0/21, 6-14=-116/81, 13-14=-222/1350, 12-13=0/173, 8-13=-399/168, 11-12=-21/42
WEBS 7-14=-266/1169, 7-13=-602/206, 11-13=-55/481, 9-13=-153/1369, 9-11=-1528/186, 2-17=-165/1903, 3-17=-41/173, 3-16=-548/216, 5-16=-148/98, 14-16=-341/2056, 5-14=-328/159

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 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 208 lb uplift at joint 18 and 150 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

November 8,2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 111 MN	I48693618
MN111	B3	Piggyback Base	2	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Oct 11 2021 Print: 8.430 S Oct 11 2021 MiTek Industries, Inc. Fri Nov 05 14:15:48 Page: 1
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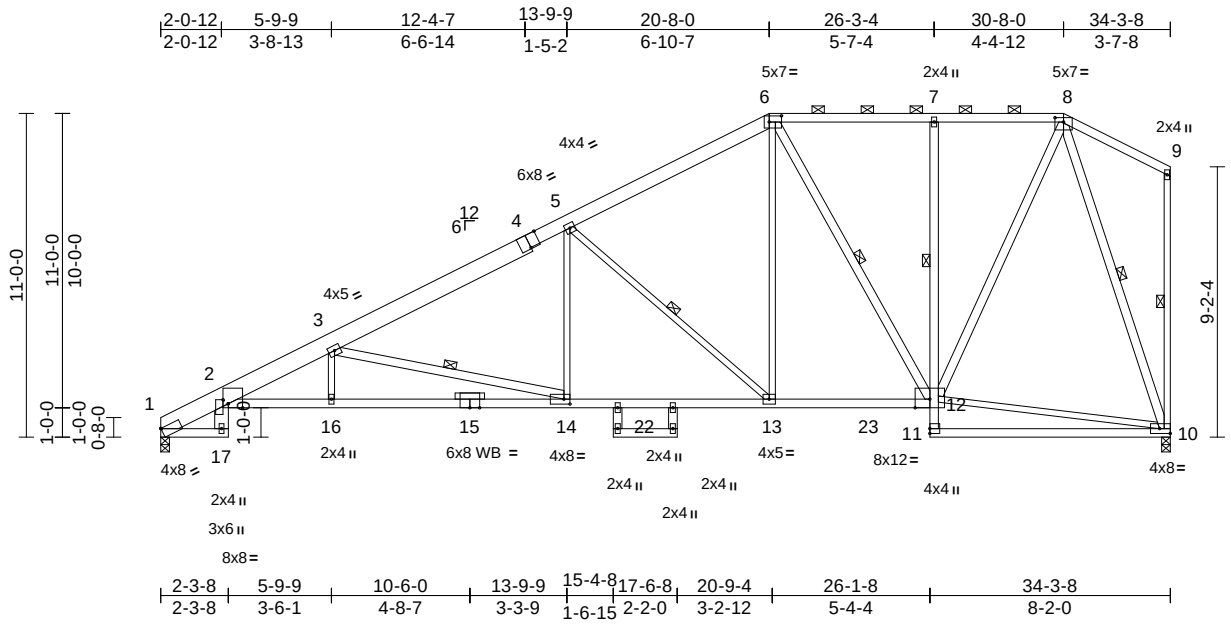


Scale = 1:78.3

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

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	0.73	Vert(LL)	-0.29	14-16	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.61	Vert(CT)	-0.54	14-16	>763	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.89	Horz(CT)	0.29	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.22	14-16	>999	240	Weight: 213 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF No.2 *Except* 4-6:2x6 SPF No.2, 4-1:2x8 SP DSS

BOT CHORD 2x4 SPF No.2 *Except* 2-15,11-10,15-12:2x4 SPF 2100F 1.8E

WEBS 2x3 SPF No.2 *Except* 17-2:2x6 SPF No.2, 14-3,12-6,12-8,10-8:2x4 SPF No.2

OTHERS 2x3 SPF No.2

BRACING

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

BOT CHORD Rigid ceiling directly applied or 8-2-7 oc bracing. Except:

1 Row at midpt 7-12

WEBS 1 Row at midpt 3-14, 5-13, 6-12, 9-10, 8-10

REACTIONS (lb/size) 1=1532/0-3-8, 10=1532/0-3-8
Max Horiz 1=395 (LC 8)
Max Uplift 1=-182 (LC 8), 10=-152 (LC 8)
Max Grav 1=1614 (LC 2), 10=1624 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-874/0, 2-3=-3960/577, 3-5=-2620/327, 5-6=-1675/233, 6-7=-1046/165, 7-8=-1039/165, 8-9=-48/64, 9-10=-114/63

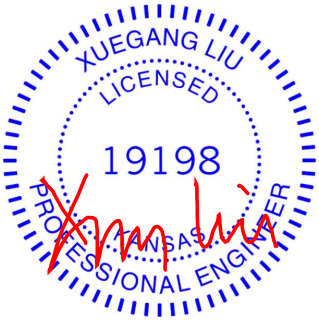
BOT CHORD 1-17=0/0, 2-16=-913/3817, 14-16=-908/3812, 13-14=-459/2244, 12-13=-215/1416, 11-12=0/173, 7-12=-387/165, 10-11=0/137

WEBS 2-17=-1/68, 3-16=-36/162, 3-14=-1619/464, 5-13=-1120/327, 6-13=-139/1014, 6-12=-747/183, 10-12=-87/363, 8-12=-158/1362, 8-10=-1523/190, 5-14=-23/715

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 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 182 lb uplift at joint 1 and 152 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



November 8,2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 111 MN	
MN111	B4	Piggyback Base	1	1	Job Reference (optional)	I48693619

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Oct 11 2021 Print: 8.430 S Oct 11 2021 MiTek Industries, Inc. Fri Nov 05 14:15:49 Page: 1
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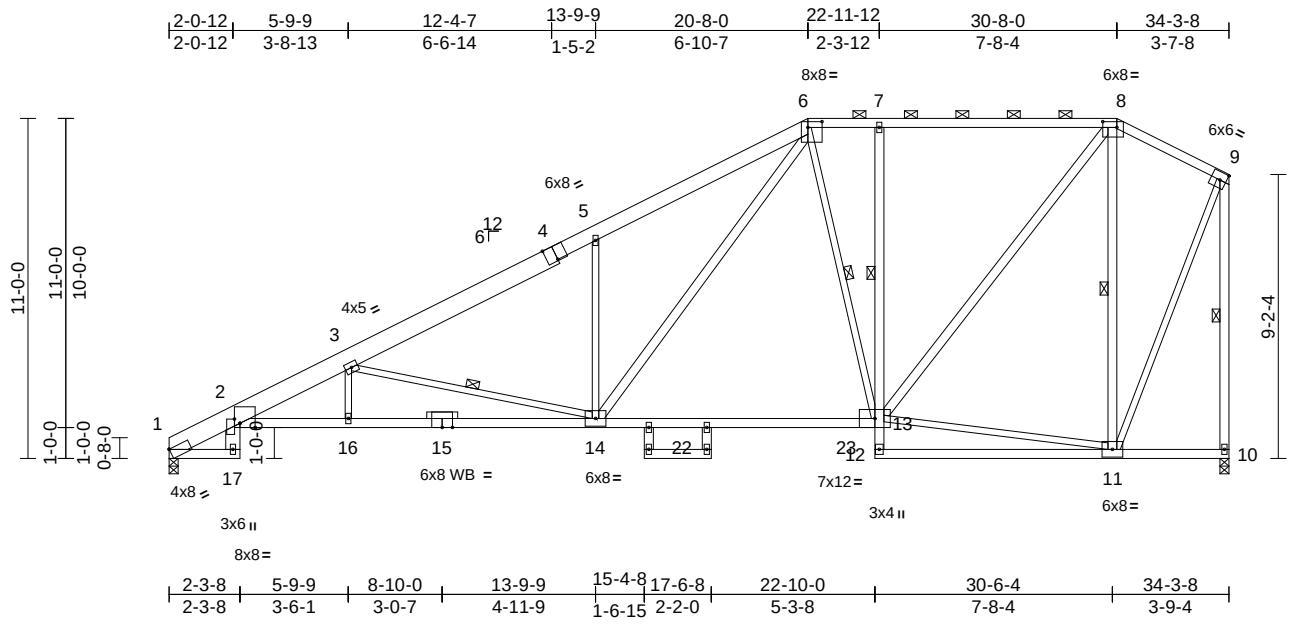


Scale = 1:74.6

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

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	0.83	Vert(LL)	-0.38	13-14	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.65	13-14	>628	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.99	Horz(CT)	0.28	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.23	14-16	>999	240	Weight: 216 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF No.2 *Except* 4-6:2x6 SPF No.2, 4-1:2x8 SP DSS

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

WEBS 2x3 SPF No.2 *Except* 17-2:2x6 SPF No.2, 14-6,13-8,11-8,10-9:2x4 SPF No.2

OTHERS 2x3 SPF No.2

BRACING

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

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

1 Row at midpt 7-13

WEBS 1 Row at midpt 3-14, 6-13, 8-11, 9-10

REACTIONS (lb/size) 1=1530/0-3-8, 10=1530/0-3-8
Max Horiz 1=395 (LC 8)
Max Uplift 1=-182 (LC 8), 10=-152 (LC 8)
Max Grav 1=1607 (LC 2), 10=1617 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-871/0, 2-3=-3905/578, 3-5=-2629/321, 5-6=-2631/498, 6-7=-1309/217, 7-8=-1309/219, 8-9=-607/80, 9-10=-1591/158

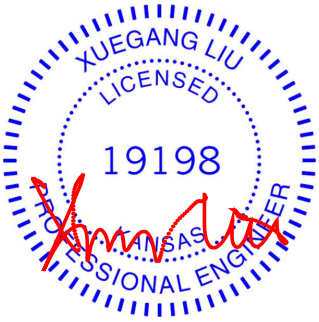
BOT CHORD 1-17=0/0, 2-16=-913/3767, 14-16=-908/3761, 13-14=-224/1372, 12-13=0/142, 7-13=-491/212, 11-12=-58/13, 10-11=-1/3

WEBS 2-17=-1/68, 3-16=-53/132, 3-14=-1556/470, 6-14=-395/1520, 6-13=-348/203, 11-13=-41/538, 8-13=-218/1311, 8-11=-1112/213, 9-11=-131/1362, 5-14=-571/319

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 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 182 lb uplift at joint 1 and 152 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



November 8,2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 111 MN	I48693620
MN111	B5	Piggyback Base	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

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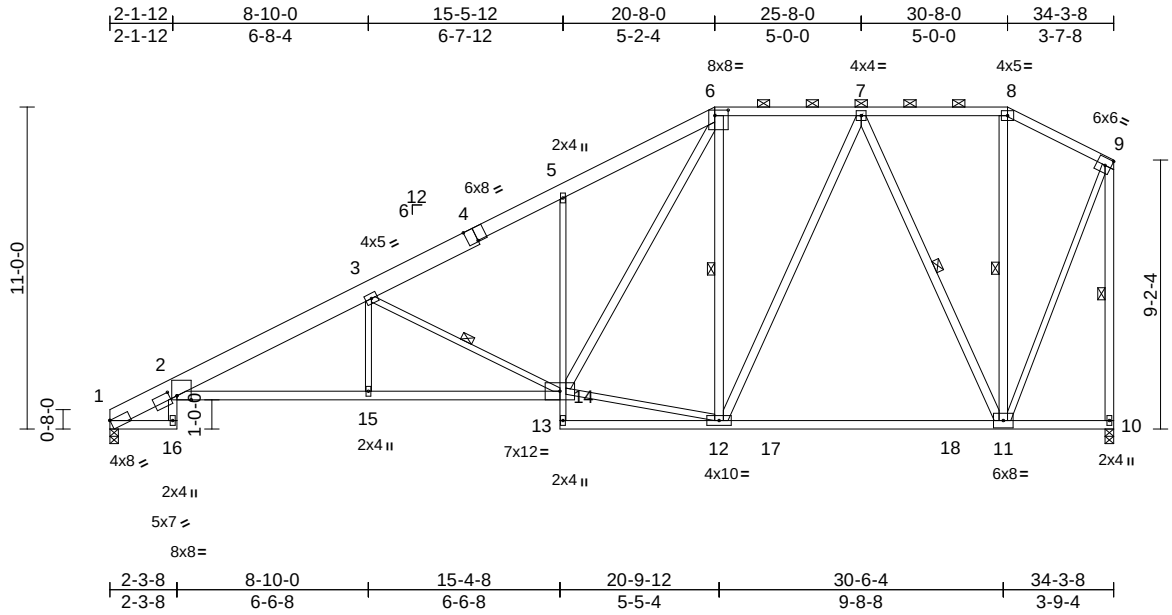


Scale = 1:78.7

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

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	0.84	Vert(LL)	-0.34	11-12	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.60	Vert(CT)	-0.58	2-15	>704	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.85	Horz(CT)	0.34	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.27	2-15	>999	240	Weight: 214 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF No.2 *Except* 4-6:2x6 SPF No.2, 4-1:2x8 SP DSS

BOT CHORD 2x4 SPF 2100F 1.8E *Except* 1-16:2x4 SPF No.2, 5-13:2x3 SPF No.2

WEBS 2x4 SPF No.2 *Except* 3-15,14-3,12-14,11-9:2x3 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 (5-0-3 max.): 6-8.

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

WEBS 1 Row at midpt 3-14, 6-12, 7-11, 8-11, 9-10

REACTIONS (lb/size) 1=1530/0-3-8, 10=1530/0-3-8
Max Horiz 1=395 (LC 8)
Max Uplift 1=-182 (LC 8), 10=-152 (LC 8)
Max Grav 1=1595 (LC 2), 10=1642 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-859/0, 2-3=-3354/451, 3-5=-2324/317, 5-6=-2231/440, 6-7=-1276/228, 7-8=-530/83, 8-9=-633/78, 9-10=-1659/150

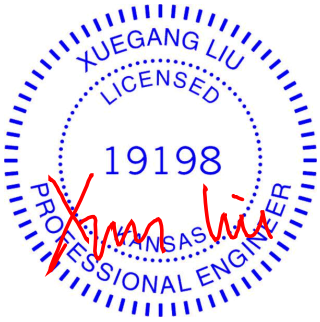
BOT CHORD 1-16=0/0, 2-15=-727/3144, 14-15=-725/3141, 13-14=0/58, 5-14=-302/209, 12-13=-28/39, 11-12=-128/972, 10-11=-2/3

WEBS 2-16=0/69, 3-15=0/253, 3-14=-1356/381, 12-14=-166/1294, 6-14=-417/1396, 6-12=-633/269, 7-12=-146/744, 7-11=-1081/208, 8-11=-97/106, 9-11=-114/1406

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 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 182 lb uplift at joint 1 and 152 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



November 8,2021

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 111 MN	I48693621
MN111	B6	Piggyback Base	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

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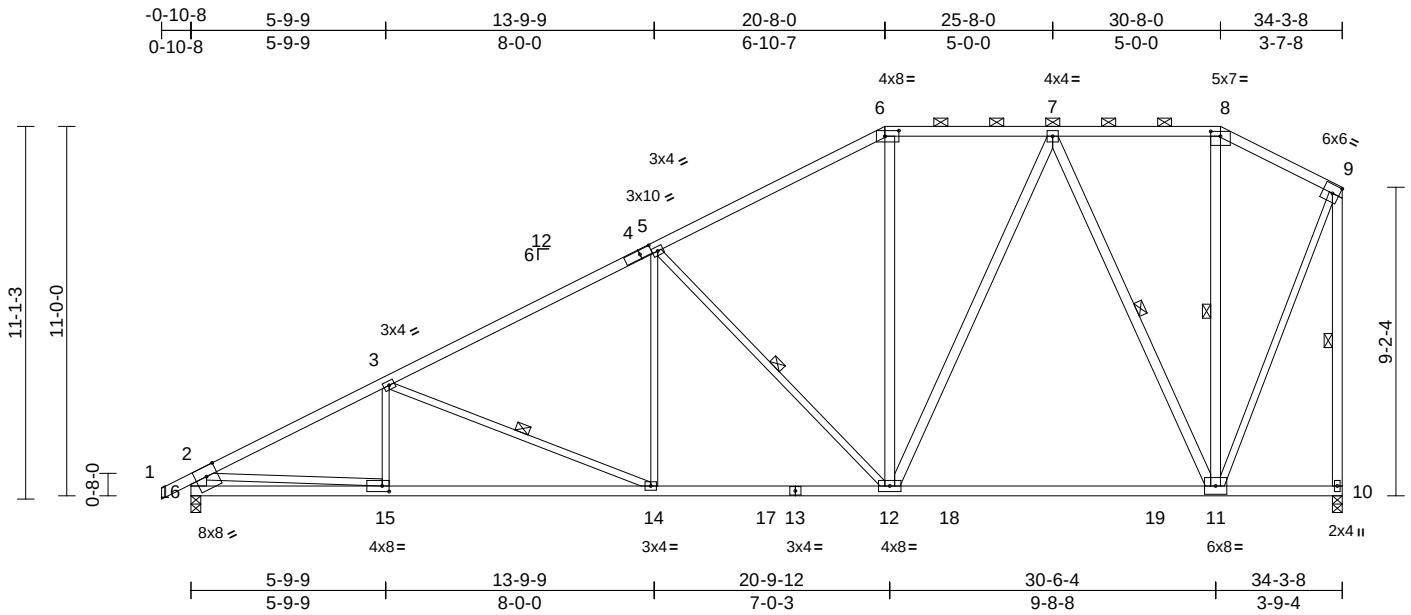

Scale = 1:68.6

Plate Offsets (X, Y): [4:0-4-4,0-1-8], [6:0-5-0,0-2-0], [8:0-3-8,0-1-12], [15:0-2-8,0-2-0]

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	0.76	Vert(LL)	-0.31	11-12	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.88	Vert(CT)	-0.51	11-12	>805	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.84	Horz(CT)	0.07	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.10	14-15	>999	240	Weight: 178 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except* 13-10:2x4 SPF 2100F 1.8E
WEBS 2x3 SPF No.2 *Except* 12-6,12-7,11-7,11-8,10-9:2x4 SPF No.2, 16-2:2x6 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 (5-0-0 max.): 6-8.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 3-14, 5-12, 7-11, 8-11, 9-10

REACTIONS (lb/size) 10=1525/0-3-8, 16=1605/0-3-8
Max Horiz 16=389 (LC 8)
Max Uplift 10=-151 (LC 8), 16=-206 (LC 8)
Max Grav 10=1659 (LC 2), 16=1684 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/35, 2-3=-2776/304, 3-5=-2240/256, 5-6=-1544/208, 6-7=-1293/229, 7-8=-536/82, 8-9=-640/78, 9-10=-1677/149, 2-16=-1592/231
BOT CHORD 15-16=-442/548, 14-15=-586/2419, 12-14=-394/1918, 11-12=-127/985, 10-11=-2/3
WEBS 3-15=-20/187, 3-14=-551/207, 5-14=0/492, 5-12=-909/295, 6-12=0/347, 7-12=-150/761, 7-11=-1098/206, 8-11=-97/109, 9-11=-113/1422, 2-15=-144/1881

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 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 206 lb uplift at joint 16 and 151 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

November 8,2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 111 MN
MN111	C1	Piggyback Base	4	1	I48693622 Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Oct 11 2021 Print: 8.430 S Oct 11 2021 MiTek Industries, Inc. Fri Nov 05 14:15:50 Page: 1
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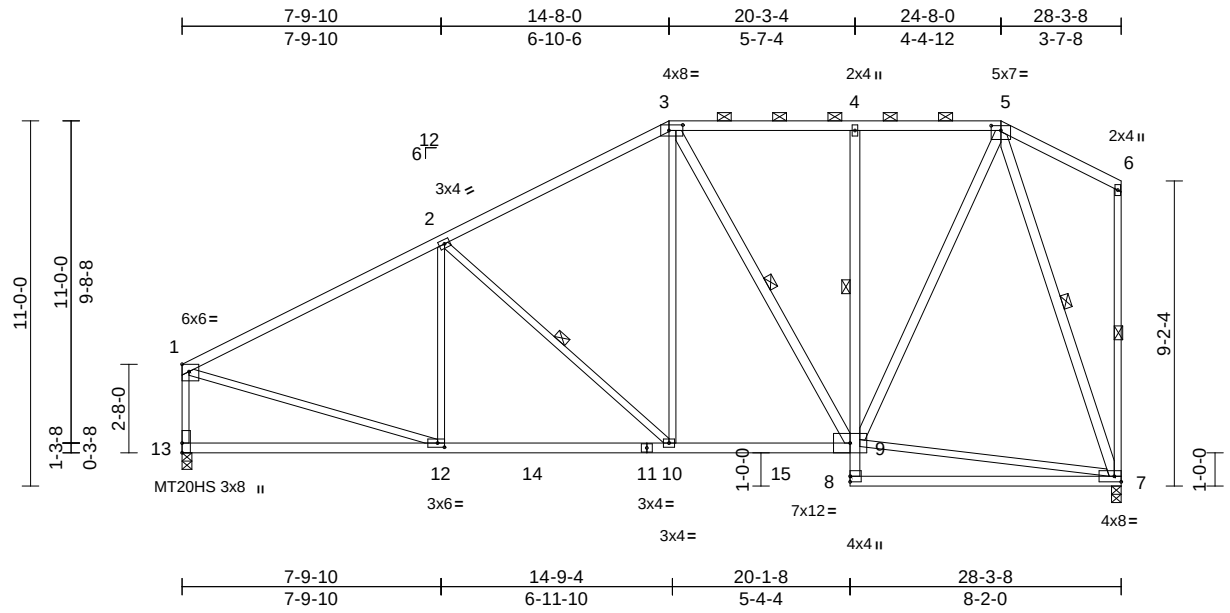


Scale = 1:69.4

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

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	0.82	Vert(LL)	-0.16	7-8	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.64	Vert(CT)	-0.33	7-8	>999	240	MT20HS	148/108
BCLL	0.0*	Rep Stress Incr	YES	WB	0.71	Horz(CT)	0.04	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.04	10-12	>999	240	Weight: 157 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except* 9-3,9-5,7-5:2x4 SPF No.2

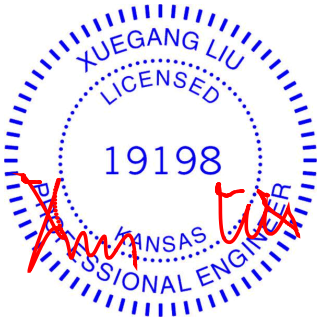
BRACING
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
1 Row at midpt 4-9
WEBS 1 Row at midpt 3-9, 6-7, 5-7, 2-10

REACTIONS (lb/size) 7=1264/0-3-8, 13=1264/0-3-8
Max Horiz 13=256 (LC 8)
Max Uplift 7=-114 (LC 5), 13=-127 (LC 8)
Max Grav 7=1341 (LC 2), 13=1348 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-1542/159, 2-3=-1232/168, 3-4=-814/129, 4-5=-810/129, 5-6=-49/63, 6-7=-114/63, 1-13=-1229/166
BOT CHORD 12-13=-275/84, 10-12=-311/1302, 9-10=-152/1014, 8-9=0/173, 4-9=-401/169, 7-8=0/131
WEBS 3-10=-69/554, 3-9=-423/132, 7-9=-80/280, 5-9=-130/1041, 5-7=-1212/175, 1-12=-38/1292, 2-10=-422/215, 2-12=-200/112

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 ; 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 127 lb uplift at joint 13 and 114 lb uplift at joint 7.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



November 8,2021

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 111 MN	
MN111	C2	Piggyback Base	1	1	Job Reference (optional)	I48693623

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Oct 11 2021 Print: 8.430 S Oct 11 2021 MiTek Industries, Inc. Fri Nov 05 14:15:50
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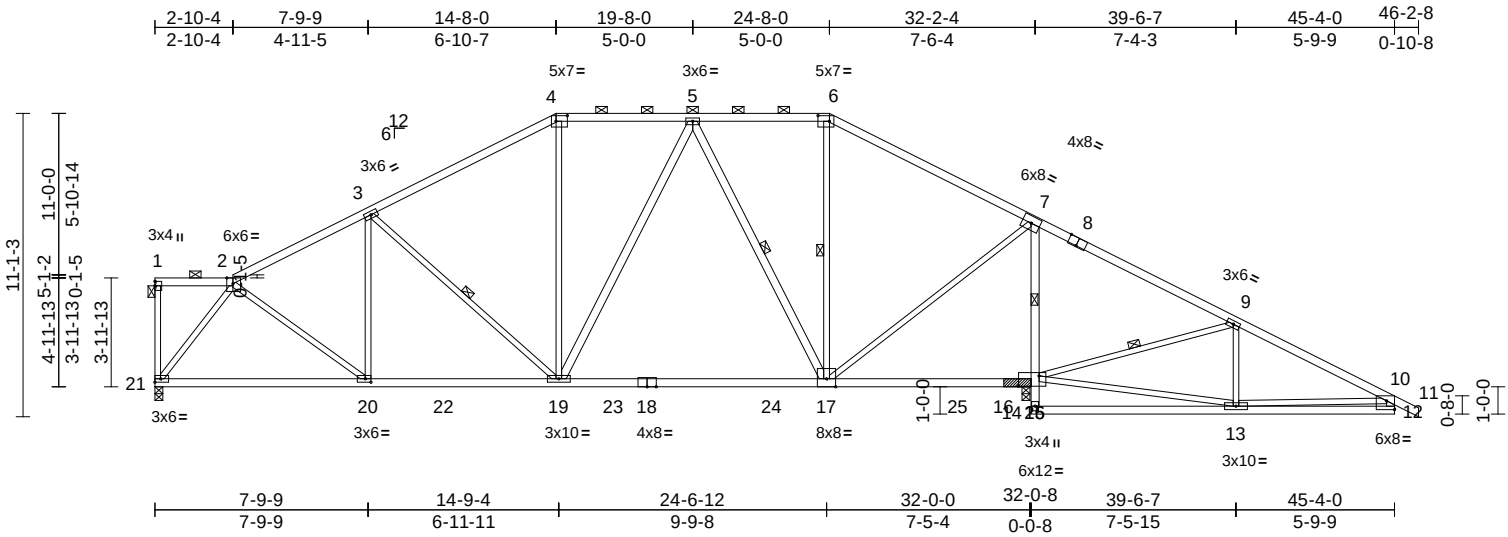


Scale = 1:84.3

Plate Offsets (X, Y): [2:0-2-11,Edge], [4:0-5-0,0-2-8], [6:0-5-0,0-2-8], [8:0-4-0,Edge], [12:Edge,0-3-13], [15:0-9-0,0-4-8], [20:0-2-8,0-1-8]

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	0.77	Vert(LL)	-0.29	17-19	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.76	Vert(CT)	-0.45	17-19	>848	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.77	Horz(CT)	0.02	15	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.04	19-20	>999	240	Weight: 207 lb	FT = 10%

LUMBER

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

BOT CHORD 2x4 SPF No.2 *Except* 18-15,16-15:2x4 SPF 2400F 2.0E

WEBS 2x3 SPF No.2 *Except* 19-5,17-5,12-10:2x4 SPF No.2

BRACING

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

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 15-17,13-14.

1 Row at midpt 7-15

WEBS 1 Row at midpt 3-19, 5-17, 6-17, 9-15

REACTIONS (lb/size) 15=2952/(0-3-8 + bearing block), (req. 0-4-14), 21=1177/0-3-8
Max Horiz 21=-263 (LC 4)
Max Uplift 15=-374 (LC 9), 21=-170 (LC 8)
Max Grav 15=3118 (LC 2), 21=1363 (LC 23)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-21=-91/32, 1-2=-62/37, 2-3=-1507/182, 3-4=-1265/204, 4-5=-1047/229, 5-6=-516/153, 6-7=-614/146, 7-9=-272/1680, 9-10=-124/621, 10-11=0/32, 10-12=-15/82

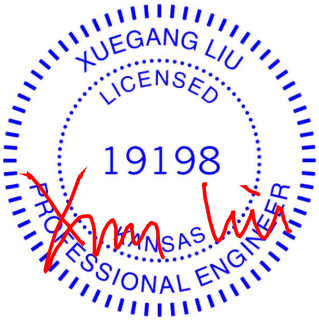
BOT CHORD 20-21=-115/917, 19-20=-99/1302, 17-19=-36/859, 15-17=-1399/423, 14-15=-24/131, 7-15=-2675/401, 13-14=-97/37, 12-13=-63/126

WEBS 2-21=-1449/225, 2-20=-8/533, 3-20=-130/114, 3-19=-410/167, 4-19=0/223, 5-19=-61/545, 5-17=-849/181, 6-17=-339/126, 7-17=-148/2174, 13-15=-374/125, 9-15=-999/273, 9-13=-73/373, 10-13=-593/224

NOTES

1) 2x4 SPF 2400F 2.0E bearing block 12" long at jt. 15 attached to front face with 2 rows of 10d (0.131"x3") nails spaced 3" o.c. 8 Total fasteners. Bearing is assumed to be SPF No.2.
2) Unbalanced roof live loads have been considered for this design.
3) 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
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 170 lb uplift at joint 21 and 374 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



November 8,2021

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 111 MN	
MN111	C3	Piggyback Base	1	1	Job Reference (optional)	I48693624

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Oct 11 2021 Print: 8.430 S Oct 11 2021 MiTek Industries, Inc. Fri Nov 05 14:15:51
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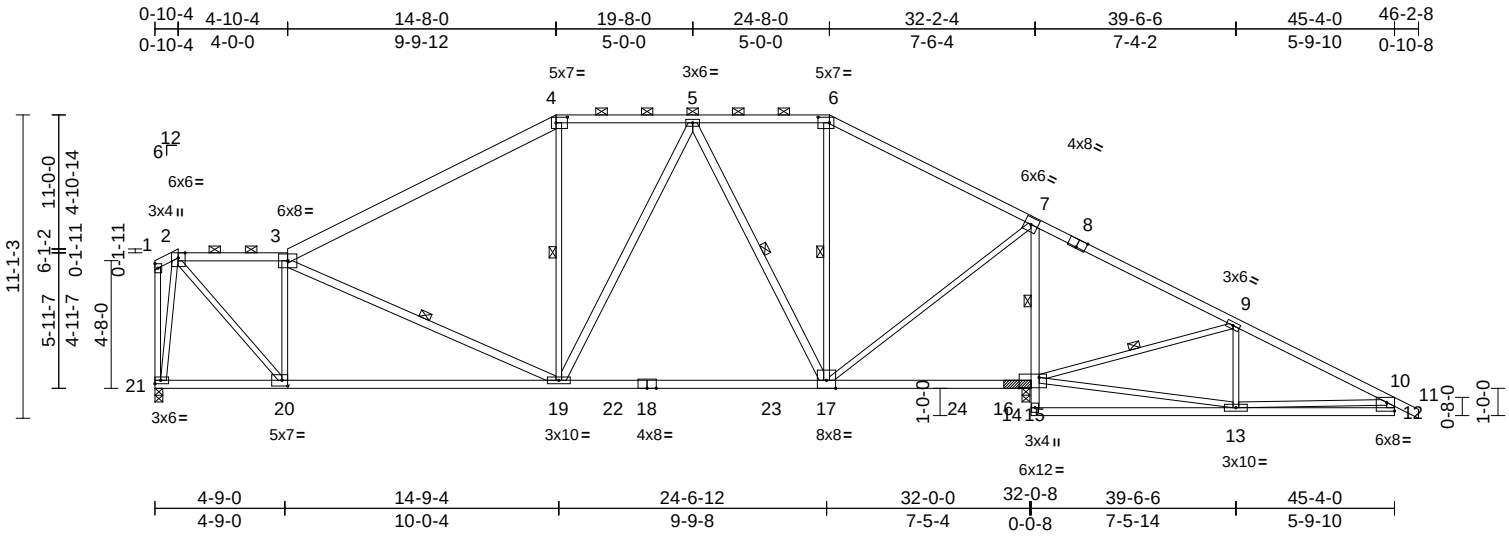
Page: 1



Scale = 1:84.3

Plate Offsets (X, Y): [4:0-5-0,0-2-8], [6:0-5-0,0-2-8], [8:0-4-0,Edge], [12:Edge,0-3-13], [15:0-8-12,0-4-8], [20:0-2-8,0-2-8]

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	0.83	Vert(LL)	-0.26	17-19	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.92	Vert(CT)	-0.41	19-20	>935	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.74	Horz(CT)	0.02	15	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.04	19-20	>999	240	Weight: 219 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF No.2 *Except* 3-4:2x6 SPF No.2, 6-8:2x4 SPF 2100F 1.8E

BOT CHORD 2x4 SPF No.2 *Except* 18-15,16-15:2x4 SPF 2400F 2.0E

WEBS 2x3 SPF No.2 *Except* 19-5,17-5,12-10,3-19:2x4 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 (5-1-4 max.): 2-3, 4-6.

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

1 Row at midpt 7-15

WEBS 1 Row at midpt 4-19, 5-17, 6-17, 9-15, 3-19

REACTIONS (lb/size) 15=2952/(0-3-8 + bearing block), (req. 0-4-14), 21=1177/0-3-8

Max Horiz 21=-283 (LC 4)

Max Uplift 15=-373 (LC 9), 21=-176 (LC 8)

Max Grav 15=3107 (LC 2), 21=1333 (LC 23)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-93/67, 2-3=-1185/123, 3-4=-1300/162, 4-5=-1048/221, 5-6=-504/150, 6-7=-601/143, 7-9=-272/1679, 9-10=-124/622, 10-11=0/32, 1-21=-99/55, 10-12=-15/82

BOT CHORD 20-21=-70/349, 19-20=-83/1205, 17-19=-28/845, 15-17=-1398/424, 14-15=-24/131, 7-15=-2658/403, 13-14=-100/35, 12-13=-63/127

WEBS 2-20=-174/1526, 3-20=-952/240, 4-19=-124/173, 5-19=-63/567, 5-17=-853/174, 6-17=-343/127, 7-17=-150/2157, 13-15=-371/127, 9-15=-998/273, 9-13=-74/372, 2-21=-1271/197, 10-13=-594/225, 3-19=-257/121

NOTES

1) 2x4 SPF 2400F 2.0E bearing block 12" long at jt. 15 attached to front face with 2 rows of 10d (0.131"x3") nails spaced 3" o.c. 8 Total fasteners. Bearing is assumed to be SPF No.2.
2) Unbalanced roof live loads have been considered for this design.
3) 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
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 373 lb uplift at joint 15 and 176 lb uplift at joint 21.
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

November 8,2021

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 111 MN	
MN111	C4	Piggyback Base	1	1	Job Reference (optional)	I48693625

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Oct 11 2021 Print: 8.430 S Oct 11 2021 MiTek Industries, Inc. Fri Nov 05 14:15:51 Page: 1
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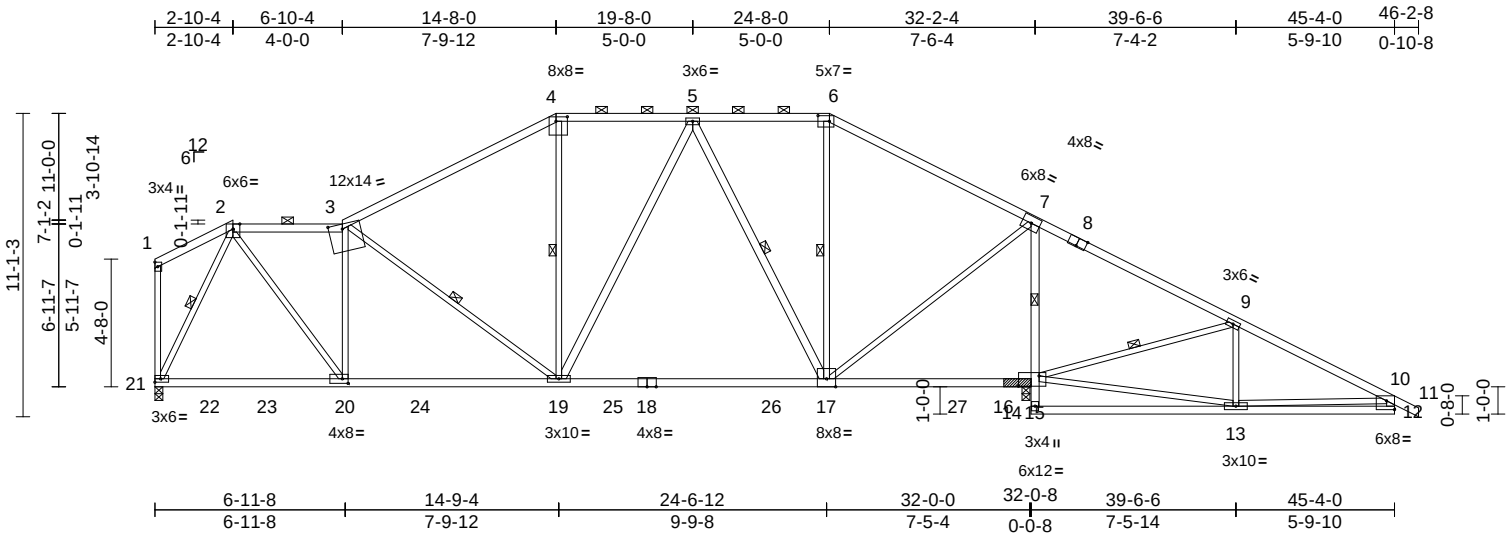

Scale = 1:84.3

Plate Offsets (X, Y): [3:0-6-0,0-2-3], [4:0-5-0,0-2-0], [6:0-5-0,0-2-8], [8:0-4-0,Edge], [12:Edge,0-3-13], [15:0-9-0,0-4-8], [20:0-2-8,0-2-0]

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	0.77	Vert(LL)	-0.29	17-19	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.80	Vert(CT)	-0.44	17-19	>869	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.75	Horz(CT)	0.02	15	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.04	19-20	>999	240	Weight: 210 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF No.2 *Except* 3-4,6-8:2x4 SPF 2100F 1.8E

BOT CHORD 2x4 SPF No.2 *Except* 18-15,16-15:2x4 SPF 2400F 2.0E

WEBS 2x3 SPF No.2 *Except* 19-5,17-5,12-10:2x4 SPF No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-10-1 oc purlins, except end verticals, and 2-0-0 oc purlins (4-10-9 max.): 2-3, 4-6.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 15-17,13-14.

1 Row at midpt 7-15

WEBS 1 Row at midpt 3-19, 4-19, 5-17, 6-17, 9-15, 2-21

REACTIONS (lb/size) 15=2952/(0-3-8 + bearing block), (req. 0-4-14), 21=1177/0-3-8
Max Horiz 21=-285 (LC 4)
Max Uplift 15=-373 (LC 9), 21=-175 (LC 8)
Max Grav 15=3120 (LC 2), 21=1393 (LC 23)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-105/78, 2-3=-1326/173, 3-4=-1285/182, 4-5=-1057/223, 5-6=-517/149, 6-7=-615/142, 7-9=-272/1679, 9-10=-124/622, 10-11=0/32, 10-12=-15/82, 1-21=-118/55

BOT CHORD 20-21=-70/678, 19-20=-76/1313, 17-19=-28/861, 15-17=-1399/424, 14-15=-24/131, 7-15=-2675/401, 13-14=-98/37, 12-13=-63/127

WEBS 2-20=-113/1269, 3-20=-779/188, 3-19=-360/133, 4-19=-46/212, 5-19=-63/554, 5-17=-848/177, 6-17=-341/127, 7-17=-148/2175, 13-15=-374/126, 9-15=-999/273, 9-13=-74/373, 10-13=-594/225, 2-21=-1324/198

NOTES

1) 2x4 SPF 2400F 2.0E bearing block 12" long at jt. 15 attached to front face with 2 rows of 10d (0.131"x3") nails spaced 3" o.c. 8 Total fasteners. Bearing is assumed to be SPF No.2.
2) Unbalanced roof live loads have been considered for this design.
3) 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
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 373 lb uplift at joint 15 and 175 lb uplift at joint 21.
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

November 8,2021

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 111 MN	
MN111	C5	Piggyback Base	1	1	Job Reference (optional)	I48693626

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Oct 11 2021 Print: 8.430 S Oct 11 2021 MiTek Industries, Inc. Fri Nov 05 14:15:52
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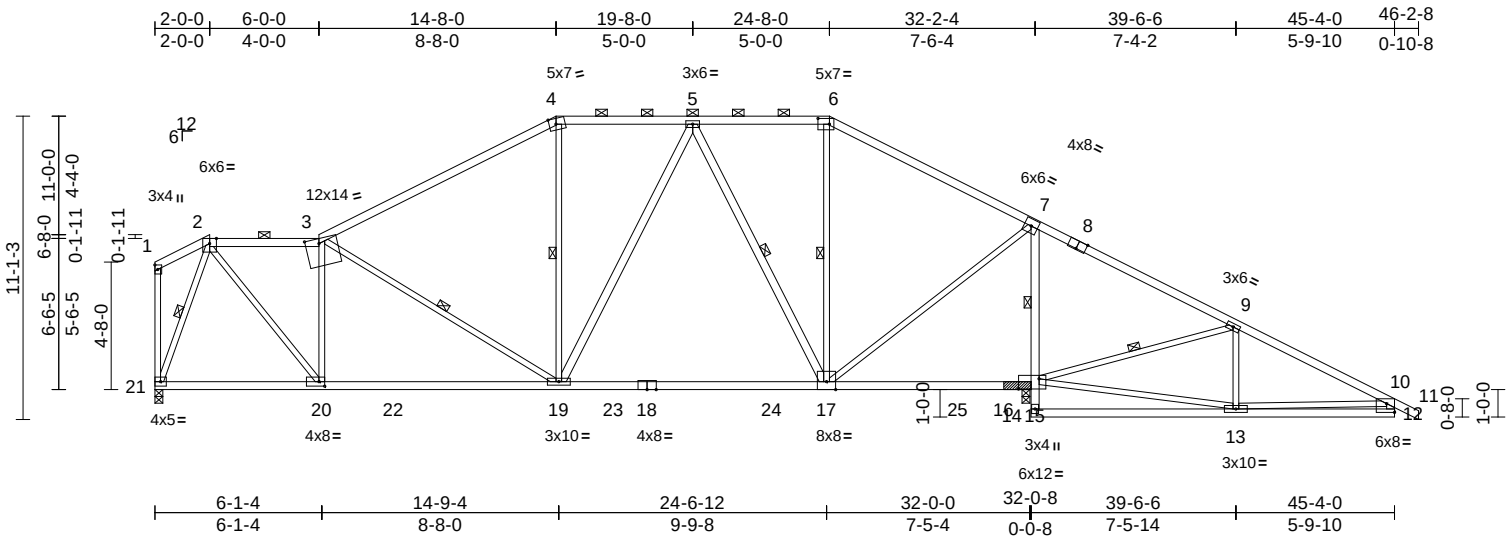


Scale = 1:84.3

Plate Offsets (X, Y): [3:0-6-0,0-2-3], [4:0-3-0,Edge], [6:0-5-0,0-2-8], [8:0-4-0,Edge], [12:Edge,0-3-13], [15:0-9-0,0-4-8], [20:0-2-8,0-2-0]

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	0.85	Vert(LL)	-0.28	17-19	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.85	Vert(CT)	-0.42	17-19	>927	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.74	Horz(CT)	0.02	15	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.04	19-20	>999	240	Weight: 209 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF No.2 *Except* 3-4,6-8:2x4 SPF 2100F 1.8E

BOT CHORD 2x4 SPF No.2 *Except* 18-15,16-15:2x4 SPF 2400F 2.0E

WEBS 2x3 SPF No.2 *Except* 19-5,17-5:2x4 SPF No.2, 12-10:2x4 SPF 2400F 2.0E

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (4-9-13 max.): 2-3, 4-6.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 15-17,13-14.

1 Row at midpt 7-15

WEBS 1 Row at midpt 4-19, 5-17, 6-17, 9-15, 2-21, 3-19

REACTIONS (lb/size) 15=2952/(0-3-8 + bearing block), (req. 0-4-14), 21=1177/0-3-8
Max Horiz 21=-285 (LC 4)
Max Uplift 15=-373 (LC 9), 21=-175 (LC 8)
Max Grav 15=3116 (LC 2), 21=1363 (LC 23)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-93/74, 2-3=-1300/162, 3-4=-1294/176, 4-5=-1055/224, 5-6=-512/150, 6-7=-610/143, 7-9=-272/1679, 9-10=-124/622, 10-11=0/32, 1-21=-99/52, 10-12=-15/82

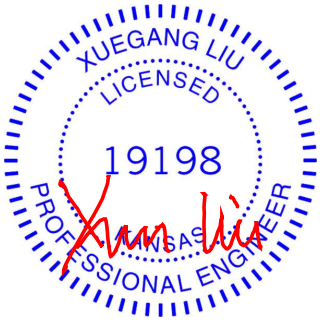
BOT CHORD 20-21=-70/557, 19-20=-82/1284, 17-19=-28/855, 15-17=-1398/424, 14-15=-24/131, 7-15=-2669/402, 13-14=-99/36, 12-13=-65/130

WEBS 2-20=-149/1394, 3-20=-863/216, 4-19=-83/198, 5-19=-68/565, 5-17=-848/175, 6-17=-342/127, 7-17=-149/2168, 13-15=-373/126, 9-15=-998/273, 9-13=-74/373, 2-21=-1303/198, 10-13=-598/227, 3-19=-326/131

NOTES

1) 2x4 SPF 2400F 2.0E bearing block 12" long at jt. 15 attached to front face with 2 rows of 10d (0.131"x3") nails spaced 3" o.c. 8 Total fasteners. Bearing is assumed to be SPF No.2.
2) Unbalanced roof live loads have been considered for this design.
3) 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
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 373 lb uplift at joint 15 and 175 lb uplift at joint 21.
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



November 8,2021

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 111 MN
MN111	D1	Piggyback Base	1	1	I48693627
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

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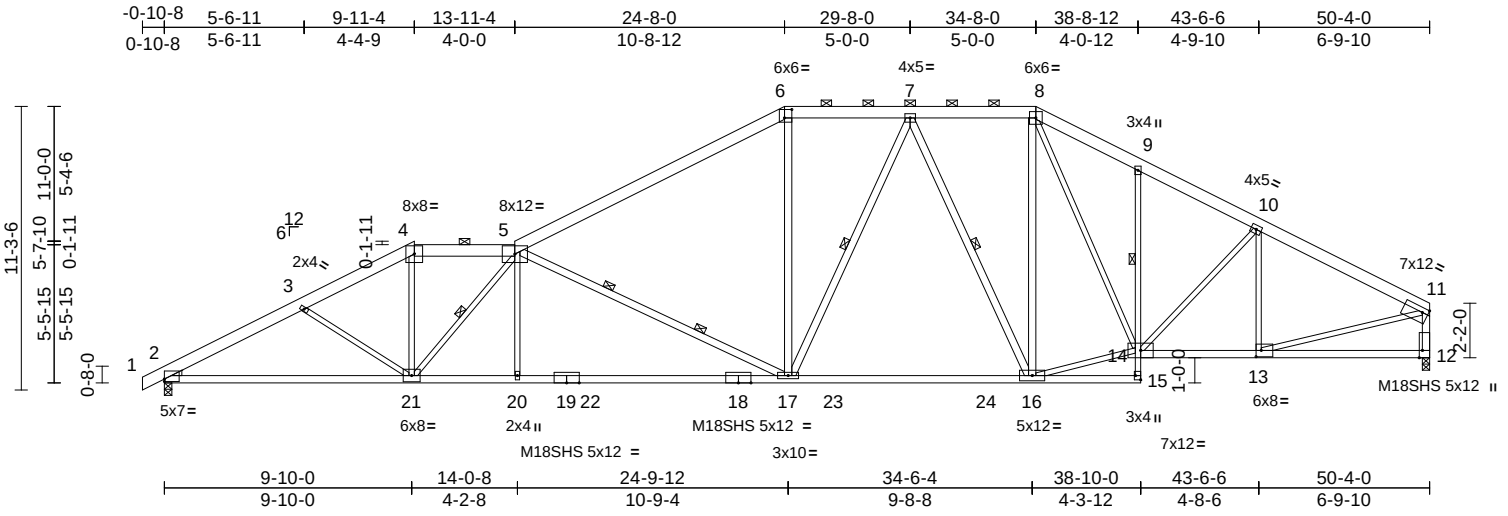

Scale = 1:91.7

Plate Offsets (X, Y): [2:Edge,0-1-3], [6:0-3-8,0-4-0], [11:Edge,0-2-4], [12:0-3-8,Edge], [13:0-2-8,0-3-0], [15: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	0.80	Vert(LL)	-0.47	17-20	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.97	Vert(CT)	-0.91	17-20	>663	240	M18SHS	197/144
BCLL	0.0*	Rep Stress Incr	YES	WB	1.00	Horz(CT)	0.21	12	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.22	17-20	>999	240	Weight: 273 lb	FT = 10%

LUMBER

TOP CHORD 2x6 SPF No.2 *Except* 5-6:2x6 SPF 1650F 1.4E

BOT CHORD 2x4 SPF 2100F 1.8E *Except* 15-9:2x3 SPF No.2, 14-12:2x4 SPF No.2

WEBS 2x3 SPF No.2 *Except* 17-6,17-7,16-7,16-8,12-11,5-17:2x4 SPF No.2

WEDGE Left: 2x3 SPF No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-2-1 oc purlins, except end verticals, and 2-0-0 oc purlins (3-7-14 max.): 4-5, 6-8.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
9-8-7 oc bracing: 2-21
2-2-0 oc bracing: 17-20.

1 Row at midpt 9-14

WEBS 1 Row at midpt 5-21, 7-17, 7-16

WEBS 2 Rows at 1/3 pts 5-17

REACTIONS (lb/size) 2=2324/0-3-8, (req. 0-3-13), 12=2251/0-3-8, (req. 0-3-12)
Max Horiz 2=222 (LC 8)
Max Uplift 2=-309 (LC 8), 12=-195 (LC 9)
Max Grav 2=2441 (LC 2), 12=2381 (LC 2)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 2-3=-4317/560, 3-4=-4177/495, 4-5=-3672/474, 5-6=-3387/359, 6-7=-2914/404, 7-8=-2478/287, 8-9=-3164/388, 9-10=-3207/299, 10-11=-3128/254, 11-12=-2268/230

BOT CHORD 2-21=-630/3720, 20-21=-583/4722, 19-20=-582/4728, 19-22=-582/4728, 18-22=-582/4728, 17-18=-582/4728, 17-23=-132/2741, 23-24=-132/2741, 16-24=-132/2741, 9-14=-262/151, 13-14=-176/2722

WEBS 4-21=-146/1592, 5-21=-1691/168, 6-17=0/942, 7-17=-146/511, 7-16=-771/151, 8-16=-29/497, 14-16=-62/2479, 8-14=-232/839, 10-13=-547/124, 11-13=-154/2700, 5-20=0/327, 5-17=-2024/436

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) WARNING: Required bearing size at joint(s) 2, 12 greater than input bearing size.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 309 lb uplift at joint 2 and 195 lb uplift at joint 12.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

November 8,2021

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 111 MN	
MN111	D2	Piggyback Base	1	1	Job Reference (optional)	I48693628

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Oct 11 2021 Print: 8.430 S Oct 11 2021 MiTek Industries, Inc. Fri Nov 05 14:15:53
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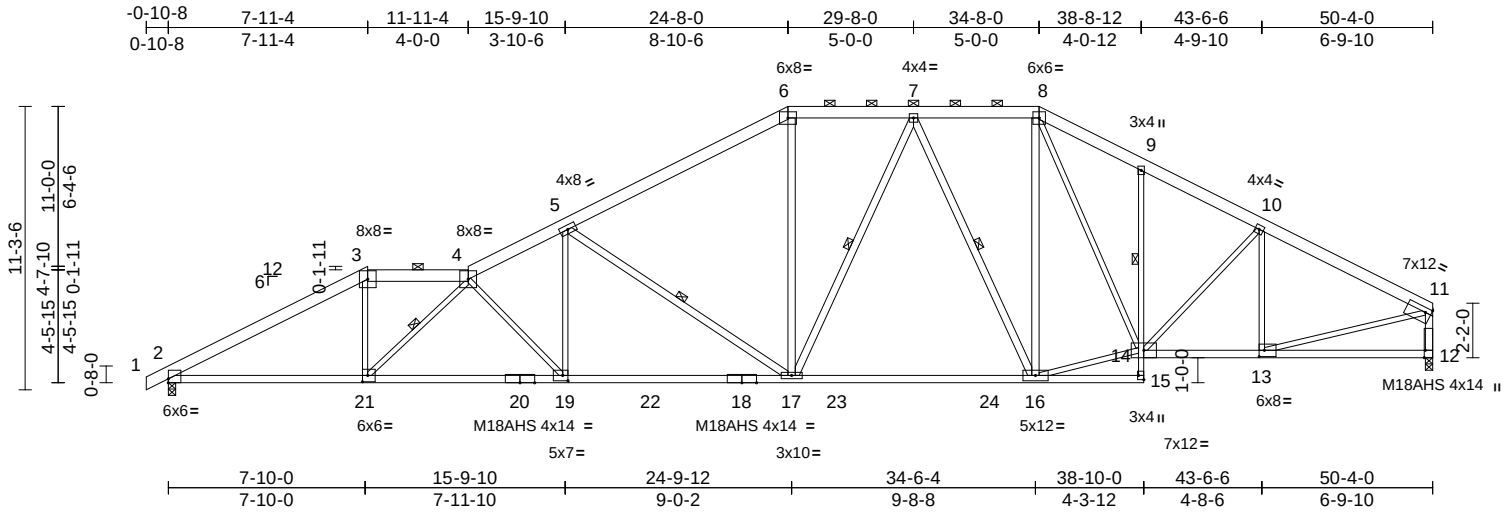


Scale = 1:91.7

Plate Offsets (X, Y): [2:Edge,0-1-14], [11:Edge,0-2-4], [12:0-3-8,Edge], [13:0-2-8,0-3-0], [15:Edge,0-2-8], [19:0-2-8,0-2-8], [21:0-2-8,0-3-0]

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	0.78	Vert(LL)	-0.47	16-17	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.82	Vert(CT)	-0.78	16-17	>766	240	M18AHS	142/136
BCLL	0.0*	Rep Stress Incr	YES	WB	0.97	Horz(CT)	0.21	12	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.22	17-19	>999	240	Weight: 271 lb	FT = 10%

LUMBER

TOP CHORD 2x6 SPF No.2
BOT CHORD 2x4 SPF 2100F 1.8E *Except* 15-9:2x3 SPF No.2, 14-12:2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except* 17-5,17-6,17-7,16-7,16-8,12-11:2x4 SPF No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-4-6 oc purlins, except end verticals, and 2-0-0 oc purlins (3-7-2 max.): 3-4, 6-8.
BOT CHORD Rigid ceiling directly applied or 9-8-7 oc bracing. Except:
1 Row at midpt 9-14
WEBS 1 Row at midpt 4-21, 5-17, 7-17, 7-16

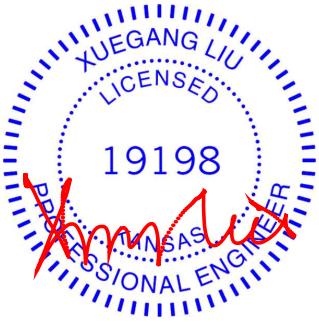
REACTIONS (lb/size) 2=2324/0-3-8, (req. 0-3-13), 12=2251/0-3-8, (req. 0-3-12)
Max Horiz 2=222 (LC 8)
Max Uplift 2=-309 (LC 8), 12=-195 (LC 9)
Max Grav 2=2444 (LC 2), 12=2385 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/12, 2-3=-4457/496, 3-4=-3822/504, 4-5=-4828/544, 5-6=-3356/375, 6-7=-2905/398, 7-8=-2486/286, 8-9=-3173/388, 9-10=-3215/299, 10-11=-3134/254, 11-12=-2272/230
BOT CHORD 2-21=-550/3863, 19-21=-655/5131, 17-19=-509/4299, 16-17=-135/2750, 15-16=-12/76, 14-15=0/30, 9-14=-263/152, 13-14=-176/2728, 12-13=-27/120
WEBS 3-21=-16/1627, 4-21=-1868/150, 4-19=-1226/215, 5-19=-57/1218, 5-17=-1707/397, 6-17=-11/1036, 7-17=-125/468, 7-16=-774/157, 8-16=-31/513, 14-16=-60/2492, 8-14=-234/837, 10-14=-55/239, 10-13=-547/124, 11-13=-154/2706

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) WARNING: Required bearing size at joint(s) 2, 12 greater than input bearing size.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 309 lb uplift at joint 2 and 195 lb uplift at joint 12.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



November 8,2021

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 111 MN	
MN111	D3	Piggyback Base	1	1	Job Reference (optional)	I48693629

Wheeler Lumber, Waverly, KS - 66871,

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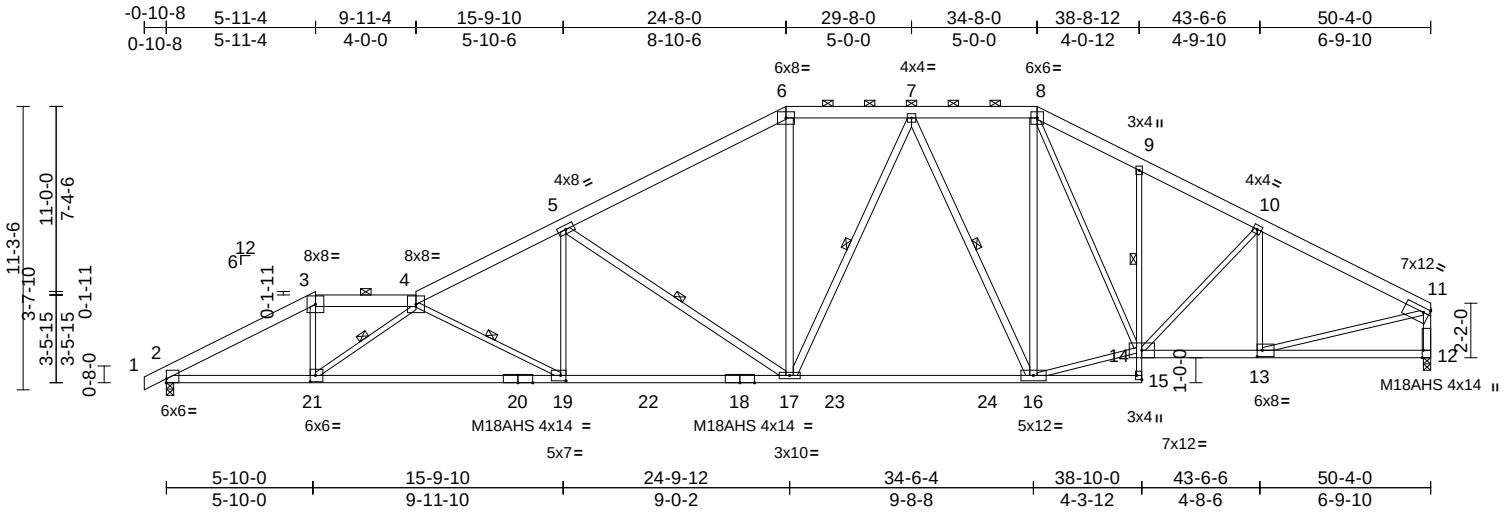
Page: 1



Scale = 1:91.7

Plate Offsets (X, Y): [2:Edge,0-1-14], [11:Edge,0-2-4], [12:0-3-8,Edge], [13:0-2-8,0-3-0], [15:Edge,0-2-8], [19:0-2-8,0-2-8], [21:0-2-8,0-3-0]

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	0.56	Vert(LL)	-0.50	16-17	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.90	Vert(CT)	-0.84	16-17	>716	240	M18AHS	142/136
BCLL	0.0*	Rep Stress Incr	YES	WB	0.94	Horz(CT)	0.22	12	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.25	17-19	>999	240	Weight: 270 lb	FT = 10%

LUMBER

TOP CHORD 2x6 SPF No.2
BOT CHORD 2x4 SPF 2100F 1.8E *Except* 15-9:2x3 SPF No.2, 14-12:2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except* 17-5,17-6,17-7,16-7,16-8,12-11:2x4 SPF No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (3-6-10 max.): 3-4, 6-8.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
8-9-2 oc bracing: 19-21.
1 Row at midpt 9-14
WEBS 1 Row at midpt 4-21, 4-19, 5-17, 7-17, 7-16

REACTIONS (lb/size) 2=2324/0-3-8, (req. 0-3-13), 12=2251/0-3-8, (req. 0-3-12)
Max Horiz 2=222 (LC 8)
Max Uplift 2=-309 (LC 8), 12=-195 (LC 9)
Max Grav 2=2444 (LC 2), 12=2385 (LC 2)

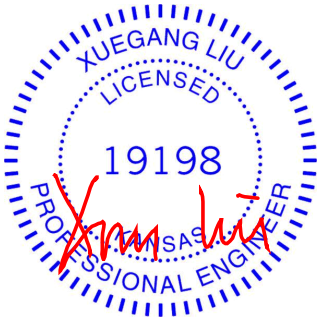
FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/12, 2-3=-4564/494, 3-4=-3890/483, 4-5=-4868/535, 5-6=-3354/376, 6-7=-2903/399, 7-8=-2487/285, 8-9=-3173/388, 9-10=-3215/299, 10-11=-3134/254, 11-12=-2272/230
BOT CHORD 2-21=-572/3950, 19-21=-792/5852, 17-19=-506/4315, 16-17=-135/2750, 15-16=-13/75, 14-15=0/28, 9-14=-263/152, 13-14=-176/2728, 12-13=-27/120
WEBS 3-21=-70/1824, 4-21=-2482/281, 4-19=-1748/325, 5-19=-39/1203, 5-17=-1729/394, 6-17=-12/1039, 7-17=-125/464, 7-16=-772/159, 8-16=-31/514, 14-16=-60/2494, 8-14=-235/836, 10-14=-55/239, 10-13=-547/124, 11-13=-154/2705

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) WARNING: Required bearing size at joint(s) 2, 12 greater than input bearing size.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 309 lb uplift at joint 2 and 195 lb uplift at joint 12.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



November 8,2021

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 111 MN	
MN111	D4	Piggyback Base	1	1	Job Reference (optional)	I48693630

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Oct 11 2021 Print: 8.430 S Oct 11 2021 MiTek Industries, Inc. Fri Nov 05 14:15:54 Page: 1
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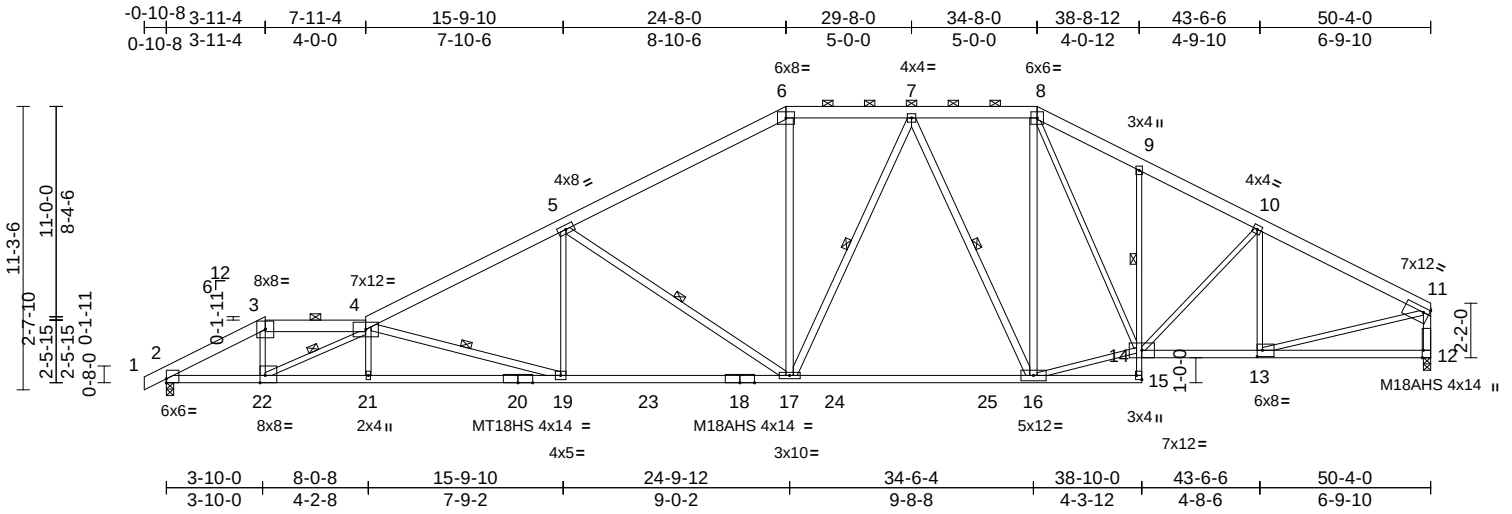


Scale = 1:91.7

Plate Offsets (X, Y): [2:Edge,0-1-14], [11:Edge,0-2-4], [12:0-3-8,Edge], [13:0-2-8,0-3-0], [15:Edge,0-2-8], [22:0-2-8,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	0.67	Vert(LL)	-0.55	16-17	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.97	Vert(CT)	-0.94	19-21	>637	240	MT18HS	197/144
BCLL	0.0*	Rep Stress Incr	YES	WB	0.98	Horz(CT)	0.24	12	n/a	n/a	M18AHS	142/136
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.33	19-21	>999	240	Weight: 274 lb	FT = 10%

LUMBER

TOP CHORD 2x6 SPF No.2
BOT CHORD 2x4 SPF 2100F 1.8E *Except* 15-9:2x3 SPF No.2, 14-12:2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except* 17-6,17-7,16-7,16-8,12-11,4-19,5-17:2x4 SPF No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-7-9 oc purlins, except end verticals, and 2-0-0 oc purlins (3-6-14 max.): 3-4, 6-8.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
8-0-13 oc bracing: 21-22
2-2-0 oc bracing: 19-21.
1 Row at midpt 9-14
WEBS 1 Row at midpt 4-22, 7-17, 7-16, 4-19, 5-17

REACTIONS (lb/size) 2=2324/0-3-8, (req. 0-3-13), 12=2251/0-3-8, (req. 0-3-12)
Max Horiz 2=222 (LC 8)
Max Uplift 2=-309 (LC 8), 12=-195 (LC 9)
Max Grav 2=2444 (LC 2), 12=2385 (LC 2)

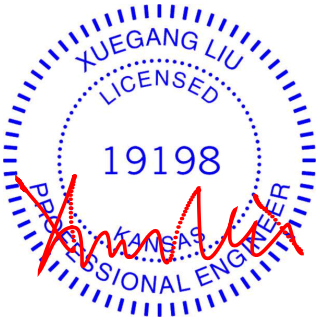
FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/12, 2-3=-4528/523, 3-4=-3804/481, 4-5=-4899/535, 5-6=-3358/377, 6-7=-2902/397, 7-8=-2487/286, 8-9=-3173/388, 9-10=-3215/299, 10-11=-3134/254, 11-12=-2272/230
BOT CHORD 2-22=-615/3897, 21-22=-947/7172, 19-21=-943/7180, 17-19=-518/4326, 16-17=-136/2750, 15-16=-12/75, 14-15=0/29, 9-14=-263/152, 13-14=-176/2728, 12-13=-27/120
WEBS 3-22=-147/1948, 4-22=-3812/383, 4-21=0/218, 6-17=-15/1054, 7-17=-122/460, 7-16=-773/158, 8-16=-32/515, 14-16=-61/2493, 8-14=-234/837, 10-14=-55/239, 10-13=-547/124, 11-13=-154/2705, 4-19=-2961/441, 5-19=-19/1145, 5-17=-1744/410

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) WARNING: Required bearing size at joint(s) 2, 12 greater than input bearing size.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 309 lb uplift at joint 2 and 195 lb uplift at joint 12.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 111 MN	
MN111	D5	Piggyback Base Girder	1	1	Job Reference (optional)	I48693631

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Oct 11 2021 Print: 8.430 S Oct 11 2021 MiTek Industries, Inc. Fri Nov 05 14:15:55 Page: 1
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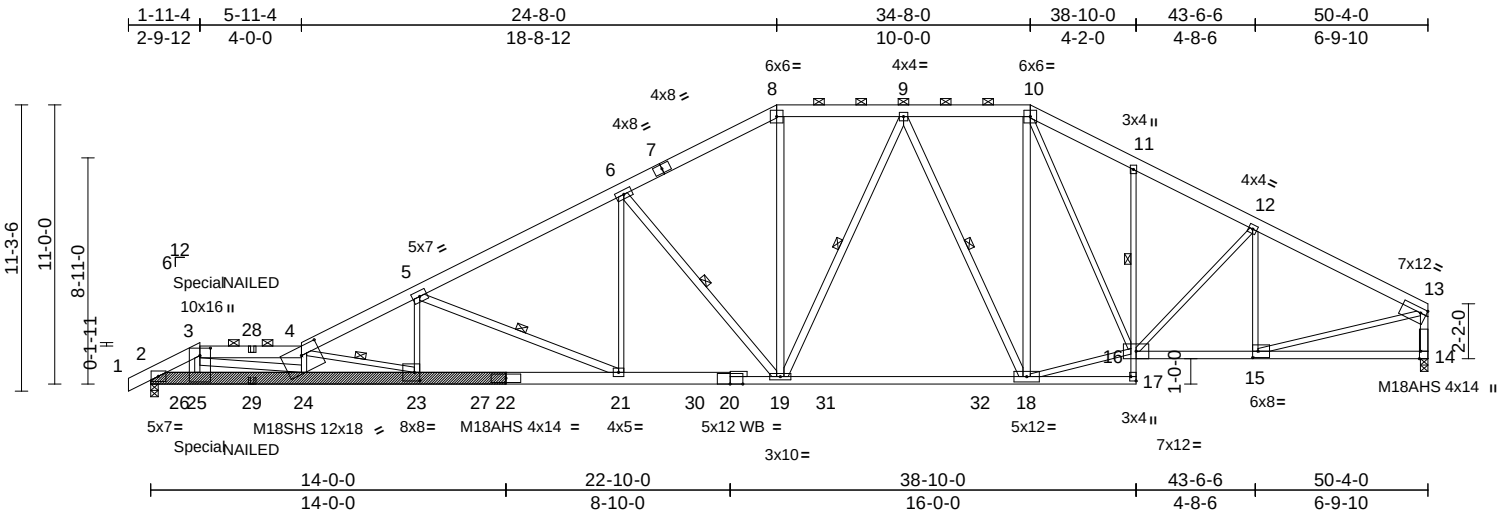


Scale = 1:90.8

Plate Offsets (X, Y): [3:0-3-8,0-5-0], [13:Edge,0-2-4], [14:0-3-8,Edge], [15:0-2-8,0-3-0], [17:Edge,0-2-8], [23:0-2-8,0-4-0], [24:0-8-12,0-4-0]

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	0.85	Vert(LL)	-0.60	18-19	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	1.00	Vert(CT)	-1.01	18-19	>592	240	M18AHS	142/136
BCLL	0.0*	Rep Stress Incr	NO	WB	0.93	Horz(CT)	0.18	14	n/a	n/a	M18SHS	197/144
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.35	23-24	>999	240	Weight: 335 lb	FT = 10%

LUMBER

TOP CHORD 2x6 SPF No.2 *Except* 3-4:2x6 SPF 1650F 1.4E

BOT CHORD 2x6 SP 2400F 2.0E *Except* 17-11:2x3 SPF No.2, 16-14:2x4 SPF No.2, 20-17:2x4 SPF 2100F 1.8E, 22-20:2x6 SPF 1650F 1.4E

WEBS 2x3 SPF No.2 *Except* 19-8,19-9,18-9,18-10,14-13,6-19,21-5:2x4 SPF No.2, 3-24:2x4 SPF 2100F 1.8E

OTHERS 2x3 SPF No.2

LBR SCAB 2-22 SP 2400F 2.0E one side

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-0-5 oc purlins, except end verticals, and 2-0-0 oc purlins (2-4-9 max.): 3-4, 8-10.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
9-9-9 oc bracing: 21-23
6-0-0 oc bracing: 16-17.

1 Row at midpt 11-16

WEBS 1 Row at midpt 9-19, 9-18, 6-19, 4-23, 5-21

REACTIONS (lb/size) 2=2324/(0-3-8 + bearing block), (req. 0-3-13), 14=2251/0-3-8, (req. 0-3-12)
Max Horiz 2=222 (LC 8)
Max Uplift 2=-363 (LC 8), 14=-200 (LC 9)
Max Grav 2=2438 (LC 2), 14=2385 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

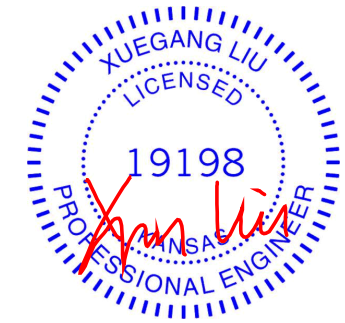
TOP CHORD 1-2=0/17, 2-3=-5292/676, 3-4=-9106/1101, 4-5=-6626/748, 5-6=-4355/492, 6-8=-3307/402, 8-9=-2890/398, 9-10=-2488/292, 10-11=-3173/397, 11-12=-3214/307, 12-13=-3134/261, 13-14=-2272/235

BOT CHORD 2-25=-777/4590, 24-25=-772/4490, 23-24=-1242/8896, 21-23=-793/5899, 19-21=-413/3804, 18-19=-146/2750, 17-18=-14/73, 16-17=-4/23, 11-16=-263/152, 15-16=-182/2727, 14-15=-27/120

WEBS 3-25=-54/1003, 4-24=-2171/289, 8-19=-73/1139, 9-19=-111/434, 9-18=-773/168, 10-18=-35/522, 16-18=-66/2498, 10-16=-236/835, 12-16=-57/240, 12-15=-547/125, 13-15=-161/2705, 6-19=-1452/365, 5-23=-74/1517, 4-23=-3082/462, 5-21=-2279/413, 6-21=-90/1139, 3-24=-514/4766

NOTES

1) Attached 14-0-0 scab 2 to 22, front face(s) 2x6 SP 2400F 2.0E with 2 row(s) of 10d (0.131"x3") nails spaced 9" o.c.except : starting at 0-3-4 from end at joint 2, nail 2 row(s) at 7" o.c. for 2-8-4; starting at 3-0-2 from end at joint 2, nail 2 row(s) at 7" o.c. for 4-0-8.
2) Scab(s) 2 to 22 to provide bearing enhancement at jt.2, a cluster of 12 evenly spaced - 10d (0.131"x3") nails are required within 12" of jt.2. Total nails to be divided equally between front and back if scabs are on both sides. Bearing is assumed to be SPF No.2.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
6) All plates are MT20 plates unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
9) WARNING: Required bearing size at joint(s) 14 greater than input bearing size.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 363 lb uplift at joint 2 and 200 lb uplift at joint 14.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
13) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
14) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 110 lb down and 116 lb up at 1-11-4 on top chord, and 12 lb down and 28 lb up at 1-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.



November 8,2021

Continued on page 2

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

15) 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, 4-8=-70, 8-10=-70, 10-13=-70, 2-17=-20, 14-16=-20
   Concentrated Loads (lb)
   Vert: 25=4 (B), 29=-4 (B)

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 111 MN	
MN111	D6	Piggyback Base Supported Gable	1	1	Job Reference (optional)	I48693632

Wheeler Lumber, Waverly, KS - 66871, Run: 8.43 S Oct 11 2021 Print: 8.430 S Oct 11 2021 MiTek Industries, Inc. Fri Nov 05 14:15:56 Page: 1
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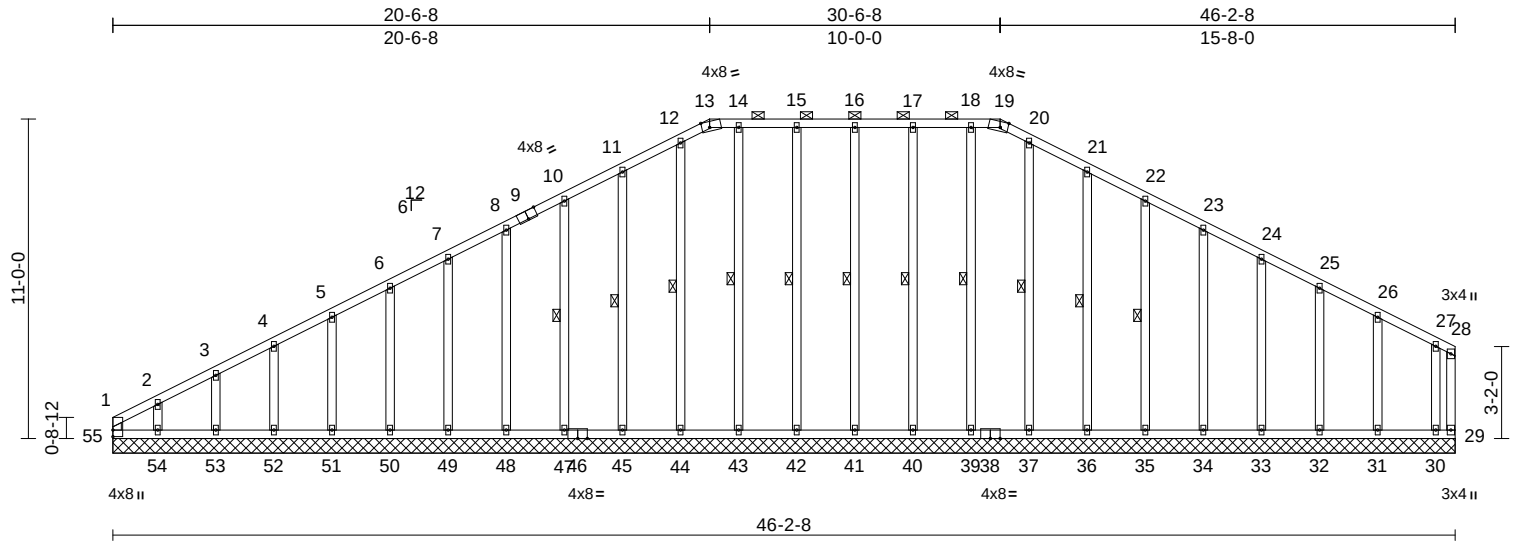


Scale = 1:79.3

Plate Offsets (X, Y): [9:0-4-0,Edge], [13:0-3-3,Edge], [19:0-3-3,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	0.10	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.13	Horiz(TL)	0.00	29	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 294 lb	FT = 10%

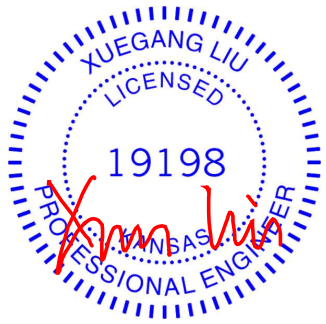
LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
OTHERS 2x4 SPF No.2

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.): 13-19.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 10-47, 11-45, 12-44, 14-43, 15-42, 16-41, 17-40, 18-39, 20-37, 21-36, 22-35

REACTIONS (lb/size) 29=4/46-2-8, 30=128/46-2-8, 31=188/46-2-8, 32=178/46-2-8, 33=180/46-2-8, 34=180/46-2-8, 35=180/46-2-8, 36=179/46-2-8, 37=180/46-2-8, 39=180/46-2-8, 40=179/46-2-8, 41=180/46-2-8, 42=179/46-2-8, 43=180/46-2-8, 44=180/46-2-8, 45=179/46-2-8, 47=180/46-2-8, 48=180/46-2-8, 49=180/46-2-8, 50=180/46-2-8, 51=180/46-2-8, 52=179/46-2-8, 53=183/46-2-8, 54=168/46-2-8, 55=47/46-2-8
Max Horiz 55=220 (LC 5)
Max Uplift 29=-29 (LC 7), 30=-117 (LC 9), 31=-58 (LC 9), 32=-53 (LC 9), 33=-54 (LC 9), 34=-54 (LC 9), 35=-51 (LC 9), 36=-73 (LC 9), 39=-6 (LC 5), 40=-47 (LC 4), 41=-32 (LC 5), 42=-48 (LC 4), 43=-9 (LC 5), 45=-68 (LC 8), 47=-52 (LC 8), 48=-54 (LC 8), 49=-54 (LC 8), 50=-54 (LC 8), 51=-53 (LC 8), 52=-58 (LC 8), 53=-38 (LC 8), 54=-153 (LC 8), 55=-81 (LC 4)
Max Grav 29=97 (LC 9), 30=145 (LC 16), 31=188 (LC 1), 32=178 (LC 1), 33=180 (LC 1), 34=180 (LC 22), 35=180 (LC 22), 36=179 (LC 1), 37=180 (LC 22), 39=180 (LC 22), 40=182 (LC 21), 41=180 (LC 1), 42=182 (LC 22), 43=181 (LC 21), 44=180 (LC 21), 45=179 (LC 1), 47=180 (LC 21), 48=180 (LC 1), 49=180 (LC 1), 50=180 (LC 21), 51=180 (LC 1), 52=179 (LC 21), 53=183 (LC 1), 54=186 (LC 15), 55=180 (LC 12)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-55=-127/66, 1-2=-244/136, 2-3=-186/126, 3-4=-165/136, 4-5=-149/150, 5-6=-135/165, 6-7=-120/191, 7-8=-105/217, 8-10=-90/243, 10-11=-78/268, 11-12=-67/301, 12-13=-55/284, 13-14=-49/283, 14-15=-49/283, 15-16=-49/283, 16-17=-49/283, 17-18=-49/283, 18-19=-49/283, 19-20=-55/282, 20-21=-58/281, 21-22=-56/228, 22-23=-56/184, 23-24=-56/138, 24-25=-57/107, 25-26=-57/81, 26-27=-56/55, 27-28=-74/36, 28-29=-69/20
BOT CHORD 54-55=-48/43, 53-54=-48/43, 52-53=-48/43, 51-52=-48/43, 50-51=-48/43, 49-50=-48/43, 48-49=-48/43, 47-48=-48/43, 45-47=-48/43, 44-45=-48/43, 43-44=-48/43, 42-43=-48/43, 41-42=-48/43, 40-41=-48/43, 39-40=-48/43, 37-39=-48/43, 36-37=-48/43, 35-36=-48/43, 34-35=-48/43, 33-34=-48/43, 32-33=-48/43, 31-32=-48/43, 30-31=-48/43, 29-30=-48/43
WEBS 2-54=-130/120, 3-53=-143/72, 4-52=-139/79, 5-51=-140/78, 6-50=-140/78, 7-49=-140/78, 8-48=-140/78, 10-47=-140/76, 11-45=-139/92, 12-44=-140/20, 14-43=-141/33, 15-42=-142/72, 16-41=-140/56, 17-40=-142/71, 18-39=-140/30, 20-37=-140/0, 21-36=-139/97, 22-35=-140/76, 23-34=-140/78, 24-33=-140/78, 25-32=-139/76, 26-31=-147/84, 27-30=-102/101

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



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Continued on page 2

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Provide adequate drainage to prevent water ponding.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
8) Gable studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * 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.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 81 lb uplift at joint 55, 29 lb uplift at joint 29, 153 lb uplift at joint 54, 38 lb uplift at joint 53, 58 lb uplift at joint 52, 53 lb uplift at joint 51, 54 lb uplift at joint 50, 54 lb uplift at joint 49, 54 lb uplift at joint 48, 52 lb uplift at joint 47, 68 lb uplift at joint 45, 9 lb uplift at joint 43, 48 lb uplift at joint 42, 32 lb uplift at joint 41, 47 lb uplift at joint 40, 6 lb uplift at joint 39, 73 lb uplift at joint 36, 51 lb uplift at joint 35, 54 lb uplift at joint 34, 54 lb uplift at joint 33, 53 lb uplift at joint 32, 58 lb uplift at joint 31 and 117 lb uplift at joint 30.
12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 111 MN
MN111	E1	Common Supported Gable	1	1	I48693633
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

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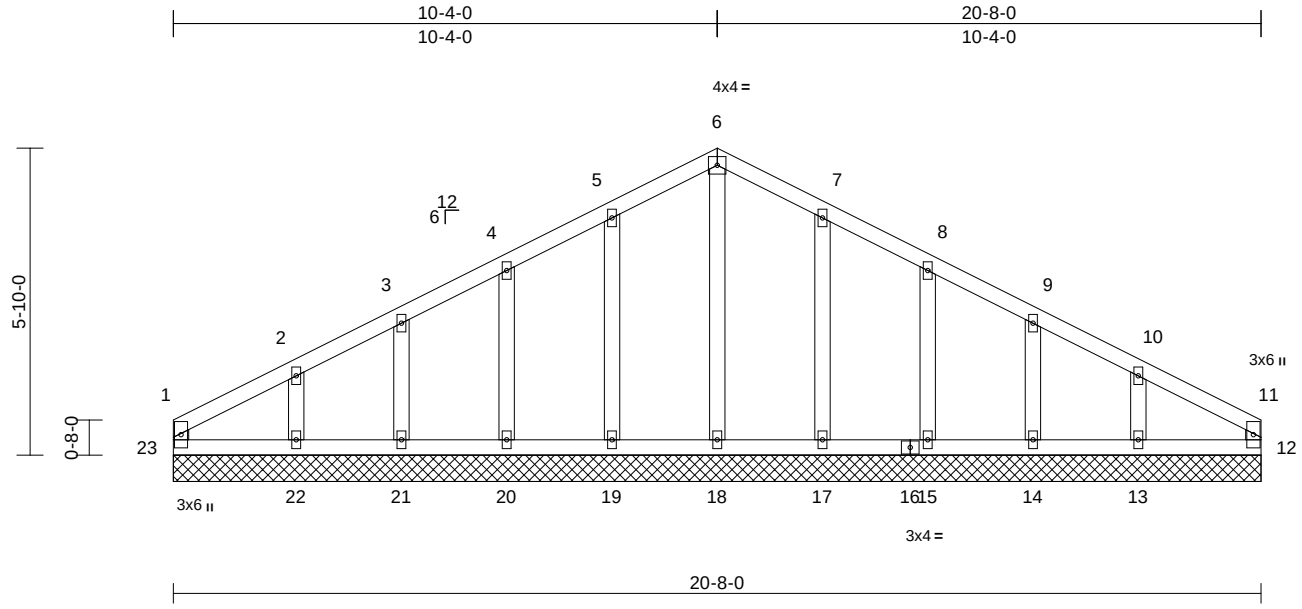

Scale = 1:43.8

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	0.05	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.06	Horiz(TL)	0.00	12	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 82 lb	FT = 10%

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

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

REACTIONS (lb/size) 12=97/20-8-0, 13=208/20-8-0, 14=172/20-8-0, 15=180/20-8-0, 17=187/20-8-0, 18=144/20-8-0, 19=187/20-8-0, 20=180/20-8-0, 21=172/20-8-0, 22=208/20-8-0, 23=97/20-8-0
Max Horiz 23=-82 (LC 4)
Max Uplift 12=-10 (LC 8), 13=-85 (LC 9), 14=-45 (LC 9), 15=-57 (LC 9), 17=-55 (LC 9), 19=-55 (LC 8), 20=-57 (LC 8), 21=-44 (LC 8), 22=-90 (LC 8), 23=-22 (LC 9)
Max Grav 12=97 (LC 1), 13=211 (LC 22), 14=172 (LC 1), 15=180 (LC 1), 17=190 (LC 22), 18=159 (LC 18), 19=190 (LC 21), 20=180 (LC 1), 21=172 (LC 1), 22=211 (LC 21), 23=100 (LC 16)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-23=-79/32, 1-2=-97/50, 2-3=-72/75, 3-4=-61/101, 4-5=-58/127, 5-6=-61/152, 6-7=-61/144, 7-8=-58/109, 8-9=-58/82, 9-10=-61/57, 10-11=-82/31, 11-12=-79/21
BOT CHORD 22-23=-20/58, 21-22=-20/58, 20-21=-20/58, 19-20=-20/58, 18-19=-20/58, 17-18=-20/58, 15-17=-20/58, 14-15=-20/58, 13-14=-20/58, 12-13=-20/58
WEBS 6-18=-119/0, 5-19=-150/79, 4-20=-140/80, 3-21=-135/71, 2-22=-161/102, 7-17=-150/79, 8-15=-140/80, 9-14=-135/72, 10-13=-161/99

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 22 lb uplift at joint 23, 10 lb uplift at joint 12, 55 lb uplift at joint 19, 57 lb uplift at joint 20, 44 lb uplift at joint 21, 90 lb uplift at joint 22, 55 lb uplift at joint 17, 57 lb uplift at joint 15, 45 lb uplift at joint 14 and 85 lb uplift at joint 13.
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

November 8,2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 111 MN	
MN111	G1	Common Supported Gable	1	1	Job Reference (optional)	I48693634

Wheeler Lumber, Waverly, KS - 66871,

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Page: 1

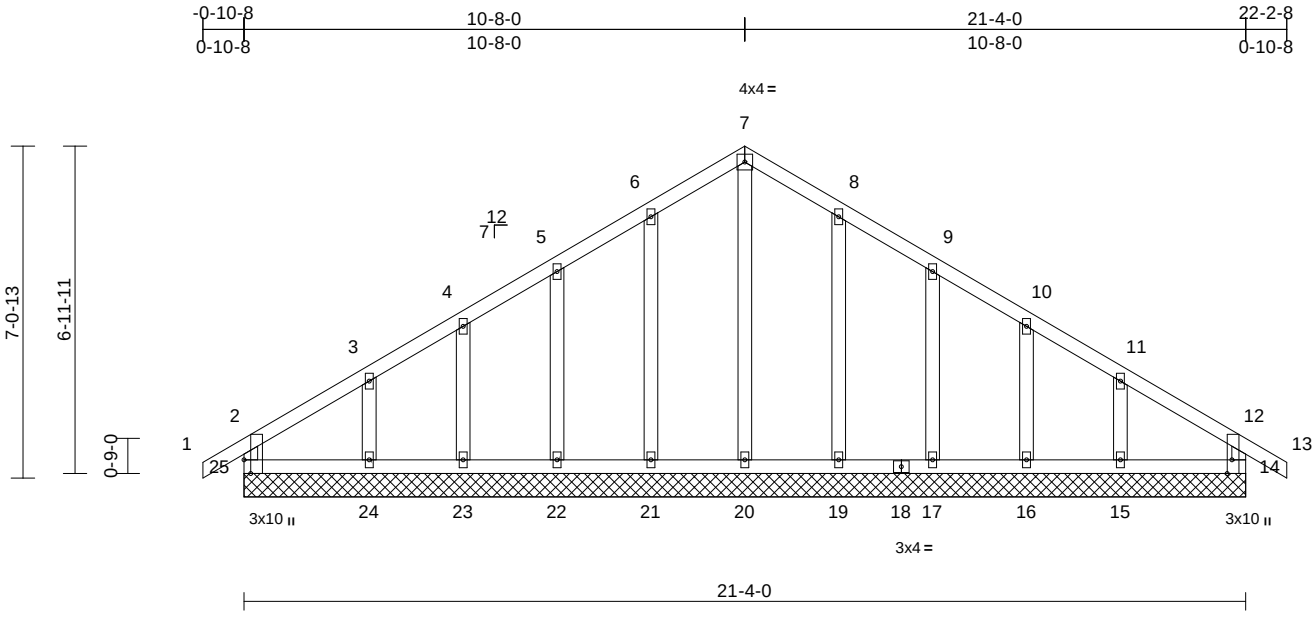

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Plate Offsets (X, Y): [14:0-3-8,Edge], [25:0-3-8,Edge]

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	0.07	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.00	14	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 95 lb	FT = 10%

LUMBER

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

BRACING

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

REACTIONS (lb/size) 14=195/21-4-0, 15=209/21-4-0, 16=172/21-4-0, 17=181/21-4-0, 19=187/21-4-0, 20=150/21-4-0, 21=187/21-4-0, 22=181/21-4-0, 23=172/21-4-0, 24=209/21-4-0, 25=195/21-4-0
Max Horiz 25=196 (LC 7)
Max Uplift 14=-25 (LC 8), 15=-102 (LC 9), 16=-48 (LC 9), 17=-66 (LC 9), 19=-59 (LC 9), 21=-60 (LC 8), 22=-67 (LC 8), 23=-46 (LC 8), 24=-109 (LC 8), 25=-42 (LC 4)
Max Grav 14=195 (LC 1), 15=237 (LC 16), 16=172 (LC 1), 17=187 (LC 16), 19=192 (LC 16), 20=189 (LC 18), 21=193 (LC 15), 22=188 (LC 15), 23=172 (LC 1), 24=247 (LC 15), 25=201 (LC 16)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 12-14=-172/39, 7-8=-66/184, 8-9=-55/143, 9-10=-67/111, 10-11=-79/80, 11-12=-104/69, 12-13=0/36, 1-2=0/36, 2-3=-138/113, 3-4=-110/102, 4-5=-99/133, 5-6=-87/165, 6-7=-77/193, 2-25=-172/53
BOT CHORD 24-25=-73/97, 23-24=-73/97, 22-23=-73/97, 21-22=-73/97, 20-21=-73/97, 19-20=-73/97, 17-19=-73/97, 16-17=-73/97, 15-16=-73/97, 14-15=-73/97
WEBS 7-20=-149/1, 8-19=-152/84, 9-17=-146/90, 10-16=-135/75, 11-15=-177/117, 6-21=-153/84, 5-22=-145/90, 4-23=-135/74, 3-24=-183/121

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 25 lb uplift at joint 14, 42 lb uplift at joint 25, 59 lb uplift at joint 19, 66 lb uplift at joint 17, 48 lb uplift at joint 16, 102 lb uplift at joint 15, 60 lb uplift at joint 21, 67 lb uplift at joint 22, 46 lb uplift at joint 23 and 109 lb uplift at joint 24.
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

November 8,2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 111 MN	
MN111	G2	Common Structural Gable	1	1	Job Reference (optional)	I48693635

Wheeler Lumber, Waverly, KS - 66871,

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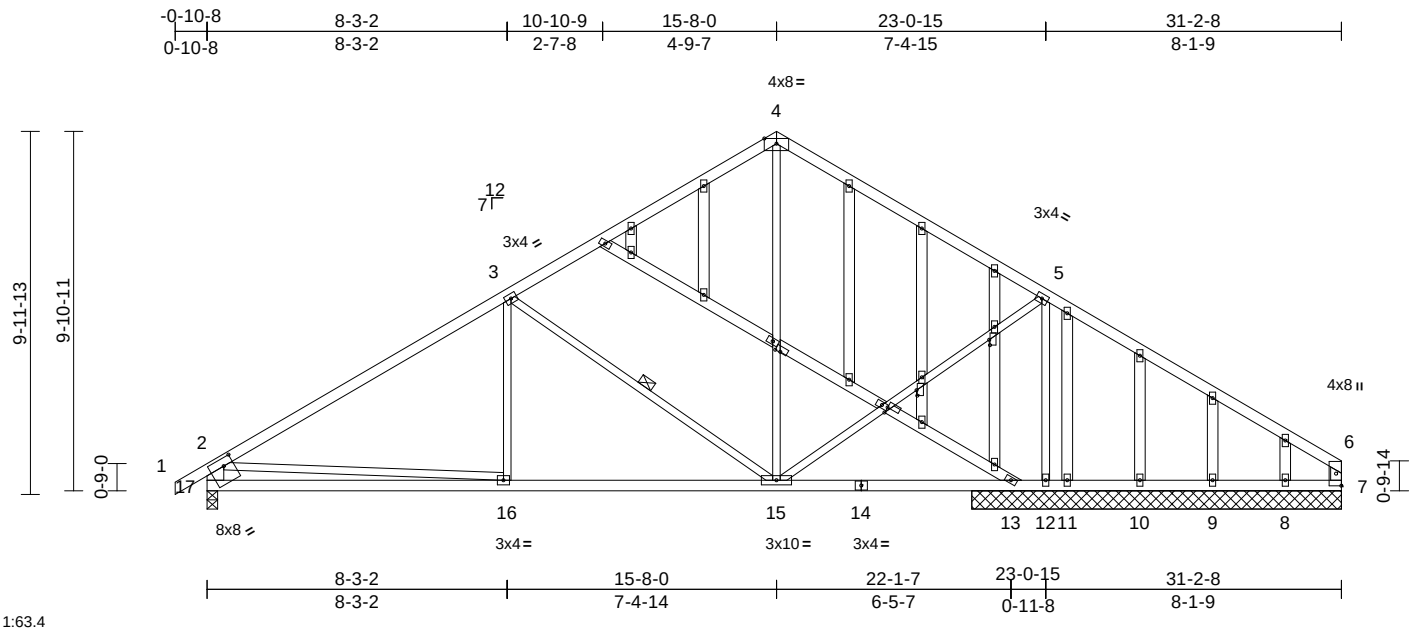

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Plate Offsets (X, Y): [17:0-3-4,0-2-8], [19:0-1-12,0-0-4], [20:0-0-1,0-2-0], [29:0-1-13,0-0-4], [32:0-1-13,0-0-4]

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	0.82	Vert(LL)	-0.10	16-17	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.60	Vert(CT)	-0.20	16-17	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.79	Horz(CT)	0.03	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.03	16	>999	240	Weight: 167 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except* 17-2:2x6 SPF No.2, 7-6,18-19,19-20,20-13:2x4 SPF No.2
OTHERS 2x4 SPF No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-0-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 9-4-10 oc bracing.
WEBS 1 Row at midpt 3-15

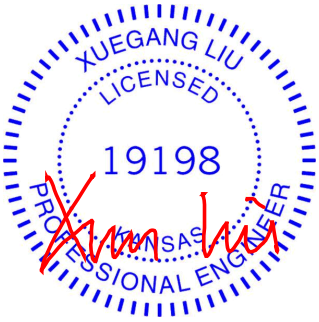
REACTIONS (lb/size) 7=282/10-2-0, 8=111/10-2-0, 9=28/10-2-0, 10=42/10-2-0, 11=78/10-2-0, 12=1015/10-2-0, 13=179/10-2-0, 17=1117/0-3-8
Max Horiz 17=268 (LC 5)
Max Uplift 7=-122 (LC 9), 8=-38 (LC 9), 12=-211 (LC 8), 17=-178 (LC 8)
Max Grav 7=306 (LC 22), 8=154 (LC 16), 9=76 (LC 3), 10=100 (LC 14), 11=185 (LC 14), 12=1015 (LC 1), 13=321 (LC 14), 17=1187 (LC 15)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/39, 2-3=-1481/221, 3-4=-828/240, 4-5=-819/236, 5-6=-328/186, 2-17=-1058/223, 6-7=-347/180
BOT CHORD 16-17=-386/922, 15-16=-225/1336, 13-15=-63/178, 12-13=-63/178, 11-12=-63/178, 10-11=-63/178, 9-10=-63/178, 8-9=-63/178, 7-8=-63/178
WEBS 4-15=-79/318, 5-15=-26/697, 5-12=-1156/152, 3-15=-818/261, 3-16=0/308, 2-16=0/555

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 178 lb uplift at joint 17, 211 lb uplift at joint 12, 122 lb uplift at joint 7 and 38 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



November 8,2021

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 111 MN	I48693636
MN111	G3	Common	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

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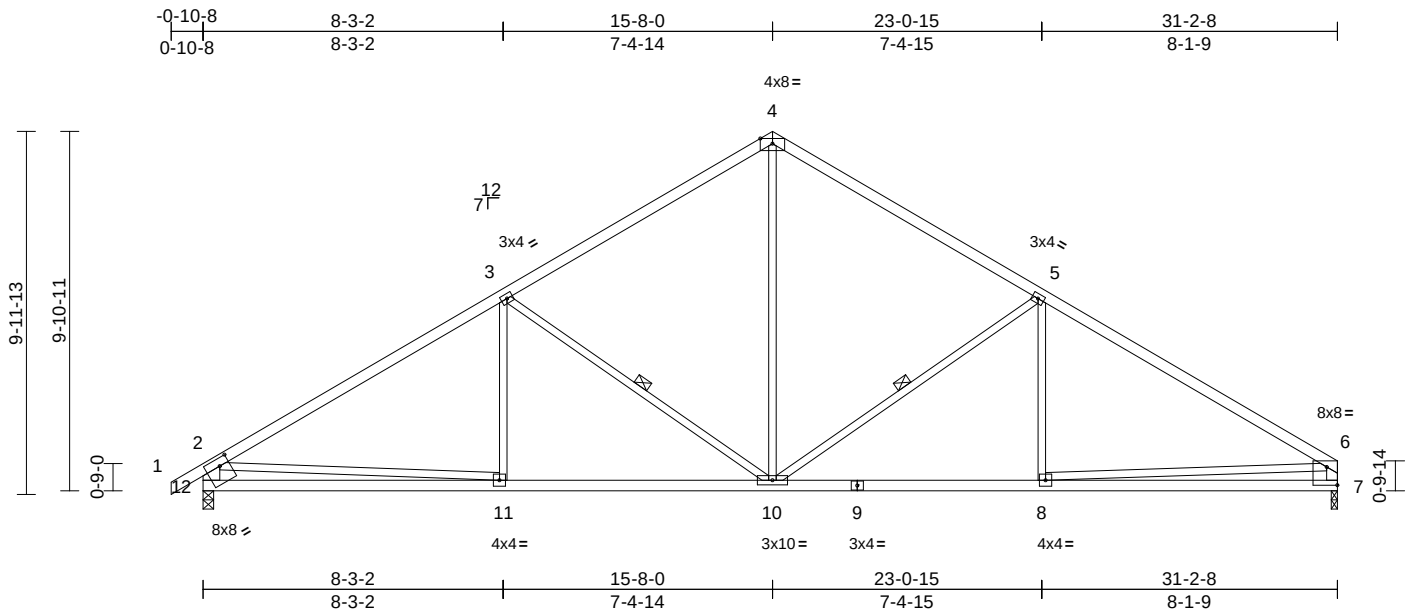


Scale = 1:63.4

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

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	0.74	Vert(LL)	-0.11	11-12	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.59	Vert(CT)	-0.23	11-12	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.51	Horz(CT)	0.06	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.06	8-10	>999	240	Weight: 122 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF No.2 *Except* 4-6:2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except* 12-2:2x6 SPF No.2, 7-6:2x4 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 9-4-3 oc bracing.
WEBS 1 Row at midpt 5-10, 3-10

REACTIONS (lb/size) 7=1386/0-2-0, (req. 0-2-3), 12=1466/0-3-8
Max Horiz 12=268 (LC 5)
Max Uplift 7=-165 (LC 9), 12=-191 (LC 8)

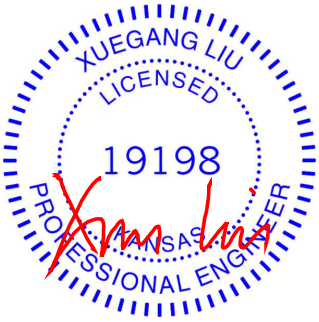
FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/39, 2-3=-2054/244, 3-4=-1466/260, 4-5=-1469/261, 5-6=-2046/242, 2-12=-1388/237, 6-7=-1307/208
BOT CHORD 11-12=-389/902, 10-11=-245/1651, 8-10=-111/1657, 7-8=-124/501
WEBS 4-10=-100/874, 5-10=-674/264, 5-8=0/269, 3-10=-666/258, 3-11=0/278, 2-11=0/915, 6-8=-47/1159

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) WARNING: Required bearing size at joint(s) 7 greater than input bearing size.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 191 lb uplift at joint 12 and 165 lb uplift at joint 7.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



November 8,2021

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 111 MN	
MN111	G4	Common	9	1	Job Reference (optional)	I48693637

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Oct 11 2021 Print: 8.430 S Oct 11 2021 MiTek Industries, Inc. Fri Nov 05 14:15:58 Page: 1
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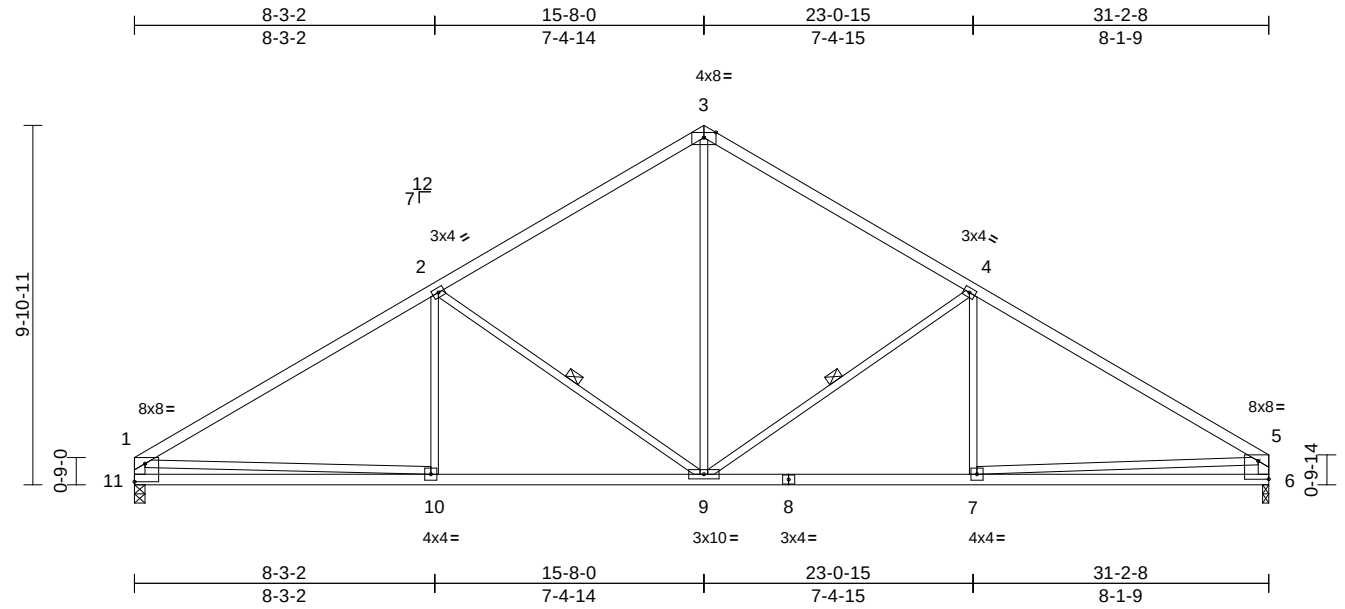


Scale = 1:63.4

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

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	0.51	Vert(LL)	-0.11	10-11	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.60	Vert(CT)	-0.23	10-11	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.52	Horz(CT)	0.05	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.06	9-10	>999	240	Weight: 121 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except* 11-1:2x4 SPF 2100F 1.8E, 6-5:2x4 SPF No.2

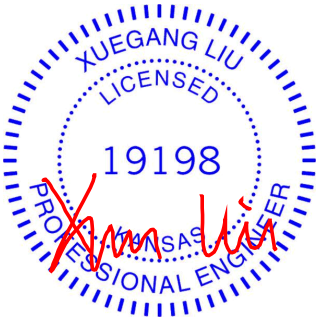
BRACING
TOP CHORD Structural wood sheathing directly applied or 4-5-11 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 4-9, 2-9

REACTIONS (lb/size) 6=1391/0-2-0, (req. 0-2-3), 11=1391/0-3-8
Max Horiz 11=257 (LC 5)
Max Uplift 6=-165 (LC 9), 11=-166 (LC 8)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-2078/245, 2-3=-1478/262, 3-4=-1478/262, 4-5=-2055/243, 1-11=-1311/211, 5-6=-1312/208
BOT CHORD 10-11=-275/749, 9-10=-253/1682, 7-9=-111/1665, 6-7=-124/501
WEBS 3-9=-103/891, 4-9=-673/264, 4-7=0/269, 2-9=-694/267, 2-10=0/282, 1-10=-31/1089, 5-7=-49/1167

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) The Fabrication Tolerance at joint 1 = 6%, joint 1 = 6%
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) WARNING: Required bearing size at joint(s) 6 greater than input bearing size.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 166 lb uplift at joint 11 and 165 lb uplift at joint 6.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 111 MN	
MN111	G5	Monopitch Supported Gable	1	1	Job Reference (optional)	I48693638

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Oct 11 2021 Print: 8.430 S Oct 11 2021 MiTek Industries, Inc. Fri Nov 05 14:15:58
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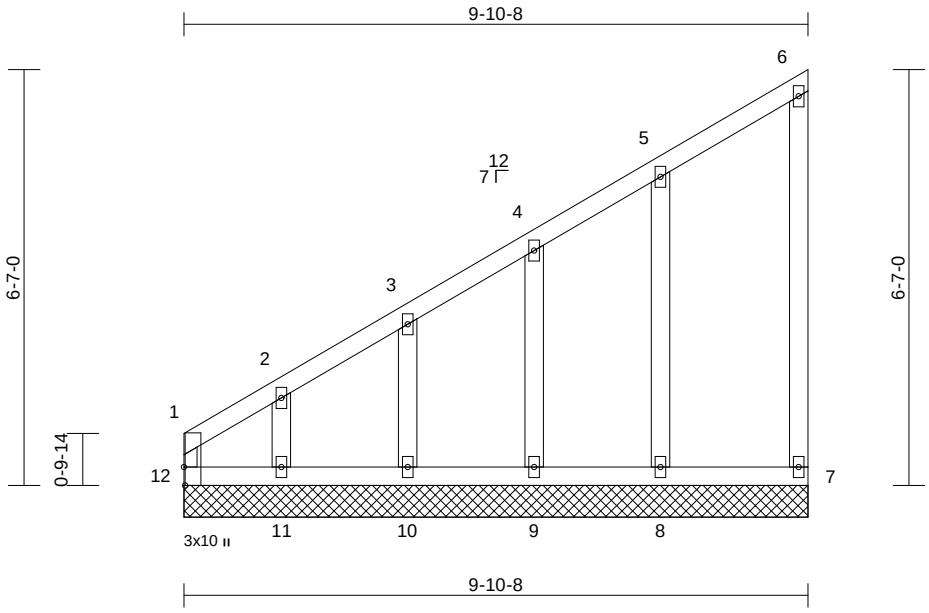


Scale = 1:36.5

Plate Offsets (X, Y): [12:0-3-8,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	0.17	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.07	Horiz(TL)	0.00	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 45 lb	FT = 10%

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

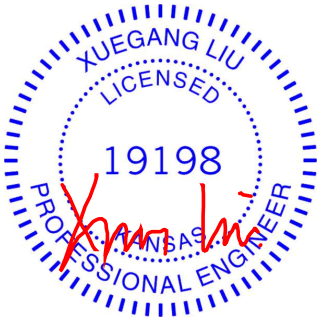
BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 7=83/9-10-8, 8=209/9-10-8, 9=172/9-10-8, 10=184/9-10-8, 11=170/9-10-8, 12=47/9-10-8
Max Horiz 12=245 (LC 7)
Max Uplift 7=-40 (LC 5), 8=-68 (LC 8), 9=-63 (LC 8), 10=-47 (LC 8), 11=-149 (LC 8), 12=-92 (LC 6)
Max Grav 7=100 (LC 15), 8=211 (LC 15), 9=180 (LC 15), 10=184 (LC 1), 11=225 (LC 15), 12=191 (LC 5)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-12=-137/71, 1-2=-225/147, 2-3=-174/113, 3-4=-151/95, 4-5=-139/92, 5-6=-109/74, 6-7=-73/33
BOT CHORD 11-12=-88/68, 10-11=-88/68, 9-10=-88/68, 8-9=-88/68, 7-8=-88/68
WEBS 2-11=-159/123, 3-10=-145/79, 4-9=-137/90, 5-8=-176/74

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 92 lb uplift at joint 12, 40 lb uplift at joint 7, 149 lb uplift at joint 11, 47 lb uplift at joint 10, 63 lb uplift at joint 9 and 68 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



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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 111 MN	
MN111	J1	Diagonal Hip Girder	2	1	Job Reference (optional)	I48693639

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Oct 11 2021 Print: 8.430 S Oct 11 2021 MiTek Industries, Inc. Fri Nov 05 14:15:59 Page: 1
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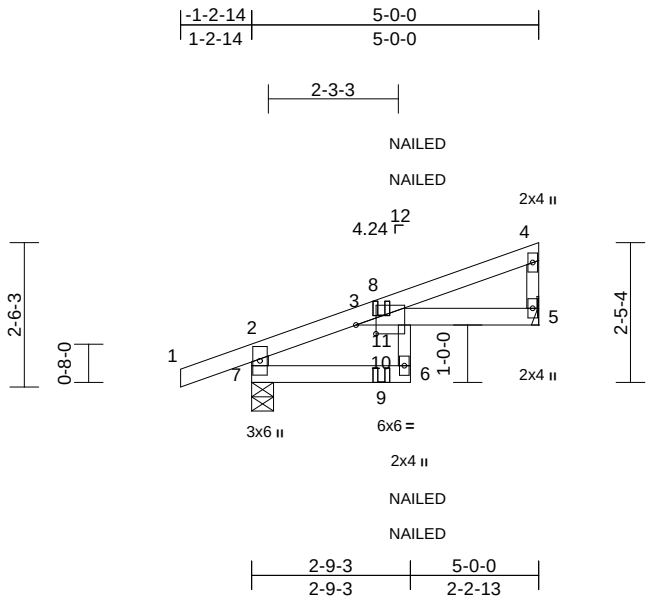

Scale = 1:40.1

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

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)	-0.05	6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.24	Vert(CT)	-0.11	6	>496	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.05	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R		Wind(LL)	0.06	6	>897	240	Weight: 16 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except* 6-3:2x3 SPF No.2
WEBS 2x4 SPF No.2 *Except* 4-5:2x3 SPF No.2

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

REACTIONS (lb/size) 5=205/ Mechanical, 7=331/0-4-9
Max Horiz 7=86 (LC 5)
Max Uplift 5=-42 (LC 8), 7=-90 (LC 4)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-7=-313/107, 1-2=0/32, 2-3=-88/13, 3-4=-103/7, 4-5=-134/50
BOT CHORD 6-7=-40/0, 3-6=0/72, 3-5=-16/64

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 90 lb uplift at joint 7 and 42 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) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
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, 3-4=-70, 6-7=-20, 3-5=-20
Concentrated Loads (lb)
Vert: 9=6 (F=3, B=3)

November 8,2021

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 111 MN	
MN111	J2	Jack-Open	5	1	Job Reference (optional)	I48693640

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Oct 11 2021 Print: 8.430 S Oct 11 2021 MiTek Industries, Inc. Fri Nov 05 14:15:59 Page: 1
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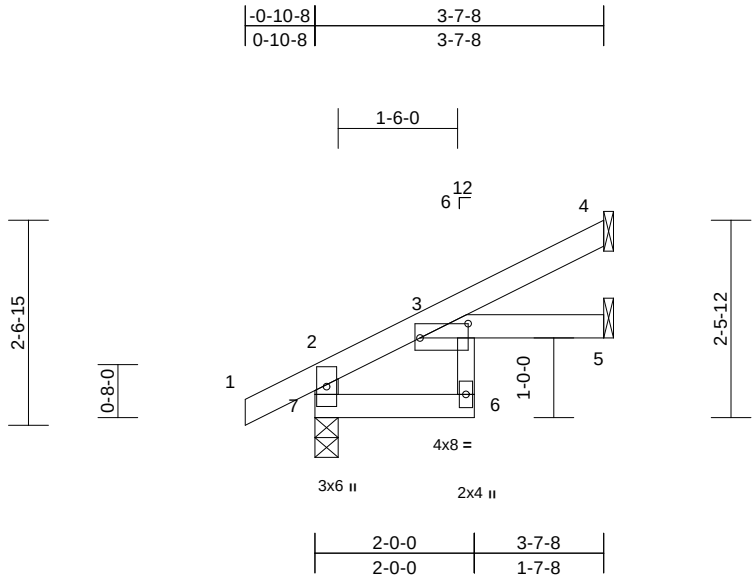

Scale = 1:28.9

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

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	0.18	Vert(LL)	-0.01	6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	-0.03	6	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.02	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R		Wind(LL)	0.02	6	>999	240	Weight: 12 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except* 6-3:2x3 SPF No.2
WEBS 2x4 SPF No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-7-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (lb/size) 4=93/ Mechanical, 5=55/ Mechanical, 7=243/0-3-8
Max Horiz 7=81 (LC 8)
Max Uplift 4=-45 (LC 8), 5=-3 (LC 8), 7=-25 (LC 8)
Max Grav 4=93 (LC 1), 5=65 (LC 3), 7=243 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-7=-232/49, 1-2=0/32, 2-3=-72/0, 3-4=-33/35
BOT CHORD 6-7=-18/0, 3-6=-2/48, 3-5=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 25 lb uplift at joint 7, 45 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

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 111 MN	
MN111	J3	Jack-Open	4	1	Job Reference (optional)	I48693641

Wheeler Lumber, Waverly, KS - 66871,

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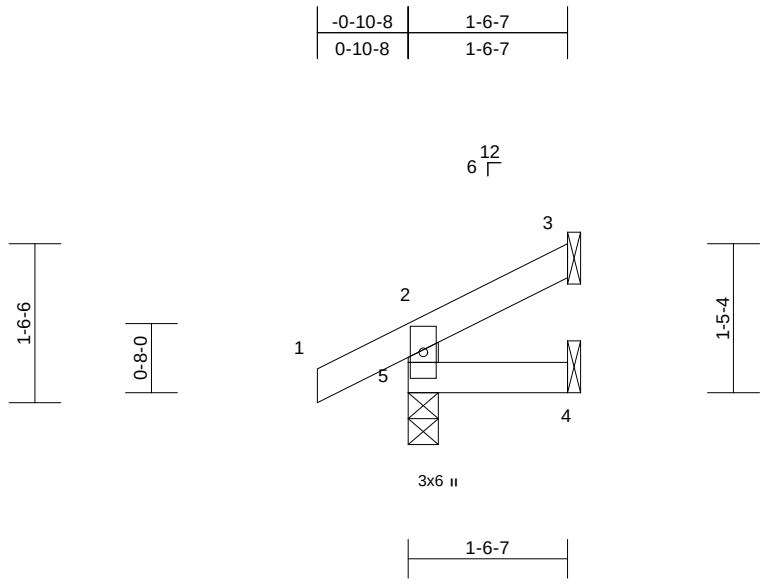

Scale = 1:22.2

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.07	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: 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 1-6-7 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 3=28/ Mechanical, 4=7/ Mechanical, 5=160/0-3-8
Max Horiz 5=40 (LC 8)
Max Uplift 3=-23 (LC 8), 5=-27 (LC 8)
Max Grav 3=28 (LC 1), 4=24 (LC 3), 5=160 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-5=-140/40, 1-2=0/32, 2-3=-31/8
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 27 lb uplift at joint 5 and 23 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

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 111 MN	
MN111	J4	Diagonal Hip Girder	1	1	Job Reference (optional)	I48693642

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Oct 11 2021 Print: 8.430 S Oct 11 2021 MiTek Industries, Inc. Fri Nov 05 14:16:00
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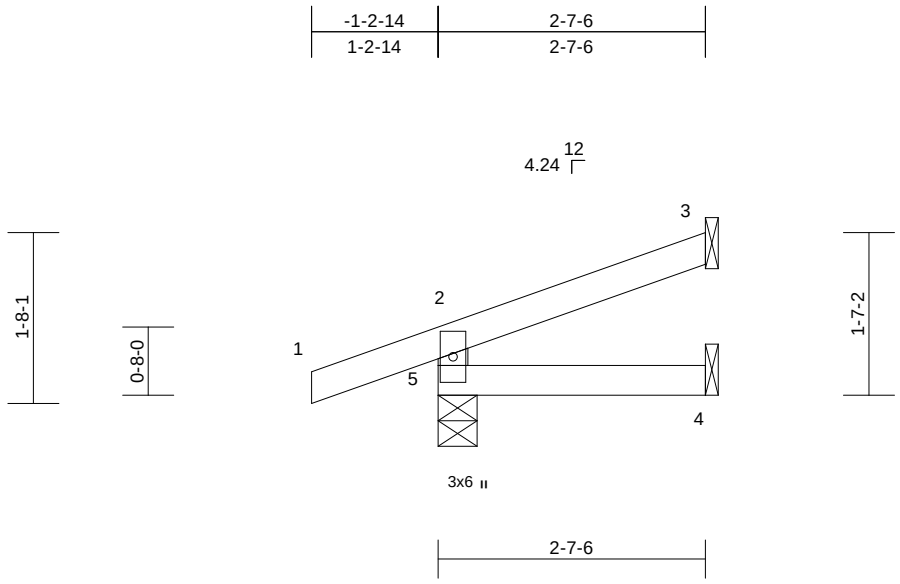


Scale = 1:22.5

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	0.10	Vert(LL)	0.00	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	0.00	4-5	>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-R		Wind(LL)	0.00	4-5	>999	240	Weight: 8 lb	FT = 10%

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

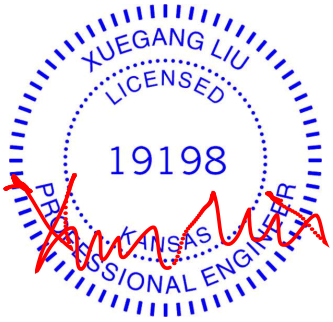
BRACING
TOP CHORD Structural wood sheathing directly applied or 2-7-6 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 3=24/ Mechanical, 4=4/ Mechanical, 5=92/0-4-9
Max Horiz 5=62 (LC 12)
Max Uplift 3=-45 (LC 12), 4=-4 (LC 19), 5=-99 (LC 6)
Max Grav 3=24 (LC 1), 4=30 (LC 3), 5=92 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-5=-81/113, 1-2=-5/18, 2-3=-22/4
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 99 lb uplift at joint 5, 45 lb uplift at joint 3 and 4 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) 20 lb down and 7 lb up at -1-2-14, and 20 lb down and 7 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=-30 (F=-15, B=-15)
Trapezoidal Loads (lb/ft)
Vert: 1=0 (F=35, B=35)-to-2=-24 (F=23, B=23), 2=-3 (F=34, B=34)-to-3=-46 (F=12, B=12), 5=0 (F=10, B=10)-to-4=-13 (F=3, B=3)



November 8,2021

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 111 MN	
MN111	J5	Jack-Open	1	1	Job Reference (optional)	I48693643

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Oct 11 2021 Print: 8.430 S Oct 11 2021 MiTek Industries, Inc. Fri Nov 05 14:16:00 Page: 1
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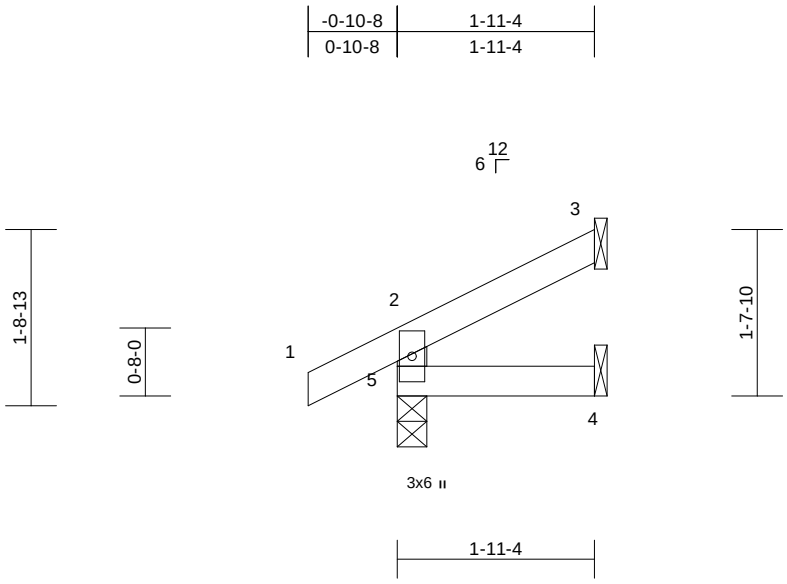


Scale = 1:22.6

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

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

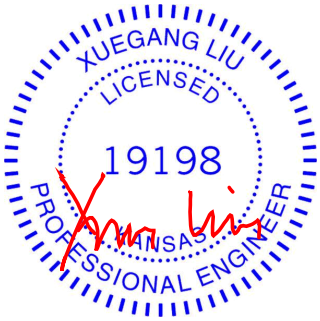
BRACING
TOP CHORD Structural wood sheathing directly applied or 1-11-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 3=45/ Mechanical, 4=14/ Mechanical, 5=172/0-3-8
Max Horiz 5=48 (LC 8)
Max Uplift 3=-31 (LC 8), 5=-26 (LC 8)
Max Grav 3=45 (LC 1), 4=32 (LC 3), 5=172 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-5=-151/44, 1-2=0/32, 2-3=-38/15
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 26 lb uplift at joint 5 and 31 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



November 8,2021

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 111 MN
MN111	J6	Jack-Open	1	1	I48693644
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Oct 11 2021 Print: 8.430 S Oct 11 2021 MiTek Industries, Inc. Fri Nov 05 14:16:00 Page: 1
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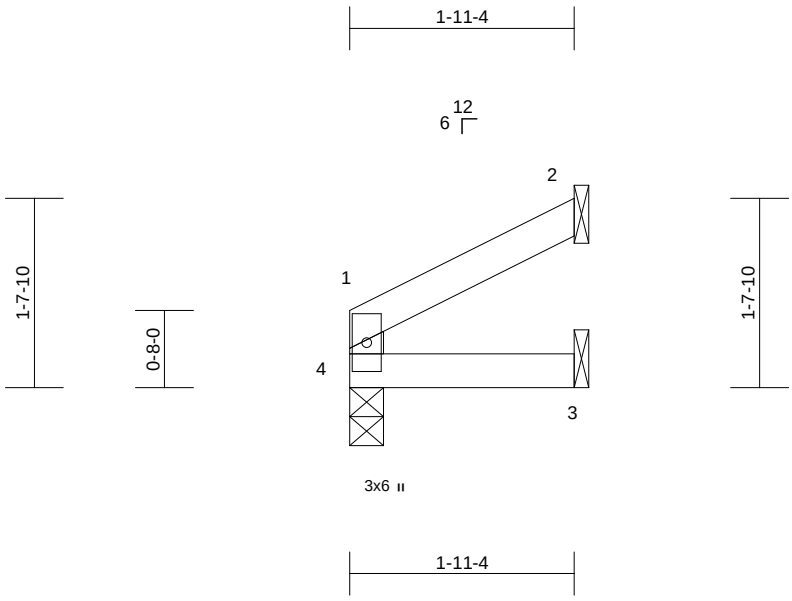

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.04	Vert(LL)	0.00	3-4	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	0.00	3-4	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	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 1-11-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 2=58/ Mechanical, 3=22/ Mechanical, 4=80/0-3-8
Max Horiz 4=31 (LC 5)
Max Uplift 2=-34 (LC 8)
Max Grav 2=58 (LC 1), 3=34 (LC 3), 4=80 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-4=-67/17, 1-2=-35/20
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 34 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

November 8,2021

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 111 MN	
MN111	LAY1	Lay-In Gable	1	1	Job Reference (optional)	I48693645

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Oct 11 2021 Print: 8.430 S Oct 11 2021 MiTek Industries, Inc. Fri Nov 05 14:16:00
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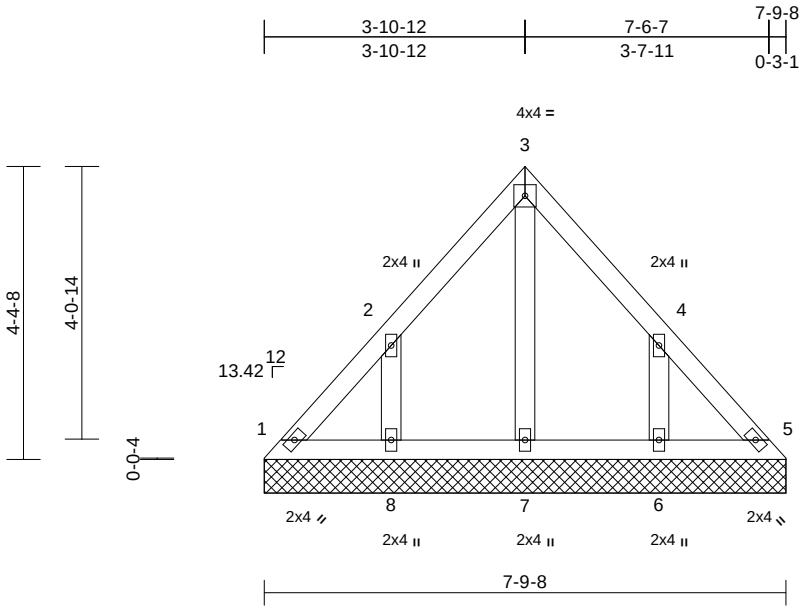


Scale = 1:34.4

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 29 lb	FT = 10%

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

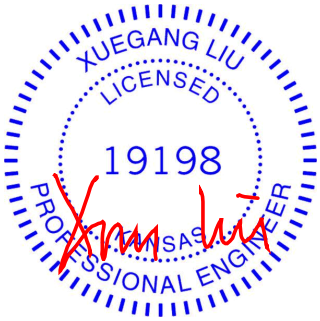
BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 1=71/7-9-8, 5=71/7-9-8, 6=198/7-9-8, 7=108/7-9-8, 8=198/7-9-8
Max Horiz 1=108 (LC 5)
Max Uplift 1=-27 (LC 4), 5=-10 (LC 5), 6=-154 (LC 9), 8=-154 (LC 8)
Max Grav 1=99 (LC 17), 5=91 (LC 18), 6=228 (LC 16), 7=122 (LC 18), 8=229 (LC 15)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-121/92, 2-3=-101/79, 3-4=-92/64, 4-5=-106/69
BOT CHORD 1-8=-45/94, 7-8=-45/94, 6-7=-45/94, 5-6=-45/94
WEBS 3-7=-82/0, 2-8=-189/178, 4-6=-189/178

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 27 lb uplift at joint 1, 10 lb uplift at joint 5, 154 lb uplift at joint 8 and 154 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



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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 111 MN	I48693646
MN111	LAY2	Lay-In Gable	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

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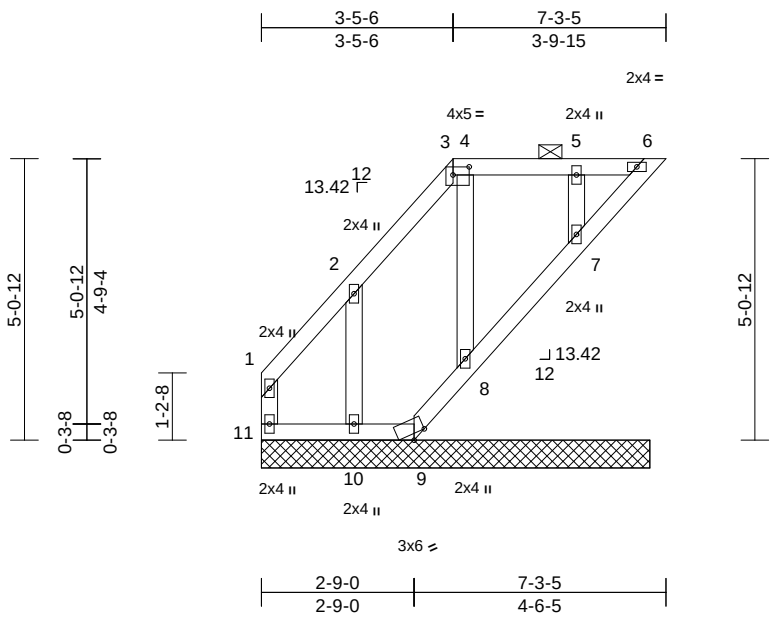


Scale = 1:41.4

Plate Offsets (X, Y): [3:0-3-8,0-1-12]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.05	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	0.03	Horiz(TL)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 30 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.): 3-6.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 6-7.

REACTIONS (lb/size) 6=47/6-11-13, 7=169/6-11-13, 8=166/6-11-13, 9=1/6-11-13, 10=161/6-11-13, 11=68/6-11-13
Max Horiz 11=139 (LC 8)
Max Uplift 6=-134 (LC 8), 7=-37 (LC 5), 8=-16 (LC 4), 9=-66 (LC 6), 10=-160 (LC 8)
Max Grav 6=81 (LC 15), 7=177 (LC 22), 8=166 (LC 1), 9=154 (LC 8), 10=202 (LC 15), 11=68 (LC 1)

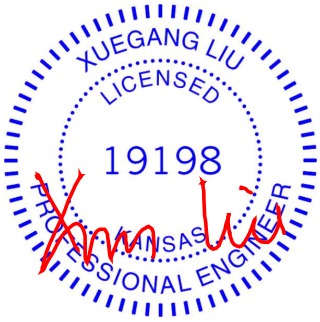
FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-11=-57/9, 1-2=-50/34, 2-3=-105/131, 3-4=-62/120, 4-5=-62/120, 5-6=-62/120
BOT CHORD	10-11=-120/62, 9-10=-120/62, 8-9=-188/108, 7-8=-190/108, 6-7=-187/97
WEBS	2-10=-163/161, 4-8=-131/39, 5-7=-138/59

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Provide adequate drainage to prevent water ponding.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 134 lb uplift at joint 6, 66 lb uplift at joint 9, 160 lb uplift at joint 10, 16 lb uplift at joint 8 and 37 lb uplift at joint 7.
11) Non Standard bearing condition. Review required.
12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 111 MN
MN111	LAY3	Lay-In Gable	1	1	I48693647
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

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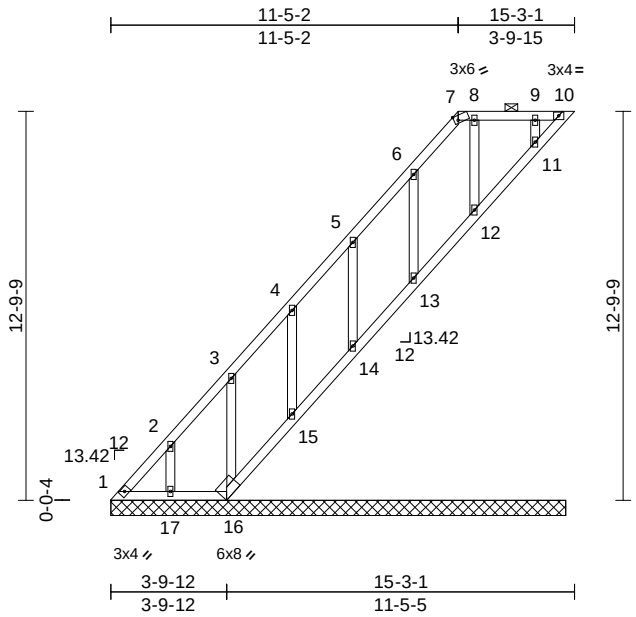


Scale = 1:75.8

Plate Offsets (X, Y): [7:0-1-9,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	0.07	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	0.04	Horiz(TL)	-0.01	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 70 lb	FT = 10%

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

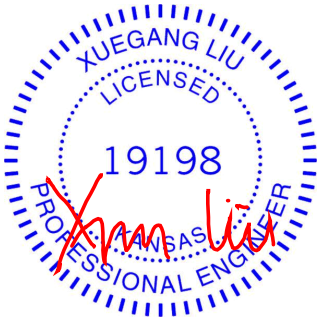
BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 7-10.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 10-11.

REACTIONS (lb/size) 1=62/14-11-9, 10=31/14-11-9, 11=155/14-11-9, 12=175/14-11-9, 13=175/14-11-9, 14=180/14-11-9, 15=185/14-11-9, 16=169/14-11-9, 17=184/14-11-9
Max Horiz 1=510 (LC 8)
Max Uplift 1=-128 (LC 6), 10=-112 (LC 8), 11=-41 (LC 5), 12=-19 (LC 4), 13=-112 (LC 8), 14=-144 (LC 8), 15=-134 (LC 8), 16=-26 (LC 8), 17=-137 (LC 8)
Max Grav 1=418 (LC 8), 10=56 (LC 15), 11=161 (LC 22), 12=175 (LC 1), 13=198 (LC 15), 14=209 (LC 15), 15=214 (LC 15), 16=169 (LC 1), 17=212 (LC 15)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-576/231, 2-3=-445/179, 3-4=-300/121, 4-5=-163/74, 5-6=-69/36, 6-7=-87/112, 7-8=-44/105, 8-9=-44/105, 9-10=-44/105
BOT CHORD 1-17=-98/39, 16-17=-99/40, 15-16=-167/84, 14-15=-166/80, 13-14=-166/81, 12-13=-166/81, 11-12=-166/80, 10-11=-163/67
WEBS 2-17=-167/156, 3-16=-174/166, 4-15=-168/159, 5-14=-171/167, 6-13=-158/136, 8-12=-134/44, 9-11=-127/61

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Provide adequate drainage to prevent water ponding.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable 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 128 lb uplift at joint 1, 112 lb uplift at joint 10, 26 lb uplift at joint 16, 137 lb uplift at joint 17, 134 lb uplift at joint 15, 144 lb uplift at joint 14, 112 lb uplift at joint 13, 19 lb uplift at joint 12 and 41 lb uplift at joint 11.
10) Non Standard bearing condition. Review required.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



November 8,2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 111 MN
MN111	LAY4	Lay-In Gable	1	1	I48693648
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Oct 11 2021 Print: 8.430 S Oct 11 2021 MiTek Industries, Inc. Fri Nov 05 14:16:01
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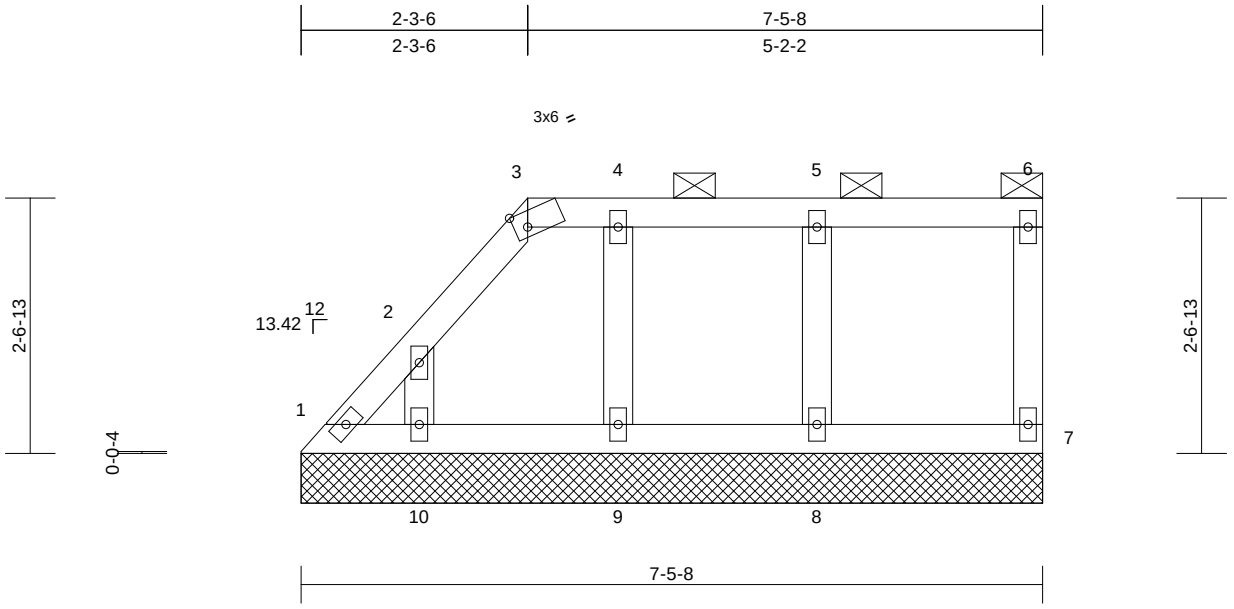

Scale = 1:23.2

Plate Offsets (X, Y): [3:0-1-9,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	0.05	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	0.02	Horiz(TL)	0.00	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 26 lb	FT = 10%

LUMBER

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	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.): 3-6.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 1=21/7-5-8, 7=85/7-5-8, 8=197/7-5-8, 9=179/7-5-8, 10=147/7-5-8
Max Horiz 1=90 (LC 5)
Max Uplift 1=-38 (LC 6), 7=-19 (LC 5), 8=-48 (LC 4), 9=-54 (LC 5), 10=-87 (LC 8)
Max Grav 1=77 (LC 5), 7=85 (LC 1), 8=203 (LC 22), 9=179 (LC 1), 10=171 (LC 15)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-102/73, 2-3=-74/34, 3-4=-31/24, 4-5=-31/24, 5-6=-31/24, 6-7=-66/27
BOT CHORD	1-10=-34/25, 9-10=-34/25, 8-9=-34/25, 7-8=-34/25
WEBS	2-10=-136/105, 4-9=-139/77, 5-8=-159/71

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Provide adequate drainage to prevent water ponding.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 38 lb uplift at joint 1, 19 lb uplift at joint 7, 87 lb uplift at joint 10, 54 lb uplift at joint 9 and 48 lb uplift at joint 8.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

November 8,2021

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 111 MN	I48693649
MN111	P1	Piggyback	2	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Oct 11 2021 Print: 8.430 S Oct 11 2021 MiTek Industries, Inc. Fri Nov 05 14:16:01 Page: 1
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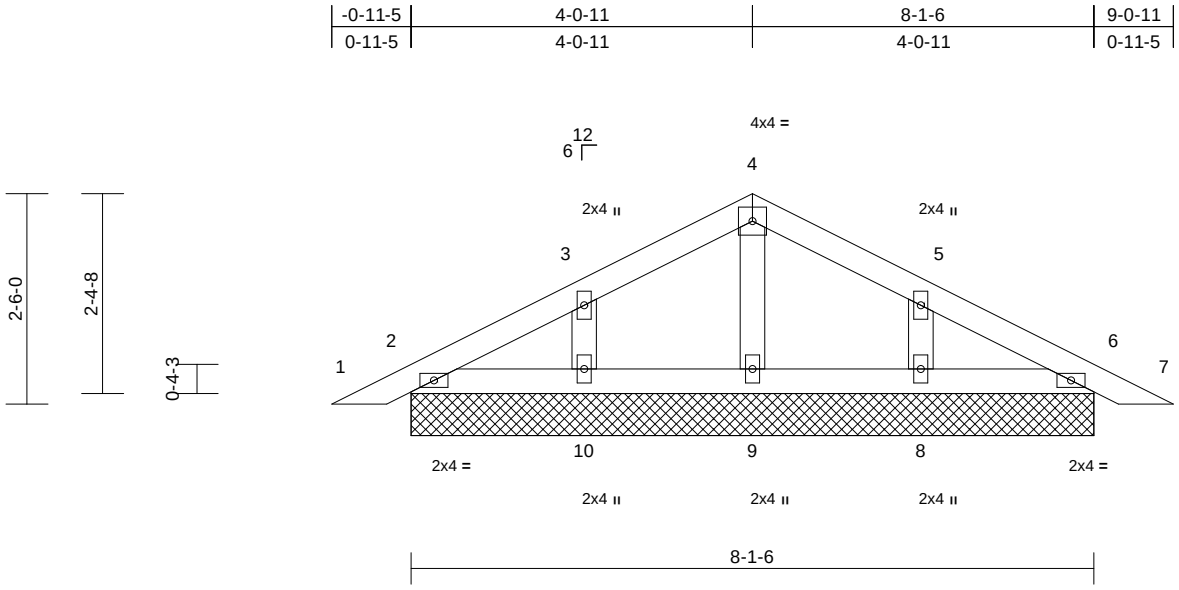


Scale = 1:27.4

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	0.06	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 26 lb	FT = 10%

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

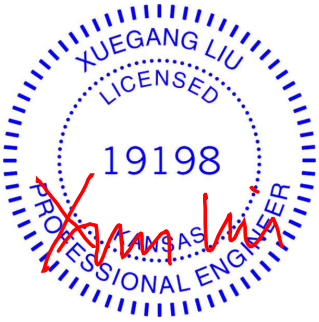
BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 2=127/8-1-6, 6=127/8-1-6, 8=214/8-1-6, 9=134/8-1-6, 10=214/8-1-6
Max Horiz 2=41 (LC 8)
Max Uplift 2=-17 (LC 8), 6=-25 (LC 9), 8=-67 (LC 9), 10=-67 (LC 8)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/17, 2-3=-51/41, 3-4=-50/56, 4-5=-50/49, 5-6=-40/30, 6-7=0/17
BOT CHORD 2-10=-2/37, 9-10=-2/37, 8-9=-2/37, 6-8=-2/37
WEBS 4-9=-98/2, 3-10=-167/95, 5-8=-167/95

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 17 lb uplift at joint 2, 25 lb uplift at joint 6, 67 lb uplift at joint 10 and 67 lb uplift at joint 8.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard



November 8,2021

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 111 MN	I48693650
MN111	P2	Piggyback	19	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

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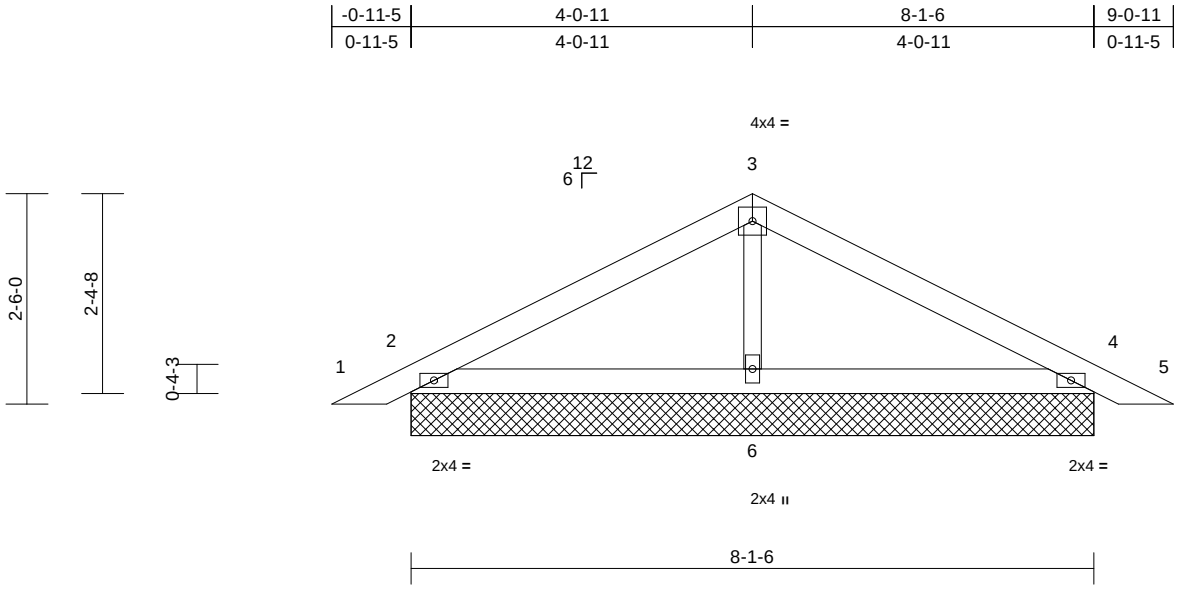

Scale = 1:27.4

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)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	n/a	-	n/a	999		
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							Weight: 23 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
OTHERS 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=237/8-1-6, 4=237/8-1-6, 6=343/8-1-6
Max Horiz 2=-41 (LC 13)
Max Uplift 2=-60 (LC 8), 4=-67 (LC 9), 6=-1 (LC 8)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/17, 2-3=-93/55, 3-4=-93/39, 4-5=0/17
BOT CHORD 2-6=0/45, 4-6=0/45
WEBS 3-6=-241/62

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) 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 4-0-0 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 60 lb uplift at joint 2, 67 lb uplift at joint 4 and 1 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.
10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

November 8,2021

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 111 MN	
MN111	V1	Valley	1	1	Job Reference (optional)	I48693651

Wheeler Lumber, Waverly, KS - 66871,

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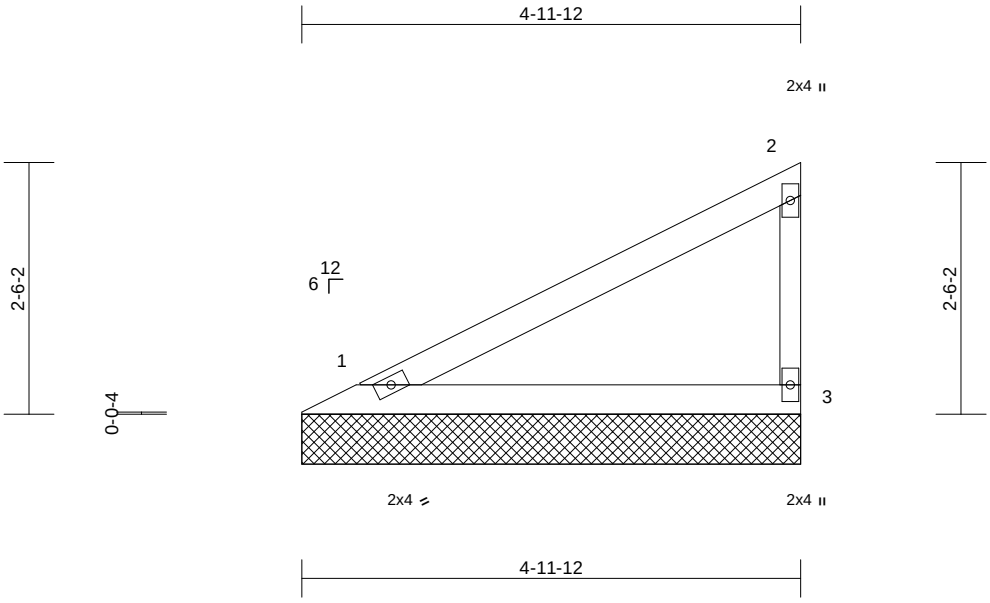


Scale = 1:23

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	0.19	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: 13 lb	FT = 10%

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

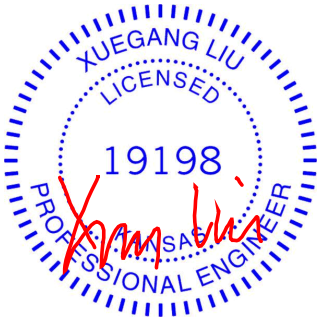
BRACING
TOP CHORD Structural wood sheathing directly applied or 5-0-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 1=193/4-11-12, 3=193/4-11-12
Max Horiz 1=89 (LC 7)
Max Uplift 1=-25 (LC 8), 3=-47 (LC 8)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-82/54, 2-3=-150/73
BOT CHORD 1-3=-31/23

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 25 lb uplift at joint 1 and 47 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



November 8,2021

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 111 MN	I48693652
MN111	V2	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Oct 11 2021 Print: 8.430 S Oct 11 2021 MiTek Industries, Inc. Fri Nov 05 14:16:02
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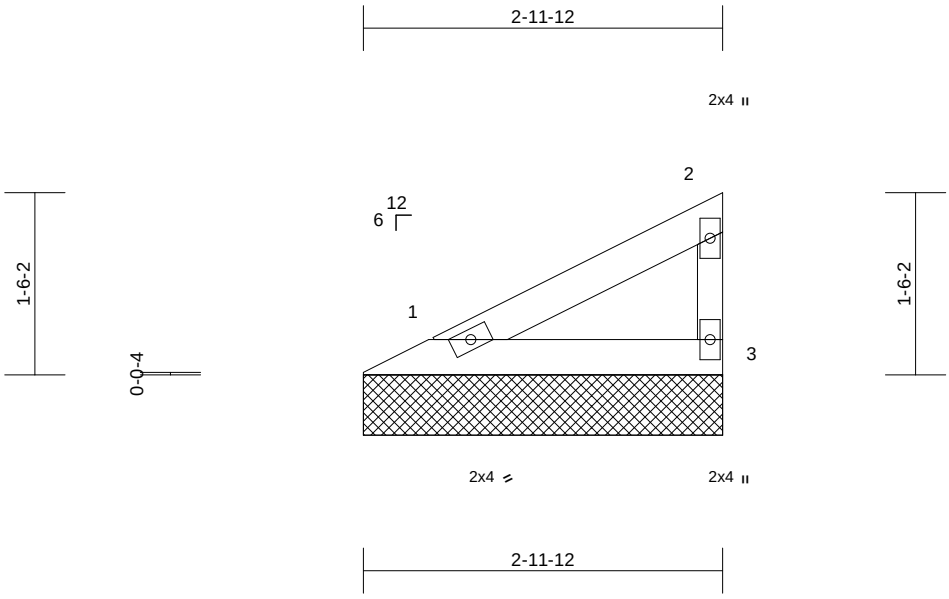

Scale = 1:19.1

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

REACTIONS (lb/size) 1=103/2-11-12, 3=103/2-11-12
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=-80/39
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

November 8,2021

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Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 111 MN	
MN111	V3	Valley	1	1	Job Reference (optional)	I48693653

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Oct 11 2021 Print: 8.430 S Oct 11 2021 MiTek Industries, Inc. Fri Nov 05 14:16:02
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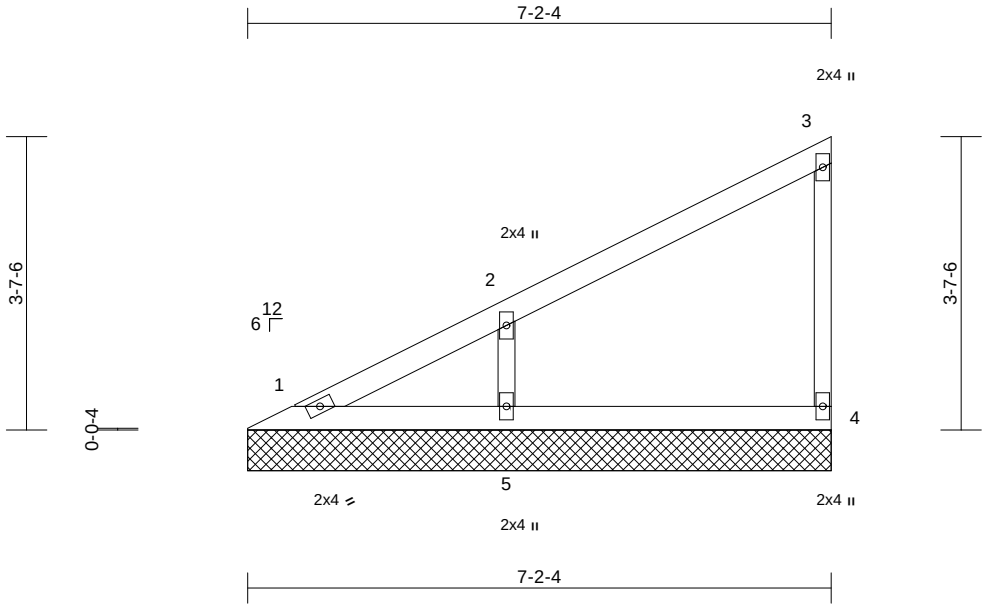

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.05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

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

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

REACTIONS (lb/size) 1=66/7-2-4, 4=141/7-2-4, 5=377/7-2-4
Max Horiz 1=135 (LC 5)
Max Uplift 4=-26 (LC 8), 5=-113 (LC 8)
Max Grav 1=81 (LC 16), 4=141 (LC 1), 5=377 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-113/61, 2-3=-107/44, 3-4=-110/45
BOT CHORD 1-5=-46/35, 4-5=-46/35
WEBS 2-5=-293/163

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 4-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 26 lb uplift at joint 4 and 113 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

November 8,2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 111 MN	
MN111	V4	Valley	1	1	Job Reference (optional)	I48693654

Wheeler Lumber, Waverly, KS - 66871,

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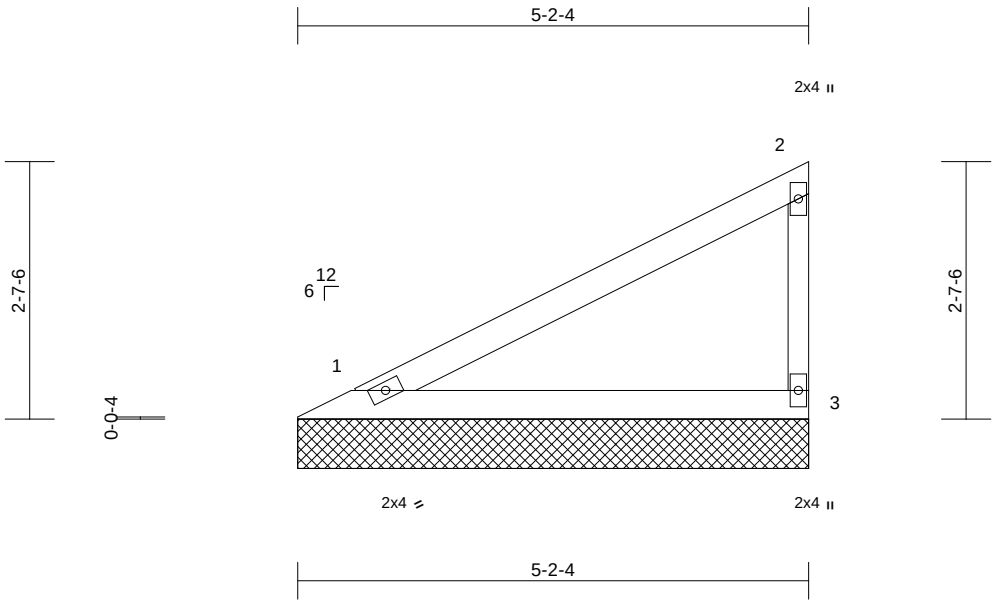

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.38	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.21	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 13 lb	FT = 10%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-2-12 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 1=202/5-2-4, 3=202/5-2-4
Max Horiz 1=94 (LC 5)
Max Uplift 1=-26 (LC 8), 3=-50 (LC 8)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-86/56, 2-3=-157/77
BOT CHORD 1-3=-32/24

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 4-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 26 lb uplift at joint 1 and 50 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

November 8,2021

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 111 MN	I48693655
MN111	V5	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

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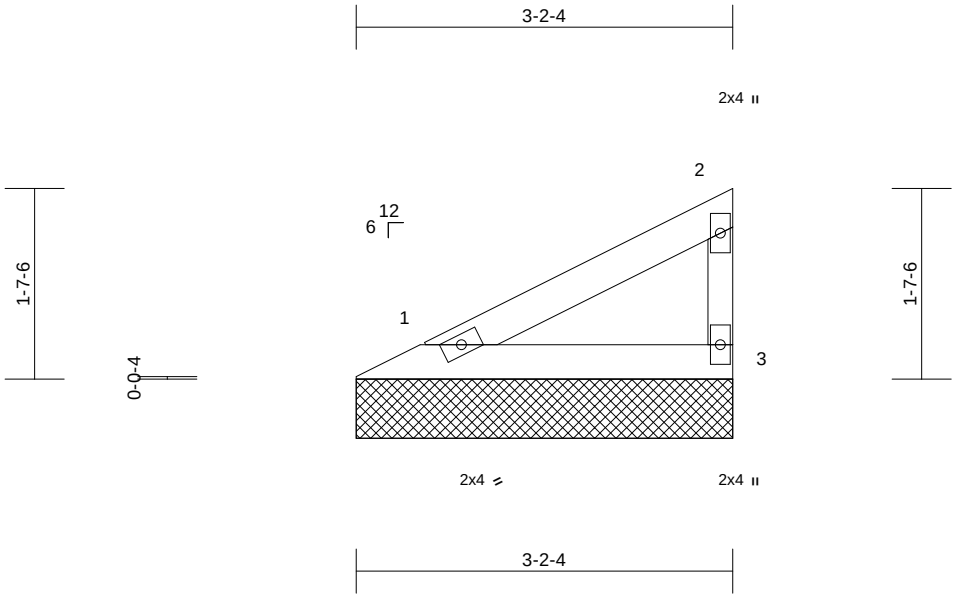

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 8 lb	FT = 10%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-2-12 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 1=112/3-2-4, 3=112/3-2-4
Max Horiz 1=52 (LC 5)
Max Uplift 1=-14 (LC 8), 3=-28 (LC 8)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-48/31, 2-3=-87/43
BOT CHORD 1-3=-18/14

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 28 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

November 8,2021

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 111 MN	
MN111	V6	Valley	1	1	Job Reference (optional)	I48693656

Wheeler Lumber, Waverly, KS - 66871,

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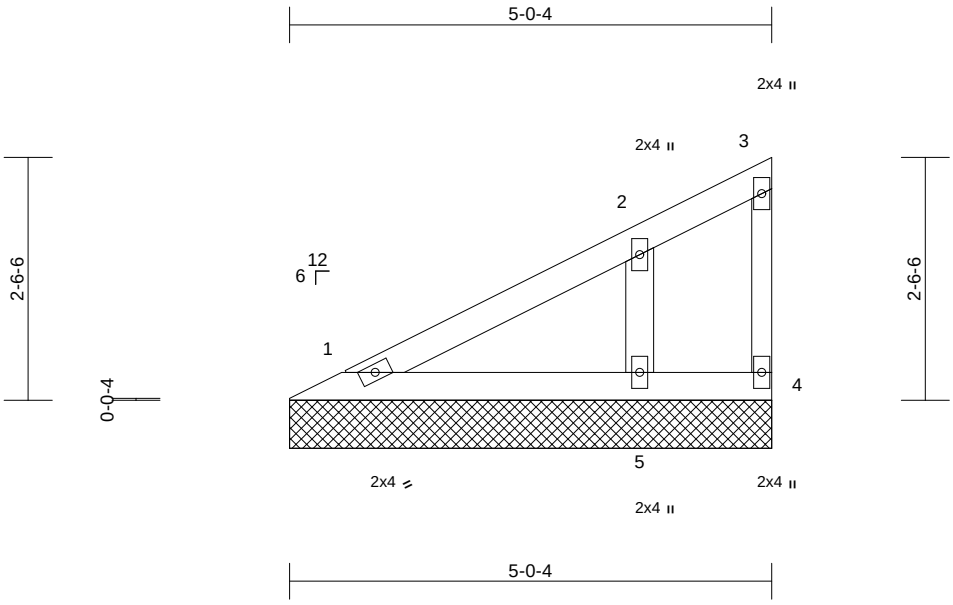

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 14 lb	FT = 10%

LUMBER

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

BRACING

TOP CHORD	Structural wood sheathing directly applied or 5-0-12 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 1=112/5-0-4, 4=-4/5-0-4, 5=282/5-0-4
Max Horiz 1=90 (LC 7)
Max Uplift 4=-17 (LC 7), 5=-84 (LC 8)
Max Grav 1=112 (LC 1), 4=12 (LC 8), 5=282 (LC 1)

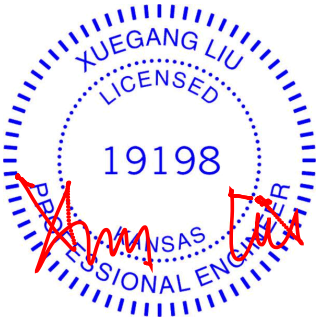
FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-68/57, 2-3=-59/25, 3-4=-12/15
BOT CHORD	1-5=-31/23, 4-5=-31/23
WEBS	2-5=-219/122

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 2-0-0 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 17 lb uplift at joint 4 and 84 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



November 8,2021

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 111 MN	
MN111	V7	Valley	1	1	Job Reference (optional)	I48693657

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Oct 11 2021 Print: 8.430 S Oct 11 2021 MiTek Industries, Inc. Fri Nov 05 14:16:03 Page: 1
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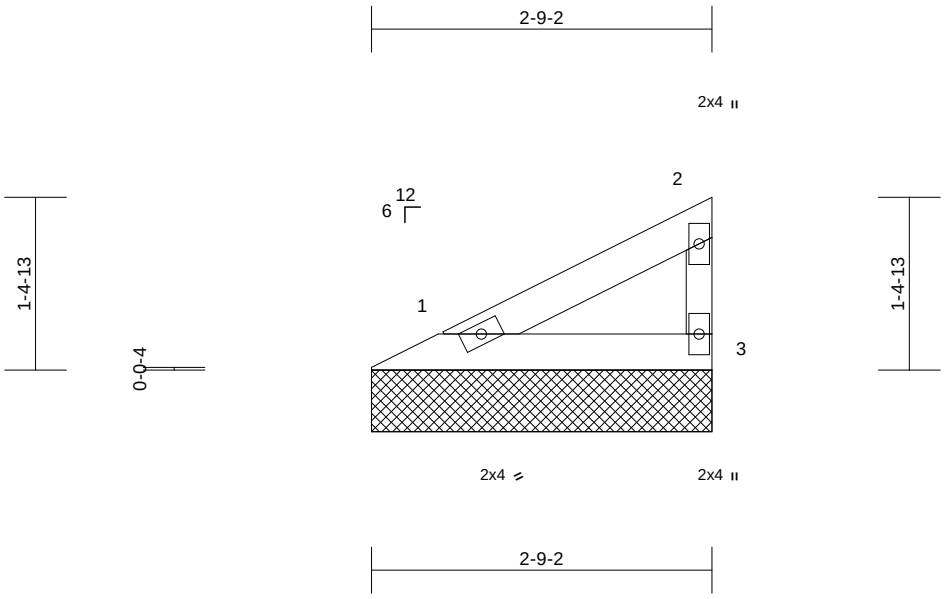

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	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

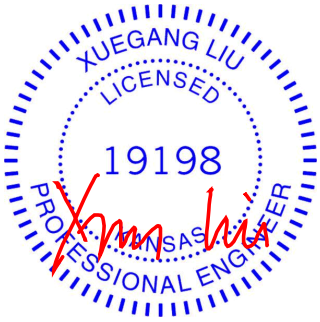
BRACING
TOP CHORD Structural wood sheathing directly applied or 2-9-10 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 1=93/2-9-2, 3=93/2-9-2
Max Horiz 1=43 (LC 5)
Max Uplift 1=-12 (LC 8), 3=-23 (LC 8)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-40/26, 2-3=-72/35
BOT CHORD 1-3=-15/11

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 4-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 12 lb uplift at joint 1 and 23 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



November 8,2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 111 MN	
MN111	V8	Valley	1	1	Job Reference (optional)	I48693658

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Oct 11 2021 Print: 8.430 S Oct 11 2021 MiTek Industries, Inc. Fri Nov 05 14:16:03
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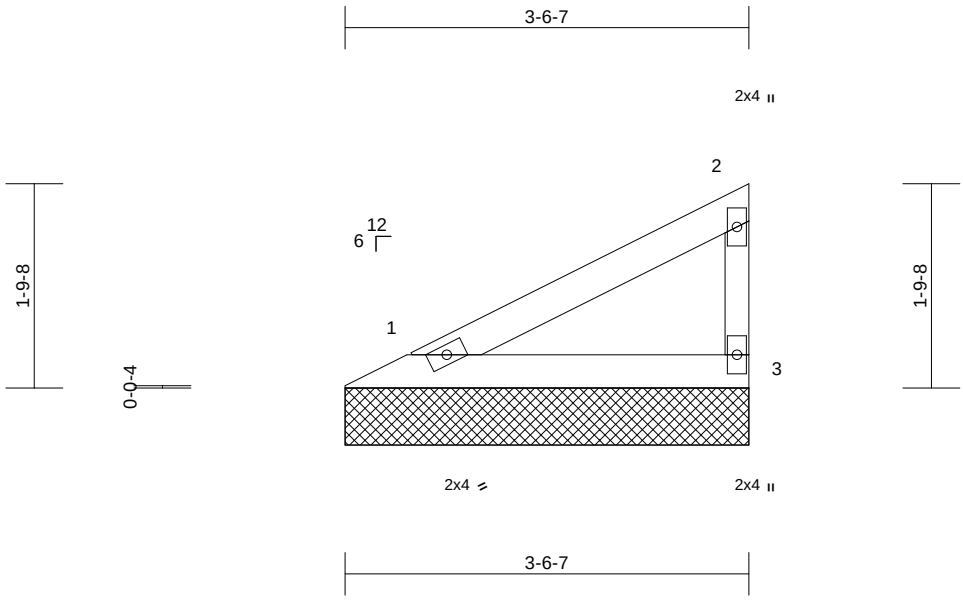

Scale = 1:20.2

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	0.14	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 9 lb	FT = 10%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-6-15 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 1=128/3-6-7, 3=128/3-6-7
Max Horiz 1=59 (LC 5)
Max Uplift 1=-16 (LC 8), 3=-31 (LC 8)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-54/36, 2-3=-100/48
BOT CHORD 1-3=-20/15

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 4-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 16 lb uplift at joint 1 and 31 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

November 8,2021

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 111 MN	
MN111	V9	Valley	1	1	Job Reference (optional)	I48693659

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Oct 11 2021 Print: 8.430 S Oct 11 2021 MiTek Industries, Inc. Fri Nov 05 14:16:04 Page: 1
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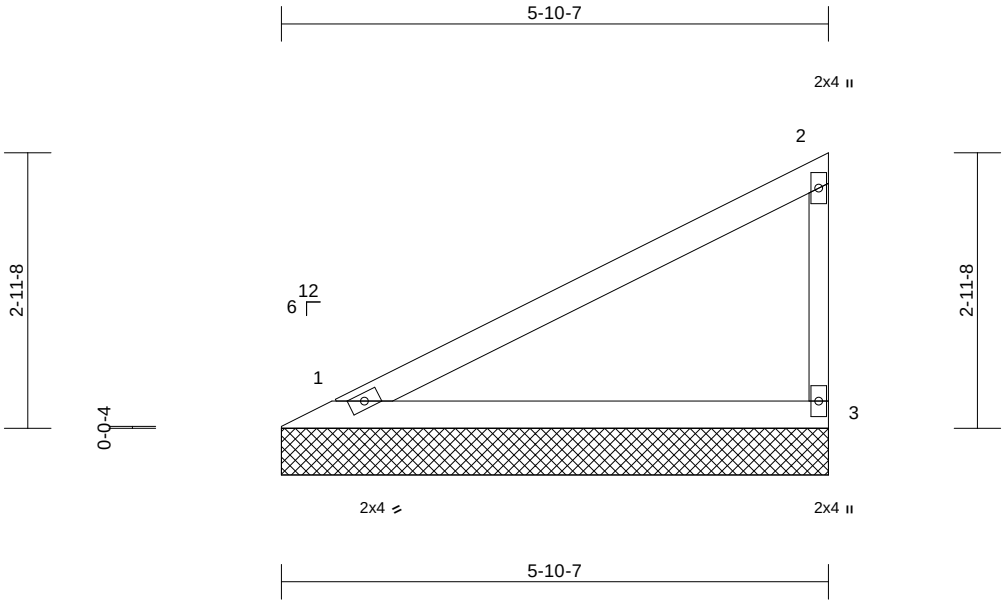


Scale = 1:24.7

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	0.52	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.28	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 15 lb	FT = 10%

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

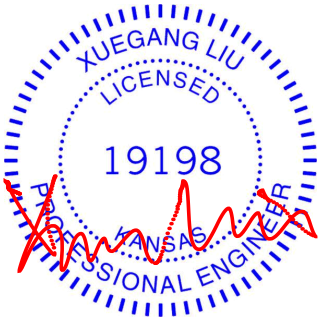
BRACING
TOP CHORD Structural wood sheathing directly applied or 5-10-15 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 1=233/5-10-7, 3=233/5-10-7
Max Horiz 1=108 (LC 5)
Max Uplift 1=-30 (LC 8), 3=-57 (LC 8)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-99/65, 2-3=-181/88
BOT CHORD 1-3=-37/28

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 30 lb uplift at joint 1 and 57 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



November 8,2021

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 111 MN	
MN111	V10	Valley	1	1	Job Reference (optional)	I48693660

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Oct 11 2021 Print: 8.430 S Oct 11 2021 MiTek Industries, Inc. Fri Nov 05 14:16:04 Page: 1
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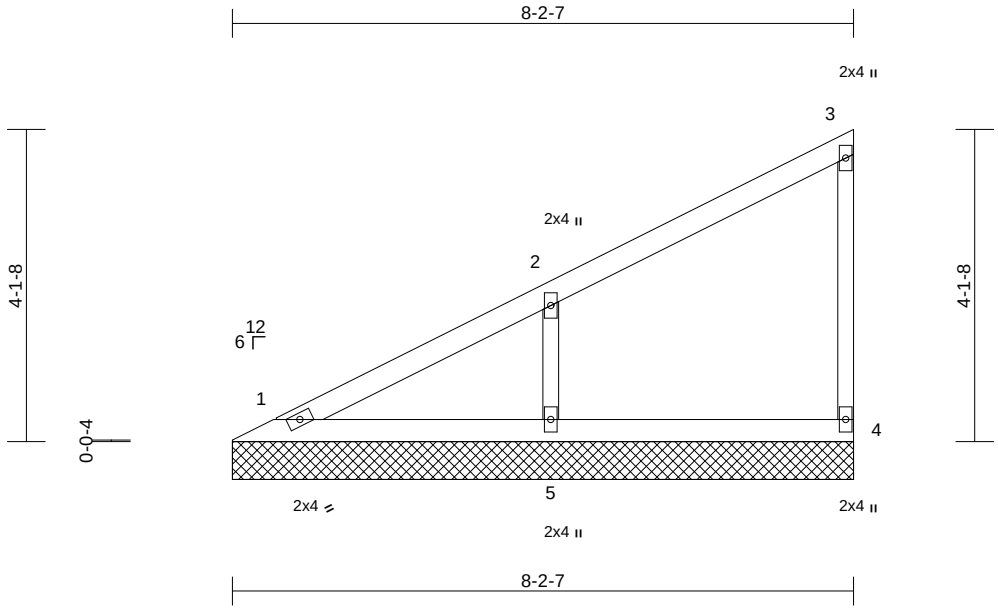


Scale = 1:30.4

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	0.23	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	0.06	Horiz(TL)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 23 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

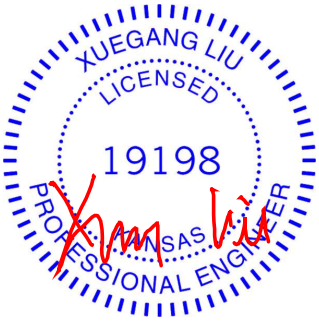
BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 1=119/8-2-7, 4=135/8-2-7, 5=423/8-2-7
Max Horiz 1=157 (LC 5)
Max Uplift 4=-26 (LC 5), 5=-127 (LC 8)
Max Grav 1=125 (LC 16), 4=135 (LC 1), 5=423 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-127/74, 2-3=-115/44, 3-4=-105/44
BOT CHORD 1-5=-53/41, 4-5=-53/41
WEBS 2-5=-329/183

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 26 lb uplift at joint 4 and 127 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



November 8,2021

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 111 MN	
MN111	V11	Valley	1	1	Job Reference (optional)	I48693661

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Oct 11 2021 Print: 8.430 S Oct 11 2021 MiTek Industries, Inc. Fri Nov 05 14:16:04 Page: 1
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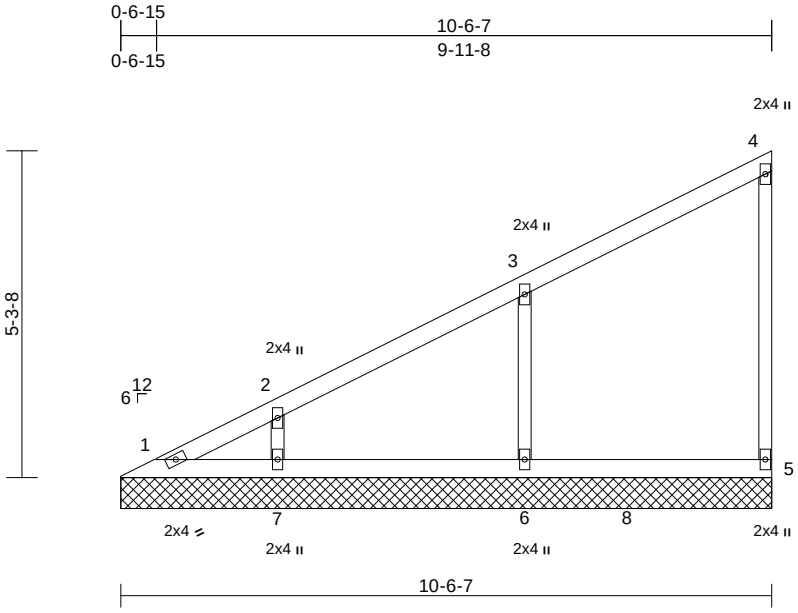


Scale = 1:37.3

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	0.22	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.08	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 31 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

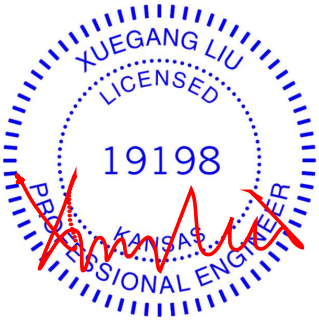
BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 1=46/10-6-7, 5=140/10-6-7, 6=405/10-6-7, 7=296/10-6-7
Max Horiz 1=205 (LC 5)
Max Uplift 5=-32 (LC 5), 6=-121 (LC 8), 7=-89 (LC 8)
Max Grav 1=93 (LC 16), 5=174 (LC 15), 6=430 (LC 2), 7=300 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-178/52, 2-3=-144/71, 3-4=-127/53, 4-5=-108/44
BOT CHORD 1-7=-69/54, 6-7=-69/54, 5-6=-69/54
WEBS 3-6=-315/167, 2-7=-230/131

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 4-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 32 lb uplift at joint 5, 121 lb uplift at joint 6 and 89 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.

LOAD CASE(S) Standard



November 8,2021

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 111 MN	
MN111	V12	Valley	1	1	Job Reference (optional)	I48693662

Wheeler Lumber, Waverly, KS - 66871,

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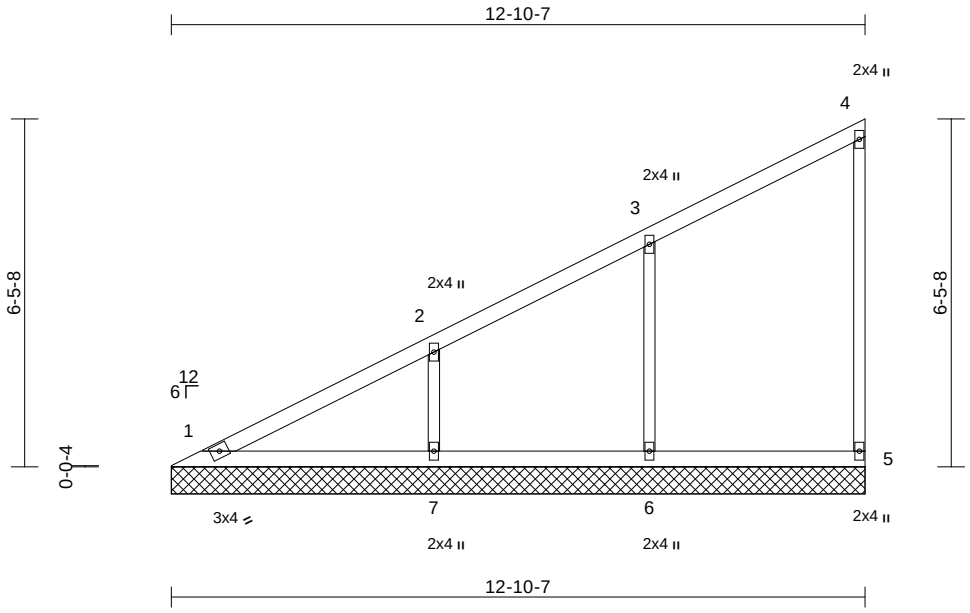


Scale = 1:42.8

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	0.33	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.13	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 40 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

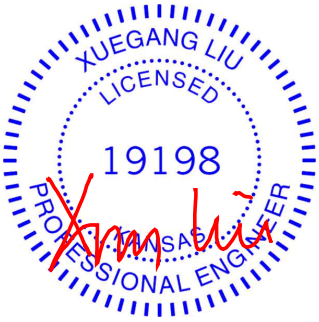
BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 1=156/12-10-7, 5=145/12-10-7, 6=376/12-10-7, 7=419/12-10-7
Max Horiz 1=254 (LC 5)
Max Uplift 5=-37 (LC 5), 6=-113 (LC 8), 7=-126 (LC 8)
Max Grav 1=203 (LC 16), 5=186 (LC 15), 6=423 (LC 2), 7=425 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-210/84, 2-3=-163/71, 3-4=-138/65, 4-5=-112/47
BOT CHORD 1-7=-86/66, 6-7=-86/66, 5-6=-86/66
WEBS 3-6=-296/152, 2-7=-316/176

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, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 37 lb uplift at joint 5, 113 lb uplift at joint 6 and 126 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.

LOAD CASE(S) Standard



November 8,2021

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 111 MN	
MN111	V13	Valley	1	1	Job Reference (optional)	I48693663

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Oct 11 2021 Print: 8.430 S Oct 11 2021 MiTek Industries, Inc. Fri Nov 05 14:16:04 Page: 1
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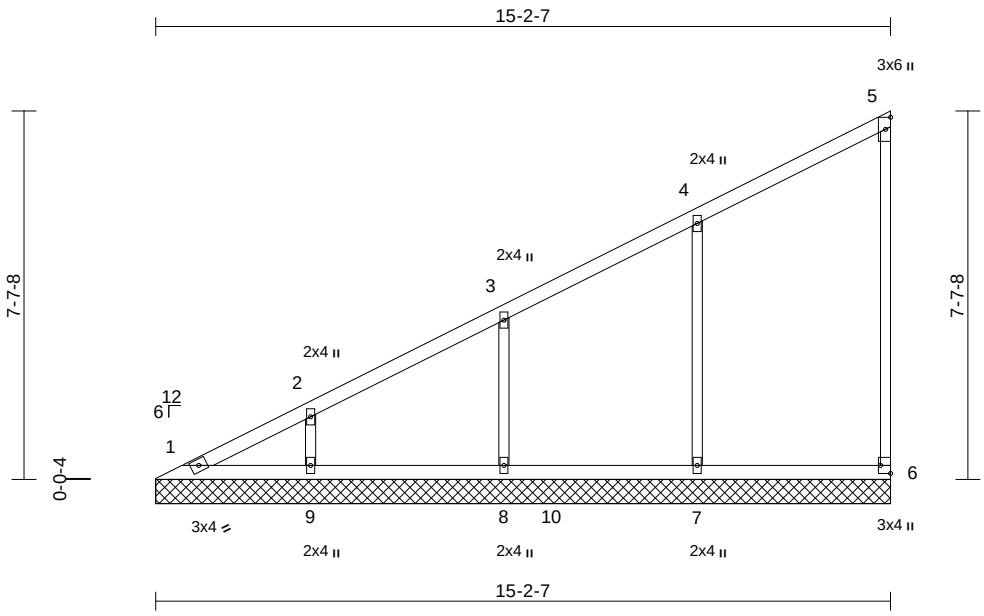


Scale = 1:47.7

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	0.47	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	0.21	Horiz(TL)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 49 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

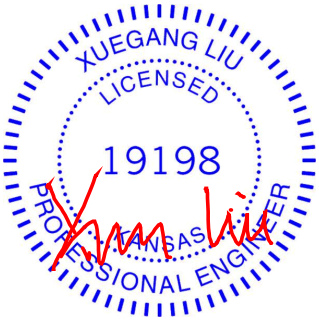
BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 1=79/15-2-7, 6=142/15-2-7, 7=393/15-2-7, 8=359/15-2-7, 9=333/15-2-7
Max Horiz 1=302 (LC 5)
Max Uplift 6=-42 (LC 5), 7=-118 (LC 8), 8=-108 (LC 8), 9=-101 (LC 8)
Max Grav 1=146 (LC 16), 6=182 (LC 15), 7=473 (LC 2), 8=383 (LC 2), 9=340 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-262/70, 2-3=-216/78, 3-4=-180/80, 4-5=-149/77, 5-6=-110/47
BOT CHORD 1-9=-103/79, 8-9=-103/79, 7-8=-103/79, 6-7=-103/79
WEBS 4-7=-306/150, 3-8=-279/161, 2-9=-256/141

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, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 42 lb uplift at joint 6, 118 lb uplift at joint 7, 108 lb uplift at joint 8 and 101 lb uplift at joint 9.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



November 8,2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 111 MN	
MN111	V14	Valley	2	1	Job Reference (optional)	I48693664

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Oct 11 2021 Print: 8.430 S Oct 11 2021 MiTek Industries, Inc. Fri Nov 05 14:16:05 Page: 1
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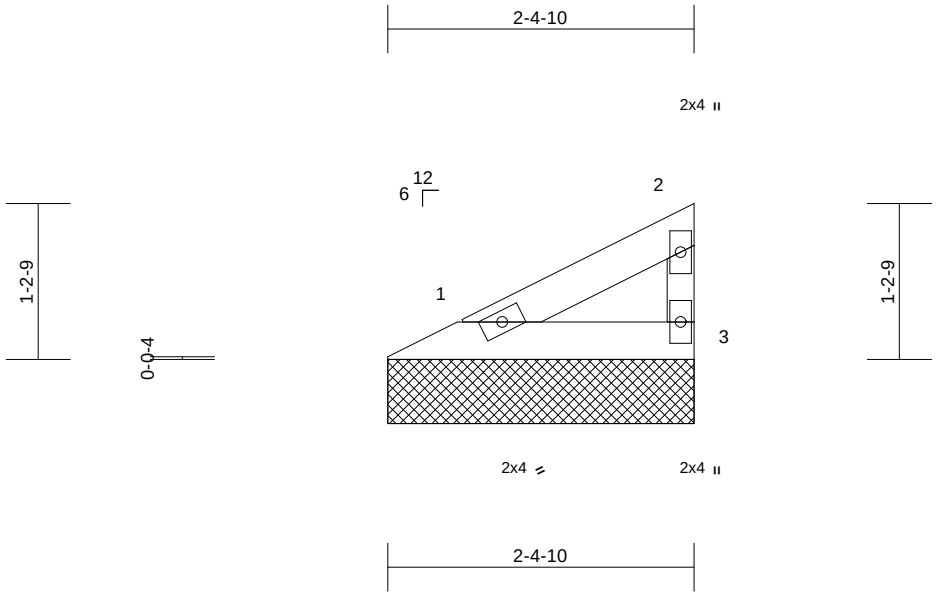

Scale = 1:17.9

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	0.05	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: 6 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 2-5-2 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 1=76/2-4-10, 3=76/2-4-10
Max Horiz 1=35 (LC 7)
Max Uplift 1=-10 (LC 8), 3=-19 (LC 8)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-32/21, 2-3=-59/29
BOT CHORD 1-3=-12/9

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 10 lb uplift at joint 1 and 19 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

November 8,2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 111 MN	
MN111	V15	Valley	1	1	Job Reference (optional)	I48693665

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Oct 11 2021 Print: 8.430 S Oct 11 2021 MiTek Industries, Inc. Fri Nov 05 14:16:05 Page: 1
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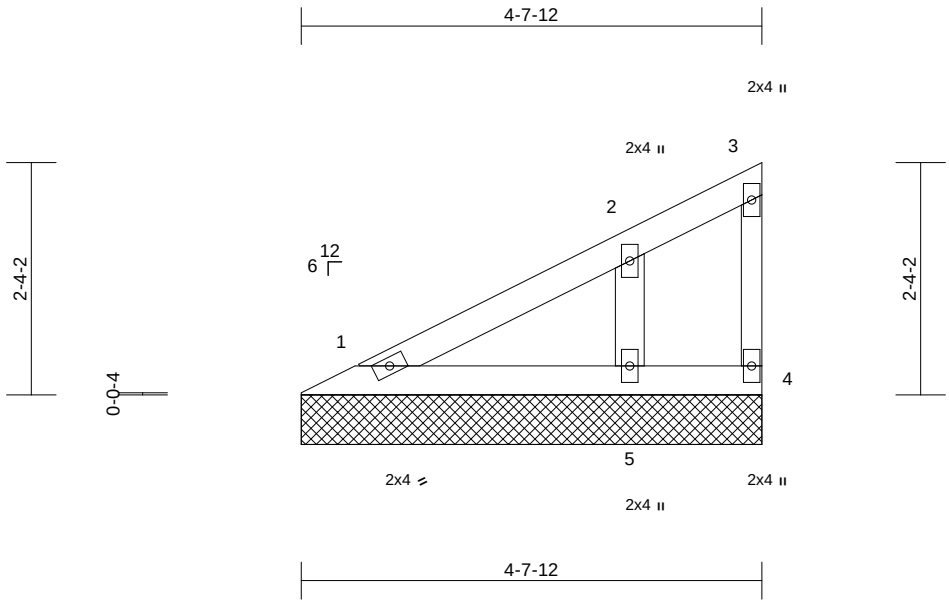


Scale = 1:23.2

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.10	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	0.03	Horiz(TL)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 13 lb	FT = 10%

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

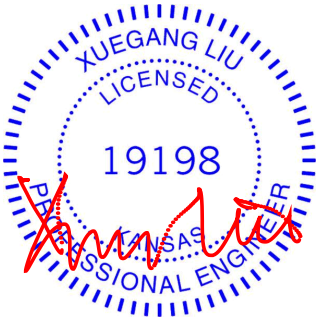
BRACING
TOP CHORD Structural wood sheathing directly applied or 4-8-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 1=100/4-7-12, 4=5/4-7-12, 5=250/4-7-12
Max Horiz 1=83 (LC 5)
Max Uplift 4=-13 (LC 7), 5=-75 (LC 8)
Max Grav 1=100 (LC 1), 4=11 (LC 4), 5=250 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-63/51, 2-3=-54/23, 3-4=-10/14
BOT CHORD 1-5=-28/21, 4-5=-28/21
WEBS 2-5=-194/108

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 2-0-0 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 4 and 75 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



November 8,2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 111 MN	I48693666
MN111	V16	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Oct 11 2021 Print: 8.430 S Oct 11 2021 MiTek Industries, Inc. Fri Nov 05 14:16:05 Page: 1
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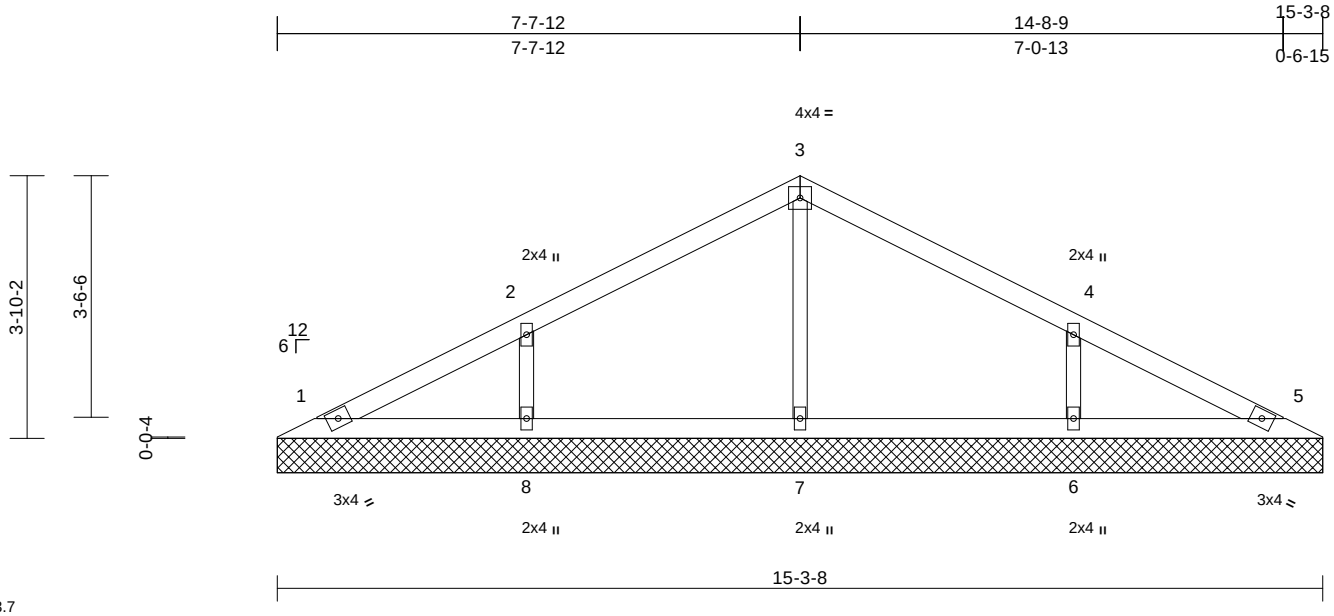

Scale = 1:33.7

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	0.18	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.07	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 40 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
OTHERS 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) 1=114/15-3-8, 5=114/15-3-8, 6=370/15-3-8, 7=302/15-3-8, 8=370/15-3-8
Max Horiz 1=62 (LC 12)
Max Uplift 1=-12 (LC 9), 5=-3 (LC 9), 6=-119 (LC 9), 8=-119 (LC 8)
Max Grav 1=114 (LC 1), 5=114 (LC 1), 6=378 (LC 22), 7=302 (LC 1), 8=378 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-87/48, 2-3=-106/91, 3-4=-106/75, 4-5=-68/38
BOT CHORD 1-8=0/54, 7-8=0/54, 6-7=0/54, 5-6=0/54
WEBS 3-7=-223/31, 2-8=-296/162, 4-6=-296/162

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 4-0-0 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 12 lb uplift at joint 1, 3 lb uplift at joint 5, 119 lb uplift at joint 8 and 119 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

November 8,2021

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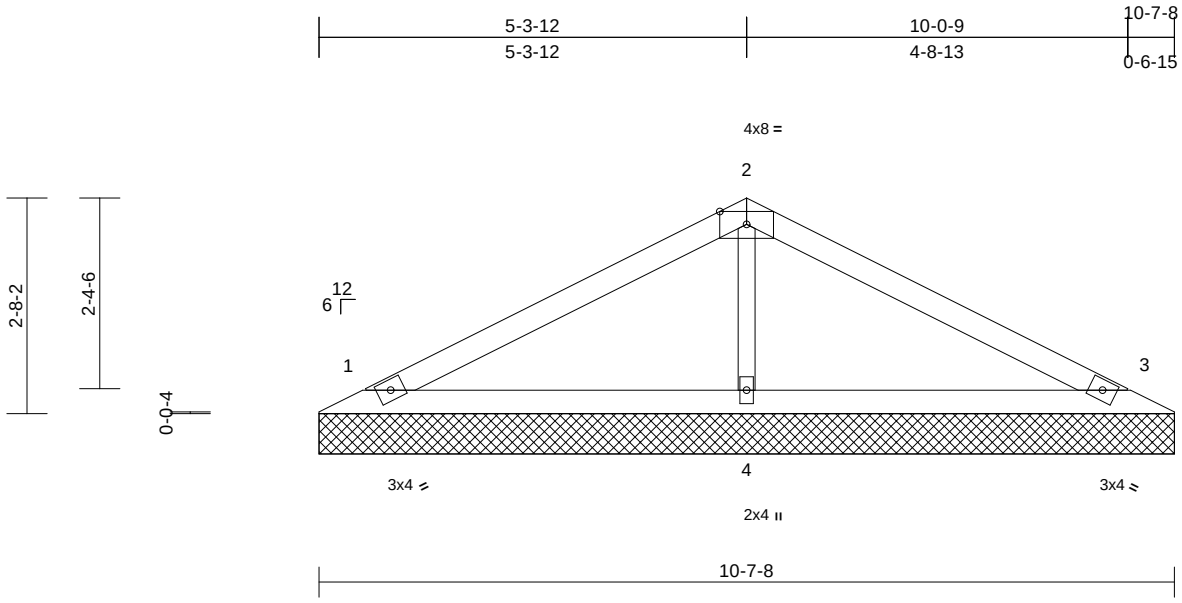
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 111 MN	
MN111	V17	Valley	1	1	Job Reference (optional)	I48693667

Wheeler Lumber, Waverly, KS - 66871,

Run: 8.43 S Oct 11 2021 Print: 8.430 S Oct 11 2021 MiTek Industries, Inc. Fri Nov 05 14:16:05 ID:UfEnf?q5bDRB5DATkUaMjEyMGa3-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:28.6

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)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.19	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.07	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 26 lb	FT = 10%

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

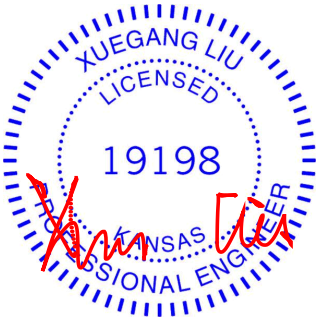
BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 1=200/10-7-8, 3=200/10-7-8, 4=451/10-7-8
Max Horiz 1=-42 (LC 13)
Max Uplift 1=-41 (LC 8), 3=-48 (LC 9), 4=-25 (LC 8)
Max Grav 1=200 (LC 21), 3=200 (LC 22), 4=451 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-122/61, 2-3=-122/44
BOT CHORD 1-4=-3/51, 3-4=-3/51
WEBS 2-4=-308/81

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 4-0-0 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 41 lb uplift at joint 1, 48 lb uplift at joint 3 and 25 lb uplift at joint 4.
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



November 8,2021

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 111 MN	
MN111	V18	Valley	1	1	Job Reference (optional)	I48693668

Wheeler Lumber, Waverly, KS - 66871,

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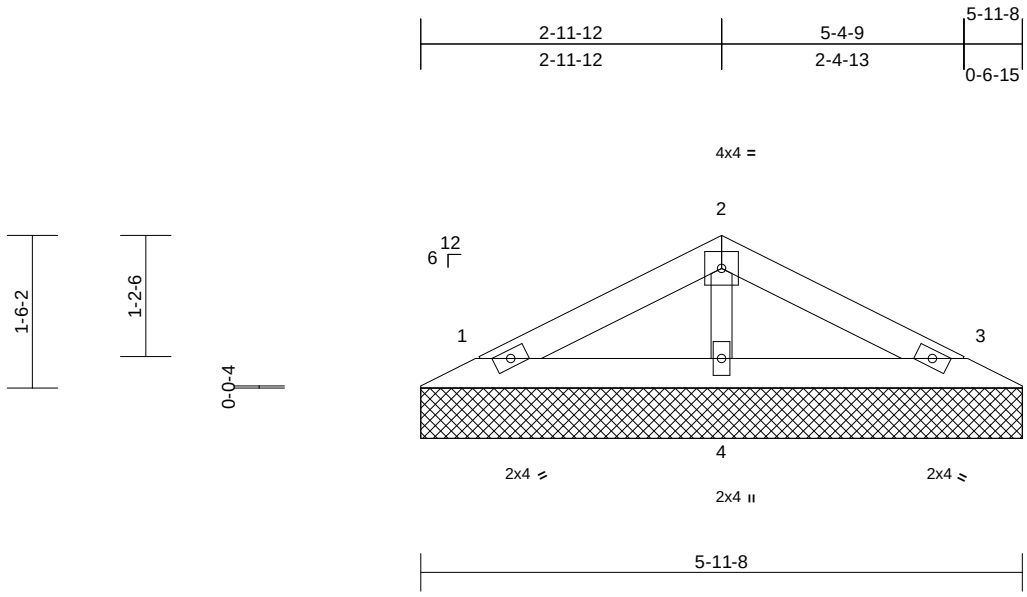


Scale = 1:22.8

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	0.10	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	0.03	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 14 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
OTHERS 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) 1=112/5-11-8, 3=112/5-11-8, 4=206/5-11-8
Max Horiz 1=-21 (LC 13)
Max Uplift 1=-26 (LC 8), 3=-30 (LC 9), 4=-3 (LC 8)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-54/30, 2-3=-54/21
BOT CHORD 1-4=-1/24, 3-4=-1/24
WEBS 2-4=-146/38

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 4-0-0 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 26 lb uplift at joint 1, 30 lb uplift at joint 3 and 3 lb uplift at joint 4.
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

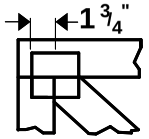
November 8,2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

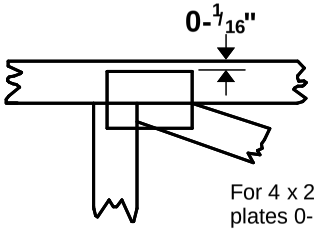
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

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.

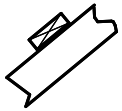
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

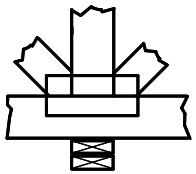
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

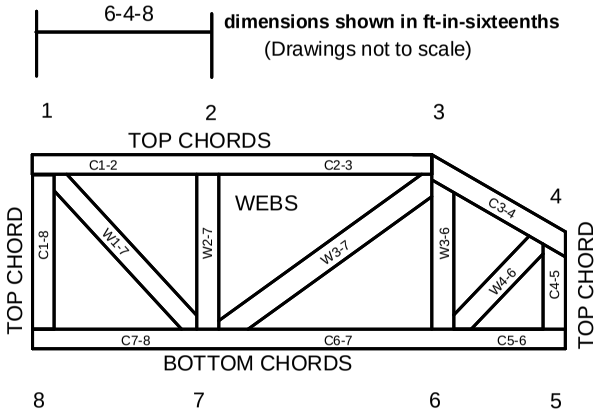


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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.

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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.