



RELEASE FOR  
CONSTRUCTION  
AS NOTED ON PLANS REVIEW  
DEVELOPMENT SERVICES  
LEE'S SUMMIT, MISSOURI  
12/18/2020

RE: W0 114  
Lot 114 W0

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

**Site Information:**

Customer: Project Name: W0 114  
Lot/Block:  
Address:  
City:

Model:  
Subdivision:  
State:

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

Design Code: IRC2018/TPI2014  
Wind Code: N/A  
Roof Load: 45.0 psf

Design Program: MiTek 20/20 8.4  
Wind Speed: 115 mph  
Floor Load: N/A psf

This package includes 111 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I42521635	A1	12/4/2020	21	I42521655	C10	12/4/2020
2	I42521636	A2	12/4/2020	22	I42521656	D1	12/4/2020
3	I42521637	A3	12/4/2020	23	I42521657	D2	12/4/2020
4	I42521638	A4	12/4/2020	24	I42521658	D3	12/4/2020
5	I42521639	A5	12/4/2020	25	I42521659	D4	12/4/2020
6	I42521640	A6	12/4/2020	26	I42521660	E1	12/4/2020
7	I42521641	B1	12/4/2020	27	I42521661	E2	12/4/2020
8	I42521642	B2	12/4/2020	28	I42521662	E3	12/4/2020
9	I42521643	B3	12/4/2020	29	I42521663	E4	12/4/2020
10	I42521644	B4	12/4/2020	30	I42521664	E5	12/4/2020
11	I42521645	B5	12/4/2020	31	I42521665	G1	12/4/2020
12	I42521646	C1	12/4/2020	32	I42521666	G2	12/4/2020
13	I42521647	C2	12/4/2020	33	I42521667	G3	12/4/2020
14	I42521648	C3	12/4/2020	34	I42521668	G4	12/4/2020
15	I42521649	C4	12/4/2020	35	I42521669	G5	12/4/2020
16	I42521650	C5	12/4/2020	36	I42521670	G6	12/4/2020
17	I42521651	C6	12/4/2020	37	I42521671	G7	12/4/2020
18	I42521652	C7	12/4/2020	38	I42521672	G8	12/4/2020
19	I42521653	C8	12/4/2020	39	I42521673	G9	12/4/2020
20	I42521654	C9	12/4/2020	40	I42521674	G10	12/4/2020

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: Sevier, Scott  
My license renewal date for the state of Missouri is December 31, 2021.  
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.



RE: W0 114 - Lot 114 W0

MiTek USA, Inc.

16023 Swingley Ridge Rd  
Chesterfield, MO 63017  
314-434-1200

**Site Information:**

Project Customer: Project Name: W0 114

Lot/Block:

Subdivision:

Address:

City, County:

State:

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
41	I42521675	H1	12/4/2020	85	I42521719	J41	12/4/2020
42	I42521676	H2	12/4/2020	86	I42521720	J42	12/4/2020
43	I42521677	H3	12/4/2020	87	I42521721	J43	12/4/2020
44	I42521678	H4	12/4/2020	88	I42521722	J44	12/4/2020
45	I42521679	J1	12/4/2020	89	I42521723	J45	12/4/2020
46	I42521680	J2	12/4/2020	90	I42521724	J46	12/4/2020
47	I42521681	J3	12/4/2020	91	I42521725	J47	12/4/2020
48	I42521682	J4	12/4/2020	92	I42521726	J48	12/4/2020
49	I42521683	J5	12/4/2020	93	I42521727	LAY1	12/4/2020
50	I42521684	J6	12/4/2020	94	I42521728	LAY2	12/4/2020
51	I42521685	J7	12/4/2020	95	I42521729	LAY3	12/4/2020
52	I42521686	J8	12/4/2020	96	I42521730	LAY4	12/4/2020
53	I42521687	J9	12/4/2020	97	I42521731	LAY5	12/4/2020
54	I42521688	J10	12/4/2020	98	I42521732	LAY6	12/4/2020
55	I42521689	J11	12/4/2020	99	I42521733	LAY7	12/4/2020
56	I42521690	J12	12/4/2020	100	I42521734	LAY8	12/4/2020
57	I42521691	J13	12/4/2020	101	I42521735	LAY9	12/4/2020
58	I42521692	J14	12/4/2020	102	I42521736	R1	12/4/2020
59	I42521693	J15	12/4/2020	103	I42521737	V1	12/4/2020
60	I42521694	J16	12/4/2020	104	I42521738	V2	12/4/2020
61	I42521695	J17	12/4/2020	105	I42521739	V3	12/4/2020
62	I42521696	J18	12/4/2020	106	I42521740	V4	12/4/2020
63	I42521697	J19	12/4/2020	107	I42521741	V5	12/4/2020
64	I42521698	J20	12/4/2020	108	I42521742	V6	12/4/2020
65	I42521699	J21	12/4/2020	109	I42521743	V7	12/4/2020
66	I42521700	J22	12/4/2020	110	I42521744	V8	12/4/2020
67	I42521701	J23	12/4/2020	111	I42521745	V9	12/4/2020
68	I42521702	J24	12/4/2020				
69	I42521703	J25	12/4/2020				
70	I42521704	J26	12/4/2020				
71	I42521705	J27	12/4/2020				
72	I42521706	J28	12/4/2020				
73	I42521707	J29	12/4/2020				
74	I42521708	J30	12/4/2020				
75	I42521709	J31	12/4/2020				
76	I42521710	J32	12/4/2020				
77	I42521711	J33	12/4/2020				
78	I42521712	J34	12/4/2020				
79	I42521713	J35	12/4/2020				
80	I42521714	J36	12/4/2020				
81	I42521715	J37	12/4/2020				
82	I42521716	J38	12/4/2020				
83	I42521717	J39	12/4/2020				
84	I42521718	J40	12/4/2020				

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521635
W0 114	A1	Half Hip Supported	1	1		

Wheeler Lumber, Waverly, KS 66871

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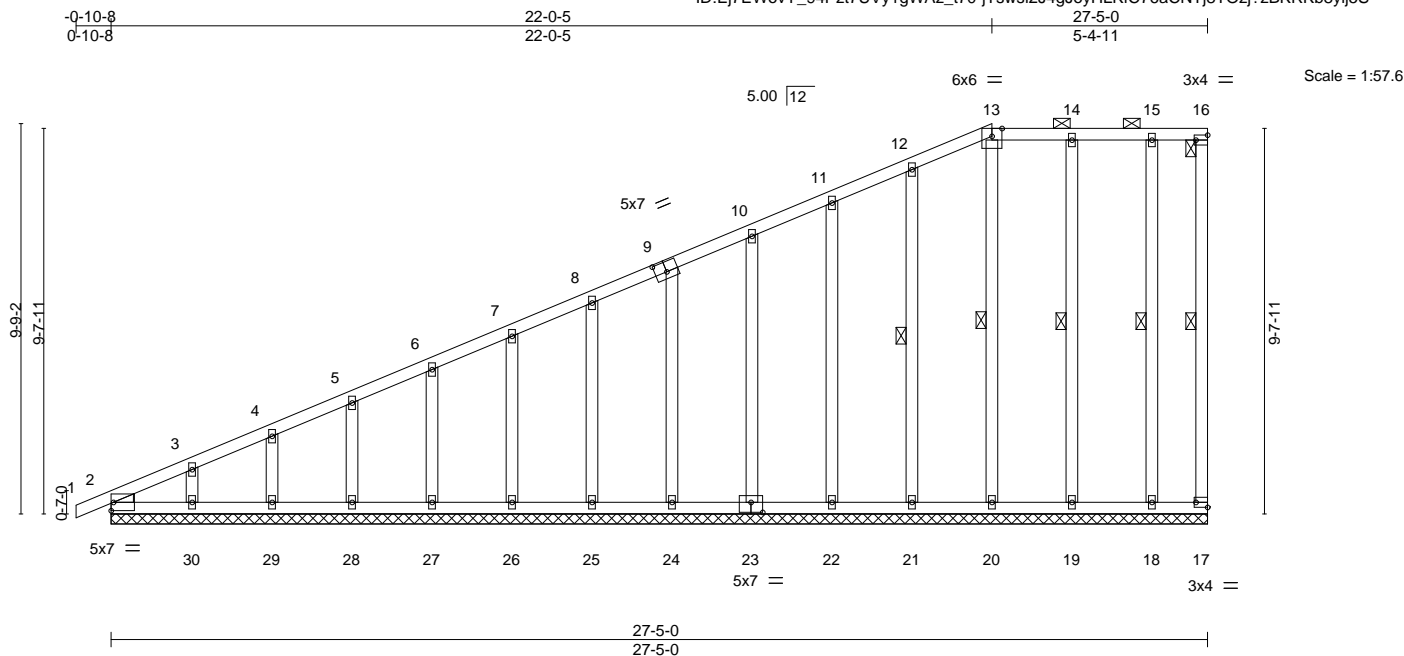


Plate Offsets (X,Y)--		[9:0-3-8,0-3-0], [16:Edge,0-1-8], [17:Edge,0-1-8], [23:0-3-8,0-3-0]	
<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>
TCLL 25.0	Plate Grip DOL 1.15	TC 0.40	in (loc) l/defl L/d
TCDL 10.0	Lumber DOL 1.15	BC 0.17	Vert(LL) -0.00 1 n/r 120
BCLL 0.0 *	Rep Stress Incr YES	WB 0.15	Vert(CT) -0.00 1 n/r 120
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Horz(CT) -0.01 17 n/a n/a
		Weight: 160 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  
WEDGE  
Left: 2x3 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.): 13-16.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 23-24.  
WEBS 1 Row at midpt 16-17, 13-20, 12-21, 14-19, 15-18

#### REACTIONS.

All bearings 27-5-0.  
(lb) - Max Horz 2=410(LC 5)  
Max Uplift All uplift 100 lb or less at joint(s) 17, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 19, 18  
Max Grav All reactions 250 lb or less at joint(s) 17, 2, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 19, 18

#### FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-364/37, 3-4=-315/30, 4-5=-291/28, 5-6=-266/25

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- 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) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- Provide adequate drainage to prevent water ponding.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 17, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 19, 18.
- 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



August 21, 2020

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16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521636
W0 114	A2	Half Hip	1	1		

Wheeler Lumber, Waverly, KS 66871

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-0-10-8	5-8-14	13-2-12	19-1-14	23-7-8	27-5-0
0-10-8	5-8-14	7-5-14	5-11-2	4-5-10	3-9-8

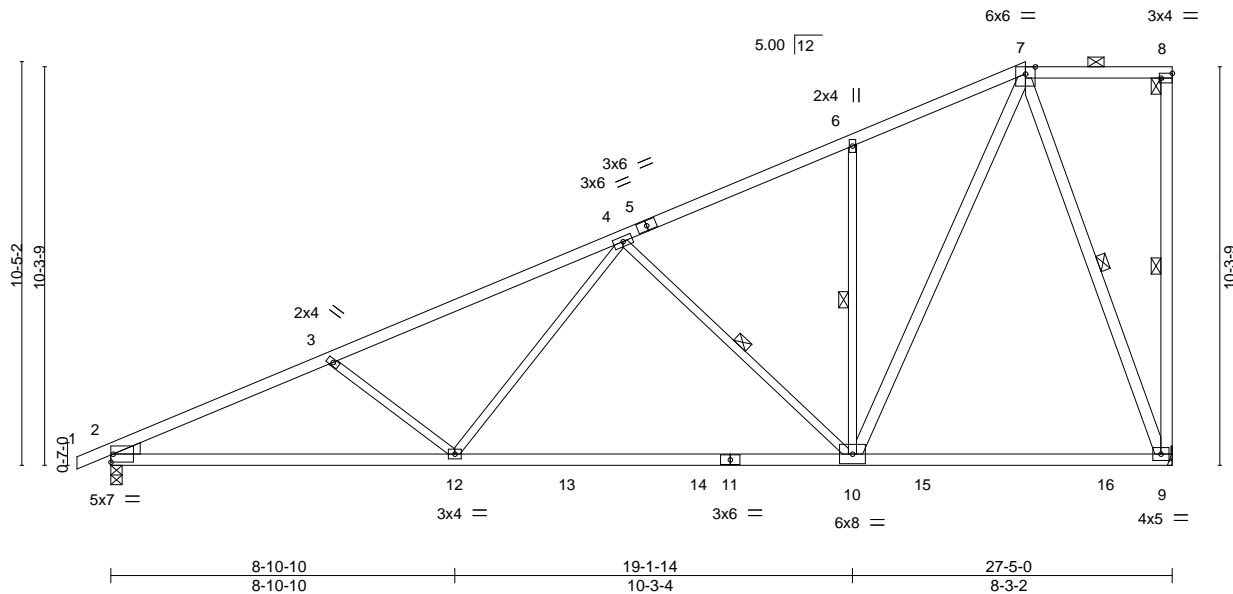


Plate Offsets (X,Y)-- [8:Edge,0-1-8]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.74	Vert(LL)	-0.25 10-12	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.60	Vert(CT)	-0.44 10-12	>737	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.64	Horz(CT)	0.05 9	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.08 12	>999	240	Weight: 124 lb	FT = 10%

#### LUMBER-

TOP CHORD 2x4 SPF No.2  
 BOT CHORD 2x4 SPF 2100F 1.8E  
 WEBS 2x3 SPF No.2 \*Except\*  
 8-9,7-10,7-9: 2x4 SPF No.2

#### WEDGE

Left: 2x4 SPF No.2

#### REACTIONS.

(size) 9=Mechanical, 2=0-3-8  
 Max Horz 2=438(LC 5)  
 Max Uplift 9=206(LC 8), 2=209(LC 8)  
 Max Grav 9=1339(LC 2), 2=1351(LC 2)

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

TOP CHORD 2-3=-2487/397, 3-4=-2228/319, 4-6=-1137/207, 6-7=-1098/296  
 BOT CHORD 2-12=-509/2212, 10-12=-296/1549, 9-10=-144/407  
 WEBS 3-12=-392/245, 4-12=-35/718, 4-10=-817/277, 6-10=-342/185, 7-10=-296/1386,  
 7-9=-1172/225

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- 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) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=206, 2=209.
- 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



August 21, 2020

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16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

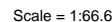
Waverly, KS 66871

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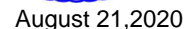
142521637

Job Reference (optional)

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- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDD=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end 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'-6" tall by 2'-0" wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=237, 2=207.
- 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.



Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521638
W0 114	A4	Half Hip	1	1		

Wheeler Lumber, Waverly, KS 66871

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Job Reference (optional)

0-10-8 2-3-8 7-1-13 13-4-0 19-1-14 26-9-14 27-5-0  
0-10-8 2-3-8 4-10-5 6-2-4 5-9-14 7-8-1 0-7-2

Scale = 1:72.9

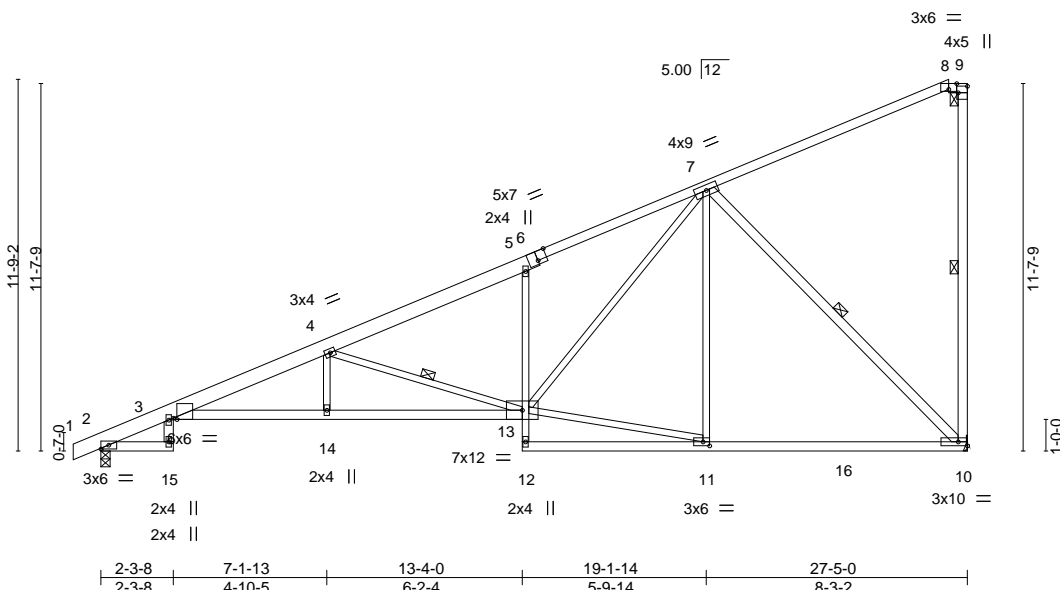


Plate Offsets (X,Y)-- [3:0-1-6,Edge], [6:0-3-8,Edge], [8:0-3-0,Edge], [9:Edge,0-3-8], [11:0-2-8,0-1-8]									
<b>LOADING</b> (psf)		<b>SPACING-</b> 2-0-0		<b>CSI.</b>		<b>DEFL.</b> in (loc) l/defl L/d		<b>PLATES</b> <b>GRIP</b>	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.96	Vert(LL)	-0.35 3-14 >920	360	MT20 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.71	Vert(CT)	-0.62 3-14 >525	240	
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.83	Horz(CT)	0.36 10 n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.30 3-14 >999	240	Weight: 141 lb FT = 10%

#### LUMBER-

TOP CHORD 2x4 SPF No.2 \*Except\*  
1-6: 2x6 SP 2400F 2.0E  
BOT CHORD 2x4 SPF No.2 \*Except\*  
3-13: 2x4 SPF 2100F 1.8E, 5-12: 2x3 SPF No.2  
WEBS 2x3 SPF No.2 \*Except\*  
9-10: 2x4 SPF 2400F 2.0E, 3-15,7-10: 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.): 8-9.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
WEBS 1 Row at midpt 9-10, 4-13, 7-10

#### REACTIONS.

(size) 10=Mechanical, 2=0-3-8  
Max Horz 2=498(LC 5)  
Max Uplift 10=-270(LC 8), 2=-202(LC 8)  
Max Grav 10=1304(LC 2), 2=1329(LC 2)

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

TOP CHORD 2-3=-897/0, 3-4=-3461/559, 4-5=-2058/324, 5-7=-1983/421, 7-8=-251/102  
BOT CHORD 3-14=-704/3325, 13-14=-703/3324, 5-13=-280/177, 10-11=-179/963  
WEBS 4-14=0/268, 4-13=-1607/392, 11-13=-157/948, 7-13=-334/1343, 7-11=0/299, 7-10=-1348/334

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- 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) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=270, 2=202.
- 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



August 21,2020

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Chesterfield, MO 63017



Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521639
W0 114	A5	Monopitch	4	1		

Wheeler Lumber, Waverly, KS 66871

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ID:Ej7EWovY\_94Pzt7UVy1gWAZ\_t70-cf5Ri46q8vpERue5u2C2k2Y0wliavLCZ6yPXkvylj50

Job Reference (optional)

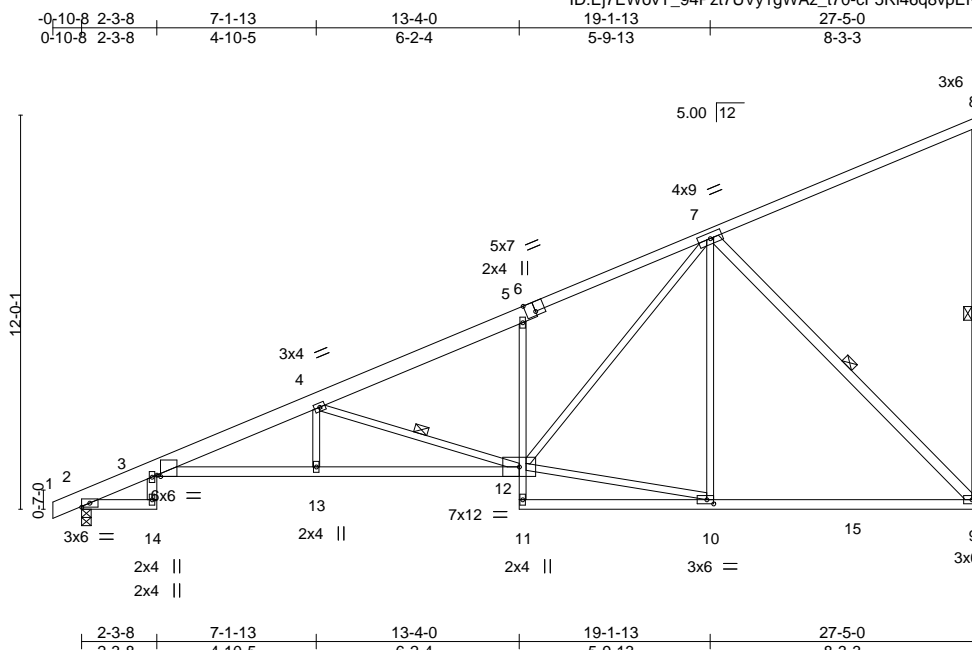


Plate Offsets (X,Y)-- [3:0-1-6,Edge], [6:0-3-8,Edge], [10:0-2-8,0-1-8]									
<b>LOADING</b> (psf)		<b>SPACING-</b> 2-0-0		<b>CSI.</b>		<b>DEFL.</b> in (loc) l/defl L/d		<b>PLATES</b>	<b>GRIP</b>
TCLL	25.0	Plate Grip DOL	1.15	TC	0.96	Vert(LL)	-0.35 3-13 >920 360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.73	Vert(CT)	-0.62 3-13 >525 240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.84	Horz(CT)	0.36 9 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.33 3-13 >985 240	Weight: 142 lb	FT = 10%

#### LUMBER-

TOP CHORD 2x4 SPF No.2 \*Except\*  
1-6: 2x6 SP 2400F 2.0E  
BOT CHORD 2x4 SPF No.2 \*Except\*  
3-12: 2x4 SPF 2100F 1.8E, 5-11: 2x3 SPF No.2  
WEBS 2x3 SPF No.2 \*Except\*  
8-9,3-14,7-9: 2x4 SPF No.2

#### BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
WEBS 1 Row at midpt 8-9, 4-12, 7-9

#### REACTIONS.

(size) 9=Mechanical, 2=0-3-8  
Max Horz 2=481(LC 8)  
Max Uplift 9=-329(LC 8), 2=-150(LC 8)  
Max Grav 9=1304(LC 2), 2=1329(LC 2)

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

TOP CHORD 2-3=-714/0, 3-4=-3462/497, 4-5=-2057/220, 5-7=-1980/309  
BOT CHORD 3-13=-895/3326, 12-13=-895/3325, 5-12=-273/159, 9-10=-245/966  
WEBS 4-13=0/268, 4-12=-1610/448, 10-12=-221/952, 7-12=-364/1336, 7-10=0/302,  
7-9=-1359/344

#### 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) gable end zone; cantilever left and right exposed; end vertical left 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=329, 2=150.
- 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.



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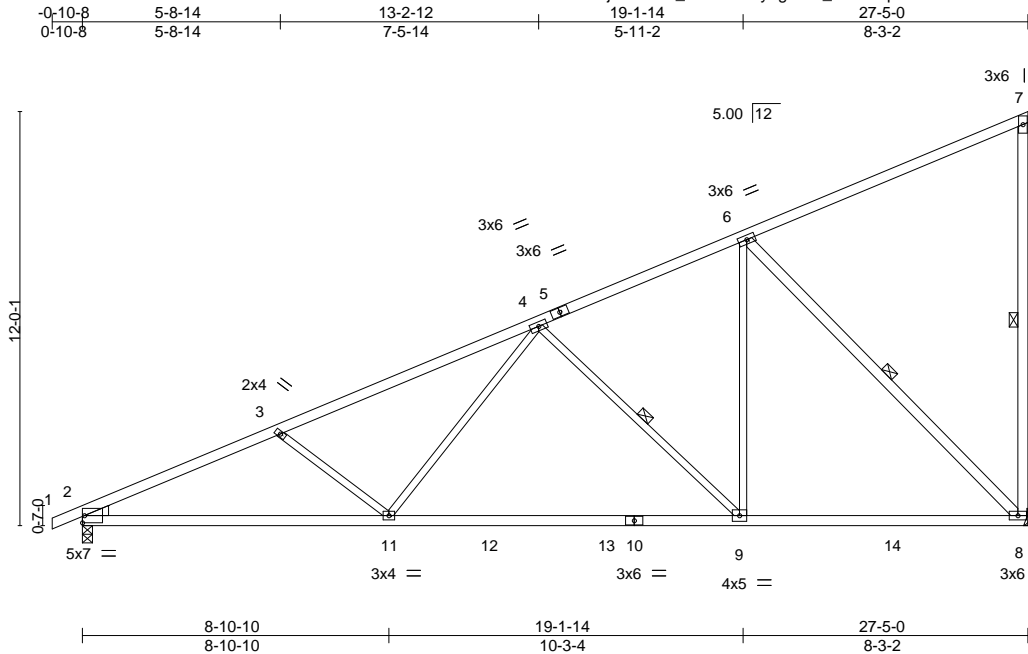


16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521640
W0 114	A6	Monopitch	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Fri Aug 21 05:59:50 2020 Page 1  
ID:Ej7EWovY\_94Pzt7UVy1gWAZ\_t70-4RfpvQ6SvDx522DHSijHHG5Ev94yeoyIKc85HLyIj5N



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.82	Vert(LL)	-0.26 9-11	>999	360	MT20	197/144
BCLL 10.0	Lumber DOL	1.15	BC 0.59	Vert(CT)	-0.45 9-11	>720	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.87	Horz(CT)	0.06 8	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.08 9-11	>999	240		
								Weight: 115 lb	FT = 10%

#### LUMBER-

TOP CHORD 2x4 SPF No.2  
BOT CHORD 2x4 SPF 2100F 1.8E  
WEBS 2x3 SPF No.2 \*Except\*  
7-8,6-8: 2x4 SPF No.2

WEDGE  
Left: 2x4 SPF No.2

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-8-1 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 9-7-10 oc bracing.  
WEBS 1 Row at midpt 7-8, 4-9, 6-8

#### REACTIONS.

(size) 8=Mechanical, 2=0-3-8  
Max Horz 2=478(LC 8)  
Max Uplift 8=329(LC 8), 2=150(LC 8)  
Max Grav 8=1329(LC 2), 2=1354(LC 2)

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

TOP CHORD 2-3=-2502/266, 3-4=-2238/181, 4-6=-1142/65  
BOT CHORD 2-11=-656/2227, 9-11=-423/1549, 8-9=-239/1001  
WEBS 3-11=-407/260, 4-11=-51/728, 4-9=-766/256, 6-9=-56/968, 6-8=-1411/336

#### 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) gable end zone; cantilever left and right exposed; end vertical left 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=329, 2=150.
- 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.



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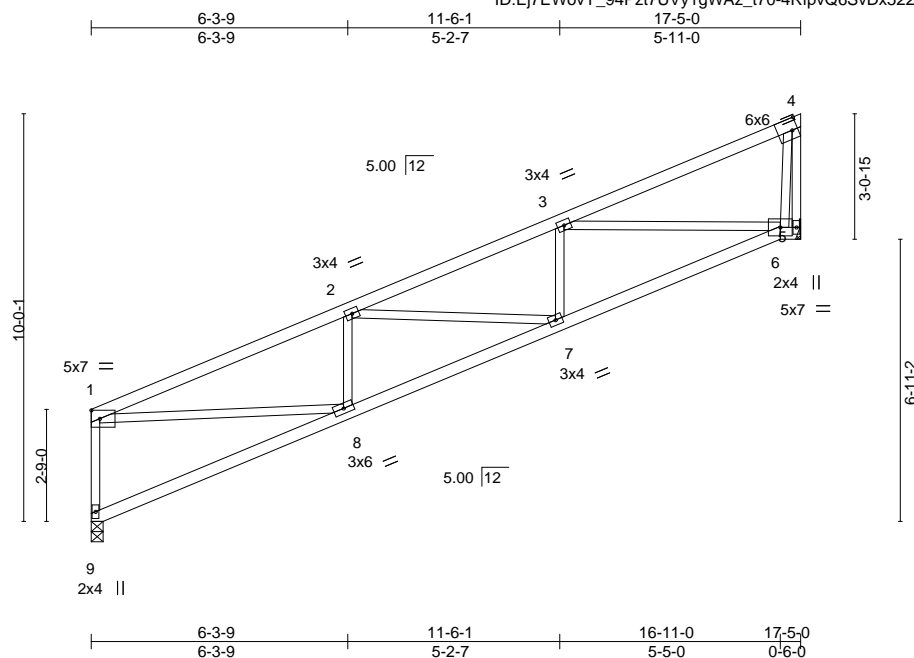


Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521641
W0 114	B1	Monopitch	7	1		

Wheeler Lumber, Waverly, KS 66871

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Scale = 1:56.6

Plate Offsets (X,Y)-- [4:0-1-11,Edge]												
<b>LOADING</b> (psf)		<b>SPACING-</b> 2-0-0		<b>CSI.</b>		<b>DEFL.</b> in (loc) l/defl L/d				<b>PLATES</b> <b>GRIP</b>		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.60	Vert(LL)	-0.07	7-8	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.42	Vert(CT)	-0.13	8-9	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.88	Horz(CT)	0.03	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.05	7-8	>999	240	Weight: 66 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 3-7-5 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS.

(size) 9=0-3-8, 5=Mechanical  
Max Horz 9=231(LC 5)  
Max Uplift 5=89(LC 8)  
Max Grav 9=774(LC 1), 5=774(LC 1)

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

TOP CHORD 1-9=-732/83, 1-2=-1484/118, 2-3=-1430/133, 4-5=-702/54  
BOT CHORD 7-8=-256/1428, 6-7=-196/1372  
WEBS 1-8=-68/1258, 2-8=-402/105, 3-6=-1138/181, 4-6=-10/575

#### NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Bearing at joint(s) 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5.
- 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.



August 21, 2020

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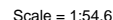
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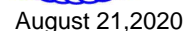


TOP CHORD	Structural wood sheathing directly applied or 3-9-12 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-5.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

Max Horiz 10=211(LC 5)  
Max Uplift 6=-74(LC 8)  
Max Grav 10=774(LC 1), 6=774(LC 1)

TOP CHORD 1-10=-731/84, 1-2=-1490/121, 2-3=-1405/129, 3-4=-1386/188, 5-6=-750/43  
BOT CHORD 8-9=-251/1435, 7-8=-54/393  
WEBS 1-9=-71/1266, 2-9=-404/106, 3-8=-320/101, 4-8=-176/1213, 4-7=-606/110, 5-7=-52/766

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDF=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Bearing at joint(s) 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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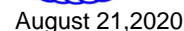
8.410 s May 22 2020 MiTek Industries, Inc. Fri Aug 21 05:59:53 2020 Page 1

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- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Bearing at joint(s) 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9 except (jt=lb) 5=133.
- 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.

TOP CHORD	Structural wood sheathing directly applied or 4-0-15 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-4.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 8-4-12 oc bracing: 7-8.



Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521645
W0 114	B5	GABLE	1	2		

Wheeler Lumber, Waverly, KS 66871

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Job Reference (optional)

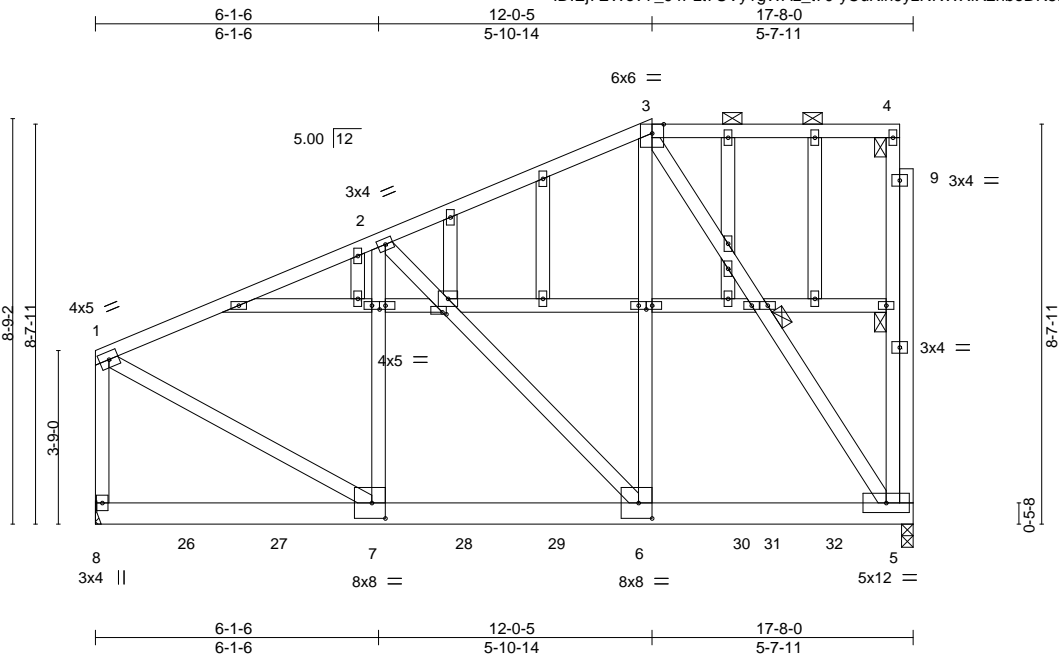


Plate Offsets (X,Y)-- [6:0-3-8,0-4-0], [7:0-3-8,0-4-0], [11:0-1-8,0-1-0], [12:0-1-1,0-0-8], [13:0-1-8,0-1-0]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	-0.05	7-8	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	-0.08	7-8	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.49	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.03	7-8	>999	240	Weight: 296 lb	FT = 10%

#### LUMBER-

TOP CHORD 2x4 SPF No.2  
BOT CHORD 2x6 SP 2400F 2.0E  
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.): 3-4.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
WEBS 1 Row at midpt 4-5, 3-5

#### REACTIONS.

(size) 5=0-3-0, 8=Mechanical  
Max Horz 8=342(LC 5)  
Max Uplift 5=393(LC 5), 8=318(LC 8)  
Max Grav 5=3309(LC 1), 8=3182(LC 1)

#### FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-2764/287, 2-3=-1902/249, 1-8=-2603/299  
BOT CHORD 7-8=-324/90, 6-7=-395/2485, 5-6=-264/1632  
WEBS 2-7=-130/866, 2-6=-1152/209, 3-6=-262/2789, 3-5=-2946/341, 1-7=-248/2779

#### NOTES-

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.  
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- 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) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- Provide adequate drainage to prevent water ponding.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 5=393, 8=318.
- 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Continued on page 2



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Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0
W0 114	B5	GABLE	1	2	I42521645
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871

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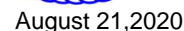
- NOTES-**
- 15) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 619 lb down and 59 lb up at 2-0-0, 619 lb down and 63 lb up at 4-0-0, 619 lb down and 63 lb up at 6-0-0, 619 lb down and 63 lb up at 8-0-0, 619 lb down and 63 lb up at 10-0-0, 619 lb down and 63 lb up at 12-0-0, and 619 lb down and 63 lb up at 14-0-0, and 619 lb down and 63 lb up at 16-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 16) Studding applied to ply: 1(Front)

- LOAD CASE(S)** Standard
- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
- Vert: 1-3=-70, 3-4=-70, 5-8=-20
- Concentrated Loads (lb)
- Vert: 7=-619(B) 6=-619(B) 26=-619(B) 27=-619(B) 28=-619(B) 29=-619(B) 30=-619(B) 32=-619(B)

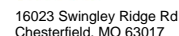


Job Reference (optional)

Scale = 1:31.0



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 20691



Job	Truss	Truss Type	Qty	Ply	Lot 114 W0
W0 114	C1	HALF HIP GIRDER	1	2	I42521646
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Fri Aug 21 05:59:56 2020 Page 2  
ID:Ej7EWovY\_94Pzt7UVy1gWAZ\_t70-ub04ATBDV3hEmzhRo0qhWWLGuZ4a2dbbjXbPU?ylj5H

**LOAD CASE(S)** Standard  
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-4=-70, 4-6=-70, 2-13=-20, 3-10=-20, 7-8=-20  
Concentrated Loads (lb)  
Vert: 10=-230(F) 12=-449(F) 14=-230(F) 15=-230(F) 16=-230(F)

Wheeler Lumber, Waverly, KS 66871 8.410 s May 22 2020 MiTek Industries, Inc. Fri Aug 21 05:59:57 2020 Page 1  
ID:Ej7EWovY\_94Pzt7UVy1gWAZ\_t70-NnaSNpCrGmp5O7FdMjLw3ktRazRin1ukxBLZ1Rylj5G  
-1-10-8 2-3-8 9-2-1 13-8-8 16-0-0  
1-10-8 2-3-8 6-10-9 4-6-7 2-3-8  
Scale = 1:30.8

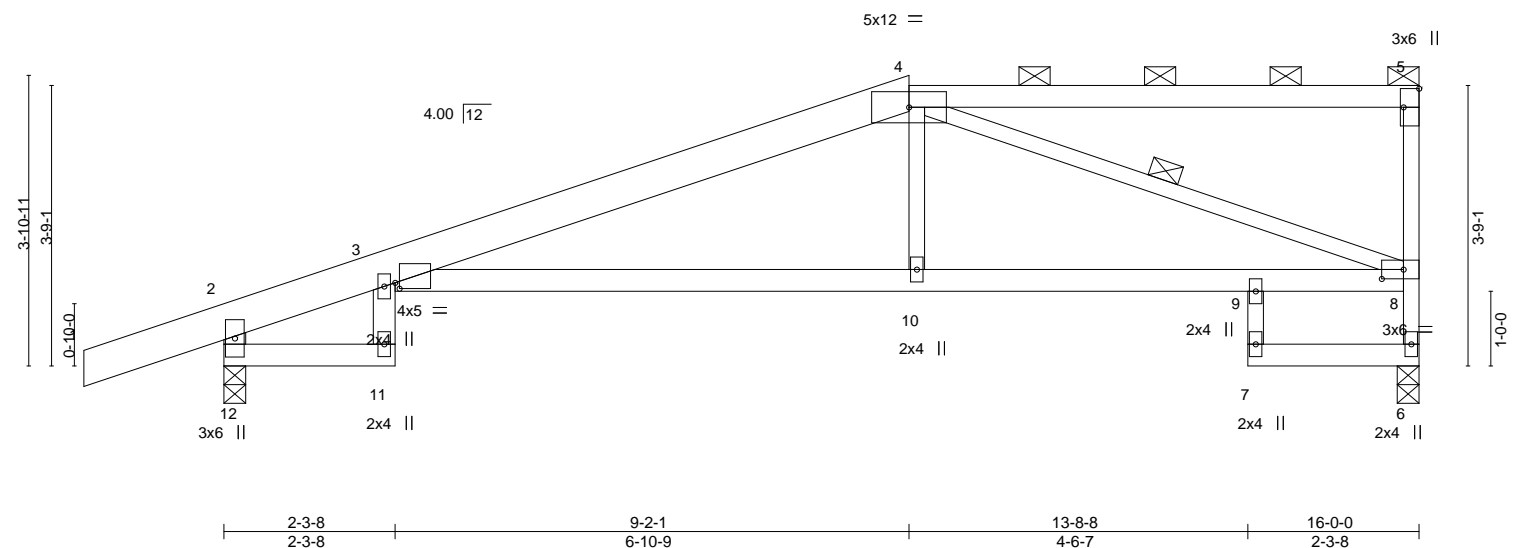


Plate Offsets (X,Y)-- [3:0-0-11,0-0-15], [5:Edge,0-2-8], [8:0-3-8,0-1-8]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d					PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.72	Vert(LL)	-0.28	3-10	>670	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.71	Vert(CT)	-0.55	3-10	>342	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.60	Horz(CT)	0.32	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.24	3-10	>789	240	Weight: 61 lb	FT = 10%

<b>LUMBER-</b>		<b>BRACING-</b>	
TOP CHORD	2x6 SPF 1650F 1.4E *Except* 4-5: 2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 4-7-1 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-5.
BOT CHORD	2x4 SPF No.2 *Except* 7-9: 2x3 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 6-7.
WEBS	2x3 SPF No.2 *Except* 3-11,2-12: 2x4 SPF No.2	WEBS	1 Row at midpt 4-8


**REACTIONS.** (size) 6=0-3-8, 12=0-3-8  
 Max Horz 12=166(LC 5)  
 Max Uplift 6=-134(LC 4), 12=-216(LC 4)  
 Max Grav 6=700(LC 1), 12=859(LC 1)

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

TOP CHORD	2-3=-263/11, 3-4=-1296/218, 6-8=-673/147, 2-12=-857/235
BOT CHORD	3-10=-212/1223, 9-10=-207/1229, 8-9=-215/1232
WEBS	4-10=0/317, 4-8=-1250/226

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91 mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end 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 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) except (jt=lb) 6=134, 12=216.
- 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.



August 21, 2020

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521648
W0 114	C3	Half Hip Girder	1	2		

Wheeler Lumber, Waverly, KS 66871

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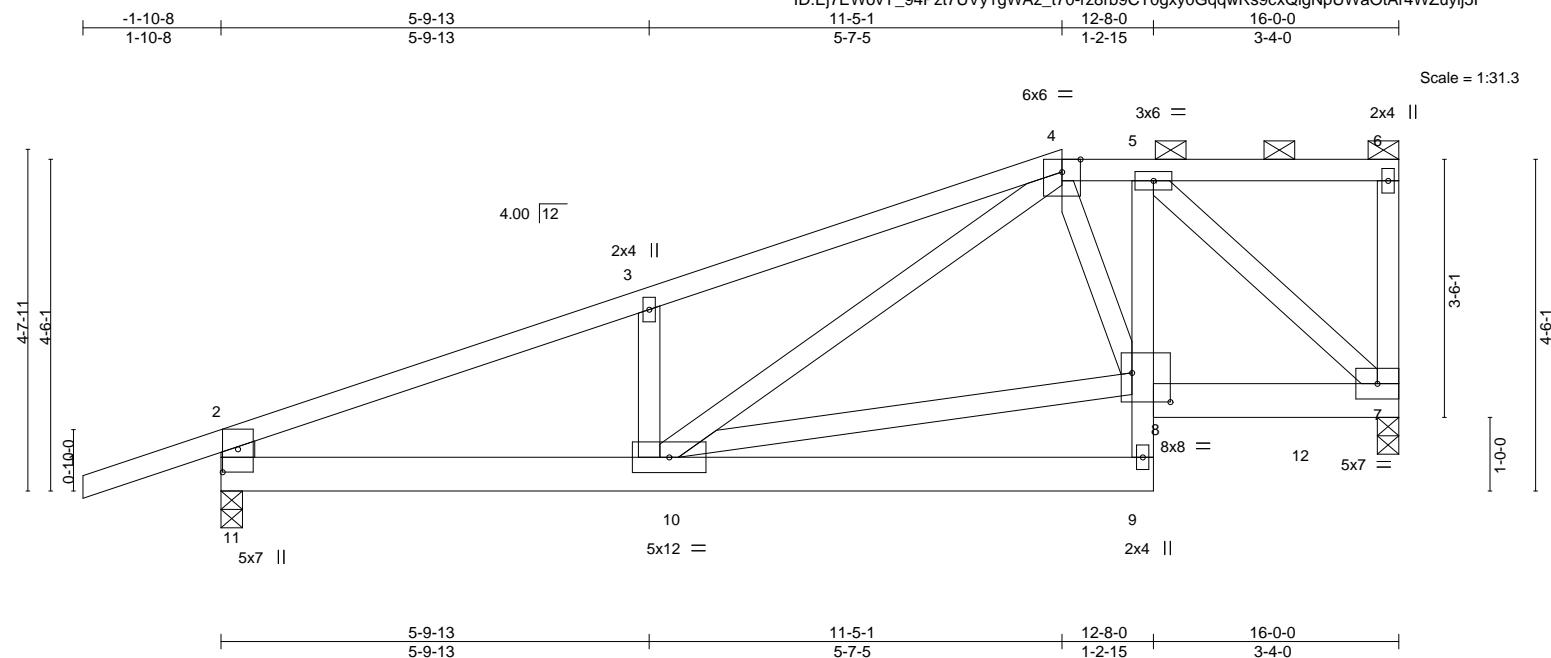


Plate Offsets (X,Y)-- [8:0-6-4,0-4-12], [11:0-3-12,0-2-8]													
<b>LOADING</b> (psf)		<b>SPACING-</b> 2-0-0		<b>CSI.</b>		<b>DEFL.</b> in (loc) l/defl L/d				<b>PLATES</b>		<b>GRIP</b>	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.38	Vert(LL)	-0.04	9-10	>999	360	MT20	197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.55	Vert(CT)	-0.08	9-10	>999	240			
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.20	Horz(CT)	0.01	7	n/a	n/a			
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.03	9-10	>999	240	Weight: 183 lb	FT = 10%	

#### LUMBER-

TOP CHORD 2x4 SPF No.2  
 BOT CHORD 2x6 SP 2400F 2.0E \*Except\*  
 5-9: 2x4 SPF No.2  
 WEBS 2x4 SPF No.2 \*Except\*  
 2-11: 2x6 SPF No.2

#### BRACING-

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

#### REACTIONS.

(size) 7=0-3-8, 11=0-3-8  
 Max Horz 11=178(LC 5)  
 Max Uplift 7=444(LC 4), 11=238(LC 4)  
 Max Grav 7=3641(LC 1), 11=1074(LC 1)

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

TOP CHORD 2-3=-1633/234, 3-4=-1560/283, 4-5=-1573/257, 2-11=-880/245  
 BOT CHORD 10-11=-253/1477, 5-8=-174/1327, 7-8=-233/1733  
 WEBS 3-10=-323/200, 4-10=-335/301, 8-10=-219/1518, 4-8=-124/472, 5-7=-2150/306

#### NOTES-

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.  
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-3-0 oc, 2x4 - 1 row at 0-9-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- 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) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=444, 11=238.
- 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 3162 lb down and 338 lb up at 14-9-9 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

#### LOAD CASE(S) Standard

Continued on page 2



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16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0
W0 114	C3	Half Hip Girder	1	2	I42521648
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871

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**LOAD CASE(S)** Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-2=-70, 2-4=-70, 4-6=-70, 9-11=-20, 7-8=-20

Concentrated Loads (lb)

Vert: 12=-3162(B)

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521649
W0 114	C4	Half Hip	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Fri Aug 21 05:59:59 2020 Page 1  
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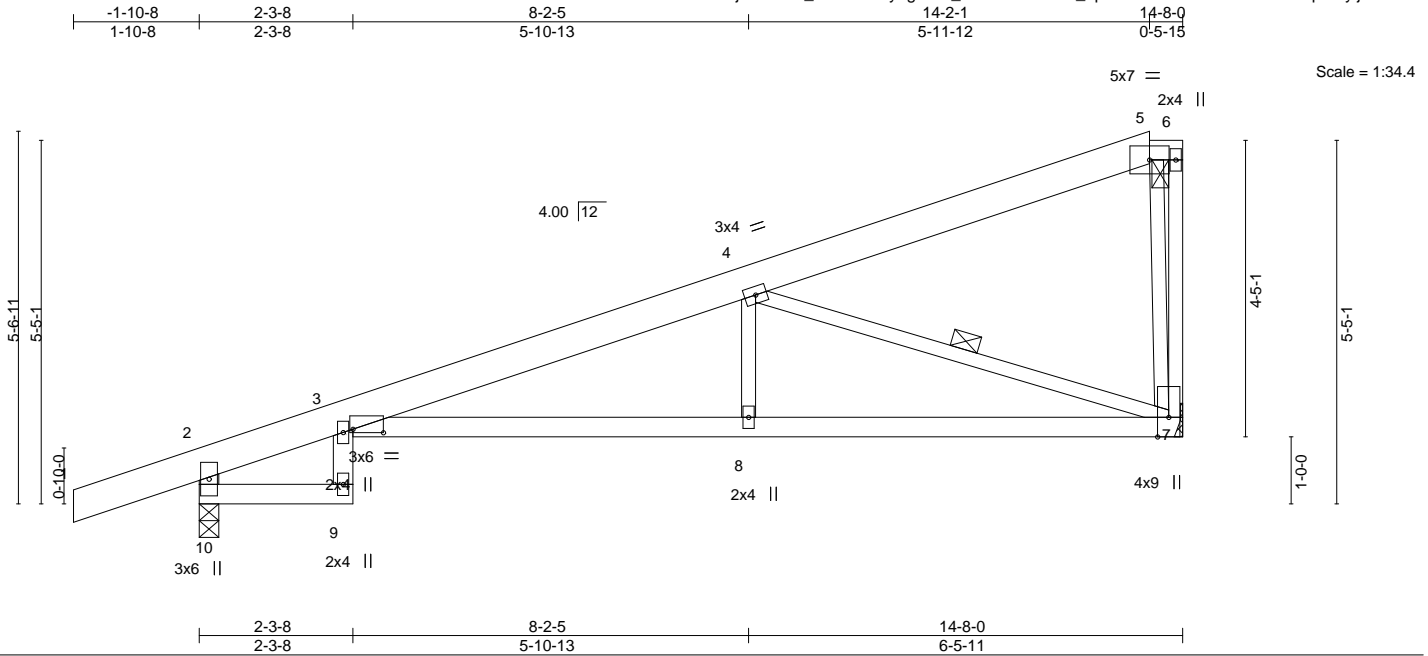


Plate Offsets (X,Y)--		[3:0-5-7,0-0-10]										
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.		in (loc) l/defl L/d		PLATES GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.87	Vert(LL)	-0.19	3-8	>888	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.61	Vert(CT)	-0.38	3-8	>461	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.58	Horz(CT)	0.21	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.13	3-8	>999	240	Weight: 62 lb	FT = 10%

#### LUMBER-

TOP CHORD 2x6 SPF No.2 \*Except\*  
5-6: 2x4 SPF No.2  
BOT CHORD 2x4 SPF No.2  
WEBS 2x3 SPF No.2 \*Except\*  
3-9,2-10: 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 (6-0-0 max.): 5-6.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
WEBS 1 Row at midpt 4-7

#### REACTIONS.

(size) 7=Mechanical, 10=0-3-8  
Max Horz 10=168(LC 5)  
Max Uplift 7=-39(LC 8), 10=-86(LC 4)  
Max Grav 7=639(LC 1), 10=800(LC 1)

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

TOP CHORD 2-3=-266/0, 3-4=-1338/61, 2-10=-795/103  
BOT CHORD 3-8=-76/1271, 7-8=-75/1270  
WEBS 4-8=0/287, 4-7=-1314/110

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



August 21, 2020

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16023 Swingley Ridge Rd  
Chesterfield, MO 63017



Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521650
W0 114	C5	Monopitch	7	1		

Wheeler Lumber, Waverly, KS 66871

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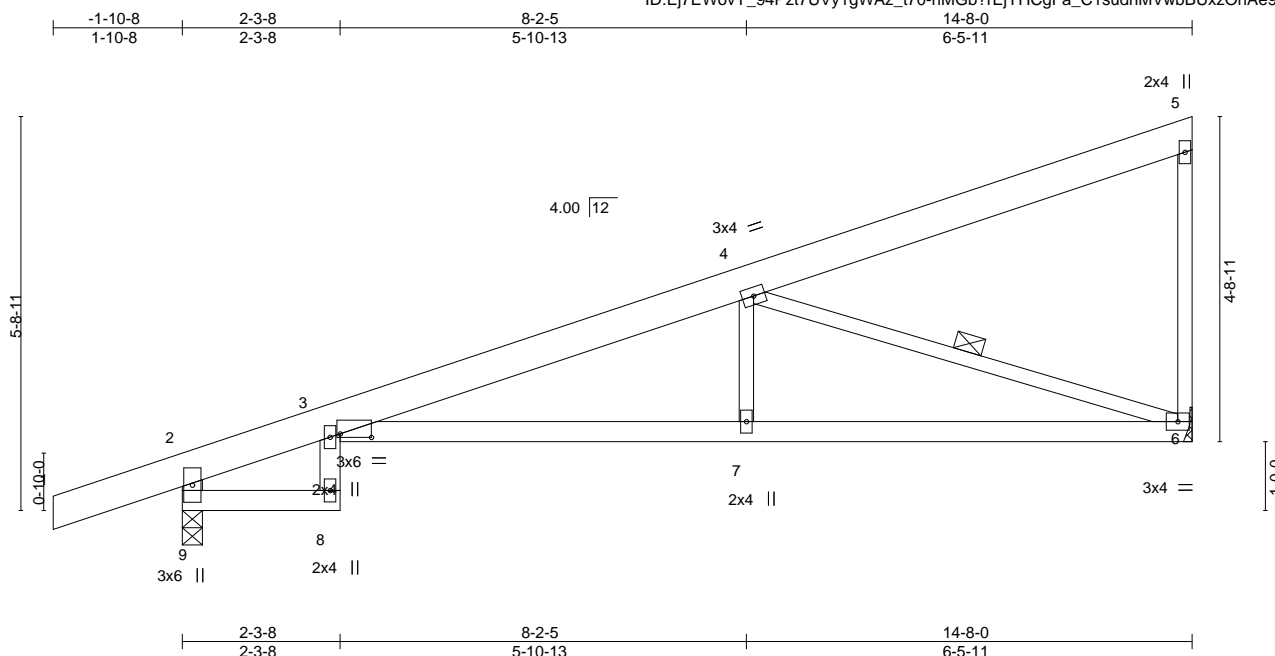


Plate Offsets (X,Y)-- [3:0-5-7,0-0-10]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.87	Vert(LL)	-0.19	3-7	>894	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.61	Vert(CT)	-0.37	3-7	>463	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.59	Horz(CT)	0.21	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.13	3-7	>999	240	Weight: 59 lb	FT = 10%

#### LUMBER-

TOP CHORD 2x6 SPF No.2  
 BOT CHORD 2x4 SPF No.2  
 WEBS 2x3 SPF No.2 \*Except\*  
 3-8,2-9: 2x4 SPF No.2

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 WEBS 1 Row at midpt 4-6

#### REACTIONS.

(size) 6=Mechanical, 9=0-3-8  
 Max Horz 9=174(LC 5)  
 Max Uplift 6=-43(LC 8), 9=-86(LC 4)  
 Max Grav 6=639(LC 1), 9=800(LC 1)

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

TOP CHORD 2-3=-271/0, 3-4=-1347/62, 2-9=-795/102  
 BOT CHORD 3-7=-79/1281, 6-7=-78/1280  
 WEBS 4-7=0/287, 4-6=-1345/118

#### NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) 6, 9.
- 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.



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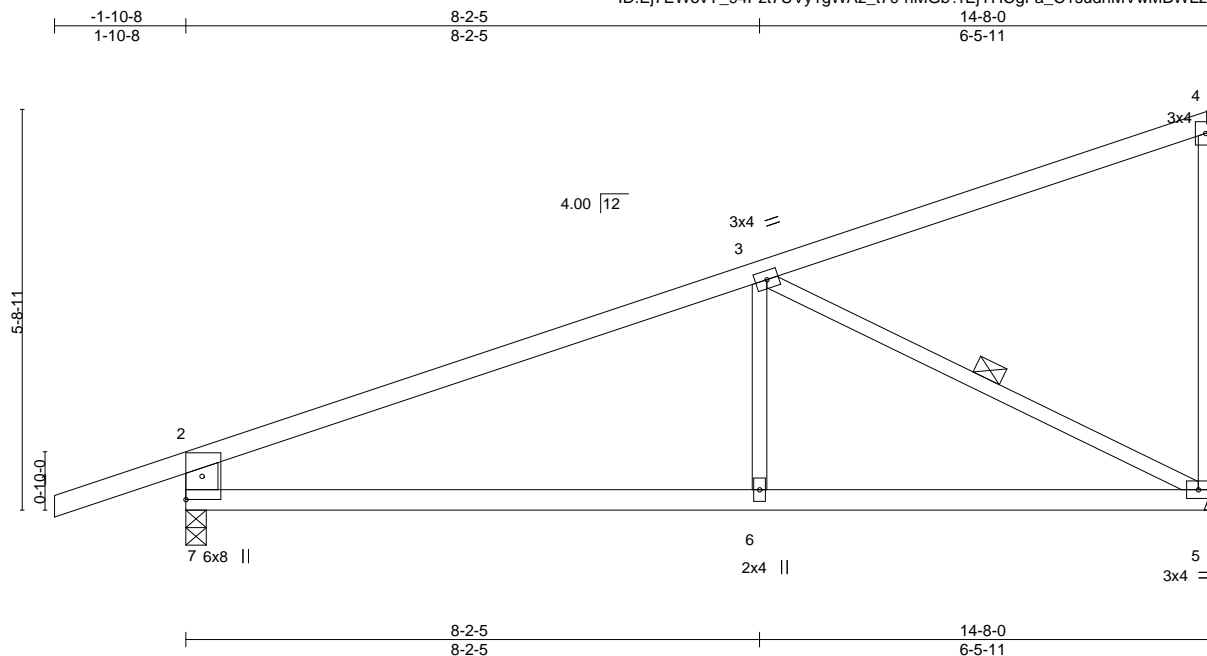
16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521651
W0 114	C6	Monopitch	3	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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Scale = 1:32.9

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.88	Vert(LL)	-0.09	6-7	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.46	Vert(CT)	-0.18	6-7	>934	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.43	Horz(CT)	0.02	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.03	5-6	>999	240	Weight: 50 lb	FT = 10%

#### LUMBER-

TOP CHORD 2x4 SPF No.2  
 BOT CHORD 2x4 SPF No.2  
 WEBS 2x3 SPF No.2 \*Except\*  
 2-7: 2x6 SPF No.2

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 WEBS 1 Row at midpt 3-5

**REACTIONS.** (size) 5=Mechanical, 7=0-3-8  
 Max Horz 7=190(LC 5)  
 Max Uplift 5=-43(LC 8), 7=-89(LC 4)  
 Max Grav 5=634(LC 1), 7=803(LC 1)

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

TOP CHORD 2-3=-928/38, 2-7=-715/134  
 BOT CHORD 6-7=-49/789, 5-6=-49/789  
 WEBS 3-6=0/317, 3-5=-873/89

#### NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) 5, 7.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



August 21, 2020

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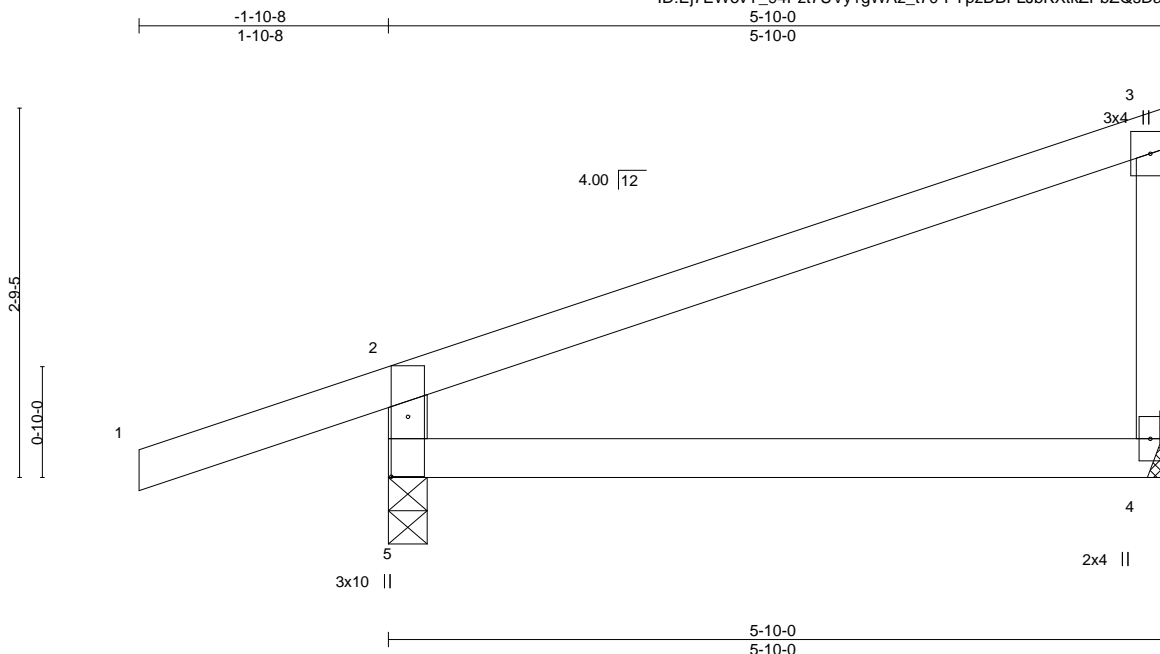


16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521652
W0 114	C7	Monopitch	5	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Fri Aug 21 06:00:01 2020 Page 1  
ID:Ej7EWovY\_94Pzt7UVy1gWAZ\_t70-FYpzDBFLJbKXtkZPbZQsDa2DLawqi\_EKspJAADylj5C



Scale = 1:17.3

Plate Offsets (X,Y)-- [5:0-5-6,0-1-8]									
<b>LOADING</b> (psf)		<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>	
TCLL	25.0	Plate Grip DOL 1.15	TC 0.36	Vert(LL)	-0.04 4-5	>999 360	MT20	197/144	
TCDL	10.0	Lumber DOL 1.15	BC 0.25	Vert(CT)	-0.08 4-5	>846 240			
BCLL	0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT)	-0.00 4	n/a n/a			
BCDL	10.0	Code IRC2018/TPI2014	Matrix-R	Wind(LL)	0.01 4-5	>999 240	Weight: 18 lb	FT = 10%	

#### LUMBER-

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

#### BRACING-

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

#### REACTIONS.

(size) 4=Mechanical, 5=0-3-8  
Max Horz 5=120(LC 5)  
Max Uplift 4=-49(LC 8), 5=-138(LC 4)  
Max Grav 4=226(LC 1), 5=418(LC 1)

#### FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-5=-370/176

#### 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) gable end 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 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) 4 except (jt=lb) 5=138.
- 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.



August 21, 2020

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16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521653
W0 114	C8	Half Hip	1	1		

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Fri Aug 21 06:00:01 2020 Page 1  
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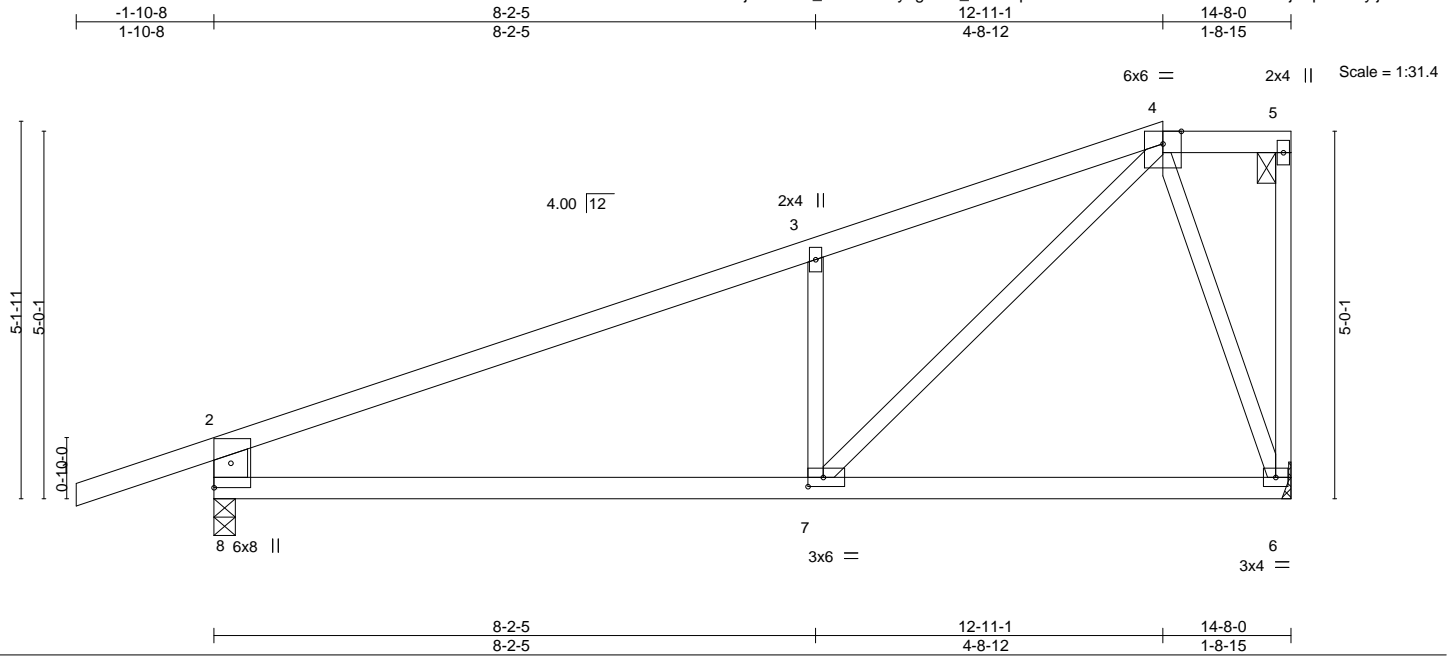


Plate Offsets (X,Y)-- [7:0-2-8,0-1-8]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.90	Vert(LL)	-0.09	7-8	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.46	Vert(CT)	-0.18	7-8	>933	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.35	Horz(CT)	0.01	6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.03	6-7	>999	240	Weight: 52 lb	FT = 10%

#### LUMBER-

TOP CHORD 2x4 SPF No.2  
BOT CHORD 2x4 SPF No.2  
WEBS 2x3 SPF No.2 \*Except\*  
2-8: 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 (6-0-0 max.): 4-5.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS.

(size) 6=Mechanical, 8=0-3-8  
Max Horz 8=220(LC 5)  
Max Uplift 6=129(LC 4), 8=201(LC 4)  
Max Grav 6=634(LC 1), 8=803(LC 1)

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

TOP CHORD 2-3=-913/142, 3-4=-873/232, 2-8=-718/247  
BOT CHORD 7-8=-141/772  
WEBS 3-7=-439/240, 4-7=-210/826, 4-6=-573/133

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- 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) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=129, 8=201.
- 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



August 21, 2020

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16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521654
W0 114	C9	Roof Special	1	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Fri Aug 21 06:00:02 2020 Page 1  
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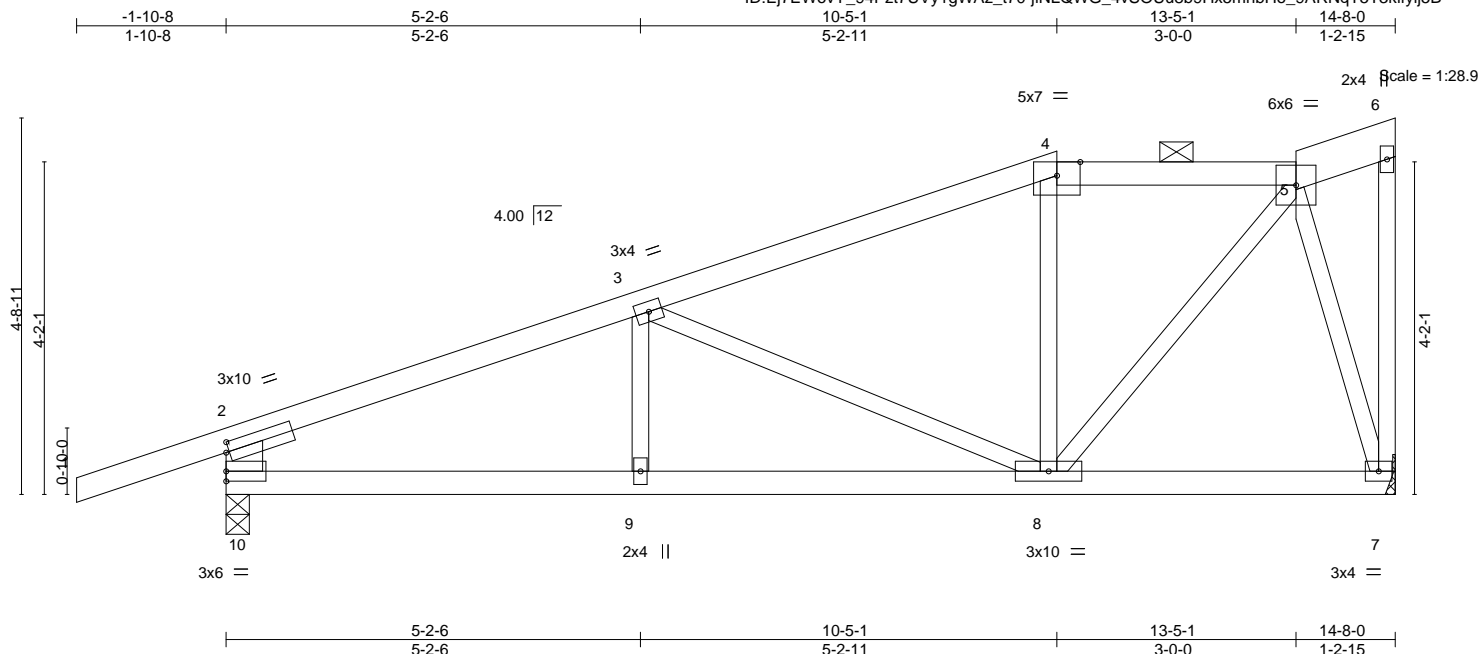


Plate Offsets (X,Y)-- [2:0-0-8,0-1-8]		5-2-6		10-5-1		13-5-1		14-8-0	
		5-2-6		5-2-11		3-0-0		1-2-15	
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 25.0	Plate Grip DOL	1.15	TC 0.82	Vert(LL)	-0.09	8-9	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.69	Vert(CT)	-0.16	8-9	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.30	Horz(CT)	0.02	7	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.07	8-9	>999	Weight: 58 lb	FT = 10%

#### LUMBER-

TOP CHORD 2x4 SPF No.2 \*Except\*  
5-6: 2x6 SPF No.2  
BOT CHORD 2x4 SPF No.2  
WEBS 2x3 SPF No.2 \*Except\*  
2-10: 2x6 SP DSS

#### BRACING-

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

#### REACTIONS.

(size) 7=Mechanical, 10=0-3-8  
Max Horz 10=203(LC 5)  
Max Uplift 7=130(LC 8), 10=204(LC 4)  
Max Grav 7=634(LC 1), 10=803(LC 1)

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

TOP CHORD 2-3=-998/169, 3-4=-584/119, 4-5=-522/138, 2-10=-697/219  
BOT CHORD 9-10=-180/869, 8-9=-180/869  
WEBS 3-8=-385/126, 5-8=-110/563, 5-7=-600/144

#### 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) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=130, 10=204.
- 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.



August 21, 2020

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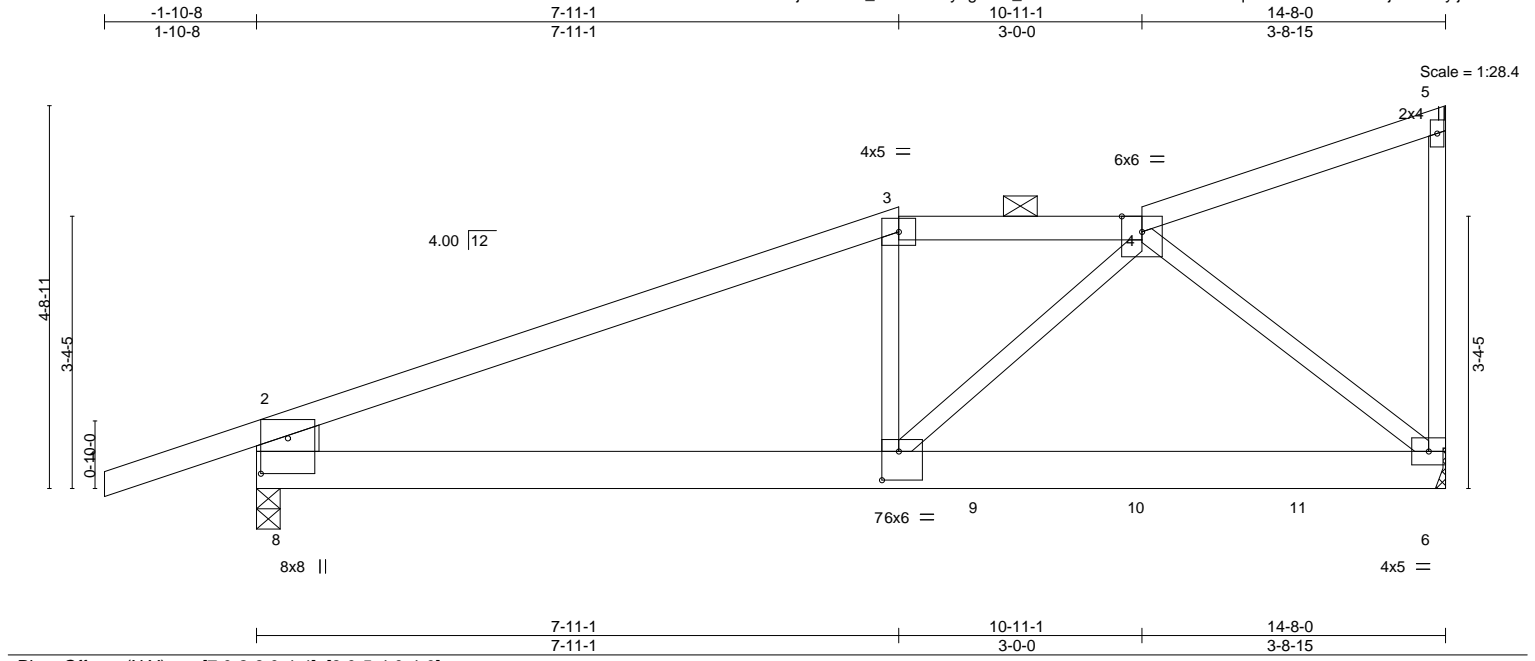


16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521655
W0 114	C10	Roof Special Girder	1	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Fri Aug 21 05:59:56 2020 Page 1  
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LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.94	Vert(LL)	-0.15	MT20	197/144		
TCDL	10.0	Lumber DOL	1.15	BC	0.68	Vert(CT)	-0.27				
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.80	Horz(CT)	0.02				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.14	Weight: 60 lb		FT = 10%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2 *Except* 1-3: 2x4 SPF 2100F 1.8E	TOP CHORD	Structural wood sheathing directly applied or 3-8-6 oc purlins, except end verticals, and 2-0-0 oc purlins (4-3-13 max.): 3-4.
BOT CHORD	2x6 SPF 1650F 1.4E	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x3 SPF No.2 *Except* 2-8: 2x10 SP DSS		

**REACTIONS.** (size) 6=Mechanical, 8=0-3-8  
Max Horz 8=204(LC 22)  
Max Uplift 6=381(LC 8), 8=345(LC 4)  
Max Grav 6=1404(LC 1), 8=1219(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1995/494, 3-4=-1781/498, 2-8=-1098/378  
BOT CHORD 7-8=-464/1791, 6-7=-284/1107  
WEBS 3-7=-113/352, 4-7=-252/942, 4-6=-1415/419

#### NOTES-

- 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) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=381, 8=345.
- 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 503 lb down and 181 lb up at 7-11-1, 211 lb down and 76 lb up at 8-11-13, and 238 lb down and 83 lb up at 10-11-4, and 238 lb down and 83 lb up at 12-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 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

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-2=-70, 2-3=-70, 3-4=-70, 4-5=-70, 6-8=-20



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Continued on page 2

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16023 Swingley Ridge Rd  
Chesterfield, MO 63017



Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521655
W0 114	C10	Roof Special Girder	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Fri Aug 21 05:59:57 2020 Page 2  
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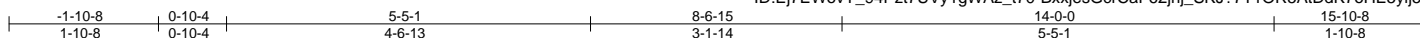
**LOAD CASE(S)** Standard  
Concentrated Loads (lb)  
Vert: 7=-503(B) 9=-211(B) 10=-238(B) 11=-238(B)

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521656
W0 114	D1	Hip Girder	1	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

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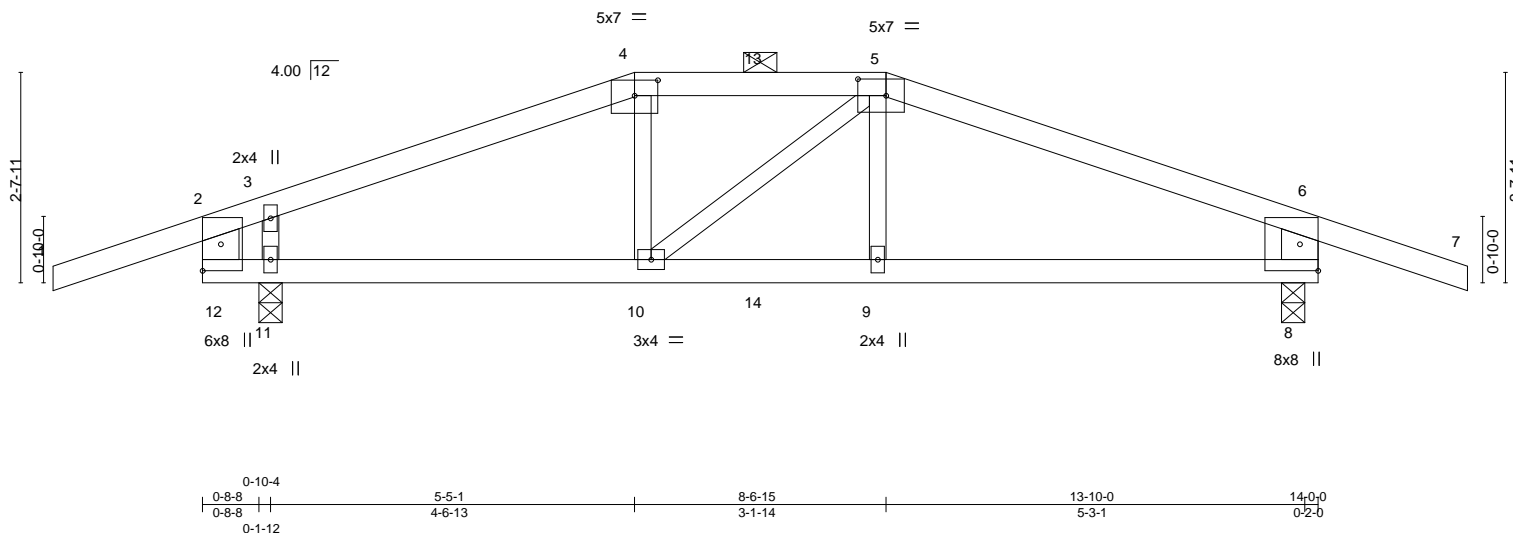


Plate Offsets (X, Y)-- [4:0-3-8,0-2-5], [5:0-4-4,0-2-8]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.73	Vert(LL)	-0.15	9-10	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.90	Vert(CT)	-0.27	9-10	>570	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.10	Horz(CT)	0.02	8	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.14	9-10	>999	240	Weight: 46 lb	FT = 10%

#### LUMBER-

TOP CHORD 2x4 SPF 2100F 1.8E \*Except\*  
4-5: 2x4 SPF No.2  
BOT CHORD 2x4 SPF 2100F 1.8E  
WEBS 2x3 SPF No.2 \*Except\*  
2-12,6-8: 2x6 SP DSS

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-6-6 oc purlins, except end verticals, and 2-0-0 oc purlins (5-4-8 max.): 4-5.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS.

(size) 8=0-3-8, 11=0-3-8  
Max Horz 11=22(LC 8)  
Max Uplift 8=269(LC 5), 11=303(LC 4)  
Max Grav 8=927(LC 1), 11=1021(LC 1)

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

TOP CHORD 2-3=-982/207, 3-4=-1107/265, 4-5=-971/258, 5-6=-1259/292, 2-12=-370/71, 6-8=-813/284  
BOT CHORD 11-12=-181/963, 10-11=-165/963, 9-10=-196/1118, 8-9=-196/1105  
WEBS 5-9=-23/307, 3-11=-432/212

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- 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) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=269, 11=303.
- 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 79 lb down and 64 lb up at 7-0-0 on top chord, and 197 lb down and 86 lb up at 5-5-1, and 27 lb down at 7-0-0, and 197 lb down and 86 lb up at 8-6-15 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 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

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15



August 21, 2020

Continued on page 2

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16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521656
W0 114	D1	Hip Girder	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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ID:Ej7EWovY\_94Pzt7UVy1gWAZ\_t70-BxxjesGcrCaF62nj\_SKJ?7T1OR5AtDdK7oHE5ylj5A

**LOAD CASE(S)** Standard

- Uniform Loads (plf)  
Vert: 1-2=-70, 2-4=-70, 4-5=-70, 5-6=-70, 6-7=-70, 8-12=-20
- Concentrated Loads (lb)  
Vert: 10=-197(F) 9=-197(F) 13=-28(F) 14=-12(F)



Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521658
W0 114	D3	Common	1	1		

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Fri Aug 21 06:00:05 2020 Page 1

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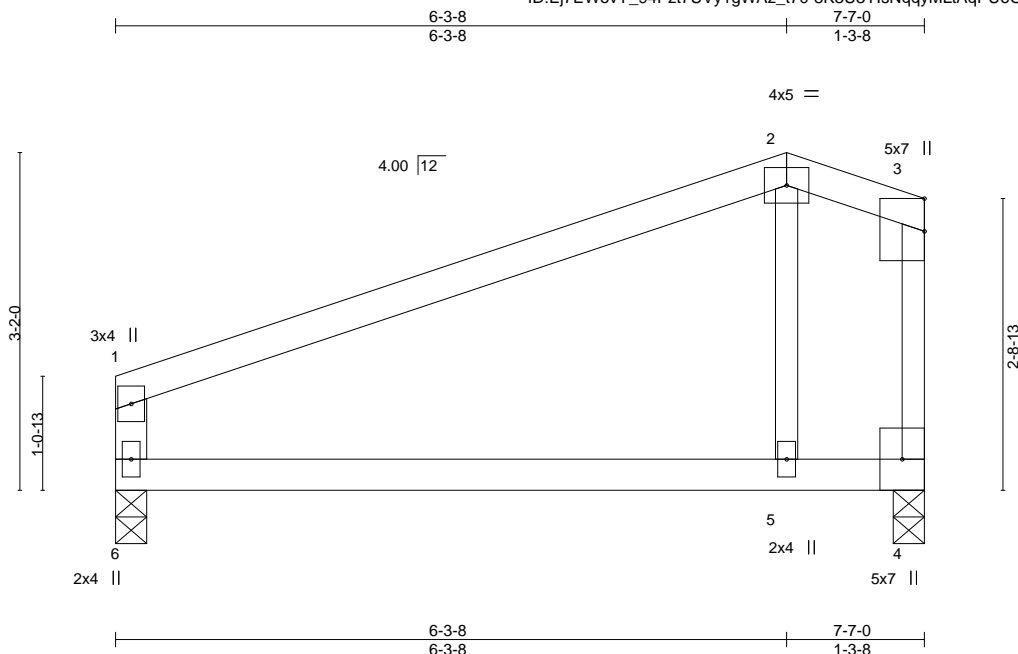


Plate Offsets (X,Y)-- [3:0-3-11,0-0-0]											
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.64	Vert(LL)	-0.07	5-6	>999	360	MT20 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.34	Vert(CT)	-0.17	5-6	>529	240	
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	4	n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.06	5-6	>999	240	Weight: 23 lb FT = 10%

#### LUMBER-

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

#### BRACING-

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

**REACTIONS.** (size) 6=0-3-8, 4=0-3-8  
Max Horz 6=100(LC 5)  
Max Uplift 6=53(LC 4), 4=55(LC 4)  
Max Grav 6=330(LC 1), 4=330(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-6=-257/90

#### 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) gable end 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 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) 6, 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.



August 21, 2020

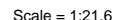
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

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



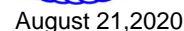
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

8.410 s May 22 2020 MiTek Industries, Inc. Fri Aug 21 06:00:05 2020 Page 1  
ID:Ei7EWovY\_94Pzt7UVV1qWAZ\_t70-8K3U3YIsNaavMLtAgPUoQQDrkCGneopvnRHOJ\_vlj58



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

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDF=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 4.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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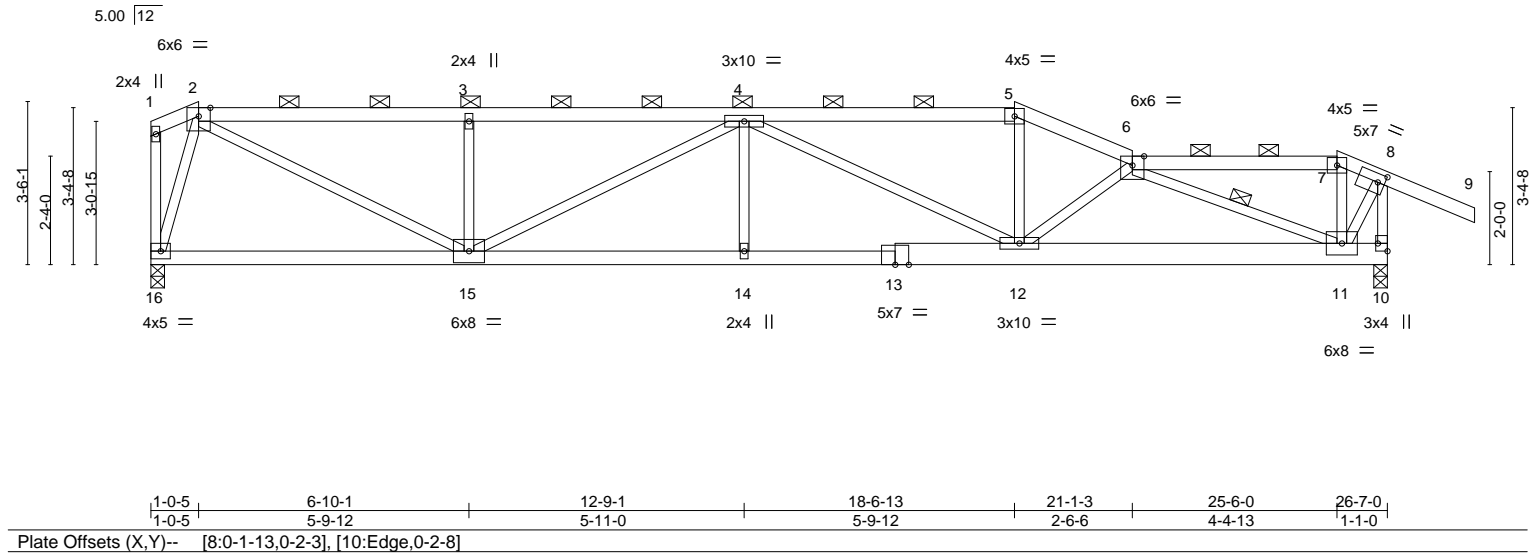
Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521660
W0 114	E1	Roof Special Girder	1	1		

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Fri Aug 21 06:00:07 2020 Page 1  
ID:Ej7EWovY\_94Pzt7UVy1gWAZ\_t70-4iBETEJ6vR4gbf0YyqXGTriB1?g26W5CFImUNsYlj56

1-0-5	6-10-1	12-9-1	18-6-13	21-1-3	25-6-0	26-7-0	28-5-8
1-0-5	5-9-12	5-11-0	5-9-12	2-6-6	4-4-13	1-1-0	1-10-8

Scale = 1:49.5



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.60	Vert(LL)	-0.16 14-15	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.77	Vert(CT)	-0.30 14-15	>999	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.75	Horz(CT)	0.07 10	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.13 14	>999	240	Weight: 107 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 3-8-14 oc purlins, except end verticals, and 2-0-0 oc purlins (3-5-10 max.): 2-5, 6-7.
BOT CHORD 2x4 SPF No.2 *Except* 10-13: 2x6 SPF No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x3 SPF No.2	WEBS 1 Row at midpt 6-11

REACTIONS.	(size) 16=0-3-8, 10=0-3-8
Max Horz 16=-129(LC 6)	
Max Uplift 16=-204(LC 5), 10=-360(LC 5)	
Max Grav 16=1179(LC 1), 10=1255(LC 1)	

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-2004/394, 3-4=-2002/392, 4-5=-2105/387, 5-6=-2323/409, 6-7=-483/114, 7-8=-546/130, 8-10=-1314/309
BOT CHORD	15-16=-61/357, 14-15=-454/2572, 12-14=-454/2573, 11-12=-437/2400
WEBS	2-15=-323/1872, 3-15=-450/181, 4-15=-645/123, 4-12=-698/157, 5-12=-57/607, 6-12=-360/147, 6-11=-2138/387, 2-16=-1215/298, 8-11=-182/1033

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - 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) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 16=204, 10=360.
  - 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.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 29 lb down and 80 lb up at 25-6-0 on top chord, and 139 lb down and 746 lb up at 25-4-15 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
  - 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	



August 21, 2020

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521660
W0 114	E1	Roof Special Girder	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Fri Aug 21 06:00:07 2020 Page 2  
ID:Ej7EWovY\_94Pzt7UVy1gWAZ\_t70-4iBETEJ6vR4gbf0YyqXGTriB1?q26W5CFImUNsylv56

**LOAD CASE(S)** Standard

- Uniform Loads (plf)  
Vert: 1-2=-70, 2-5=-70, 5-6=-70, 6-7=-70, 7-8=-70, 8-9=-70, 10-16=-20
- Concentrated Loads (lb)  
Vert: 7=22(F) 11=57(F)

Wheeler Lumber, Waverly, KS 66871

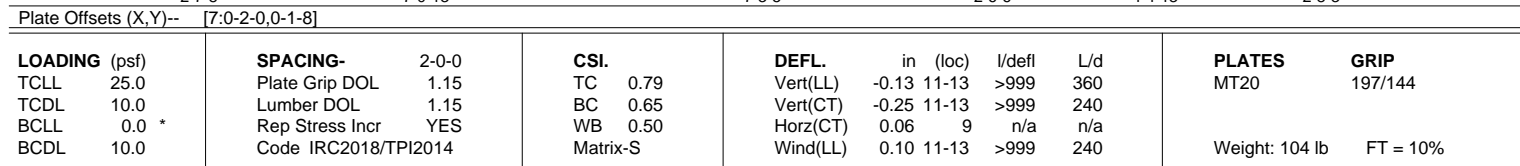
8.410 s May 22 2020 MiTek Industries, Inc. Fri Aug 21 06:00:08 2020 Page 1

ID:Ej7EWovY\_94PztUVy1gWaz\_t70-YulchaKkgICXDpblVX2V02qJpPCFr15MTPW2vJyJf55

2-7-8 9-8-5 16-11-10 19-6-0 23-10-13 26-7-0 28-5-8

2-7-8 7-0-13 7-3-5 2-6-6 4-4-13 2-8-3 1-10-8

Scale = 1:49.1




**REACTIONS.** (size) 15=0-3-8, 9=0-3-8  
 Max Horz 15=-130(LC 4)  
 Max Uplift 15=-176(LC 5), 9=-235(LC 5)  
 Max Grav 15=1182(LC 1), 9=1331(LC 1)

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

TOP CHORD	1-2=-805/156, 2-3=-2037/394, 3-4=-2035/392, 4-5=-2124/357, 5-6=-968/154, 6-7=-1088/161, 1-15=-1185/178, 7-9=-1327/232
BOT CHORD	13-14=-96/753, 11-13=-278/1956, 10-11=-349/2207
WEBS	2-14=-728/202, 2-13=-263/1469, 3-13=-590/240, 4-13=-73/266, 4-11=-12/434, 5-11=-377/140, 5-10=-1448/270, 1-14=-167/1122, 7-10=-137/1202

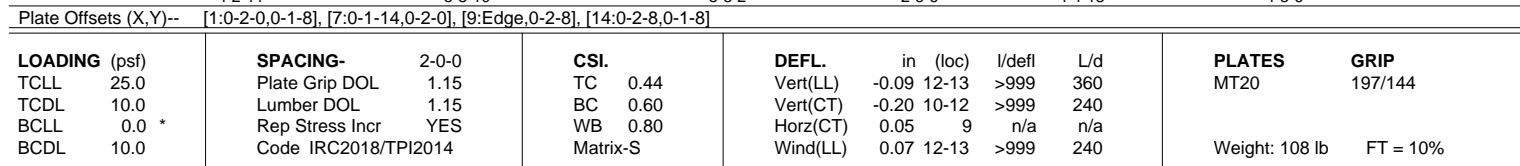
**NOTES-**

- 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) gable end 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 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) except (jt=lb) 15=176, 9=235.
- 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.



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Wheeler Lumber, Waverly, KS 66871 8.410 s May 22 2020 MiTek Industries, Inc. Fri Aug 21 06:00:09 2020 Page 1  
ID:Ej7EWovY\_94Pzt7UvY1gWAz\_t70-05l?uwLNR2KOqzAx3FZkYGNZ1pZCaPoVl3Pb5ly5j4  
4-2-11 9-8-5 15-4-6 17-10-13 22-3-10 26-7-0 28-5-8  
4-2-11 5-5-10 5-8-2 2-6-6 4-4-13 4-3-6 1-10-8  
Scale = 1:49.3



**REACTIONS.** (size) 15=0-3-8, 9=0-3-8  
 Max Horz 15=-128(LC 4)  
 Max Uplift 15=-153(LC 5), 9=-218(LC 5)  
 Max Grav 15=1182(LC 1), 9=1331(LC 1)

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

TOP CHORD	1-2=1053/187, 2-3=1688/324, 3-4=1686/323, 4-5=1901/319, 5-6=1203/194, 6-7=1364/195, 1-15=1149/173, 7-9=1302/231
BOT CHORD	13-14=105/944, 12-13=222/1741, 10-12=292/2005
WEBS	2-14=539/151, 2-13=171/991, 3-13=465/186, 4-12=42/485, 5-12=446/154, 5-10=1003/192, 6-10=0/264, 1-14=147/1120, 7-10=143/1304

- 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) gable end 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 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) except (jt=lb) 15=153, 9=218.
  - 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.



August 21, 2020

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521663
W0 114	E4	Roof Special	1	1		

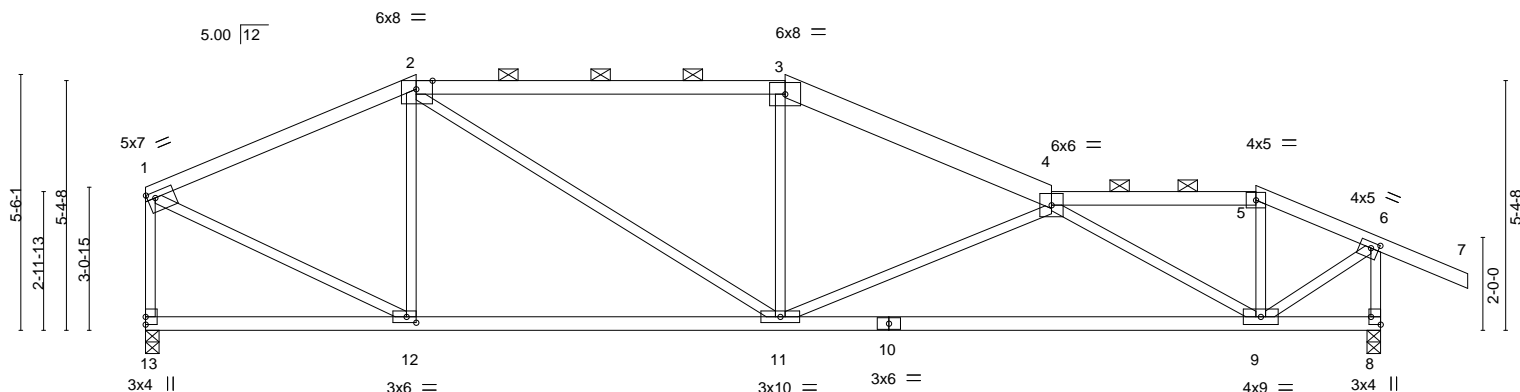
Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Fri Aug 21 06:00:10 2020 Page 1

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5-9-14	13-9-3	19-6-0	23-10-13	26-7-0	28-5-8
5-9-14	7-11-5	5-8-13	4-4-13	2-8-3	1-10-8

Scale = 1:49.6



	5-9-14	13-9-3	19-6-0	23-10-13	26-7-0
	5-9-14	7-11-5	5-8-13	4-4-13	2-8-3

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

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.74	Vert(LL)	-0.24	9-11	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.88	Vert(CT)	-0.50	9-11	>630	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.97	Horz(CT)	0.05	8	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.06	9-11	>999	240	Weight: 106 lb	FT = 10%

#### LUMBER-

TOP CHORD 2x4 SPF No.2 \*Except\*  
2-3: 2x4 SPF 2100F 1.8E, 3-4: 2x6 SPF No.2  
BOT CHORD 2x4 SPF No.2  
WEBS 2x3 SPF No.2

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-6-15 oc purlins, except end verticals, and 2-0-0 oc purlins (4-4-5 max.): 2-3, 4-5.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 8-9.

#### REACTIONS.

(size) 13=0-3-8, 8=0-3-8  
Max Horz 13=-126(LC 4)  
Max Uplift 13=-124(LC 5), 8=-206(LC 5)  
Max Grav 13=1182(LC 1), 8=1331(LC 1)

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

TOP CHORD 1-2=-1221/188, 2-3=-1591/256, 3-4=-1784/248, 4-5=-998/117, 5-6=-1120/112,  
1-13=-1134/152, 6-8=-1365/180  
BOT CHORD 11-12=-93/1078, 9-11=-292/2188  
WEBS 2-12=-390/142, 2-11=-94/681, 3-11=0/297, 4-11=-663/230, 4-9=-1391/256,  
1-12=-129/1166, 6-9=-77/1246

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- 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) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 13=124, 8=206.
- 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



August 21, 2020

**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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16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	142521664
W0 114	E5	Roof Special Girder	1	1		
Job Reference (optional)						

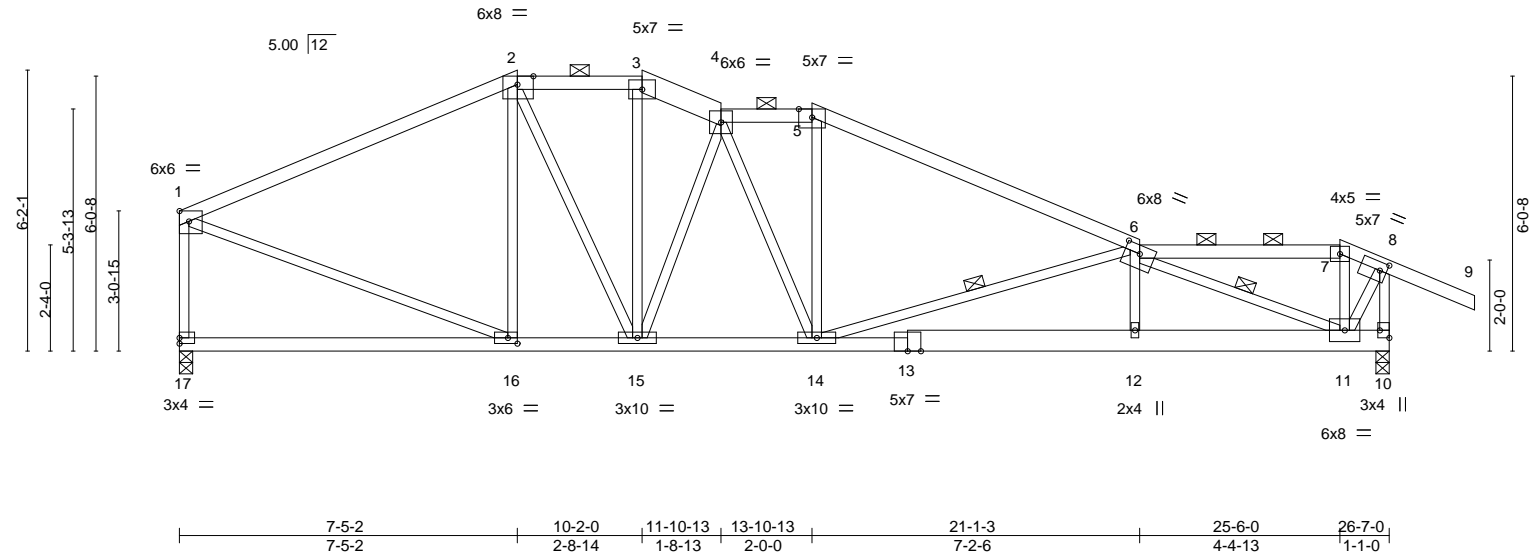
Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Fri Aug 21 06:00:11 2020 Page 1

ID:Ej7EWovY\_94Pzt7UVy1gWAZ\_t70-yTQLJbNdzga64GKKbfbCdhSrUcCL2MJo9NkiWeylj52

7-5-2	10-2-0	11-10-13	13-10-13	21-1-3	25-6-0	26-7-0	28-5-8
7-5-2	2-8-14	1-8-13	2-0-0	7-2-6	4-4-13	1-1-0	1-10-8

Scale = 1:50.6



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.70	Vert(LL)	-0.12 12-14	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.75	Vert(CT)	-0.22 12-14	>999	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.60	Horz(CT)	0.05 10	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.09 12-14	>999	240	Weight: 122 lb	FT = 10%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SPF No.2 *Except* 1-2,5-6: 2x4 SPF 2100F 1.8E, 3-4: 2x6 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 4-5-2 oc purlins, except end verticals, and 2-0-0 oc purlins (4-3-12 max.): 2-3, 4-5, 6-7.
BOT CHORD 2x4 SPF No.2 *Except* 10-13: 2x6 SPF No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x3 SPF No.2	WEBS 1 Row at midpt 6-14, 6-11

<b>REACTIONS.</b>	(size) 17=0-3-8, 10=0-3-8
	Max Horz 17=-124(LC 6)
	Max Uplift 17=-101(LC 8), 10=-333(LC 9)
	Max Grav 17=1179(LC 1), 10=1255(LC 1)

<b>FORCES.</b>	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	1-2=-1290/171, 2-3=-1262/228, 3-4=-1364/229, 4-5=-1561/291, 5-6=-1790/265, 6-7=-481/128, 7-8=-555/143, 1-17=-1112/137, 8-10=-1339/326
BOT CHORD	15-16=-57/1112, 14-15=-120/1502, 12-14=-373/2452, 11-12=-377/2447
WEBS	2-16=-274/114, 2-15=-116/468, 3-15=-60/367, 4-15=-722/179, 5-14=0/320, 6-14=-923/234, 6-11=-2182/305, 1-16=-83/1130, 8-11=-210/1032

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 17=101, 10=333.
  - 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.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 29 lb down and 80 lb up at 25-6-0 on top chord, and 139 lb down and 746 lb up at 25-4-15 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
  - 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



August 21, 2020

Continued on page 2

**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 114 W0	I42521664
W0 114	E5	Roof Special Girder	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Fri Aug 21 06:00:12 2020 Page 2  
ID:Ej7EWovY\_94Pzt7UVy1gWAZ\_t70-Qg\_7XxNFjzizhQvWkN6RAu?0E0YanpZxO1UF24ylj51

**LOAD CASE(S)** Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-2=-70, 2-3=-70, 3-4=-70, 4-5=-70, 5-6=-70, 6-7=-70, 7-8=-70, 8-9=-70, 10-17=-20  
Concentrated Loads (lb)  
Vert: 7=22(B) 11=57(B)

 **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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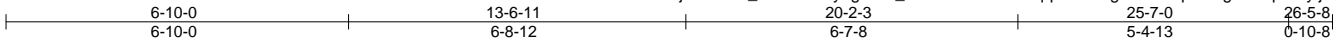


16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521665
W0 114	G1	Half Hip Girder	1	1		

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Fri Aug 21 06:00:13 2020 Page 1  
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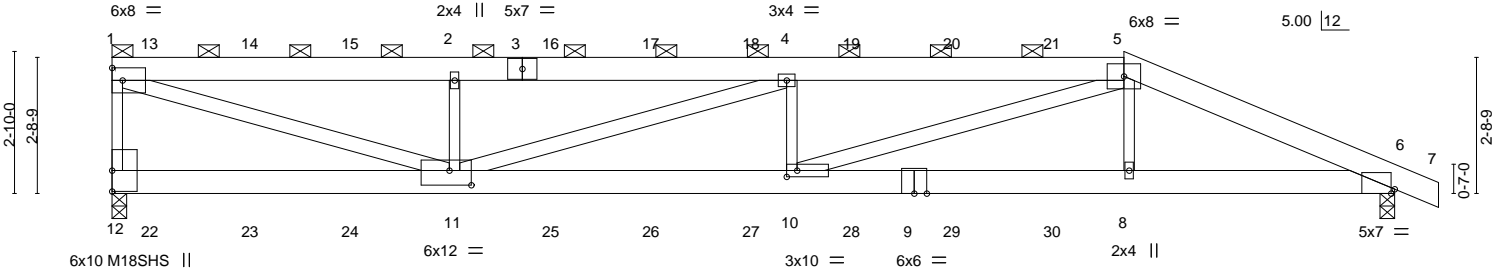


Plate Offsets (X,Y)--	6:0-0-14,Edge], [10:0-2-8,0-1-8], [11:0-5-4,0-3-8]
-----------------------	--

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.96	Vert(LL)	-0.30 10-11	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.96	Vert(CT)	-0.56 10-11	>546	240	M18SHS	197/144
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.68	Horz(CT)	0.09 6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.26 10-11	>999	240	Weight: 124 lb	FT = 10%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SPF No.2 *Except* 3-5: 2x6 SPF 1650F 1.4E	TOP CHORD Structural wood sheathing directly applied or 3-3-7 oc purlins, except end verticals, and 2-0-0 oc purlins (2-2-1 max.): 1-5.
BOT CHORD 2x6 SPF No.2 *Except* 9-12: 2x6 SPF 1650F 1.4E	BOT CHORD Rigid ceiling directly applied or 8-0-1 oc bracing.
WEBS 2x3 SPF No.2 *Except* 1-11,4-11,5-10: 2x4 SPF 2100F 1.8E	

**REACTIONS.** (size) 12=0-3-8, 6=0-3-8  
Max Horz 12=-103(LC 4)  
Max Uplift 12=-428(LC 4), 6=-397(LC 5)  
Max Grav 12=2125(LC 1), 6=2054(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-12=-1971/487, 1-2=-4799/986, 2-4=-4799/986, 4-5=-6090/1255, 5-6=-4493/872  
BOT CHORD 10-11=-1176/6086, 8-10=-745/4029, 6-8=-745/4054  
WEBS 1-11=-1008/4983, 2-11=-874/405, 4-11=-1358/290, 4-10=-474/304, 5-10=-457/2277, 5-8=-3/588

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - 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) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - All plates are MT20 plates unless otherwise indicated.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 12=428, 6=397.
  - 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.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 113 lb down and 88 lb up at 0-9-8, 108 lb down and 90 lb up at 2-9-8, 108 lb down and 90 lb up at 4-9-8, 108 lb down and 90 lb up at 6-9-8, 108 lb down and 90 lb up at 8-9-8, 108 lb down and 90 lb up at 10-9-8, 108 lb down and 90 lb up at 12-9-8, 108 lb down and 90 lb up at 14-9-8, and 108 lb down and 90 lb up at 16-9-8, and 108 lb down and 90 lb up at 18-9-8 on top chord, and 73 lb down at 0-9-8, 67 lb down at 2-9-8, 67 lb down at 4-9-8, 67 lb down at 6-9-8, 67 lb down at 8-9-8, 67 lb down at 10-9-8, 67 lb down at 12-9-8, 67 lb down at 14-9-8, 67 lb down at 16-9-8, and 67 lb down at 18-9-8, and 354 lb down and 117 lb up at 20-2-3 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

On the CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).



August 21,2020

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0
W0 114	G1	Half Hip Girder	1	1	I42521665
Job Reference (optional)					

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Fri Aug 21 06:00:13 2020 Page 2  
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LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
  - Uniform Loads (plf)
    - Vert: 1-5=-70, 5-7=-70, 6-12=-20
  - Concentrated Loads (lb)
    - Vert: 11=-43(F) 2=-103(F) 8=-354(F) 13=-113(F) 14=-103(F) 15=-103(F) 16=-103(F) 17=-103(F) 18=-103(F) 19=-103(F) 20=-103(F) 21=-103(F) 22=-46(F) 23=-43(F) 24=-43(F) 25=-43(F) 26=-43(F) 27=-43(F) 28=-43(F) 29=-43(F) 30=-43(F)

Wheeler Lumber, Waverly, KS 66871

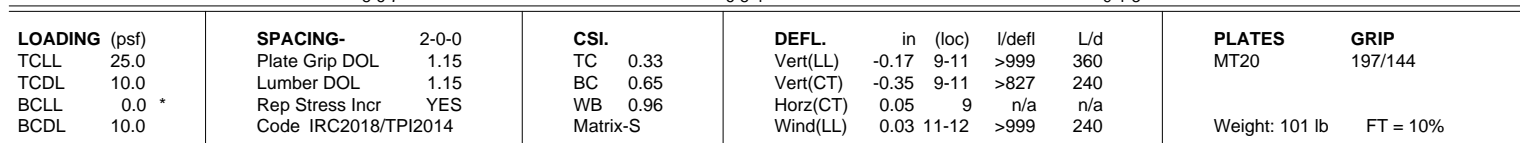
8.410 s May 22 2020 MiTek Industries, Inc. Fri Aug 21 06:00:16 2020 Page 1

ID:Ej7EWovY\_94Pzt7UVy1gWAZ\_t70-JRDeMJQmnCDPA1ChzDBNKKAnxd0jY1XJfSBrylj4z

4-3-1 8-6-7 13-2-11 15-2-11 19-9-6 24-3-14 26-2-6

4-3-1 4-3-6 4-8-4 2-0-0 4-6-11 4-6-8 1-10-8

Scale: 1/4"=1'

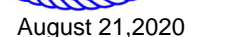


**REACTIONS.** (size) 13=Mechanical, 9=0-3-8  
Max Horz 13=-110(LC 6)  
Max Uplift 9=-51(LC 9)  
Max Grav 13=1077(LC 1), 9=1231(LC 1)

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

TOP CHORD	2-3=-1084/64, 3-4=-1069/51, 4-5=-1389/64, 5-6=-1569/52, 6-7=-282/0, 7-9=-375/47
BOT CHORD	12-13=0/789, 11-12=0/1460, 9-11=-36/1450
WEBS	2-12=0/308, 3-12=0/467, 4-12=-709/83, 5-11=0/338, 2-13=-1160/22, 6-9=-1501/104

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDF=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521667
W0 114	G3	Roof Special	1	1		

Wheeler Lumber, Waverly, KS 66871

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3-3-10	8-1-6	8-11-8	14-9-14	16-9-14	24-3-14	26-2-6
3-3-10	4-9-12	0-10-2	5-10-6	2-0-0	7-6-0	1-10-8

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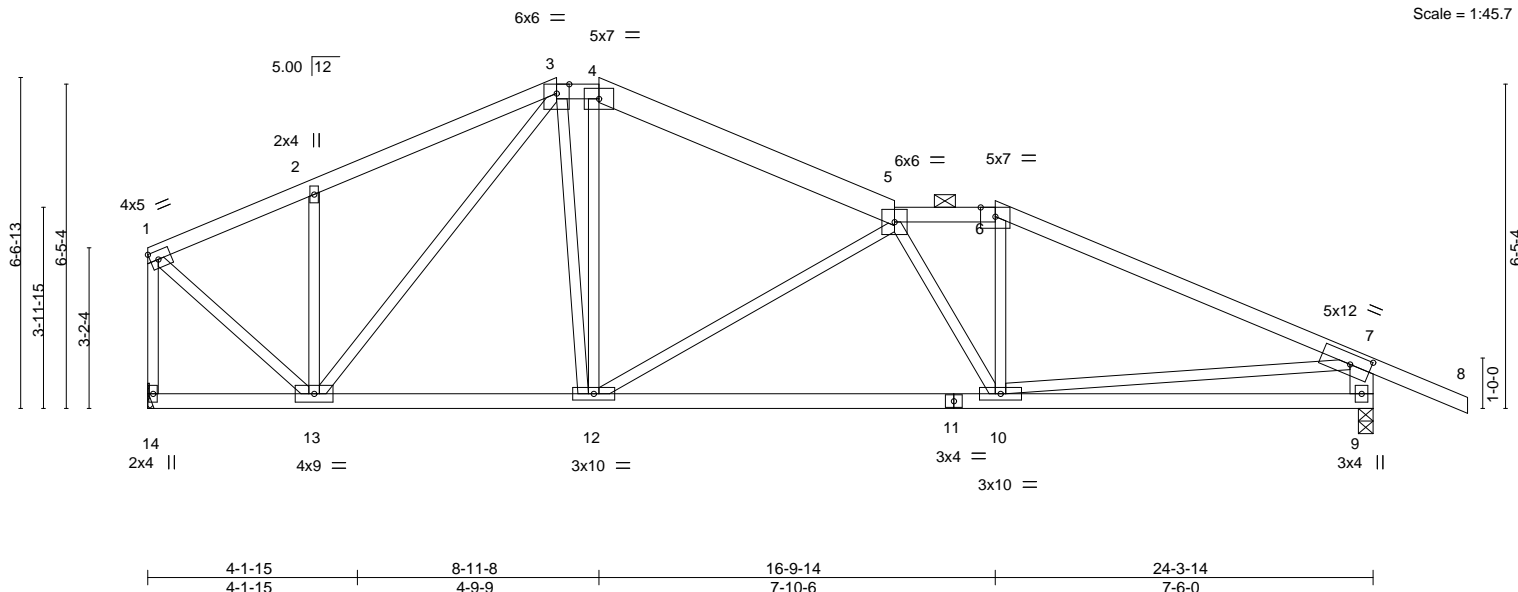


Plate Offsets (X,Y)-- [7:0-4-15,0-2-8]											
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES GRIP			
TCLL	25.0	Plate Grip DOL	1.15	TC	0.77	Vert(LL)	-0.10 10-12	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.59	Vert(CT)	-0.22 10-12	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.92	Horz(CT)	0.03 9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.03 10-12	>999	240	Weight: 107 lb	FT = 10%

#### LUMBER-

TOP CHORD 2x4 SPF No.2 \*Except\*  
4-5: 2x6 SPF No.2  
BOT CHORD 2x4 SPF No.2  
WEBS 2x3 SPF No.2 \*Except\*  
7-9: 2x6 SPF No.2

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-3-14 oc purlins, except end verticals, and 2-0-0 oc purlins (4-7-12 max.): 3-4, 5-6.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS.

(size) 14=Mechanical, 9=0-3-8  
Max Horz 14=-110(LC 6)  
Max Uplift 9=-50(LC 9)  
Max Grav 14=1073(LC 1), 9=1233(LC 1)

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

TOP CHORD 1-2=-813/27, 2-3=-852/63, 3-4=-994/65, 4-5=-1133/47, 5-6=-1471/62, 6-7=-1709/40,  
1-14=-1045/8, 7-9=-1165/88  
BOT CHORD 12-13=0/947, 10-12=0/1626, 9-10=-69/416  
WEBS 2-13=-318/101, 3-13=-398/0, 3-12=-20/506, 5-12=-747/89, 5-10=-317/30, 6-10=0/351,  
1-13=0/984, 7-10=0/1068

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



August 21, 2020

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16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521668
W0 114	G4	Roof Special	1	1		

Wheeler Lumber, Waverly, KS 66871

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6-6-3	10-6-11	16-5-1	18-5-1	24-3-14	26-2-6
6-6-3	4-0-8	5-10-6	2-0-0	5-10-13	1-10-8

Scale = 1:45.8

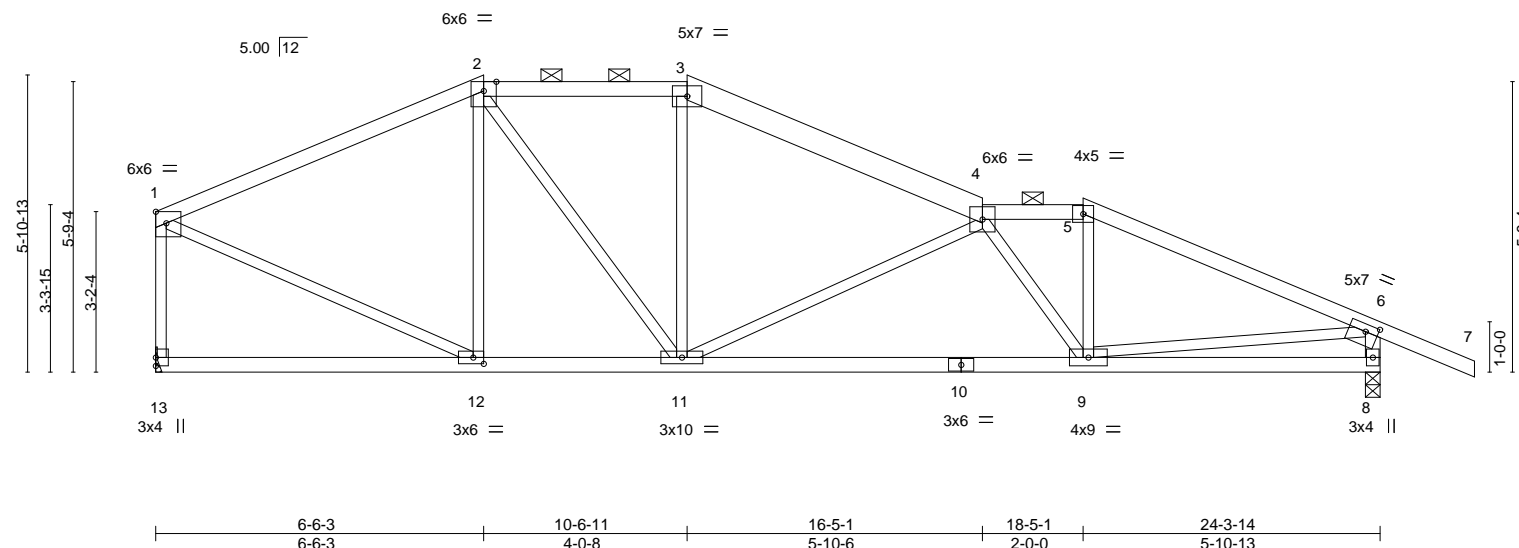


Plate Offsets (X,Y)-- [1:Edge,0-2-12], [6:0-3-0,0-1-12], [12:0-2-8,0-1-8]									
<b>LOADING</b> (psf)		<b>SPACING-</b> 2-0-0		<b>CSI.</b>		<b>DEFL.</b> in (loc) l/defl L/d		<b>PLATES</b>	<b>GRIP</b>
TCLL	25.0	Plate Grip DOL	1.15	TC	0.71	Vert(LL)	-0.12 9-11 >999 360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.62	Vert(CT)	-0.27 9-11 >999 240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.82	Horz(CT)	0.03 8 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.04 9-11 >999 240	Weight: 101 lb	FT = 10%

#### LUMBER-

TOP CHORD 2x4 SPF No.2 \*Except\*  
3-4: 2x6 SPF No.2  
BOT CHORD 2x4 SPF No.2  
WEBS 2x3 SPF No.2 \*Except\*  
6-8: 2x4 SPF No.2

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-5-6 oc purlins, except end verticals, and 2-0-0 oc purlins (4-8-3 max.): 2-3, 4-5.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS.

(size) 13=Mechanical, 8=0-3-8  
Max Horz 13=-110(LC 6)  
Max Uplift 8=-45(LC 9)  
Max Grav 13=1077(LC 1), 8=1231(LC 1)

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

TOP CHORD 1-2=-1095/37, 2-3=-1180/51, 3-4=-1334/30, 4-5=-1525/44, 5-6=-1749/25,  
1-13=-1015/21, 6-8=-1178/69  
BOT CHORD 11-12=0/944, 9-11=0/1830  
WEBS 2-12=-321/59, 2-11=-24/483, 4-11=-735/92, 4-9=-540/43, 5-9=0/410, 1-12=0/988,  
6-9=0/1313

#### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



August 21,2020

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16023 Swingley Ridge Rd  
Chesterfield, MO 63017



Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521669
W0 114	G5	Roof Special	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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ID:Ej7EWovY\_94Pzt7UVy1gWAZ\_t70-FqLOn?S0JpT6PLMg5eDrP9F4xRcEBWTqmyxaFkyli4x

4-11-0	12-1-14	18-0-4	20-0-4	24-3-14	26-2-6
4-11-0	7-2-14	5-10-6	2-0-0	4-3-10	1-10-8

Scale = 1:45.8

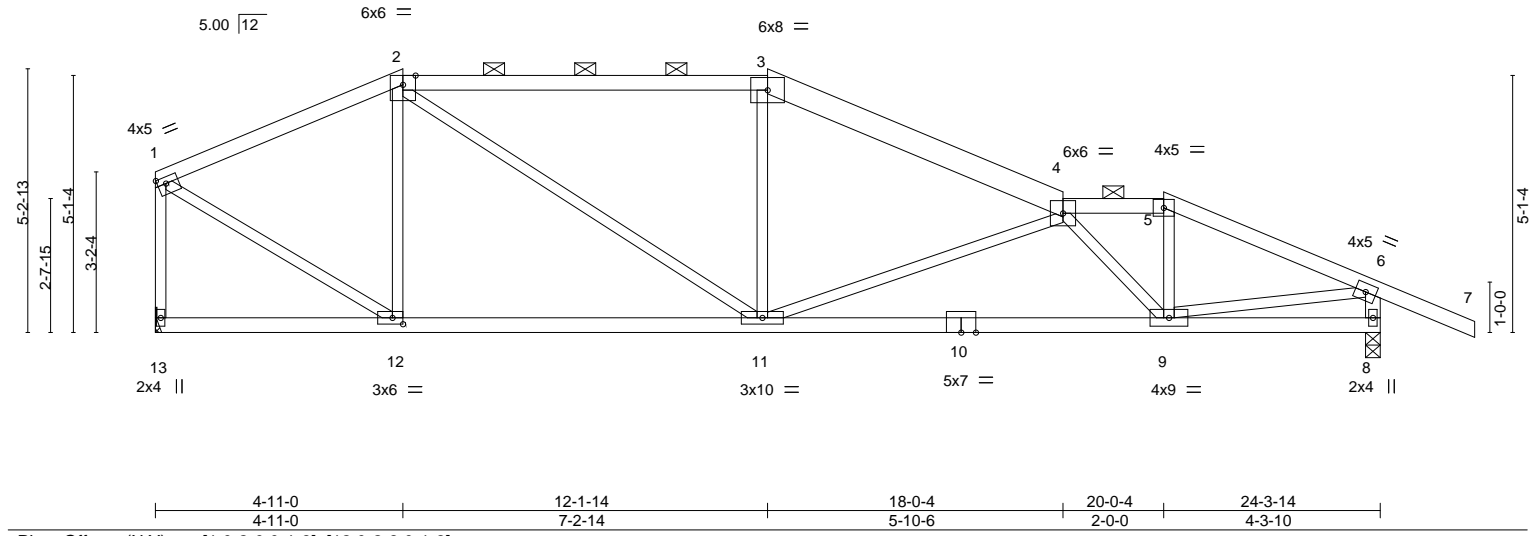


Plate Offsets (X, Y)--		[1:0-2-0,0-1-8], [12:0-2-8,0-1-8]									
<b>LOADING</b> (psf)		<b>SPACING-</b>	2-0-0	<b>CSI.</b>		<b>DEFL.</b>	in (loc)	L/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 25.0		Plate Grip DOL	1.15	TC 0.55		Vert(LL)	-0.11 9-11	>999	360	MT20	197/144
TCDL 10.0		Lumber DOL	1.15	BC 0.67		Vert(CT)	-0.25 9-11	>999	240		
BCLL 0.0 *		Rep Stress Incr	YES	WB 0.70		Horz(CT)	0.04 8	n/a	n/a		
BCDL 10.0		Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.04 9-11	>999	240	Weight: 98 lb	FT = 10%

**LUMBER-**  
TOP CHORD 2x4 SPF No.2 \*Except\*  
2-3: 2x4 SPF 2100F 1.8E, 3-4: 2x6 SPF No.2  
BOT CHORD 2x4 SPF No.2  
WEBS 2x3 SPF No.2 \*Except\*  
6-8: 2x4 SPF No.2

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 4-2-13 oc purlins, except end verticals, and 2-0-0 oc purlins (4-9-15 max.): 2-3, 4-5.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 13=Mechanical, 8=0-3-8  
Max Horz 13=-110(LC 6)  
Max Uplift 13=-3(LC 4), 8=-39(LC 5)  
Max Grav 13=1077(LC 1), 8=1231(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-1007/45, 2-3=-1396/48, 3-4=-1560/37, 4-5=-1489/21, 5-6=-1692/7, 1-13=-1040/22, 6-8=-1194/51  
BOT CHORD 11-12=0/893, 9-11=0/2020  
WEBS 2-12=-417/82, 2-11=-19/660, 4-11=-675/94, 4-9=-806/51, 5-9=0/459, 1-12=-8/1021, 6-9=0/1437

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 6) Refer to girder(s) for truss to truss connections.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 13, 8.
  - 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



August 21, 2020

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16023 Swingley Ridge Rd  
Chesterfield, MO 63017

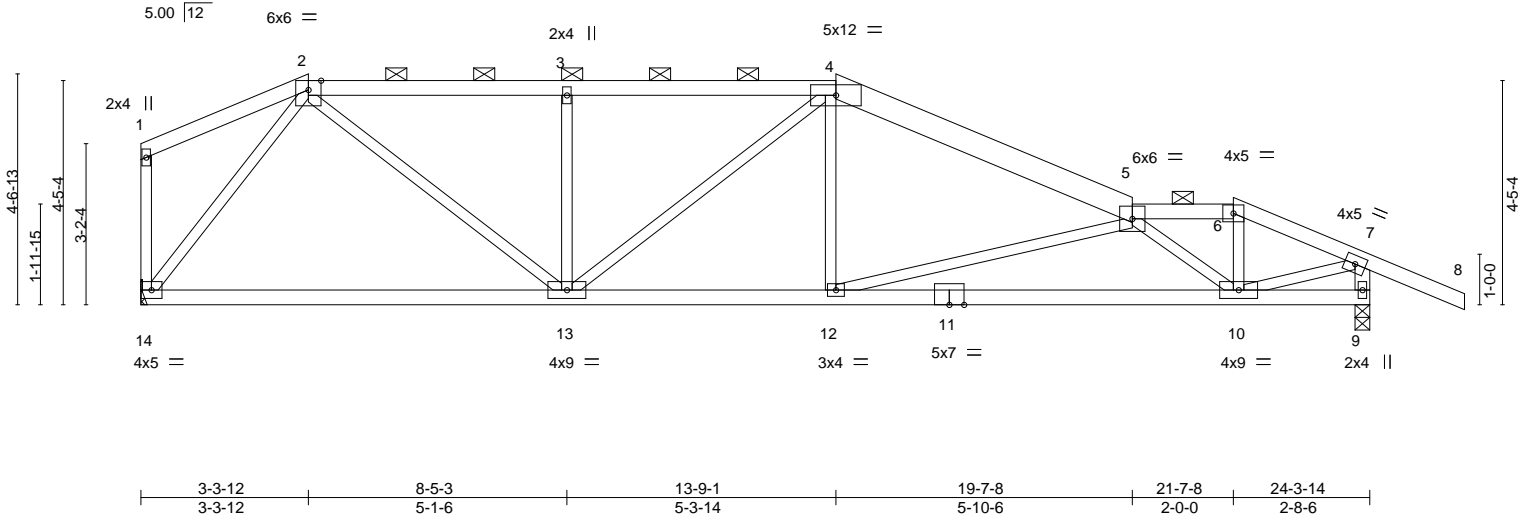
Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521670
W0 114	G6	Roof Special	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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ID:Ej7EWovY\_94Pzt7UVy1gWAZ\_t70-j0vn?LTte47bz1VxsfLk4yNolbrxWwxNz?cg7nAylj4w

3-3-12	8-5-3	13-9-1	19-7-8	21-7-8	24-3-14	26-2-6
3-3-12	5-1-6	5-3-14	5-10-6	2-0-0	2-8-6	1-10-8

Scale = 1:45.6



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.37	Vert(LL)	-0.16 13-14	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.73	Vert(CT)	-0.34 13-14	>854	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.79	Horz(CT)	0.05 9	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.06 10-12	>999	240	Weight: 97 lb	FT = 10%

#### LUMBER-

TOP CHORD 2x4 SPF No.2 \*Except\*  
4-5: 2x6 SPF No.2  
BOT CHORD 2x4 SPF No.2  
WEBS 2x3 SPF No.2 \*Except\*  
7-9: 2x4 SPF No.2

#### BRACING-

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

#### REACTIONS.

(size) 14=Mechanical, 9=0-3-8  
Max Horz 14=-139(LC 4)  
Max Uplift 14=-143(LC 4), 9=-189(LC 5)  
Max Grav 14=1077(LC 1), 9=1231(LC 1)

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

TOP CHORD 2-3=-1480/263, 3-4=-1478/261, 4-5=-1743/247, 5-6=-1321/122, 6-7=-1495/125, 7-9=-1223/173  
BOT CHORD 13-14=-477/703, 12-13=-129/1564, 10-12=-244/2235  
WEBS 2-13=-118/1025, 3-13=-429/173, 4-12=0/372, 5-12=-706/207, 5-10=-1182/227, 6-10=-17/450, 2-14=-1122/219, 7-10=-103/1417

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- 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) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 14=143, 9=189.
- 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



August 21, 2020

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16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521671
W0 114	G7	Roof Special Girder	1	1		

Wheeler Lumber, Waverly, KS 66871

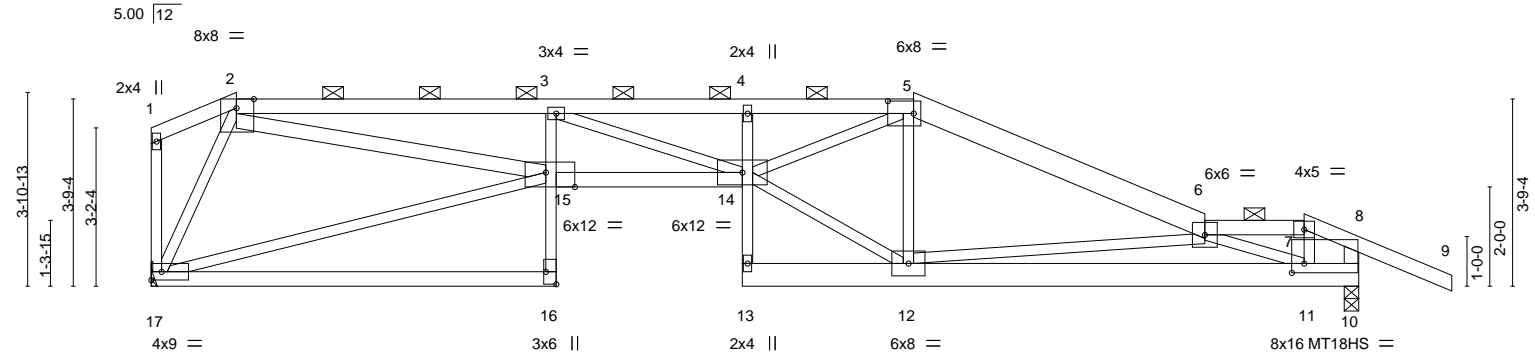
8.410 s May 22 2020 MiTek Industries, Inc. Fri Aug 21 06:00:21 2020 Page 1

ID:Ej7EWovY\_94Pzt7UVy1gWAZ\_t70-gP1XQ0UuckrhGp5FmmnY1otXdeeZOpIGTw9Es2ylj4u

Job Reference (optional)

1-8-9	8-1-14	11-10-14	15-4-4	21-2-11	23-2-11	24-3-14	26-2-6
1-8-9	6-5-5	3-9-0	3-5-6	5-10-6	2-0-0	1-1-3	1-10-8

Scale = 1:46.4



1-8-9	8-1-14	11-10-14	15-4-4	21-2-11	23-2-11	24-3-14
1-8-9	6-5-5	3-9-0	3-5-6	5-10-6	2-0-0	1-1-3

Plate Offsets (X,Y)--	[2:0-4-3,Edge], [5:0-6-4,0-3-0], [10:0-3-0,0-2-4], [15:0-7-0,Edge], [16:Edge,0-2-8]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.78	Vert(LL)	-0.34 14-15	>854	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.69	Vert(CT)	-0.61 14-15	>474	240	MT18HS	197/144
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.92	Horz(CT)	0.29 10	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.25 14-15	>999	240	Weight: 114 lb	FT = 10%

#### LUMBER-

TOP CHORD 2x4 SPF No.2 \*Except\*  
2-5: 2x4 SPF 2100F 1.8E, 5-6: 2x6 SPF No.2  
BOT CHORD 2x3 SPF No.2 \*Except\*  
16-17: 2x4 SPF No.2, 14-15: 2x4 SPF 2100F 1.8E  
10-13: 2x6 SPF No.2  
WEBS 2x3 SPF No.2 \*Except\*  
2-15: 2x4 SPF No.2, 8-10: 2x4 SPF 2100F 1.8E

#### BRACING-

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

#### REACTIONS.

(size) 10=0-3-8, 17=Mechanical  
Max Horz 17=-139(LC 6)  
Max Uplift 10=-266(LC 5), 17=-171(LC 4)  
Max Grav 10=1167(LC 1), 17=1075(LC 1)

#### FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-4045/668, 3-4=-4295/641, 4-5=-4238/639, 5-6=-2008/294, 6-7=-534/79,  
7-8=-701/100, 8-10=-649/131  
BOT CHORD 3-15=-483/169, 14-15=-549/4094, 11-12=-349/2491, 10-11=-87/588  
WEBS 15-17=-50/471, 2-15=-537/3592, 12-14=-204/1997, 5-14=-381/2691, 5-12=-742/162,  
6-12=-697/243, 6-11=-2163/390, 7-11=-86/382, 2-17=-1238/274

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- 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) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=266, 17=171.
- 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 55 lb down and 12 lb up at 23-2-11 on top chord, and 167 lb down and 873 lb up at 23-1-11 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

Continued on page 2

#### LOAD CASE(S) Standard

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16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521671
W0 114	G7	Roof Special Girder	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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ID:Ej7EWovY\_94Pzt7UVy1gWAZ\_t70-gP1XQ0UuckrhGp5FmmnY1otXdeeZOplGTw9Es2ylj4u

**LOAD CASE(S)** Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-2=-70, 2-5=-70, 5-6=-70, 6-7=-70, 7-8=-70, 8-9=-70, 16-17=-20, 14-15=-20, 10-13=-20  
Concentrated Loads (lb)  
Vert: 11=66(B)

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16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521672
W0 114	G8	Half Hip	1	1		

Wheeler Lumber, Waverly, KS 66871

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ID:Ej7EWovY\_94Pzt7UVy1gWAZ\_t70-8bbvdMVWN2zYuygRKTlna?Qo4Zz\_7JlQhawnOVylj4t

5-7-14	11-6-2	16-11-8	22-3-14	24-2-6
5-7-14	5-10-4	5-5-6	5-4-6	1-10-8

Scale = 1:40.6

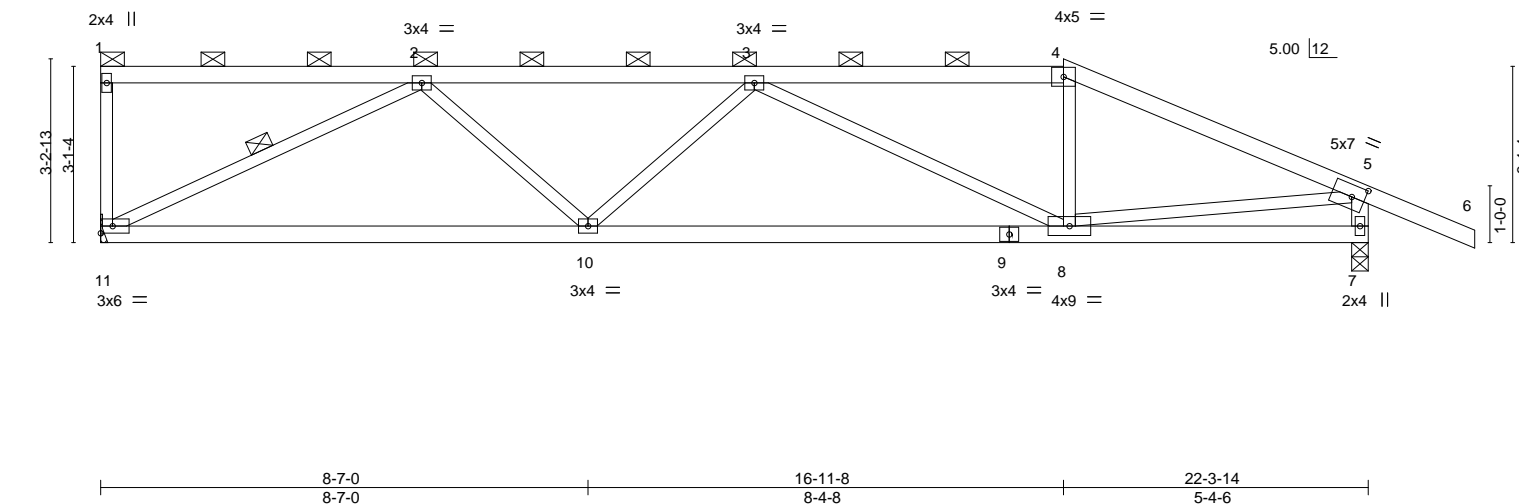


Plate Offsets (X,Y)-- [5:0-2-12,0-2-8]							
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	L/defl	L/d
TCLL 25.0	Plate Grip DOL	1.15	TC 0.42	Vert(LL)	-0.14 10-11	>999	360
TCDL 10.0	Lumber DOL	1.15	BC 0.75	Vert(CT)	-0.31 10-11	>859	240
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.71	Horz(CT)	0.05 7	n/a	n/a
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.05 8-10	>999	240
				<b>PLATES</b>	<b>GRIP</b>		
				MT20	197/144		
				Weight: 79 lb	FT = 10%		

#### LUMBER-

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

#### BRACING-

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

#### REACTIONS.

(size) 11=Mechanical, 7=0-3-8  
Max Horz 11=-104(LC 6)  
Max Uplift 11=-50(LC 4), 7=-60(LC 5)  
Max Grav 11=987(LC 1), 7=1141(LC 1)

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

TOP CHORD 2-3=-1834/57, 3-4=-1381/48, 4-5=-1577/39, 5-7=-1096/81  
BOT CHORD 10-11=-52/1505, 8-10=-57/1969  
WEBS 2-11=-1649/122, 2-10=0/501, 3-8=-729/85, 4-8=0/316, 5-8=-9/1244

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11, 7.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



August 21, 2020

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16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521673
W0 114	G9	Roof Special	1	1	Job Reference (optional)	

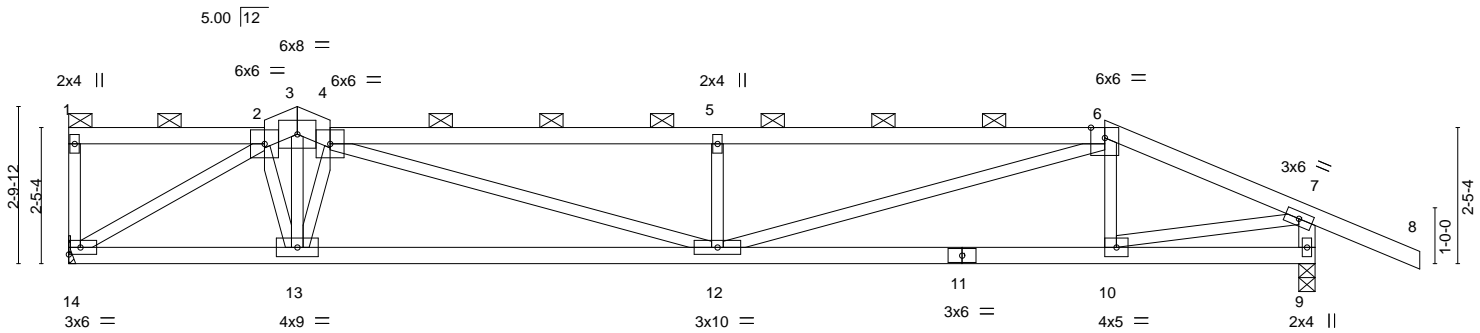
Wheeler Lumber, Waverly, KS 66871

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ID:Ej7EWovY\_94Pzt7UVy1gWaz\_t70-cn9HqiW98M5PW6FduBp06DyyqSLzsnlZwEeLwxyli4s

3-6-1	4-1-2 4-8-3	11-7-7	18-6-11	22-3-14	24-2-6
3-6-1	6-7-1 6-7-1	6-11-4	6-11-4	3-9-3	1-10-8

Scale = 1:41.3



	3-6-1	4-1-2 4-8-3	11-7-7	18-6-11	22-3-14	
	3-6-1	6-7-1 6-7-1	6-11-4	6-11-4	3-9-3	
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc) l/defl L/d	<b>PLATES</b> <b>GRIP</b>
TCLL 25.0	Plate Grip DOL	1.15	TC 0.48	Vert(LL)	-0.15 12 >999 360	MT20 197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.57	Vert(CT)	-0.30 12-13 >889 240	
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.67	Horz(CT)	0.05 9 n/a n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.08 12 >999 240	
						Weight: 83 lb FT = 10%

#### LUMBER-

TOP CHORD 2x4 SPF No.2 \*Except\*  
2-3,3-4: 2x6 SPF No.2, 4-6: 2x4 SPF 2100F 1.8E  
BOT CHORD 2x4 SPF No.2  
WEBS 2x3 SPF No.2 \*Except\*  
7-9: 2x4 SPF No.2

#### BRACING-

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

#### REACTIONS.

(size) 14=Mechanical, 9=0-3-8  
Max Horz 14=-83(LC 4)  
Max Uplift 14=-11(LC 9), 9=-66(LC 5)  
Max Grav 14=987(LC 1), 9=1141(LC 1)

#### FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1438/40, 3-4=-1511/57, 4-5=-2692/132, 5-6=-2693/133, 6-7=-1523/65,  
7-9=-1115/77  
BOT CHORD 13-14=0/1339, 12-13=-18/1723, 10-12=-22/1376  
WEBS 2-14=-1565/27, 4-12=-64/1071, 5-12=-574/131, 6-12=-74/1380, 7-10=-32/1389,  
3-13=-19/550, 4-13=-960/113, 2-13=-14/586

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14, 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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16023 Swingley Ridge Rd  
Chesterfield, MO 63017



Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521674
W0 114	G10	Roof Special Girder	1	1		

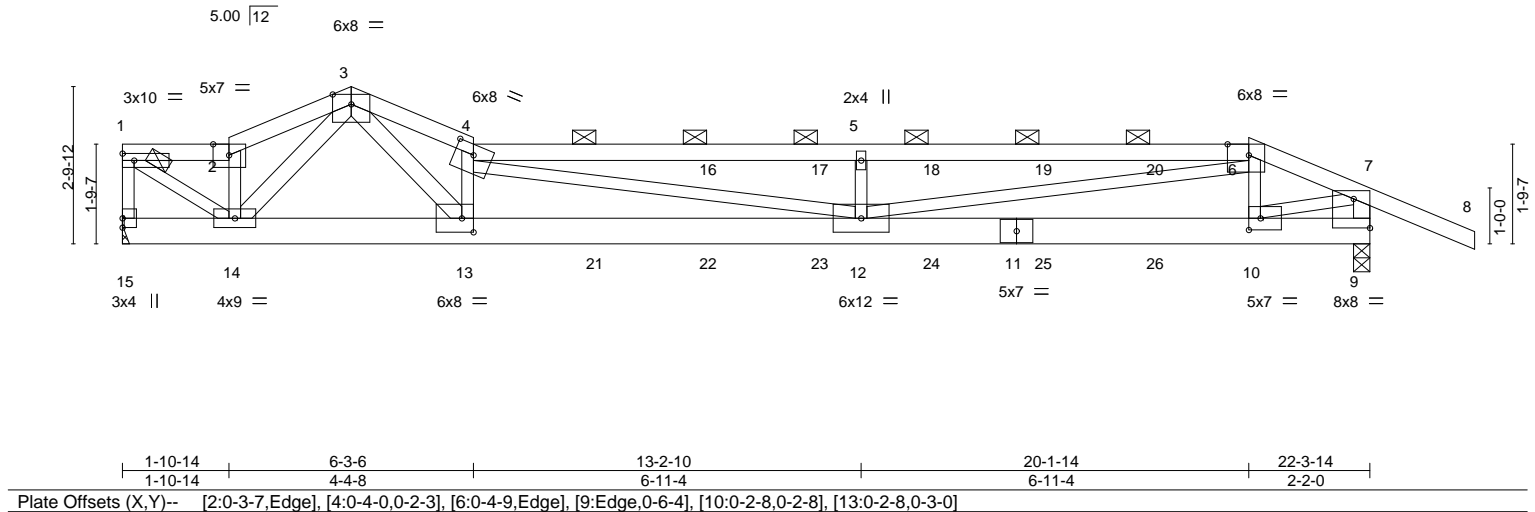
Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Fri Aug 21 06:00:15 2020 Page 1

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1-10-14	4-1-2	6-3-6	13-2-10	20-1-14	22-3-14	24-2-6
1-10-14	2-2-4	2-2-4	6-11-4	6-11-4	2-2-0	1-10-8

Scale = 1:41.2



<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 25.0	Plate Grip DOL 1.15	TC 0.98	Vert(LL) -0.35 12-13 >766 360	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.75	Vert(CT) -0.63 12-13 >418 240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.98	Horz(CT) 0.05 9 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.30 12-13 >880 240	Weight: 95 lb	FT = 10%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SPF No.2 *Except* 4-6: 2x4 SPF 2400F 2.0E	TOP CHORD Structural wood sheathing directly applied or 2-7-14 oc purlins, except end verticals, and 2-0-0 oc purlins (2-9-7 max.): 1-2, 4-6.
BOT CHORD 2x6 SPF 1650F 1.4E *Except* 9-11: 2x6 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 9-10.
WEBS 2x3 SPF No.2 *Except* 3-14,3-13,7-9: 2x4 SPF No.2	

<b>REACTIONS.</b>	(size) 15=Mechanical, 9=0-3-8 Max Horz 15=-73(LC 4) Max Uplift 15=-177(LC 9), 9=-305(LC 9) Max Grav 15=1143(LC 1), 9=1230(LC 1)
-------------------	--

<b>FORCES.</b> (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-15=-1051/170, 1-2=-1295/223, 2-3=-1380/251, 3-4=-4208/844, 4-5=-4374/949, 5-6=-4374/949, 6-7=-1676/370, 7-9=-1311/307
BOT CHORD 13-14=-237/1594, 12-13=-723/3941, 10-12=-323/1585
WEBS 1-14=-252/1563, 2-14=-609/119, 3-14=-572/139, 3-13=-687/3358, 4-13=-2157/522, 4-12=-185/542, 5-12=-537/258, 6-12=-587/2846, 6-10=-434/134, 7-10=-360/1681

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - 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) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 15=-177, 9=305.
  - 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.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 65 lb down and 41 lb up at 10-6-7, 65 lb down and 41 lb up at 12-6-7, 65 lb down and 41 lb up at 14-6-7, and 65 lb down and 41 lb up at 16-6-7, and 65 lb down and 41 lb up at 18-6-7 on top chord, and 250 lb down and 74 lb up at 8-6-2, 19 lb down at 10-6-7, 19 lb down at 12-6-7, 19 lb down at 14-6-7, 19 lb down at 16-6-7, and 19 lb down at 18-6-7, and 97 lb down and 287 lb up at 20-1-14 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
  - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

Continued on page 2

#### LOAD CASE(S) Standard

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August 21, 2020



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521674
W0 114	G10	Roof Special Girder	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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**LOAD CASE(S)** Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-2=-70, 2-3=-70, 3-4=-70, 4-6=-70, 6-7=-70, 7-8=-70, 9-15=-20  
Concentrated Loads (lb)  
Vert: 10=14(B) 16=-2(B) 17=-2(B) 18=-2(B) 19=-2(B) 20=-2(B) 21=-250(B) 22=-0(B) 23=-0(B) 24=-0(B) 25=-0(B) 26=-0(B)

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16023 Swingley Ridge Rd  
Chesterfield, MO 63017

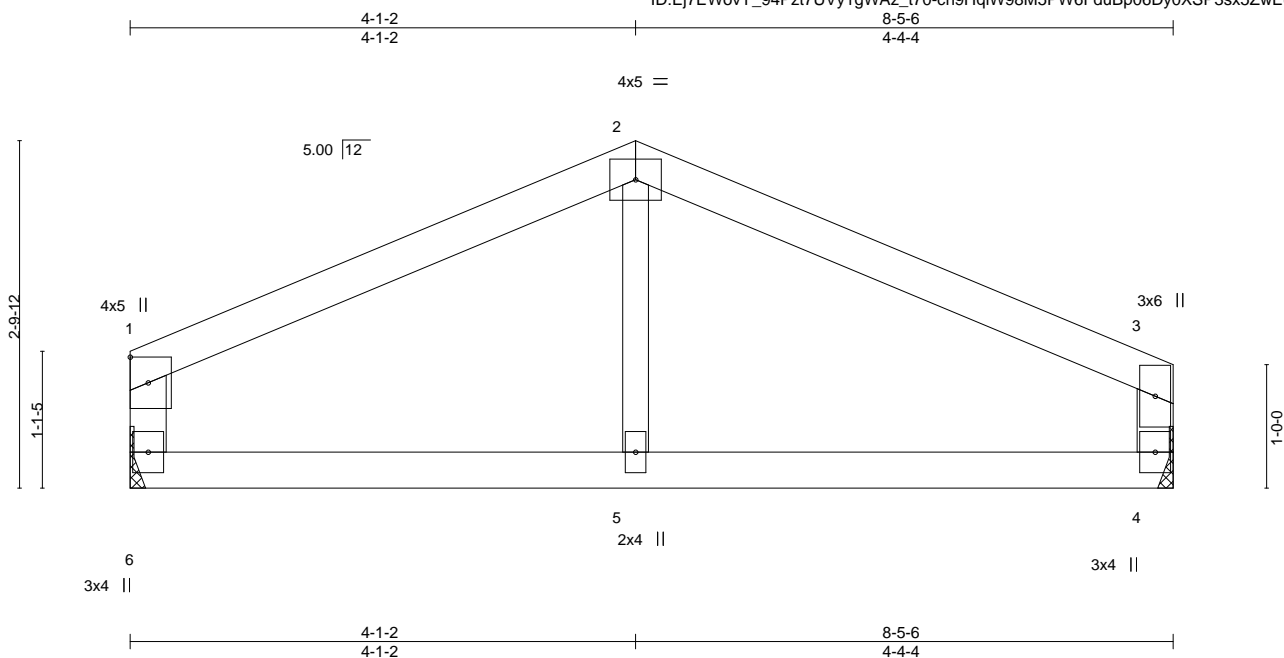
Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521675
W0 114	H1	Common	1	1		

Wheeler Lumber, Waverly, KS 66871

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Job Reference (optional)



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.24	Vert(LL)	-0.03	5	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.31	Vert(CT)	-0.06	5	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.01	5	>999	240	Weight: 23 lb	FT = 10%

#### LUMBER-

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

#### BRACING-

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

#### REACTIONS.

(size) 6=Mechanical, 4=Mechanical  
 Max Horz 6=-27(LC 6)  
 Max Uplift 6=-4(LC 8), 4=-5(LC 9)  
 Max Grav 6=367(LC 1), 4=367(LC 1)

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

TOP CHORD 1-2=-371/21, 2-3=-373/19, 1-6=-285/29, 3-4=-289/32  
 BOT CHORD 5-6=0/284, 4-5=0/284

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 4.
- 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.



August 21, 2020

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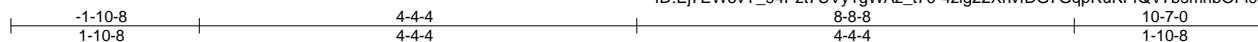
16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521676
W0 114	H2	Common	2	1		

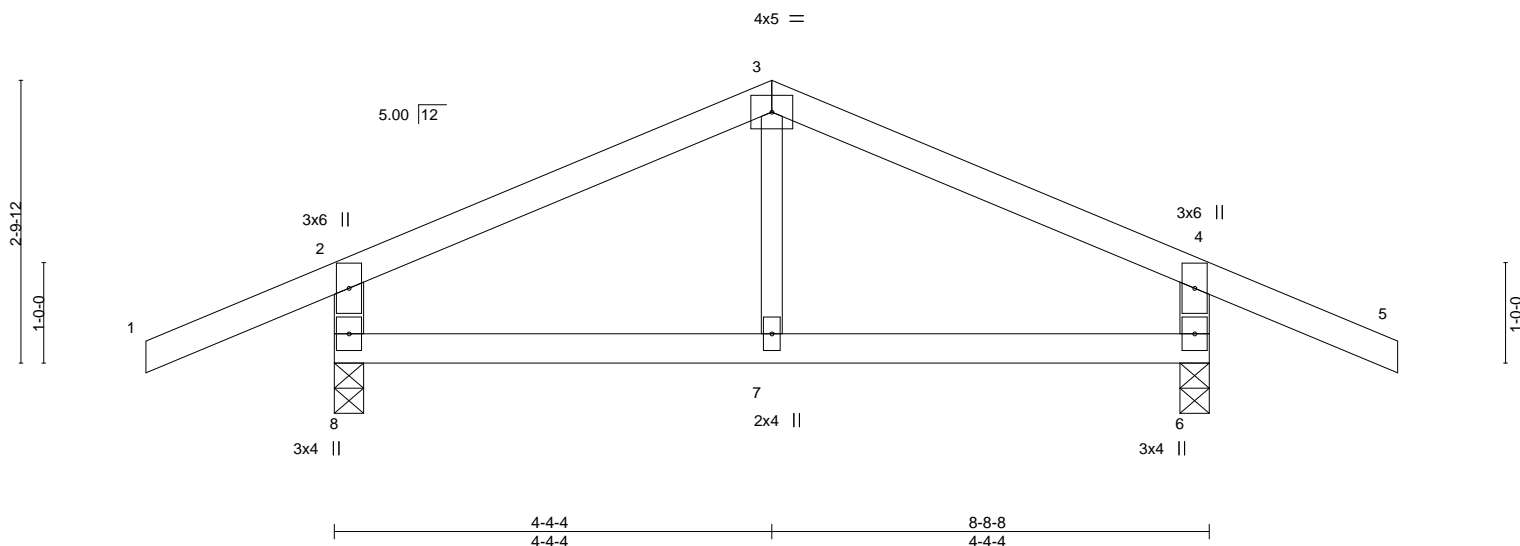
Wheeler Lumber, Waverly, KS 66871

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Scale = 1:22.9



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.42	Vert(LL)	-0.03	7	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.22	Vert(CT)	-0.05	7	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.00	6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.01	7	>999	240		
									Weight: 29 lb	FT = 10%

#### LUMBER-

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

#### BRACING-

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

**REACTIONS.** (size) 8=0-3-8, 6=0-3-8  
 Max Horz 8=-23(LC 6)  
 Max Uplift 8=-97(LC 8), 6=-97(LC 9)  
 Max Grav 8=520(LC 1), 6=520(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-343/51, 3-4=-343/51, 2-8=-447/123, 4-6=-447/123

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- 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) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 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.



August 21, 2020

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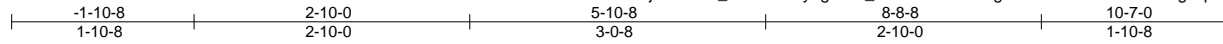
16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521677
W0 114	H3	Hip	1	1		

Wheeler Lumber, Waverly, KS 66871

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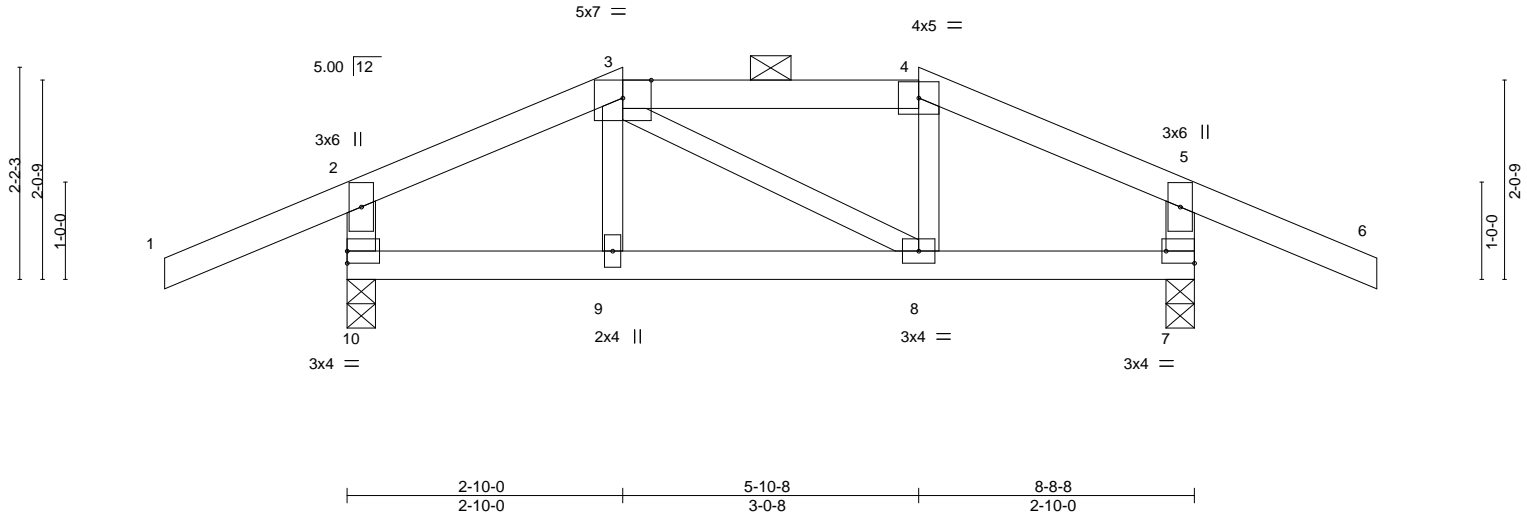


Plate Offsets (X,Y)-- [7:Edge,0-1-8]									
<b>LOADING</b> (psf)		<b>SPACING-</b>	2-0-0	<b>CSI.</b>		<b>DEFL.</b>	in (loc)	L/defl	L/d
TCLL 25.0		Plate Grip DOL	1.15	TC 0.40		Vert(LL)	-0.04 8-9	>999	360
TCDL 10.0		Lumber DOL	1.15	BC 0.30		Vert(CT)	-0.07 8-9	>999	240
BCLL 0.0 *		Rep Stress Incr	YES	WB 0.03		Horz(CT)	0.00 7	n/a	n/a
BCDL 10.0		Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.02 8-9	>999	240
								<b>PLATES</b>	<b>GRIP</b>
								MT20	197/144
								Weight: 32 lb	FT = 10%

#### LUMBER-

TOP CHORD 2x4 SPF No.2  
BOT CHORD 2x4 SPF No.2  
WEBS 2x3 SPF No.2 \*Except\*  
2-10,5-7: 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.): 3-4.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS.

(size) 10=0-3-8, 7=0-3-8  
Max Horz 10=-24(LC 6)  
Max Uplift 10=-107(LC 4), 7=-107(LC 5)  
Max Grav 10=520(LC 1), 7=520(LC 1)

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

TOP CHORD 2-3=-360/48, 3-4=-272/54, 4-5=-360/48, 2-10=-434/113, 5-7=-434/113  
BOT CHORD 9-10=0/272, 8-9=0/272, 7-8=0/272

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- 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) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=107, 7=107.
- 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



August 21, 2020

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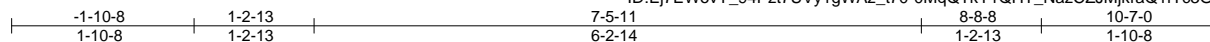
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521678
W0 114	H4	Hip Girder	1	1		

Wheeler Lumber, Waverly, KS 66871

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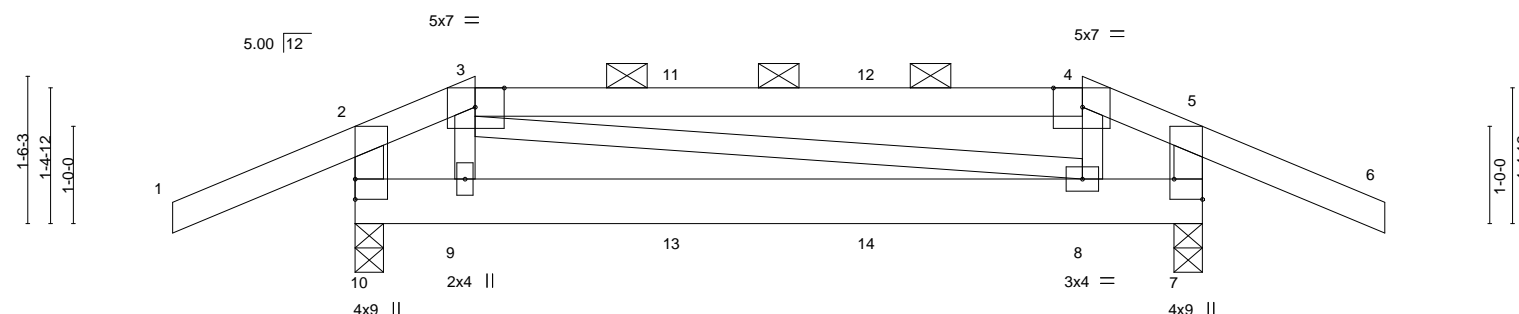


Plate Offsets (X,Y)--	[3:0-3-9,Edge], [4:0-3-9,Edge], [7:Edge,0-3-8]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.61	Vert(LL)	-0.02	8-9	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.19	Vert(CT)	-0.04	8-9	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.09	Horz(CT)	0.00	7	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	-0.02	8-9	>999	Weight: 38 lb	FT = 10%

#### LUMBER-

TOP CHORD 2x4 SPF No.2  
 BOT CHORD 2x6 SPF No.2  
 WEBS 2x3 SPF No.2 \*Except\*  
 2-10,5-7: 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.): 3-4.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

#### REACTIONS.

(size) 10=0-3-8, 7=0-3-8  
 Max Horz 10=24(LC 7)  
 Max Uplift 10=-397(LC 29), 7=-397(LC 28)  
 Max Grav 10=499(LC 45), 7=499(LC 44)

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

TOP CHORD 2-3=-401/415, 3-4=-350/289, 4-5=-395/413, 2-10=-303/225, 5-7=-309/232  
 BOT CHORD 9-10=-348/375, 8-9=-297/380, 7-8=-336/362  
 WEBS 3-9=-500/127, 4-8=-517/139

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- 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) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 10=397, 7=397.
- 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 45 lb down and 12 lb up at 1-2-13, 50 lb down and 12 lb up at 3-4-4, and 50 lb down and 12 lb up at 5-4-4, and 45 lb down and 12 lb up at 7-5-11 on top chord, and 141 lb down and 737 lb up at 1-2-13, 14 lb down and 16 lb up at 3-4-4, and 14 lb down and 16 lb up at 5-4-4, and 141 lb down and 737 lb up at 7-4-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 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 (plf)  
 Vert: 1-2=-70, 2-3=-70, 3-4=-70, 4-5=-70, 5-6=-70, 7-10=-20



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Continued on page 2

**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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16023 Swingley Ridge Rd  
 Chesterfield, MO 63017



Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521678
W0 114	H4	Hip Girder	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Fri Aug 21 06:00:26 2020 Page 2  
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**LOAD CASE(S)** Standard  
Concentrated Loads (lb)  
Vert: 9=53(B) 8=53(B)

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16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521679
W0 114	J1	Diagonal Hip Girder	1	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Fri Aug 21 06:00:27 2020 Page 1  
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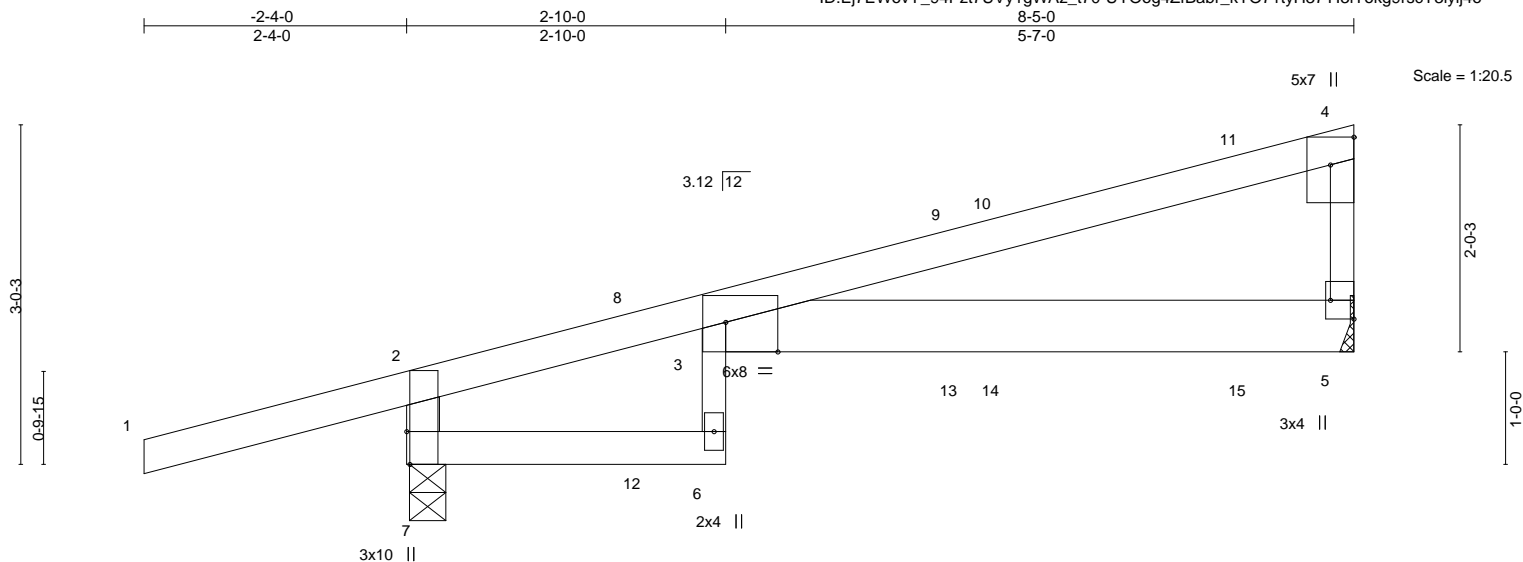


Plate Offsets (X,Y)--	[3:0-5-9,Edge], [4:Edge,0-2-8], [5:Edge,0-2-8], [7:0-3-8,Edge]
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LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.77	Vert(LL)	-0.18	3	>544	360	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.59	Vert(CT)	-0.33	3	>300	240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.00	Horz(CT)	0.17	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-R	Wind(LL)	0.16	6	>604	240	Weight: 28 lb	FT = 10%

#### LUMBER-

TOP CHORD 2x4 SPF 2100F 1.8E  
BOT CHORD 2x4 SPF No.2 \*Except\*  
3-6: 2x3 SPF No.2, 3-5: 2x6 SPF No.2  
WEBS 2x4 SPF No.2 \*Except\*  
4-5: 2x3 SPF No.2

#### BRACING-

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

#### REACTIONS.

(size) 7=0-3-14, 5=Mechanical  
Max Horz 7=109(LC 5)  
Max Uplift 7=161(LC 4), 5=109(LC 8)  
Max Grav 7=577(LC 1), 5=481(LC 1)

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

TOP CHORD 2-7=-563/174, 4-5=-260/100

#### NOTES-

- 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) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=161, 5=109.
- 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.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 72 lb down and 134 lb up at 2-1-6, 63 lb down and 36 lb up at 2-4-9, 108 lb down and 63 lb up at 4-11-5, and 97 lb down and 51 lb up at 5-3-12, and 98 lb down and 67 lb up at 7-6-1 on top chord, and 18 lb down and 21 lb up at 2-1-6, 3 lb down at 2-4-9, 3 lb down at 4-11-5, and 24 lb down at 5-3-12, and 63 lb down and 27 lb up at 7-6-1 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 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

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-2=-70, 2-3=-70, 3-4=-70, 6-7=-20, 3-5=-20  
Concentrated Loads (lb)  
Vert: 8=35(B) 9=-40(F) 10=-4(B) 11=-62(F) 14=-16(B) 15=-63(F)



August 21, 2020

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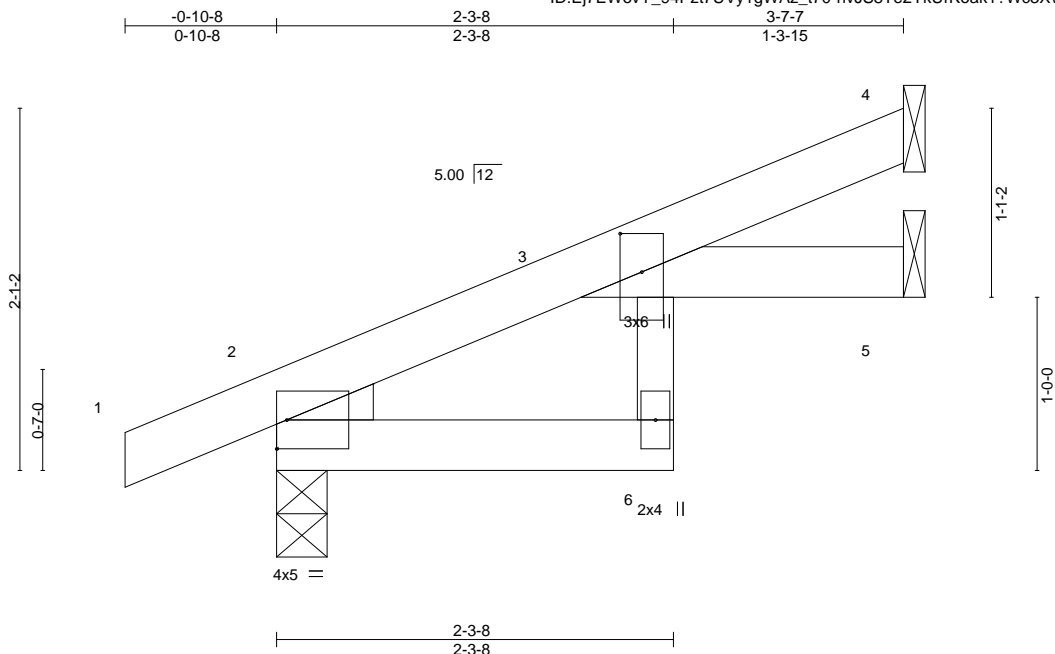


16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521680
W0 114	J2	Jack-Open	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Fri Aug 21 06:00:34 2020 Page 1  
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Scale = 1:13.3

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

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.22	Vert(LL)	-0.02	6	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.07	Vert(CT)	-0.04	6	>925	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.01	Horz(CT)	0.02	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P	Wind(LL)	0.03	6	>999	240	Weight: 11 lb	FT = 10%

#### LUMBER-

TOP CHORD 2x4 SPF No.2  
BOT CHORD 2x4 SPF No.2  
WEBS 2x3 SPF No.2  
WEDGE  
Left: 2x3 SPF No.2

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-7-7 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

**REACTIONS.** (size) 4=Mechanical, 2=0-3-8, 5=Mechanical  
Max Horz 2=75(LC 8)  
Max Uplift 4=-52(LC 8), 2=-34(LC 8)  
Max Grav 4=129(LC 1), 2=240(LC 1), 5=37(LC 3)

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

#### 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) gable end 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 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) 4, 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.



August 21, 2020

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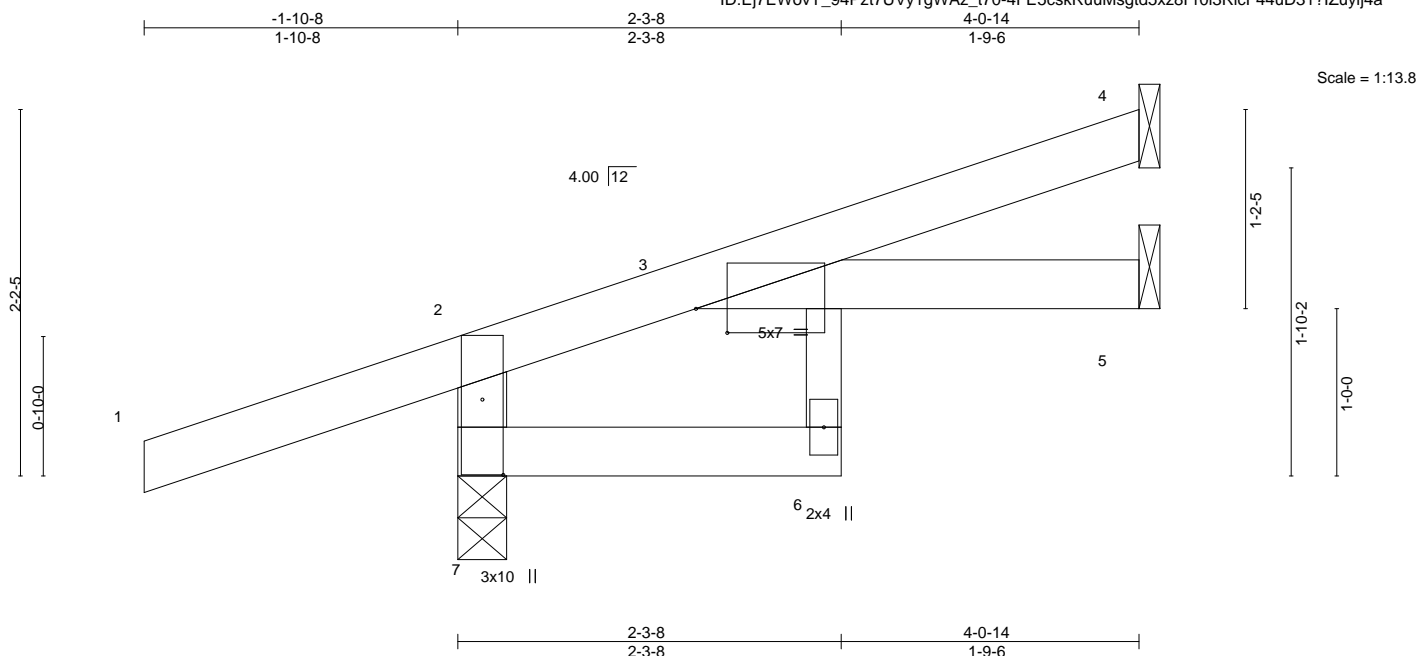
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521681
W0 114	J3	Jack-Open	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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Scale = 1:13.8

Plate Offsets (X,Y)--		[3:0-2-4,0-1-12], [7:0-5-6,0-1-8]									
LOADING	(psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC 0.28	Vert(LL)	-0.02	6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC 0.12	Vert(CT)	-0.04	6	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB 0.02	Horz(CT)	0.02	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P	Wind(LL)	0.02	6	>999	240	Weight: 14 lb	FT = 10%

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-0-14 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

**REACTIONS.** (size) 7=0-3-8, 4=Mechanical, 5=Mechanical  
Max Horz 7=79(LC 4)  
Max Uplift 7=117(LC 4), 4=39(LC 8)  
Max Grav 7=361(LC 1), 4=96(LC 1), 5=70(LC 3)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-7=-329/128

#### NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end 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 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) 4 except (jt=lb) 7=117.
- 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.



August 21, 2020

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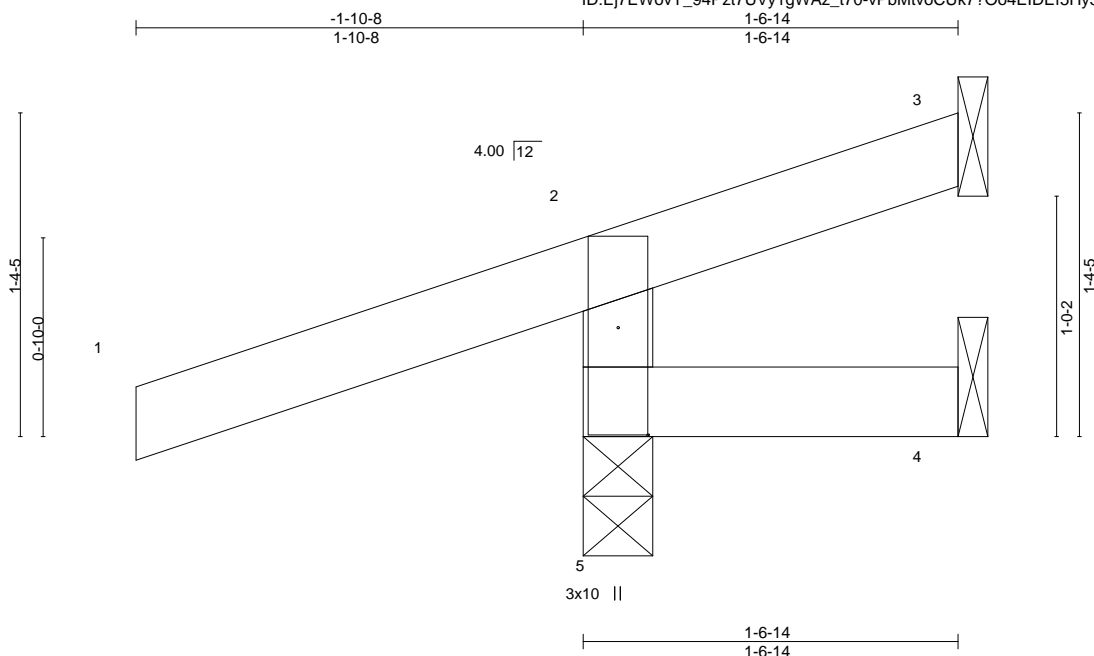


16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521682
W0 114	J4	Jack-Open	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Fri Aug 21 06:00:47 2020 Page 1  
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Scale = 1:9.7

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

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	L/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.28	Vert(LL)	0.00	5	>999	360	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.08	Vert(CT)	0.00	4-5	>999	240	197/144
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	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 1-6-14 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 5=0-3-8, 3=Mechanical, 4=Mechanical  
Max Horz 5=46(LC 4)  
Max Uplift 5=143(LC 4), 3=22(LC 1), 4=16(LC 1)  
Max Grav 5=306(LC 1), 3=16(LC 4), 4=18(LC 4)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-5=-262/142

#### 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) gable end 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 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) 3, 4 except (jt=lb) 5=143.
- 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.



August 21, 2020

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Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521683
W0 114	J5	Jack-Open	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Fri Aug 21 06:00:53 2020 Page 1  
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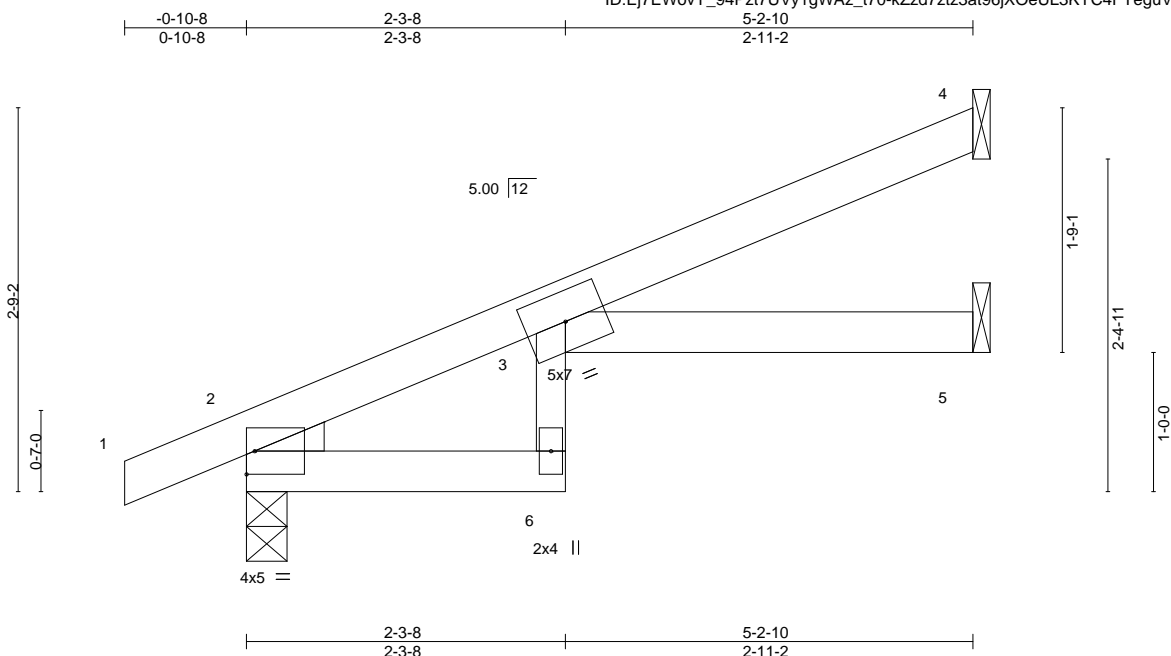


Plate Offsets (X,Y)--		[3:0-0-0,0-0-1]							
<b>LOADING</b> (psf)		<b>SPACING-</b>	2-0-0	<b>CSI.</b>		<b>DEFL.</b>	in (loc)	L/defl	L/d
TCLL 25.0		Plate Grip DOL	1.15	TC 0.48		Vert(LL)	-0.06 3	>999	360
TCDL 10.0		Lumber DOL	1.15	BC 0.33		Vert(CT)	-0.10 3	>583	240
BCLL 0.0 *		Rep Stress Incr	YES	WB 0.00		Horz(CT)	0.07 5	n/a	n/a
BCDL 10.0		Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.06 3	>966	240
						<b>PLATES</b>		<b>GRIP</b>	
						MT20		197/144	
						Weight: 15 lb		FT = 10%	

#### LUMBER-

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

#### WEDGE

Left: 2x3 SPF No.2

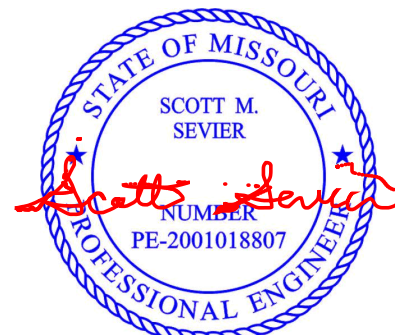
#### REACTIONS.

(size) 4=Mechanical, 2=0-3-8, 5=Mechanical  
Max Horz 2=102(LC 8)  
Max Uplift 4=-58(LC 8), 2=-44(LC 8), 5=-6(LC 8)  
Max Grav 4=135(LC 1), 2=304(LC 1), 5=87(LC 3)

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

#### NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end 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 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) 4, 2, 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.



August 21, 2020

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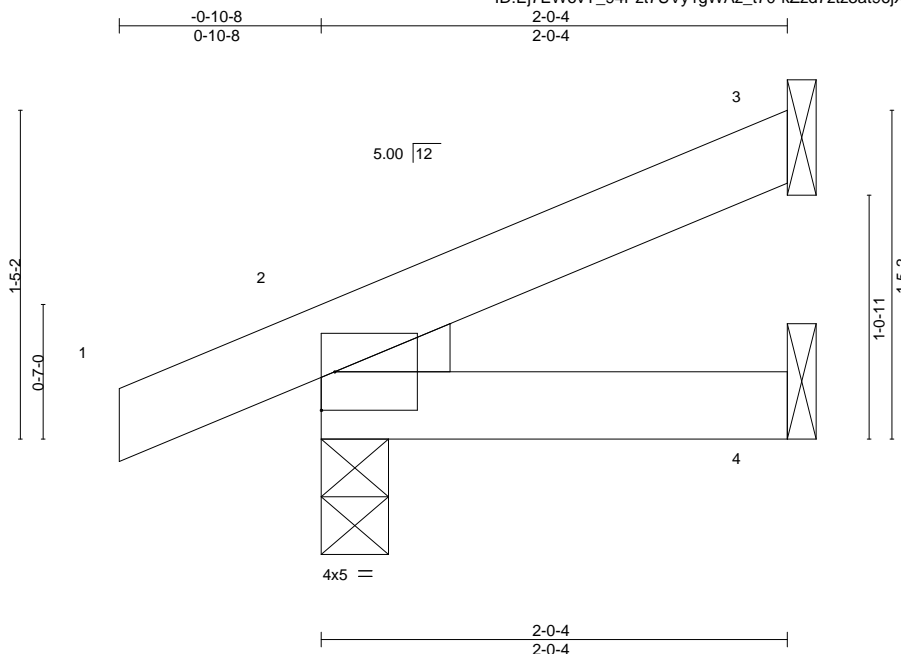
16023 Swingley Ridge Rd  
Chesterfield, MO 63017



Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521684
W0 114	J6	Jack-Open	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Fri Aug 21 06:00:53 2020 Page 1  
ID:Ej7EWovY\_94Pzt7UVy1gWAZ\_t70-kZzd7ztz3at96jXOeUL3KYCAmYjRuV6\_qvww\_Cylj40



Scale = 1:10.0

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.06	Vert(LL)	-0.00	2	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	-0.00	2-4	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P	Wind(LL)	0.00	2	****	240	Weight: 6 lb	FT = 10%

#### LUMBER-

TOP CHORD 2x4 SPF No.2  
BOT CHORD 2x4 SPF No.2  
WEDGE  
Left: 2x3 SPF No.2

#### BRACING-

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

**REACTIONS.** (size) 3=Mechanical, 2=0-3-8, 4=Mechanical  
Max Horz 2=48(LC 8)  
Max Uplift 3=33(LC 8), 2=36(LC 4)  
Max Grav 3=43(LC 1), 2=173(LC 1), 4=36(LC 3)

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

#### 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) gable end 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 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) 3, 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.



August 21, 2020

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16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521685
W0 114	J7	Jack-Closed	3	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Fri Aug 21 06:00:54 2020 Page 1  
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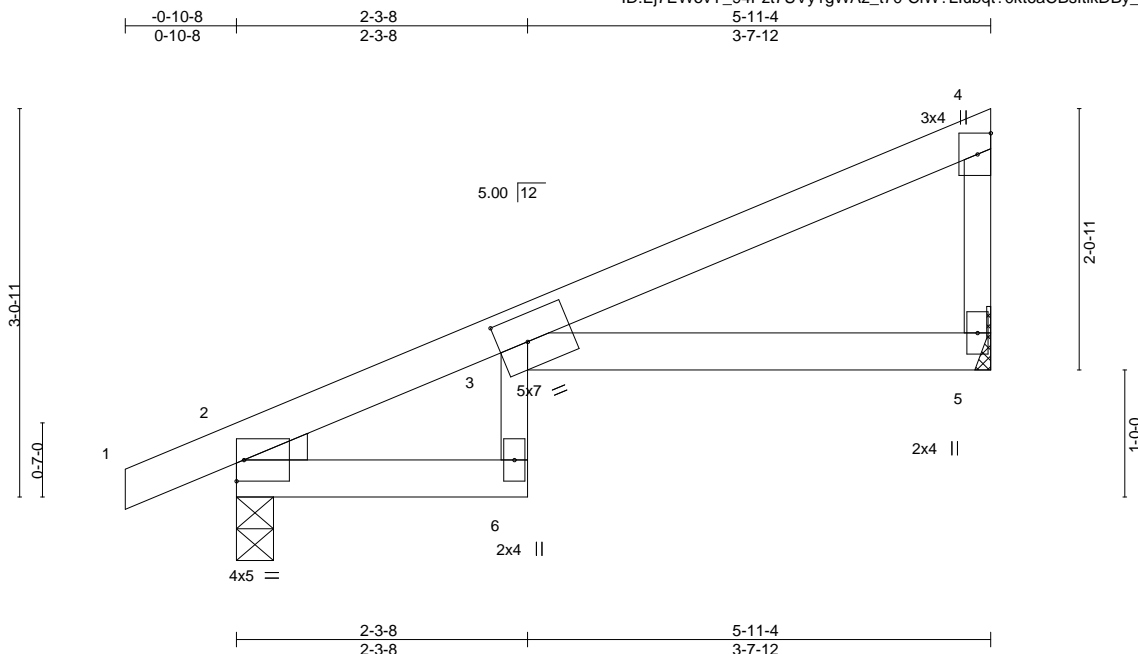


Plate Offsets (X,Y)-- [3:0-2-12,0-2-9]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.60	Vert(LL)	-0.10	6	>711	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.33	Vert(CT)	-0.17	6	>397	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.11	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.10	6	>705	240	Weight: 18 lb	FT = 10%

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-11-4 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 5=Mechanical, 2=0-3-8  
Max Horz 2=104(LC 5)  
Max Uplift 5=61(LC 8), 2=58(LC 8)  
Max Grav 5=250(LC 1), 2=334(LC 1)

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

#### 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) gable end 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 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) 5, 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.



August 21, 2020

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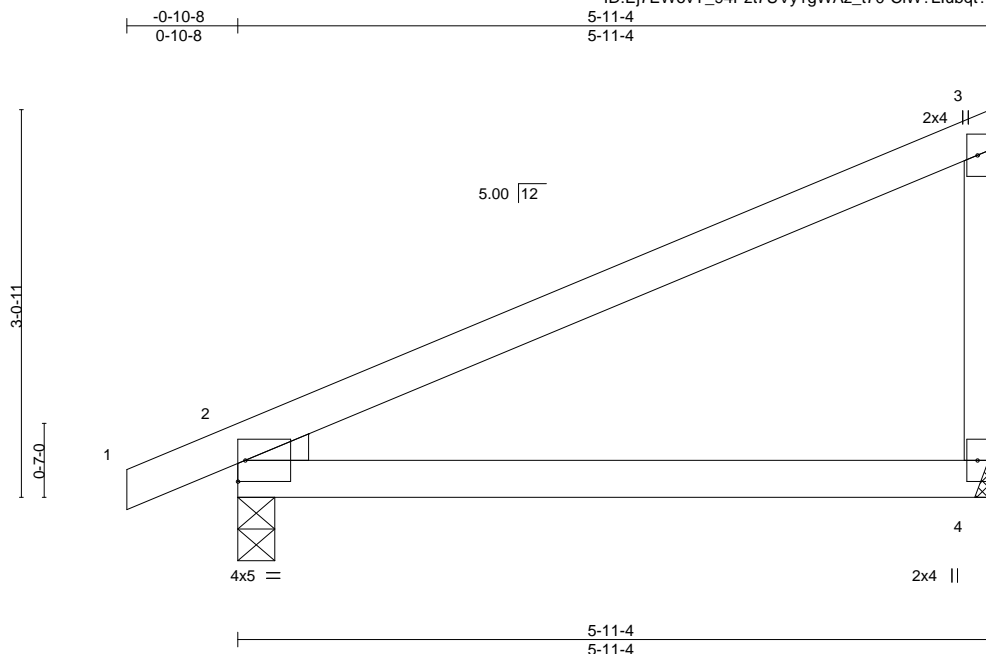
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521686
W0 114	J8	Jack-Closed	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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Scale = 1:18.2

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.60	Vert(LL)	-0.06	2-4	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.35	Vert(CT)	-0.13	2-4	>544	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P	Wind(LL)	0.00	2	****	240	Weight: 18 lb	FT = 10%

#### LUMBER-

TOP CHORD 2x4 SPF No.2  
BOT CHORD 2x4 SPF No.2  
WEBS 2x3 SPF No.2  
WEDGE  
Left: 2x3 SPF No.2

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-11-4 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 4=Mechanical, 2=0-3-8  
Max Horz 2=120(LC 5)  
Max Uplift 4=-59(LC 8), 2=-60(LC 8)  
Max Grav 4=250(LC 1), 2=334(LC 1)

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

#### 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) gable end 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 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) 4, 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.



August 21, 2020

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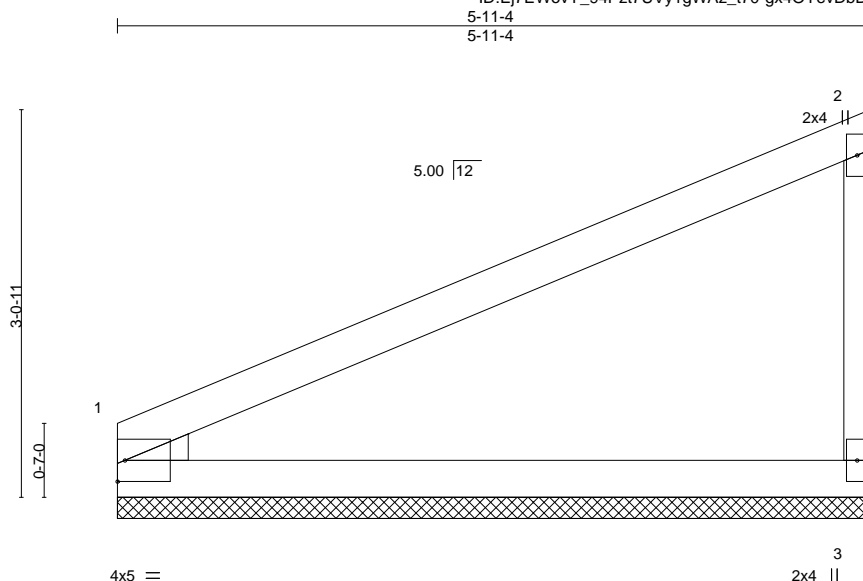
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521687
W0 114	J9	Jack-Closed	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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Scale = 1:18.2

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.67	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.36	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 17 lb	FT = 10%

#### LUMBER-

TOP CHORD 2x4 SPF No.2  
 BOT CHORD 2x4 SPF No.2  
 WEBS 2x3 SPF No.2  
 WEDGE  
 Left: 2x3 SPF No.2

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-11-4 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 3=5-11-4, 1=5-11-4  
 Max Horz 1=118(LC 5)  
 Max Uplift 3=62(LC 8), 1=36(LC 8)  
 Max Grav 3=263(LC 1), 1=263(LC 1)

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

#### 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) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) 3, 1.
- 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.



August 21, 2020

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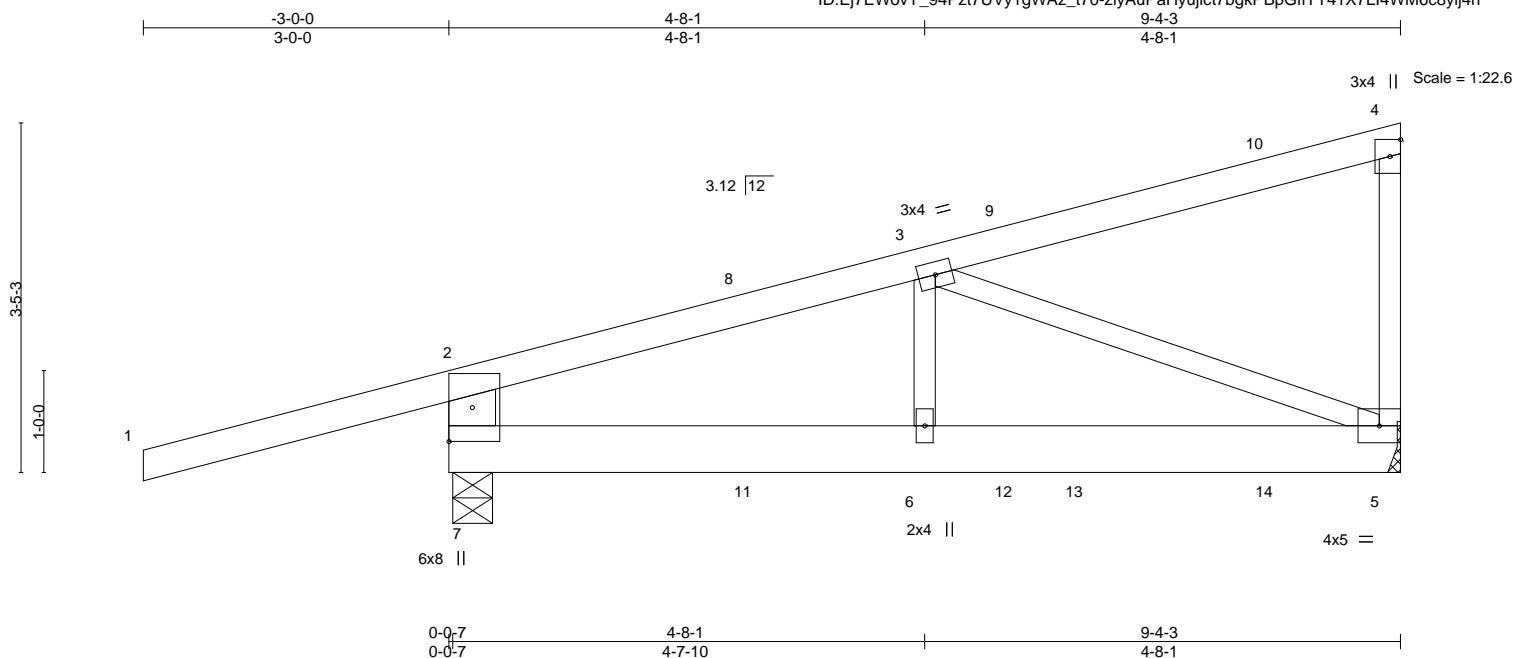


16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521688
W0 114	J10	Diagonal Hip Girder	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.87	Vert(LL)	-0.05	MT20		197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.45	Vert(CT)	-0.08				
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.29	Horz(CT)	0.00				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.04	Weight: 39 lb		FT = 10%	

#### LUMBER-

TOP CHORD 2x4 SPF No.2  
BOT CHORD 2x6 SPF No.2  
WEBS 2x3 SPF No.2 \*Except\*  
2-7: 2x6 SPF No.2

#### BRACING-

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

#### REACTIONS.

(size) 7=0-4-11, 5=Mechanical  
Max Horz 7=145(LC 5)  
Max Uplift 7=266(LC 4), 5=149(LC 8)  
Max Grav 7=715(LC 1), 5=535(LC 1)

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

TOP CHORD 2-7=-554/247, 2-3=-563/132  
BOT CHORD 6-7=-165/481, 5-6=-165/481  
WEBS 3-5=-490/167

#### NOTES-

- 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) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=266, 5=149.
- 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.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 55 lb down and 94 lb up at 2-11-15, 78 lb down and 36 lb up at 3-0-9, and 79 lb down and 54 lb up at 5-6-11, and 102 lb down and 86 lb up at 8-1-6 on top chord, and 10 lb down and 16 lb up at 2-11-15, 9 lb down and 7 lb up at 3-0-9, 16 lb down and 2 lb up at 5-6-11, and 168 lb down and 75 lb up at 6-2-15, and 40 lb down at 8-1-6 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 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

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-2=-70, 2-4=-70, 5-7=-20  
Concentrated Loads (lb)  
Vert: 8=26(B) 10=-54(B) 11=7(F) 12=2(B) 13=-168(F) 14=-25(B)



August 21, 2020

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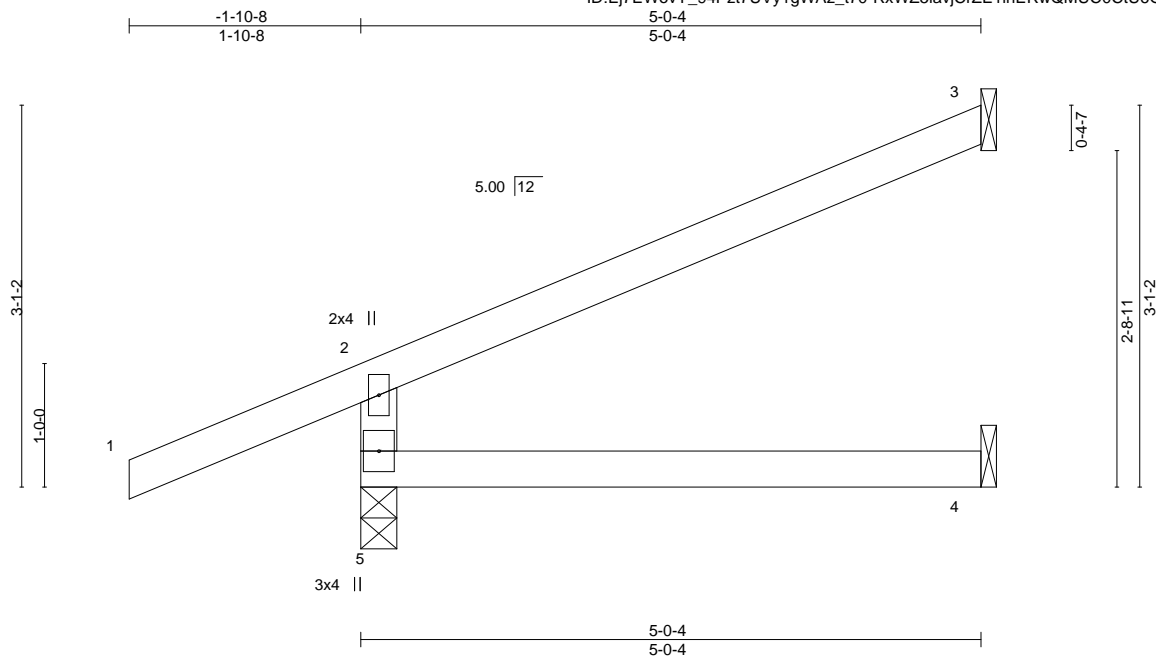
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Chesterfield, MO 63017

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8.410 s May 22 2020 MiTek Industries, Inc. Fri Aug 21 06:00:29 2020 Page 1  
ID:Ej7EWovY\_94Pzt7UVy1gWaz\_t70-RxWZ5lavjCrZE1inERwQMUC0CtU6GeARIA5f8bylj4m



<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 25.0	Plate Grip DOL 1.15	TC 0.30	Vert(LL) -0.02 4-5 >999 360	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.20	Vert(CT) -0.05 4-5 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) -0.02 3 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-R	Wind(LL) 0.02 4-5 >999 240	Weight: 15 lb	FT = 10%

<b>LUMBER-</b>		<b>BRACING-</b>	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 5-0-4 oc purlins, except end verticals.
BOT CHORD	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SPF No.2		

**REACTIONS.** (size) 5=0-3-8, 3=Mechanical, 4=Mechanical  
 Max Horz 5=101(LC 8)  
 Max Uplift 5=-66(LC 4), 3=-75(LC 8)  
 Max Grav 5=388(LC 1), 3=138(LC 1), 4=88(LC 3)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-5=-340/110

**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) gable end 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 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) 5, 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.



August 21, 2020



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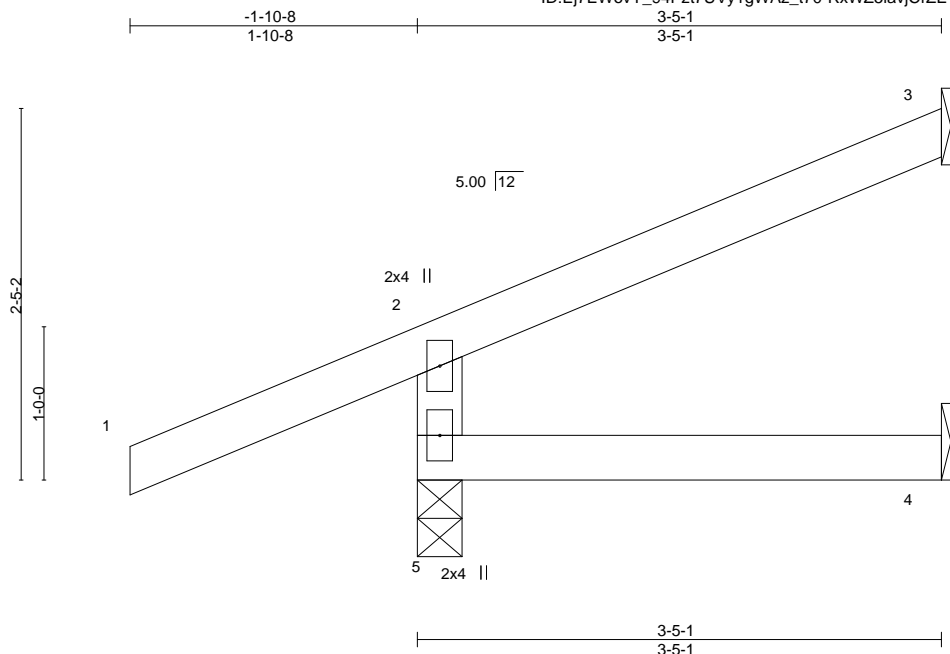
16023 Swingley Ridge Rd  
Chesterfield, MO 63017



Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521690
W0 114	J12	Jack-Open	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Fri Aug 21 06:00:29 2020 Page 1  
ID:Ej7EWovY\_94Pzt7UVy1gWaz\_t70-RxWZ5lavjCrZE1nERwQMUC0PtW3GeARIA5f8bylj4m



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.28	Vert(LL)	-0.01	4-5	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.08	Vert(CT)	-0.01	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: 11 lb	FT = 10%

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-5-1 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 5=0-3-8, 3=Mechanical, 4=Mechanical  
Max Horz 5=73(LC 8)  
Max Uplift 5=71(LC 4), 3=-48(LC 8)  
Max Grav 5=330(LC 1), 3=77(LC 1), 4=57(LC 3)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-5=-289/94

#### 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) gable end 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 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) 5, 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.



August 21, 2020

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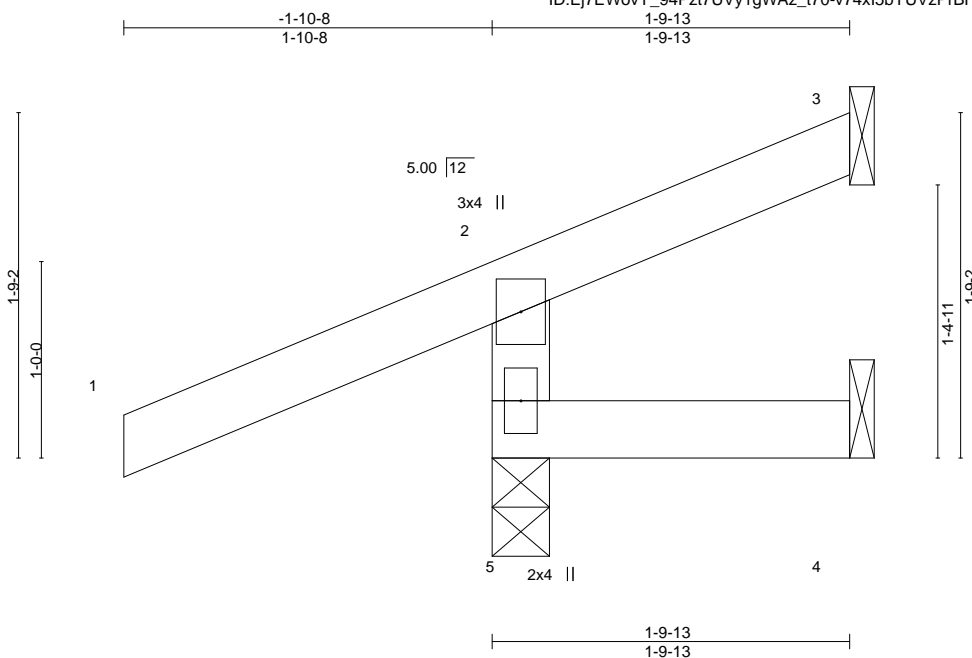
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521691
W0 114	J13	Jack-Open	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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ID:Ej7EWovY\_94Pzt7UVy1gWAZ\_t70-v74x15bYUVzPrBHzo9RfvhlB9HrK?5QbXqrCg1ylj4l



Scale = 1:11.7

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	L/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.28	Vert(LL)	0.00	4-5	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.08	Vert(CT)	0.00	4-5	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	-0.00	5	>999	240	Weight: 7 lb	FT = 10%

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 1-9-13 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 5=0-3-8, 3=Mechanical, 4=Mechanical  
Max Horz 5=53(LC 5)  
Max Uplift 5=87(LC 4), 3=-14(LC 8), 4=-7(LC 1)  
Max Grav 5=302(LC 1), 3=4(LC 4), 4=24(LC 3)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-5=-262/96

#### 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) gable end 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 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) 5, 3, 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.



August 21, 2020

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16023 Swingley Ridge Rd  
Chesterfield, MO 63017



Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521693
W0 114	J15	Jack-Open	1	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Fri Aug 21 06:00:31 2020 Page 1

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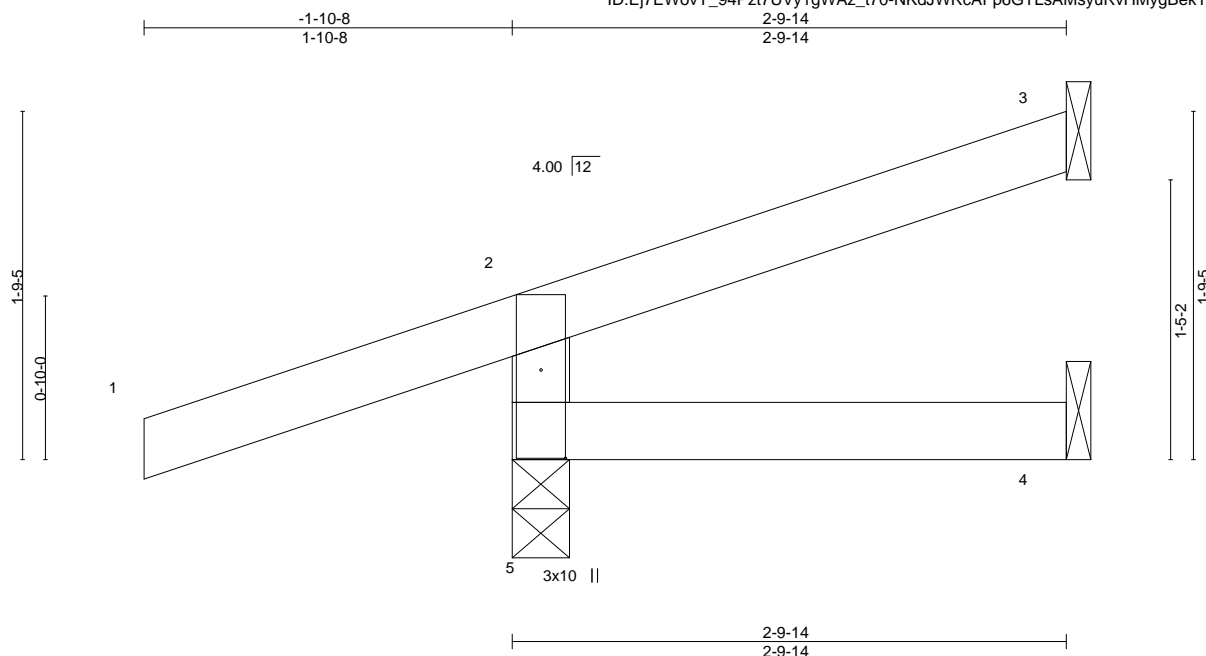


Plate Offsets (X,Y)-- [5:0-5-6,0-1-8]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.28	Vert(LL)	0.00	4-5	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.07	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: 9 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 2-9-14 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS.

(size) 5=0-3-8, 3=Mechanical, 4=Mechanical  
Max Horz 5=62(LC 4)  
Max Uplift 5=124(LC 4), 3=31(LC 8)  
Max Grav 5=314(LC 1), 3=52(LC 1), 4=44(LC 3)

#### FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-5=273/139

#### 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) gable end 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 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) 3 except (jt=lb) 5=124.
- 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.



August 21, 2020

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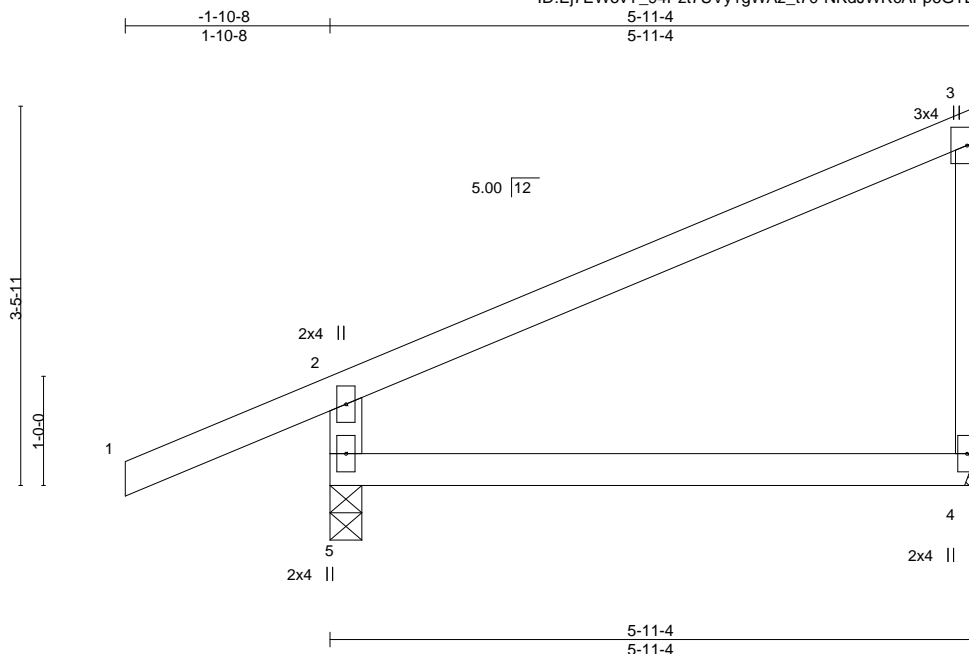


16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521694
W0 114	J16	Jack-Closed	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Fri Aug 21 06:00:31 2020 Page 1  
ID:Ej7EWovY\_94Pzt7UVy1gWAZ\_t70-NKdJWRcAFp6GTLsAMsyuRvHLLg8ckYgkmUamCTylj4k



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.38	Vert(LL)	-0.04	4-5	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.26	Vert(CT)	-0.09	4-5	>773	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.02	4-5	>999	240	Weight: 19 lb	FT = 10%

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-11-4 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS.

(size) 5=0-3-8, 4=Mechanical  
Max Horz 5=150(LC 5)  
Max Uplift 5=-85(LC 8), 4=-56(LC 8)  
Max Grav 5=423(LC 1), 4=231(LC 1)

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

TOP CHORD 2-5=-373/129

#### 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) gable end 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 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) 5, 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.



August 21, 2020

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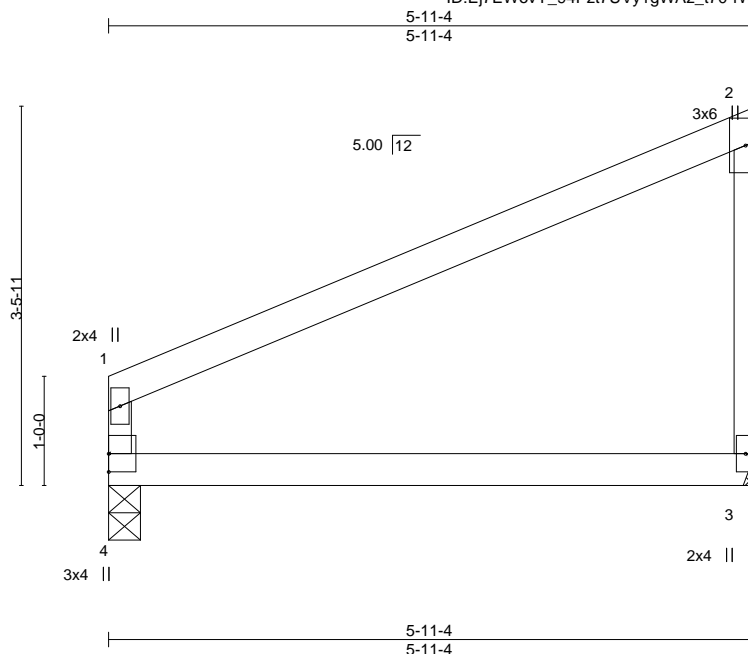
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521695
W0 114	J17	Jack-Closed	2	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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ID:Ej7EWovY\_94Pzt7UVy1gWAZ\_t70-rWBhndo07E75VRMvaT7\_6qUC4UYT?wu\_8KJlwyIj4j



Scale = 1:21.1

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.50	Vert(LL)	-0.05	3-4	>999	360	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.28	Vert(CT)	-0.10	3-4	>707	240	197/144
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)	0.02	3-4	>999	240	
								Weight: 17 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 5-11-4 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 4=0-3-8, 3=Mechanical  
Max Horz 4=133(LC 5)  
Max Uplift 4=-33(LC 8), 3=-63(LC 8)  
Max Grav 4=258(LC 1), 3=258(LC 1)

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

#### 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) gable end 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 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) 4, 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.



August 21, 2020

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16023 Swingley Ridge Rd  
Chesterfield, MO 63017



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521696
W0 114	J18	Diagonal Hip Girder	2	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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ID:Ej7EWovY\_94Pzt7UVy1gWAZ\_t70-Jil3x7eQnQM\_if0YTH\_MWKNaKUqcCS91Do3tHMyIj4i

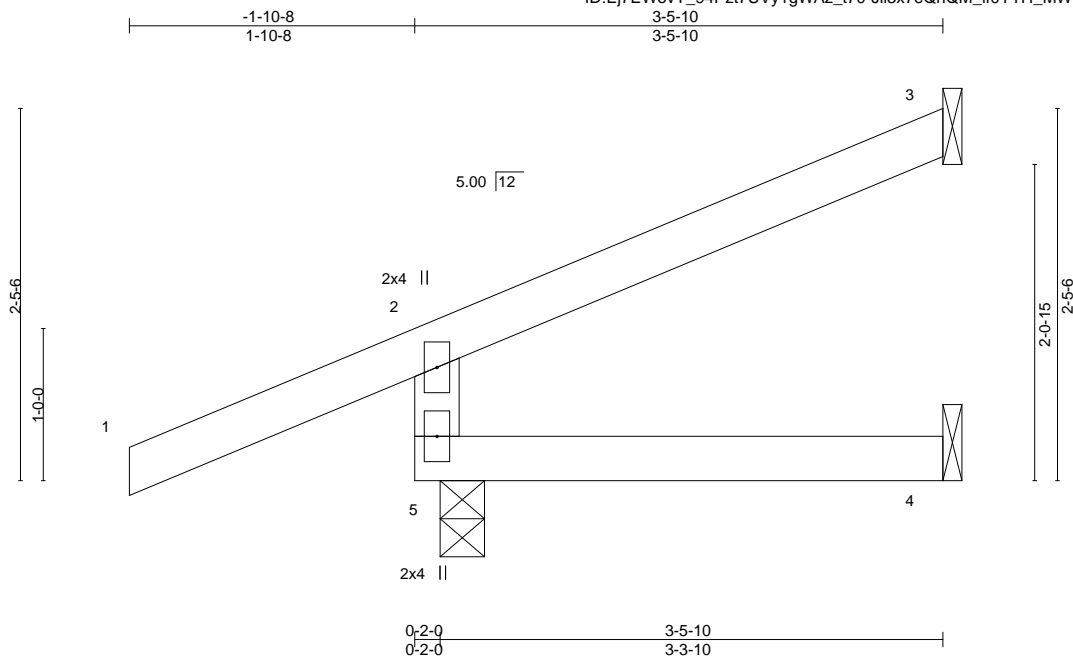
LOAD CASE(S)

- 40) Reversal: User defined: Lumber Increase=1.15, Plate Increase=1.15
  - Uniform Loads (plf)
    - Vert: 1-2=-70(F), 2-3=-70(F), 4-5=-20(F)
  - Concentrated Loads (lb)
    - Vert: 1=-250 6=1(B) 7=-20(B) 8=22(F=7, B=16) 9=-8(B)
- 41) User defined: Lumber Increase=1.15, Plate Increase=1.15
  - Uniform Loads (plf)
    - Vert: 1-2=-70(F), 2-3=-70(F), 4-5=-20(F)
  - Concentrated Loads (lb)
    - Vert: 1=-250 7=-20(B) 8=7(F) 9=-8(B)

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521697
W0 114	J19	Jack-Open	2	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Fri Aug 21 06:00:33 2020 Page 1  
ID:Ej7EWovY\_94Pzt7UVy1gWaz\_t70-Jil3x7eQnQM\_if0YTH\_MWKNiPUtyCS91Do3tHMyIj4i



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.28	Vert(LL)	-0.01	4-5	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.08	Vert(CT)	-0.01	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: 11 lb	FT = 10%

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-5-10 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 5=0-3-8, 3=Mechanical, 4=Mechanical  
Max Horz 5=74(LC 8)  
Max Uplift 5=71(LC 4), 3=-49(LC 8)  
Max Grav 5=332(LC 1), 3=79(LC 1), 4=58(LC 3)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-5=-290/95

#### NOTES-

- 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) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3.
- 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.



August 21, 2020

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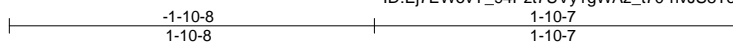
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521698
W0 114	J20	Jack-Open	2	1	Job Reference (optional)	

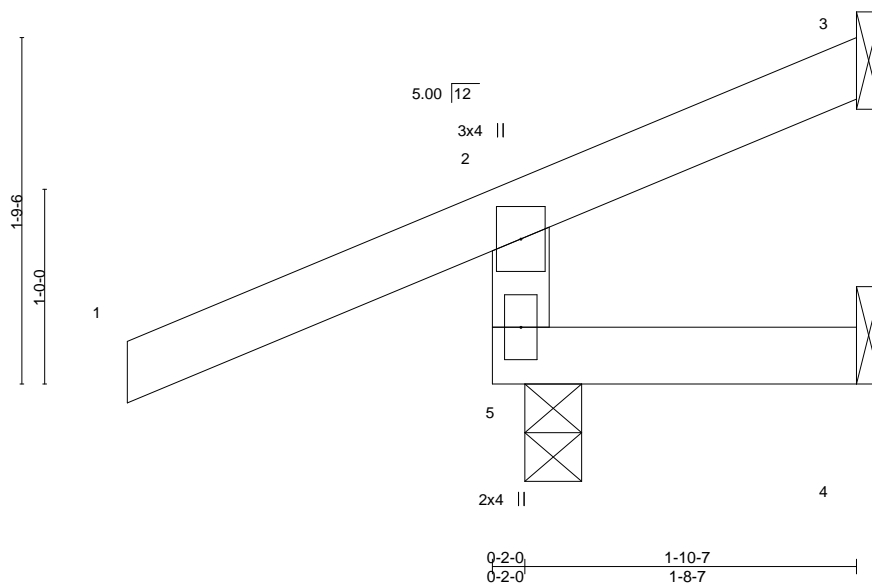
Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Fri Aug 21 06:00:34 2020 Page 1

ID:EJ7EWovY\_94Pzt7UVy1gWAZ\_t70-nvJS8Te2YkUrKoak1?Wc3Xvt9uDgXvPBSSpQpoylj4h



Scale = 1:11.8



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.28	Vert(LL)	0.00	4-5	>999	360	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.08	Vert(CT)	0.00	4-5	>999	240	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.01	3	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	-0.00	5	>999	240	
									Weight: 7 lb FT = 10%

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 1-10-7 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 3=Mechanical, 4=Mechanical, 5=0-3-8  
Max Horz 5=53(LC 5)  
Max Uplift 3=16(LC 8), 4=6(LC 1), 5=86(LC 4)  
Max Grav 3=5(LC 19), 4=25(LC 3), 5=302(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-5=-262/95

#### NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end 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 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) 3, 4, 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.



August 21, 2020

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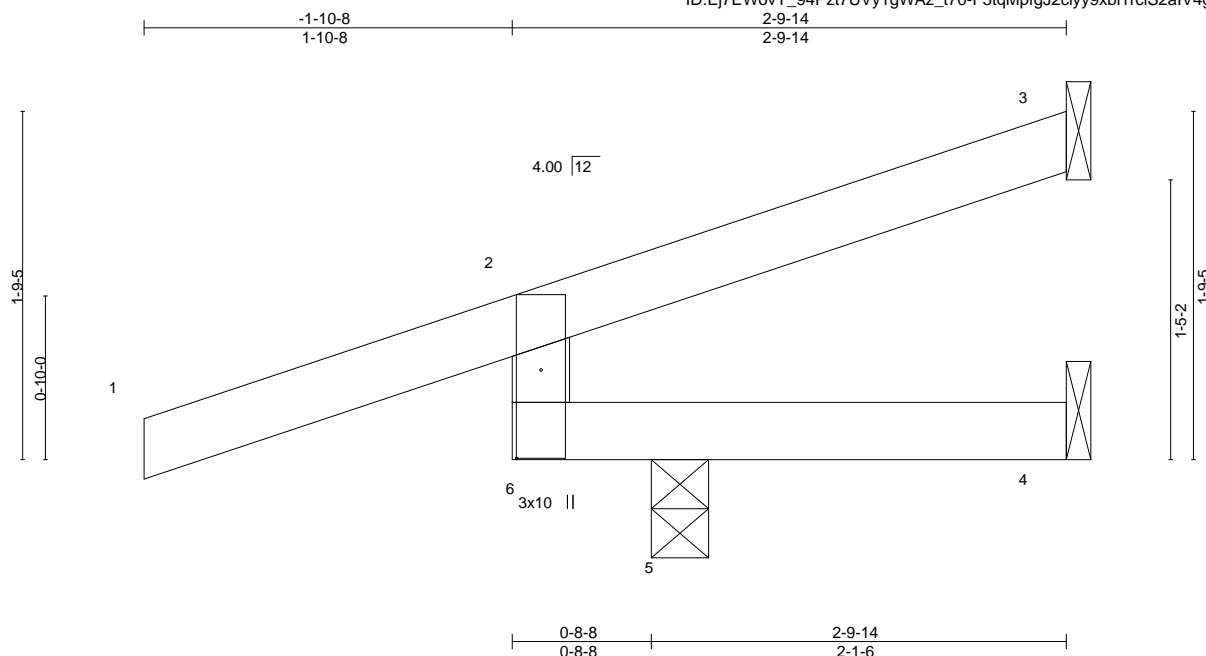


16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521699
W0 114	J21	Jack-Open	1	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Fri Aug 21 06:00:35 2020 Page 1  
ID:Ej7EWovY\_94Pzt7UVy1gWaz\_t70-F5tqMpfGJ2ciyy9xbi1rclS2aIV4gMfKh6YzMFYlj4g



Scale = 1:11.7

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

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.30	Vert(LL)	0.01	4-5	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.36	Vert(CT)	0.01	4-5	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.03	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	-0.01	4-5	>999	240	Weight: 9 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 2-9-14 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS.

(size) 3=Mechanical, 4=Mechanical, 5=0-3-8  
Max Horz 5=62(LC 4)  
Max Uplift 3=25(LC 8), 4=78(LC 1), 5=187(LC 4)  
Max Grav 3=25(LC 1), 4=55(LC 4), 5=430(LC 1)

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

TOP CHORD 2-6=300/150

#### NOTES-

- 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) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4 except (jt=lb) 5=187.
- 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.



August 21, 2020

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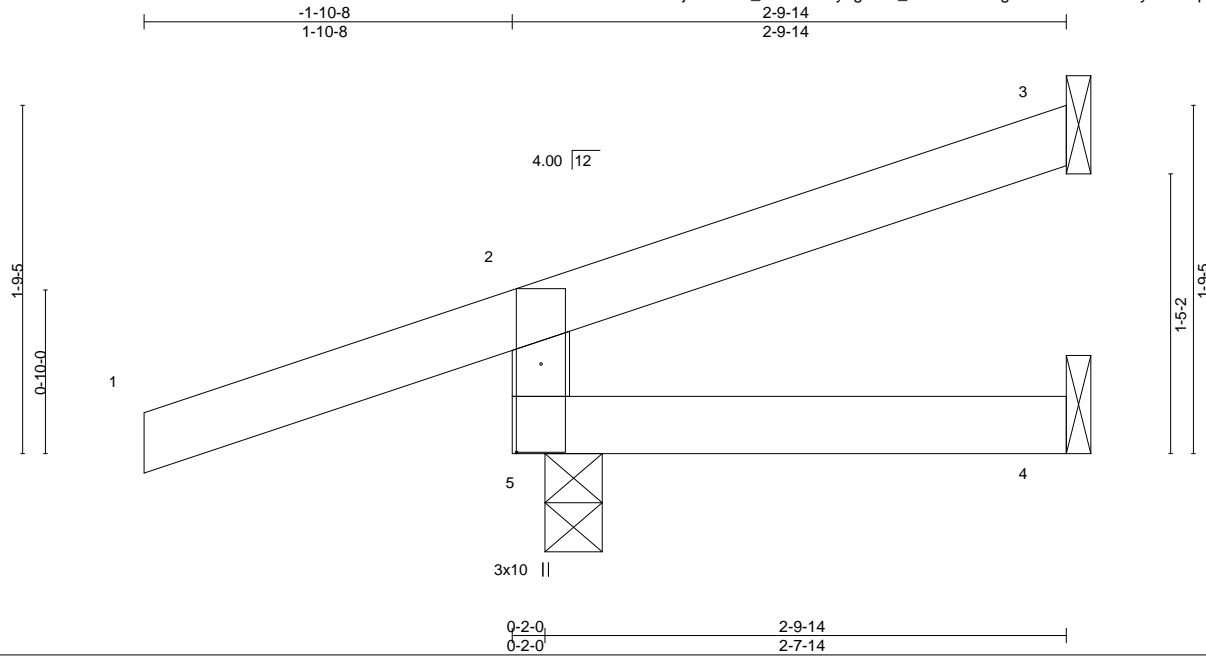


16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521700
W0 114	J22	Jack-Open	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Fri Aug 21 06:00:36 2020 Page 1  
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Scale = 1:11.7

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

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.28	Vert(LL)	0.00	4-5	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.07	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: 9 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 2-9-14 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS.

(size) 5=0-3-8, 3=Mechanical, 4=Mechanical  
Max Horz 5=62(LC 4)  
Max Uplift 5=124(LC 4), 3=31(LC 8)  
Max Grav 5=314(LC 1), 3=52(LC 1), 4=44(LC 3)

#### FORCES.

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

TOP CHORD 2-5=273/139

#### 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) gable end 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 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) 3 except (jt=lb) 5=124.
- 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.



August 21, 2020

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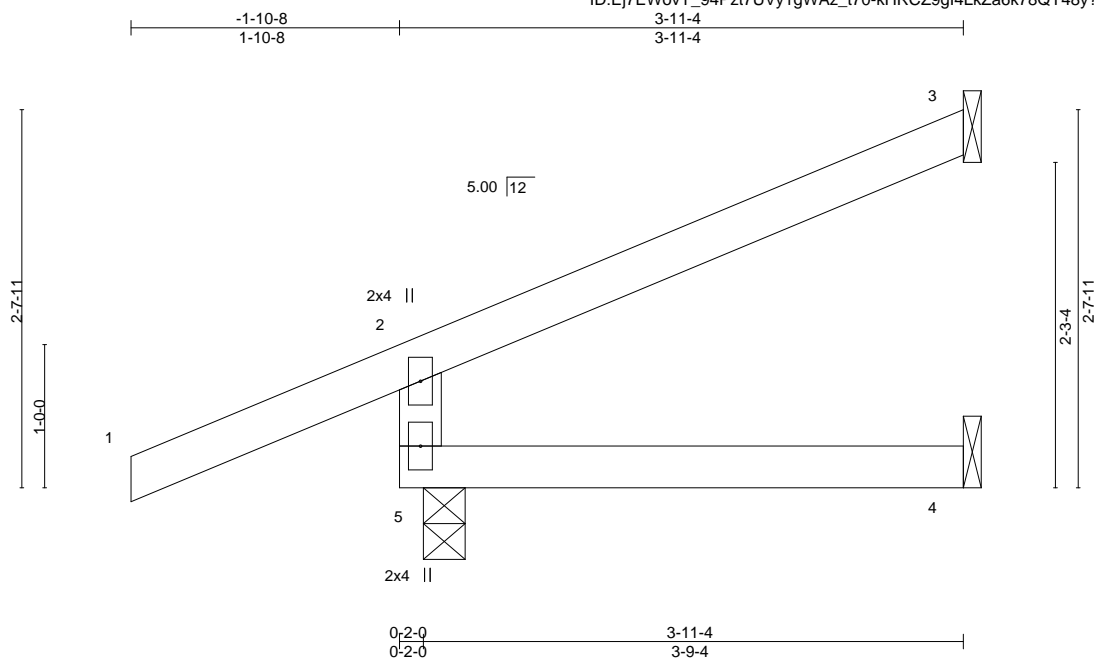


16023 Swingley Ridge Rd  
Chesterfield, MO 63017



Wheeler Lumber, Waverly, KS 66871 8.410 s May 22 2020 MiTek Industries, Inc. Fri Aug 21 06:00:36 2020 Page 1  
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8.410 s May 22 2020 MiTek Industries, Inc. Fri Aug 21 06:00:36 2020 Page 1  
ID:Ei7EWoyY 94Pzt7UVy1aWAz t70-kHRCZ9ql4LkZa6k78QY48v?DehuAPovTvmIXuhvli4f



Scale: 3/4"=1'

<b>LOADING</b>	(psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>		<b>DEFL.</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL	25.0	Plate Grip DOL	1.15	TC	0.28	Vert(LL)	-0.01	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	-0.02	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.01	4-5	>999	240	Weight: 12 lb	FT = 10%

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

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

**REACTIONS.** (size) 5=0-3-8, 3=Mechanical, 4=Mechanical  
Max Horz 5=82(LC 8)  
Max Uplift 5=69(LC 4), 3=57(LC 8)  
Max Grav 5=348(LC 1), 3=98(LC 1), 4=67(LC 3)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**TOP CHORD** 2-5=-305/97

**NOTES-**

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDD=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end 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 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) 5, 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.



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16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521702
W0 114	J24	Diagonal Hip Girder	1	1		

Wheeler Lumber, Waverly, KS 66871

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Job Reference (optional)

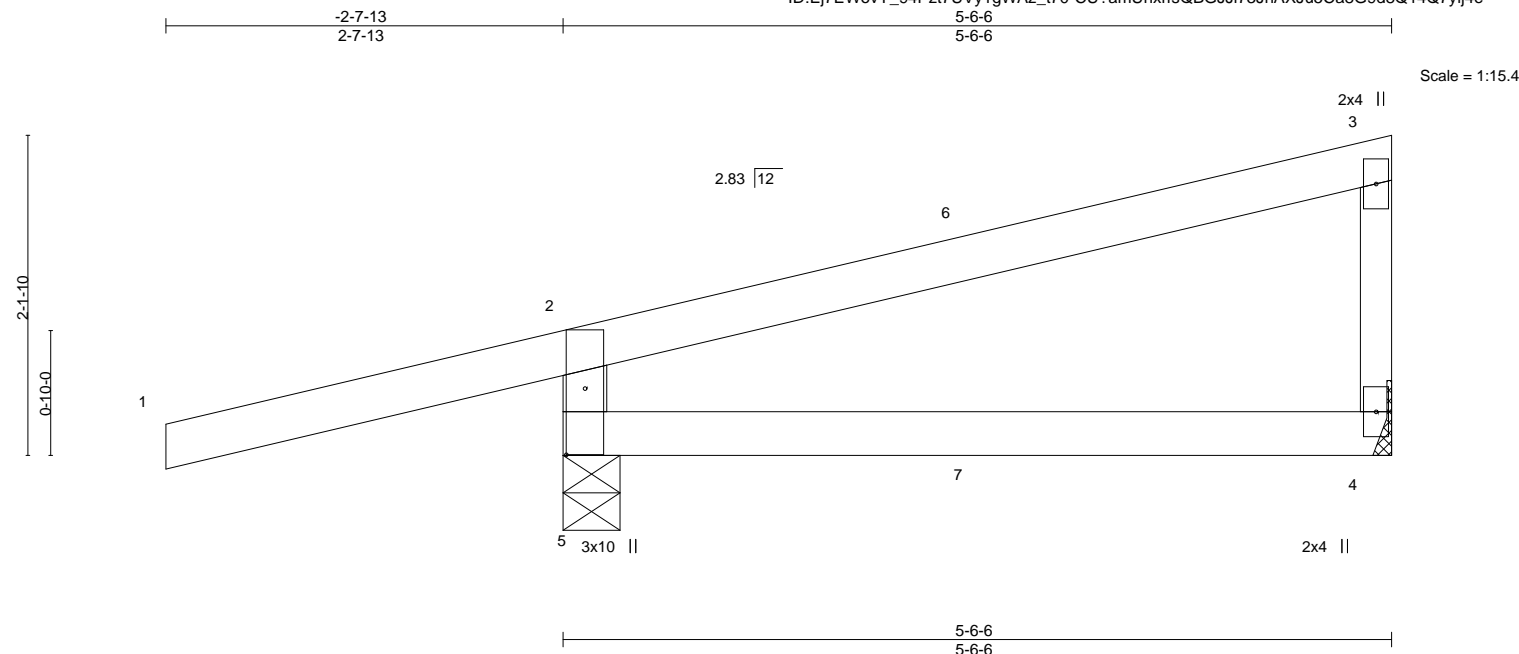


Plate Offsets (X,Y)-- [5:0-5-5,0-1-8]												
<b>LOADING</b> (psf)		<b>SPACING-</b> 2-0-0		<b>CSI.</b>		<b>DEFL.</b> in (loc) l/defl L/d				<b>PLATES</b>	<b>GRIP</b>	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.63	Vert(LL)	-0.03	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.23	Vert(CT)	-0.06	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	-0.02	4-5	>999	240	Weight: 18 lb	FT = 10%

#### LUMBER-

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

#### BRACING-

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

#### REACTIONS.

(size) 5=0-4-9, 4=Mechanical  
Max Horz 5=88(LC 5)  
Max Uplift 5=186(LC 4), 4=31(LC 8)  
Max Grav 5=485(LC 1), 4=186(LC 1)

#### FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-5=-429/217

#### 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) gable end 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 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) 4 except (jt=lb) 5=186.
- 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) 70 lb down and 14 lb up at 2-9-8, and 70 lb down and 14 lb up at 2-9-8 on top chord, and 14 lb down and 16 lb up at 2-9-8, and 14 lb down and 16 lb up at 2-9-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

#### LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-2=-70, 2-3=-70, 4-5=-20



August 21, 2020

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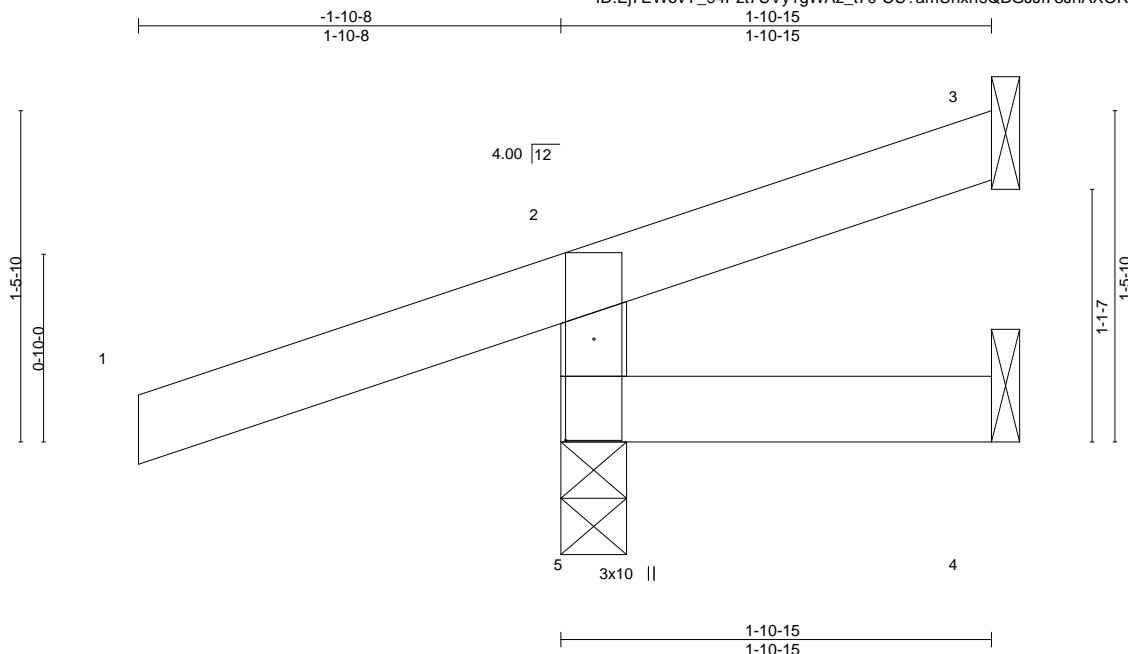


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Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521703
W0 114	J25	Jack-Open	2	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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Scale = 1:10.2

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

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.28	Vert(LL)	0.00	4-5	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.08	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	5	>999	240	Weight: 7 lb	FT = 10%

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

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 1-10-15 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 5=0-3-8, 3=Mechanical, 4=Mechanical  
Max Horz 5=51(LC 4)  
Max Uplift 5=134(LC 4), 3=13(LC 8), 4=7(LC 1)  
Max Grav 5=302(LC 1), 3=5(LC 18), 4=26(LC 3)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-5=-260/138

#### 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) gable end 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 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) 3, 4 except (jt=lb) 5=134.
- 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.



August 21, 2020

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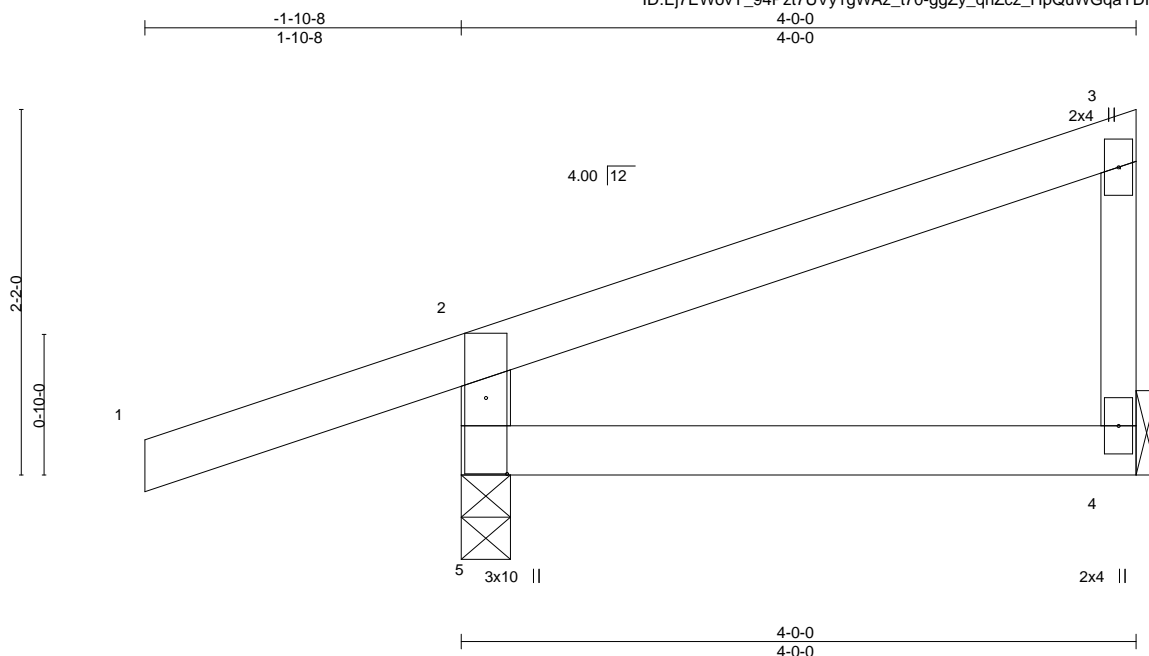


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Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521704
W0 114	J26	Jack-Closed	2	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Fri Aug 21 06:00:38 2020 Page 1  
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Scale = 1:13.7

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

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	2-0-0	TC 0.28	Vert(LL)	-0.01	4-5	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.10	Vert(CT)	-0.02	4-5	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.00	4-5	>999	240	Weight: 13 lb	FT = 10%

#### LUMBER-

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

#### BRACING-

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

#### REACTIONS.

(size) 5=0-3-8, 4=Mechanical  
Max Horz 5=93(LC 5)  
Max Uplift 5=132(LC 4), 4=27(LC 8)  
Max Grav 5=348(LC 1), 4=131(LC 1)

#### FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-5=-308/154

#### 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) gable end 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 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) 4 except (jt=lb) 5=132.
- 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.



August 21, 2020

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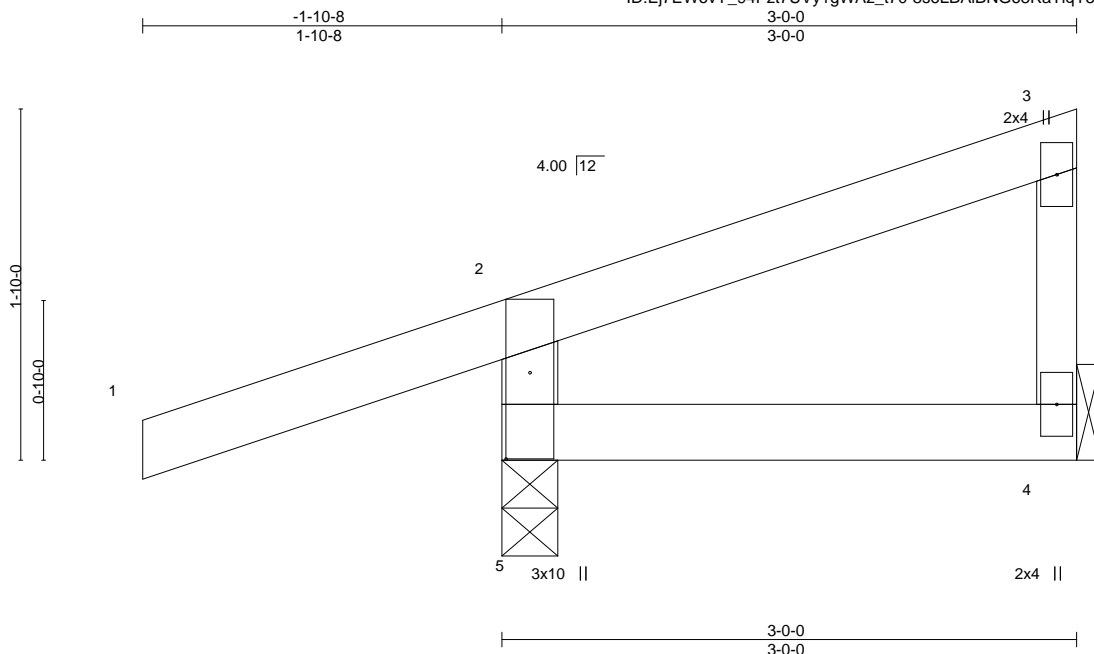


16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521705
W0 114	J27	Jack-Closed	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Fri Aug 21 06:00:39 2020 Page 1  
ID:Ej7EWovY\_94Pzt7UVy1gWAZ\_t70-8s6LBAiBNG68RaTiqY5nmbdkvxqcAfwbkWBV0ylj4c



Scale: 1"=1'

Plate Offsets (X,Y)-- [5:0-5-6,0-1-8]											
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP	
TCLL	25.0	Plate Grip DOL 1.15		TC	0.28	Vert(LL)	-0.00	4-5	>999	360	MT20 197/144
TCDL	10.0	Lumber DOL 1.15		BC	0.05	Vert(CT)	-0.00	4-5	>999	240	
BCLL	0.0 *	Rep Stress Incr YES		WB	0.00	Horz(CT)	-0.00	4	n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	-0.00	5	>999	240	Weight: 11 lb FT = 10%

#### LUMBER-

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

#### BRACING-

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

**REACTIONS.** (size) 5=0-3-8, 4=Mechanical  
Max Horz 5=78(LC 5)  
Max Uplift 5=133(LC 4), 4=17(LC 5)  
Max Grav 5=317(LC 1), 4=72(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-5=-279/145

#### 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) gable end 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 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) 4 except (jt=lb) 5=133.
- 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.



August 21, 2020

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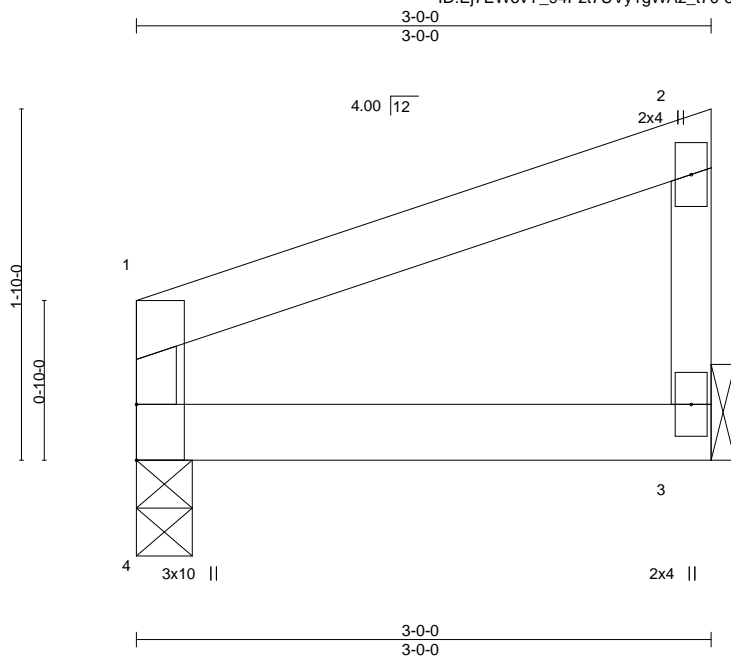
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521706
W0 114	J28	Jack-Closed	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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Scale: 1"=1'

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.10	Vert(LL)	-0.00	3-4	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.06	Vert(CT)	-0.01	3-4	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.00	4	>999	240	Weight: 8 lb	FT = 10%

#### LUMBER-

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

#### BRACING-

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

**REACTIONS.** (size) 4=0-3-8, 3=Mechanical  
Max Horz 4=63(LC 5)  
Max Uplift 4=-19(LC 4), 3=-29(LC 8)  
Max Grav 4=126(LC 1), 3=126(LC 1)

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

#### 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) gable end 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 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) 4, 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.



August 21, 2020

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16023 Swingley Ridge Rd  
Chesterfield, MO 63017



Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521707
W0 114	J29	Jack-Closed Girder	1	1		

Wheeler Lumber, Waverly, KS 66871

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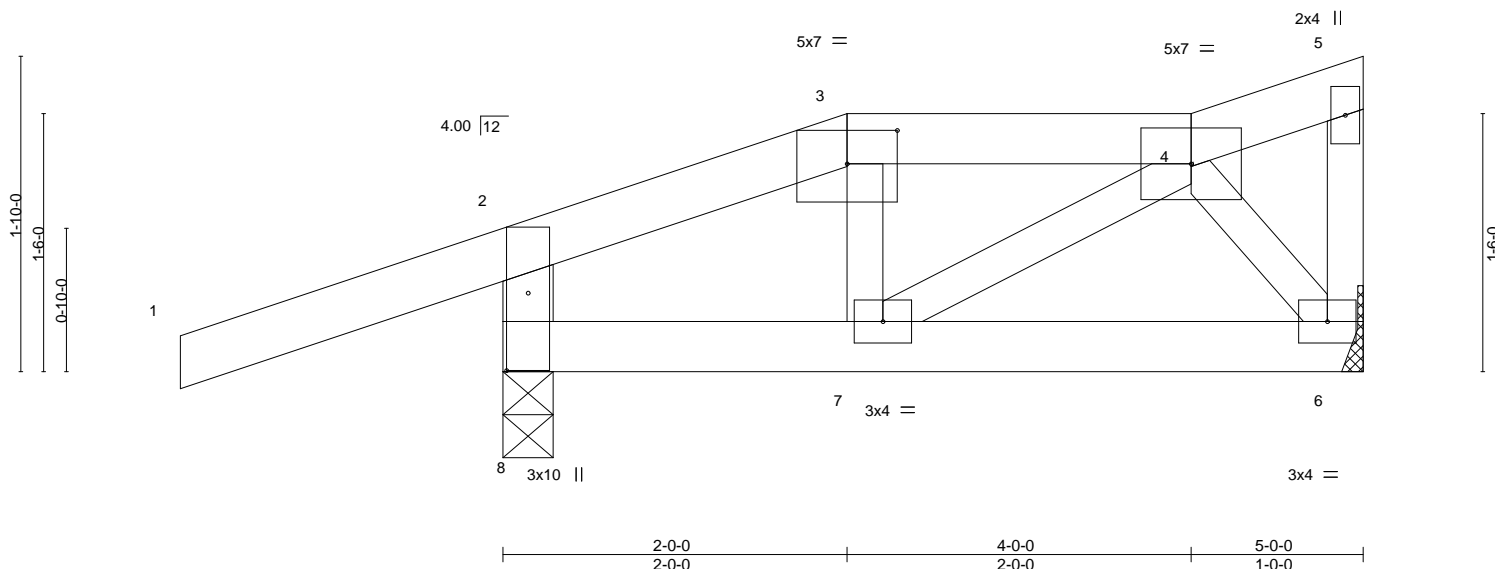


Plate Offsets (X,Y)-- [3:0-3-8,0-2-5], [8:0-5-6,0-1-8]									
<b>LOADING</b> (psf)		<b>SPACING-</b> 2-0-0		<b>CSI.</b>		<b>DEFL.</b> in (loc) l/defl L/d		<b>PLATES GRIP</b>	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.32	Vert(LL)	-0.01 7 >999 360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	-0.01 6-7 >999 240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.03	Horz(CT)	0.00 6 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.00 7 >999 240	Weight: 19 lb	FT = 10%

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

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

**REACTIONS.** (size) 8=0-3-8, 6=Mechanical  
Max Horz 8=78(LC 5)  
Max Uplift 8=166(LC 4), 6=52(LC 8)  
Max Grav 8=364(LC 1), 6=170(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-8=-313/160

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) Provide adequate drainage to prevent water ponding.
  - 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 5) Refer to girder(s) for truss to truss connections.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6 except (it=lb) 8=166.
  - 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - 9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 59 lb down and 126 lb up at 2-0-0 on top chord, and 29 lb down and 60 lb up at 2-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
  - 10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard  
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-2=-70, 2-3=-70, 3-4=-70, 4-5=-70, 6-8=-20  
Concentrated Loads (lb)  
Vert: 3=35(B)



August 21, 2020

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16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521708
W0 114	J30	Jack-Closed	1	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

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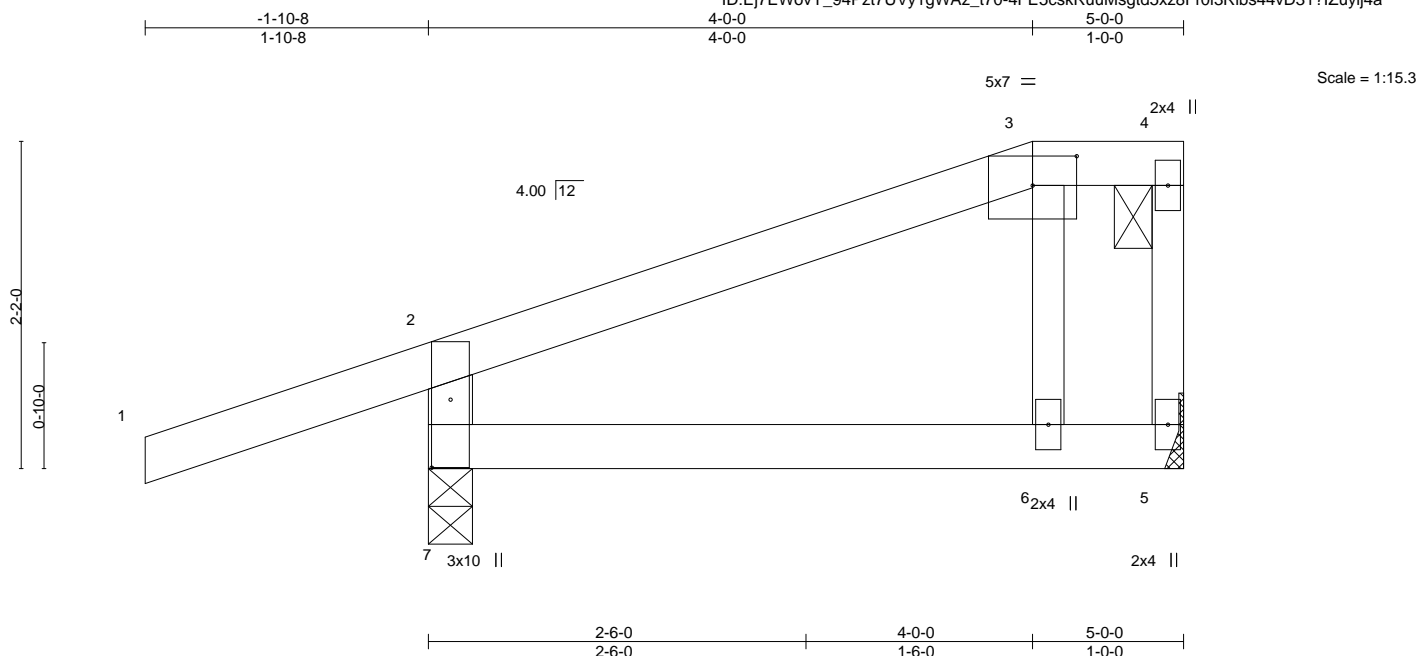


Plate Offsets (X,Y)--		[3:0-3-8,0-2-5], [7:0-5-6,0-1-8]									
LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.28	Vert(LL)	-0.01 6-7	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	-0.03 6-7	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00 5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.01 6-7	>999	240	Weight: 17 lb	FT = 10%

#### LUMBER-

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

#### BRACING-

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

#### REACTIONS.

(size) 7=0-3-8, 5=Mechanical  
 Max Horz 7=95(LC 5)  
 Max Uplift 7=137(LC 4), 5=32(LC 5)  
 Max Grav 7=385(LC 1), 5=184(LC 1)

#### FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-7=-326/156

#### 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) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5 except (jt=lb) 7=137.
- 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.



August 21, 2020

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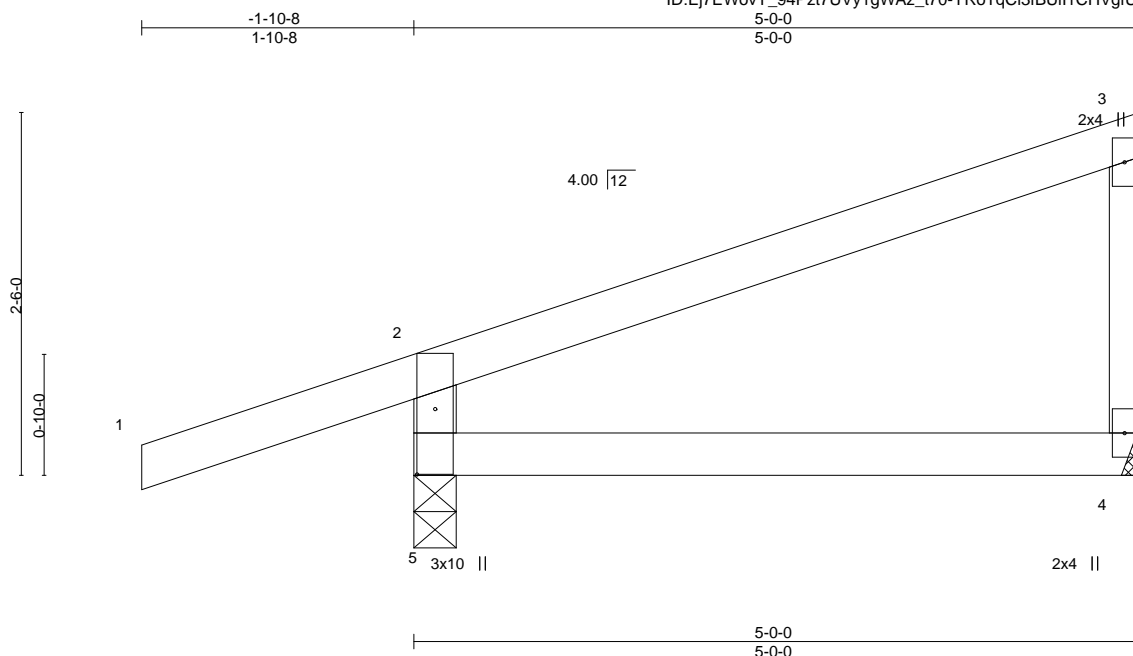


16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521709
W0 114	J31	Jack-Closed	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Fri Aug 21 06:00:42 2020 Page 1  
ID:Ej7EWovY\_94PztUVy1gWaz\_t70-YRoTqCl3fBui1CHVgfUODFEB6wcpXOMIhr5Lylj4Z



Scale: 3/4"=1'

Plate Offsets (X,Y)-- [5:0-5-6,0-1-8]											
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP	
TCLL	25.0	Plate Grip DOL 1.15		TC	0.28	Vert(LL)	-0.02	4-5	>999	360	MT20 197/144
TCDL	10.0	Lumber DOL 1.15		BC	0.17	Vert(CT)	-0.04	4-5	>999	240	
BCLL	0.0 *	Rep Stress Incr YES		WB	0.00	Horz(CT)	-0.00	4	n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.01	4-5	>999	240	Weight: 16 lb FT = 10%

#### LUMBER-

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

#### BRACING-

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

#### REACTIONS.

(size) 5=0-3-8, 4=Mechanical  
Max Horz 5=108(LC 5)  
Max Uplift 5=134(LC 4), 4=-40(LC 8)  
Max Grav 5=385(LC 1), 4=184(LC 1)

#### FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-5=-340/166

#### 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) gable end 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 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) 4 except (jt=lb) 5=134.
- 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.



August 21, 2020

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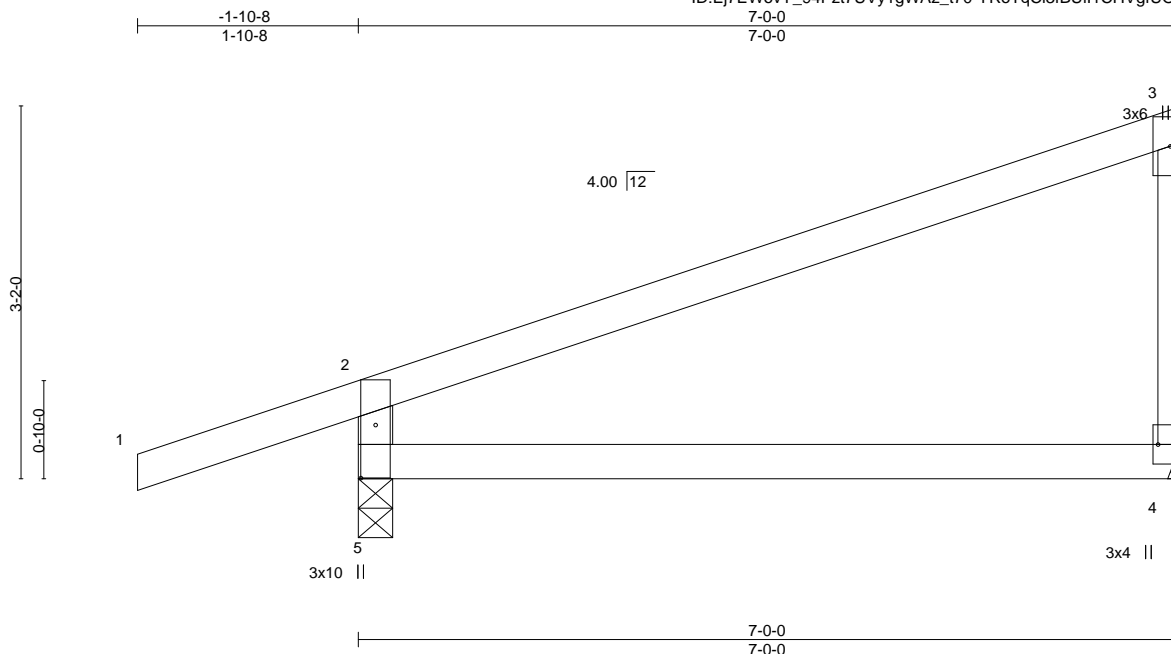


16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521710
W0 114	J32	Jack-Closed	6	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Fri Aug 21 06:00:42 2020 Page 1  
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Scale = 1:19.6

Plate Offsets (X,Y)-- [4:Edge,0-2-8], [5:0-5-6,0-1-8]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP		
TCLL	25.0	Plate Grip DOL 1.15		TC	0.58	Vert(LL)	-0.08	4-5	>985	360	MT20	197/144
TCDL	10.0	Lumber DOL 1.15		BC	0.38	Vert(CT)	-0.17	4-5	>472	240		
BCLL	0.0 *	Rep Stress Incr YES		WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.03	4-5	>999	240	Weight: 21 lb	FT = 10%

#### LUMBER-

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

#### BRACING-

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

#### REACTIONS.

(size) 5=0-3-8, 4=Mechanical  
Max Horz 5=137(LC 5)  
Max Uplift 5=144(LC 4), 4=62(LC 8)  
Max Grav 5=466(LC 1), 4=283(LC 1)

#### FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-5=412/192

#### 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) gable end 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 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) 4 except (jt=lb) 5=144.
- 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.



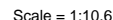
August 21,2020

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

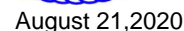
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

142521711

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Concentrated Loads (lb)  
Vert: 1=-71(F=-36, B=-36)  
Trapezoidal Loads (plf)  
Vert: 1=0(F=35, B=35)-to-2=-49(F=11, B=11), 2=-5(F=33, B=33)-to-3=-49(F=10, B=10), 5=0(F=10, B=10)-to-4=-14(F=3, B=3)



Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521712
W0 114	J34	Diagonal Hip Girder	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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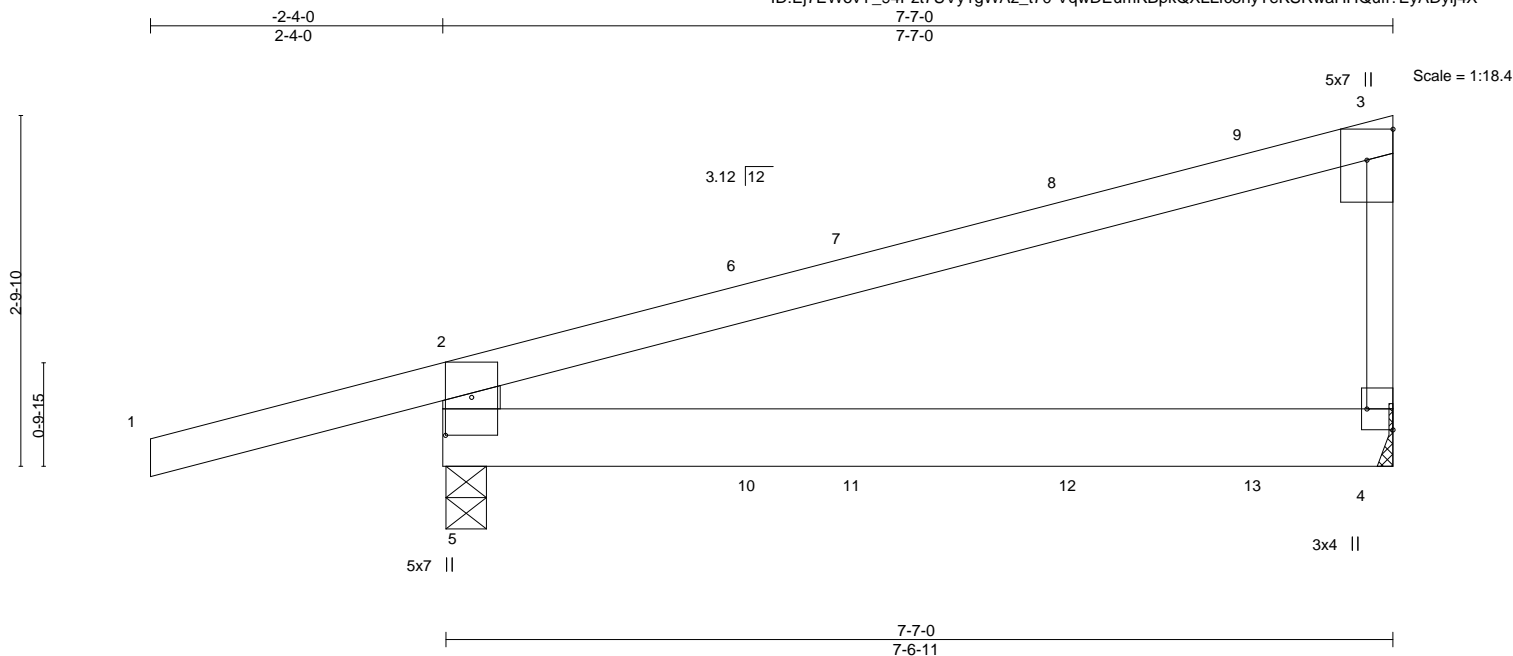


Plate Offsets (X,Y)-- [3:Edge,0-2-8], [4:Edge,0-2-8], [5:0-3-10,0-2-8]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.81	Vert(LL)	-0.04	4-5	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.29	Vert(CT)	-0.08	4-5	>999	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.02	4-5	>999	240	Weight: 27 lb	FT = 10%

#### LUMBER-

TOP CHORD 2x4 SPF No.2  
BOT CHORD 2x6 SPF No.2  
WEBS 2x6 SPF No.2 \*Except\*  
3-4: 2x3 SPF No.2

#### BRACING-

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

#### REACTIONS.

(size) 5=0-3-14, 4=Mechanical  
Max Horz 5=115(LC 22)  
Max Uplift 5=191(LC 4), 4=91(LC 8)  
Max Grav 5=553(LC 1), 4=380(LC 1)

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

TOP CHORD 2-5=-501/250, 3-4=-261/131

#### 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) gable end 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 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) 4 except (jt=lb) 5=191.
- 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) 64 lb down and 38 lb up at 2-6-8, 77 lb down and 29 lb up at 3-4-9, and 89 lb down and 71 lb up at 5-1-4, and 101 lb down and 78 lb up at 6-6-15 on top chord, and 4 lb down at 2-6-8, 10 lb down and 8 lb up at 3-4-9, and 20 lb down at 5-1-4, and 39 lb down at 6-6-15 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

#### LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-2=-70, 2-3=-70, 4-5=-20  
Concentrated Loads (lb)  
Vert: 8=-23(F) 9=-52(B) 11=8(B) 12=-10(F) 13=-24(B)



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Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521713
W0 114	J35	Jack-Open	10	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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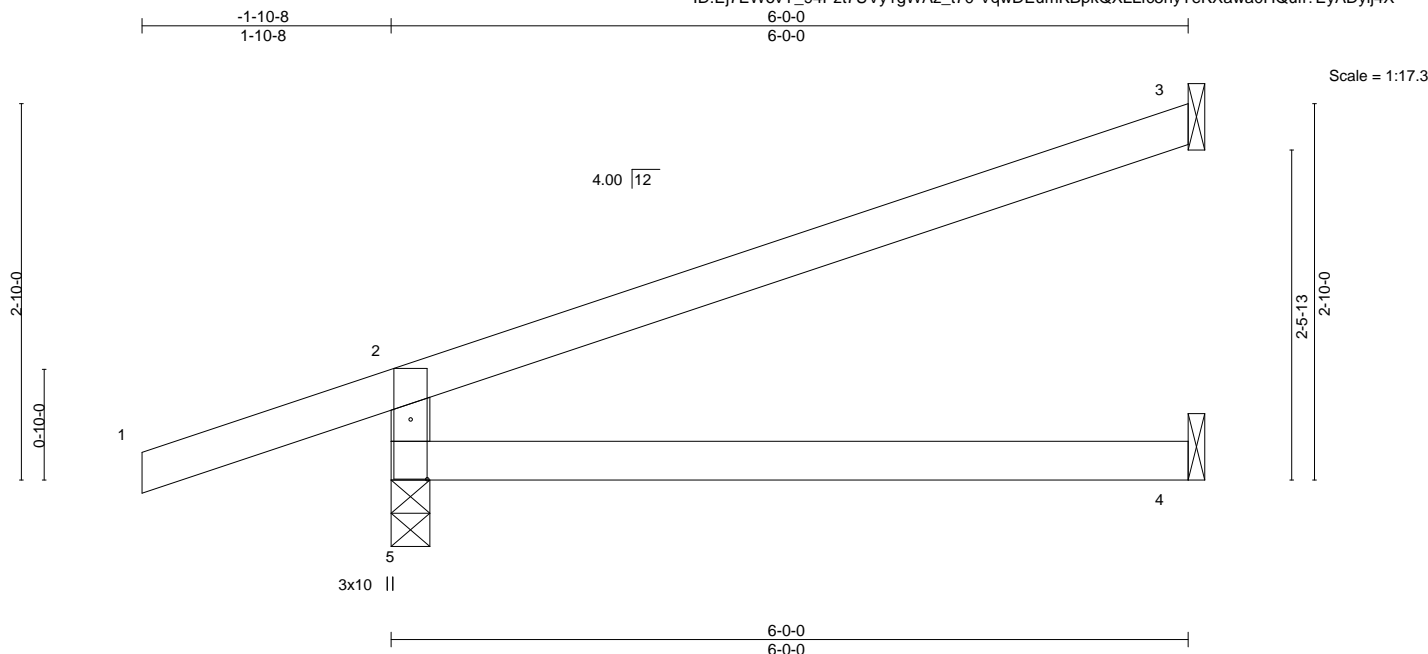


Plate Offsets (X,Y)-- [5:0-5-6,0-1-8]												
<b>LOADING</b> (psf)		<b>SPACING-</b> 2-0-0		<b>CSI.</b>		<b>DEFL.</b> in (loc) l/defl L/d				<b>PLATES</b>	<b>GRIP</b>	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.48	Vert(LL)	-0.05	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.31	Vert(CT)	-0.11	4-5	>632	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.03	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.04	4-5	>999	240	Weight: 17 lb	FT = 10%

#### LUMBER-

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

#### BRACING-

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

#### REACTIONS.

(size) 5=0-3-8, 3=Mechanical, 4=Mechanical  
Max Horz 5=106(LC 4)  
Max Uplift 5=127(LC 4), 3=82(LC 8)  
Max Grav 5=427(LC 1), 3=173(LC 1), 4=107(LC 3)

#### FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-5=-374/174

#### 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) gable end 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 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) 3 except (jt=lb) 5=127.
- 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.



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16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521714
W0 114	J36	Jack-Open	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Fri Aug 21 06:00:45 2020 Page 1  
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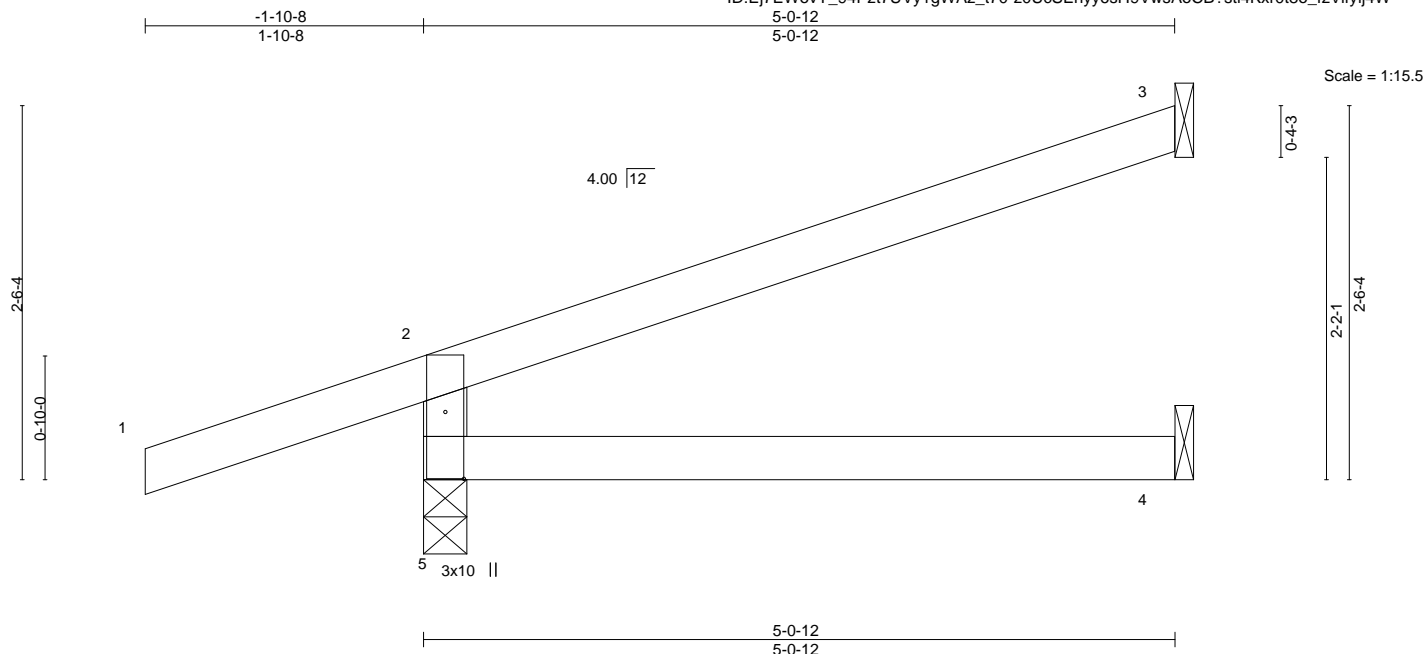


Plate Offsets (X,Y)--		[5:0-5-6,0-1-8]									
LOADING	(psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC 0.30	Vert(LL)	-0.03	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC 0.20	Vert(CT)	-0.05	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.02	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.02	4-5	>999	240	Weight: 15 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 5-0-12 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS.

(size) 5=0-3-8, 3=Mechanical, 4=Mechanical  
Max Horz 5=93(LC 4)  
Max Uplift 5=124(LC 4), 3=68(LC 8)  
Max Grav 5=389(LC 1), 3=140(LC 1), 4=89(LC 3)

#### FORCES.

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

TOP CHORD 2-5=-341/162

#### 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) gable end 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 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) 3 except (jt=lb) 5=124.
- 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.



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Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521715
W0 114	J37	Jack-Open	2	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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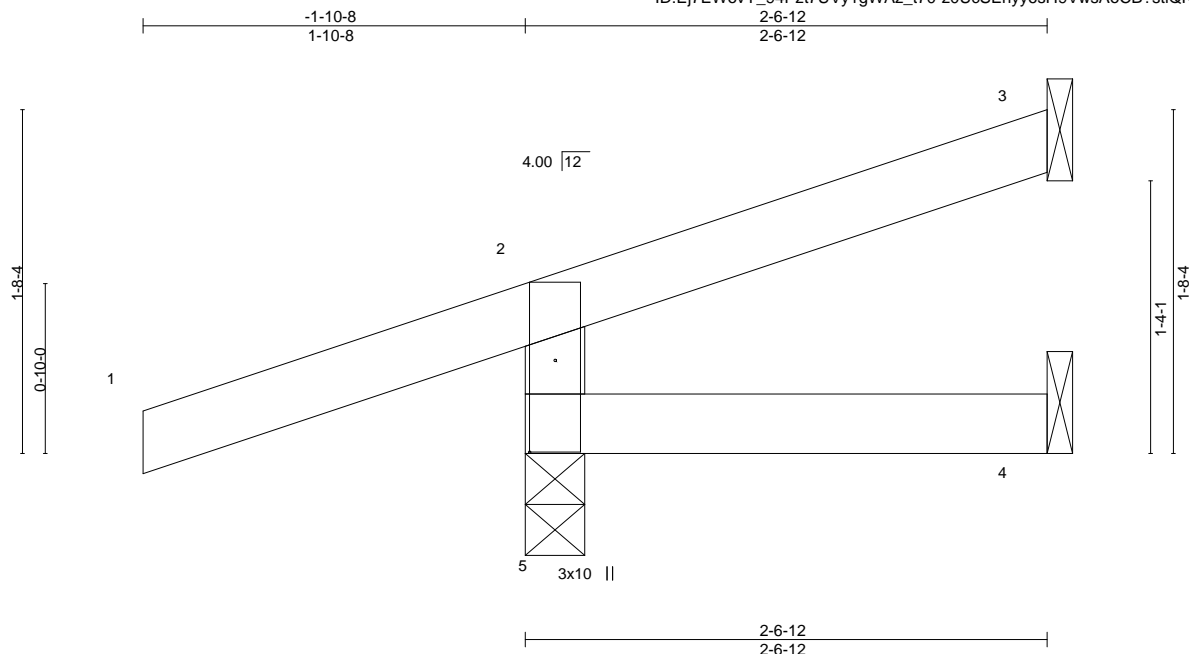


Plate Offsets (X,Y)-- [5:0-5-6,0-1-8]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.28	Vert(LL)	0.00	4-5	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.07	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: 9 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 2-6-12 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS.

(size) 5=0-3-8, 3=Mechanical, 4=Mechanical  
Max Horz 5=59(LC 4)  
Max Uplift 5=126(LC 4), 3=26(LC 8)  
Max Grav 5=308(LC 1), 3=39(LC 1), 4=38(LC 3)

#### FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-5=267/137

#### 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) gable end 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 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) 3 except (jt=lb) 5=126.
- 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.



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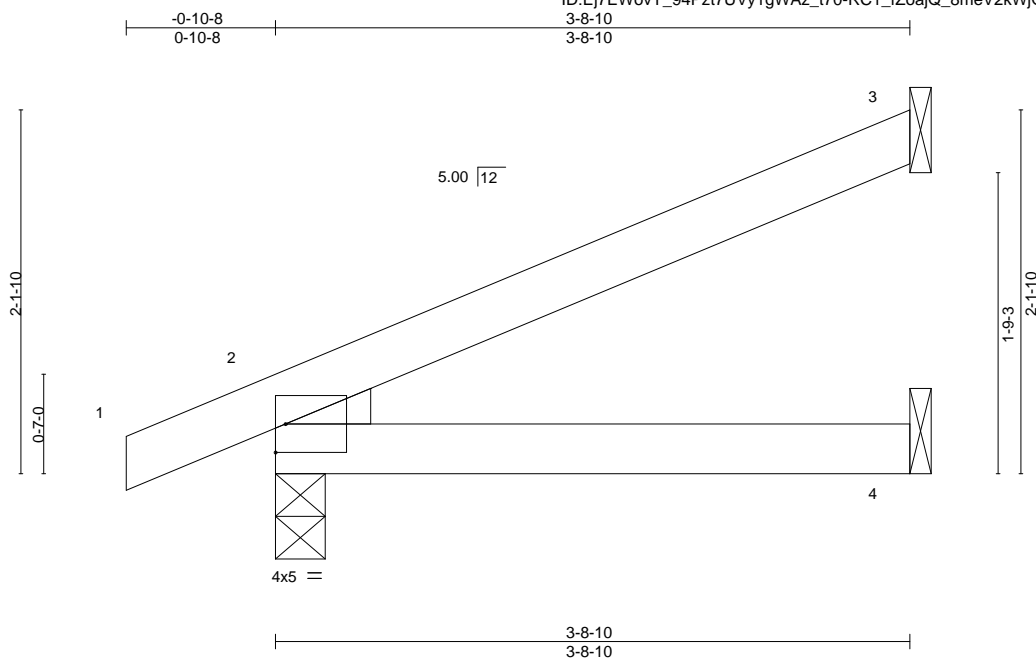
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521716
W0 114	J38	Jack-Open	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.19	Vert(LL)	-0.01	2-4	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.12	Vert(CT)	-0.02	2-4	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P	Wind(LL)	0.00	2	****	240	Weight: 10 lb	FT = 10%

#### LUMBER-

TOP CHORD 2x4 SPF No.2  
BOT CHORD 2x4 SPF No.2  
WEDGE  
Left: 2x3 SPF No.2

#### BRACING-

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

**REACTIONS.** (size) 3=Mechanical, 2=0-3-8, 4=Mechanical  
Max Horz 2=77(LC 8)  
Max Uplift 3=66(LC 8), 2=-37(LC 8)  
Max Grav 3=113(LC 1), 2=240(LC 1), 4=70(LC 3)

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

#### 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) gable end 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 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) 3, 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.



August 21, 2020

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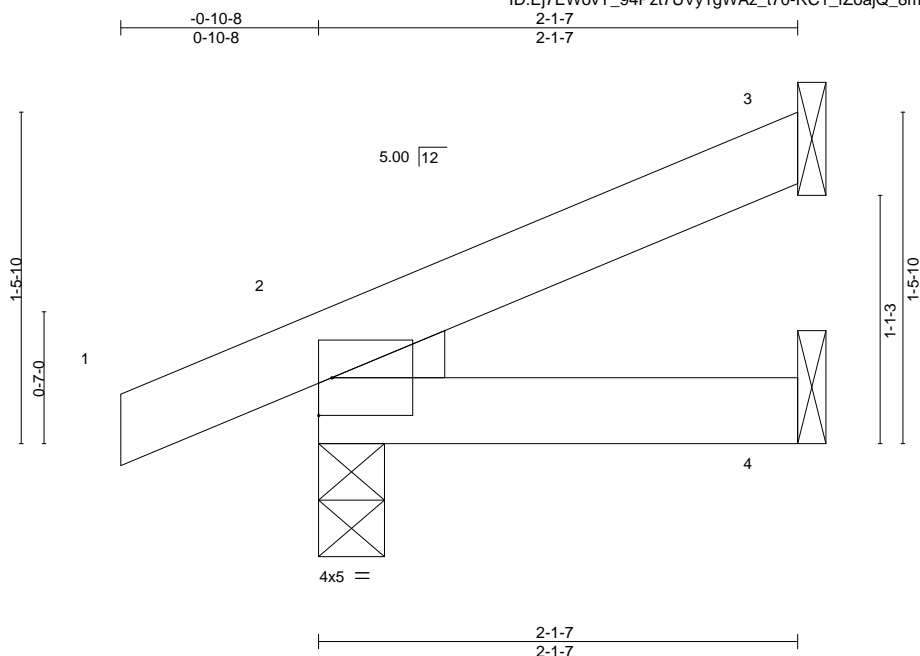
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16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Wheeler Lumber, Waverly, KS 66871 8.410 s May 22 2020 MiTek Industries, Inc. Fri Aug 21 06:00:46 2020 Page 1  
ID:Ej7EWovY\_94Pzt7UVy1gWAZ\_t70-RC1\_fZoajQ\_8meV2kWjQY3PzXiKlIKNyCj3E6vj4V

8.410 s May 22 2020 MiTek Industries, Inc. Fri Aug 21 06:00:46 2020 Page 1  
ID:Ej7EWovY\_94Pzt7UVy1gWaz\_t70-RC1\_fZoajQ\_8meV2kWjQY3PzXjKlIKNyCjJ3E6Ylj4V



<b>LOADING</b>	(psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>		<b>DEFL.</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL	25.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	-0.00	2	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	2-4	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P		Wind(LL)	0.00	2	****	240	Weight: 7 lb	FT = 10%

**LUMBER-**

TOP CHORD 2x4 SPF No.2  
BOT CHORD 2x4 SPF No.2  
WEDGE  
Left: 2x3 SPF No.2

**BRACING-**

TOP CHORD	Structural wood sheathing directly applied or 2-1-7 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

### REACTIONS.

(size) 3=Mechanical, 2=0-3-8, 4=Mechanical  
Max Horz 2=49(LC 8)  
Max Uplift 3=-35(LC 8), 2=-35(LC 4)  
Max Grav 3=48(LC 1), 2=177(LC 1), 4=38(LC 3)

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

**NOTES-**

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end 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 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) 3, 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.



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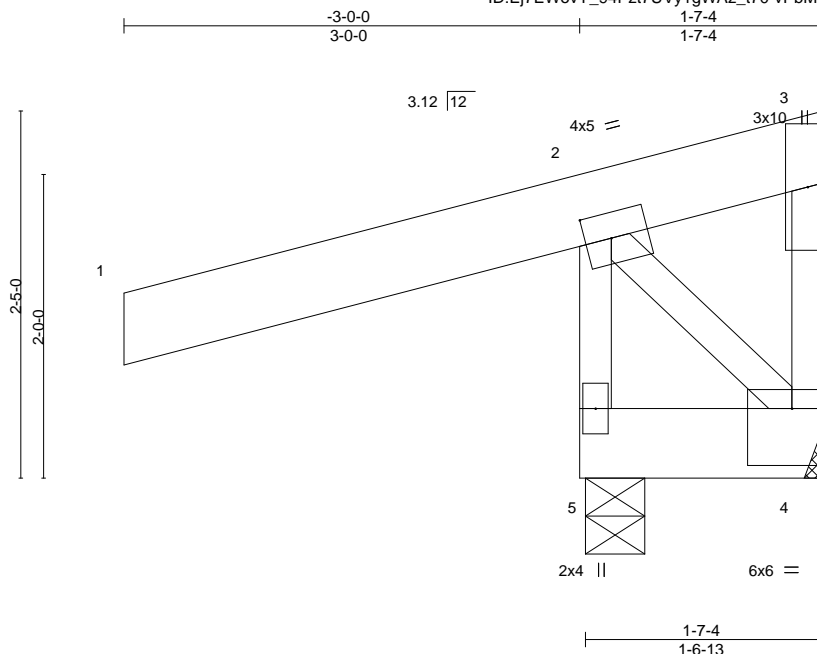


16023 Swingley Ridge Rd  
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Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521718
W0 114	J40	Jack-Closed Girder	2	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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ID:Ej7EWovY\_94Pzt7UVy1gWAZ\_t70-vPbMtvocUK7?Oo4EIDEf5HyZ27gMUnl5RzScnYylj4U



Scale = 1:15.2

Plate Offsets (X,Y)--		[2:0-2-1,0-2-0], [4:Edge,0-4-8]										
<b>LOADING</b> (psf)		<b>SPACING-</b>	2-0-0	<b>CSI.</b>		<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.78	Vert(LL)	-0.00	5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.01	Vert(CT)	-0.00	5	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.02	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P		Wind(LL)	0.00	5	****	240	Weight: 15 lb	FT = 10%

#### LUMBER-

TOP CHORD 2x6 SPF 1650F 1.4E  
BOT CHORD 2x6 SPF No.2  
WEBS 2x3 SPF No.2

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 1-7-4 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS.

(size) 5=0-4-11, 4=Mechanical  
Max Horz 5=92(LC 5)  
Max Uplift 5=278(LC 4), 4=734(LC 21)  
Max Grav 5=1327(LC 21), 4=123(LC 4)

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

TOP CHORD 2-5=-1313/286, 3-4=-142/748

#### 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) gable end 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 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) except (jt=lb) 5=278, 4=734.
- 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) Load case(s) 21 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
- 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 Except:

- 21) User defined: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-2=-70(F), 2-3=-70(F), 4-5=-20(F)  
Concentrated Loads (lb)  
Vert: 1=-250



August 21, 2020

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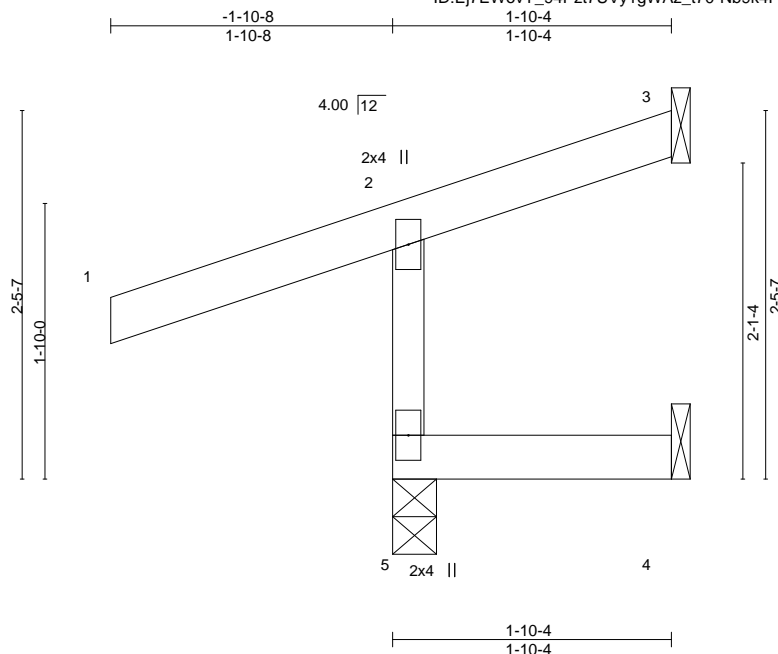
16023 Swingley Ridge Rd  
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Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521719
W0 114	J41	Jack-Open	2	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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Scale = 1:15.3

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.27	Vert(LL)	0.00	5	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.05	Vert(CT)	-0.00	5	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.02	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R						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 1-10-4 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS.

(size) 5=0-3-8, 3=Mechanical, 4=Mechanical  
Max Horz 5=64(LC 5)  
Max Uplift 5=107(LC 4), 3=23(LC 5), 4=12(LC 5)  
Max Grav 5=296(LC 1), 3=6(LC 19), 4=32(LC 3)

#### FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-5=-270/132

#### 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) gable end 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 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) 3, 4 except (jt=lb) 5=107.
- 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.



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Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521720
W0 114	J42	JACK-CLOSED GIRDER	1	1	Job Reference (optional)	

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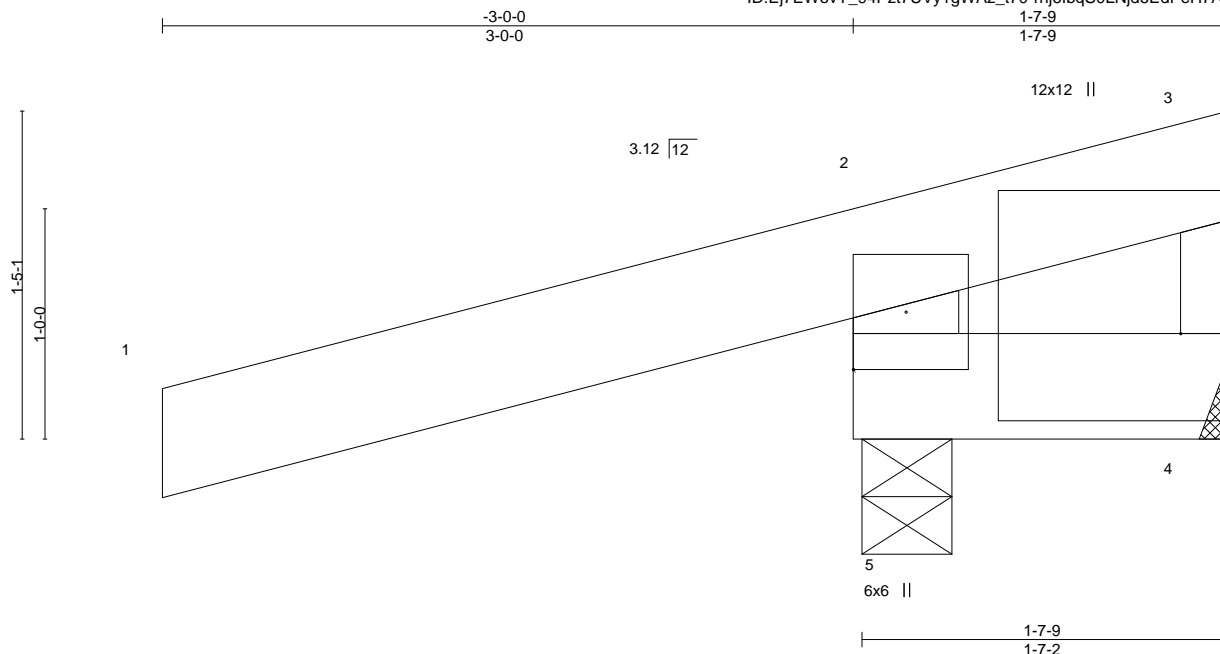


Plate Offsets (X,Y)-- [3:Edge,0-2-8]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	L/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.83	Vert(LL)	0.00	5	>999	360	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.21	Vert(CT)	0.00	4-5	>999	240	197/144
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.00	Horz(CT)	-0.00	4	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	-0.00	5	>999	240	
								Weight: 12 lb	FT = 10%

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 1-7-9 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

#### REACTIONS.

(size) 5=0-4-11, 4=Mechanical  
Max Horz 5=66(LC 7)  
Max Uplift 5=-314(LC 4), 4=-846(LC 21)  
Max Grav 5=1438(LC 21), 4=155(LC 4)

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

TOP CHORD 2-5=-1210/287, 3-4=-112/643

#### NOTES-

- 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) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 5=314, 4=846.
- 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) 21 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
- 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 Except:

- User defined: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-2=-70(F), 2-3=-70(F), 4-5=-20(F)  
Concentrated Loads (lb)  
Vert: 1=-250



August 21, 2020

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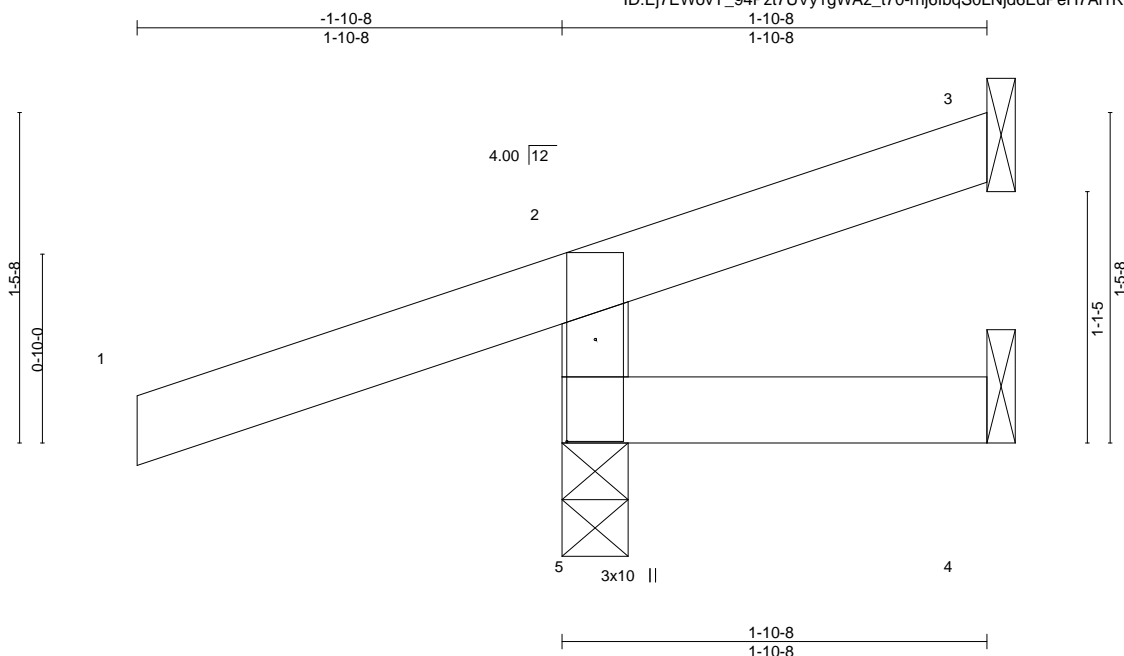


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Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521721
W0 114	J43	Jack-Open	1	1		

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Scale = 1:10.2

Plate Offsets (X,Y)-- [5:0-5-6,0-1-8]											
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP	
TCLL	25.0	Plate Grip DOL 1.15		TC	0.28	Vert(LL)	0.00	4-5	>999	360	MT20 197/144
TCDL	10.0	Lumber DOL 1.15		BC	0.08	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	5	>999	240	Weight: 7 lb FT = 10%

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 1-10-8 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS.

(size) 5=0-3-8, 3=Mechanical, 4=Mechanical  
Max Horz 5=50(LC 4)  
Max Uplift 5=135(LC 4), 3=12(LC 8), 4=8(LC 1)  
Max Grav 5=302(LC 1), 3=4(LC 19), 4=25(LC 3)

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

TOP CHORD 2-5=-260/138

#### 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) gable end 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 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) 3, 4 except (jt=lb) 5=135.
- 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.



August 21, 2020

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Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521722
W0 114	J44	Diagonal Hip Girder	1	1		
Job Reference (optional)						

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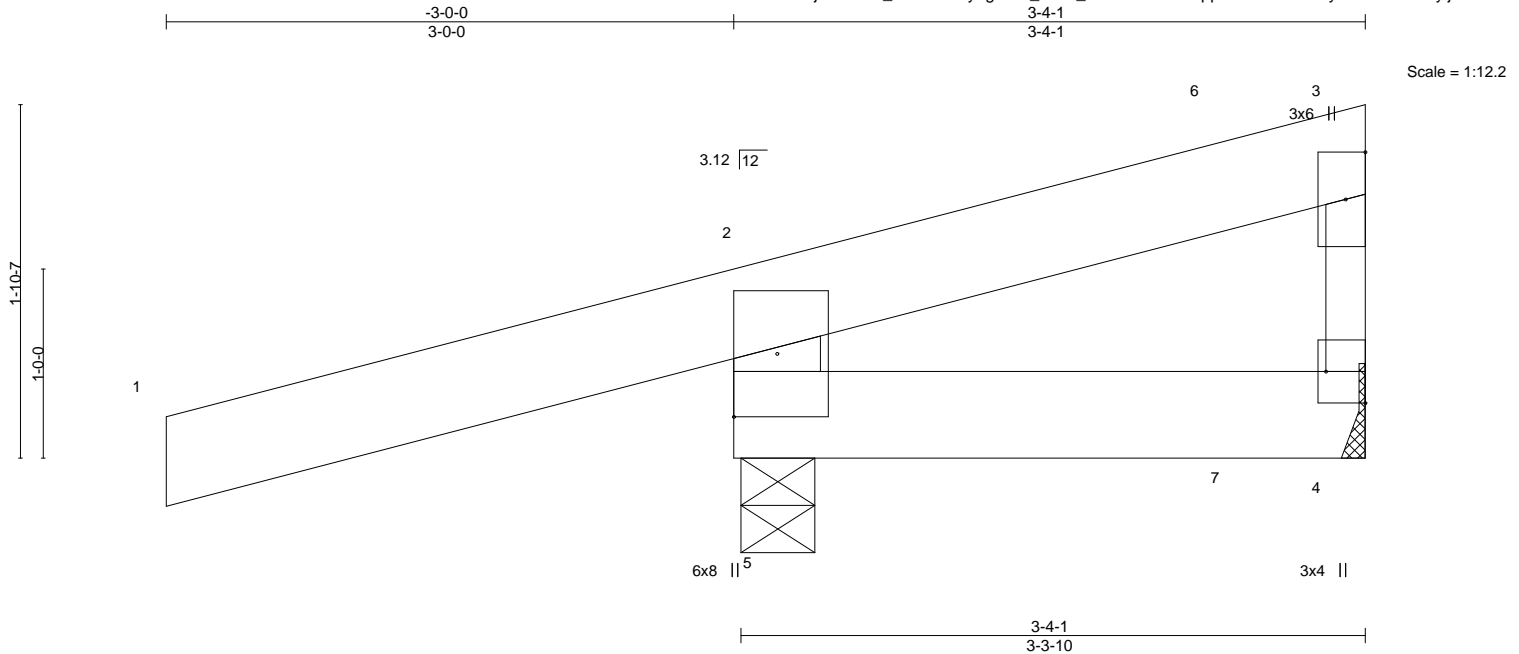


Plate Offsets (X,Y)--		[4:Edge,0-2-8]	
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>
TCLL 25.0	Plate Grip DOL	1.15	TC 0.83
TCDL 10.0	Lumber DOL	1.15	BC 0.27
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.00
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R
			<b>DEFL.</b>
			in (loc) l/defl L/d
			Vert(LL) 0.00 4-5 >999 360
			Vert(CT) 0.01 4-5 >999 240
			Horz(CT) -0.00 4 n/a n/a
			Wind(LL) -0.00 4-5 >999 240
			<b>PLATES</b>
			MT20
			<b>GRIP</b>
			197/144
			Weight: 19 lb FT = 10%

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-4-1 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

#### REACTIONS.

(size) 5=0-4-11, 4=Mechanical  
Max Horz 5=85(LC 7)  
Max Uplift 5=231(LC 4), 4=261(LC 37)  
Max Grav 5=1000(LC 37), 4=100(LC 21)

#### FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-5=-857/233

#### 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) gable end 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 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) except (jt=lb) 5=231, 4=261.
- 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) Load case(s) 37 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 55 lb down and 28 lb up at 2-8-7 on top chord, and 14 lb down and 8 lb up at 2-8-7 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

#### LOAD CASE(S)

Standard Except:  
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-2=-70, 2-3=-70, 4-5=-20  
Concentrated Loads (lb)  
Vert: 7=8(F)



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Continued on page 2

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16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521722
W0 114	J44	Diagonal Hip Girder	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Fri Aug 21 06:00:50 2020 Page 2  
ID:Ej7EWovY\_94Pzt7UVy1gWAZ\_t70-J\_HVVxr5nfVaFGppzMoMivaUYLdyh8NX7xhGNtylj4R

LOAD CASE(S)

- 37) User defined: Lumber Increase=1.15, Plate Increase=1.15
  - Uniform Loads (plf)
    - Vert: 1-2=-70(F), 2-3=-70(F), 4-5=-20(F)
  - Concentrated Loads (lb)
    - Vert: 1=-250 7=8(F)

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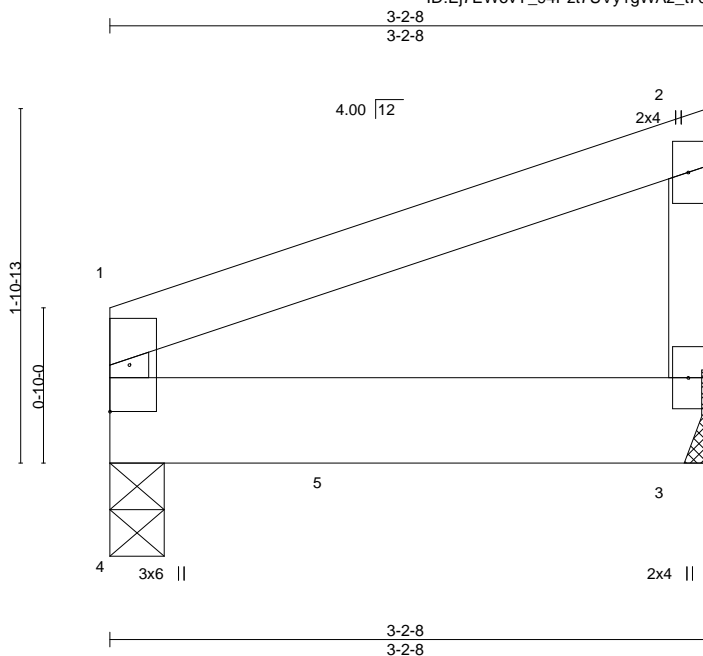
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521723
W0 114	J45	Jack-Closed Girder	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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ID:Ej7EWovY\_94Pzt7UVy1gWAZ\_t70-J\_HVVxr5nfVaFGppzMoMivaeJLdAh8NX7xhGNtylj4R



Scale = 1:12.4

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.14	Vert(LL)	-0.01	3-4	>999	360	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.26	Vert(CT)	-0.01	3-4	>999	240	197/144
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	3-4	>999	240	
									Weight: 11 lb FT = 10%

#### LUMBER-

TOP CHORD 2x4 SPF No.2  
BOT CHORD 2x6 SPF No.2  
WEBS 2x3 SPF No.2

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-2-8 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 4=0-3-8, 3=Mechanical  
Max Horz 4=63(LC 5)  
Max Uplift 4=-56(LC 4), 3=-54(LC 8)  
Max Grav 4=347(LC 1), 3=270(LC 1)

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

#### 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) gable end 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 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) 4, 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 347 lb down and 67 lb up at 1-3-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

#### LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-2=-70, 3-4=-20  
Concentrated Loads (lb)  
Vert: 5=-347(F)



August 21, 2020

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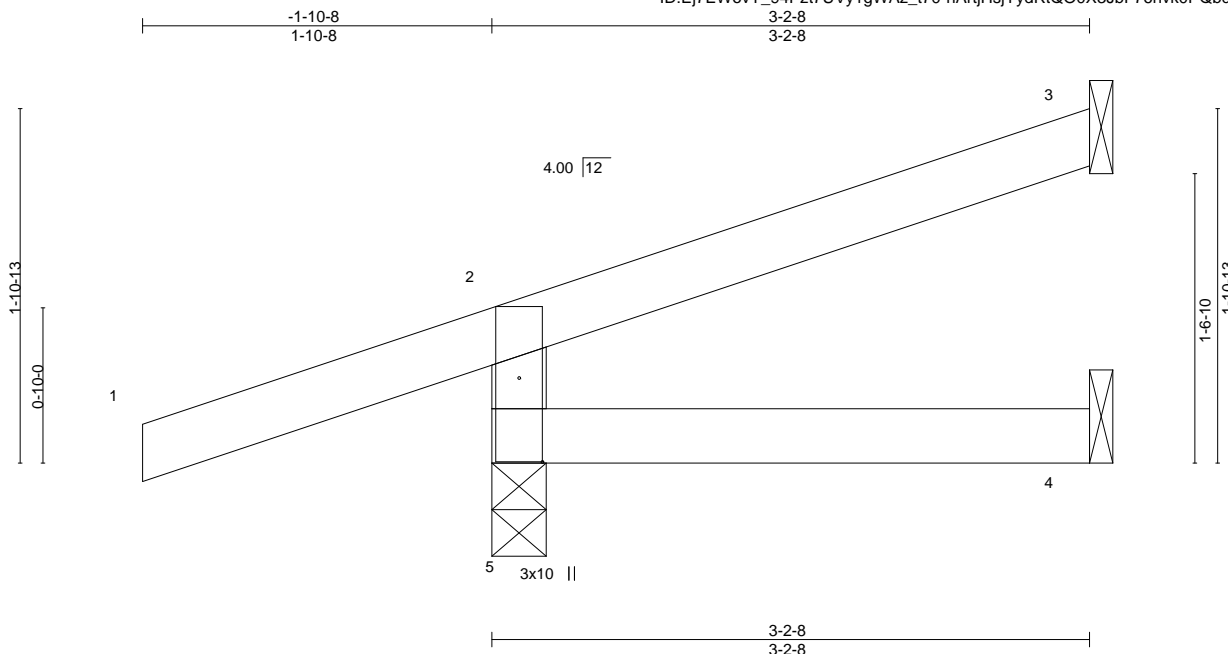
16023 Swingley Ridge Rd  
Chesterfield, MO 63017



Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521724
W0 114	J46	Jack-Open	5	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Fri Aug 21 06:00:51 2020 Page 1  
ID:Ej7EWovY\_94Pzt7UVy1gWAZ\_t70-nArtjHsjYdRtQO0X3JbF76nvk0PQbdhMbQpwJyIj4Q



Scale = 1:12.4

Plate Offsets (X,Y)-- [5:0-5-6,0-1-8]											
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP	
TCLL	25.0	Plate Grip DOL 1.15		TC	0.28	Vert(LL)	-0.00	4-5	>999	360	MT20 197/144
TCDL	10.0	Lumber DOL 1.15		BC	0.06	Vert(CT)	-0.01	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: 10 lb FT = 10%

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-2-8 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS.

(size) 5=0-3-8, 3=Mechanical, 4=Mechanical  
Max Horz 5=68(LC 4)  
Max Uplift 5=123(LC 4), 3=38(LC 8)  
Max Grav 5=324(LC 1), 3=69(LC 1), 4=52(LC 3)

#### FORCES.

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

TOP CHORD 2-5=283/142

#### 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) gable end 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 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) 3 except (jt=lb) 5=123.
- 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.



August 21, 2020

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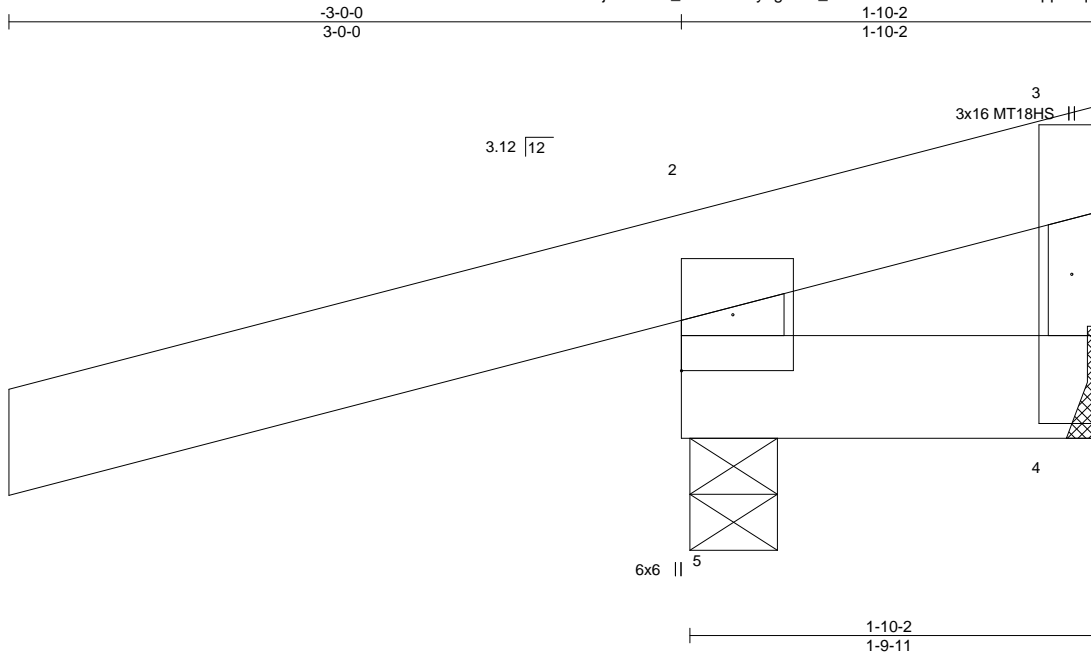


16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521725
W0 114	J47	Jack-Closed Girder	2	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Fri Aug 21 06:00:52 2020 Page 1  
ID:Ej7EWovY\_94Pzt7UVy1gWAZ\_t70-GMPFwdsLJGIIUZzC4nqqoKfq28K892sqbFANSlylj4P



Scale = 1:10.3

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.83	Vert(LL)	0.00	5	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.22	Vert(CT)	0.00	4-5	>999	240	MT18HS	197/144
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	-0.00	5	>999	240		
									Weight: 13 lb	FT = 10%

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 1-10-2 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

#### REACTIONS.

(size) 5=0-4-11, 4=Mechanical  
Max Horz 5=68(LC 7)  
Max Uplift 5=291(LC 4), 4=707(LC 21)  
Max Grav 5=1320(LC 21), 4=129(LC 4)

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

TOP CHORD 2-5=-1111/269, 3-4=-89/529

#### 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) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) All plates are MT20 plates unless otherwise indicated.
- 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 5=291, 4=707.
- 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) Load case(s) 21 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
- 9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

#### LOAD CASE(S) Standard Except:

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-2=-70, 2-3=-70, 4-5=-20
- 21) User defined: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-2=-70(F), 2-3=-70(F), 4-5=-20(F)  
Concentrated Loads (lb)  
Vert: 1=-250



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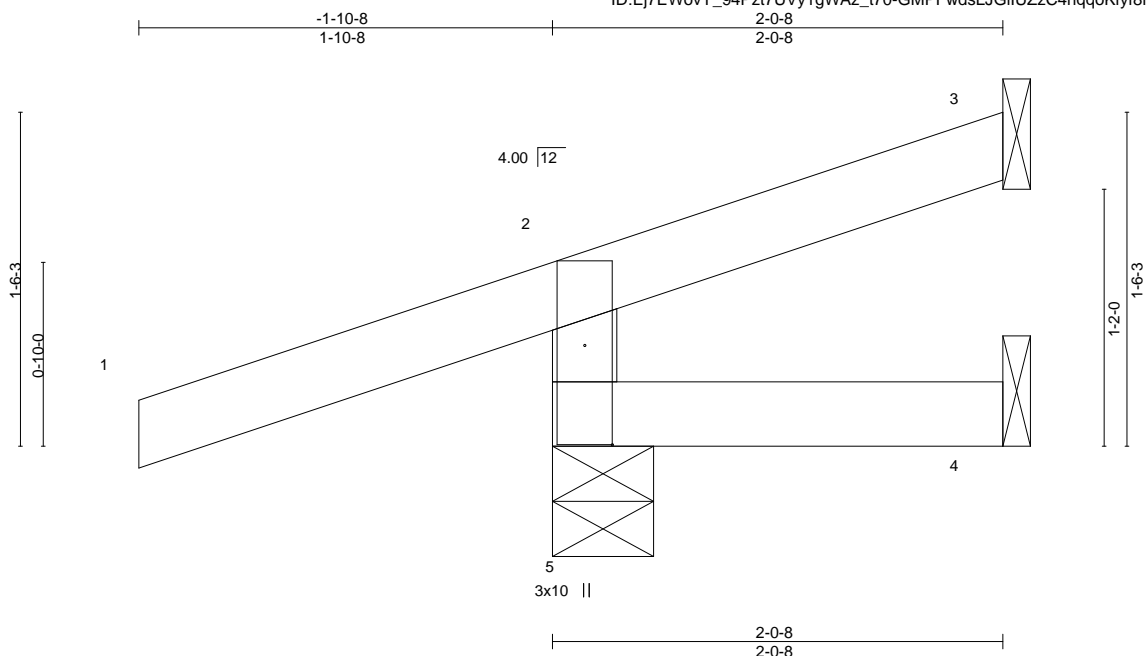


16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521726
W0 114	J48	Jack-Open	4	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Fri Aug 21 06:00:52 2020 Page 1  
ID:Ej7EWovY\_94Pzi7UVy1gWAZ\_t70-GMPFwdsLJGIIUZZC4nqqoKfyf8MM92sqbFANSlylj4P



Scale = 1:10.4

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

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.28	Vert(LL)	0.00	4-5	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.08	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	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 2-0-8 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS.

(size) 5=0-5-8, 3=Mechanical, 4=Mechanical  
Max Horz 5=52(LC 4)  
Max Uplift 5=133(LC 4), 3=15(LC 8), 4=5(LC 1)  
Max Grav 5=302(LC 1), 3=10(LC 1), 4=27(LC 3)

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

TOP CHORD 2-5=-260/137

#### 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) gable end 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 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) 3, 4 except (jt=lb) 5=133.
- 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.



August 21, 2020

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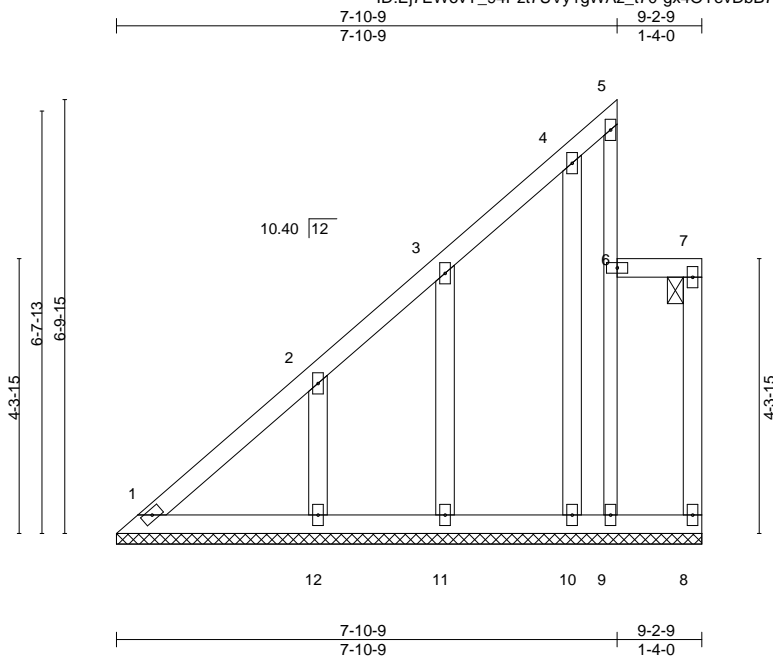
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521727
W0 114	LAY1	GABLE	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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Scale = 1:36.3

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.16	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.06	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.10	Horz(CT)	-0.00	8	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						
								Weight: 46 lb	FT = 10%

#### LUMBER-

TOP CHORD 2x4 SPF No.2  
 BOT CHORD 2x4 SPF No.2  
 WEBS 2x4 SPF No.2 \*Except\*  
 5-9: 2x3 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.): 6-9, 6-7.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. Except: 10-0-0 oc bracing: 8-9.

#### REACTIONS.

All bearings 9-2-9.  
 (lb) - Max Horz 1=277(LC 8)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 9, 8, 11, 10 except 12=-135(LC 8)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 9, 8, 11, 10 except 12=277(LC 15)

#### FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-364/211

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- 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) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 9, 8, 11, 10 except (jt=lb) 12=135.
- 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



August 21, 2020

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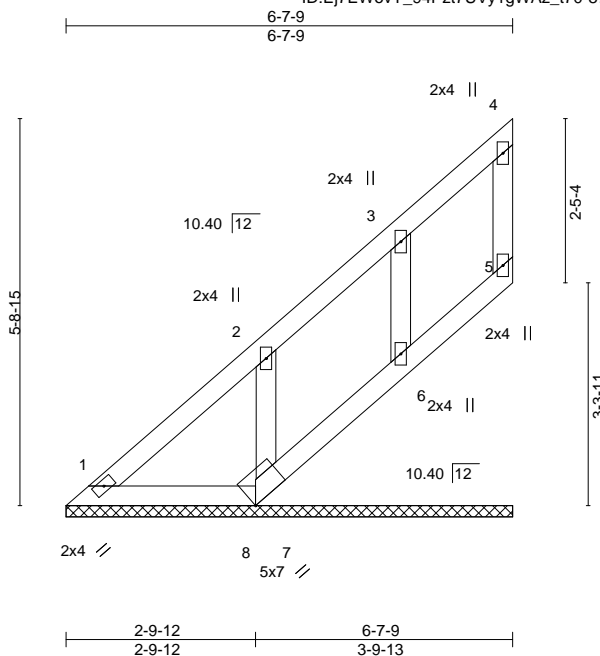
16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521728
W0 114	LAY2	GABLE	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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Scale = 1:34.2

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.09	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.05	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.03	Horz(CT)	-0.00	5	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 25 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. Except: 6-0-0 oc bracing: 5-6.

#### REACTIONS.

All bearings 6-7-9.  
(lb) - Max Horz 1=175(LC 8)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 8, 6 except 7=121(LC 8)  
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 8, 6 except 7=271(LC 15)

#### FORCES.

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

#### NOTES-

- 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) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 8, 6 except (jt=lb) 7=121.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 5, 7, 6.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



August 21, 2020

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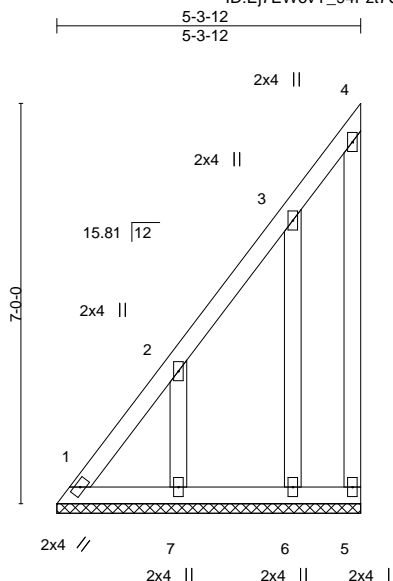
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0
W0 114	LAY3	GABLE	2	1	I42521729
Job Reference (optional)					

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Fri Aug 21 06:00:57 2020 Page 1

ID:Ej7EWovY\_94Pzt7UVy1gWAZ\_t70-cKC8zKwU7oNabLr9tkQ?VOMoB94Pql6ZkXt87zylj4K



Scale = 1:40.3

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 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 0.03	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.06	Horz(CT)	-0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P							
										Weight: 31 lb FT = 10%

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-3-12 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS.

All bearings 5-3-12.  
(lb) - Max Horz 1=254(LC 5)  
Max Uplift All uplift 100 lb or less at joint(s) except 1=125(LC 6), 5=115(LC 7), 7=197(LC 8), 6=138(LC 8)  
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7, 6

#### FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-301/225

#### 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) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 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 125 lb uplift at joint 1, 115 lb uplift at joint 5, 197 lb uplift at joint 7 and 138 lb uplift at joint 6.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



August 21, 2020

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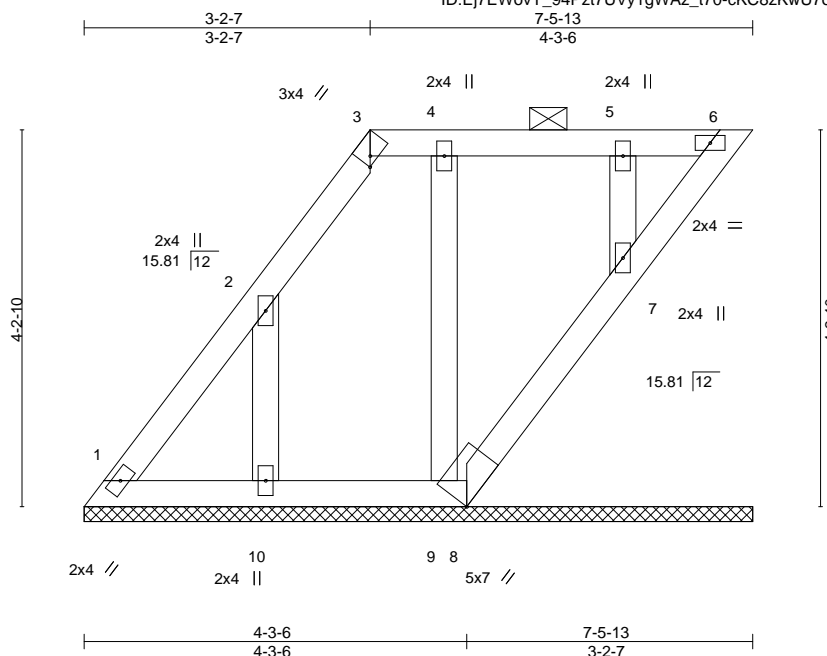
16023 Swingley Ridge Rd  
Chesterfield, MO 63017



Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521730
W0 114	LAY4	GABLE	2	1		

Wheeler Lumber, Waverly, KS 66871

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Scale = 1:25.8

Plate Offsets (X,Y)--		[3:0-1-3,Edge]									
<b>LOADING</b> (psf)		<b>SPACING-</b>	2-0-0	<b>CSI.</b>		<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 25.0		Plate Grip DOL	1.15	TC 0.04		Vert(LL)	n/a -	n/a	999	MT20	197/144
TCDL 10.0		Lumber DOL	1.15	BC 0.03		Vert(CT)	n/a -	n/a	999		
BCLL 0.0 *		Rep Stress Incr	YES	WB 0.03		Horz(CT)	-0.00 6	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, except 2-0-0 oc purlins (6-0-0 max.): 3-6.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS.

All bearings 7-5-13.  
(lb) - Max Horz 1=160(LC 8)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 6, 8, 9, 7 except 10=159(LC 8)  
Max Grav All reactions 250 lb or less at joint(s) 1, 6, 8, 10, 9, 7

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

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- 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) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 6, 8, 9, 7 except (jt=lb) 10=159.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 6, 7.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



August 21, 2020

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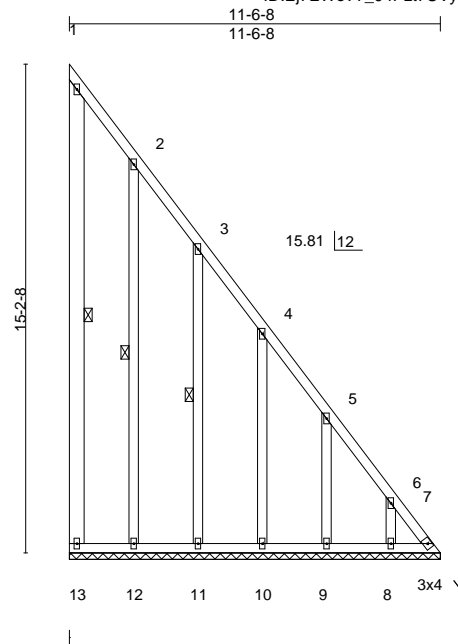
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521731
W0 114	LAY5	GABLE	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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Scale = 1:71.7

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 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 0.11	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.15	Horz(CT)	0.01	7	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 99 lb	FT = 10%

#### LUMBER-

TOP CHORD 2x4 SPF No.2  
BOT CHORD 2x4 SPF No.2  
WEBS 2x6 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.  
WEBS 1 Row at midpt 1-13, 2-12, 3-11

#### REACTIONS.

All bearings 11-6-8.  
(lb) - Max Horz 13=-592(LC 9)  
Max Uplift All uplift 100 lb or less at joint(s) 13 except 7=-290(LC 7), 12=-165(LC 9), 11=-180(LC 9), 10=-174(LC 9), 9=-179(LC 9), 8=-158(LC 9)  
Max Grav All reactions 250 lb or less at joint(s) 13, 12, 11, 10, 9, 8 except 7=743(LC 9)

#### FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-252/120, 3-4=-433/193, 4-5=-609/266, 5-6=-791/343, 6-7=-940/404  
BOT CHORD 12-13=-247/591, 11-12=-247/591, 10-11=-247/591, 9-10=-247/591, 8-9=-247/591, 7-8=-247/591

#### 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) gable end zone; cantilever left and right exposed; end vertical right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) All plates are 2x4 MT20 unless otherwise indicated.
- 3) Gable requires continuous bottom chord bearing.
- 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 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) 13 except (jt=lb) 7=290, 12=165, 11=180, 10=174, 9=179, 8=158.
- 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.



August 21, 2020

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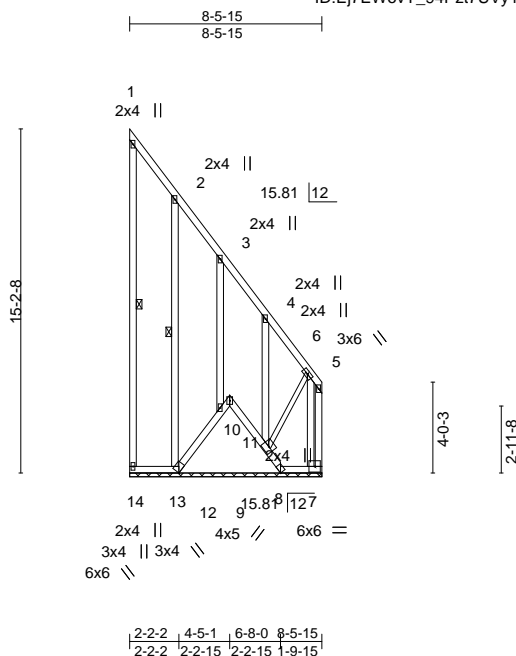


16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521732
W0 114	LAY6	GABLE	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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Scale = 1:101.8

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.10	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.11	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.26	Horz(CT)	0.01	8	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 87 lb	FT = 10%

#### LUMBER-

TOP CHORD 2x4 SPF No.2  
BOT CHORD 2x4 SPF No.2  
WEBS 2x4 SPF No.2 \*Except\*  
5-9: 2x3 SPF No.2  
OTHERS 2x4 SPF No.2

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
WEBS 1 Row at midpt 1-14, 2-13

#### REACTIONS.

All bearings 8-5-15.  
(lb) - Max Horz 14=-387(LC 9)  
Max Uplift All uplift 100 lb or less at joint(s) 14, 8 except 7=-493(LC 7), 12=-548(LC 9), 10=-770(LC 7), 13=-164(LC 9), 11=-169(LC 9), 9=-1288(LC 9)  
Max Grav All reactions 250 lb or less at joint(s) 14, 8, 11 except 7=1068(LC 9), 12=373(LC 7), 10=1019(LC 9), 13=262(LC 16), 9=787(LC 7)

#### FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-261/124, 3-4=-450/202, 4-5=-596/256  
BOT CHORD 13-14=-293/387, 12-13=-293/387, 11-12=-506/667, 10-11=-501/635, 9-10=-498/643  
WEBS 5-7=-843/451, 5-9=-431/753

#### NOTES-

- 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) gable end zone; cantilever left and right exposed; end vertical right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14, 8 except (jt=lb) 7=493, 12=548, 10=770, 13=164, 11=169, 9=1288.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 10, 11, 9.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



August 21, 2020

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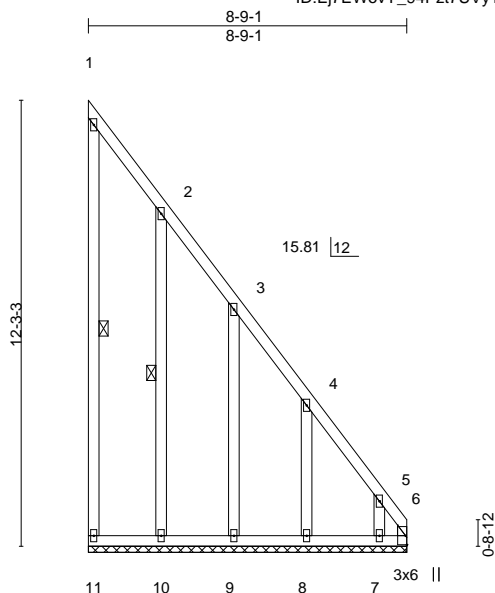


16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521733
W0 114	LAY7	GABLE	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Fri Aug 21 06:01:00 2020 Page 1  
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Scale = 1:63.4

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.08	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.08	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.13	Horz(CT)	0.01	6	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 64 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  
WEDGE  
Right: 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.  
WEBS 1 Row at midpt 1-11, 2-10

#### REACTIONS.

All bearings 8-9-1.  
(lb) - Max Horz 11=-477(LC 9)  
Max Uplift All uplift 100 lb or less at joint(s) 11 except 10=-186(LC 9), 9=-172(LC 9), 6=-337(LC 7), 8=-185(LC 9), 7=-348(LC 9)  
Max Grav All reactions 250 lb or less at joint(s) 11, 10, 9, 8, 7 except 6=812(LC 9)

#### FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-264/126, 3-4=-439/195, 4-5=-626/275, 5-6=-940/406  
BOT CHORD 10-11=-199/477, 9-10=-199/477, 8-9=-199/477, 7-8=-199/477, 6-7=-199/477  
WEBS 5-7=-216/368

#### NOTES-

- 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) gable end zone; cantilever left and right exposed; end vertical right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11 except (jt=lb) 10=186, 9=172, 6=337, 8=185, 7=348.
- 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.



August 21, 2020

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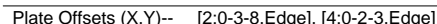
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16023 Swingley Ridge Rd  
Chesterfield, MO 63017

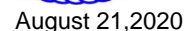
Job Reference (optional)

Scale = 1:71.6



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.): 2-4.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt                      1-14, 2-13, 3-12

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDD=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- 3) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 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 3-6-0 tall by 2-0-0 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 238 lb uplift at joint 14, 318 lb uplift at joint 8, 194 lb uplift at joint 13, 247 lb uplift at joint 12, 188 lb uplift at joint 11, 177 lb uplift at joint 10 and 151 lb uplift at joint 9.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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 BCS1 Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521735
W0 114	LAY9	GABLE	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Fri Aug 21 06:01:01 2020 Page 1  
ID:Ej7EWovY\_94Pzt7UVy1gWAZ\_t70-V5Rfpiz\_B1t03y9x6AVxfEXY\_mSLm6d9f9rLgkyIj4G

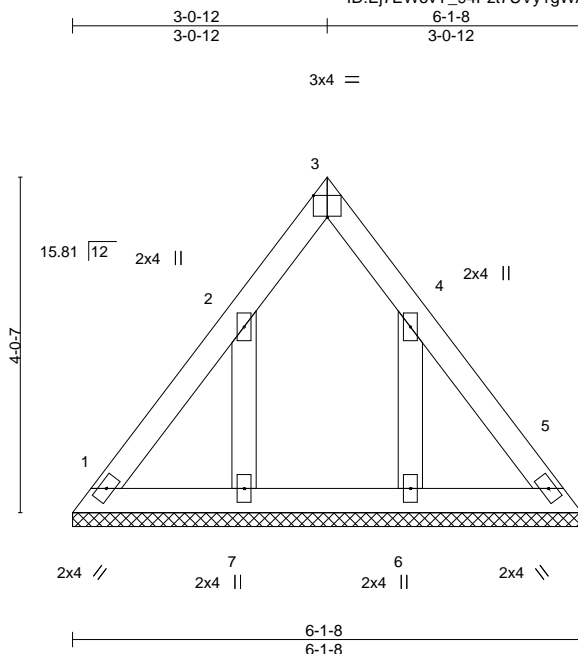


Plate Offsets (X,Y)-- [3:Edge,0-3-2]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	5	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 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.

All bearings 6-1-8.  
(lb) - Max Horz 1=-103(LC 4)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 7=-149(LC 8), 6=-148(LC 9)  
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7, 6

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

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 7=149, 6=148.
- 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.



August 21, 2020

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

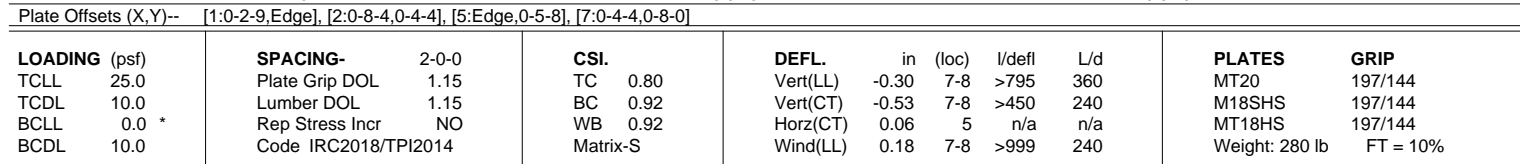
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16023 Swingley Ridge Rd  
Chesterfield, MO 63017



Wheeler Lumber, Waverly, KS 66871 8.410 s May 22 2020 MiTek Industries, Inc. Fri Aug 21 06:01:03 2020 Page 1  
ID:Ej7EWovY\_94Pzt7UVy1gWAZ\_t70-RUZPEN?Eje8kJGIJEaXPkfcjavuEoES7TKSLdyIj4E  
7-1-6 13-8-3 20-5-0  
7-1-6 6-6-13 6-8-13  
Scale = 1:35.4



**REACTIONS.** (size) 1=0-8-0, 5=0-8-0  
 Max Horz 1=83(LC 22)  
 Max Uplift 1=-908(LC 4), 5=-99(LC 4)  
 Max Grav 1=8864(LC 1), 5=10218(LC 1)

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

TOP CHORD	1-2=-19337/1770, 2-3=-17189/1034, 3-4=-17189/1034, 4-5=-6570/435
BOT CHORD	1-8=-1650/18128, 7-8=-1694/18513, 5-7=-21/840
WEBS	2-8=-751/6493, 2-7=-1413/774, 3-7=-362/265, 4-7=-1078/17483

- 1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x6 - 2 rows staggered at 0-4-0 oc.  
Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-5-0 oc.  
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 4) Provide adequate drainage to prevent water ponding.
- 5) All plates are MT20 plates unless otherwise indicated.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) 5 except (jt=lb) 1=908.
- 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.



August 21, 2020

Continued on page 2



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16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0
W0 114	R1	Half Hip Girder	1	2	I42521736
Wheeler Lumber, Waverly, KS 66871					Job Reference (optional)

8.410 s May 22 2020 MiTek Industries, Inc. Fri Aug 21 06:01:03 2020 Page 2  
ID:Ej7EWovY\_94Pzt7UVy1gWaz\_t70-RUZPEN?Eje8kJGIJEaXPkfcijavuEoES7TKSLdyIj4E

**NOTES-**

11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 754 lb down and 153 lb up at 1-7-12, 347 lb down and 24 lb up at 1-7-12, 1123 lb down and 197 lb up at 3-7-12, 754 lb down and 182 lb up at 3-7-12, 967 lb down and 31 lb up at 5-7-12, 754 lb down and 94 lb up at 5-7-12, 967 lb down and 70 lb up at 7-7-12, 754 lb down and 109 lb up at 7-7-12, 1055 lb down and 191 lb up at 9-7-12, 754 lb down and 109 lb up at 9-7-12, 1057 lb down and 163 lb up at 11-7-12, 754 lb down and 109 lb up at 11-7-12, 1057 lb down and 23 lb up at 13-7-12, 754 lb down and 109 lb up at 13-7-12, 1057 lb down at 15-7-12, 754 lb down and 109 lb up at 15-7-12, 1053 lb down at 17-7-12, 754 lb down and 109 lb up at 17-7-12, and 1062 lb down at 19-7-12, and 759 lb down and 104 lb up at 19-7-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-2=-70, 2-4=-70, 1-5=-20

Concentrated Loads (lb)

Vert: 7=-1812(F=-754, B=-1057) 9=-1101(F=-754, B=-347) 10=-1878(F=-754, B=-1123) 11=-1721(F=-754, B=-967) 12=-1721(F=-754, B=-967) 13=-1809(F=-754, B=-1055) 14=-1812(F=-754, B=-1057) 15=-1812(F=-754, B=-1057) 16=-1807(F=-754, B=-1053) 17=-1821(F=-759, B=-1062)

**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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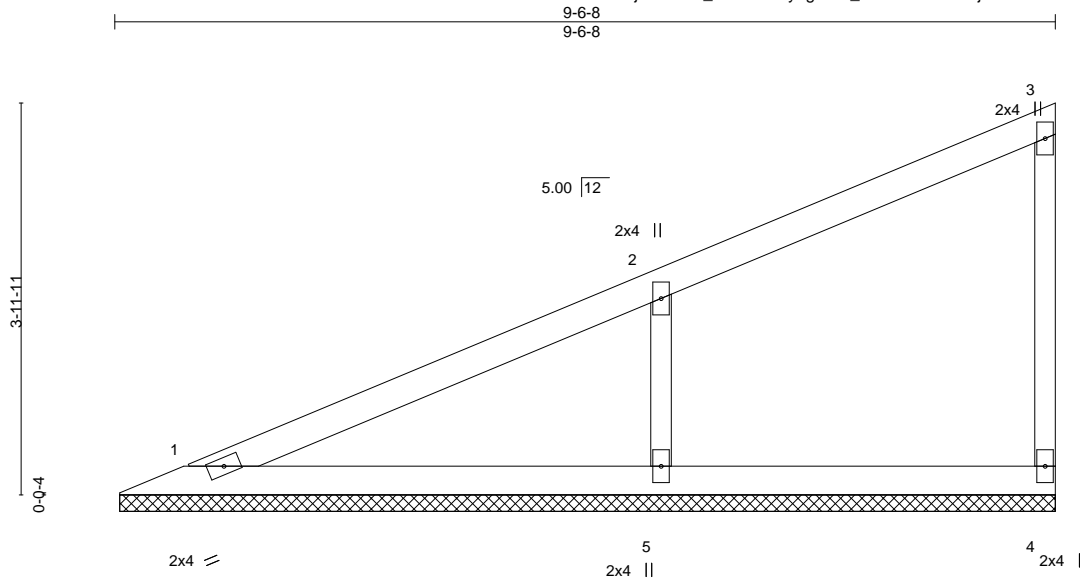
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521737
W0 114	V1	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Fri Aug 21 06:01:03 2020 Page 1

ID:Ej7EWovY\_94Pzt7UVy1gWAZ\_t70-RUZPEN?Eje8kJGJEaXPkfcqga5nE?TS7TKSLdyIj4E



Scale = 1:23.4

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.29	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.16	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.07	Horz(CT)	-0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 26 lb	FT = 10%

#### LUMBER-

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

#### BRACING-

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

#### REACTIONS.

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

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

WEBS 2-5=-370/182

#### NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) 4 except (jt=lb) 5=129.
- 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.



August 21, 2020

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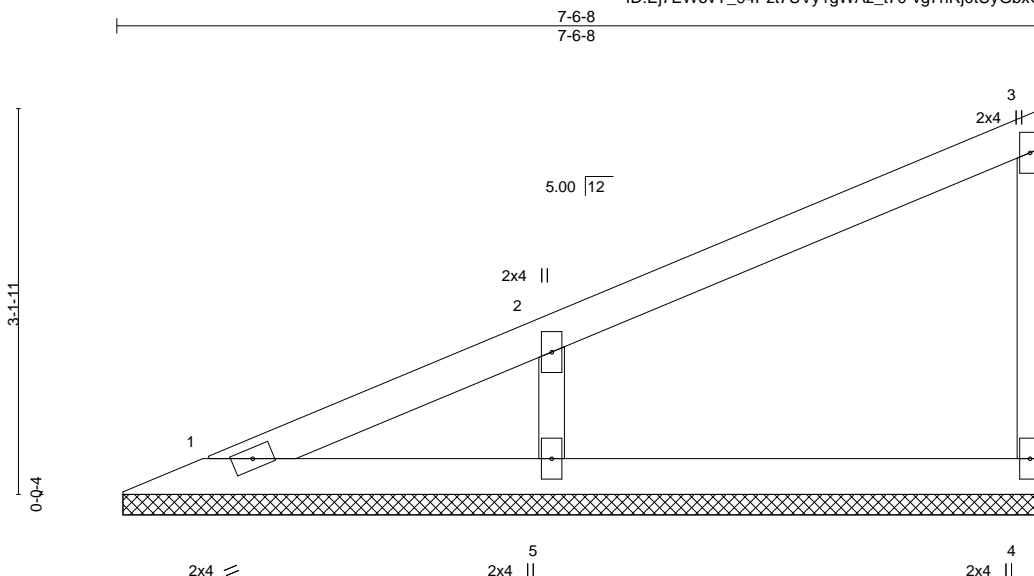


16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521738
W0 114	V2	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Fri Aug 21 06:01:04 2020 Page 1  
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Scale = 1:18.8

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 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(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: 20 lb	FT = 10%

#### LUMBER-

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

#### BRACING-

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

#### REACTIONS.

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

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

WEBS 2-5=-299/153

#### NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) 4 except (jt=lb) 5=102.
- 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.



August 21, 2020

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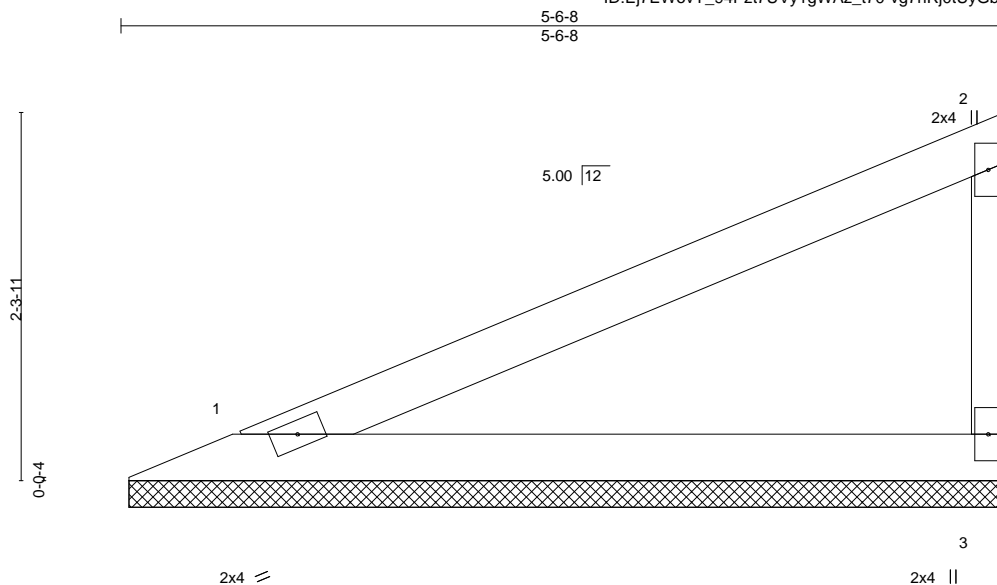


16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521739
W0 114	V3	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Fri Aug 21 06:01:04 2020 Page 1  
ID:Ej7EWovY\_94Pzt7UVy1gWAZ\_t70-vg7nRj0tUyGbxQtVnl2eHs9zT\_QwzTrbL640t3ylj4D



Scale = 1:14.4

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.42	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.23	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 14 lb	FT = 10%

#### LUMBER-

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

#### BRACING-

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

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

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

#### 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) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) 1, 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.



August 21, 2020

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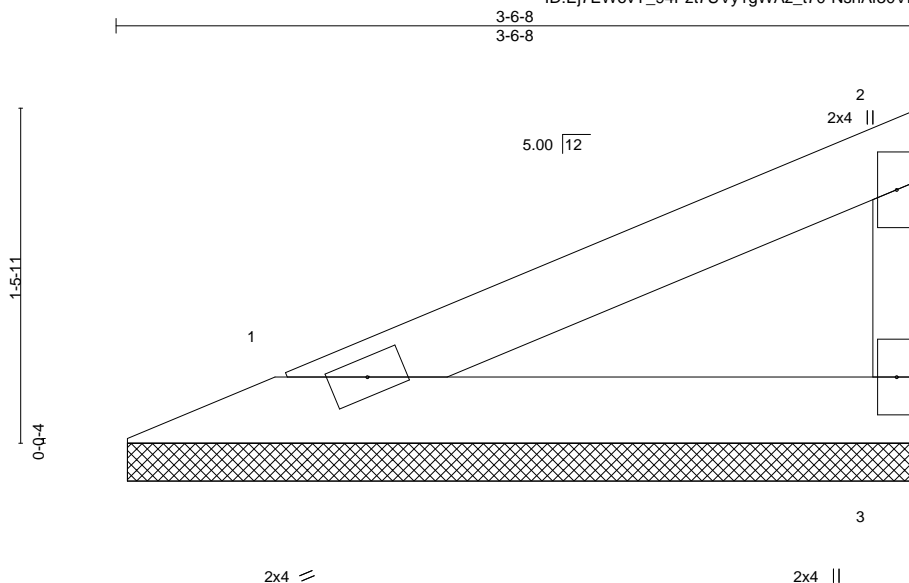


16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521740
W0 114	V4	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Fri Aug 21 06:01:05 2020 Page 1  
ID:Ej7EWovY\_94Pzt7UVy1gWAZ\_t70-NshAf30VFGOSYZSiL?Ztp4iDnOoeiw4lampZPVylj4C



Scale = 1:10.1

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

#### LUMBER-

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

#### BRACING-

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

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

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

#### 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) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) 1, 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.



August 21, 2020

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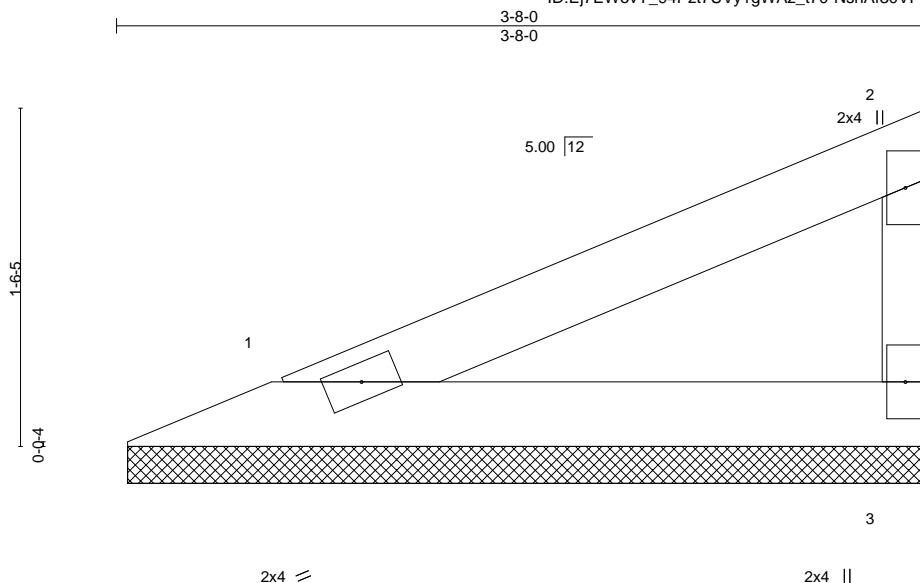
16023 Swingley Ridge Rd  
Chesterfield, MO 63017



Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521741
W0 114	V5	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Fri Aug 21 06:01:05 2020 Page 1  
ID:Ej7EWovY\_94Pzt7UVy1gWAZ\_t70-NshAf30VFGOSYZSiL?Ztp4iCbOoXiw4lampZPVylj4C



Scale = 1:10.4

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.14	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.07	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	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 3-8-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=3-7-6, 3=3-7-6  
Max Horz 1=52(LC 5)  
Max Uplift 1=-18(LC 8), 3=-29(LC 8)  
Max Grav 1=126(LC 1), 3=126(LC 1)

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

#### 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) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) 1, 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.



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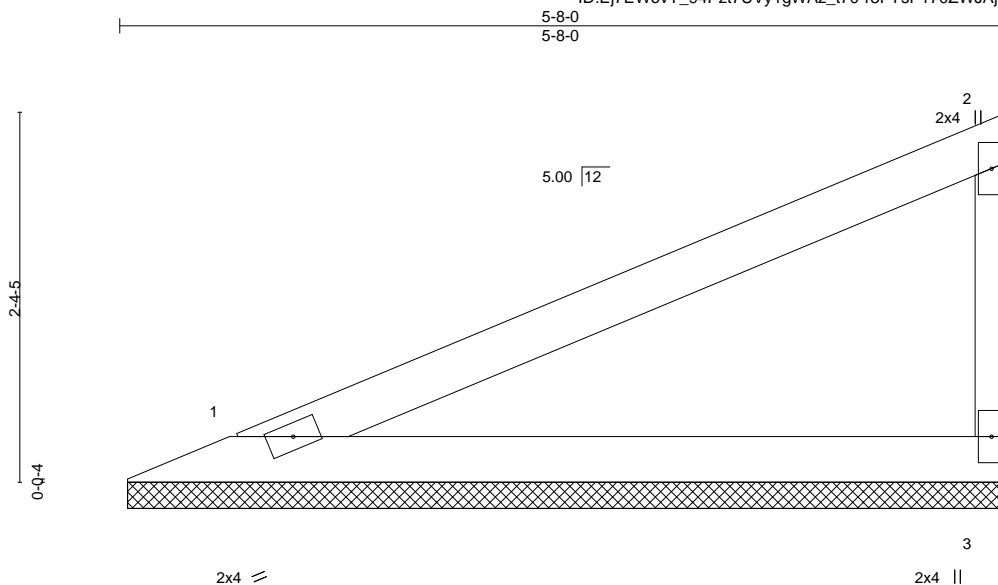
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521742
W0 114	V6	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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ID:Ej7EWovY\_94PztUVy1gWAZ\_t70-r3FYsP170ZWJAj1uvj46MHEJan6BRNKupQZ6yytj4B



Scale = 1:14.7

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.44	Vert(LL)	n/a	-	n/a	999	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.24	Vert(CT)	n/a	-	n/a	999	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						
									Weight: 14 lb FT = 10%

#### LUMBER-

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

#### BRACING-

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

#### REACTIONS.

(size) 1=5-7-6, 3=5-7-6  
Max Horz 1=88(LC 5)  
Max Uplift 1=32(LC 8), 3=49(LC 8)  
Max Grav 1=216(LC 1), 3=216(LC 1)

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

#### 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) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) 1, 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.



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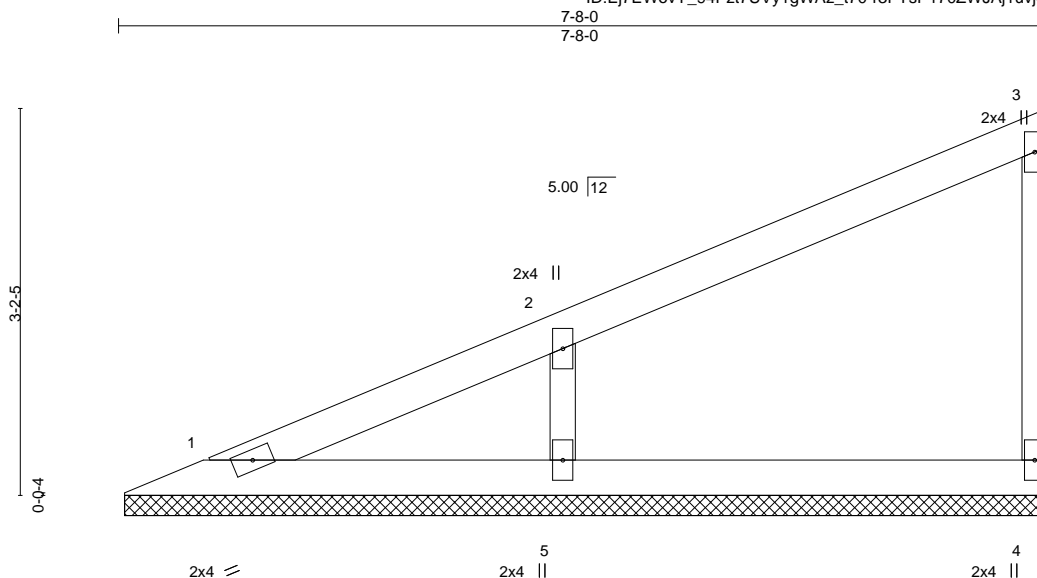
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Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521743
W0 114	V7	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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ID:Ej7EWovY\_94Pzt7UVy1gWAZ\_t70-r3FYsP170ZWJAj1uvj46MHEMOn8KRNUupQZ6yytj4B



Scale = 1:19.0

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.20	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.10	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: 20 lb	FT = 10%

#### LUMBER-

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

#### BRACING-

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

#### REACTIONS.

(size) 1=7-7-6, 4=7-7-6, 5=7-7-6  
Max Horz 1=124(LC 5)  
Max Uplift 4=-25(LC 8), 5=-103(LC 8)  
Max Grav 1=86(LC 16), 4=140(LC 1), 5=389(LC 1)

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

WEBS 2-5=-303/155

#### 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) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) 4 except (jt=lb) 5=103.
- 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.



August 21, 2020

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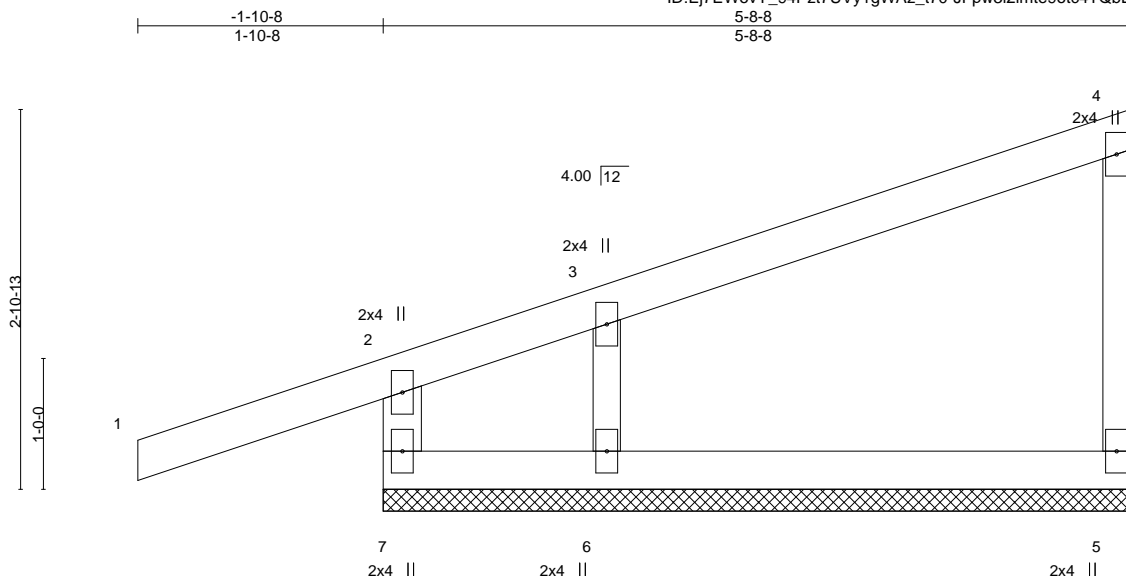


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Job	Truss	Truss Type	Qty	Ply	Lot 114 W0	I42521744
W0 114	V8	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.410 s May 22 2020 MiTek Industries, Inc. Fri Aug 21 06:01:07 2020 Page 1  
ID:Ej7EWovY\_94Pzt7UVy1gWAZ\_t70-JFpw3l2lnte9otc4TQbLvNwBuiAq3124lgUOylj4A



Scale = 1:17.6

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.28	Vert(LL)	0.01	1	n/r	120	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.09	Vert(CT)	-0.01	1	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.03	Horz(CT)	-0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R						Weight: 19 lb	FT = 10%

#### LUMBER-

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

#### BRACING-

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

#### REACTIONS.

(size) 7=5-8-8, 5=5-8-8, 6=5-8-8  
Max Horz 7=124(LC 5)  
Max Uplift 7=102(LC 4), 5=28(LC 4), 6=76(LC 8)  
Max Grav 7=248(LC 1), 5=153(LC 1), 6=232(LC 1)

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

#### NOTES-

- 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) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 6 except (jt=lb) 7=102.
- 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.



August 21, 2020

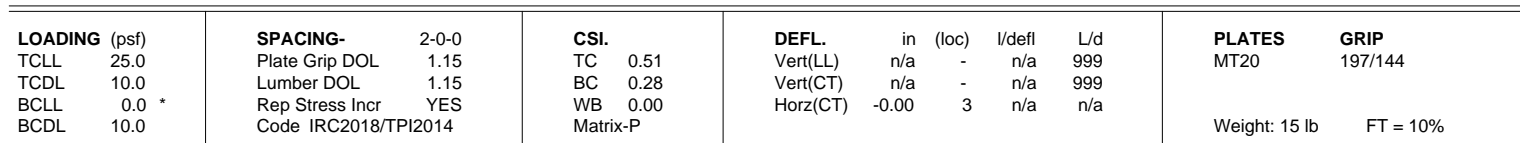
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8.410 s May 22 2020 MiTek Industries, Inc. Fri Aug 21 06:01:07 2020 Page 1  
ID:Ei7EWovY 94Pzt7UVV1qWaz t70-JFow3J2lnte9otc4TQbLvYnSPDBRoAga124lqUOvli4A



**LUMBER-**

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

**BRACING-**

TOP CHORD	Structural wood sheathing directly applied or 6-2-8 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

### REACTIONS.

(size) 1=6-1-12, 3=6-1-12  
 Max Horz 1=77(LC 5)  
 Max Uplift 1=-38(LC 4), 3=-49(LC 8)  
 Max Grav 1=232(LC 1), 3=232(LC 1)

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

**NOTES-**

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDD=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) 1, 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.



August 21, 2020



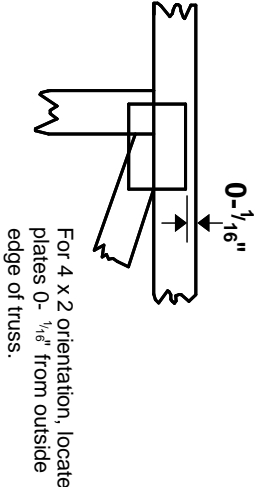
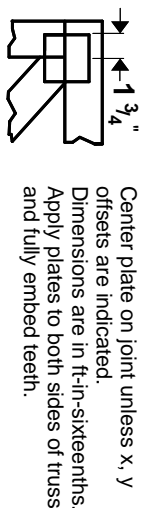
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# Symbols

## PLATE LOCATION AND ORIENTATION



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 SIZE

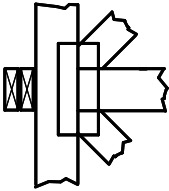
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## 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.

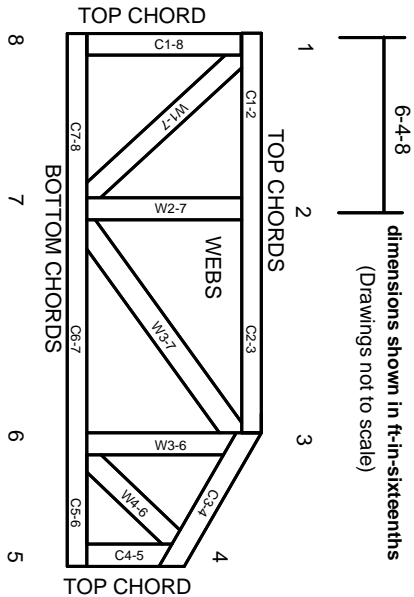
## BEARING



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/TP1: 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/TP1 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/TP1 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 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/TP1 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.