



RE: 400307
Lot 91 RR

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

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

Design Code: IRC2018/TPI2014

Design Program: MiTek 20/20 8.2

Wind Code: N/A

Wind Speed: 115 mph

Roof Load: 45.0 psf

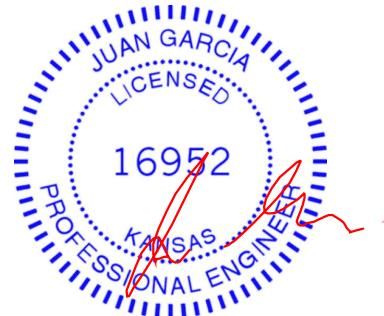
Floor Load: N/A psf

This package includes 81 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I40979716	A1	5/19/2020	27	I40979742	G3	5/19/2020
2	I40979717	A2	5/19/2020	28	I40979743	G4	5/19/2020
3	I40979718	B1	5/19/2020	29	I40979744	G5	5/19/2020
4	I40979719	B2	5/19/2020	30	I40979745	G6	5/19/2020
5	I40979720	B3	5/19/2020	31	I40979746	G7	5/19/2020
6	I40979721	B4	5/19/2020	32	I40979747	G8	5/19/2020
7	I40979722	B5	5/19/2020	33	I40979748	G9	5/19/2020
8	I40979723	B6	5/19/2020	34	I40979749	G10	5/19/2020
9	I40979724	C1	5/19/2020	35	I40979750	H1	5/19/2020
10	I40979725	C2	5/19/2020	36	I40979751	H2	5/19/2020
11	I40979726	C3	5/19/2020	37	I40979752	H3	5/19/2020
12	I40979727	C4	5/19/2020	38	I40979753	H4	5/19/2020
13	I40979728	C5	5/19/2020	39	I40979754	J1	5/19/2020
14	I40979729	C6	5/19/2020	40	I40979755	J2	5/19/2020
15	I40979730	C7	5/19/2020	41	I40979756	J3	5/19/2020
16	I40979731	C8	5/19/2020	42	I40979757	J4	5/19/2020
17	I40979732	C9	5/19/2020	43	I40979758	J5	5/19/2020
18	I40979733	D1	5/19/2020	44	I40979759	J5A	5/19/2020
19	I40979734	D2	5/19/2020	45	I40979760	J6	5/19/2020
20	I40979735	D3	5/19/2020	46	I40979761	J6A	5/19/2020
21	I40979736	D4	5/19/2020	47	I40979762	J7	5/19/2020
22	I40979737	E1	5/19/2020	48	I40979763	J8	5/19/2020
23	I40979738	E2	5/19/2020	49	I40979764	J9	5/19/2020
24	I40979739	E3	5/19/2020	50	I40979765	J10	5/19/2020
25	I40979740	G1	5/19/2020	51	I40979766	J11	5/19/2020
26	I40979741	G2	5/19/2020	52	I40979767	J12	5/19/2020

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: Garcia, Juan
My license renewal date for the state of Kansas is April 30, 2022.
Kansas COA: E-943

IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which were given to MiTek. Any project specific information included is for MiTek customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek has not independently verified the applicability of the design parameters or the designs for any particular building. Before use, the building designer should verify applicability of design parameters and properly incorporate these designs into the overall building design per ANSI/TPI 1, Chapter 2.





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MiTek USA, Inc.

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

Site Information:

Project Customer: Project Name:

Lot/Block:

Subdivision:

Address:

City, County:

State:

No.	Seal#	Truss Name	Date
53	I40979768	J13	5/19/2020
54	I40979769	J15	5/19/2020
55	I40979770	J16	5/19/2020
56	I40979771	J17	5/19/2020
57	I40979772	J18	5/19/2020
58	I40979773	J19	5/19/2020
59	I40979774	J20	5/19/2020
60	I40979775	J21	5/19/2020
61	I40979776	J22	5/19/2020
62	I40979777	J23	5/19/2020
63	I40979778	LAY1	5/19/2020
64	I40979779	LAY2	5/19/2020
65	I40979780	LAY3	5/19/2020
66	I40979781	LAY4	5/19/2020
67	I40979782	LAY5	5/19/2020
68	I40979783	LAY6	5/19/2020
69	I40979784	LAY7	5/19/2020
70	I40979785	LAY8	5/19/2020
71	I40979786	LAY9	5/19/2020
72	I40979787	V1	5/19/2020
73	I40979788	V2	5/19/2020
74	I40979789	V3	5/19/2020
75	I40979790	V4	5/19/2020
76	I40979791	V5	5/19/2020
77	I40979792	V6	5/19/2020
78	I40979793	V7	5/19/2020
79	I40979794	V8	5/19/2020
80	I40979795	V9	5/19/2020
81	I40979796	V10	5/19/2020



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Design Code: IRC2018/TPI2014

Design Program: MiTek 20/20 8.2

Wind Code: N/A

Wind Speed: 115 mph

Roof Load: 45.0 psf

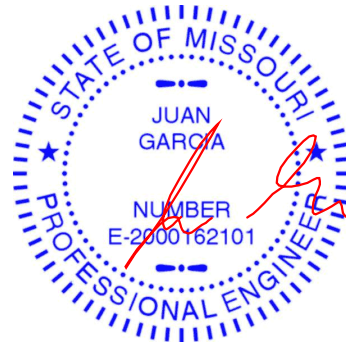
Floor Load: N/A psf

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The truss drawing(s) referenced above have been prepared by
MiTek USA, Inc. under my direct supervision
based on the parameters provided by Wheeler - Waverly.
Truss Design Engineer's Name: Garcia, Juan
My license renewal date for the state of Missouri is December 31, 2020.
Missouri COA: 001193

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Chesterfield, MO 63017
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Lot/Block:

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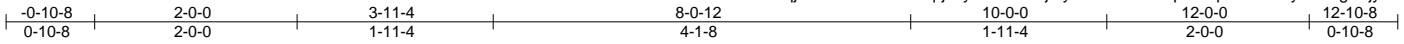
No.	Seal#	Truss Name	Date
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54	I40979769	J15	5/19/2020
55	I40979770	J16	5/19/2020
56	I40979771	J17	5/19/2020
57	I40979772	J18	5/19/2020
58	I40979773	J19	5/19/2020
59	I40979774	J20	5/19/2020
60	I40979775	J21	5/19/2020
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75	I40979790	V4	5/19/2020
76	I40979791	V5	5/19/2020
77	I40979792	V6	5/19/2020
78	I40979793	V7	5/19/2020
79	I40979794	V8	5/19/2020
80	I40979795	V9	5/19/2020
81	I40979796	V10	5/19/2020

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR	140979716
400307	A1	Hip Girder	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 14 14:41:53 2020 Page 1

ID:vOmQjObOcWV19uGsdqrjnyemAP-SXjMy3IPNVcW90HpThMp5e01trtGyNSkzg3PjyzQmij



Scale = 1:22.8

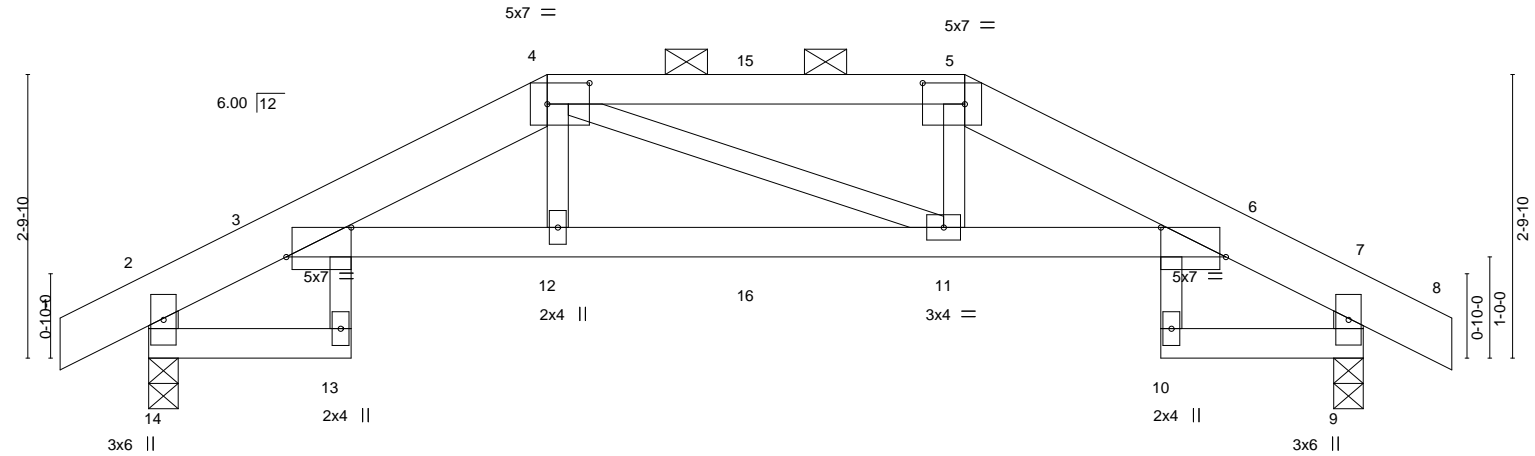


Plate Offsets (X,Y)--	[3:0-7-11,Edge], [4:0-5-0,0-2-8], [5:0-5-0,0-2-8], [6:0-7-11,Edge]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	L/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.78	Vert(LL)	-0.08 11-12	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.69	Vert(CT)	-0.15 11-12	>913	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.12	Horz(CT)	0.21 9	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.08 11-12	>999	240	Weight: 47 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x6 SPF No.2 *Except* 4-5: 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 4-0-1 oc purlins, except end verticals, and 2-0-0 oc purlins (4-0-13 max.): 4-5.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x3 SPF No.2 *Except* 2-14,7-9: 2x4 SPF No.2	

REACTIONS.	(size)
14=0-3-8, 9=0-3-8	
Max Horz 14=51(LC 7)	
Max Uplift 14=-219(LC 8), 9=-219(LC 9)	
Max Grav 14=904(LC 1), 9=904(LC 1)	

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-351/128, 3-4=-1876/495, 4-5=-1773/467, 5-6=-1878/479, 6-7=-351/113, 2-14=-897/235, 7-9=-897/232
BOT CHORD	3-12=-453/1748, 11-12=-456/1771, 6-11=-423/1750
WEBS	4-12=-60/320, 5-11=-69/338

- 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 219 lb uplift at joint 14 and 219 lb uplift at joint 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.
 - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 78 lb down and 61 lb up at 3-11-4, and 86 lb down and 61 lb up at 6-0-0, and 78 lb down and 61 lb up at 8-0-12 on top chord, and 224 lb down and 109 lb up at 3-11-4, and 32 lb down and 28 lb up at 6-0-0, and 224 lb down and 109 lb up at 8-0-0 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



April 14,2020

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR	I40979716
400307	A1	Hip Girder	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 14 14:41:54 2020 Page 2
ID:vOmQjObOcWV19uGsdqrjnvymAP-wjHkAPm18okNnAs?1Ot2esZCdEDVhqitBKoyFPzQmjx

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, 4-5=-70, 5-7=-70, 7-8=-70, 13-14=-20, 3-6=-20, 9-10=-20
Concentrated Loads (lb)
Vert: 4=-36(B) 5=-36(B) 12=-224(B) 11=-224(B) 15=-36(B) 16=-32(B)

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR	140979717
400307	A2	Roof Special	3	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 14 14:41:54 2020 Page 1

ID:vOmajObOcWV19uGsdqrjnyemAP-wjHkAPm18okNnAs?1Ot2esZGvECfhqutBKoyFPzQmjx

-0-10-8	2-0-0	6-0-0	10-0-0	12-0-0	12-10-8
0-10-8	2-0-0	4-0-0	4-0-0	2-0-0	0-10-8

5x7 =

Scale = 1:25.5

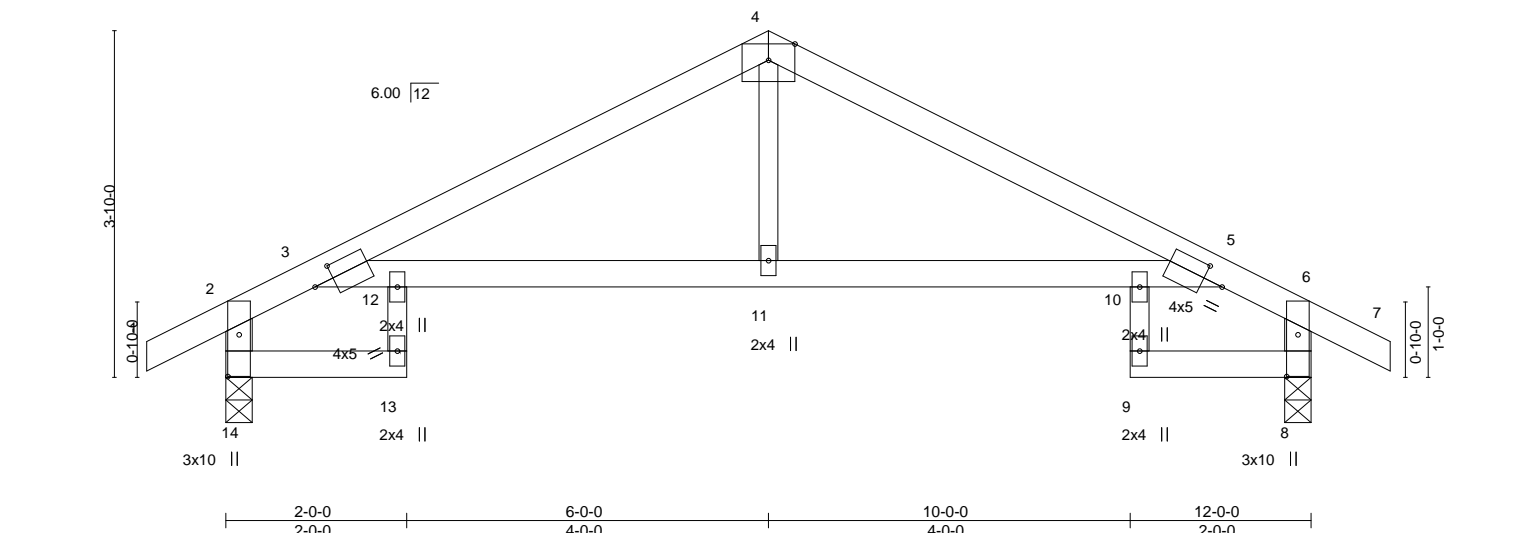


Plate Offsets (X,Y)-- [3:0-2-11,0-1-13], [5:0-2-11,0-1-13], [8:0-5-9,0-1-8], [14:0-5-9,0-1-8]									
LOADING (psf)		SPACING 2-0-0		CSI		DEFL. in (loc) l/defl L/d		PLATES GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.57	Vert(LL)	-0.11 10-11 >999 360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.74	Vert(CT)	-0.20 10-11 >705 240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.27 8 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.10 11-12 >999 240	Weight: 38 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-14,6-8: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-1-5 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 10-0-0 oc bracing: 10-11

REACTIONS.

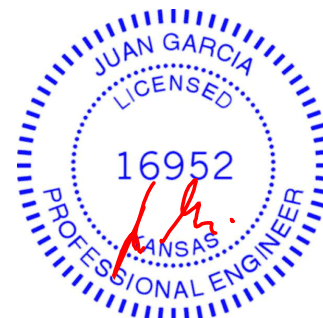
(size) 14=0-3-8, 8=0-3-8
Max Horz 14=67(LC 7)
Max Uplift 14=-88(LC 8), 8=-88(LC 9)
Max Grav 14=598(LC 1), 8=598(LC 1)

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

TOP CHORD 3-4=-857/79, 4-5=-857/102, 2-14=-623/115, 6-8=-623/106
BOT CHORD 3-12=-21/728, 11-12=-21/728, 10-11=-21/728, 5-10=-21/728
WEBS 4-11=0/327

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 88 lb uplift at joint 14 and 88 lb uplift at joint 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.



April 14, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 400307	Truss B1	Truss Type HALF HIP GIRDER	Qty 1	Ply 3	Lot 91 RR 140979718
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Wheeler Lumber, Waverly, KS 66871

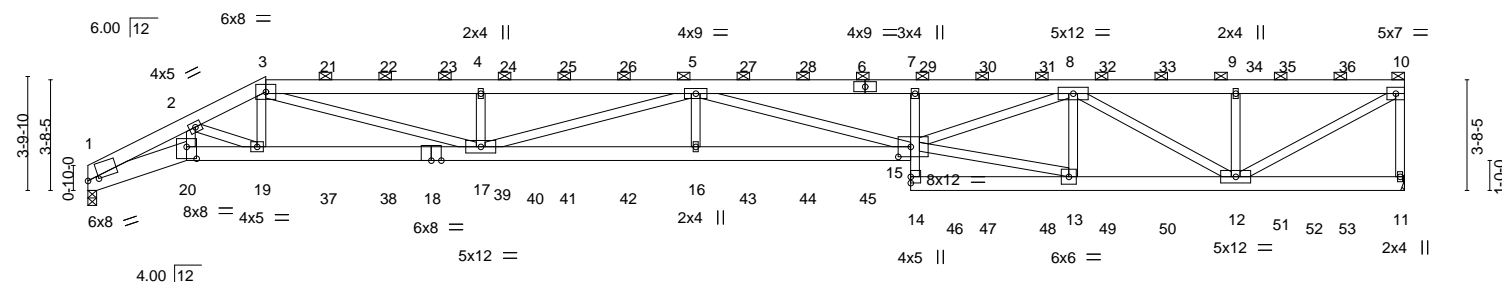
8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 14 14:41:59 2020 Page 1

ID:vOmQjObOcWV19uGsdqjnyemAP-Gh4dD7qAzLNgtxlzxqTDLvG6DFv4MyGcLcWjxczQmjs

Job Reference (optional)

3-3-8	5-11-4	13-1-5	20-3-7	27-5-8	32-10-9	38-3-11	43-11-4
3-3-8	2-7-12	7-2-1	7-2-1	7-2-1	5-5-1	5-5-1	5-7-9

Scale = 1:76.9



3-3-8	5-11-4	13-1-5	20-3-7	27-5-8	32-10-9	38-3-11	43-11-4
3-3-8	2-7-12	7-2-1	7-2-1	7-2-1	5-5-1	5-5-1	5-7-9

Plate Offsets (X,Y)-- [1:0-4-7,0-0-8], [15:0-5-0,0-4-0], [20:0-4-0,0-4-12]

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)	-0.64 15-16	>821	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.72	Vert(CT)	-1.15 15-16	>454	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.67	Horz(CT)	0.28 11	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.43 15-16	>999	240	Weight: 775 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x6 SPF No.2	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.): 3-10.
BOT CHORD 2x6 SP 2400F 2.0E *Except*	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
1-20: 2x8 SP DSS, 7-14: 2x4 SPF No.2	
WEBS 2x4 SPF No.2	
REACTIONS. (size) 1=0-3-8, 11=Mechanical	
Max Horz 1=106(LC 26)	
Max Uplift 1=-363(LC 5), 11=-352(LC 5)	
Max Grav 1=3672(LC 1), 11=3691(LC 1)	

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-11762/1324, 2-3=-9991/1112, 3-4=-15425/1607, 4-5=-15423/1606, 5-7=-16990/1722, 7-8=-16611/1687, 8-9=-5628/560, 9-10=-5628/560, 10-11=-3560/389
BOT CHORD 1-20=-1242/10256, 19-20=-1147/9520, 17-19=-1067/9051, 16-17=-1922/18510, 15-16=-1922/18510, 14-15=-0/274, 7-15=-550/157, 13-14=-140/1527, 12-13=-965/9584
WEBS 2-20=-297/2360, 2-19=-427/103, 3-19=-89/1410, 3-17=-636/6744, 4-17=-940/297, 5-17=-3283/318, 5-16=-0/634, 5-15=-1589/166, 13-15=-839/8200, 8-15=-828/7631, 8-13=-1406/301, 8-12=-4606/465, 9-12=-682/224, 10-12=-624/6455

NOTES-

- 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 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); 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.
- Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 363 lb uplift at joint 1 and 352 lb uplift at joint 11.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

On the ground representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 14, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR
400307	B1	HALF HIP GIRDER	1	3	I40979718
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871

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NOTES-

13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 134 lb down and 74 lb up at 5-11-4, 111 lb down and 74 lb up at 8-0-0, 111 lb down and 74 lb up at 10-0-0, 111 lb down and 74 lb up at 12-0-0, 111 lb down and 74 lb up at 14-0-0, 111 lb down and 74 lb up at 16-0-0, 111 lb down and 74 lb up at 18-0-0, 111 lb down and 74 lb up at 20-0-0, 111 lb down and 74 lb up at 22-0-0, 85 lb down and 37 lb up at 24-0-0, 66 lb down and 20 lb up at 26-0-0, 110 lb down and 74 lb up at 28-0-0, 110 lb down and 74 lb up at 30-0-0, 110 lb down and 74 lb up at 32-0-0, 110 lb down and 74 lb up at 34-0-0, 110 lb down and 74 lb up at 36-0-0, 110 lb down and 74 lb up at 38-0-0, and 110 lb down and 74 lb up at 40-0-0, and 110 lb down and 74 lb up at 42-0-0 on top chord, and 414 lb down and 125 lb up at 5-11-4, 68 lb down at 8-0-0, 68 lb down at 10-0-0, 68 lb down at 12-0-0, 68 lb down at 14-0-0, 68 lb down at 16-0-0, 68 lb down at 18-0-0, 68 lb down at 20-0-0, 68 lb down at 22-0-0, 106 lb down and 38 lb up at 24-0-0, 146 lb down and 55 lb up at 26-0-0, 69 lb down at 28-0-0, 69 lb down at 30-0-0, 69 lb down at 32-0-0, 69 lb down at 34-0-0, 69 lb down at 36-0-0, 69 lb down at 38-0-0, and 69 lb down at 40-0-0, and 69 lb down at 42-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-70, 3-10=-70, 1-20=-20, 15-20=-20, 11-14=-20
Concentrated Loads (lb)
Vert: 3=-111(F) 6=-20(F) 19=-414(F) 5=-111(F) 16=-51(F) 21=-111(F) 22=-111(F) 23=-111(F) 24=-111(F) 25=-111(F) 26=-111(F) 27=-111(F) 28=-55(F) 29=-110(F) 30=-110(F) 31=-110(F) 32=-110(F) 33=-110(F) 34=-110(F) 35=-110(F) 36=-110(F) 37=-51(F) 38=-51(F) 39=-51(F) 40=-51(F) 41=-51(F) 42=-51(F) 43=-51(F) 44=-106(F) 45=-146(F) 46=-52(F) 47=-52(F) 48=-52(F) 49=-52(F) 50=-52(F) 51=-52(F) 52=-52(F) 53=-52(F)

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR	140979719
400307	B2	Half Hip	1	1		

Wheeler Lumber, Waverly, KS 66871

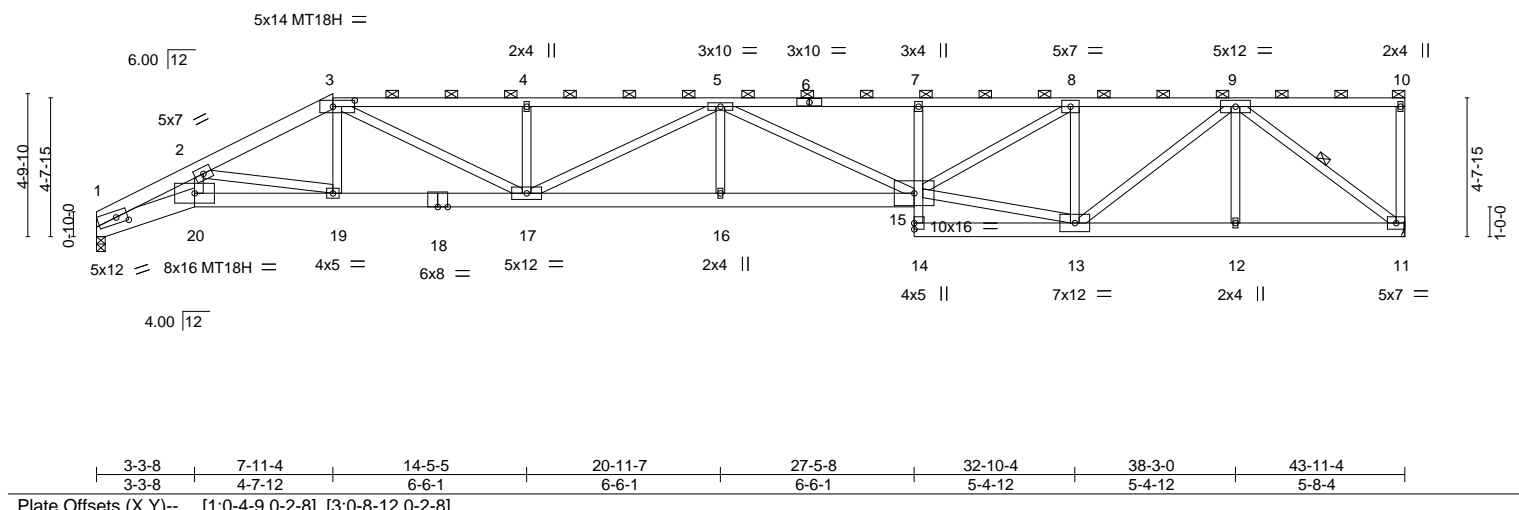
8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 14 14:42:00 2020 Page 1

ID:vOmQjObOcWV19uGsdqjnvymAP-kte?QStrokeVXV5K9Of_St6pD3fFp5MMmaGFHT2zQmjr

Job Reference (optional)

3-3-8	7-11-4	14-5-5	20-11-7	27-5-8	32-10-4	38-3-0	43-11-4
3-3-8	4-7-12	6-6-1	6-6-1	6-6-1	5-4-12	5-4-12	5-8-4

Scale = 1:77.4



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 0.85	Vert(LL)	-0.63 16	>829	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.76	Vert(CT)	-1.14 15-16	>459	240	MT18H	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.87	Horz(CT)	0.40 11	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.36 16	>999	240		
								Weight: 226 lb	FT = 10%

LUMBER-

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

BOT CHORD 2x6 SPF 1650F 1.4E *Except*
1-20: 2x8 SP DSS, 7-14: 2x4 SPF No.2, 11-14: 2x6 SPF No.2

WEBS 2x4 SPF No.2

BRACING-

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

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

WEBS 1 Row at midpt 9-11

REACTIONS.

(size) 1=0-3-8, 11=Mechanical

Max Horz 1=140(LC 7)

Max Uplift 1=33(LC 5), 11=97(LC 5)

Max Grav 1=1964(LC 1), 11=1964(LC 1)

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

TOP CHORD 1-2=-6394/265, 2-3=-4348/187, 3-4=-5792/278, 4-5=-5791/278, 5-7=-6105/293, 7-8=-6031/289, 8-9=-3783/183

BOT CHORD 1-20=-356/5581, 19-20=-328/5113, 17-19=-233/3911, 16-17=-363/6587, 15-16=-363/6587, 7-15=-414/99, 13-14=-33/468, 12-13=-139/2270, 11-12=-139/2270

WEBS 2-20=-55/1611, 2-19=-1257/95, 3-19=0/506, 3-17=-150/2198, 4-17=-484/114, 5-17=-964/72, 5-16=0/307, 5-15=-538/19, 13-15=-183/3375, 8-15=-152/2652, 8-13=-1769/162, 9-13=-94/1932, 9-11=-2842/138

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.
- 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.
- Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 33 lb uplift at joint 1 and 97 lb uplift at joint 11.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 14, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR	140979720
400307	B3	Hip	1	1		

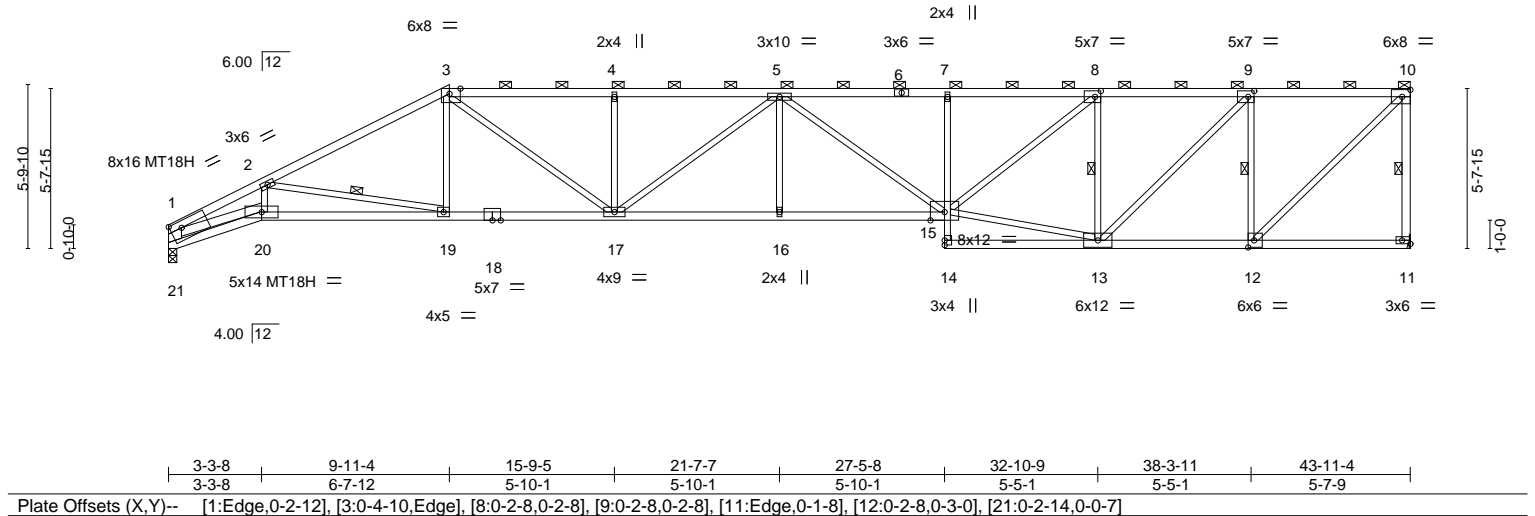
Wheeler Lumber, Waverly, KS 66871

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ID: vOmjqObOcWV19uGsdqrjnvymAP-D3CNeosQVydO7FuMxMVhQKLPj3dPqngvow?VzQmjq

3-3-8	9-11-4	15-9-5	21-7-7	27-5-8	32-10-9	38-3-11	43-8-12	43-11-4
3-3-8	6-7-12	5-10-1	5-10-1	5-10-1	5-5-1	5-5-1	5-5-1	0-2-8

Scale = 1:81.5



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 0.79	Vert(LL) -0.49 15-16 >999 360	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.60	Vert(CT) -0.89 15-16 >587 240	MT18H	197/144
BCLL 0.0 *	Rep Stress Incr YES	WB 1.00	Horz(CT) 0.36 11 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.28 15-16 >999 240	Weight: 179 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF 2100F 1.8E *Except* 6-10: 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (2-3-1 max.): 3-10.
BOT CHORD 2x4 SPF 2100F 1.8E *Except* 20-21,11-14: 2x4 SPF No.2, 7-14: 2x3 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2 *Except* 1-21: 2x6 SPF No.2, 1-20: 2x4 SPF 2100F 1.8E, 10-11: 2x4 SPF No.2	WEBS 1 Row at midpt 2-19, 8-13, 9-12, 10-11

REACTIONS.	(size) 21=0-3-8, 11=Mechanical Max Horz 21=175(LC 5) Max Uplift 21=-17(LC 5), 11=-98(LC 5) Max Grav 21=1960(LC 1), 11=1960(LC 1)
-------------------	---

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-5388/233, 2-3=-3888/152, 3-4=-4534/213, 4-5=-4531/212, 5-7=-4596/211, 7-8=-4578/211, 8-9=-3018/146, 9-10=-1796/112, 1-21=-1963/82, 10-11=-1908/123
BOT CHORD 20-21=-175/258, 19-20=-351/4721, 17-19=-219/3395, 16-17=-293/4942, 15-16=-293/4942, 7-15=-391/92, 12-13=-124/1796
WEBS 2-20=-15/640, 2-19=-1340/147, 3-19=0/447, 3-17=-124/1535, 4-17=-473/106, 5-17=-596/60, 5-16=0/266, 5-15=-429/18, 13-15=-176/2902, 8-15=-121/2018, 8-13=-1649/161, 9-13=-85/1720, 9-12=-1625/162, 10-12=-125/2488, 1-20=-191/4557

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Provide adequate drainage to prevent water ponding.
 - 4) All plates are MT20 plates unless otherwise indicated.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 7) Refer to girder(s) for truss to truss connections.
 - 8) Bearing at joint(s) 21 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 17 lb uplift at joint 21 and 98 lb uplift at joint 11.
 - 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 14,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR	140979722
400307	B5	Hip	1	1		

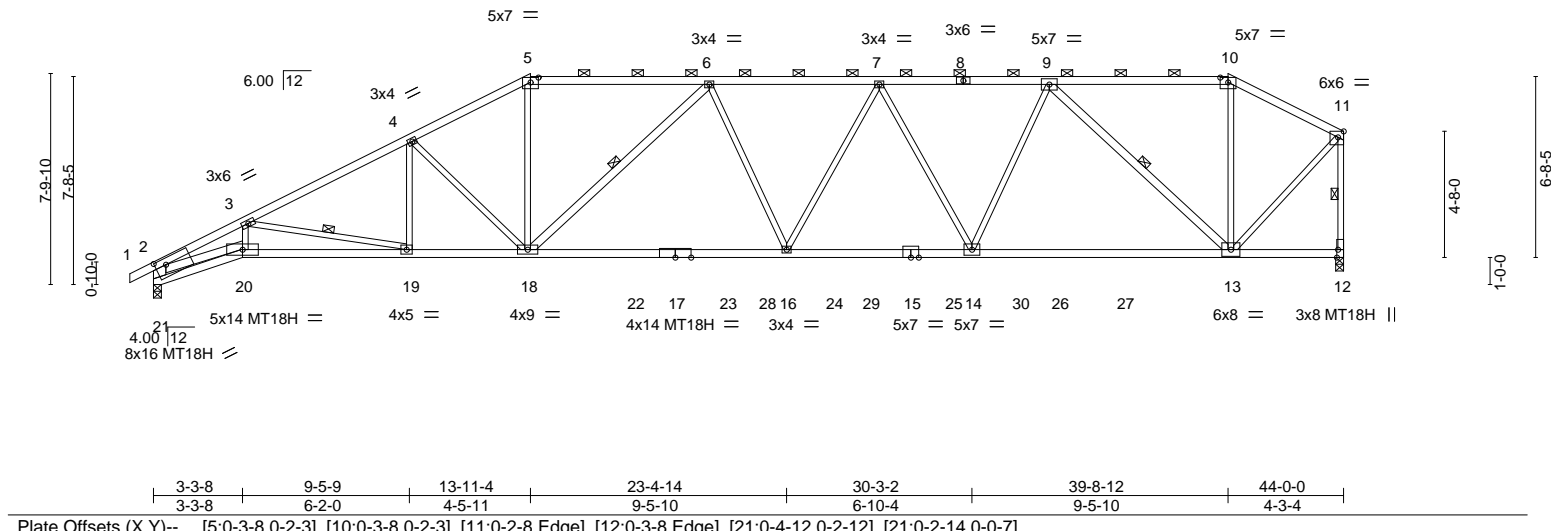
Wheeler Lumber, Waverly, KS 66871

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-0-10-8	3-3-8	9-5-9	13-11-4	20-6-9	26-10-0	33-1-7	39-8-12	44-0-0
0-10-8	3-3-8	6-2-0	4-5-11	6-7-5	6-3-7	6-3-7	6-7-5	4-3-4

Scale = 1:85.2



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 0.97	Vert(LL)	-0.51 16-18	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.74	Vert(CT)	-0.89 16-18	>588	240	MT18H	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.96	Horz(CT)	0.29 12	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.23 16-18	>999	240	Weight: 184 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
5-8: 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF 2100F 1.8E *Except*
20-21: 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
6-18,9-13: 2x4 SPF No.2, 2-21: 2x6 SPF No.2
2-20: 2x4 SPF 2100F 1.8E

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (2-10-13 max.): 5-10.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
8-10-1 oc bracing: 19-20
9-10-14 oc bracing: 16-18.
WEBS 1 Row at midpt 3-19, 6-18, 9-13, 11-12

REACTIONS.

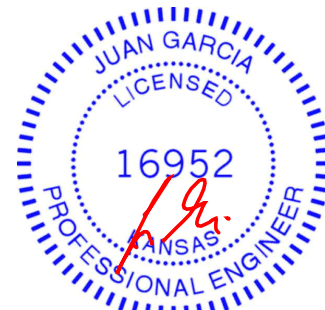
(size) 21=0-3-8, 12=0-3-8
Max Horz 21=243(LC 5)
Max Uplift 21=199(LC 8), 12=237(LC 5)
Max Grav 21=2144(LC 2), 12=2112(LC 2)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-5653/676, 3-4=-4115/477, 4-5=-3554/469, 5-6=-3113/435, 6-7=-3640/526,
7-9=-3150/452, 9-10=-1272/217, 10-11=-1454/223, 2-21=-2143/257, 11-12=-2105/245
BOT CHORD 20-21=-260/335, 19-20=-792/4939, 18-19=-555/3636, 16-18=-614/3615, 14-16=-585/3486,
13-14=-478/2717
WEBS 3-20=-78/754, 3-19=-1329/338, 4-19=-17/421, 4-18=-710/234, 5-18=-96/1280,
6-18=-813/259, 7-16=-14/336, 7-14=-730/174, 9-14=-62/1067, 9-13=-2013/379,
10-13=0/383, 2-20=-556/4742, 11-13=-244/1877

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, with BCDL = 10.0psf.
- Bearing at joint(s) 21 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 199 lb uplift at joint 21 and 237 lb uplift at joint 12.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 14,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR	140979723
400307	B6	Hip	1	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

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ID:vOmjqObOcWV19uGsdqrjnyemAP-5rRuTAvxZB7pbsC7ACadaAW3tguXmeGVjXz28GzQmjrm

-0-10-8 3-3-8 9-5-9 15-11-4 23-2-0 30-6-0 37-8-12 44-0-0
0-10-8 3-3-8 6-2-1 6-5-11 7-2-12 7-4-0 7-2-12 6-3-4

Scale = 1:85.2

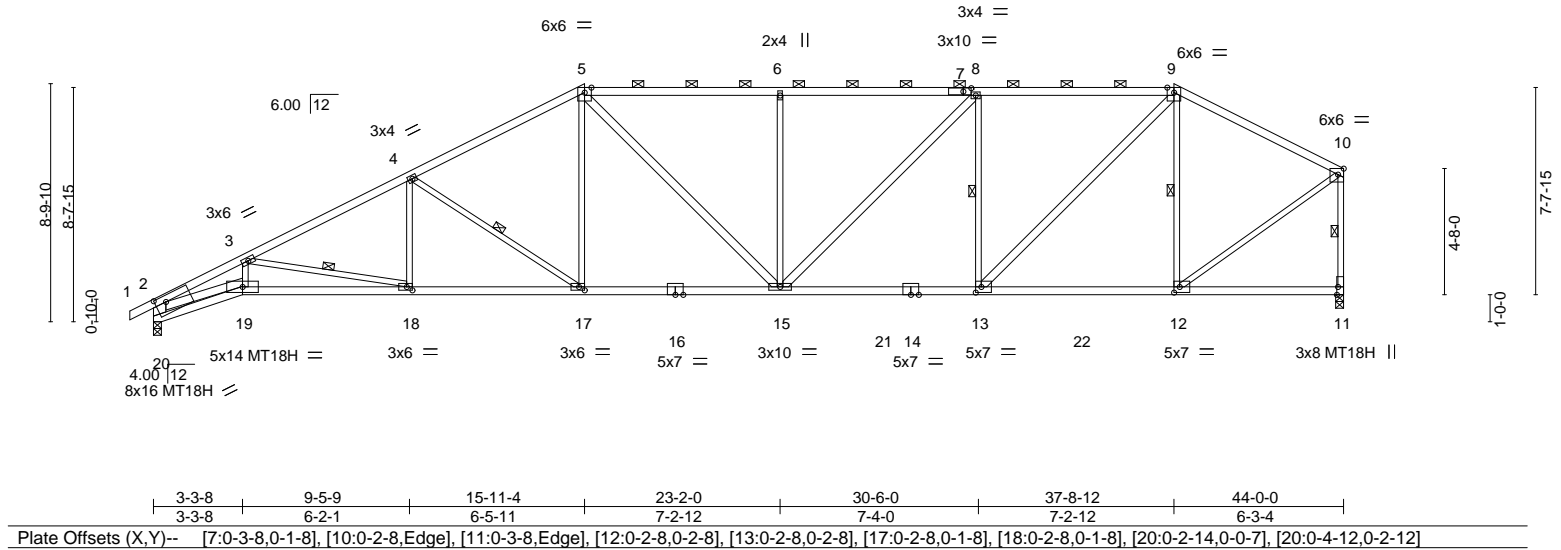


Plate Offsets (X,Y)--		[7:0-3-8,0-1-8], [10:0-2-8,Edge], [11:0-3-8,Edge], [12:0-2-8,0-2-8], [13:0-2-8,0-2-8], [17:0-2-8,0-1-8], [18:0-2-8,0-1-8], [20:0-2-14,0-0-7], [20:0-4-12,0-2-12]
LOADING (psf)	SPACING-	2-0-0
TCLL 25.0	Plate Grip DOL	1.15
TCDL 10.0	Lumber DOL	1.15
BCLL 0.0 *	Rep Stress Incr	YES
BCDL 10.0	Code IRC2018/TPI2014	
	CSI.	
	TC 0.84	
	BC 0.98	
	WB 0.77	
	Matrix-S	
	DEFL.	
	in (loc)	l/defl L/d
	Vert(LL) -0.36 15-17	>999 360
	Vert(CT) -0.62 15-17	>848 240
	Horz(CT) 0.27 11	n/a n/a
	Wind(LL) 0.20 15-17	>999 240
	PLATES	GRIP
	MT20	197/144
	MT18H	197/144
	Weight: 191 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
5-7,7-9: 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2 *Except*
16-19,11-14: 2x4 SPF 2100F 1.8E
WEBS 2x3 SPF No.2 *Except*
5-15,8-15,9-13: 2x4 SPF No.2, 2-20: 2x6 SPF No.2
2-19: 2x4 SPF 2100F 1.8E

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (3-10-0 max.): 5-9.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 3-18, 4-17, 8-13, 9-12, 10-11

REACTIONS.

(size) 20=0-3-8, 11=0-3-8
Max Horz 20=256(LC 5)
Max Uplift 20=-219(LC 8), 11=-186(LC 4)
Max Grav 20=2143(LC 2), 11=2118(LC 2)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-5629/654, 3-4=-4137/406, 4-5=-3322/403, 5-6=-3189/451, 6-8=-3187/450,
8-9=-2747/385, 9-10=-1796/239, 2-20=-2144/287, 10-11=-2035/217
BOT CHORD 19-20=-272/365, 18-19=-736/4914, 17-18=-506/3661, 15-17=-422/2890, 13-15=-422/2745,
12-13=-220/1559
WEBS 3-19=-80/742, 3-18=-1278/338, 4-18=0/493, 4-17=-914/273, 5-17=-69/791,
5-15=-198/594, 6-15=-569/229, 8-15=-95/647, 8-13=-1014/296, 9-13=-290/1735,
9-12=-876/223, 2-19=-531/4700, 10-12=-224/1892

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, with BCDL = 10.0psf.
- Bearing at joint(s) 20 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 219 lb uplift at joint 20 and 186 lb uplift at joint 11.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 14,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

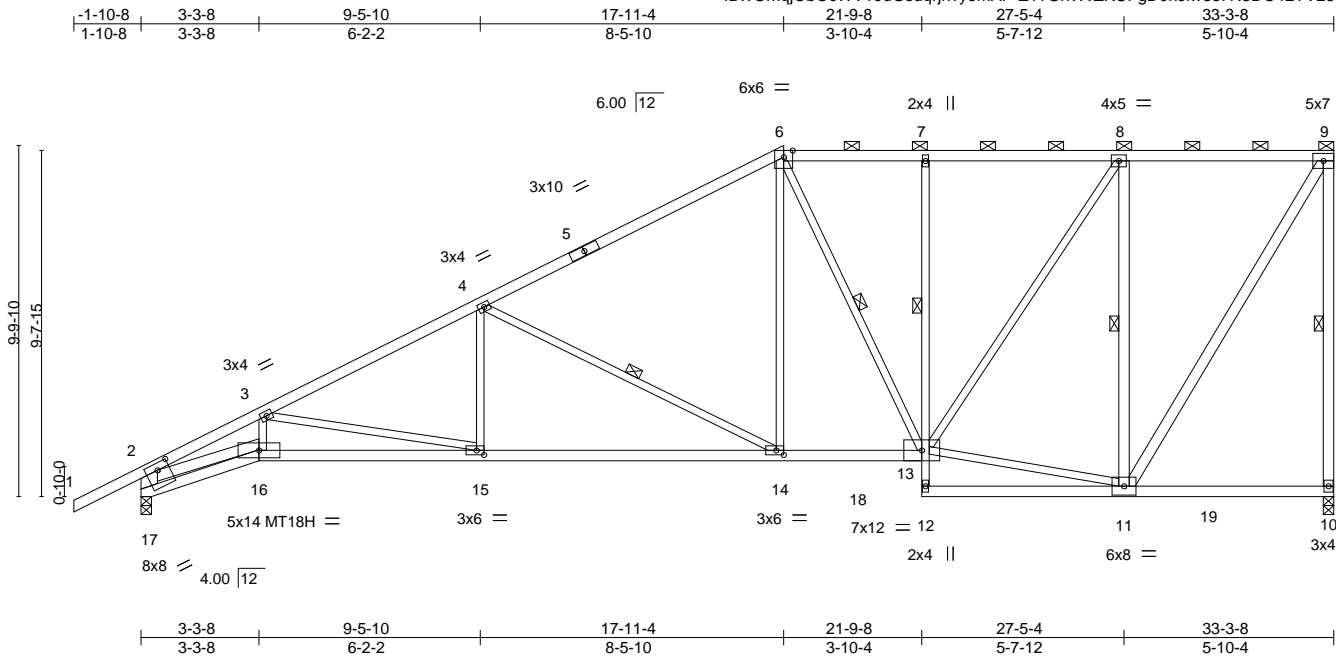
Job	Truss	Truss Type	Qty	Ply	Lot 91 RR	140979724
400307	C1	Half Hip	1	1		

Wheeler Lumber, Waverly, KS 66871

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ID:vOmajObOcWV19uGsdqrjnyemAP-Z1?GhWvZKUFgD0nJkv5s7N3DC4LYV23eyBibhizQmjl

Job Reference (optional)



Scale: 3/16"=1'

Plate Offsets (X,Y)-- [14:0-2-8,0-1-8], [15:0-2-8,0-1-8], [17:0-2-14,0-0-7], [17:0-4-0,0-2-4]

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 0.93	Vert(LL)	-0.23 14-15	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.54	Vert(CT)	-0.43 14-15	>924	240	MT18H	187/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.92	Horz(CT)	0.17 10	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.15 15-16	>999	240		

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except*
5-6: 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2 *Except*
13-16: 2x4 SPF 2100F 1.8E, 7-12: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
9-10,8-11,9-11,2-16: 2x4 SPF No.2, 2-17: 2x6 SPF No.2

REACTIONS. (size) 10=0-3-8, 17=0-3-8
Max Horz 17=385(LC 8)
Max Uplift 10=-234(LC 5), 17=-210(LC 8)
Max Grav 10=1585(LC 2), 17=1664(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3981/695, 3-4=-2844/357, 4-6=-1846/204, 6-7=-1381/194, 7-8=-1379/192,
8-9=-817/119, 9-10=-1466/260, 2-17=-1626/332
BOT CHORD 16-17=-364/187, 15-16=-928/3457, 14-15=-548/2511, 13-14=-239/1540, 7-13=-346/141
WEBS 3-16=-125/535, 3-15=-965/387, 4-15=0/484, 4-14=-1079/347, 6-14=-70/776,
6-13=-424/156, 11-13=-124/759, 8-13=-174/1017, 8-11=-1263/297, 9-11=-226/1555,
2-16=-599/3351

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 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, with BCDL = 10.0psf.
- Bearing at joint(s) 17 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

Continued on page 2

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April 14, 2020



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR
400307	C1	Half Hip	1	1	I40979724
					Job Reference (optional)

- NOTES-**
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 234 lb uplift at joint 10 and 210 lb uplift at joint 17.
 - 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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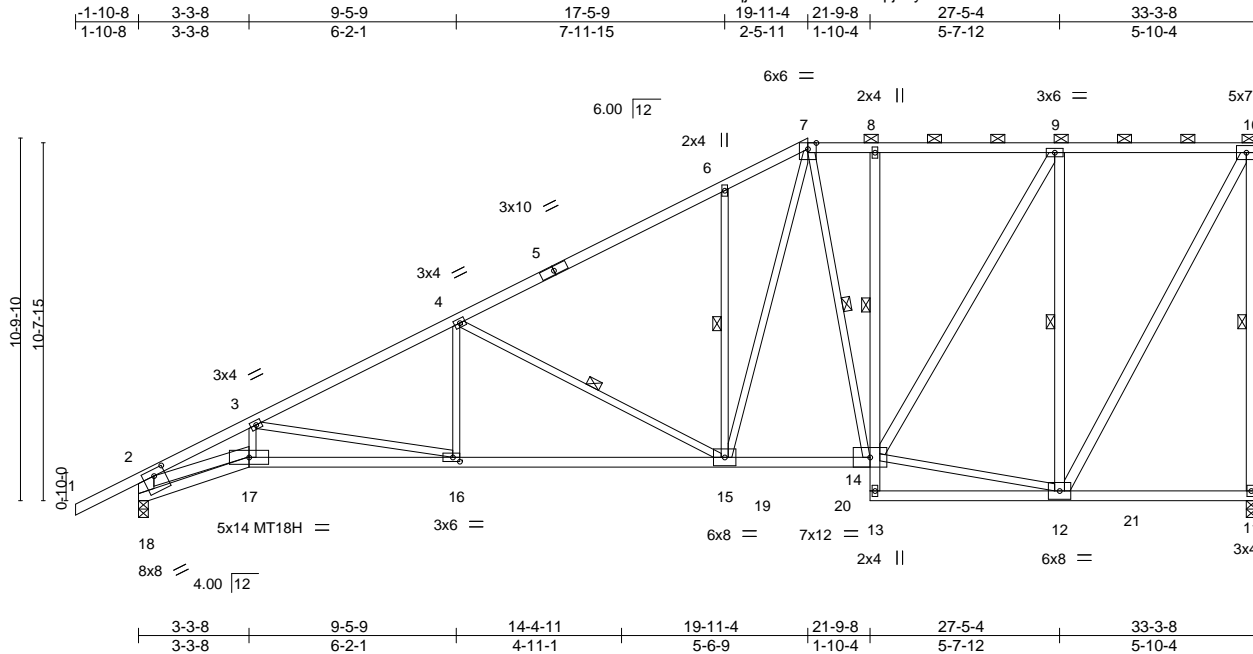
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR
400307	C2	Half Hip	1	1	
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871

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ID: vOmQjObOcWV19uGsdqrjnvymAP-1DZeuswB4oNXrAMVldc5fbbPGUhxEV3oBrS8D8zQmjk



Scale = 1:68.6

Plate Offsets (X,Y)-- [16:0-2-8,0-1-8], [18:0-4-0,0-2-4], [18:0-2-14,0-0-7]

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 0.85	Vert(LL)	-0.22 15-16	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.53	Vert(CT)	-0.41 15-16	>954	240	MT18H	187/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.94	Horz(CT)	0.17 11	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.16 16-17	>999	240		

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
14-17: 2x4 SPF 2100F 1.8E
WEBS 2x3 SPF No.2 *Except*
10-11,9-14,9-12,10-12,2-17: 2x4 SPF No.2, 2-18: 2x6 SPF No.2

REACTIONS. (size) 11=0-3-8, 18=0-3-8
Max Horz 18=425(LC 8)
Max Uplift 11=-224(LC 5), 18=-213(LC 8)
Max Grav 11=1590(LC 2), 18=1665(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3991/747, 3-4=-2839/372, 4-6=-1884/229, 6-7=-1812/352, 7-8=-1239/194,
8-9=-1236/193, 9-10=-740/102, 10-11=-1470/250, 2-18=-1625/346
BOT CHORD 17-18=-401/183, 16-17=-1014/3467, 15-16=-599/2504, 14-15=-226/1309, 8-14=-306/124
WEBS 3-17=-140/537, 3-16=-982/423, 4-16=0/480, 4-15=-1036/326, 6-15=-404/257,
7-15=-334/1100, 7-14=-384/154, 12-14=-106/686, 9-14=-212/979, 9-12=-1250/283,
10-12=-208/1520, 2-17=-651/3367

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 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, with BCDL = 10.0psf.
- Bearing at joint(s) 18 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

Continued on page 2

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16023 Swingley Ridge Rd
Chesterfield, MO 63017



April 14, 2020

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR
400307	C2	Half Hip	1	1	I40979725
Job Reference (optional)					

Wheeler Lumber, Waverly, KS 66871

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ID:vOmjqObOcWV19uGsdqrjnvymAP-1DZeuswB4oNXrAMVldc5fbbPGUhxEV3oBrS8D8zQmjk

NOTES-

- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 224 lb uplift at joint 11 and 213 lb uplift at joint 18.
- 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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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR	140979726
400307	C3	Half Hip	1	1		

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 14 14:42:08 2020 Page 1

ID: vOmQjObOcWV19uGsdqrjnyemAP-VQ716Cxp6VOSKxisK7KCo8elu1wzy6xPVBilbzQmjj

Job Reference (optional)

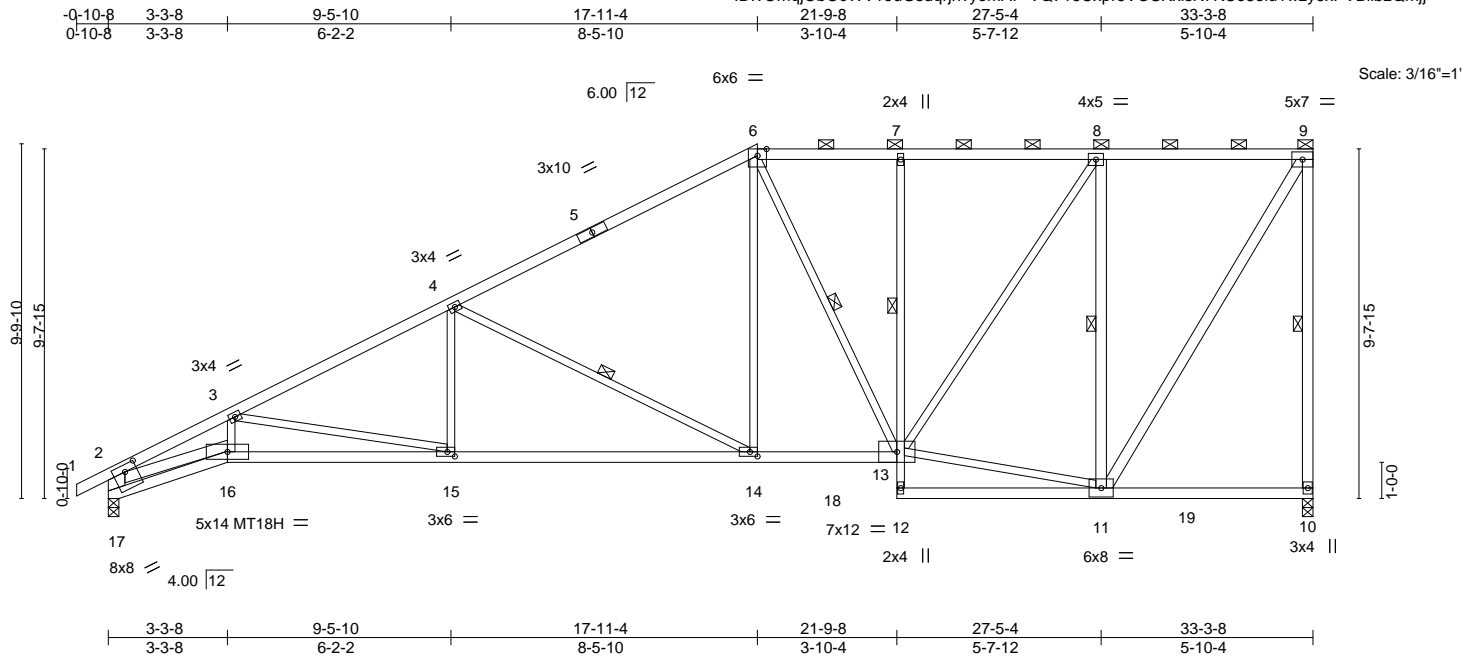


Plate Offsets (X,Y)-- [14:0-2-8,0-1-8], [15:0-2-8,0-1-8], [17:0-2-14,0-0-7], [17:0-4-0,0-2-4]

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 0.61	Vert(LL)	-0.21 14-15	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.55	Vert(CT)	-0.41 14-15	>971	240	MT18H	187/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.95	Horz(CT)	0.17 10	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.14 15-16	>999	240		

LUMBER-
TOP CHORD 2x4 SPF 2100F 1.8E *Except*
6-9: 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
13-16: 2x4 SPF 2100F 1.8E, 7-12: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
9-10,8-11,9-11,2-16: 2x4 SPF No.2, 2-17: 2x6 SPF No.2

REACTIONS. (size) 10=0-3-8, 17=0-3-8
Max Horz 17=367(LC 8)
Max Uplift 10=-234(LC 5), 17=-186(LC 8)
Max Grav 10=1587(LC 2), 17=1604(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-4046/722, 3-4=-2863/367, 4-6=-1852/207, 6-7=-1385/194, 7-8=-1383/193,
8-9=-819/119, 9-10=-1469/261, 2-17=-1621/327
BOT CHORD 16-17=-423/351, 15-16=-950/3506, 14-15=-559/2531, 13-14=-240/1544, 7-13=-347/141
WEBS 3-16=-140/578, 3-15=-994/399, 4-15=0/489, 4-14=-1097/356, 6-14=-74/785,
6-13=-425/156, 11-13=-124/760, 8-13=-176/1021, 8-11=-1266/297, 9-11=-226/1558,
2-16=-565/3245

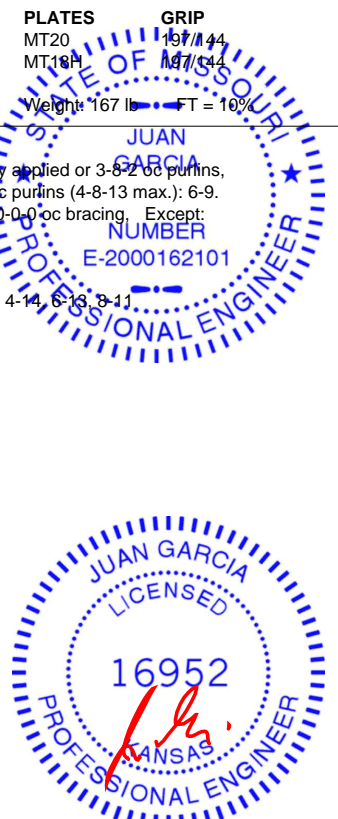
NOTES-

- 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 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, with BCDL = 10.0psf.
- Bearing at joint(s) 17 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

Continued on page 2

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April 14, 2020



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR	I40979726
400307	C3	Half Hip	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 14 14:42:08 2020 Page 2
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NOTES-

- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 234 lb uplift at joint 10 and 186 lb uplift at joint 17.
- 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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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR	140979727
400307	C4	Half Hip	1	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

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ID:VomqjObOcWV19uGsdqrjnyemAP_chPJXyRcPdF4UWuP2eZk0hpoHMOiQ54e9xFH1zQmji

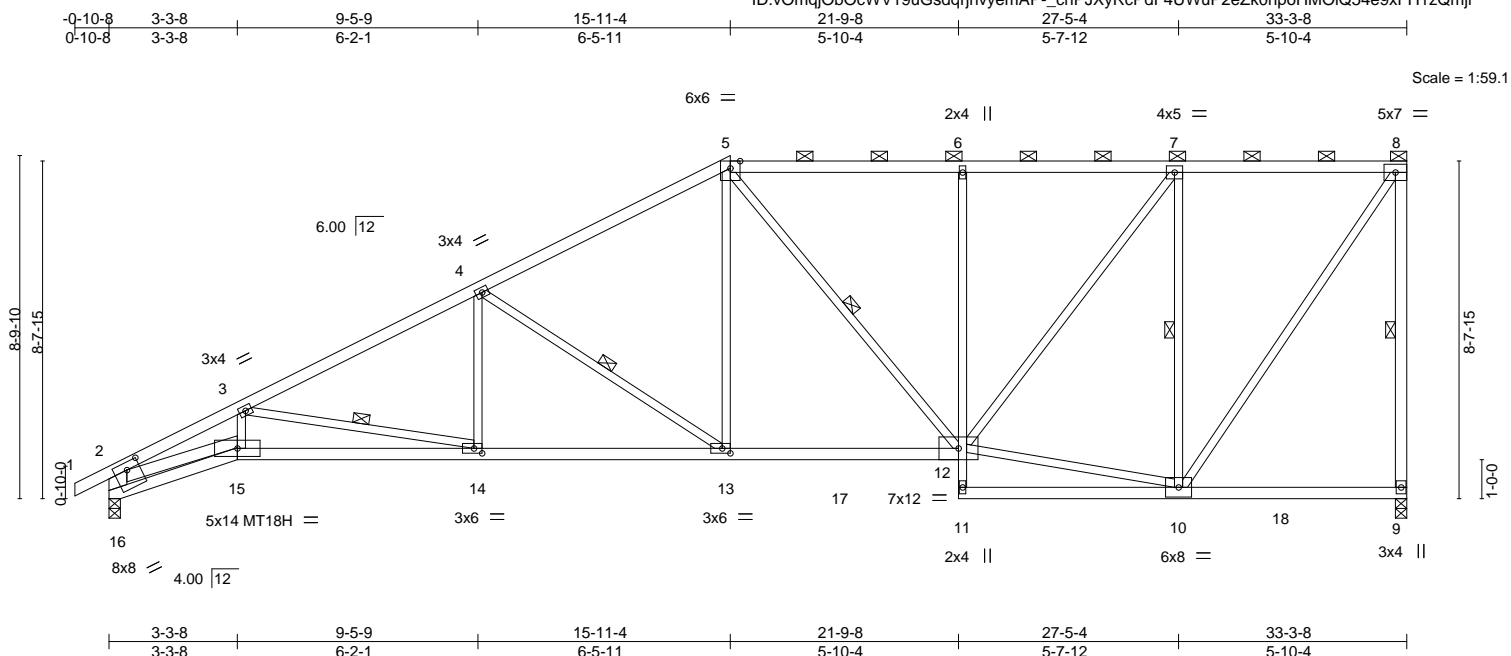


Plate Offsets (X,Y)-- [13:0-2-8,0-1-8], [14:0-2-8,0-1-8], [16:0-2-14,0-0-7], [16:0-4-0,0-2-4]

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 0.59	Vert(LL)	-0.21 14-15	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.53	Vert(CT)	-0.38 14-15	>999	240	MT18H	187/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.84	Horz(CT)	0.18 9	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.13 14-15	>999	240		

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

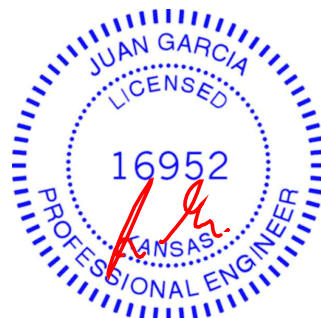
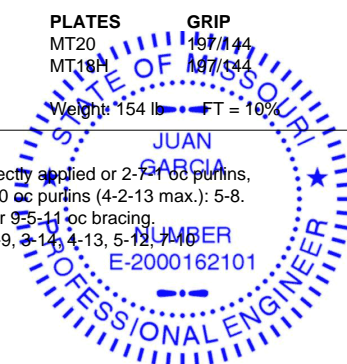
BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-7-11 oc purlins, except end verticals, and 2-0-0 oc purlins (4-2-13 max.): 5-8.
BOT CHORD Rigid ceiling directly applied or 9-5-11 oc bracing.
WEBS 1 Row at midpt 8-9, 3-14, 4-13, 5-12, 7-10

REACTIONS. (size) 9=0-3-8, 16=0-3-8
Max Horz 16=356(LC 5)
Max Uplift 9=261(LC 5), 16=201(LC 8)
Max Grav 9=1588(LC 2), 16=1610(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-4106/591, 3-4=-2848/342, 4-5=-2063/247, 5-6=-1597/205, 6-7=-1590/202, 7-8=-915/170, 8-9=-1470/278, 2-16=-1609/267
BOT CHORD 15-16=-369/344, 14-15=-694/3571, 13-14=-440/2507, 12-13=-350/1759, 6-12=-439/183
WEBS 3-15=-96/585, 3-14=-1085/325, 4-14=0/457, 4-13=-889/271, 5-13=-71/765, 5-12=-328/107, 10-12=-204/895, 7-12=-202/1123, 7-10=-1280/349, 8-10=-264/1605, 2-15=-469/3368

- 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.
 - 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, with BCDL = 10.0psf.
 - Bearing at joint(s) 16 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 261 lb uplift at joint 9 and 201 lb uplift at joint 16.

Continuation on page 2



April 14,2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR
400307	C4	Half Hip	1	1	I40979727
Job Reference (optional)					

Wheeler Lumber, Waverly, KS 66871

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ID:vOmQjObOcWV19uGsdqrjnyemAP-_chPJXyRcPdF4UWuP2eZk0hpoHMOiQ54e9xFH1zQmji

- NOTES-**
- 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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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR	140979728
400307	C5	Half Hip	1	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

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ID:vOmjqObOcWV19uGsdqjnyemAP-w_p9kDzh81tzJofHXSh1qRm8_5?AALVN6TQMMwzQmjg

-0-10-8	7-5-9	13-11-4	17-10-8	21-9-8	27-5-4	33-3-8
0-10-8	7-5-9	6-5-11	3-11-4	3-11-0	5-7-12	5-10-4

Scale = 1:59.3

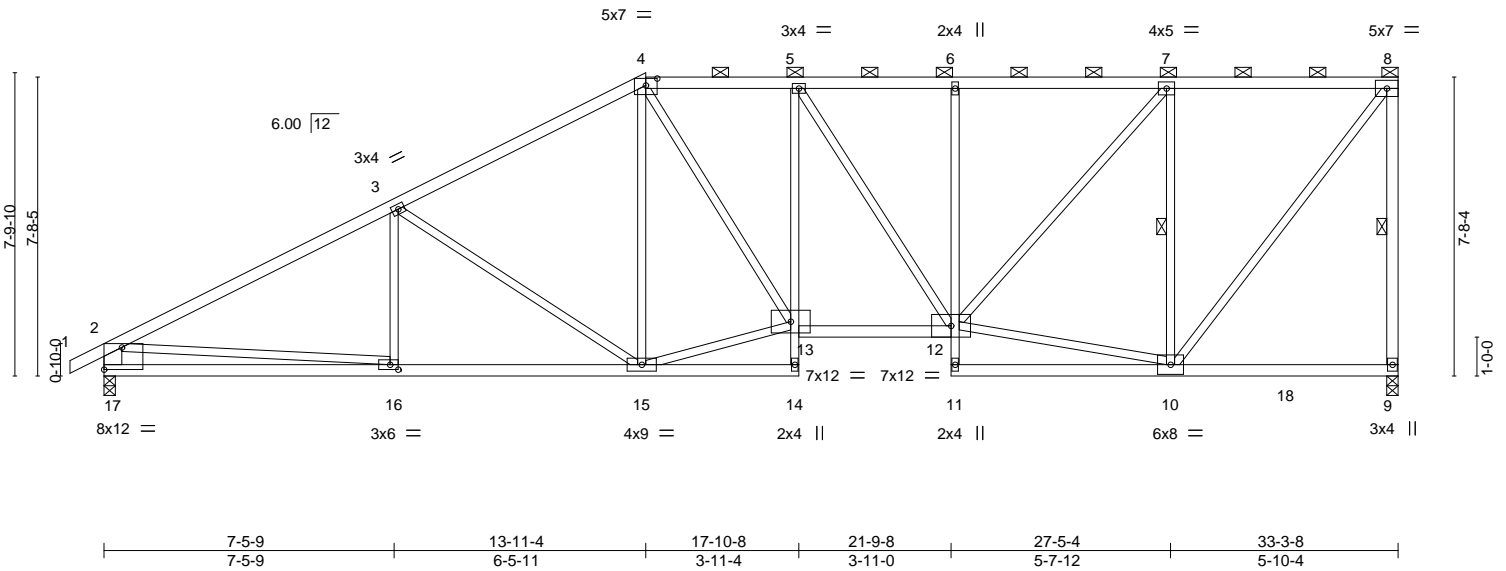


Plate Offsets (X,Y)-- [4:0-3-8,0-2-3], [16:0-2-8,0-1-8], [17:Edge,0-6-13], [17:0-2-12,0-0-0]

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 0.68	Vert(LL)	-0.15 12-13	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.70	Vert(CT)	-0.27 12-13	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.78	Horz(CT)	0.10 9	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.10 12-13	>999	240		

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
5-14,6-11: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
8-9: 2x4 SPF No.2, 2-17: 2x6 SPF No.2

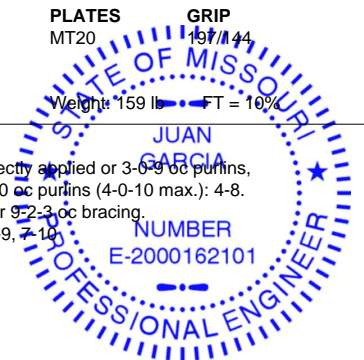
BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-6-9 oc purlins, except end verticals, and 2-0-0 oc purlins (4-0-10 max.): 4-8.
BOT CHORD Rigid ceiling directly applied or 9-2-3 oc bracing.
WEBS 1 Row at midpt 8-9, 7-10

REACTIONS. (size) 9=0-3-8, 17=0-3-8
Max Horz 17=316(LC 5)
Max Uplift 9=266(LC 5), 17=186(LC 8)
Max Grav 9=1561(LC 2), 17=1589(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2444/249, 3-4=-1948/218, 4-5=-2013/292, 5-6=-1782/255, 6-7=-1779/255, 7-8=-1017/193, 8-9=-1444/285, 2-17=-1484/226
BOT CHORD 16-17=-354/634, 15-16=-375/2099, 12-13=-415/2019, 6-12=-335/138
WEBS 3-15=-545/210, 13-15=-333/1702, 4-13=-155/705, 5-12=-429/74, 10-12=-228/973, 7-12=-216/1163, 7-10=-1302/356, 8-10=-282/1645, 2-16=-21/1502

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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 266 lb uplift at joint 9 and 186 lb uplift at joint 17.
- This truss 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.



April 14,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job Reference (optional)

16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR	140979730
400307	C7	Half Hip	1	1		

Wheeler Lumber, Waverly, KS 66871

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ID:vOmajObOcWV19uGsdqrjnyemAP-sNww9v?yge7hZ5pfetjVvsrTXve8eD?gZnvTQozQmje



Scale = 1:59.3

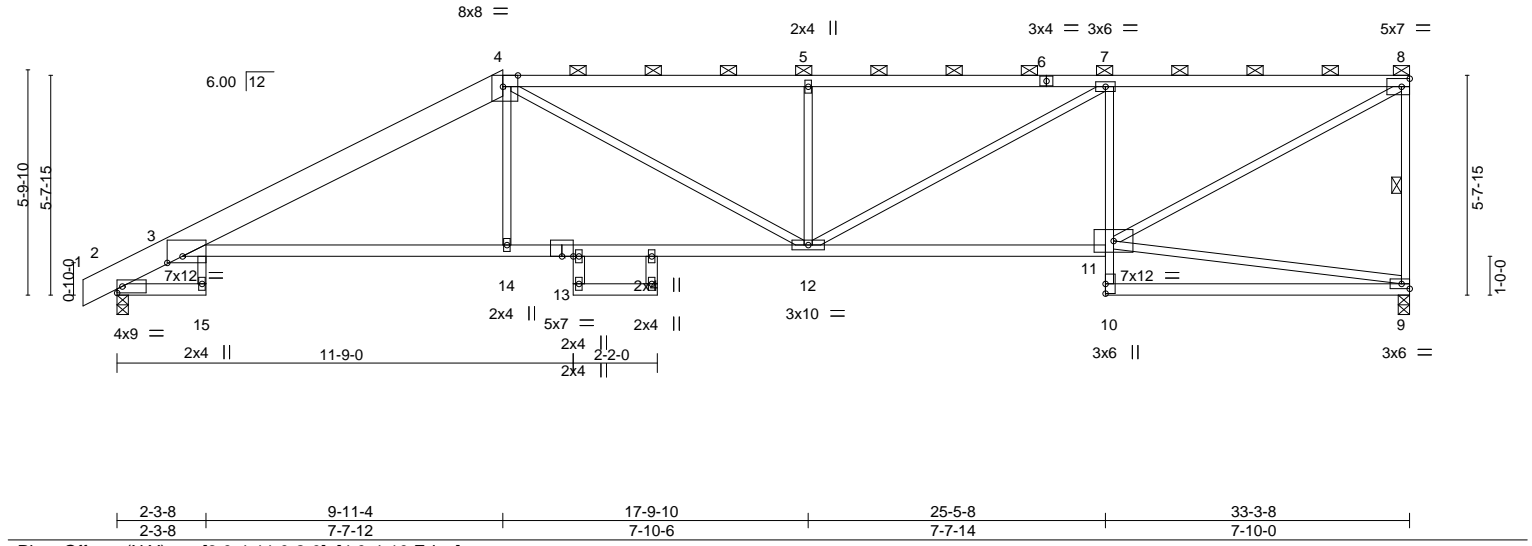


Plate Offsets (X,Y)-- [3:0-4-11,0-2-0], [4:0-4-10,Edge]							
LOADING (psf)	SPACING	2-0-0	CSI	DEFL.	in (loc)	l/defl	L/d
TCLL 25.0	Plate Grip DOL	1.15	TC 0.74	Vert(LL)	-0.25 3-14	>999	360
TCDL 10.0	Lumber DOL	1.15	BC 0.93	Vert(CT)	-0.56 3-14	>702	240
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.91	Horz(CT)	0.34 9	n/a	n/a
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.20 3-14	>999	240
				PLATES		GRIP	
				MT20		197/144	
				Weight: 150 lb		FT = 10%	

LUMBER-

TOP CHORD 2x4 SPF 2100F 1.8E *Except*
1-4: 2x8 SP DSS
BOT CHORD 2x4 SPF No.2 *Except*
3-15,7-10: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
16-18,17-19: 2x4 SPF No.2

BRACING-

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

REACTIONS.

(size) 9=0-3-8, 2=0-3-8
Max Horz 2=226(LC 5)
Max Uplift 9=-272(LC 5), 2=-141(LC 8)
Max Grav 9=1486(LC 1), 2=1572(LC 1)

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

TOP CHORD 2-3=-917/84, 3-4=-2744/371, 4-5=-2896/487, 5-7=-2895/488, 7-8=-2165/382, 8-9=-1409/321
BOT CHORD 3-14=-475/2452, 12-14=-472/2455, 11-12=-468/2173, 7-11=-995/309
WEBS 4-14=0/333, 4-12=-215/502, 5-12=-541/235, 7-12=-127/831, 8-11=-486/2451

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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 272 lb uplift at joint 9 and 141 lb uplift at joint 2.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 14, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR	140979731
400307	C8	Half Hip	1	1		
Job Reference (optional)						

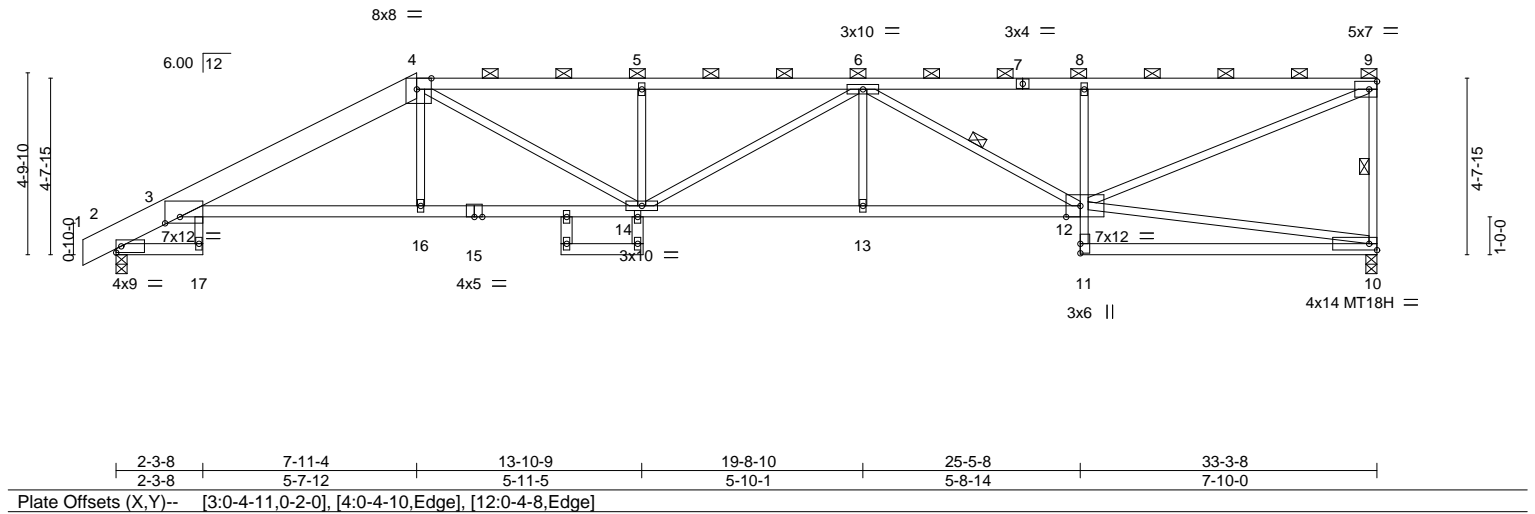
Wheeler Lumber, Waverly, KS 66871

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ID:vOmqrjObOcWV19uGsdqrjnyemAP-KZUIMF0aRyFYAFORCbEkR3OdPI_ANfvpoRe0zEzQmjd

0-10-8	2-3-8	7-11-4	13-10-9	19-8-10	25-5-8	33-3-8
0-10-8	2-3-8	5-7-12	5-11-5	5-10-1	5-8-14	7-10-0

Scale = 1:60.8



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.79	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.94	Vert(LL) -0.35 13-14 >999 360	MT18H	197/144
BCLL 0.0 *	Lumber DOL 1.15	WB 1.00	Vert(CT) -0.64 13-14 >618 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.35 10 n/a n/a		
	Code IRC2018/TPI2014		Wind(LL) 0.29 13-14 >999 240	Weight: 146 lb	FT = 10%

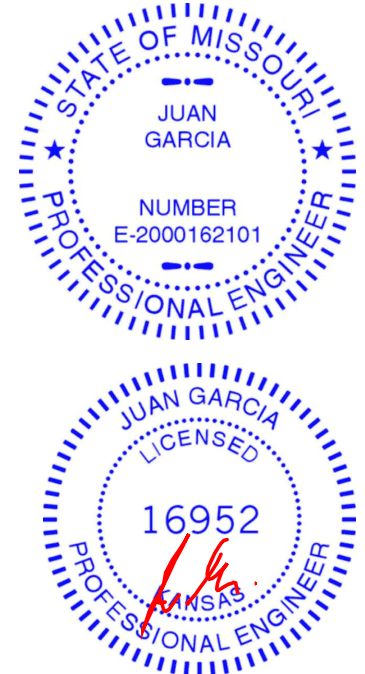
LUMBER-
TOP CHORD 2x8 SP DSS *Except*
4-7: 2x4 SPF No.2, 7-9: 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2 *Except*
3-17,8-11: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
18-20,14-19: 2x4 SPF No.2

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

REACTIONS. (size) 10=0-3-8, 2=0-3-8
Max Horz 2=184(LC 7)
Max Uplift 10=-275(LC 5), 2=-157(LC 5)
Max Grav 10=1486(LC 1), 2=1572(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-917/102, 3-4=-3001/449, 4-5=-3604/634, 5-6=-3603/635, 6-8=-2682/487,
8-9=-2680/494, 9-10=-1404/324
BOT CHORD 3-16=-526/2721, 14-16=-522/2723, 13-14=-698/3576, 12-13=-698/3576, 8-12=-536/226
WEBS 4-14=-274/1009, 5-14=-412/181, 6-13=0/256, 6-12=-1032/160, 9-12=-576/2899

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) All plates are MT20 plates unless otherwise indicated.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 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 275 lb uplift at joint 10 and 157 lb uplift at joint 2.
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.



April 14, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR	140979732
400307	C9	Half Hip Girder	1	2	Job Reference (optional)	

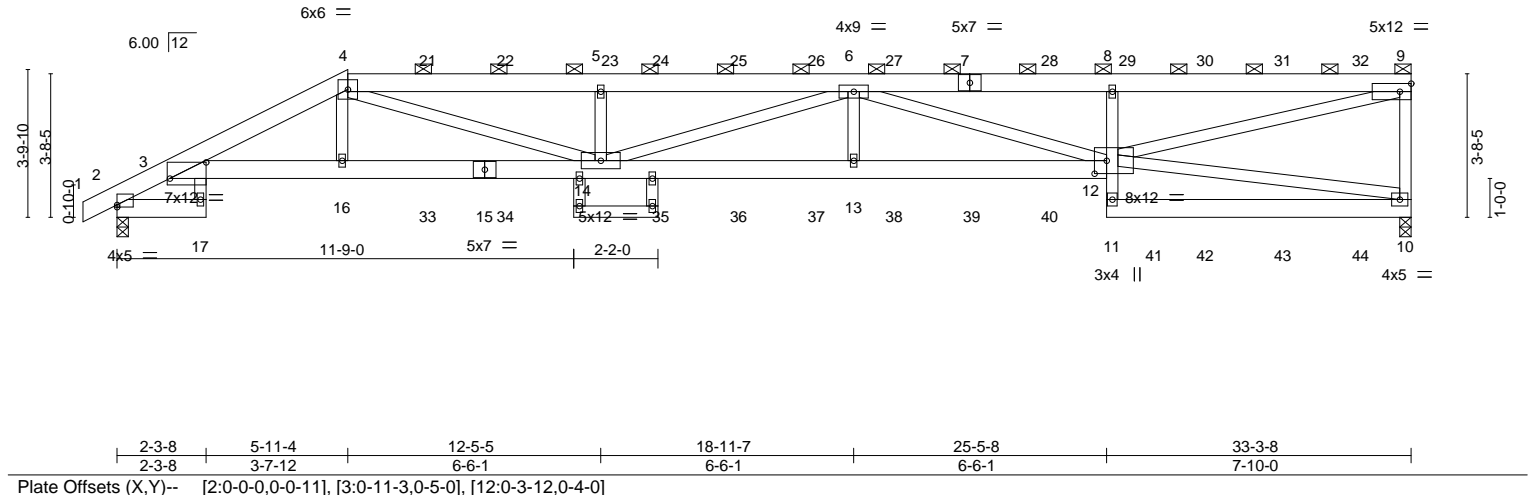
Wheeler Lumber, Waverly, KS 66871

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ID:vOmqlObOcWV19uGsdqrjnyemAP-l8AQ?H2Skte61j7QtjoR3i0AHW6qa1iGUPtgaZzQmja

0-10-8	2-3-8	5-11-4	12-5-5	18-11-7	25-5-8	33-3-8
0-10-8	2-3-8	3-7-12	6-6-1	6-6-1	6-6-1	7-10-0

Scale = 1:59.3



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 0.69	Vert(LL) -0.40 13-14 >982 360	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.50	Vert(CT) -0.73 13-14 >545 240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.93	Horz(CT) 0.29 10 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.29 13-14 >999 240	Weight: 403 lb	FT = 10%

LUMBER-

TOP CHORD 2x6 SPF No.2 *Except*
1-4: 2x6 SP 2400F 2.0E
BOT CHORD 2x6 SP 2400F 2.0E *Except*
3-17,8-11,18-19: 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, and 2-0-0 oc purlins (4-6-6 max.): 4-9.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 2-17.

REACTIONS.

(size) 10=0-3-8, 2=0-3-8
Max Horz 2=107(LC 26)
Max Uplift 10=-314(LC 5), 2=-284(LC 5)
Max Grav 10=2820(LC 1), 2=2824(LC 1)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1795/199, 3-4=-7265/889, 4-5=-9850/1208, 5-6=-9847/1207, 6-8=-7529/918, 8-9=-7363/915, 9-10=-2596/398
BOT CHORD 3-17=-28/324, 3-16=-877/6647, 14-16=-873/6578, 13-14=-1313/10418, 12-13=-1313/10418, 11-12=0/305, 8-12=-893/268, 10-11=-3/496
WEBS 4-16=-63/1076, 4-14=-445/3555, 5-14=-776/214, 6-14=-656/103, 6-13=0/490, 6-12=-3048/375, 10-12=-383/16, 9-12=-963/7557

NOTES-

- 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 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
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); 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.
- 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 314 lb uplift at joint 10 and 284 lb uplift at joint 2.
- This truss 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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Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR
400307	C9	Half Hip Girder	1	2	I40979732
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871

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NOTES-

- 12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 120 lb down and 63 lb up at 5-11-4, 100 lb down and 63 lb up at 8-0-0, 100 lb down and 63 lb up at 10-0-0, 100 lb down and 63 lb up at 12-0-0, 97 lb down and 50 lb up at 14-0-0, 97 lb down and 50 lb up at 16-0-0, 97 lb down and 50 lb up at 18-0-0, 97 lb down and 50 lb up at 20-0-0, 97 lb down and 50 lb up at 22-0-0, 97 lb down and 50 lb up at 24-0-0, 110 lb down and 74 lb up at 26-0-0, 110 lb down and 74 lb up at 28-0-0, and 110 lb down and 74 lb up at 30-0-0, and 110 lb down and 74 lb up at 32-0-0 on top chord, and 443 lb down and 138 lb up at 5-11-4, 76 lb down at 8-0-0, 76 lb down at 10-0-0, 80 lb down and 25 lb up at 14-0-0, 80 lb down and 25 lb up at 16-0-0, 80 lb down and 25 lb up at 18-0-0, 80 lb down and 25 lb up at 20-0-0, 80 lb down and 25 lb up at 22-0-0, 80 lb down and 25 lb up at 24-0-0, 69 lb down at 26-0-0, 69 lb down at 28-0-0, and 69 lb down at 30-0-0, and 69 lb down at 32-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 13) Filler 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, 4-9=-70, 2-17=-20, 3-12=-20, 10-11=-20
- Concentrated Loads (lb)
- Vert: 4=-97(B) 7=-81(B) 16=-443(B) 21=-97(B) 22=-97(B) 23=-97(B) 24=-81(B) 25=-81(B) 26=-81(B) 27=-81(B) 28=-81(B) 29=-110(B) 30=-110(B) 31=-110(B) 32=-110(B) 33=-71(B) 34=-71(B) 35=-80(B) 36=-80(B) 37=-80(B) 38=-80(B) 39=-80(B) 40=-80(B) 41=-52(B) 42=-52(B) 43=-52(B) 44=-52(B)

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR	I40979733
400307	D1	Hip Girder	1	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

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ID:vOmQjObOcWV19uGsdqrjnyemAP-DLkpCc34VAmzfsidRRJgcvZINwMsJhAPj3cE60zQmjZ

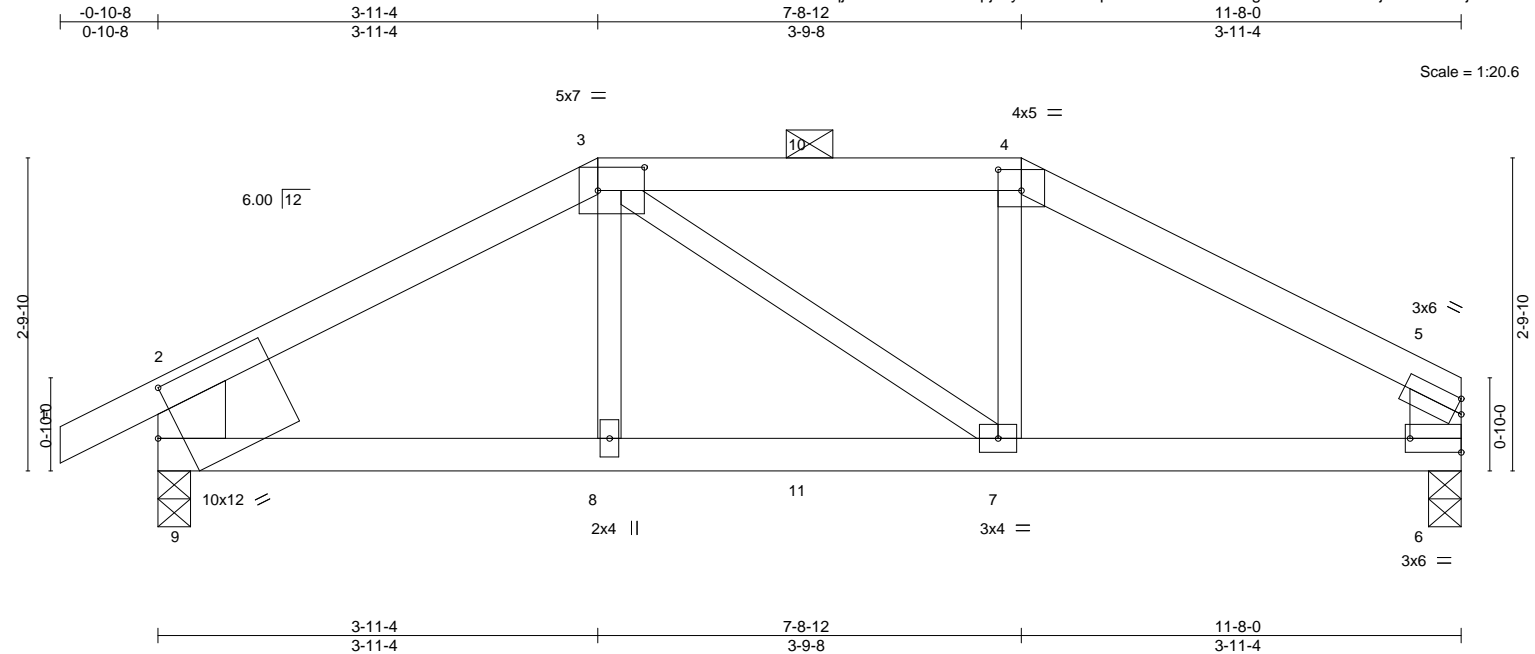


Plate Offsets (X,Y)--		[2:0-4-1,0-0-0], [3:0-5-0,0-2-8], [4:0-2-8,0-2-4], [6:Edge,0-1-8], [9:0-3-4,0-1-10], [9:0-2-7,0-4-14]	
LOADING (psf)	SPACING-	CSI.	DEFL.
TCLL 25.0	Plate Grip DOL 1.15	TC 0.86	in (loc) l/defl L/d
TCDL 10.0	Lumber DOL 1.15	BC 0.89	Vert(LL) -0.10 7-8 >999 360
BCLL 0.0 *	Rep Stress Incr NO	WB 0.08	Vert(CT) -0.18 7-8 >757 240
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Horz(CT) 0.02 6 n/a n/a
			Wind(LL) 0.08 7-8 >999 240
			PLATES MT20
			GRIP 197/144
			Weight: 39 lb FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 2x3 SPF No.2 *Except*
 2-9: 2x8 SP DSS, 5-6: 2x6 SP DSS

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-11-11 oc purlins, except end verticals, and 2-0-0 oc purlins (5-4-12 max.): 3-4.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 9=0-3-8, 6=0-3-8
 Max Horz 9=59(LC 5)
 Max Uplift 9=-205(LC 8), 6=-176(LC 9)
 Max Grav 9=883(LC 1), 6=788(LC 1)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1096/261, 3-4=-898/253, 4-5=-1088/259, 2-9=-772/212, 5-6=-653/177
 BOT CHORD 8-9=-219/880, 7-8=-218/890, 6-7=-196/890
 WEBS 3-8=0/253

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 205 lb uplift at joint 9 and 176 lb uplift at joint 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.
- 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) 78 lb down and 76 lb up at 3-11-4, and 86 lb down and 76 lb up at 5-10-0, and 78 lb down and 76 lb up at 7-8-12 on top chord, and 215 lb down and 77 lb up at 3-11-4, and 30 lb down at 5-10-0, and 215 lb down and 77 lb up at 7-8-0 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, 6-9=-20



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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR
400307	D1	Hip Girder	1	1	I40979733
Job Reference (optional)					

LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 3=-45(F) 4=-45(F) 8=-215(F) 7=-215(F) 10=-45(F) 11=-24(F)

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR	I40979734
400307	D2	Common	2	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

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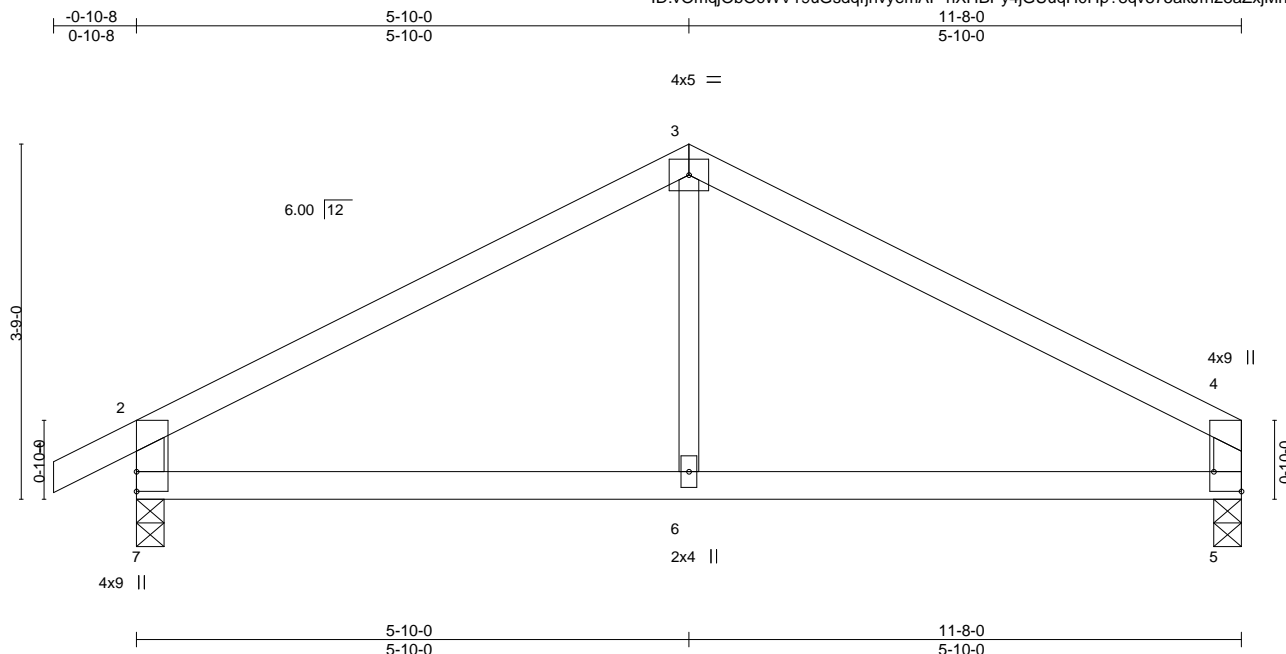


Plate Offsets (X,Y)-- [2:0-0-14,0-1-12], [4:Edge,0-3-8], [4:0-0-14,0-1-12], [5:0-0-0,0-1-12], [7:0-0-0,0-1-12]													
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.43	Vert(LL)	-0.03	6-7	>999	360	MT20	197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	-0.06	6-7	>999	240			
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.01	5	n/a	n/a			
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.01	6-7	>999	240	Weight: 33 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 6'-0" oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10'-0" oc bracing.

REACTIONS.

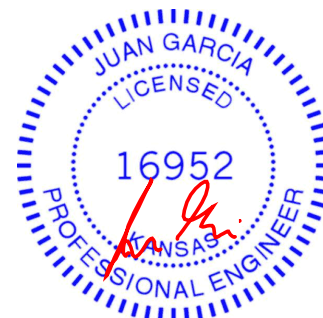
(size) 7=0-3-8, 5=0-3-8
Max Horz 7=69(LC 5)
Max Uplift 7=-86(LC 8), 5=-62(LC 9)
Max Grav 7=587(LC 1), 5=509(LC 1)

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

TOP CHORD 2-3=-605/88, 3-4=-600/86, 2-7=-522/125, 4-5=-439/100
BOT CHORD 6-7=-21/451, 5-6=-21/451

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
- 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" tall by 2'-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 86 lb uplift at joint 7 and 62 lb uplift at joint 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.



April 14, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR	140979735
400307	D3	Half Hip	1	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

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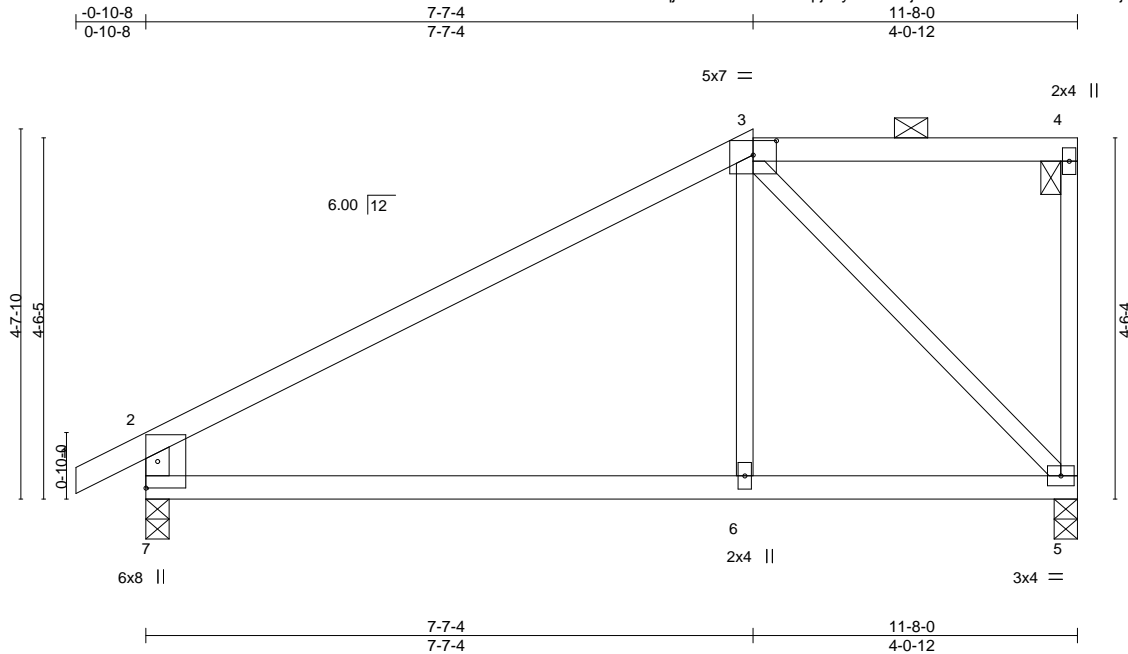


Plate Offsets (X,Y)-- [2:0-0-14,0-1-12], [3:0-3-8,0-2-3], [7:0-0-0,0-1-12]											
LOADING (psf)		SPACING- 2-0-0		CSI.	DEFL. in (loc) l/defl L/d				PLATES	GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC 0.69	Vert(LL)	-0.07	6-7	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC 0.38	Vert(CT)	-0.15	6-7	>885	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB 0.45	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.03	6-7	>999	240	Weight: 40 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 4-11-11 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.

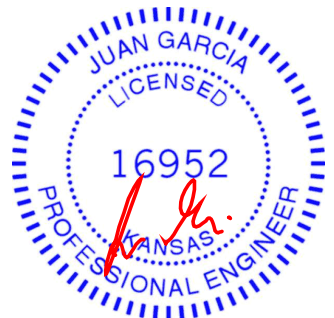
(size) 5=0-3-8, 7=0-3-8
Max Horz 7=183(LC 5)
Max Uplift 5=90(LC 5), 7=92(LC 8)
Max Grav 5=511(LC 1), 7=588(LC 1)

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

TOP CHORD 2-3=-538/61, 2-7=-532/149
BOT CHORD 6-7=-93/373, 5-6=-95/369
WEBS 3-6=0/283, 3-5=-540/107

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 90 lb uplift at joint 5 and 92 lb uplift at joint 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.



April 14, 2020

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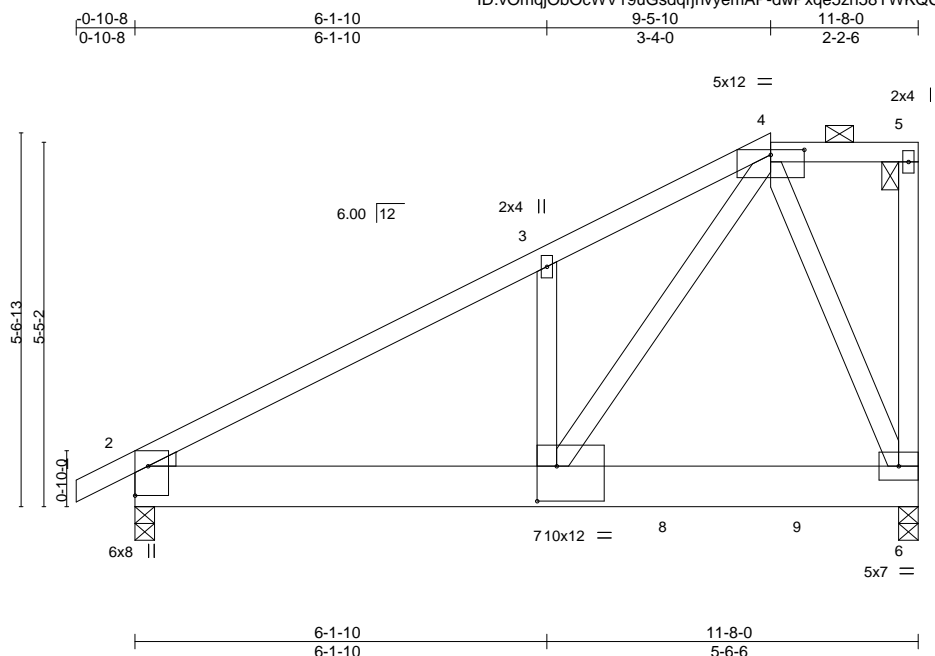
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR
400307	D4	Half Hip Girder	1	2	
Wheeler Lumber, Waverly, KS 66871					Job Reference (optional)

I40979736

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ID:vOmQjObOcWV19uGsdqrjnvymAP-dwPxqe5zn58YWKQC6ZsNEYAs17UQWtCrP1rujLzQmjW



Scale = 1:34.3

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

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 0.64	Vert(LL)	-0.08	6-7	>999	360	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.45	Vert(CT)	-0.14	6-7	>985	240	197/144
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.83	Horz(CT)	0.01	6	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.05	6-7	>999	240	
								Weight: 146 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x8 SP 2400F 2.0E
 WEBS 2x4 SPF No.2
 WEDGE
 Left: 2x3 SPF No.2

REACTIONS.

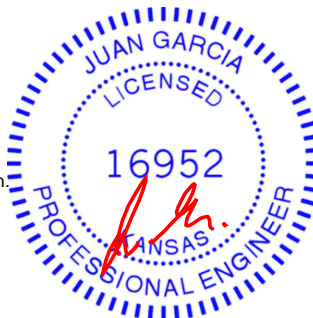
(size) 6=0-3-8 (req. 0-4-5), 2=0-3-8
 Max Horz 2=208(LC 28)
 Max Uplift 6=448(LC 8), 2=315(LC 8)
 Max Grav 6=5465(LC 1), 2=3186(LC 1)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-6056/523, 3-4=-5766/615
 BOT CHORD 2-7=-482/5147, 6-7=-179/1411
 WEBS 3-7=-259/473, 4-7=-689/6774, 4-6=-3612/366

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-8-13 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.



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WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR
400307	D4	Half Hip Girder	1	2	140979736
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 14 14:42:21 2020 Page 2
ID:vOmjqObOcWV19uGsdqrjnvymAP-dwPxqe5zn58YWKQC6ZsNEYAs17UQWtCrP1rujLzQmjW

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 0-7-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-3-0 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.
- WARNING: Required bearing size at joint(s) 6 greater than input bearing size.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 448 lb uplift at joint 6 and 315 lb uplift at joint 2.
- This truss 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) 3671 lb down and 372 lb up at 6-1-10, and 1944 lb down and 117 lb up at 8-0-0, and 1940 lb down and 118 lb up at 10-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-70, 4-5=-70, 2-6=-20
Concentrated Loads (lb)
Vert: 7=-3671(B) 8=-1944(B) 9=-1940(B)

 **WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.**

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR	140979737
400307	E1	Hip Girder	1	1		

Wheeler Lumber, Waverly, KS 66871

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Job Reference (optional)

ID:vOmjqObOcWV19uGsdqrjnyemAP-56zJ2_6bYGP8U?OgGNcmIj7aXu5FW7?ehaRFnzQmjV

0-10-8	2-0-12	4-6-4	6-7-0	7-5-8
0-10-8	2-0-12	2-5-8	2-0-12	0-10-8

Scale = 1:15.8

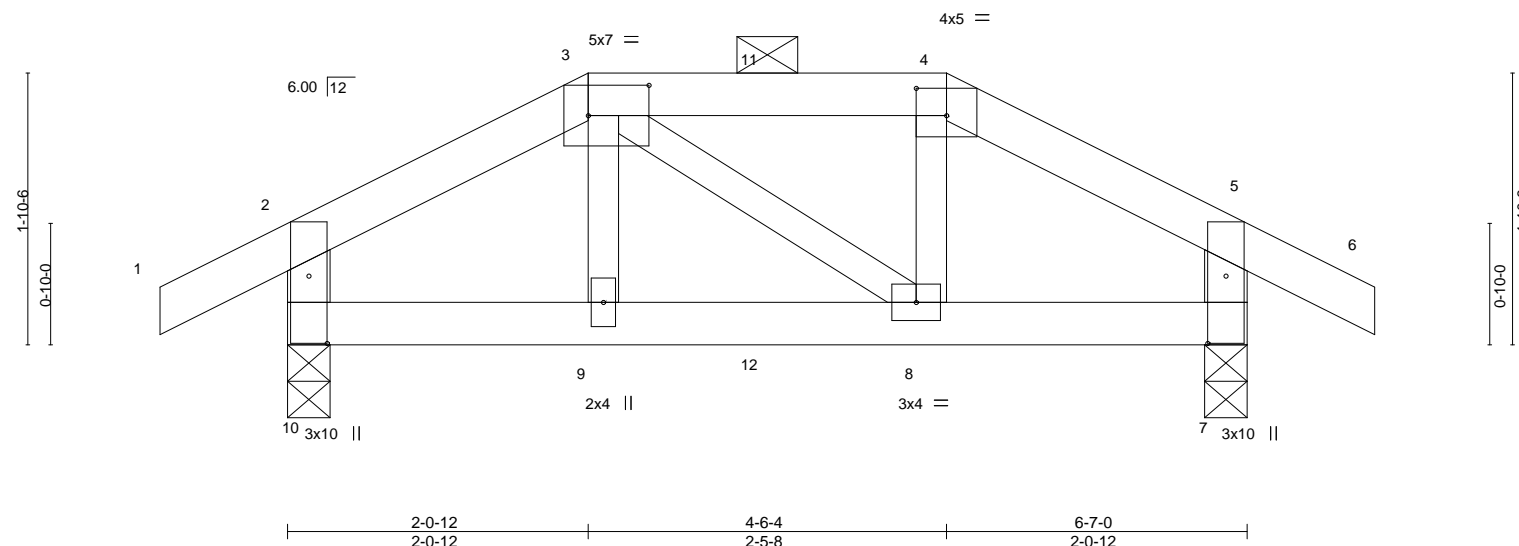


Plate Offsets (X,Y)-- [3:0-5-0,0-2-8], [4:0-2-8,0-2-4], [7:0-5-9,0-1-8], [10:0-5-9,0-1-8]									
LOADING (psf)		SPACING 2-0-0		CSI		DEFL. in (loc) l/defl L/d		PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	-0.01 8-9 >999 360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.17	Vert(CT)	-0.02 8-9 >999 240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.02	Horz(CT)	0.00 7 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.01 8-9 >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*
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=-42(LC 6)
Max Uplift 10=-113(LC 8), 7=-113(LC 9)
Max Grav 10=351(LC 1), 7=351(LC 1)

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

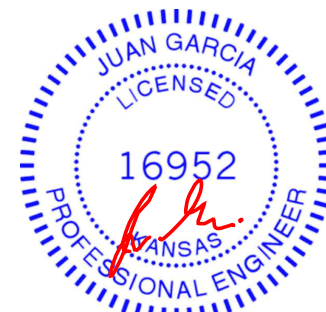
TOP CHORD 2-3=-290/117, 4-5=-290/116, 2-10=-294/112, 5-7=-294/112

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 113 lb uplift at joint 10 and 113 lb uplift at joint 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.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 92 lb down and 109 lb up at 2-0-12, and 56 lb down and 36 lb up at 3-3-8, and 92 lb down and 109 lb up at 4-6-4 on top chord, and 14 lb down and 5 lb up at 2-0-12, and 8 lb down and 1 lb up at 3-3-8, and 14 lb down and 5 lb up at 4-5-8 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, 5-6=-70, 7-10=-20
Concentrated Loads (lb)
Vert: 9=3(F) 8=3(F) 12=1(F)



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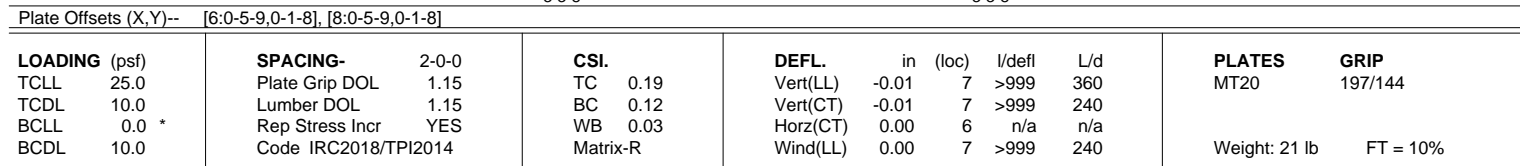
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

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16023 Swingley Ridge Rd
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Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 14 14:42:22 2020 Page 1
ID:vOmjqObOcWV19uGsdqrjnvymAP-56zJ2_6bYPGP8U?OgGNcmjljsXwFVw?ehaRFnzQmJV
-0-10-8 3-3-8 6-7-0 7-5-8
0-10-8 3-3-8 3-3-8 0-10-8
4x5 = Scale = 1:17.7



REACTIONS. (size) 8=0-3-8, 6=0-3-8
 Max Horz 8=50(LC 7)
 Max Uplift 8=-58(LC 8), 6=-58(LC 9)
 Max Grav 8=355(LC 1), 6=355(LC 1)

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 58 lb uplift at joint 8 and 58 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.



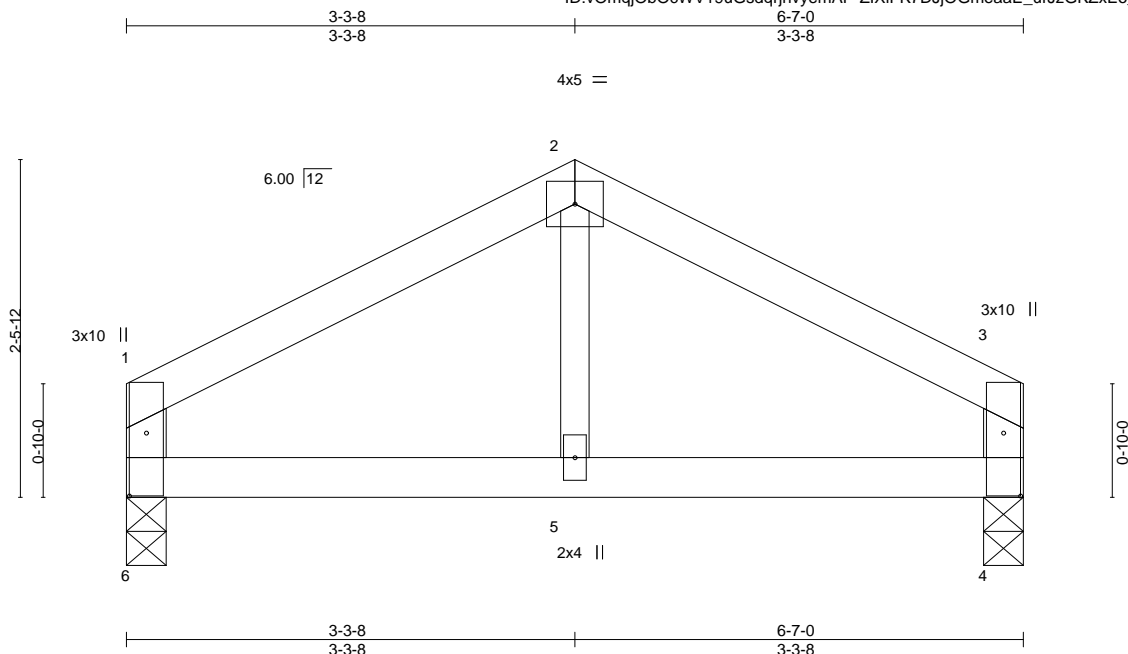
April 14, 2020

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR	
400307	E3	Common	2	1		I40979739
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 14 14:42:23 2020 Page 1

ID:vOmQjObOcWV19uGsdqrjnvymAP-ZIXiFK7DJjOGmeaaE_urJzGKZxEo_yA8sLK?nDzQmjU



Scale = 1:16.9

Plate Offsets (X,Y)--		[1:0-5-9,0-1-8], [3:0-5-9,0-1-8]			
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 0.12	Vert(LL) -0.01 5 >999 360	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.14	Vert(CT) -0.02 5 >999 240		
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) 0.00 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*
 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=0-3-8, 4=0-3-8
 Max Horz 6=43(LC 7)
 Max Uplift 6=34(LC 8), 4=34(LC 9)
 Max Grav 6=283(LC 1), 4=283(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-283/48, 2-3=-283/48

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 34 lb uplift at joint 6 and 34 lb uplift at joint 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.



April 14, 2020

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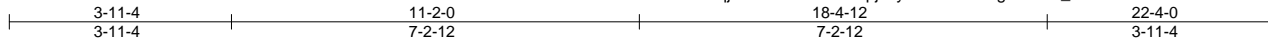
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR	140979740
400307	G1	Hip Girder	1	1		

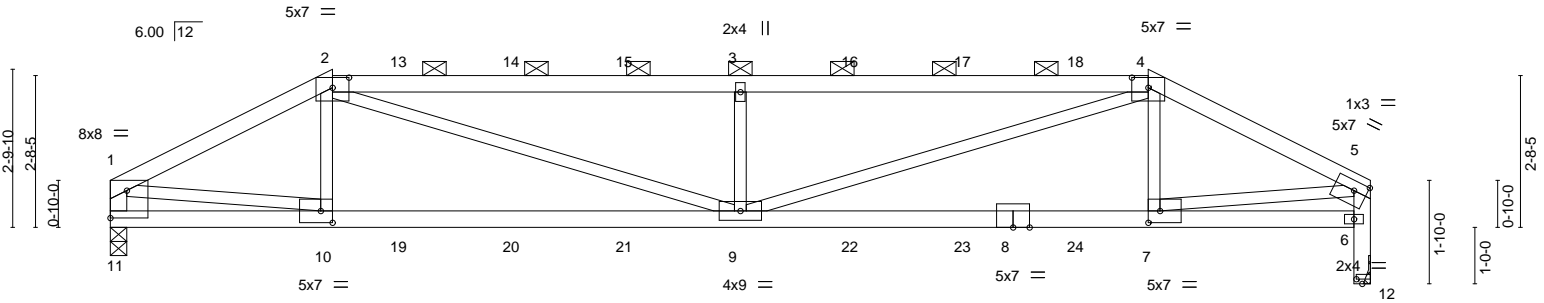
Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 14 14:42:25 2020 Page 1

ID:vOmjqObOcWV19uGsdqrjnyemAP-WhfSg08TrKe_?xkzLPxJOOLUXkmiSifRKep5s6zQmjS



Scale = 1:40.8



VERTICAL LEGS ARE NOT DESIGNED FOR LATERAL LOADS IMPOSED BY SUPPORTS (BEARINGS).

	3-11-4	11-2-0	18-4-12	22-4-0	
	3-11-4	7-2-12	7-2-12	3-11-4	
Plate Offsets (X,Y)--	[1:Edge,0-5-13], [2:0-3-8,0-2-3], [4:0-3-8,0-2-3], [5:0-2-12,0-2-0], [7:0-2-8,0-2-8], [10:0-2-8,0-2-8], [11:0-1-12,0-0-0], [12:0-1-4,0-1-0]				
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	PLATES
TCLL 25.0	Plate Grip DOL	1.15	TC 0.86	in (loc) l/defl L/d	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.81	Vert(LL) -0.18 9 >999 360	GRIP 197/144
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.67	Vert(CT) -0.36 7-9 >740 240	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Horz(CT) 0.07 12 n/a n/a	
				Wind(LL) 0.17 9 >999 240	Weight: 77 lb FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
2-4: 2x4 SPF 2400F 2.0E
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
1-11,5-12: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-6-15 oc purlins, except end verticals, and 2-0-0 oc purlins (3-3-12 max.): 2-4.
BOT CHORD Rigid ceiling directly applied or 7-11-2 oc bracing.

REACTIONS.

(size) 11=0-3-8, 12=Mechanical
Max Horz 11=79(LC 7)
Max Uplift 11=-323(LC 5), 12=-323(LC 4)
Max Grav 11=1489(LC 1), 12=1489(LC 1)

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

TOP CHORD 1-2=-2413/564, 2-3=-3679/931, 3-4=-3679/931, 4-5=-2413/558, 1-11=-1465/327,
6-12=-1489/323, 5-6=-1464/326
BOT CHORD 9-10=-538/2121, 7-9=-509/2121
WEBS 2-9=-453/1689, 3-9=-814/417, 4-9=-453/1689, 1-10=-456/1959, 5-7=-449/1955

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 323 lb uplift at joint 11 and 323 lb uplift at joint 12.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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) 78 lb down and 76 lb up at 3-11-4, 86 lb down and 76 lb up at 5-2-0, 86 lb down and 76 lb up at 7-2-0, 86 lb down and 76 lb up at 9-2-0, 86 lb down and 76 lb up at 11-2-0, 86 lb down and 76 lb up at 13-2-0, 86 lb down and 76 lb up at 15-2-0, and 86 lb down and 76 lb up at 17-2-0, and 78 lb down and 76 lb up at 18-4-12 on top chord, and 215 lb down and 77 lb up at 3-11-4, 30 lb down at 5-2-0, 30 lb down at 7-2-0, 30 lb down at 9-2-0, 30 lb down at 11-2-0, 30 lb down at 13-2-0, 30 lb down at 15-2-0, and 30 lb down at 17-2-0, and 215 lb down and 77 lb up at 18-4-0 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).



April 14, 2020

LOAD CASE(S) Standard

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR
400307	G1	Hip Girder	1	1	I40979740
Job Reference (optional)					

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, 4-5=-70, 6-11=-20
- Concentrated Loads (lb)
- Vert: 2=-45(F) 4=-45(F) 10=-215(F) 9=-24(F) 3=-45(F) 7=-215(F) 13=-45(F) 14=-45(F) 15=-45(F) 16=-45(F) 17=-45(F) 18=-45(F) 19=-24(F) 20=-24(F) 21=-24(F) 22=-24(F) 23=-24(F) 24=-24(F)

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR	140979741
400307	G2	Hip	1	1		

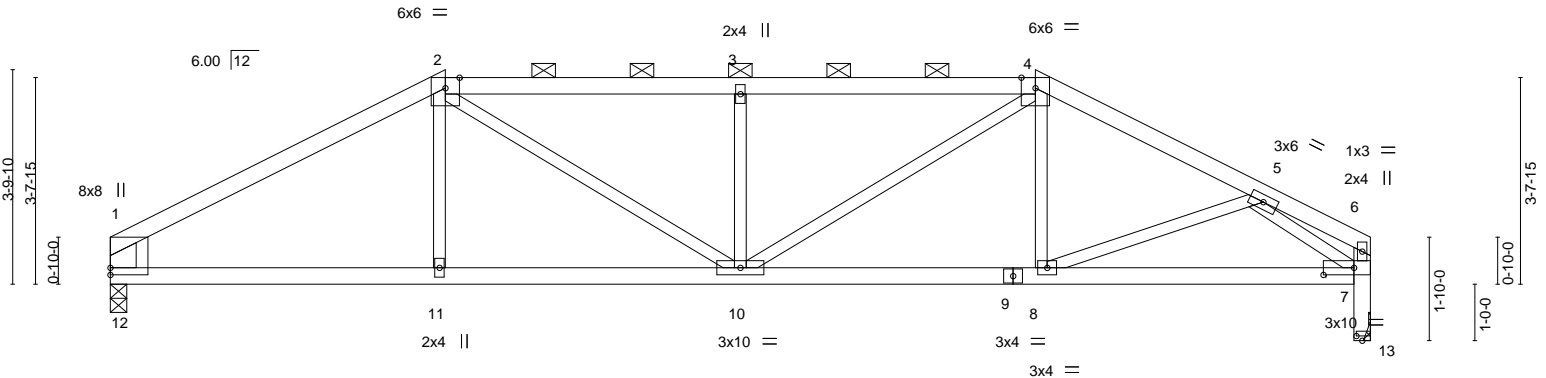
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ID:vOmqiObOcWV19uGsdqjnvymAP-S3mC5hAkNxiEFuLTqznTpQt4YUCwiVknYlCw_zQmjQ

5-11-4	11-2-0	16-4-12	20-3-10	22-4-0
5-11-4	5-2-12	5-2-12	3-10-14	2-0-6

Scale = 1:40.8



VERTICAL LEGS ARE NOT DESIGNED FOR LATERAL LOADS IMPOSED BY SUPPORTS (BEARINGS).

5-11-4	11-2-0	16-4-12	22-4-0
5-11-4	5-2-12	5-2-12	5-11-4

Plate Offsets (X,Y)--	[1:0-1-6,0-2-12], [7:0-6-8,0-1-8], [12:0-0-0,0-2-12], [13:0-1-4,0-1-0]
-----------------------	--

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 0.67	Vert(LL)	-0.15 10-11	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.69	Vert(CT)	-0.28 10-11	>946	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.27	Horz(CT)	0.06 13	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.07 10-11	>999	240	Weight: 78 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2 *Except*
 9-12: 2x4 SPF 2100F 1.8E
 WEBS 2x3 SPF No.2 *Except*
 1-12: 2x6 SP 2400F 2.0E, 6-13: 2x4 SPF No.2

BRACING-

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

REACTIONS.

(size) 12=0-3-8, 13=Mechanical
 Max Horz 12=-47(LC 6)
 Max Grav 12=988(LC 1), 13=988(LC 1)

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

TOP CHORD 1-2=-1445/22, 2-3=-1688/43, 3-4=-1688/43, 4-5=-1462/21, 1-12=-842/26, 7-13=-988/0
 BOT CHORD 11-12=-9/1196, 10-11=-11/1197, 8-10=0/1260, 7-8=-11/1087
 WEBS 2-10=-58/667, 3-10=-468/101, 4-10=-56/582, 5-8=-5/295, 5-7=-1252/51

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 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.
- This truss 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.



April 14, 2020

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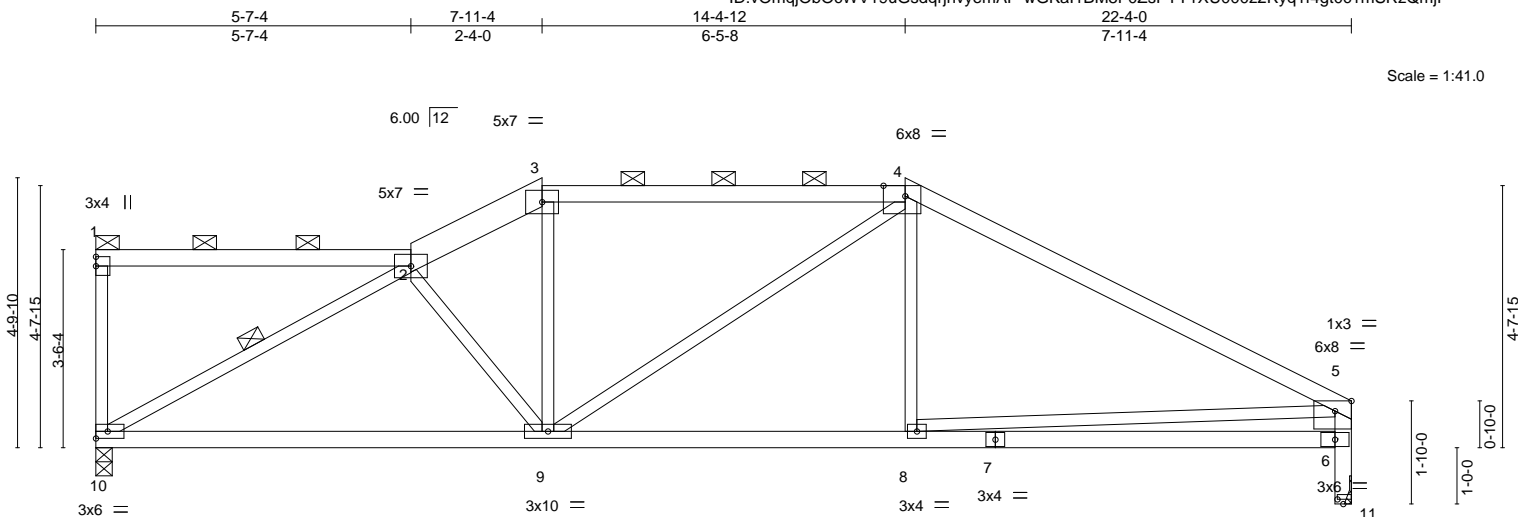
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR	140979742
400307	G3	Roof Special	1	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

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ID: vOmjqObOcWV19uGsdqrjnyemAP-wGKa1BM8F0ZsPTY1XU000z2Ryq1f4gt0c1mSRzQmjP



VERTICAL LEGS ARE NOT DESIGNED FOR LATERAL LOADS IMPOSED BY SUPPORTS (BEARINGS).

	5-7-4	7-11-4	14-4-12	22-4-0
	5-7-4	2-4-0	6-5-8	7-11-4
Plate Offsets (X,Y)--	[4:0-4-10,Edge], [5:0-3-8,Edge], [11:0-1-4,0-1-0]			

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 0.69	Vert(LL)	-0.13	9-10	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.58	Vert(CT)	-0.26	9-10	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.59	Horz(CT)	0.04	11	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.02	8-9	>999	240	Weight: 85 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
2-3: 2x6 SPF No.2, 4-5: 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
5-11: 2x4 SPF 2100F 1.8E

BRACING-

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

REACTIONS.

(size) 10=0-3-8, 11=Mechanical
Max Horz 10=-138(LC 4)
Max Uplift 10=-16(LC 4)
Max Grav 10=994(LC 1), 11=994(LC 1)

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

TOP CHORD 2-3=-1360/0, 3-4=-1201/0, 4-5=-1453/0, 6-11=-994/0, 5-6=-918/40
BOT CHORD 9-10=-4/1283, 8-9=0/1192, 6-8=-77/524
WEBS 2-10=-1453/32, 3-9=0/302, 5-8=0/712

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 16 lb uplift at joint 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.



April 14,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR	140979743
400307	G4	Roof Special	1	1	Job Reference (optional)	

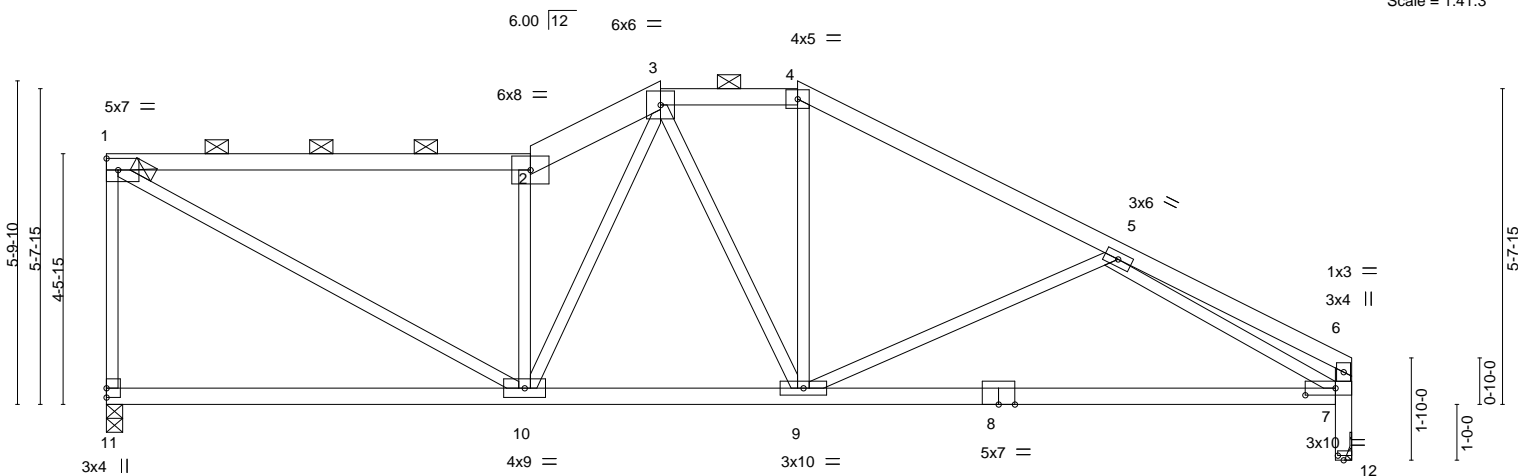
Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 14 14:42:29 2020 Page 1

ID:vOmQjObOcWV19uGsdqrjnvymAP-OSuzWNB_vY8QUZ1kaE?FYEWDL86OV21FGnJ?tzQmJO

7-7-4	9-11-4	12-4-12	18-0-4	22-4-0
7-7-4	2-4-0	2-5-8	5-7-8	4-3-12

Scale = 1:41.3



VERTICAL LEGS ARE NOT DESIGNED FOR LATERAL LOADS IMPOSED BY SUPPORTS (BEARINGS).

7-7-4	9-11-4	12-4-12	22-4-0
7-7-4	2-4-0	2-5-8	9-11-4

Plate Offsets (X,Y)-- [7:0-6-8,0-1-8], [12:0-1-4,0-1-0]									
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	0.67	Vert(LL)	-0.24 7-9 >999 360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.48 7-9 >552 240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.71	Horz(CT)	0.03 12 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.03 9-10 >999 240	Weight: 91 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
1-2: 2x4 SPF 2100F 1.8E, 2-3: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
6-12: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-5-2 oc purlins, except end verticals, and 2-0-0 oc purlins (5-3-13 max.): 1-2, 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

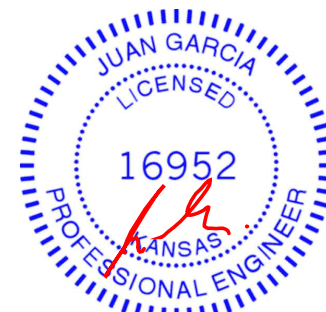
(size) 11=0-3-8, 12=Mechanical
Max Horz 11=-170(LC 4)
Max Uplift 11=-20(LC 8), 12=-5(LC 9)
Max Grav 11=994(LC 1), 12=994(LC 1)

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

TOP CHORD 1-11=-921/59, 1-2=-1213/2, 2-3=-1459/30, 3-4=-1038/38, 4-5=-1254/14, 5-6=-408/0,
7-12=-994/5, 6-7=-252/0
BOT CHORD 9-10=0/1013, 7-9=-39/1275
WEBS 1-10=-7/1360, 2-10=-1061/117, 3-10=-44/557, 4-9=0/279, 5-9=-290/139, 5-7=-1187/111

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 20 lb uplift at joint 11 and 5 lb uplift at joint 12.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 14,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR	140979744
400307	G5	Roof Special	1	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

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ID:vOmQjObOcWV19uGsdqrjnvymAP-seSLjjCgshHG5icw8yXU5R2T0IXX7?NATwWsXJzQmjN

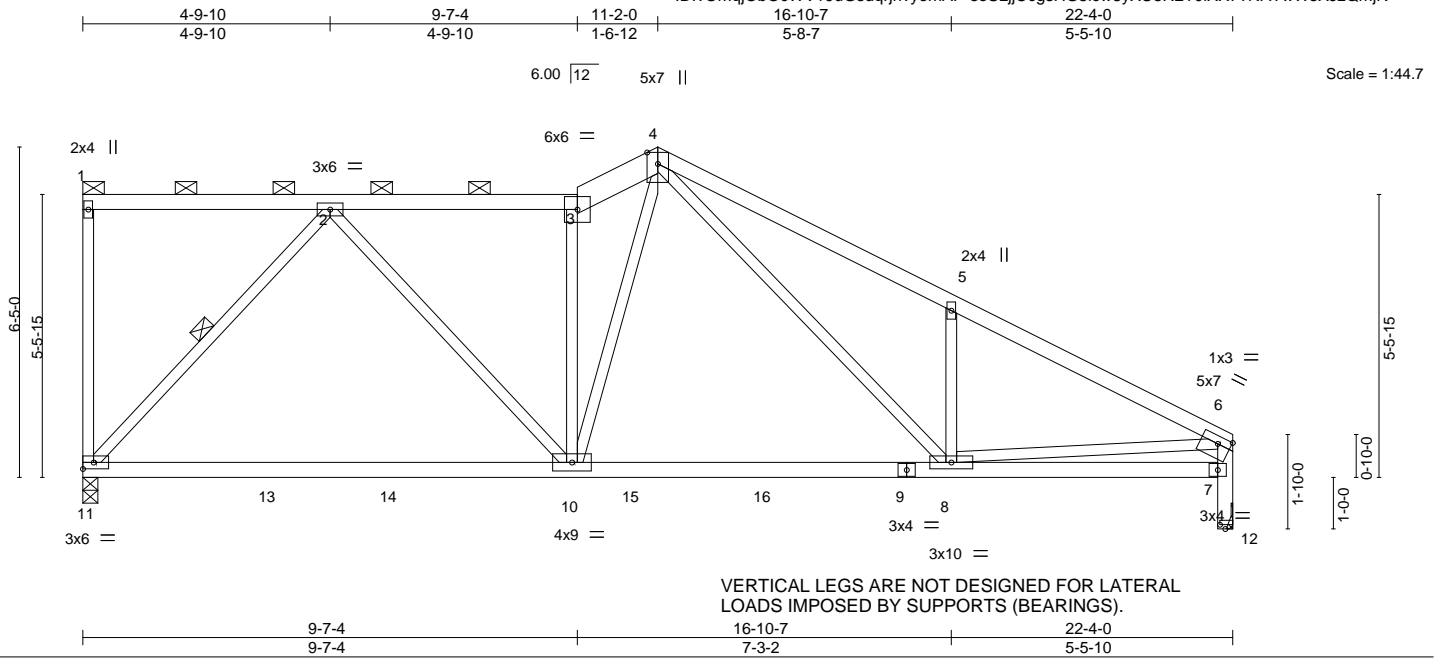


Plate Offsets (X,Y)--		[6:Edge,0-1-12], [12:0-1-4,0-1-0]							
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.37	Vert(LL)	-0.25 10-11	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.52	Vert(CT)	-0.45 10-11	>590	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.51	Horz(CT)	0.02 12	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.03 8-10	>999	240	Weight: 93 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
3-4: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
9-11: 2x4 SPF 2100F 1.8E
WEBS 2x3 SPF No.2 *Except*
6-12: 2x4 SPF No.2

BRACING-

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

REACTIONS.

(size) 11=0-3-8, 12=Mechanical
Max Horz 11=-200(LC 4)
Max Uplift 11=-33(LC 8), 12=-9(LC 9)
Max Grav 11=1067(LC 2), 12=1049(LC 2)

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

TOP CHORD 2-3=-1172/24, 3-4=-1342/34, 4-5=-1620/123, 5-6=-1607/27, 7-12=-1049/9, 6-7=-957/37
BOT CHORD 10-11=0/743, 8-10=0/999, 7-8=-32/274
WEBS 2-11=-1084/72, 2-10=0/645, 3-10=-744/45, 4-10=0/733, 4-8=-107/591, 5-8=-419/146, 6-8=0/1114

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, 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 33 lb uplift at joint 11 and 9 lb uplift at joint 12.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 14, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

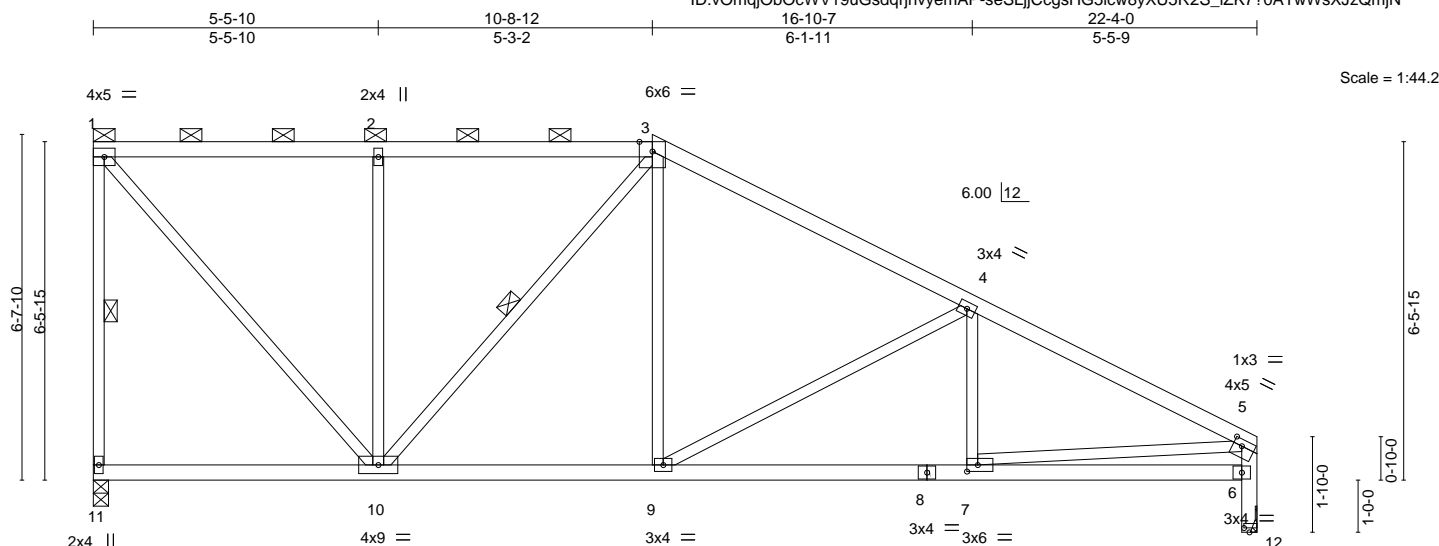
Job	Truss	Truss Type	Qty	Ply	Lot 91 RR	140979745
400307	G6	Half Hip	1	1		

Wheeler Lumber, Waverly, KS 66871

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ID: vOmQjObOcWV19uGsdqjnyemAP-seSLijCcgSHG5icw8yXU5R2S_IzK7?0ATwWsXJzQmjN

Job Reference (optional)



VERTICAL LEGS ARE NOT DESIGNED FOR LATERAL LOADS IMPOSED BY SUPPORTS (BEARINGS).

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

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 0.43	Vert(LL)	-0.05	7-9	>999	360	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.40	Vert(CT)	-0.12	7-9	>999	240	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.54	Horz(CT)	0.02	12	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.03	7-9	>999	240	
								Weight: 93 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
5-12: 2x4 SPF No.2

BRACING-

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

REACTIONS.

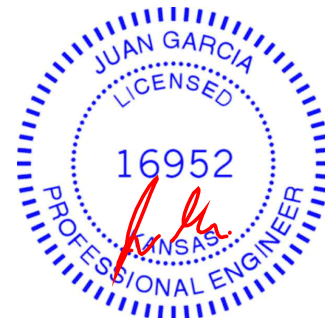
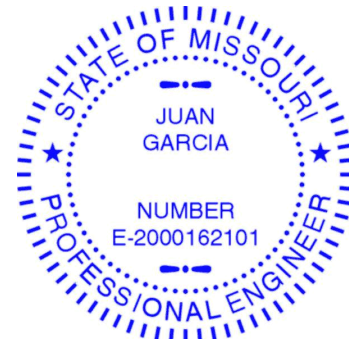
(size) 11=0-3-8, 12=Mechanical
Max Horz 11=-223(LC 4)
Max Uplift 11=-53(LC 4), 12=-10(LC 9)
Max Grav 11=994(LC 1), 12=994(LC 1)

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

TOP CHORD 1-11=-946/74, 1-2=-691/37, 2-3=-693/38, 3-4=-1111/40, 4-5=-1539/32, 6-12=-994/10, 5-6=-937/38
BOT CHORD 9-10=0/899, 7-9=0/1313
WEBS 1-10=-58/1047, 2-10=-446/108, 3-10=-324/35, 3-9=0/369, 4-9=-463/94, 5-7=0/1074

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 53 lb uplift at joint 11 and 10 lb uplift at joint 12.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 14,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR	140979746
400307	G7	Half Hip	1	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

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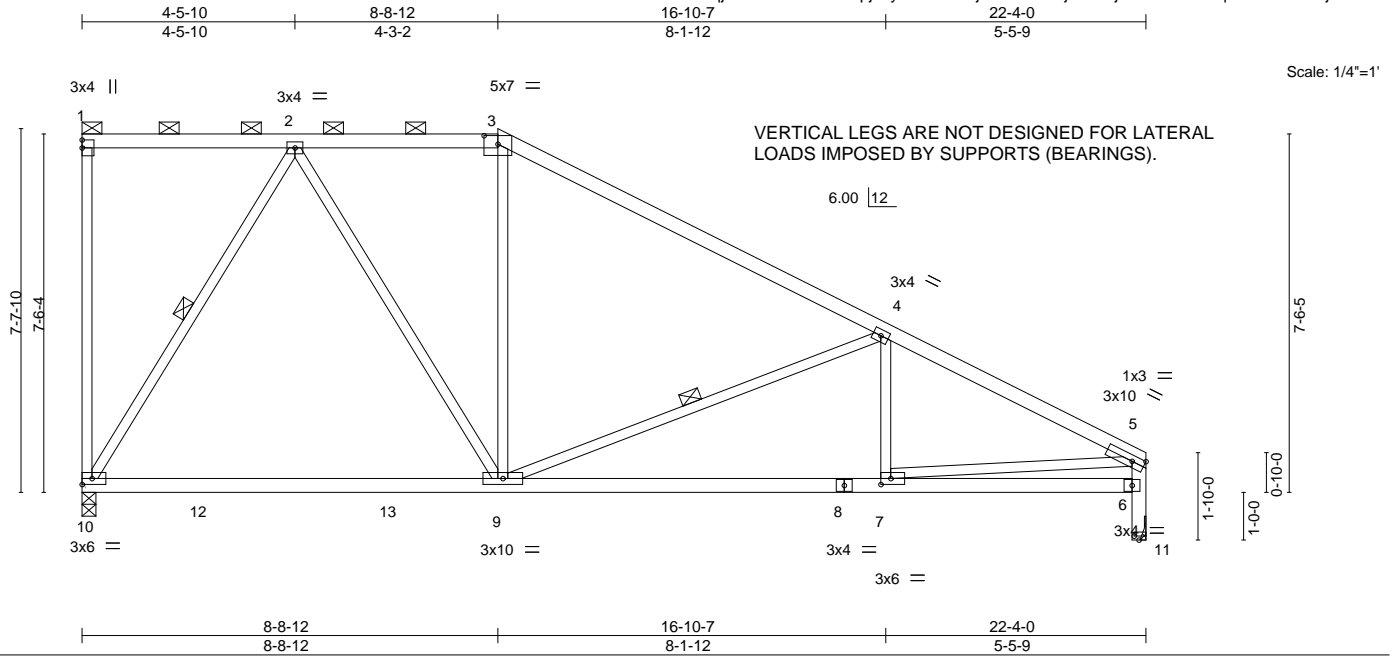


Plate Offsets (X,Y)--		[3:0-3-8,0-2-3], [7:0-2-8,0-1-8], [11:0-1-4,0-1-0]					
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d
TCLL 25.0	Plate Grip DOL	1.15	TC 0.85	Vert(LL)	-0.25 9-10	>999	360
TCDL 10.0	Lumber DOL	1.15	BC 0.50	Vert(CT)	-0.39 9-10	>688	240
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.63	Horz(CT)	0.02 11	n/a	n/a
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	-0.03 9-10	>999	240
				PLATES	GRIP		
				MT20	197/144		
				Weight: 93 lb	FT = 10%		

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
8-10: 2x4 SPF 2100F 1.8E
WEBS 2x3 SPF No.2 *Except*
5-11: 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.): 1-3.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 2-10, 4-9

REACTIONS.

(size) 10=0-3-8, 11=Mechanical
Max Horz 10=-256(LC 4)
Max Uplift 10=-54(LC 4), 11=-15(LC 9)
Max Grav 10=1069(LC 2), 11=1033(LC 2)

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

TOP CHORD 2-3=-829/74, 3-4=-1036/43, 4-5=-1617/49, 6-11=-1033/15, 5-6=-942/41
BOT CHORD 9-10=-6/542, 7-9=-15/1403
WEBS 2-10=-944/86, 2-9=-17/658, 4-9=-648/129, 5-7=0/1199

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, 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 54 lb uplift at joint 10 and 15 lb uplift at joint 11.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 14, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR	140979747
400307	G8	Half Hip	1	1		

Wheeler Lumber, Waverly, KS 66871

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ID:vOmjqObOcWV19uGsdqrjnyemAP-o1a58PEsCTX_L0mJGNZyAs8jmZBabusTxEx?zbCzQmjL

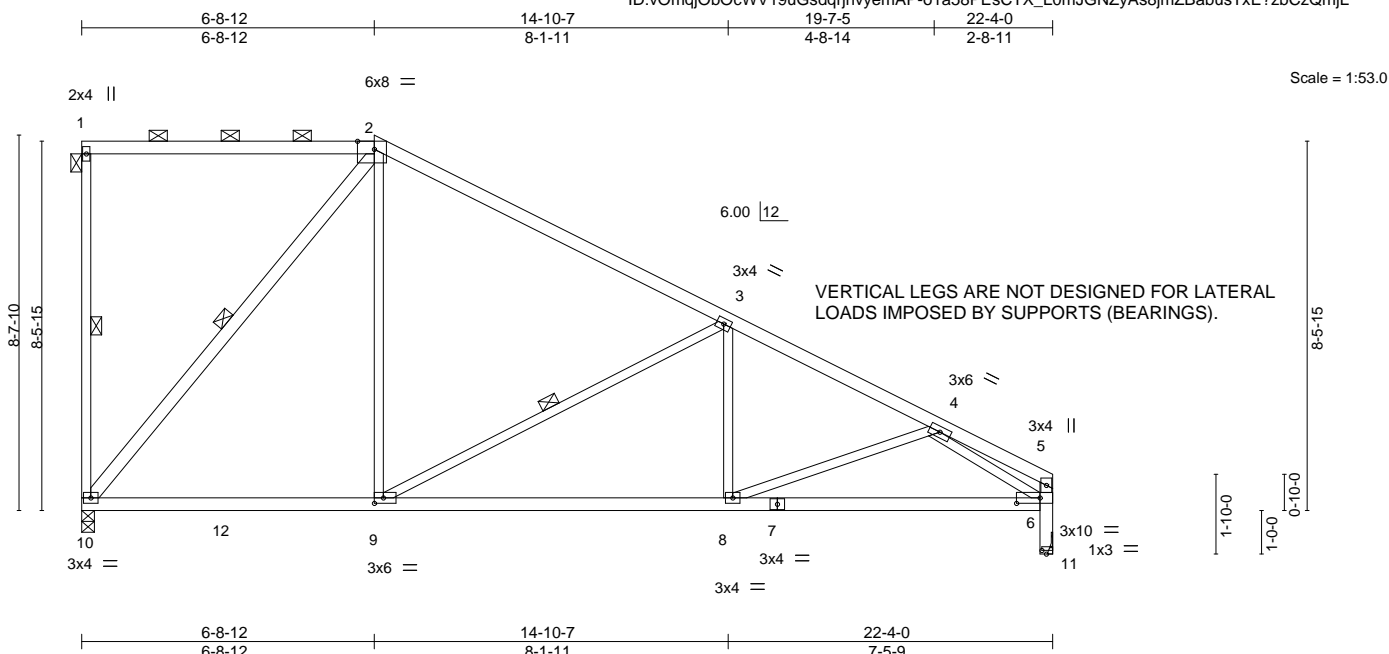


Plate Offsets (X,Y)-- [2:0-4-10,Edge], [6:0-6-8,0-1-8], [9:0-2-8,0-1-8], [11:0-1-4,0-1-0]									
LOADING (psf)		SPACING 2-0-0		CSI		DEFL. in (loc) l/defl L/d		PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.73	Vert(LL)	-0.10 9-10 >999 360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.67	Vert(CT)	-0.17 8-9 >999 240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.58	Horz(CT)	0.05 11 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.03 8-9 >999 240	Weight: 96 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-10,5-11: 2x4 SPF No.2

BRACING-

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

REACTIONS.

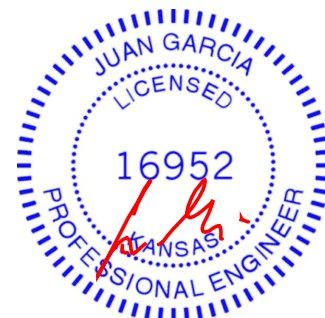
(size) 10=0-3-8, 11=Mechanical
Max Horz 10=-204(LC 9)
Max Uplift 10=-36(LC 4)
Max Grav 10=1063(LC 2), 11=1038(LC 14)

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

TOP CHORD 2-3=-833/9, 3-4=-1482/6, 4-5=-310/0, 6-11=-1038/0
BOT CHORD 9-10=0/644, 8-9=0/1304, 6-8=-11/1180
WEBS 2-10=-1012/67, 2-9=0/691, 3-9=-768/124, 3-8=0/283, 4-6=-1208/33

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 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 36 lb uplift at joint 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.



April 14, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR	I40979748
400307	G9	Half Hip	1	1		

Wheeler Lumber, Waverly, KS 66871

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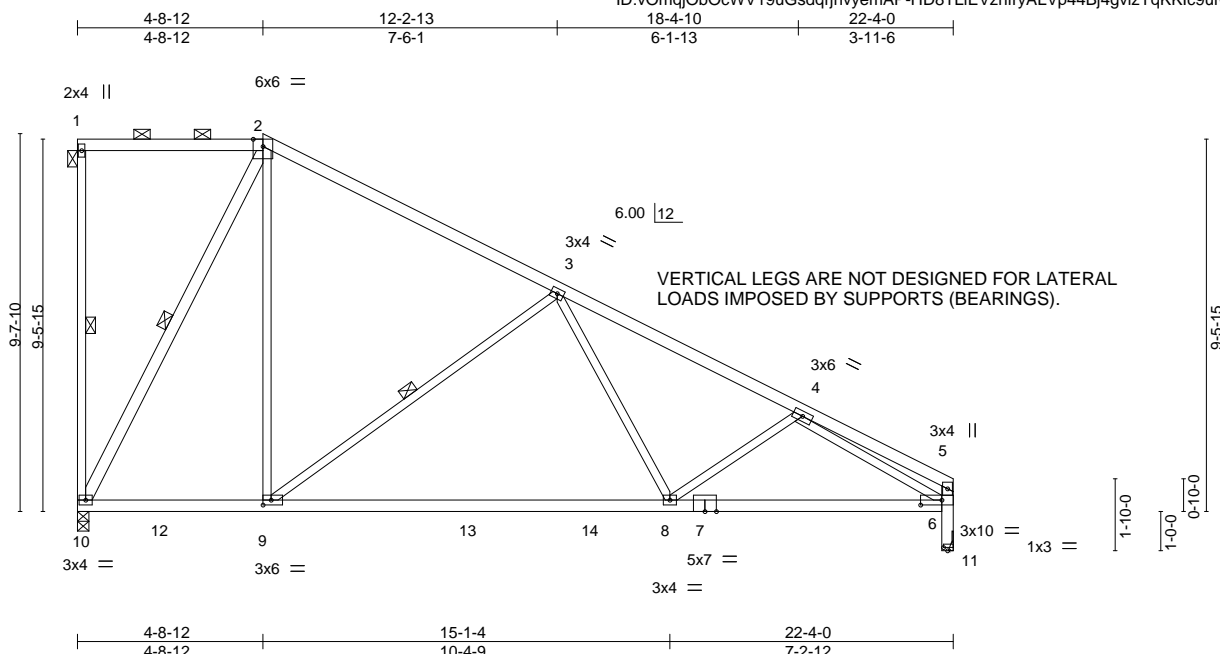


Plate Offsets (X,Y)-- [6:0-6-8,0-1-8], [9:0-2-8,0-1-8], [11:0-1-4,0-1-0]

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 0.66	Vert(LL)	-0.28	8-9	>957	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.61	Vert(CT)	-0.48	8-9	>549	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.70	Horz(CT)	0.03	11	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.03	8-9	>999	240	Weight: 100 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
7-10: 2x4 SPF 2100F 1.8E
WEBS 2x3 SPF No.2 *Except*
2-10,5-11: 2x4 SPF No.2

BRACING-

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

REACTIONS.

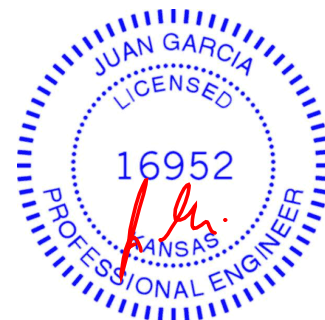
(size) 10=0-3-8, 11=Mechanical
Max Horz 10=-233(LC 9)
Max Uplift 10=-60(LC 9)
Max Grav 10=1079(LC 2), 11=1063(LC 14)

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

TOP CHORD 2-3=-638/3, 3-4=-1518/0, 4-5=-279/22, 6-11=-1063/0
BOT CHORD 9-10=0/491, 8-9=0/1078, 6-8=0/1353
WEBS 2-10=-1048/73, 2-9=0/836, 3-9=-775/149, 3-8=0/469, 4-6=-1393/0

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 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 60 lb uplift at joint 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.



April 14, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR
400307	G10	Hip	1	1	
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871

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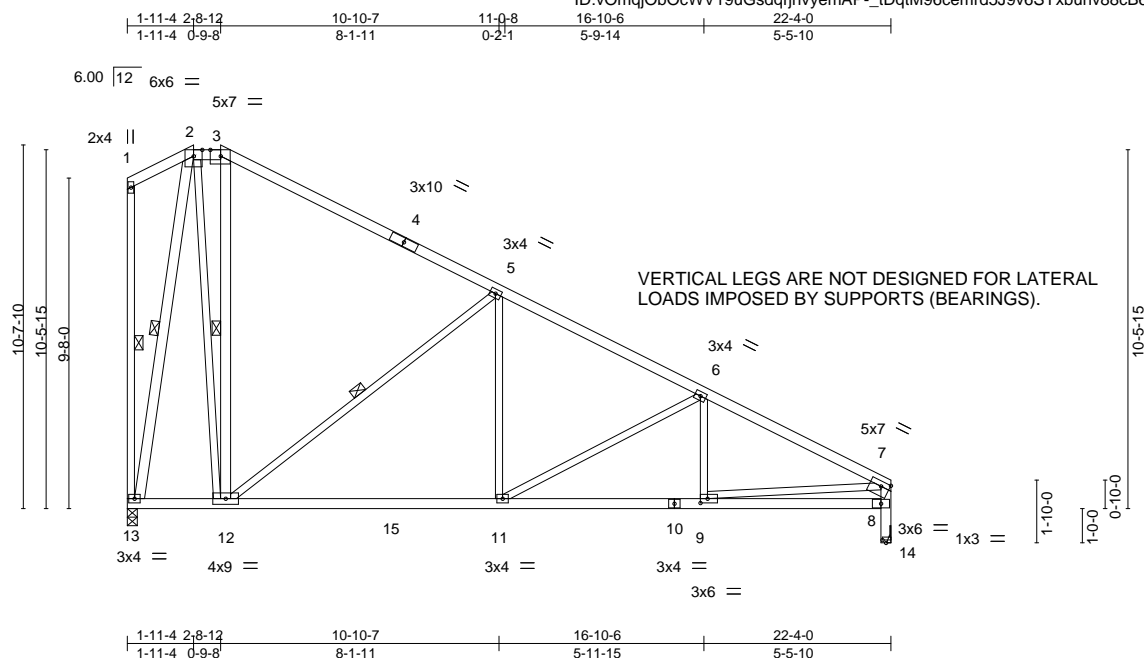


Plate Offsets (X,Y)-- [3:0-3-10,Edge], [7:Edge,0-1-12], [9:0-2-8,0-1-8], [14:0-1-4,0-1-0]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.76	Vert(LL)	-0.14 11-12 >999 360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.65	Vert(CT)	-0.25 11-12 >999 240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.90	Horz(CT)	0.03 14 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.03 11 >999 240	Weight: 119 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 2x3 SPF No.2 *Except*
 3-12,2-13,7-14: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-3-14 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 2-3.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
 WEBS 1 Row at midpt 3-12, 1-13, 2-13, 5-12

REACTIONS.

(size) 13=0-3-8, 14=Mechanical
 Max Horz 13=-247(LC 9)
 Max Uplift 13=-84(LC 9)
 Max Grav 13=1052(LC 14), 14=1054(LC 14)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-274/36, 3-5=-425/0, 5-6=-1206/0, 6-7=-1589/0, 8-14=-1054/0, 7-8=-956/16
 BOT CHORD 12-13=-9/252, 11-12=0/1017, 9-11=0/1349, 8-9=-33/294
 WEBS 2-12=-129/1039, 3-12=-295/131, 2-13=-1063/79, 5-12=-965/132, 5-11=0/496,
 6-11=-390/77, 7-9=0/1076

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 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 84 lb uplift at joint 13.
- This truss 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.



April 14,2020

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR	140979750
400307	H1	Hip Girder	1	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

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ID:vOmjqObOcWV19uGsdqjnvymAP-DcFEmQGIUOvZCUCVuxV6foVmEBmBVof5vdCEdCXzQmjl

0-10-8	3-10-8	10-6-0	17-1-8	21-0-0	21-10-8
0-10-8	3-10-8	6-7-8	6-7-8	3-10-8	0-10-8

Scale = 1:37.7

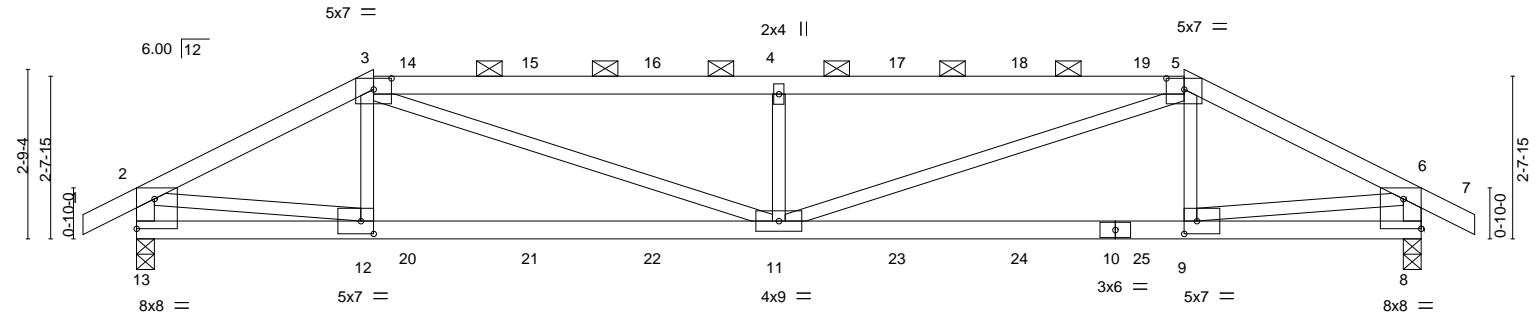


Plate Offsets (X,Y)--	[3:0-3-8,0-2-3], [5:0-3-8,0-2-3], [8:Edge,0-5-13], [8:0-1-12,0-0-0], [9:0-2-8,0-2-8], [12:0-2-8,0-2-8], [13:0-1-12,0-0-0], [13:Edge,0-5-13]
-----------------------	---

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)	-0.15	11	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.72	Vert(CT)	-0.29	9-11	>857		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.61	Horz(CT)	0.05	8	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.14	11	>999	Weight: 74 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except*	TOP CHORD Structural wood sheathing directly applied or 3-8-15 oc purlins, except end verticals, and 2-0-0 oc purlins (3-6-5 max.): 3-5.
3-5: 2x4 SPF 2100F 1.8E	BOT CHORD Rigid ceiling directly applied or 8-4-7 oc bracing.
BOT CHORD 2x4 SPF No.2	
WEBS 2x3 SPF No.2 *Except*	
2-13,6-8: 2x4 SPF No.2	

REACTIONS.	(size) 13=0-3-8, 8=0-3-8
	Max Horz 13=53(LC 7)
	Max Uplift 13=-334(LC 8), 8=-334(LC 9)
	Max Grav 13=1483(LC 1), 8=1483(LC 1)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-2248/544, 3-4=-3282/846, 4-5=-3282/846, 5-6=-2248/544, 2-13=-1454/340, 6-8=-1454/340
BOT CHORD	11-12=-485/1965, 9-11=-456/1965
WEBS	3-11=-389/1435, 4-11=-742/379, 5-11=-389/1435, 2-12=-442/1782, 6-9=-445/1782

- 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 334 lb uplift at joint 13 and 334 lb uplift at joint 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.
 - 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) 77 lb down and 75 lb up at 3-10-8, 82 lb down and 75 lb up at 4-6-0, 85 lb down and 75 lb up at 6-6-0, 85 lb down and 75 lb up at 8-6-0, 85 lb down and 75 lb up at 10-6-0, 85 lb down and 75 lb up at 12-6-0, 85 lb down and 75 lb up at 14-6-0, and 82 lb down and 75 lb up at 16-6-0, and 77 lb down and 75 lb up at 17-1-8 on top chord, and 209 lb down and 76 lb up at 3-10-8, 29 lb down at 4-6-0, 29 lb down at 6-6-0, 29 lb down at 8-6-0, 29 lb down at 10-6-0, 29 lb down at 12-6-0, 29 lb down at 14-6-0, and 29 lb down at 16-6-0, and 209 lb down and 76 lb up at 17-0-12 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
Continued on page 2



April 14,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR
400307	H1	Hip Girder	1	1	I40979750
					Job Reference (optional)

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, 3-5=-70, 5-6=-70, 6-7=-70, 8-13=-20
- Concentrated Loads (lb)
- Vert: 3=-42(B) 5=-42(B) 12=-209(B) 11=-23(B) 4=-42(B) 9=-209(B) 14=-42(B) 15=-42(B) 16=-42(B) 17=-42(B) 18=-42(B) 19=-42(B) 20=-23(B) 21=-23(B) 22=-23(B) 23=-23(B) 24=-23(B) 25=-23(B)

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR	140979751
400307	H2	Hip	1	1		

Wheeler Lumber, Waverly, KS 66871

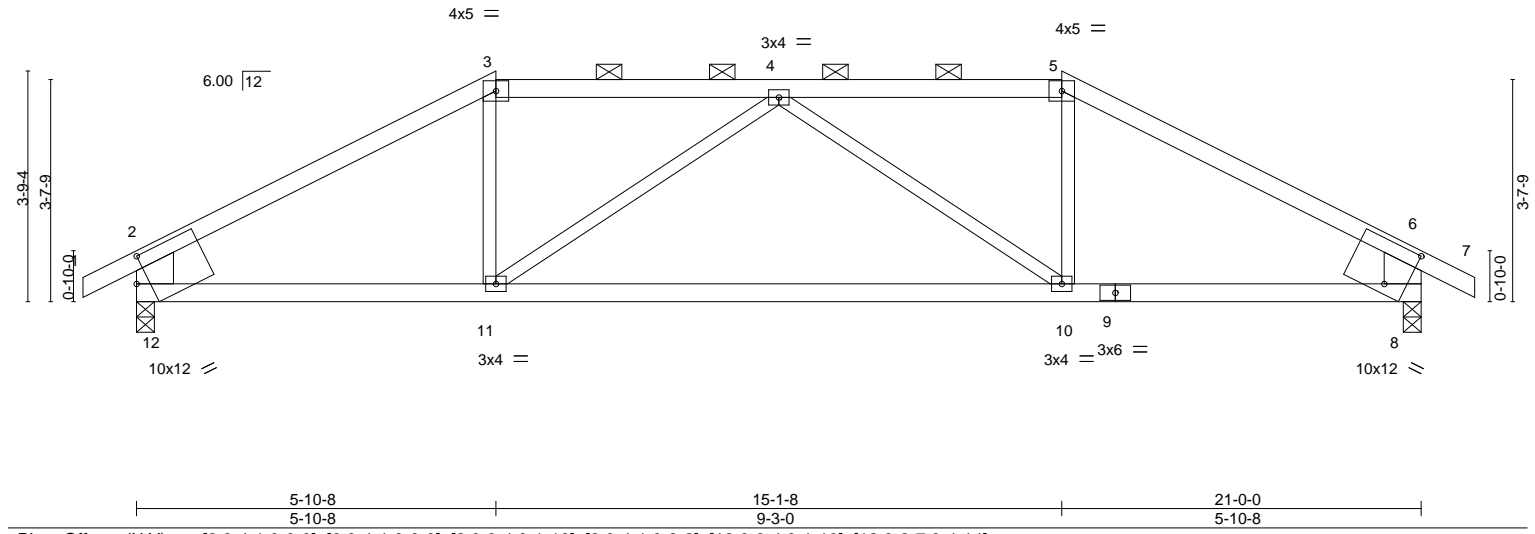
8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 14 14:42:36 2020 Page 1

ID:vOmQjObOcWV19uGsdqrjnyemAP-hopc_mHNF1Qpd44VCduKilQtAXIXm?3sszBkzzQmjh

Job Reference (optional)

0-10-8	5-10-8	10-6-0	15-1-8	21-0-0	21-10-8
0-10-8	5-10-8	4-7-8	4-7-8	5-10-8	0-10-8

Scale = 1:37.7



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.66	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.72	Vert(LL) -0.25 10-11 >971 360		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.38	Vert(CT) -0.57 10-11 >428 240		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Horz(CT) 0.04 8 n/a n/a		
			Wind(LL) 0.12 10-11 >999 240	Weight: 69 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF 2100F 1.8E *Except*
3-5: 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-12,6-8: 2x8 SP DSS

BRACING-

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

REACTIONS.

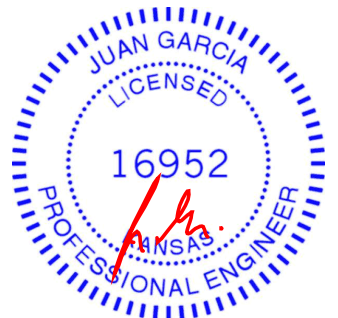
(size) 12=0-3-8, 8=0-3-8
Max Horz 12=-68(LC 6)
Max Uplift 12=-99(LC 8), 8=-99(LC 9)
Max Grav 12=1000(LC 1), 8=1000(LC 1)

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

TOP CHORD 2-3=-1359/130, 3-4=-1093/136, 4-5=-1093/136, 5-6=-1359/130, 2-12=-924/129, 6-8=-924/129
BOT CHORD 11-12=-99/1101, 10-11=-188/1395, 8-10=-53/1101
WEBS 3-11=0/388, 4-11=-449/164, 4-10=-449/164, 5-10=0/388

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 99 lb uplift at joint 12 and 99 lb uplift at joint 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 14,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR	140979752
400307	H3	Hip	1	1		

Wheeler Lumber, Waverly, KS 66871

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ID:vOmQjObOcWV19uGsdqjnvymAP-hopc_mHNF1Qpd44VCduKilQ1AauXp83sszBkzzQmjh

Job Reference (optional)

0-10-8	7-10-8	13-1-8	21-0-0	21-10-8
0-10-8	7-10-8	5-3-0	7-10-8	0-10-8

Scale = 1:37.7

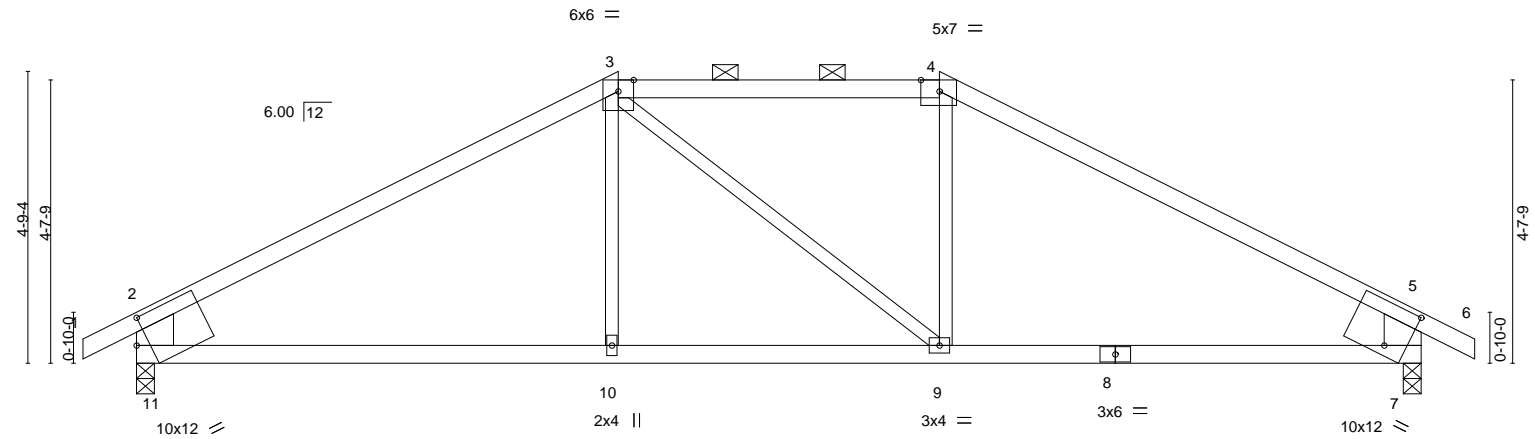


Plate Offsets (X,Y)--		[2:0-4-1,0-0-0], [4:0-3-10,Edge], [5:0-4-1,0-0-0], [7:0-3-4,0-1-10], [7:0-4-1,0-8-2], [11:0-3-4,0-1-10], [11:0-2-7,0-4-14]
LOADING (psf)	SPACING	2-0-0
TCLL 25.0	Plate Grip DOL	1.15
TCDL 10.0	Lumber DOL	1.15
BCLL 0.0 *	Rep Stress Incr	YES
BCDL 10.0	Code IRC2018/TPI2014	
CSI.	DEFL.	in (loc) l/defl L/d
TC 0.65	Vert(LL) -0.09	9-10 >999 360
BC 0.52	Vert(CT) -0.19	10-11 >999 240
WB 0.18	Horz(CT) 0.03	7 n/a n/a
Matrix-S	Wind(LL) 0.05	9-10 >999 240
PLATES	GRIP	
MT20	197/144	
Weight: 68 lb		FT = 10%

LUMBER-

TOP CHORD 2x4 SPF 2100F 1.8E *Except*
3-4: 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-11,5-7: 2x8 SP DSS

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-8-3 oc purlins, except end verticals, and 2-0-0 oc purlins (5-2-1 max.): 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 11=0-3-8, 7=0-3-8
Max Horz 11=81(LC 7)
Max Uplift 11=-120(LC 8), 7=-120(LC 9)
Max Grav 11=1000(LC 1), 7=1000(LC 1)

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

TOP CHORD 2-3=-1278/103, 3-4=-1013/151, 4-5=-1278/103, 2-11=-912/176, 5-7=-912/176
BOT CHORD 10-11=-50/1016, 9-10=-52/1013, 7-9=-6/1016

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 120 lb uplift at joint 11 and 120 lb uplift at joint 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.



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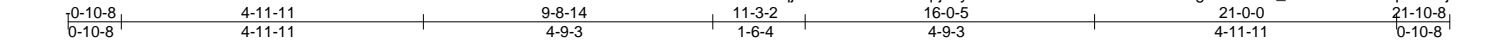
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR	140979753
400307	H4	Hip Girder	1	2	Job Reference (optional)	

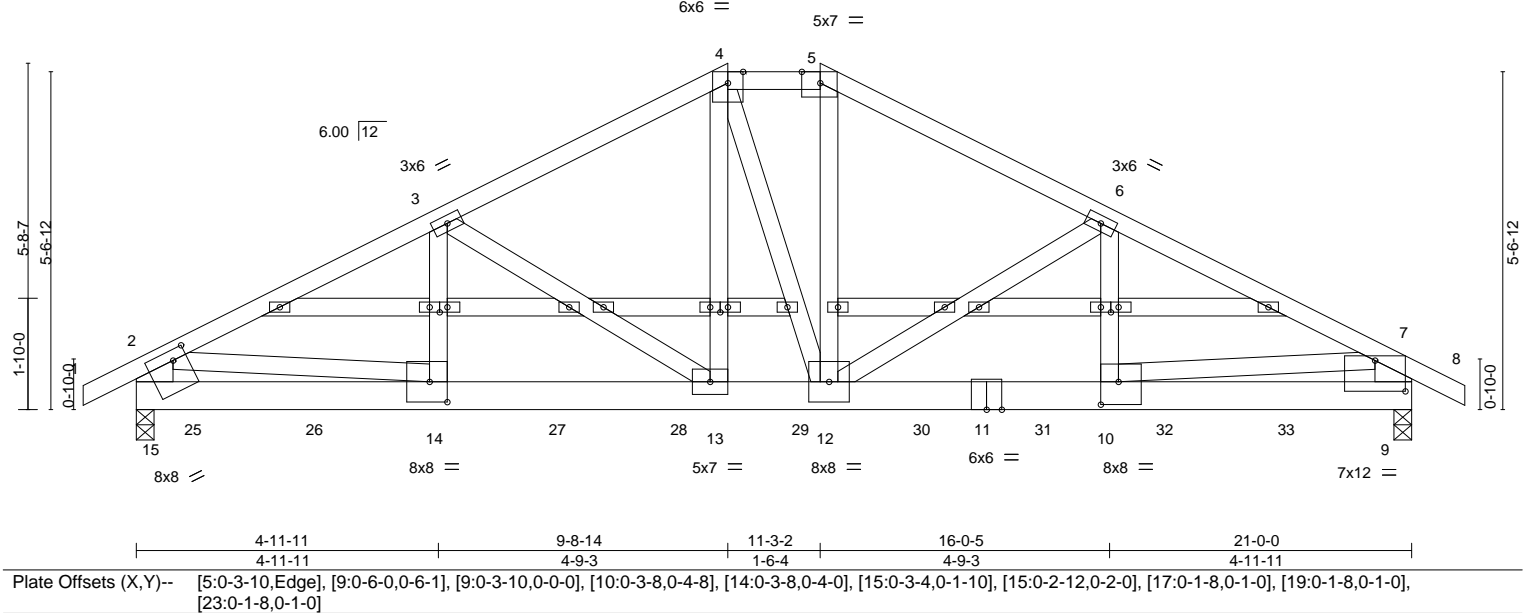
Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 14 14:42:38 2020 Page 1

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Scale = 1:37.9



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 0.62	Vert(LL)	-0.12 13-14	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.45	Vert(CT)	-0.22 13-14	>999	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.64	Horz(CT)	0.04 9	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.05 13-14	>999	240	Weight: 283 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 3-8-2 oc purlins, except end verticals, and 2-0-0 oc purlins (5-0-9 max.): 4-5.
BOT CHORD 2x6 SP 2400F 2.0E	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SPF No.2 *Except*	
2-15,7-9: 2x8 SP DSS	

REACTIONS.	(size) 15=0-3-8 (req. 0-4-13), 9=0-3-8 (req. 0-4-12)
	Max Horz 15=78(LC 26)
	Max Grav 15=6134(LC 1), 9=6063(LC 1)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-8442/0, 3-4=-6615/0, 4-5=-5890/0, 5-6=-6686/0, 6-7=-8607/0, 2-15=-4688/0, 7-9=-4754/0
BOT CHORD	14-15=0/2291, 13-14=0/7463, 12-13=0/5828, 10-12=0/7611, 9-10=-47/2512
WEBS	3-14=0/1765, 3-13=-1972/0, 4-13=0/2483, 4-12=-43/334, 5-12=0/2669, 6-12=-1985/0, 6-10=0/1739, 2-14=0/5214, 7-10=0/5139

- 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 0-7-0 oc, 2x8 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-7-0 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); 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.
 - 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.
 - WARNING:** Required bearing size at joint(s) 15, 9 greater than input bearing size.
 - This truss 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) 1019 lb down at 1-0-0, 1028 lb down at 3-0-0, 1013 lb down at 5-0-0, 1009 lb down and 35 lb up at 7-0-0, 970 lb down and 30 lb up at 9-0-0, 1026 lb down and 29 lb up at 11-0-0, 970 lb down and 24 lb up at 13-0-0, 970 lb down at 15-0-0, and 968 lb down at 17-0-0, and 1464 lb down and 344 lb up at 19-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.



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Continued on page 2

LOAD CASE(S) Standard

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MiTek

16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR
400307	H4	Hip Girder	1	2	I40979753
					Job Reference (optional)

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, 4-5=-70, 5-7=-70, 7-8=-70, 9-15=-20
- Concentrated Loads (lb)
- Vert: 14=-974(F) 25=-971(F) 26=-970(F) 27=-970(F) 28=-970(F) 29=-970(F) 30=-970(F) 31=-970(F) 32=-968(F) 33=-1464(F)

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR	
400307	J1	Diagonal Hip Girder	4	1		I40979754
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

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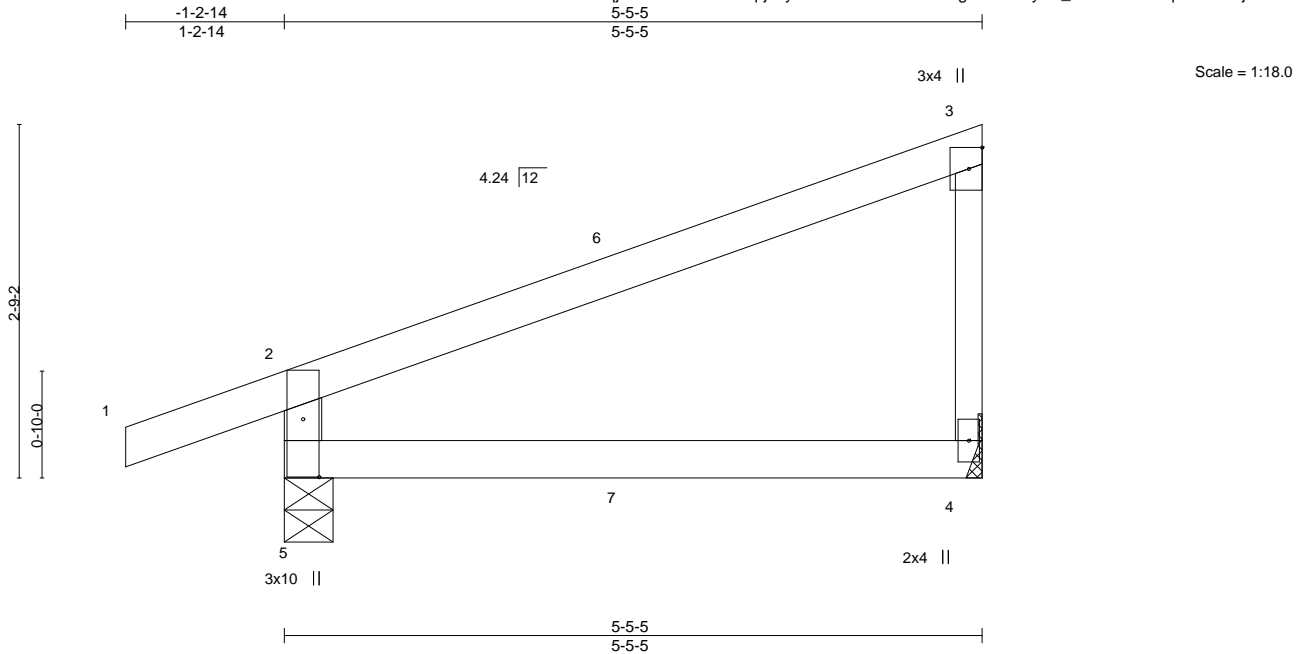


Plate Offsets (X,Y)-- [5:0-5-7,0-1-8]

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 0.39	Vert(LL)	-0.03	4-5	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.24	Vert(CT)	-0.06	4-5	>999	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.01	4-5	>999	240	Weight: 17 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-5-5 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=116(LC 5)
 Max Uplift 5=-99(LC 4), 4=-51(LC 8)
 Max Grav 5=342(LC 1), 4=219(LC 1)

FORCES.

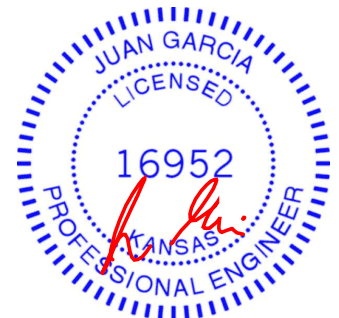
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-5=-302/138

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 99 lb uplift at joint 5 and 51 lb uplift at joint 4.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 69 lb down and 36 lb up at 2-8-7, and 69 lb down and 36 lb up at 2-8-7 on top chord, and 4 lb down and 1 lb up at 2-8-7, and 4 lb down and 1 lb up at 2-8-7 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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



April 14, 2020

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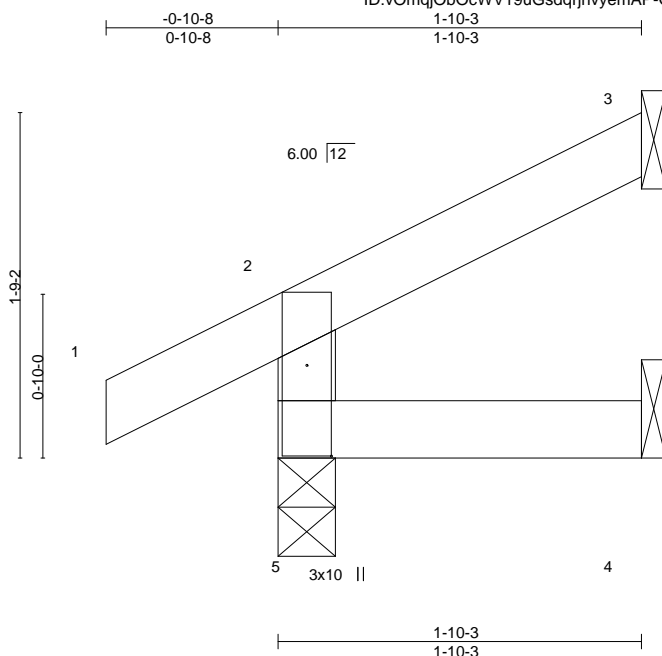
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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job 400307	Truss J2	Truss Type Jack-Open	Qty 12	Ply 1	Lot 91 RR	I40979755
Wheeler Lumber, Waverly, KS 66871						Job Reference (optional)

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Scale = 1:11.7

Plate Offsets (X,Y)-- [5:0-5-9,0-1-8]									
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	0.07	Vert(LL)	-0.00 5 >999 360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00 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: 6 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=44(LC 8)
Max Uplift 5=22(LC 8), 3=31(LC 8)
Max Grav 5=169(LC 1), 3=41(LC 1), 4=30(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 22 lb uplift at joint 5 and 31 lb uplift at joint 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



April 14, 2020

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Chesterfield, MO 63017

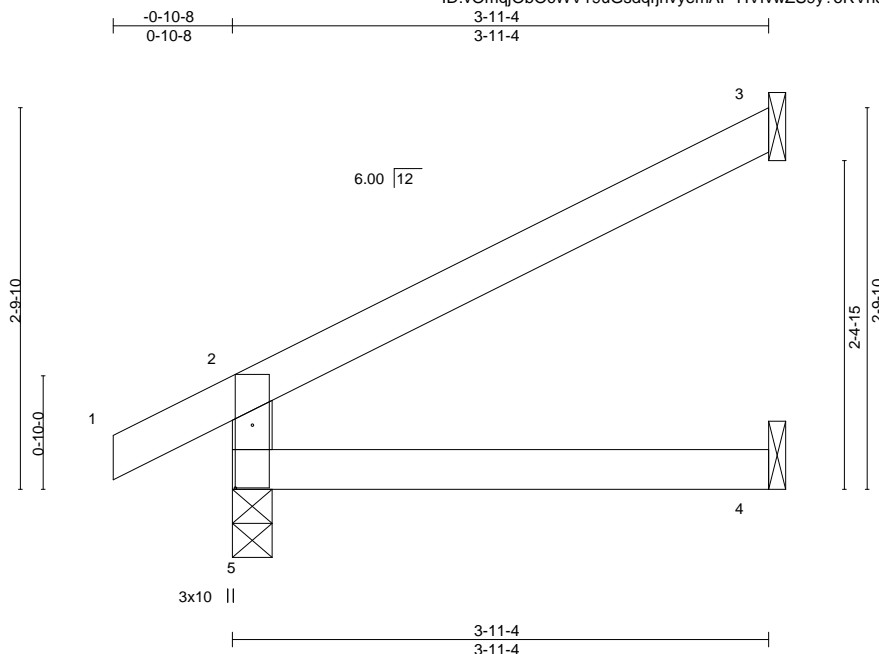
Job 400307	Truss J3	Truss Type Jack-Open	Qty 12	Ply 1	Lot 91 RR Job Reference (optional)
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I40979756

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 14 14:42:50 2020 Page 1

ID:vOmQjObOcWV19uGsdqjnyemAP-HVfwZS9y?oRVn8mJ9uAvftwcpTOpAM741MwE9zQmj3



Scale = 1:16.9

Plate Offsets (X,Y)-- [5:0-5-9,0-1-8]												
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	0.20	Vert(LL)	-0.01	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	-0.02	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.01	4-5	>999	240	Weight: 11 lb	FT = 10%

LUMBER-

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

BRACING-

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

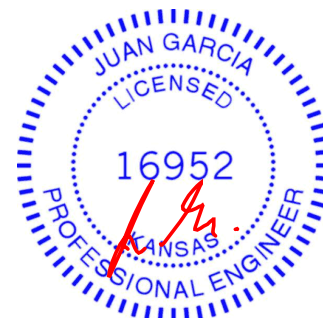
REACTIONS.

(size) 5=0-3-8, 3=Mechanical, 4=Mechanical
 Max Horz 5=86(LC 8)
 Max Uplift 5=26(LC 8), 3=67(LC 8)
 Max Grav 5=249(LC 1), 3=115(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 26 lb uplift at joint 5 and 67 lb uplift at joint 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



April 14, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

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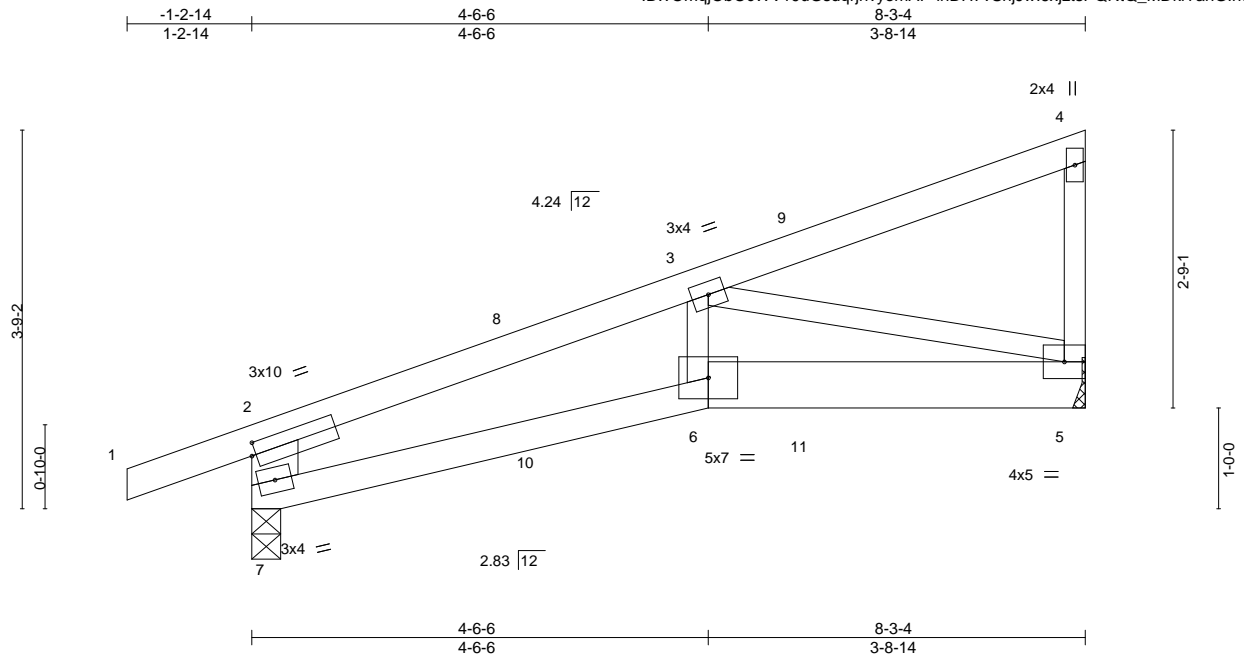


16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR	I40979757
400307	J4	Diagonal Hip Girder	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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ID:vOmQjObOcWV19uGsdqrjnyemAP-lhDH7vSnjJwI6xjztsPQRtQ_MDklYanGih6TmbzQmj2



Scale = 1:22.9

Plate Offsets (X,Y)-- [2:0-0-8,0-1-8]											
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 0.65	Vert(LL)	-0.06	6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC 0.43	Vert(CT)	-0.10	6	>969	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB 0.25	Horz(CT)	0.03	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.05	6	>999	240	Weight: 30 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x6 SPF No.2 *Except*
6-7: 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 5-9-11 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 7=0-3-7, 5=Mechanical
Max Horz 7=143(LC 5)
Max Uplift 7=-134(LC 4), 5=-111(LC 8)
Max Grav 7=492(LC 1), 5=391(LC 1)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-7=-549/193, 2-3=-732/190
BOT CHORD 6-7=-239/635, 5-6=-228/636
WEBS 3-5=-633/225

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.
- Bearing at joint(s) 7 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 134 lb uplift at joint 7 and 111 lb uplift at joint 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.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 70 lb down and 44 lb up at 2-8-7, 70 lb down and 36 lb up at 2-8-7, and 100 lb down and 78 lb up at 5-6-6, and 97 lb down and 74 lb up at 5-6-6 on top chord, and 4 lb down at 2-8-7, 4 lb down and 1 lb up at 2-8-7, and 24 lb down and 23 lb up at 5-6-6, and 23 lb down at 5-6-6 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
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15



April 14,2020

Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR
400307	J4	Diagonal Hip Girder	1	1	I40979757
Job Reference (optional)					

LOAD CASE(S) Standard
Uniform Loads (plf)
Vert: 1-2=-70, 2-4=-70, 6-7=-20, 5-6=-20
Concentrated Loads (lb)
Vert: 9=-35(F=-13, B=-23) 10=-1(F=1, B=-2) 11=-29(F=-14, B=-16)

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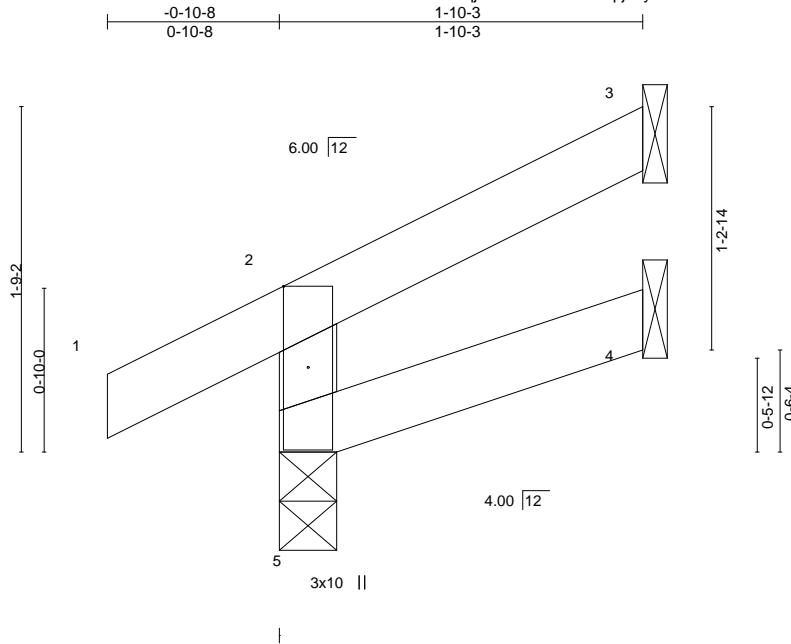
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR	I40979758
400307	J5	Jack-Open	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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ID:vOmqlObOcWV19uGsdqjnvymAP-DtnfLETPUd29k5I9Qawf_4zl5dASH4sPXLr1J2zQmj1



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 0.07	Vert(LL)	-0.00	5	>999	360	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	-0.00	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 1-10-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS.

(size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=45(LC 5)
Max Uplift 5=21(LC 8), 3=32(LC 8)
Max Grav 5=169(LC 1), 3=41(LC 1), 4=30(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) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 21 lb uplift at joint 5 and 32 lb uplift at joint 3.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



April 14, 2020

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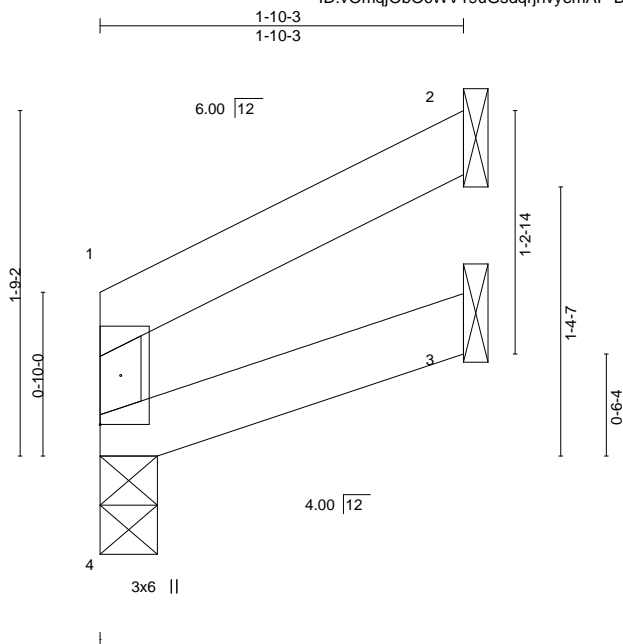
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR
400307	J5A	Jack-Open	1	1	140979759
Job Reference (optional)					

Wheeler Lumber, Waverly, KS 66871

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ID:vOmQjObOcWV19uGsdqrjnyemAP-DtnfLETPUd29k5l9Qawf_4zJVdANH4sPXLr1J2zQmj1



Scale = 1:11.7

Plate Offsets (X,Y)-- [1:0-0-10,0-1-4], [4:0-0-7,0-1-4]									
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	0.04	Vert(LL)	-0.00 4 >999 360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00 3-4 >999 240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00 2 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00 4 >999 240	Weight: 5 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 1-10-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

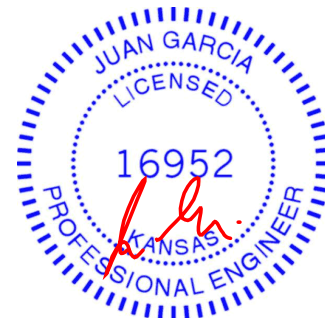
REACTIONS.

(size) 4=0-3-8, 2=Mechanical, 3=Mechanical
Max Horz 4=35(LC 5)
Max Uplift 2=37(LC 8)
Max Grav 4=78(LC 1), 2=58(LC 1), 3=34(LC 3)

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
- 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) 4 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 37 lb uplift at joint 2.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



April 14, 2020

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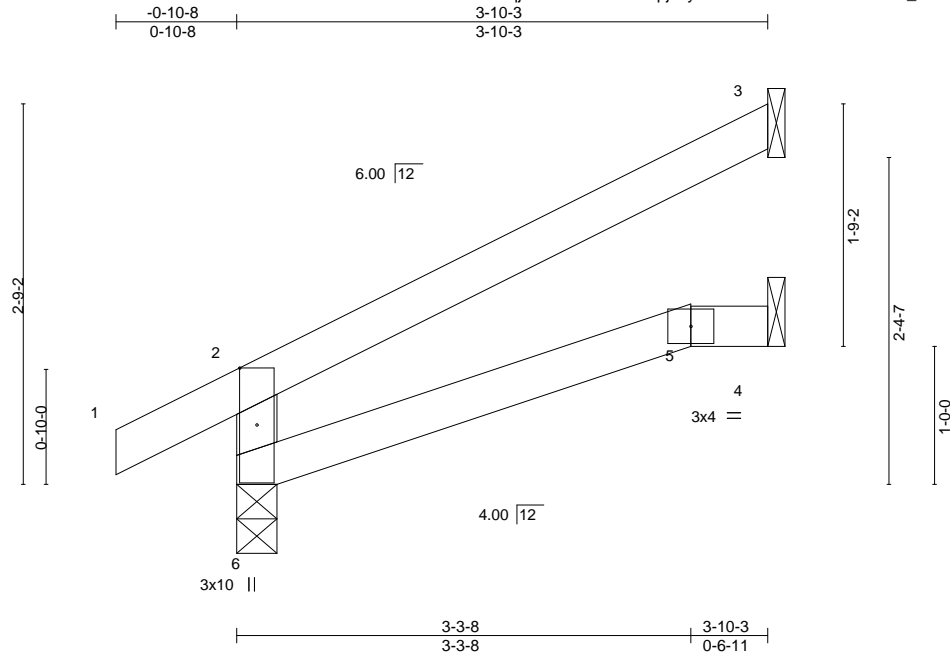
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR	I40979760
400307	J6	Jack-Open	1	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

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ID:vOmQjObOcWV19uGsdqjnyemAP-h4L1YaU1FwAOMFtL_HRuXIVR01VE0X6Zm?barUzQmj0



Scale = 1:16.7

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 0.19	Vert(LL)	-0.01	5-6	>999	360	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.11	Vert(CT)	-0.02	5-6	>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)	0.01	5-6	>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 3-10-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS.

(size) 6=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 6=83(LC 8)
Max Uplift 6=25(LC 8), 3=66(LC 8)
Max Grav 6=245(LC 1), 3=112(LC 1), 4=68(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) Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 25 lb uplift at joint 6 and 66 lb uplift at joint 3.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



April 14, 2020

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Chesterfield, MO 63017

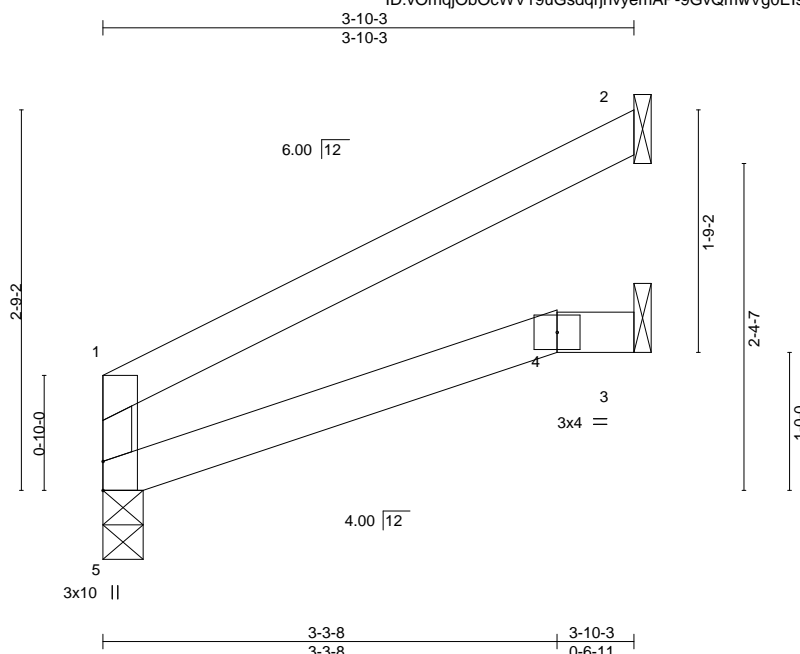
Job 400307	Truss J6A	Truss Type Jack-Open	Qty 1	Ply 1	Lot 91 RR Job Reference (optional)
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I40979761

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 14 14:42:54 2020 Page 1

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Scale = 1:16.7

Plate Offsets (X,Y)--		[1:0-0-10,0-1-4], [5:0-2-8,Edge], [5:0-0-7,0-1-4]	
LOADING (psf)	SPACING-	CSI.	DEFL.
TCLL 25.0	Plate Grip DOL 1.15	TC 0.22	in (loc) l/defl L/d
TCDL 10.0	Lumber DOL 1.15	BC 0.12	Vert(LL) -0.01 4-5 >999 360
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Vert(CT) -0.02 4-5 >999 240
BCDL 10.0	Code IRC2018/TPI2014	Matrix-R	Horz(CT) 0.01 2 n/a n/a
			Wind(LL) 0.01 4-5 >999 240
			PLATES MT20
			GRIP 197/144
			Weight: 10 lb FT = 10%

LUMBER-

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

BRACING-

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

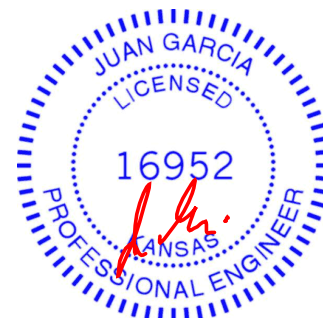
REACTIONS.

(size) 5=0-3-8, 2=Mechanical, 3=Mechanical
 Max Horz 5=66(LC 8)
 Max Uplift 2=71(LC 8)
 Max Grav 5=166(LC 1), 2=122(LC 1), 3=71(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) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 71 lb uplift at joint 2.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



April 14, 2020

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR	140979762
400307	J7	Jack-Open	9	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

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ID:vOmQjObOcWV19uGsdqrjnyemAP-dSTozGVInYQjbY1k6iTMcjbhCq7sURbsDJ4hvMzQmj_

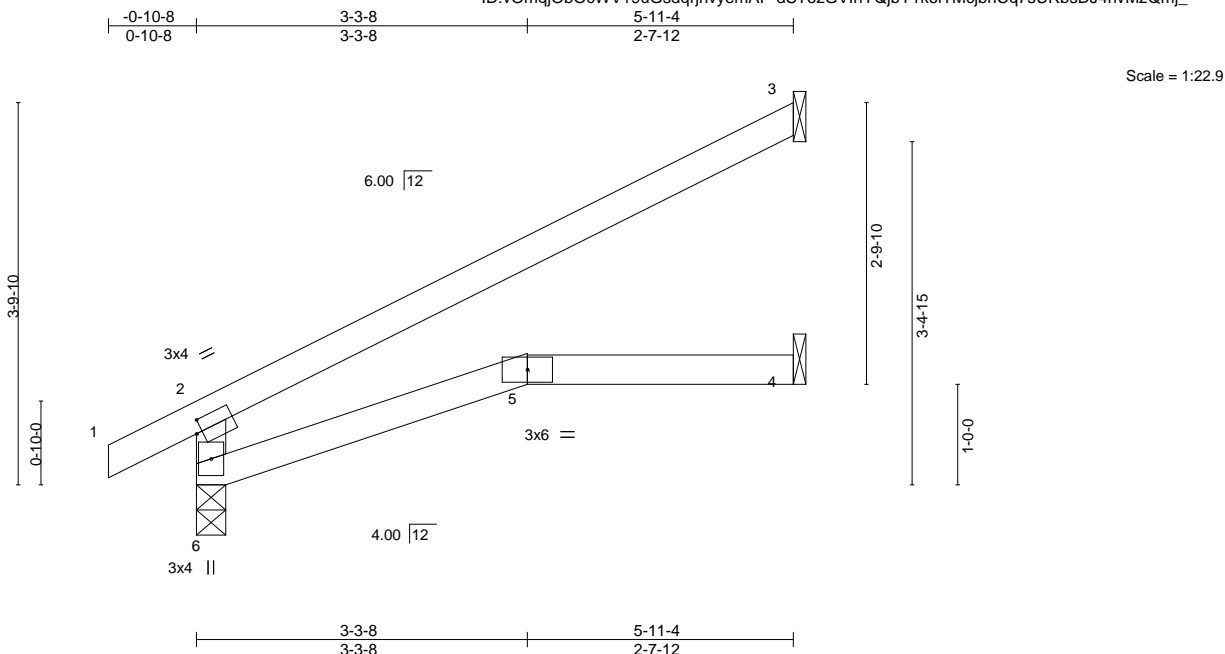


Plate Offsets (X,Y)--		[2:0-0-12,0-1-8]							
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	L/defl	L/d
TCLL 25.0		Plate Grip DOL	1.15	TC 0.53		Vert(LL)	-0.05 5	>999	360
TCDL 10.0		Lumber DOL	1.15	BC 0.30		Vert(CT)	-0.12 5-6	>594	240
BCLL 0.0 *		Rep Stress Incr	YES	WB 0.00		Horz(CT)	0.05 3	n/a	n/a
BCDL 10.0		Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.04 5-6	>999	240
						PLATES		GRIP	
						MT20		197/144	
						Weight: 16 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 5-11-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS.

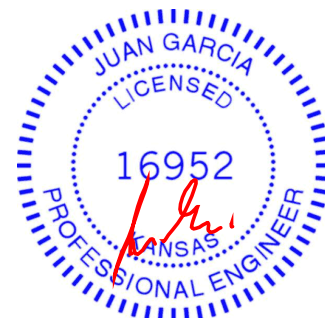
(size) 6=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 6=88(LC 8)
Max Uplift 3=60(LC 8)
Max Grav 6=336(LC 1), 3=181(LC 1), 4=108(LC 3)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-6=-292/44

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) Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 60 lb uplift at joint 3.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



April 14, 2020

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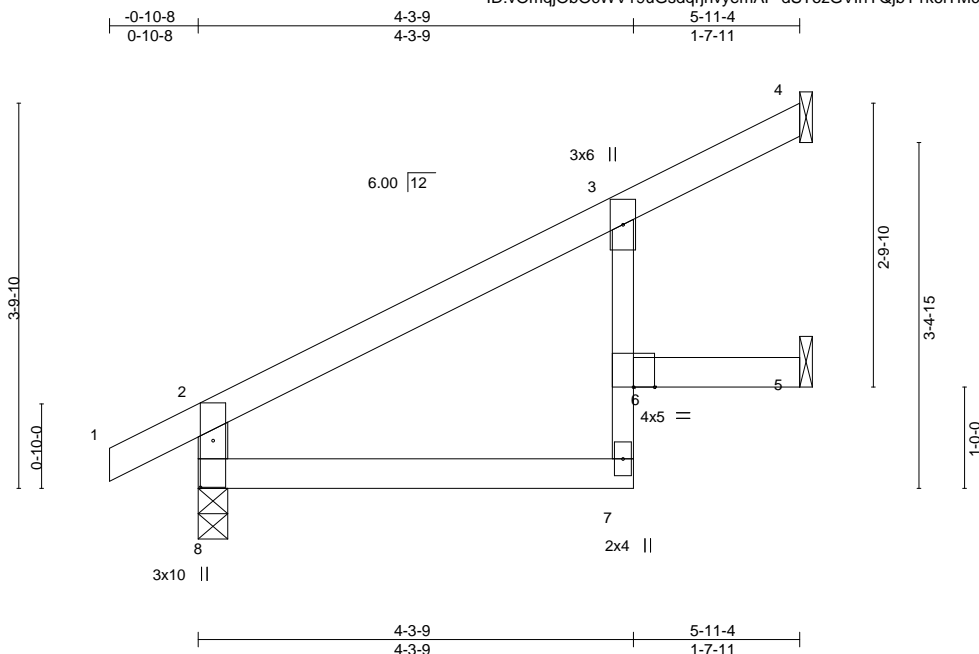
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR	140979763
400307	J8	Jack-Open	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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ID:vOmQjObOcWV19uGsdqrjnyemAP-dSTozGVInYQjbY1k6iTMcjbmrg6gURbsDJ4hvMzQmj_



Scale = 1:22.7

Plate Offsets (X,Y)-- [8:0-5-9,0-1-8]												
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	0.23	Vert(LL)	-0.04	6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.37	Vert(CT)	-0.07	6	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.02	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.03	6	>999	240	Weight: 18 lb	FT = 10%

LUMBER-

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

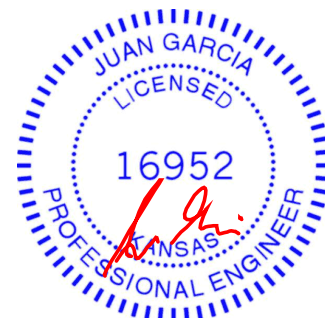
(size) 8=0-3-8, 4=Mechanical, 5=Mechanical
 Max Horz 8=89(LC 8)
 Max Uplift 4=23(LC 8), 5=18(LC 8)
 Max Grav 8=336(LC 1), 4=125(LC 1), 5=126(LC 1)

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

TOP CHORD 2-8=-302/28

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); 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 23 lb uplift at joint 4 and 18 lb uplift at joint 5.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



April 14, 2020

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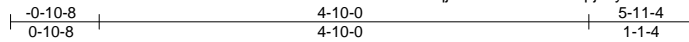
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR	I40979764
400307	J9	Jack-Open	1	1		

Wheeler Lumber, Waverly, KS 66871

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ID:vOmQjObOcWV19uGsdqjrvyemAP-5f1AAcWwYrYaDicwFP_b8w7xFERNDur?SzpERpzQmiz



Scale = 1:22.7

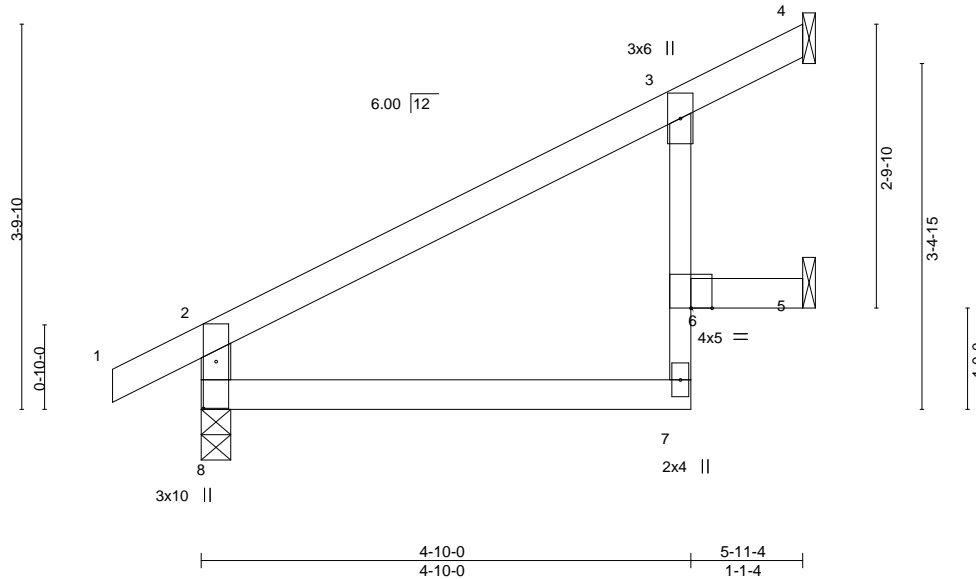


Plate Offsets (X,Y)-- [8:0-5-9,0-1-8]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	2-0-0	TC 0.25	Vert(LL)	-0.02	6	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.41	Vert(CT)	-0.05	7-8	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.02	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.02	6	>999	240	Weight: 18 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
3-7: 2x3 SPF No.2
WEBS 2x4 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) 8=0-3-8, 4=Mechanical, 5=Mechanical
Max Horz 8=89(LC 8)
Max Uplift 4=6(LC 8), 5=35(LC 8)
Max Grav 8=336(LC 1), 4=86(LC 1), 5=166(LC 1)

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

TOP CHORD 2-8=-296/31

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 6 lb uplift at joint 4 and 35 lb uplift at joint 5.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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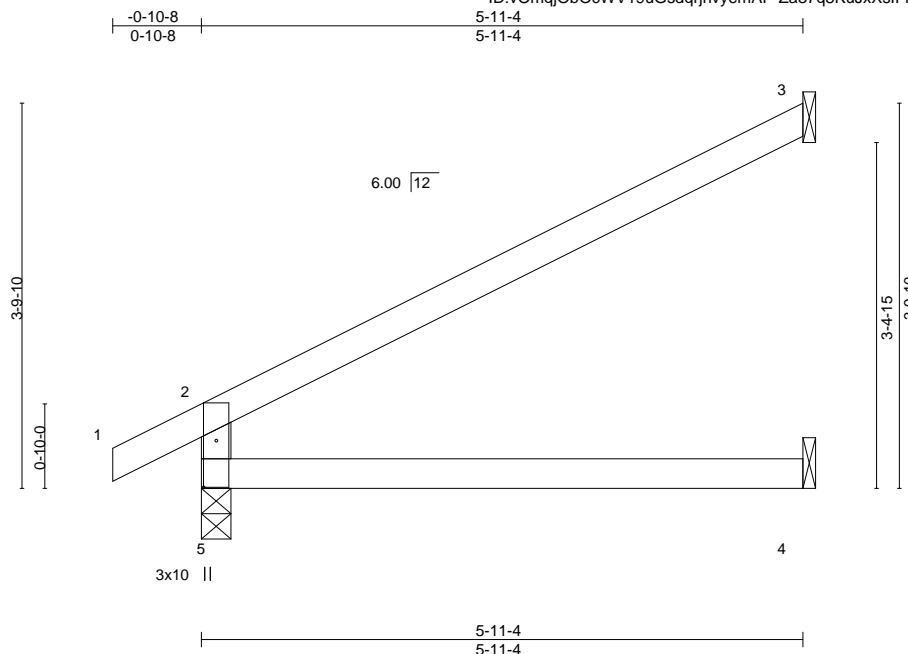
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR	140979765
400307	J10	Jack-Open	12	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

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ID:vOmQjObOcWV19uGsdqrjnyemAP-Za37q8KuJxSIFNj2iqVYT72n02TfuemUxOukzQmjD



Scale = 1:22.7

Plate Offsets (X,Y)--		[5:0-5-9,0-1-8]							
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	L/defl	L/d
TCLL 25.0		Plate Grip DOL	1.15	TC 0.52		Vert(LL)	-0.05	4-5	>999
TCDL 10.0		Lumber DOL	1.15	BC 0.31		Vert(CT)	-0.11	4-5	>609
BCLL 0.0 *		Rep Stress Incr	YES	WB 0.00		Horz(CT)	0.05	3	n/a
BCDL 10.0		Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.04	4-5	>999
								PLATES	GRIP
								MT20	197/144
								Weight: 16 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 5-11-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

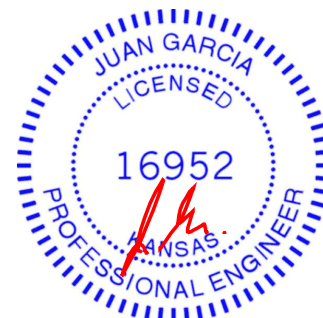
(size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=89(LC 8)
Max Uplift 3=60(LC 8)
Max Grav 5=336(LC 1), 3=180(LC 1), 4=109(LC 3)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-293/45

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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 60 lb uplift at joint 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.



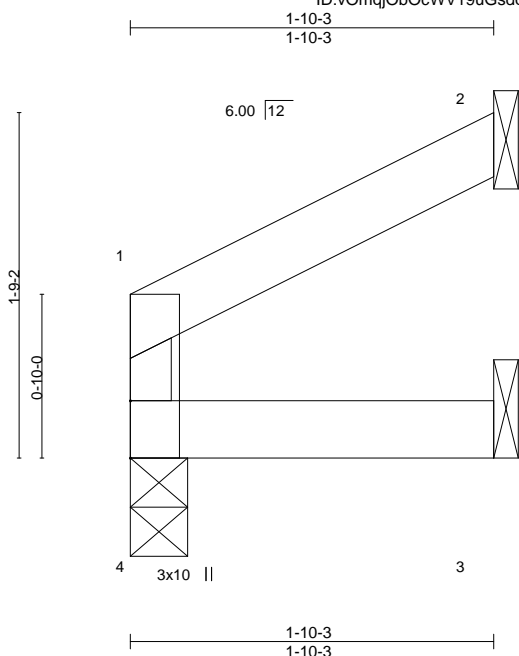
April 14, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017



Scale = 1:11.7

Plate Offsets (X,Y)-- [1:0-0-10,0-1-4], [4:0-0-0,0-1-4]												
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	0.04	Vert(LL)	-0.00	4	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	3-4	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	2	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00	4	>999	240	Weight: 5 lb	FT = 10%

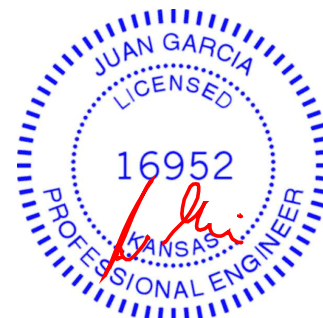
LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 1-10-3 oc purlins, except end verticals.
BOT CHORD	2x4 SPF No.2		
WEBS	2x3 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 4=0-3-8, 2=Mechanical, 3=Mechanical
 Max Horz 4=34(LC 5)
 Max Uplift 2=37(LC 8)
 Max Grav 4=78(LC 1), 2=58(LC 1), 3=34(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; 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 37 lb uplift at joint 2.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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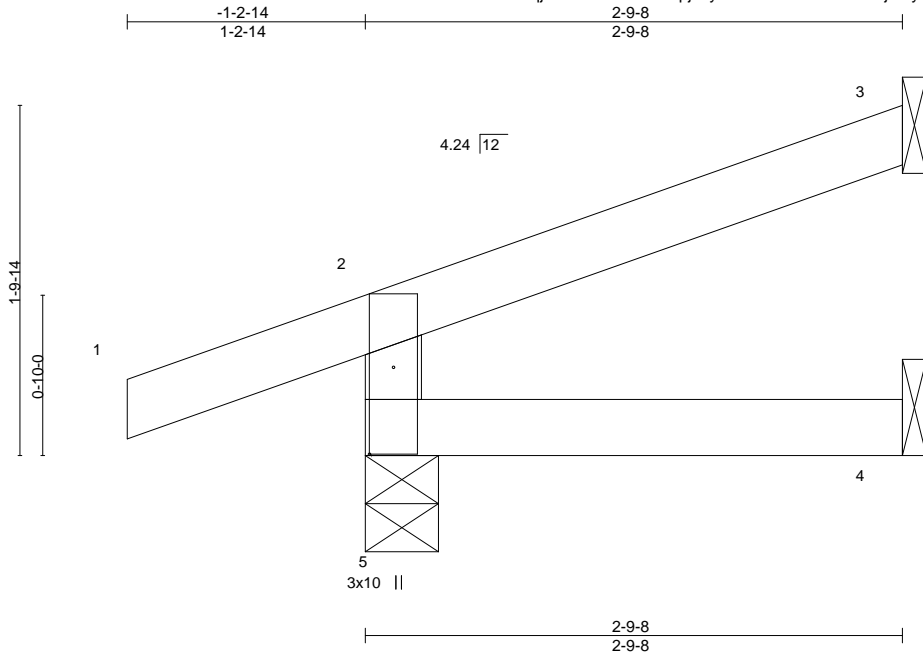
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR	
400307	J12	Jack-Open Girder	2	1		I40979767
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

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ID:vOmQjObOcWV19uGsdqrjnyemAP-2mdV1ULW4EfwPy2HmD31m?PJBPC58o?8hyQAZQmJC



Scale: 1"=1'

Plate Offsets (X,Y)--		[5:0-5-7,0-1-8]									
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 0.11		Vert(LL)	-0.00 4-5	>999	360	MT20	197/144
TCDL 10.0		Lumber DOL	1.15	BC 0.04		Vert(CT)	-0.00 4-5	>999	240		
BCLL 0.0 *		Rep Stress Incr	NO	WB 0.00		Horz(CT)	-0.00 3	n/a	n/a		
BCDL 10.0		Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00 4-5	>999	240	Weight: 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 2-9-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 5=0-4-9, 3=Mechanical, 4=Mechanical
Max Horz 5=64(LC 7)
Max Uplift 5=-95(LC 6), 3=-48(LC 12), 4=-4(LC 19)
Max Grav 5=97(LC 1), 3=30(LC 1), 4=34(LC 3)

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
- 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 95 lb uplift at joint 5, 48 lb uplift at joint 3 and 4 lb uplift at joint 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.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 20 lb down and 7 lb up at -1-2-14, and 20 lb down and 7 lb up at -1-2-14 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- 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
Concentrated Loads (lb)
Vert: 1=-31(F=-15, B=-15)
Trapezoidal Loads (plf)
Vert: 1=0(F=35, B=35)-to-2=-24(F=23, B=23), 2=-3(F=33, B=33)-to-3=-50(F=10, B=10), 5=0(F=10, B=10)-to-4=-14(F=3, B=3)



April 14, 2020

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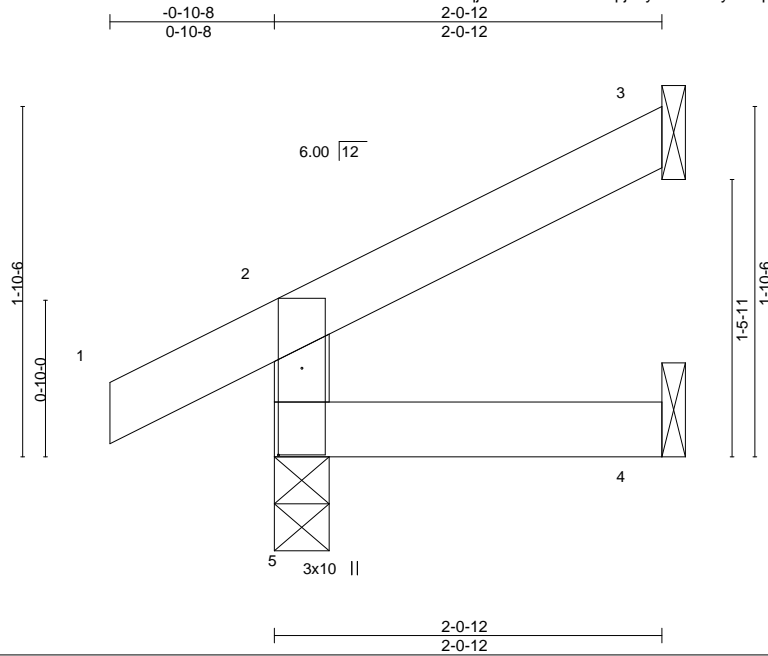
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 400307	Truss J13	Truss Type Jack-Open	Qty 3	Ply 1	Lot 91 RR Job Reference (optional)	I40979768
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Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 14 14:42:42 2020 Page 1

ID:vOmjqObOcWV19uGsdqrjnvymAP-WyAtEqL8rYnZXYErTklaZyacbl1xYNxEoQVydZQmjB



Scale = 1:12.3

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

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 0.07	Vert(LL)	-0.00	5	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	-0.00	4-5	>999	240		
BCLL 0.0 *	Rep Stress Incr	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 2-0-12 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

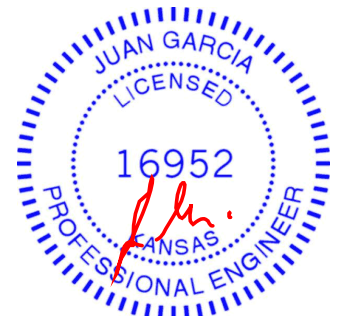
REACTIONS.

(size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=47(LC 8)
Max Uplift 5=22(LC 8), 3=34(LC 8)
Max Grav 5=175(LC 1), 3=48(LC 1), 4=34(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 22 lb uplift at joint 5 and 34 lb uplift at joint 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



April 14, 2020

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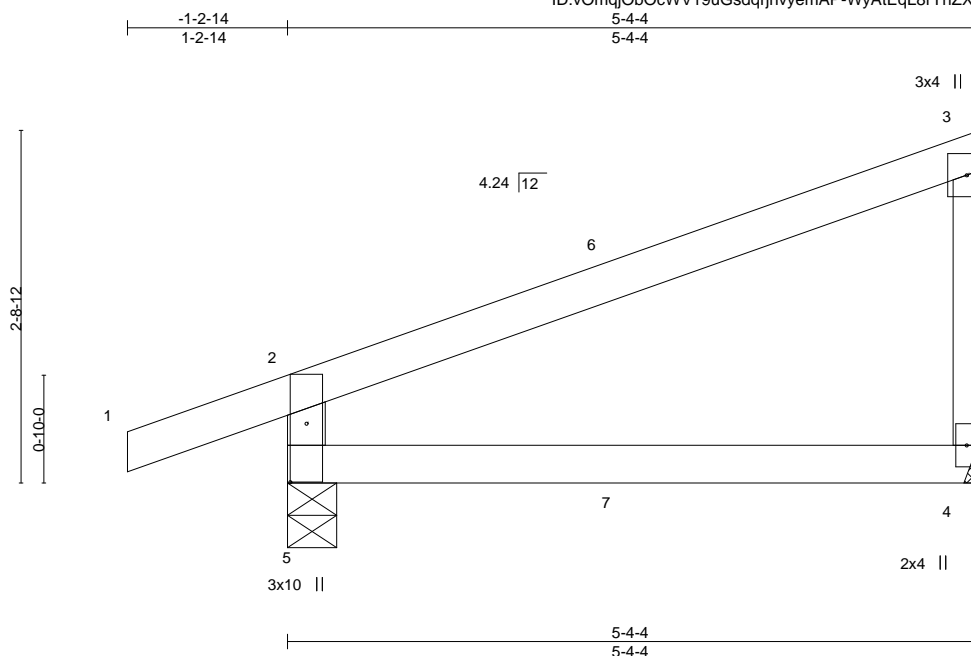
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR	I40979769
400307	J15	Diagonal Hip Girder	2	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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ID: vOmQjObOcWV19uGsdqrjnyemAP-WyAtEqL8rYnZXyXErTklaZYWtbipxYNxEoQVydZQmjB



Scale = 1:17.8

Plate Offsets (X,Y)-- [5:0-5-7,0-1-8]												
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	0.37	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)	0.01	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 5-4-4 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=114(LC 5)
 Max Uplift 5=-99(LC 4), 4=-50(LC 8)
 Max Grav 5=338(LC 1), 4=215(LC 1)

FORCES.

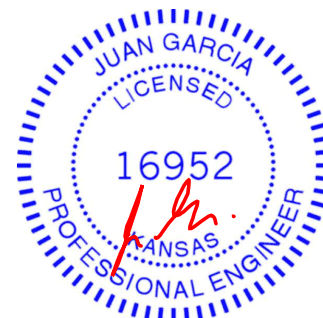
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-5=-299/137

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 99 lb uplift at joint 5 and 50 lb uplift at joint 4.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 69 lb down and 34 lb up at 2-7-6, and 69 lb down and 34 lb up at 2-7-6 on top chord, and 4 lb down and 2 lb up at 2-7-6, and 4 lb down and 2 lb up at 2-7-6 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S)

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



April 14, 2020

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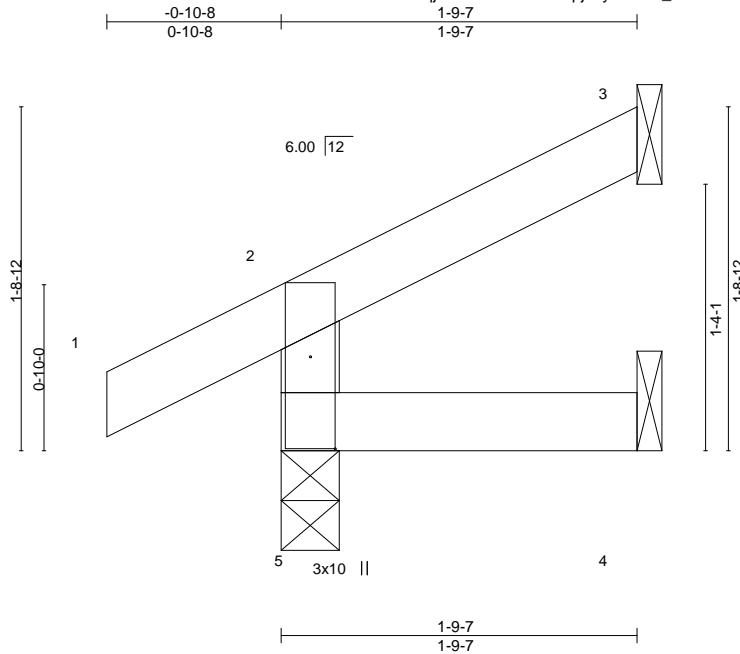
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job 400307	Truss J16	Truss Type Jack-Open	Qty 4	Ply 1	Lot 91 RR Job Reference (optional)
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Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 14 14:42:43 2020 Page 1

ID:vOmQjObOcWV19uGsdqrjnvymAP-_9kFSAMmcsvQ9i6QPBFX7B5IM?5Ng?d5TSA2U3zQmjA



Scale = 1:11.6

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

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 0.07	Vert(LL)	-0.00	5	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	-0.00	5	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.00	5	>999	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 1-9-7 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=43(LC 5)
Max Uplift 5=22(LC 8), 3=30(LC 8)
Max Grav 5=167(LC 1), 3=39(LC 1), 4=29(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 22 lb uplift at joint 5 and 30 lb uplift at joint 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



April 14, 2020

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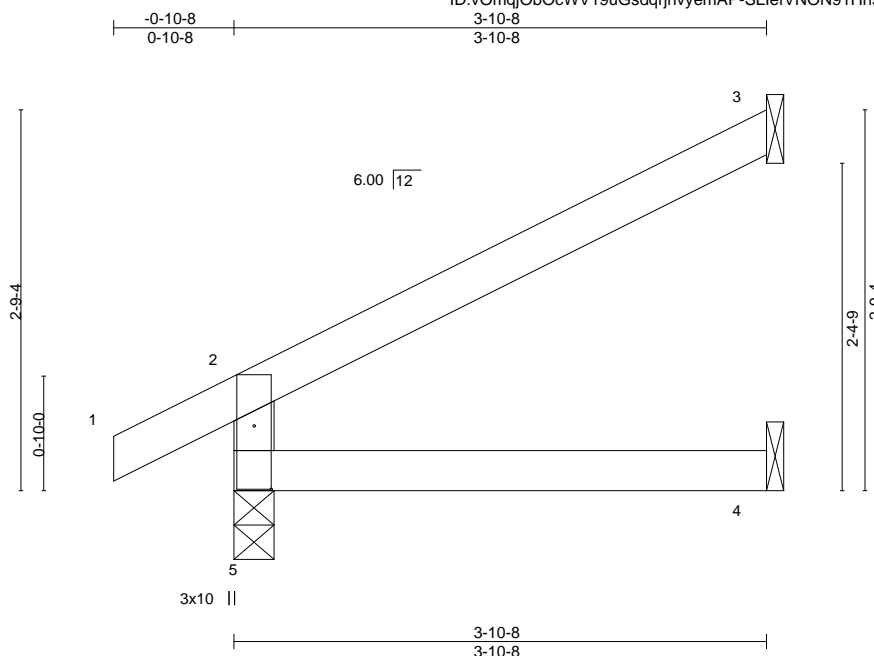
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR	
400307	J17	Jack-Open	9	1		I40979771
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 14 14:42:44 2020 Page 1

ID:vOmajObOcWV19uGsdqrjnyemAP-SLiefVNON91HnshcyunmfOdvFOQ2PStEh6vc1VzQmj9



Scale = 1:16.8

Plate Offsets (X,Y)-- [5:0-5-9,0-1-8]												
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	0.19	Vert(LL)	-0.01	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	-0.02	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.01	4-5	>999	240	Weight: 11 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-10-8 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=84(LC 8)
Max Uplift 5=-26(LC 8), 3=-66(LC 8)
Max Grav 5=246(LC 1), 3=112(LC 1), 4=69(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 26 lb uplift at joint 5 and 66 lb uplift at joint 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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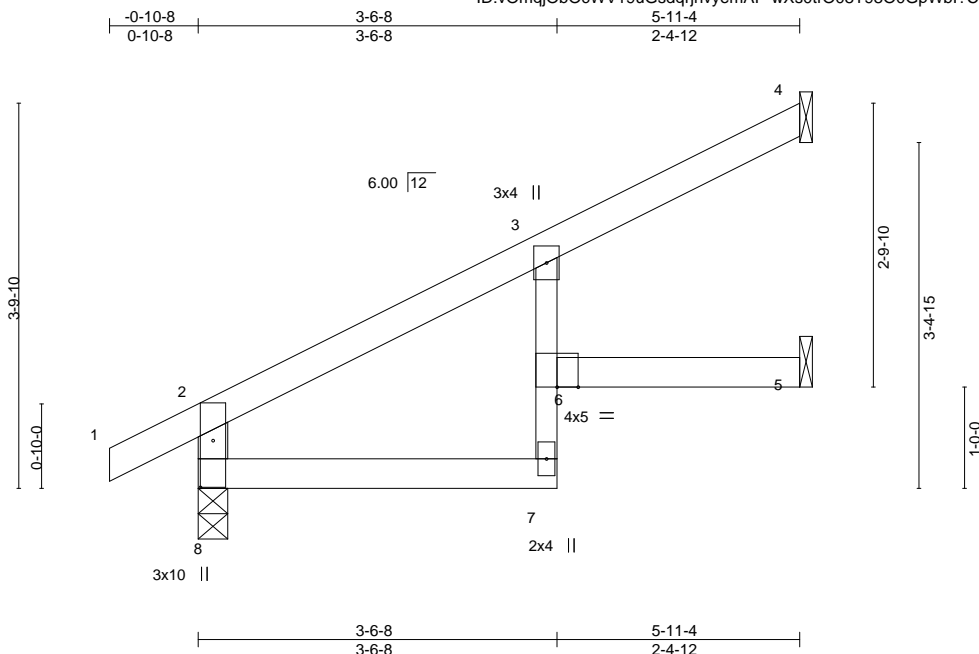
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR
400307	J18	Jack-Open	6	1	
					Job Reference (optional)

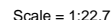
Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 14 14:42:45 2020 Page 1

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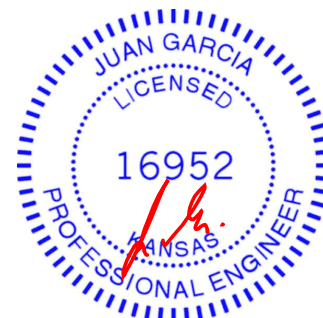


8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 14 14:42:45 2020 Page 1
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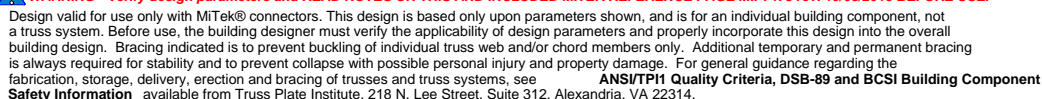


FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-8=-345/13

- 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); 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 49 lb uplift at joint 4.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



April 14, 2020

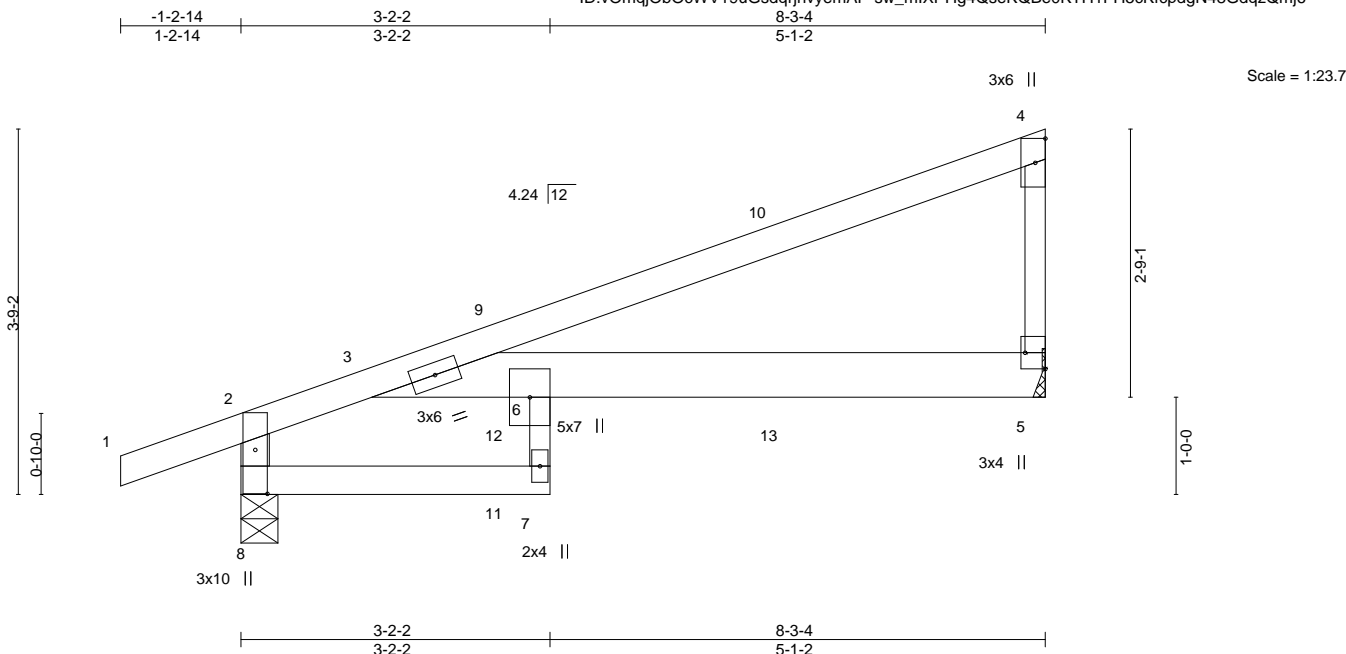


Job	Truss	Truss Type	Qty	Ply	Lot 91 RR	I40979774
400307	J20	Diagonal Hip Girder	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 14 14:42:47 2020 Page 1

ID:vOmjqObOcWV19uGsdqjnyemAP-sw_mIXPHg4QseKQB0KTH1FH5cKfcpdgN48GdqzQmj6



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)	-0.10	5-6	>976	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.57	Vert(CT)	-0.19	5-6	>516	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.00	Horz(CT)	0.08	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.12	5-6	>836	240	Weight: 30 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2 *Except*
 6-7: 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 10-0-0 oc bracing.

REACTIONS.

(size) 8=0-4-9, 5=Mechanical
 Max Horz 8=142(LC 5)
 Max Uplift 8=139(LC 4), 5=128(LC 8)
 Max Grav 8=488(LC 1), 5=400(LC 1)

FORCES.

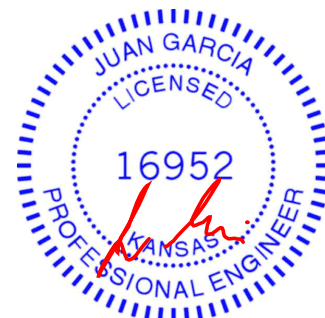
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-8=-476/169, 2-3=-325/51

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 139 lb uplift at joint 8 and 128 lb uplift at joint 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.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 69 lb down and 36 lb up at 2-8-7, 69 lb down and 36 lb up at 2-8-7, and 94 lb down and 56 lb up at 5-6-6, and 94 lb down and 56 lb up at 5-6-6 on top chord, and 4 lb down and 1 lb up at 2-8-7, 4 lb down and 1 lb up at 2-8-7, and 28 lb down and 34 lb up at 5-6-6, and 28 lb down and 34 lb up at 5-6-6 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, 7-8=-20, 5-6=-20
 Concentrated Loads (lb)
 Vert: 10=-16(F=-8, B=-8) 11=3(F=1, B=1) 13=-56(F=-28, B=-28)



April 14, 2020

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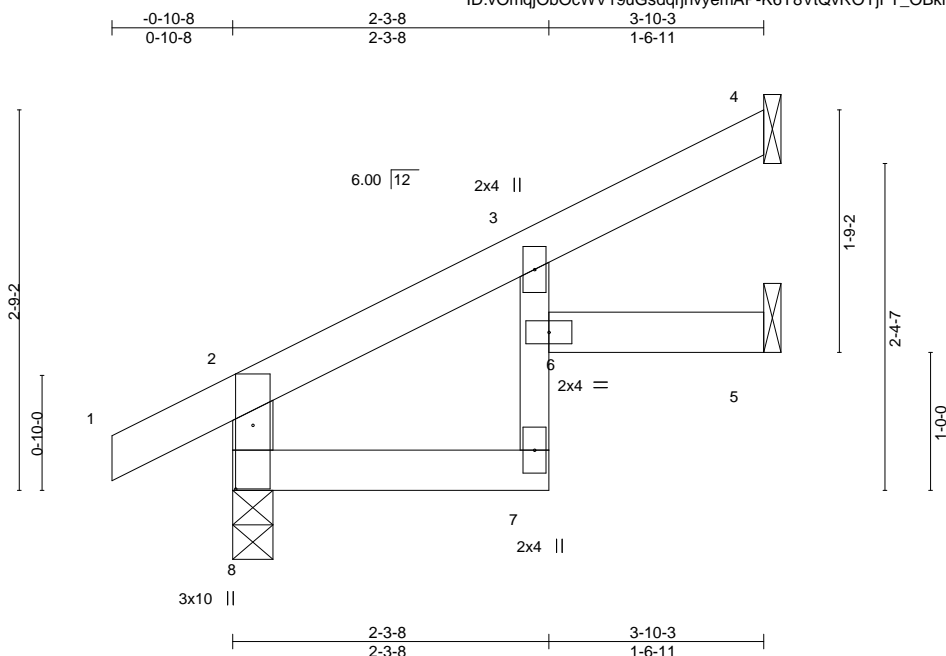
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR	I40979775
400307	J21	Jack-Open	2	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 14 14:42:48 2020 Page 1

ID:vOmQjObOcWV19uGsdqrjnyemAP-K6Y8VtQvROYjFT_OBKriqEocG0m3LGsqcjpAGzQmj5



Scale = 1:16.7

Plate Offsets (X,Y)-- [8:0-5-9,0-1-8]												
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	0.12	Vert(LL)	-0.01	6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	-0.02	7	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.01	7	>999	240	Weight: 12 lb	FT = 10%

LUMBER-

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

BRACING-

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

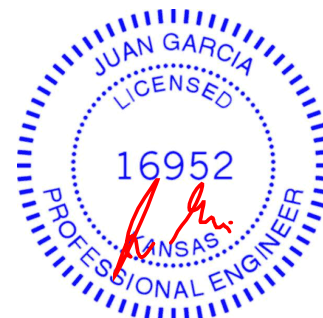
REACTIONS.

(size) 8=0-3-8, 4=Mechanical, 5=Mechanical
 Max Horz 8=84(LC 8)
 Max Uplift 8=26(LC 8), 4=45(LC 8), 5=14(LC 8)
 Max Grav 8=245(LC 1), 4=98(LC 1), 5=58(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 26 lb uplift at joint 8, 45 lb uplift at joint 4 and 14 lb uplift at joint 5.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



April 14, 2020

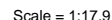
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

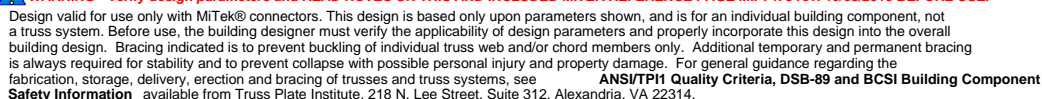
8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 14 14:42:49 2020 Page 1
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NOTES-

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April 14, 2020

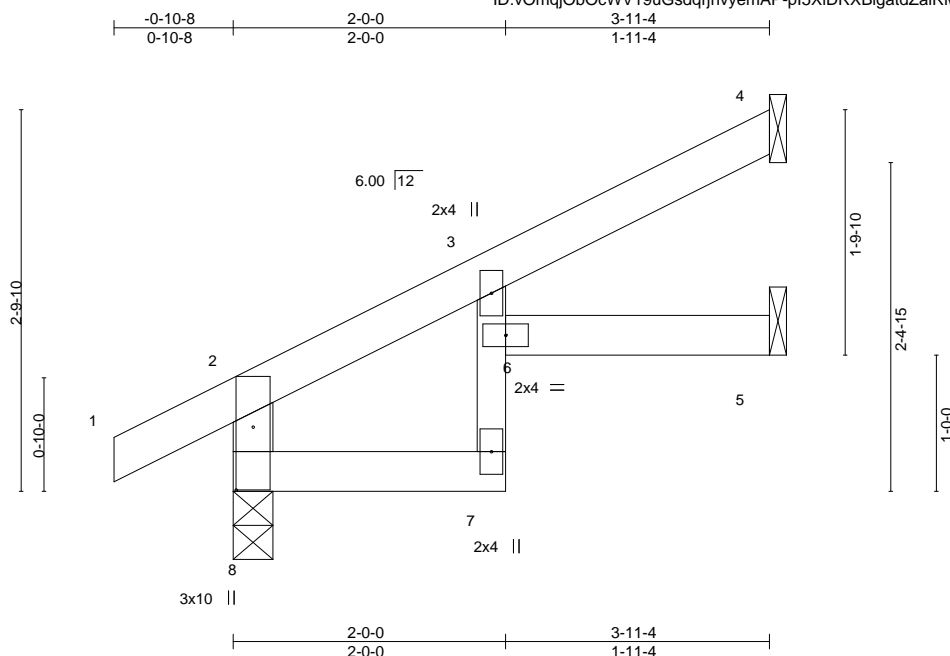


Job	Truss	Truss Type	Qty	Ply	Lot 91 RR	
400307	J23	Jack-Open	3	1		I40979777
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

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ID:vOmjqObOcWV19uGsdqrjnyemAP-pl5XiDRXBigatdZalRMxMSLmaP6E4j6zrNdNijzQmj4



Scale = 1:16.9

Plate Offsets (X,Y)--		[8:0-5-9,0-1-8]									
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 0.15	Vert(LL)	-0.01	6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC 0.18	Vert(CT)	-0.02	7	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.02	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.02	7	>999	240	Weight: 12 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 8=0-3-8, 4=Mechanical, 5=Mechanical
 Max Horz 8=86(LC 8)
 Max Uplift 8=26(LC 8), 4=52(LC 8), 5=8(LC 8)
 Max Grav 8=249(LC 1), 4=106(LC 1), 5=59(LC 3)

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
- 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 26 lb uplift at joint 8, 52 lb uplift at joint 4 and 8 lb uplift at joint 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.



April 14, 2020

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR	140979778
400307	LAY1	GABLE	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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ID:vOmajObOcWV19uGsdqjnyemAP-218wblYA4ToIS0Jnq13ELDJT2DbhmvlvHILVhzQmix

33-8-6 37-10-12
25-9-5 4-2-6

Scale = 1:61.4

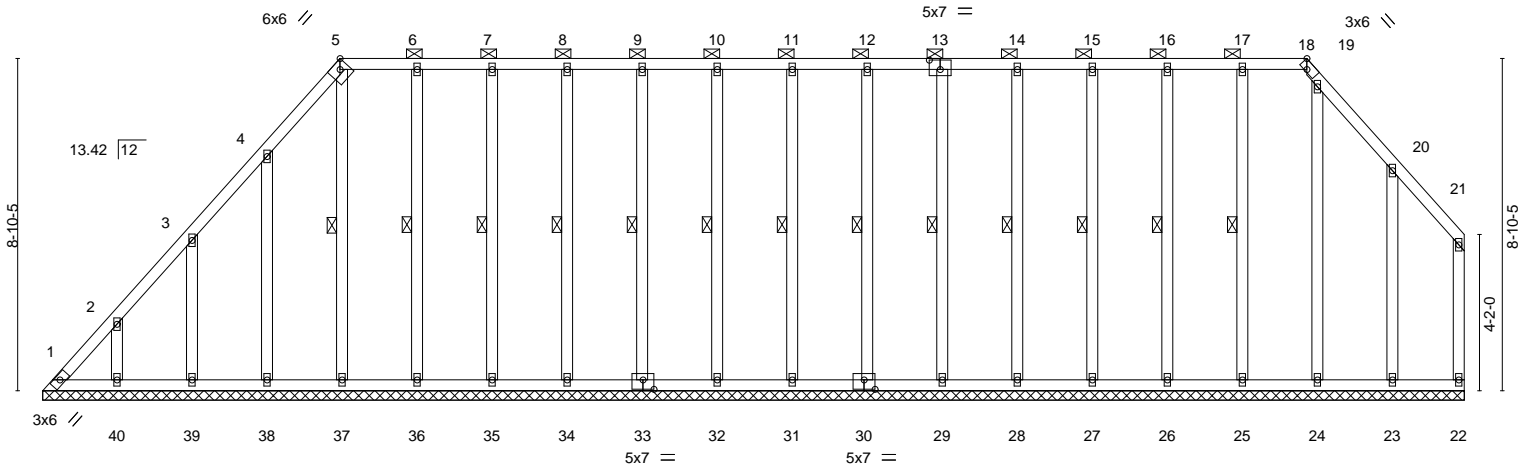


Plate Offsets (X,Y)--		[5:0-2-10,Edge], [13:0-3-8,0-3-0], [18:0-2-10,Edge], [30:0-3-8,0-3-0], [33:0-3-8,0-3-0]	
LOADING (psf)	SPACING	CSI	DEFL.
TCLL 25.0	Plate Grip DOL 1.15	TC 0.08	in (loc) l/defl L/d
TCDL 10.0	Lumber DOL 1.15	BC 0.04	Vert(LL) n/a - n/a 999
BCLL 0.0 *	Rep Stress Incr YES	WB 0.16	Vert(CT) n/a - n/a 999
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Horz(CT) -0.00 22 n/a n/a
		PLATES MT20	
		GRIP 197/144	
		Weight: 249 lb FT = 10%	

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

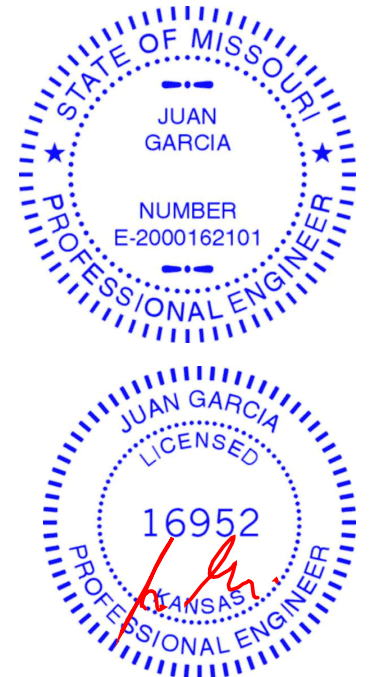
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-18.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-37, 6-36, 7-35, 8-34, 9-33, 10-32, 11-31, 12-30, 13-29, 14-28, 15-27, 16-26, 17-25

REACTIONS. All bearings 37-10-12.
(lb) - Max Horz 1=282(LC 5)
Max Uplift All uplift 100 lb or less at joint(s) 22, 36, 35, 34, 33, 32, 31, 30, 29, 28, 27, 26, 25, 24 except 1=177(LC 6), 40=137(LC 8), 39=137(LC 8), 38=141(LC 8), 37=107(LC 7), 23=168(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 22, 40, 39, 38, 37, 36, 35, 34, 33, 32, 31, 30, 29, 28, 27, 26, 25, 24, 23 except 1=258(LC 5)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-348/297, 2-3=-297/255, 3-4=-261/244

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; BCCL=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) 22, 36, 35, 34, 33, 32, 31, 30, 29, 28, 27, 26, 25, 24 except (it=lb) 1=177, 40=137, 39=137, 38=141, 37=107, 23=168.
- This truss 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.



April 14,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR	140979779
400307	LAY2	GABLE	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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ID:vOmQjObOcWV19uGsdqjrvyemAP-WEIjPeZormw94AKVLYY1mZIVRRZ1QDvR8x2v28zQmiw

5-11-13	19-3-0	21-11-10	25-7-7
5-11-13	13-3-2	2-8-10	3-7-13

Scale = 1:43.0

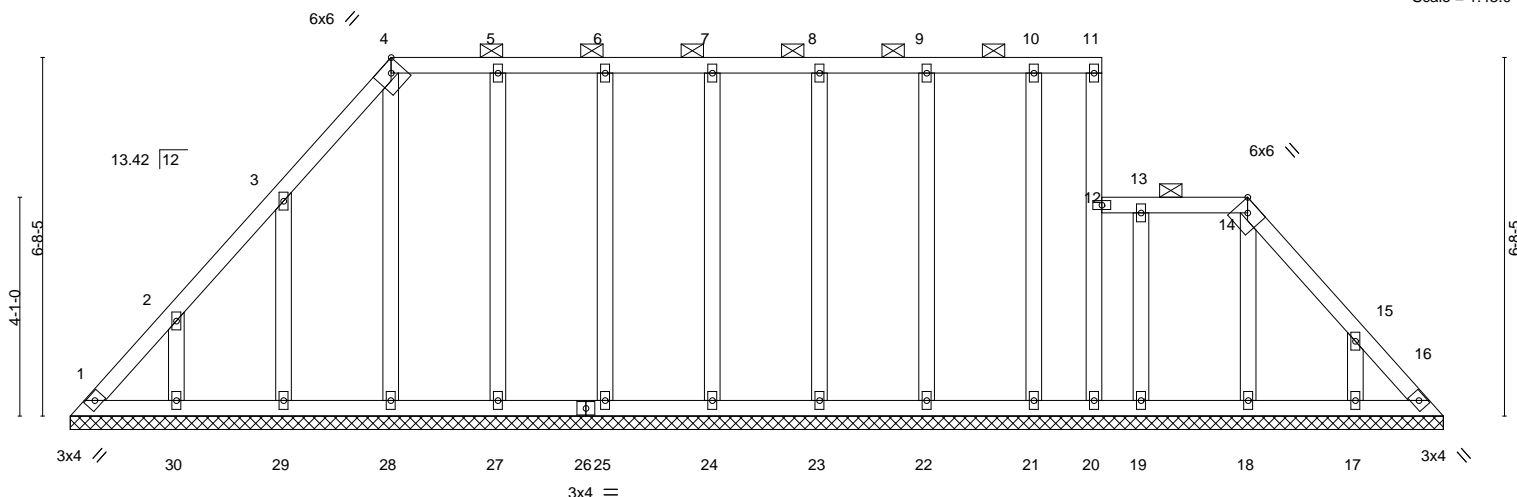


Plate Offsets (X,Y)--	[4:0-2-10,Edge], [14:0-2-10,Edge]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.06	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.11	Horz(CT)	0.00	16	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S					Weight: 134 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-11, 12-20, 12-14.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

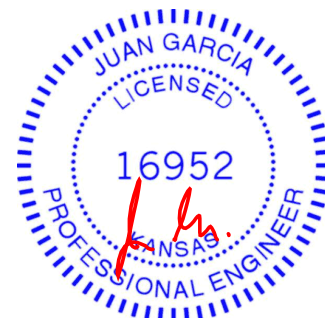
- All bearings 25-7-7.
(lb) - Max Horz 1=279(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 20, 16, 27, 25, 24, 23, 22, 21, 19, 18 except 1=102(LC 6), 30=134(LC 8), 29=149(LC 8), 28=106(LC 8), 17=139(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 20, 16, 30, 29, 28, 27, 25, 24, 23, 22, 21, 19, 18, 17 except 1=294(LC 8)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-410/197, 2-3=-282/148

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; BCCL=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) 20, 16, 27, 25, 24, 23, 22, 21, 19, 18 except (jt=lb) 1=102, 30=134, 29=149, 28=106, 17=139.
- This truss 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.



April 14, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR	I40979780
400307	LAY3	GABLE	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 14 14:43:00 2020 Page 1
ID:vOmQjObOcWV19uGsdqrjnyemAP-_QGh0_ZQc420iJvhuF3XJmleNrtS9gBbNbnSaazQmiv

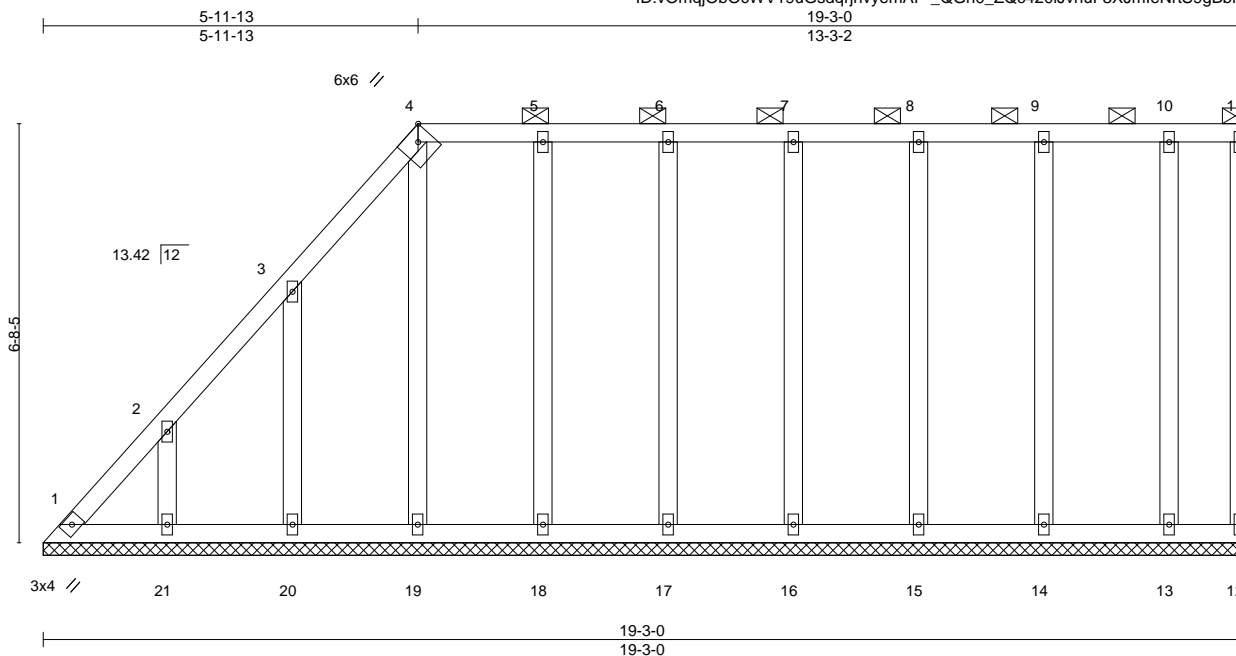


Plate Offsets (X,Y)-- [4:0-2-10,Edge]

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 0.18	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 0.11	Horz(CT)	-0.00	12	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S					Weight: 109 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 19-3-0.
(lb) - Max Horz 1=255(LC 5)
Max Uplift All uplift 100 lb or less at joint(s) 1, 12, 19, 18, 17, 16, 15, 14, 13 except 21=135(LC 8), 20=147(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 1, 12, 21, 20, 19, 18, 17, 16, 15, 14, 13

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-280/191

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) 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 100 lb uplift at joint(s) 1, 12, 19, 18, 17, 16, 15, 14, 13 except (jt=lb) 21=135, 20=147.
- 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.



April 14, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR	I40979781
400307	LAY4	GABLE	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 14 14:43:01 2020 Page 1
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27-3-0
19-3-14

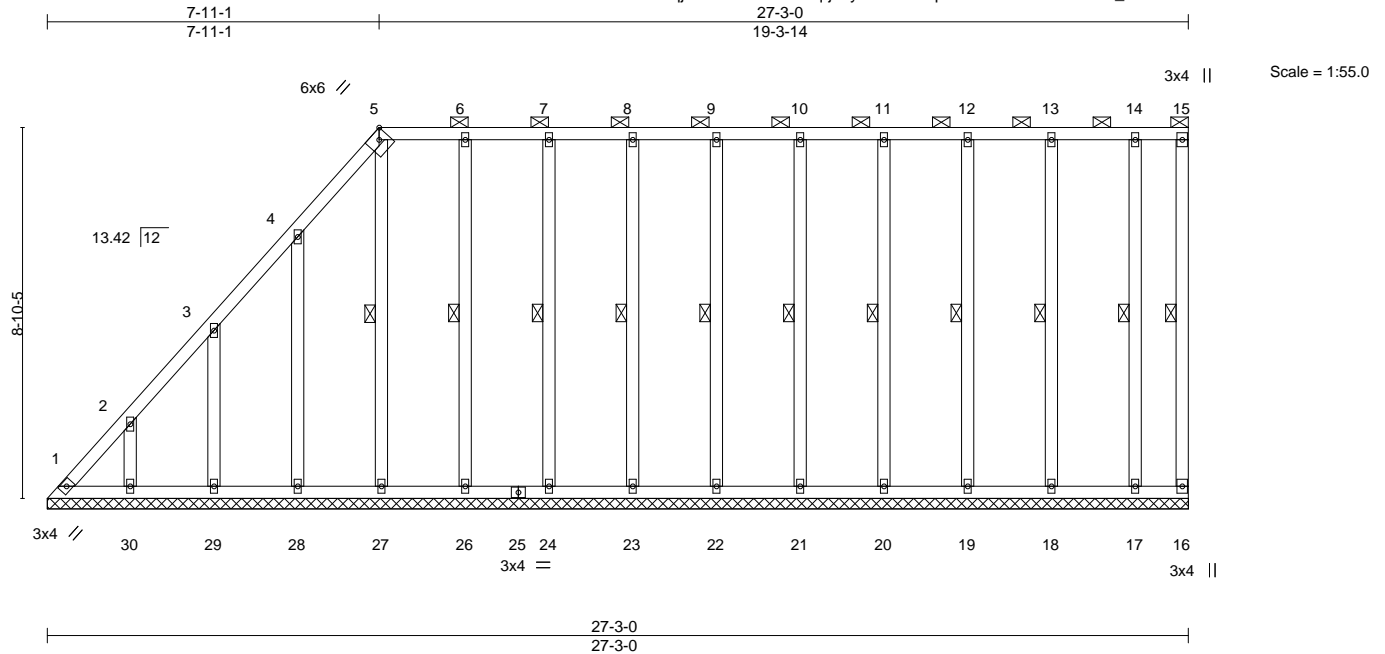


Plate Offsets (X,Y)--		[5'-0.2-10.Edge]							
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	L/defl	L/d
TCLL 25.0		Plate Grip DOL	1.15	TC 0.32		Vert(LL)	n/a -	n/a	999
TCDL 10.0		Lumber DOL	1.15	BC 0.14		Vert(CT)	n/a -	n/a	999
BCLL 0.0 *		Rep Stress Incr	YES	WB 0.12		Horz(CT)	-0.01 16	n/a	n/a
BCDL 10.0		Code IRC2018/TPI2014		Matrix-S					
						PLATES	GRIP		
						MT20	197/144		
						Weight: 183 lb		FT = 10%	

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6'-0-0 oc purlins, except end verticals, and 2'-0-0 oc purlins (6'-0-0 max.): 5-15.
BOT CHORD Rigid ceiling directly applied or 10'-0-0 oc bracing.
WEBS 1 Row at midpt 15-16, 5-27, 6-26, 7-24, 8-23, 9-22, 10-21, 11-20, 12-19, 13-18, 14-17

REACTIONS.

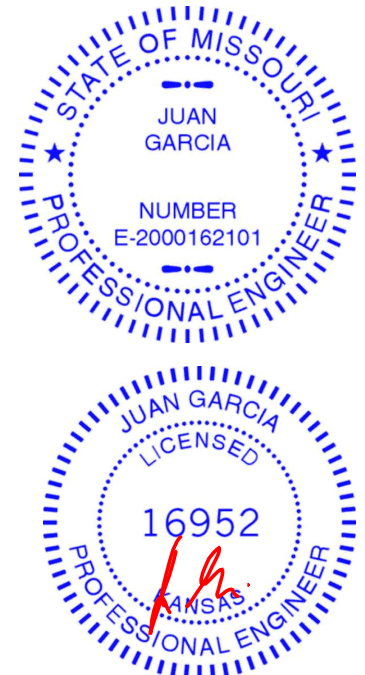
All bearings 27-3-0.
(lb) - Max Horz 1=341(LC 5)
Max Uplift All uplift 100 lb or less at joint(s) 16, 26, 24, 23, 22, 21, 20, 19, 18, 17 except 1=147(LC 6), 30=138(LC 8), 29=135(LC 8), 28=143(LC 8), 27=115(LC 5)
Max Grav All reactions 250 lb or less at joint(s) 16, 30, 29, 28, 27, 26, 24, 23, 22, 21, 20, 19, 18, 17 except 1=282(LC 5)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-381/257, 2-3=-309/206, 3-4=-255/165

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) 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 100 lb uplift at joint(s) 16, 26, 24, 23, 22, 21, 20, 19, 18, 17 except (jt=lb) 1=147, 30=138, 29=135, 28=143, 27=115.
- 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.



April 14, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

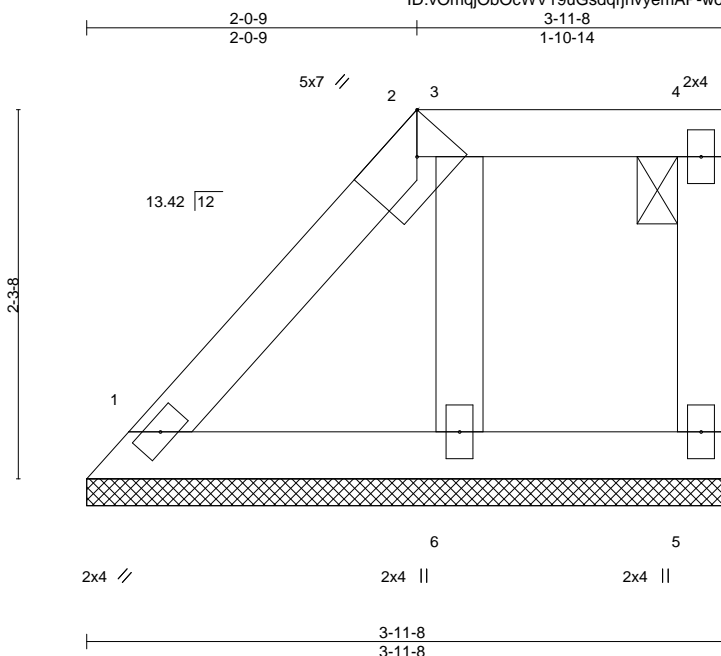
Job 400307	Truss LAY5	Truss Type GABLE	Qty 1	Ply 1	Lot 91 RR Job Reference (optional)
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I40979782

Wheeler Lumber, Waverly, KS 66871

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ID:vOmjqObOcWV19uGsdqrjnyemAP-woORRfbh8hJkxd340g5?OBN0_faidb1uqvGZeSzQmit



Scale = 1:14.3

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

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 0.04	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 0.02	Horz(CT)	-0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 14 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 3-11-8 oc purlins, except end verticals, and 2-0-0 oc purlins: 2-4.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

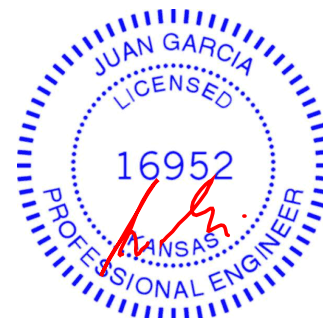
REACTIONS.

(size) 1=3-11-8, 5=3-11-8, 6=3-11-8
 Max Horz 1=79(LC 5)
 Max Uplift 1=-5(LC 4), 5=-21(LC 4), 6=-67(LC 5)
 Max Grav 1=90(LC 16), 5=49(LC 1), 6=189(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
- 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, 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 14, 2020

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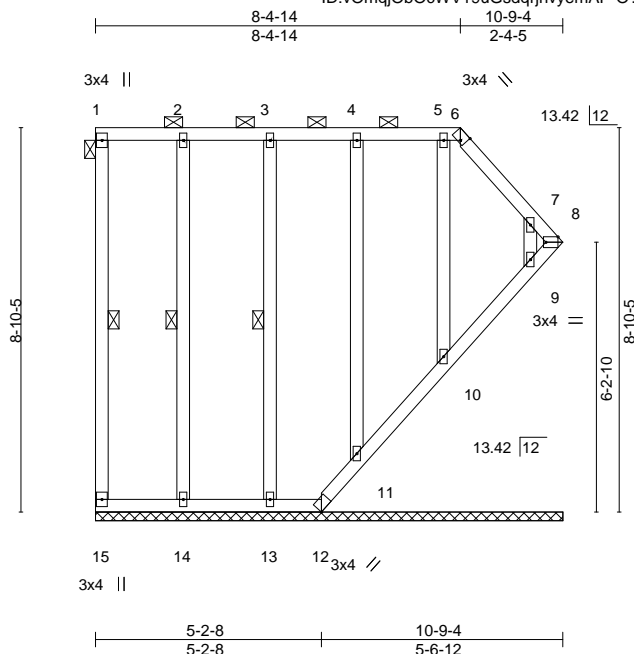
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR
400307	LAY6	GABLE	1	1	140979783
Job Reference (optional)					

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 14 14:43:03 2020 Page 1

ID:vOmajObOcWV19uGsdqjnyemAP-O?ype?cJu?RbZneGaNcExPw6D3unM0Q13Z06BvzQmis



Scale = 1:53.1

Plate Offsets (X,Y)-- [6:0-1-6,Edge], [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	0.33	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	0.14	Horz(CT)	0.01 8 n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S					Weight: 73 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 1-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 9-10,8-9.
WEBS 1 Row at midpt 1-15, 2-14, 3-13

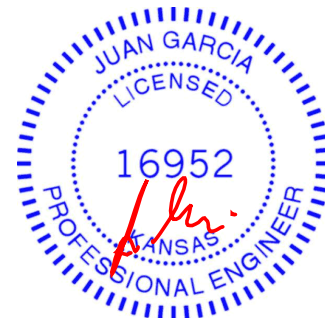
REACTIONS.

All bearings 10-9-4.
(lb) - Max Horz 15=-271(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) 15, 14, 13, 11, 9 except 8=-255(LC 5), 12=-157(LC 6), 10=-121(LC 4)
Max Grav All reactions 250 lb or less at joint(s) 15, 12, 14, 13, 11, 10, 9 except 8=358(LC 6)

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) 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 100 lb uplift at joint(s) 15, 14, 13, 11, 9 except (jt=lb) 8=255, 12=157, 10=121.
- 8) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 8, 11, 10, 9.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 14, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR
400307	LAY7	GABLE	1	1	I40979784
Job Reference (optional)					

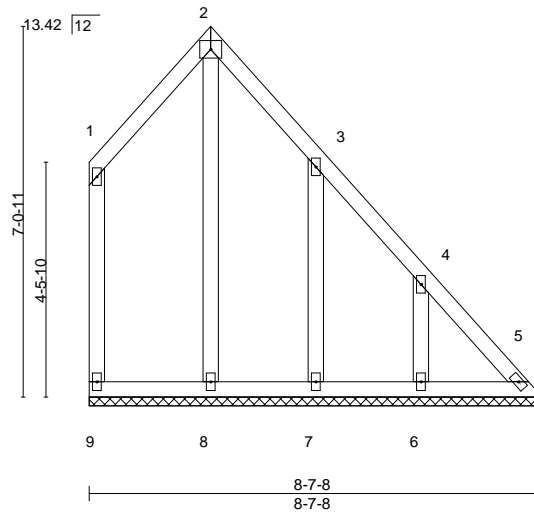
Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 14 14:43:04 2020 Page 1
ID:vOmjqObOcWV19uGsdqrjnyemAP-tBVBsLcxfJZSAxDS758TTcSLLSGy5TRAIDlfjLzQmir

2-3-12 8-7-8
2-3-12 6-3-12

4x5 =

Scale = 1:43.8



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 0.12	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.15	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 44 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 8-7-8.
(lb) - Max Horz 9=-235(LC 4)
Max Uplift All uplift 100 lb or less at joint(s) 9 except 5=-117(LC 5), 8=-116(LC 6), 7=-150(LC 9), 6=-150(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 9, 5, 8, 7, 6

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 4-5=-273/226

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
- 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) 9 except (jt=lb) 5=117, 8=116, 7=150, 6=150.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



April 14, 2020

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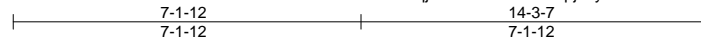
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR	I40979785
400307	LAY8	GABLE	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

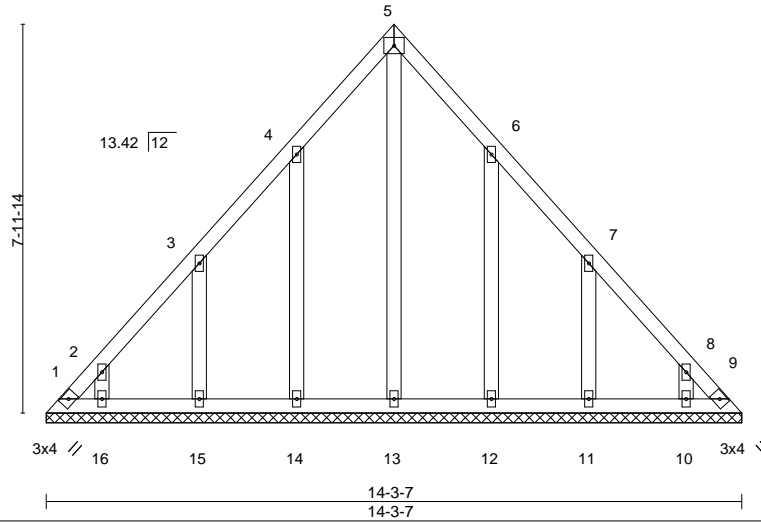
8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 14 14:43:05 2020 Page 1

ID: vOmjqObOcWV19uGsdqrjnyemAP-LN3a3hdZQchJo5ofhofi0q?X2scGqwhKWtVDFnzQmiq



4x5 =

Scale = 1:47.3



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 0.06	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.15	Horz(CT)	0.00	9	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S					Weight: 68 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 14-3-7.
(lb) - Max Horz 1=-206(LC 4)
Max Uplift All uplift 100 lb or less at joint(s) 9 except 1=-126(LC 6), 14=-139(LC 8), 15=-141(LC 8),
16=-113(LC 8), 12=-137(LC 9), 11=-141(LC 9), 10=-113(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 1, 9, 13, 14, 15, 16, 12, 11, 10

FORCES.

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

TOP CHORD 1-2=-304/186, 8-9=-275/143

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
- 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) 9 except (it=lb) 1=126, 14=139, 15=141, 16=113, 12=137, 11=141, 10=113.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



April 14, 2020

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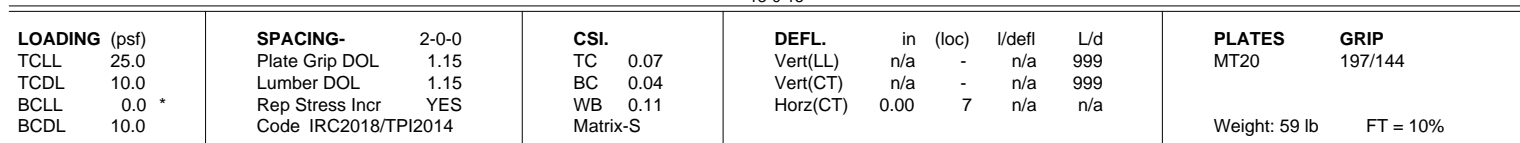
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 14 14:43:06 2020 Page 1

ID:vOmQjObOcWV19uGsdqrjnyemAP-padyH1eBBwpAQEMrFWaXyY1YhcGyMZOdTIXEmnEzQmp

6-6-8 13-0-15 6-6-8

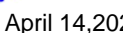
4x5 = Scale = 1:43.5



REACTIONS. All bearings 13-0-15.
(lb) - Max Horz 1=-187(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) 1, 7 except 11=-133(LC 8), 12=-164(LC 8), 9=-132(LC 9),
8=-165(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 1, 7, 10, 11, 12, 9 except 8=250(LC 16)

NOTES-

- 
- STATE OF MISSOURI
- JUAN GARCIA
- NUMBER
E-2000162101
- PROFESSIONAL ENGINEER



Job	Truss	Truss Type	Qty	Ply	Lot 91 RR
400307	V1	Valley	1	1	
Wheeler Lumber, Waverly, KS 66871					Job Reference (optional)

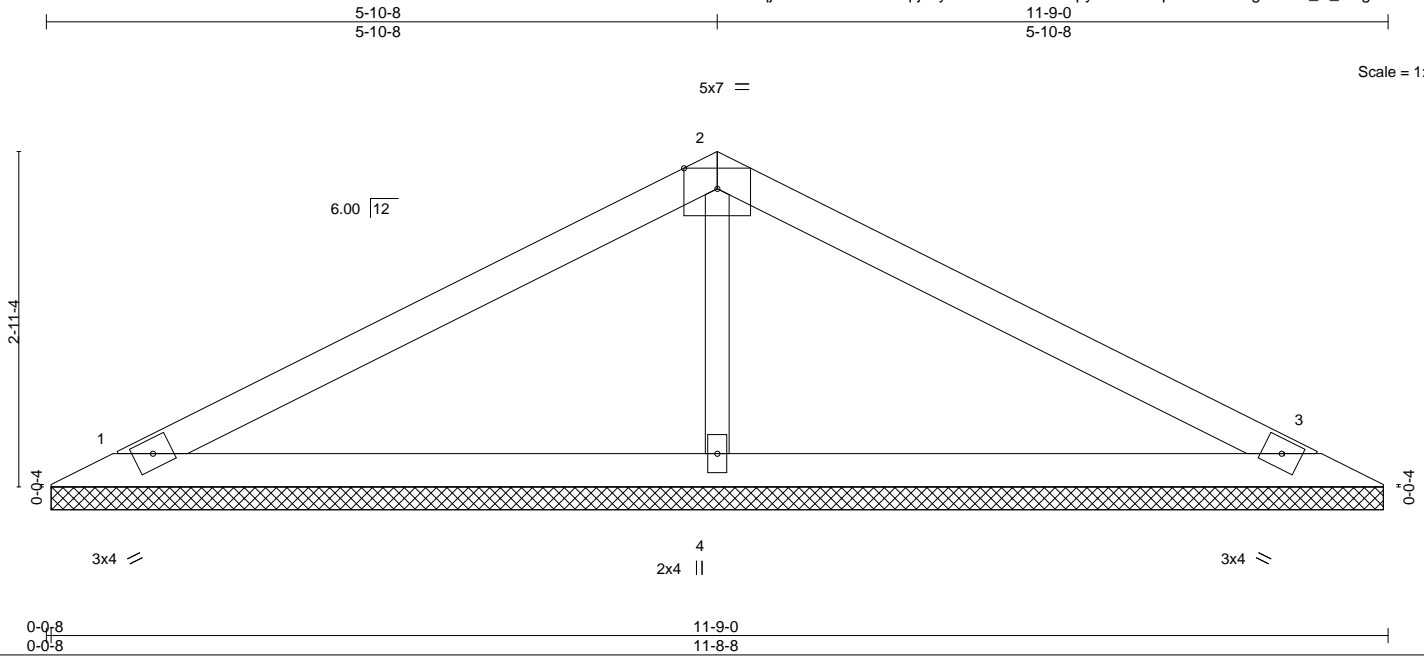
I40979787

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 14 14:43:07 2020 Page 1

ID:vOmajObOcWV19uGsdqrjnyemAP-HmBKUNfpyEx01Ox1pDhA5F4nLgEilrMd_B_KKgZQmio

11-9-0
5-10-8

Scale = 1:20.2



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.39	Vert(LL)	n/a	MT20		197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.23	Vert(CT)	n/a				
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							
								Weight: 29 lb FT = 10%			

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=11-8-0, 3=11-8-0, 4=11-8-0
 Max Horz 1=-46(LC 13)
 Max Uplift 1=-45(LC 8), 3=-54(LC 9), 4=-28(LC 8)
 Max Grav 1=222(LC 21), 3=222(LC 22), 4=501(LC 1)

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

WEBS 2-4=-342/89

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
- 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, 3, 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.



April 14, 2020

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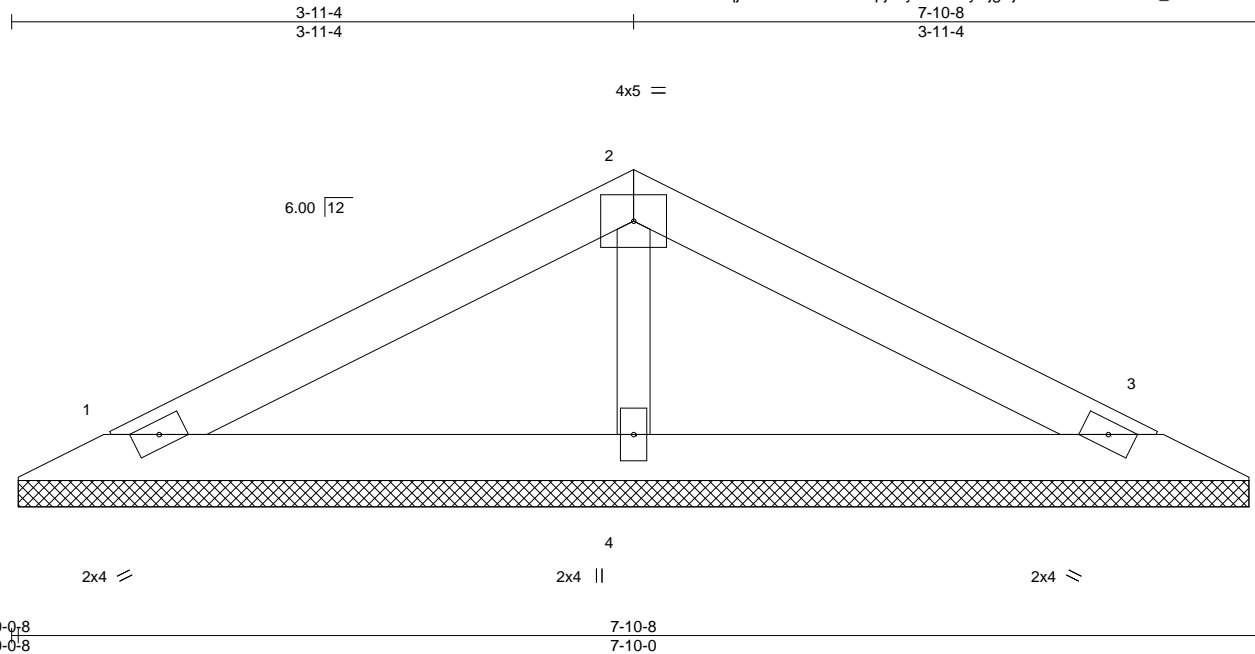


16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR	I40979788
400307	V2	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 14 14:43:08 2020 Page 1
ID:vOmajObOcWV19uGsdqjnvymAP-lyliijgSjX3tfYWEMxCPdSd_34c31JEmDrjts6zQmin



Scale = 1:14.6

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 0.20	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.09	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 18 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=7-9-8, 3=7-9-8, 4=7-9-8
Max Horz 1=-29(LC 9)
Max Uplift 1=-35(LC 8), 3=-41(LC 9), 4=-4(LC 8)
Max Grav 1=155(LC 1), 3=155(LC 1), 4=284(LC 1)

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
- 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, 3, 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.



April 14, 2020

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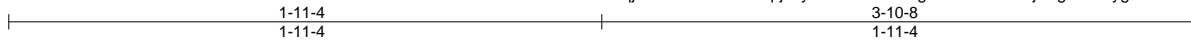
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR	140979789
400307	V3	Valley	1	1	Job Reference (optional)	

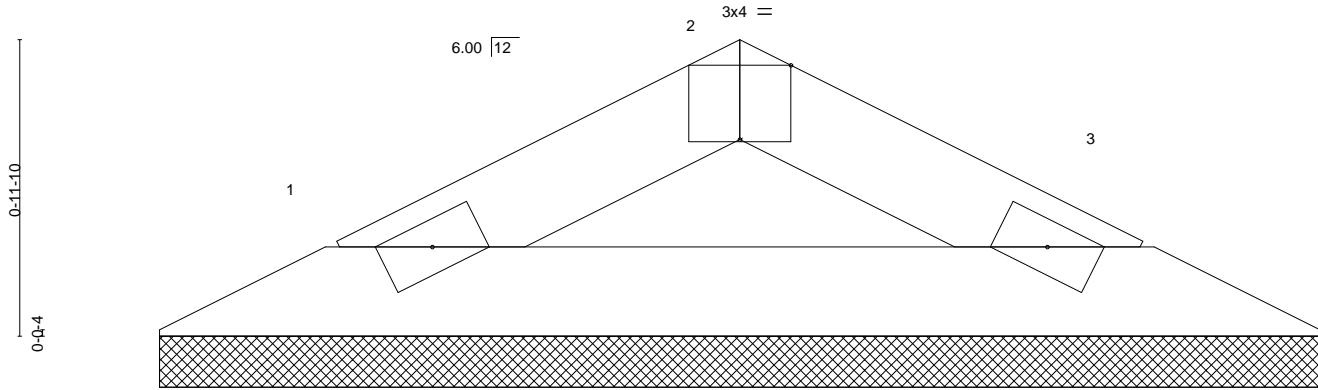
Wheeler Lumber, Waverly, KS 66871



8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 14 14:43:09 2020 Page 1

ID:vOmQjObOcWV19uGsdqrjnyemAP-D9J4v3g4UrBkHi5QwejeAgACUTygm3wRVtQOYZQmim



Scale = 1:7.5



2x4 										2x4 									
0-0-8										3-10-8									
0-0-8										3-10-0									
Plate Offsets (X,Y)--										[2:0-2-0,Edge]									
LOADING (psf)										SPACING- 2-0-0									
TCLL 25.0										Plate Grip DOL 1.15									
TCDL 10.0										Lumber DOL 1.15									
BCLL 0.0 *										Rep Stress Incr YES									
BCDL 10.0										Code IRC2018/TPI2014									
										CSI.									
										TC 0.03									
										BC 0.07									
										WB 0.00									
										Matrix-P									
										DEFL. in (loc) l/defl L/d									
										Vert(LL) n/a - n/a 999									
										Vert(CT) n/a - n/a 999									
										Horz(CT) 0.00 3 n/a n/a									
										PLATES GRIP									
										MT20 197/144									
										Weight: 8 lb FT = 10%									

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=3-9-8, 3=3-9-8
Max Horz 1=12(LC 8)
Max Uplift 1=15(LC 8), 3=15(LC 9)
Max Grav 1=118(LC 1), 3=118(LC 1)

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
- 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, 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.



April 14, 2020

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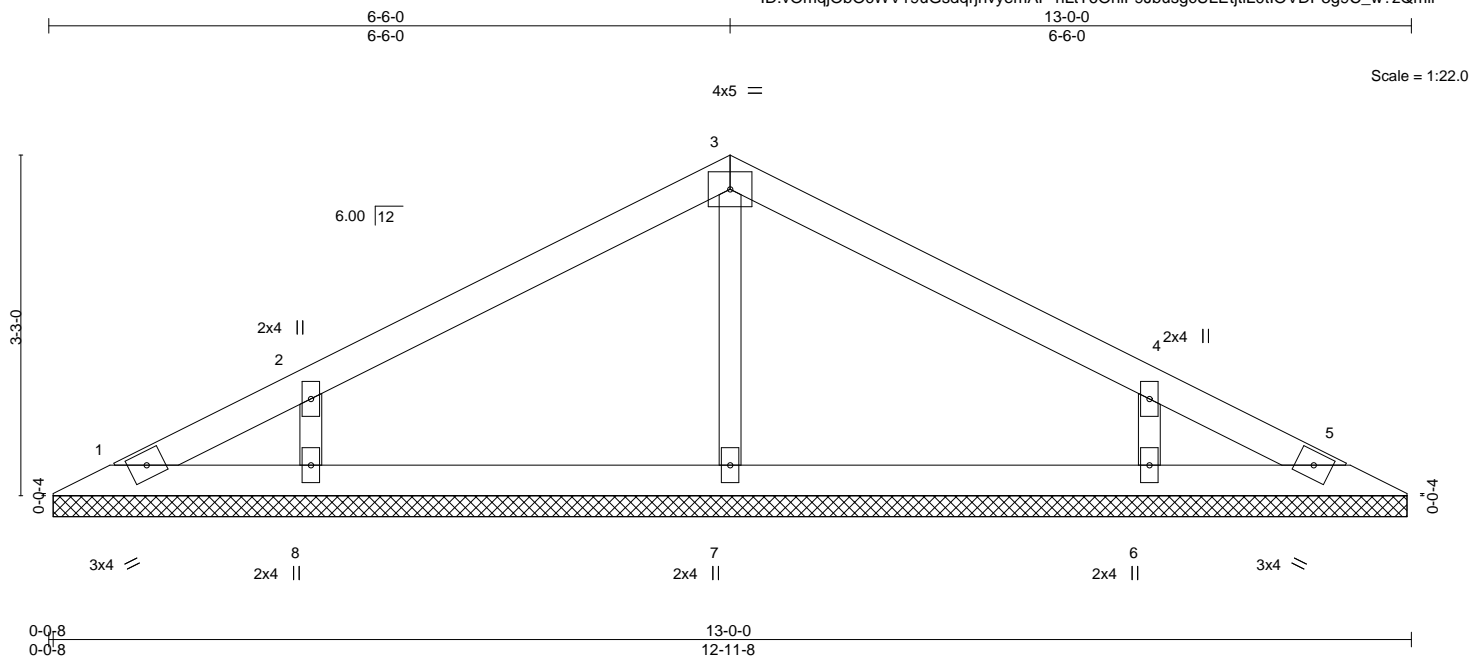


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR	I40979790
400307	V4	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 14 14:43:10 2020 Page 1
ID:vOmQjObOcWV19uGsdqrjnyemAP-hLiT6OhIF9JbusgcULEtjtiL0tIOVDP3g9C_w?zQmil



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.17	Vert(LL)	n/a	MT20		197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a				
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							
								Weight: 33 lb		FT = 10%	

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 12-11-0.
(lb) - Max Horz 1=52(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=109(LC 8), 6=109(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=314(LC 1), 8=336(LC 21), 6=336(LC 22)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-272/150, 4-6=-272/150

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 except (jt=lb) 8=109, 6=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.



April 14, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

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Chesterfield, MO 63017

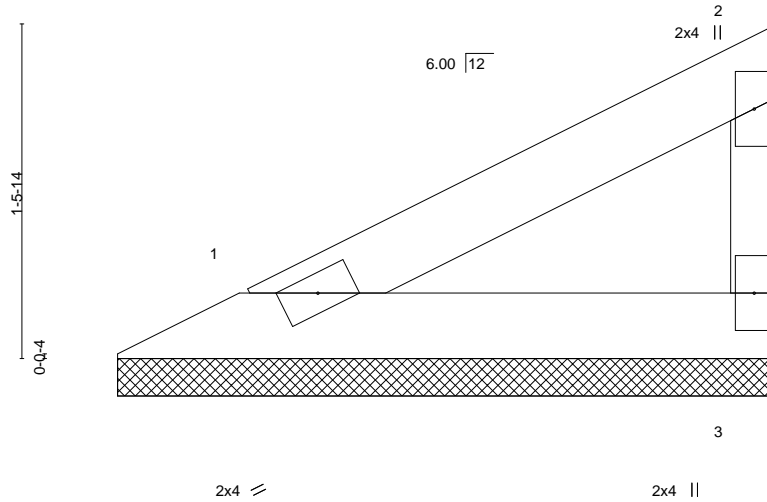
Job	Truss	Truss Type	Qty	Ply	Lot 91 RR	
400307	V6	Valley	1	1		I40979792
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 14 14:43:11 2020 Page 1

ID:vOmQjObOcWV19uGsdqjnyemAP-9XRrKkiK0SRSW0Fp23m6F5FX3HfVEgZCvpyXTRzQmik
2-11-12
2-11-12

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

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-11-12 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

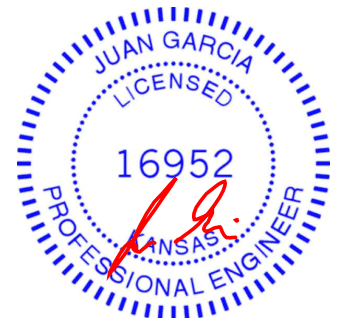
REACTIONS.

(size) 1=2-11-4, 3=2-11-4
Max Horz 1=47(LC 7)
Max Uplift 1=-13(LC 8), 3=-25(LC 8)
Max Grav 1=101(LC 1), 3=101(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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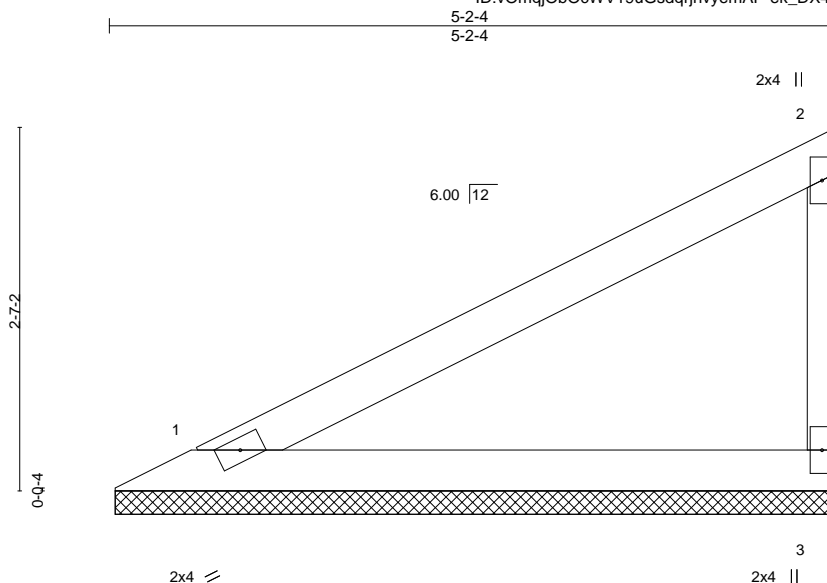
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR	I40979793
400307	V7	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 14 14:43:12 2020 Page 1

ID:vOmQjObOcWV19uGsdqrjnyemAP-ek_DX4jynmZJ89q?bmHLoloeGhyHz7pM7Sh5?tzQmij



Scale = 1:16.4

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 0.38	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.20	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: 13 lb	FT = 10%

LUMBER-

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

BRACING-

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

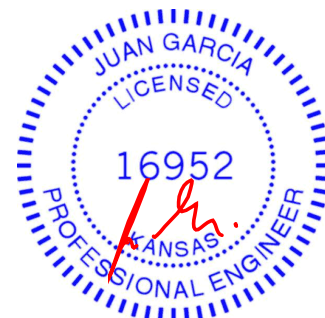
REACTIONS.

(size) 1=5-1-12, 3=5-1-12
Max Horz 1=93(LC 5)
Max Uplift 1=26(LC 8), 3=49(LC 8)
Max Grav 1=200(LC 1), 3=200(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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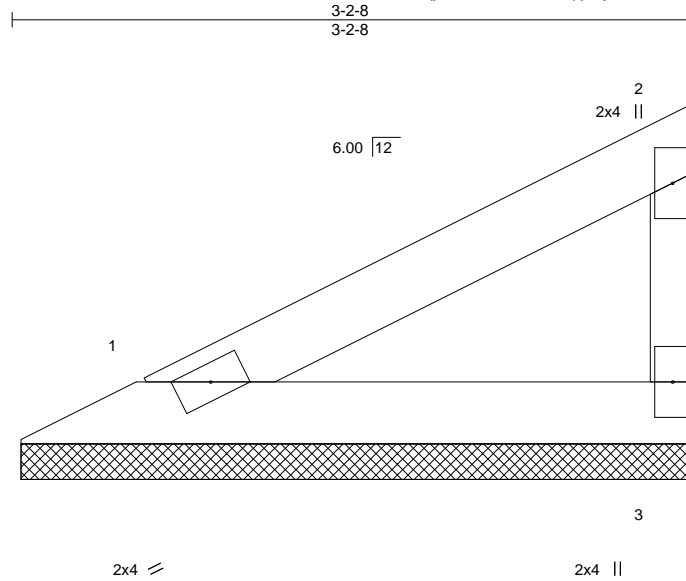
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR	I40979794
400307	V8	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 14 14:43:12 2020 Page 1

ID:vOmQjObOcWV19uGsdqjnyemAP-ek_DX4jynmZJ89q?bmHLoloiVh?az7pM7Sh5?tzQmij



Scale = 1:10.8

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 0.11	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 0.00	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 3-2-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=3-2-0, 3=3-2-0
Max Horz 1=52(LC 7)
Max Uplift 1=14(LC 8), 3=27(LC 8)
Max Grav 1=111(LC 1), 3=111(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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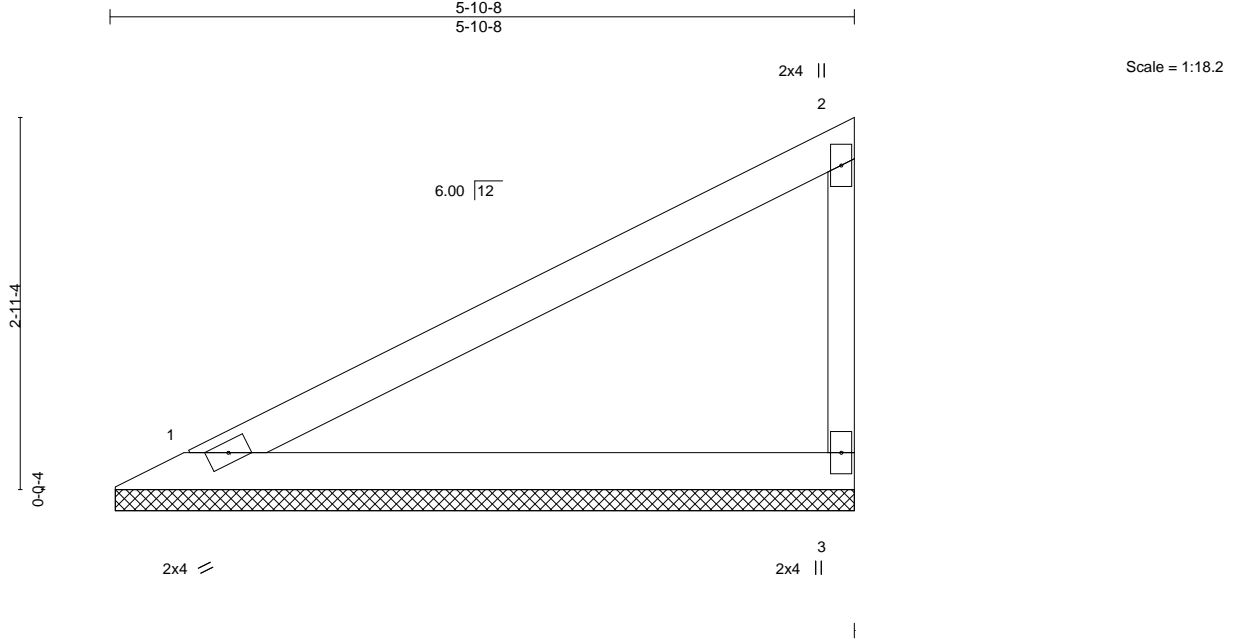
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR	I40979795
400307	V9	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 14 14:43:13 2020 Page 1

ID: vOmjqObOcWV19uGsdqjnvymAP-6wYblQjaY4hAJPB9UoaKWKmt5GMia3VM6ReXKzQmii



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 0.51	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.28	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: 15 lb	FT = 10%

LUMBER-

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

BRACING-

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

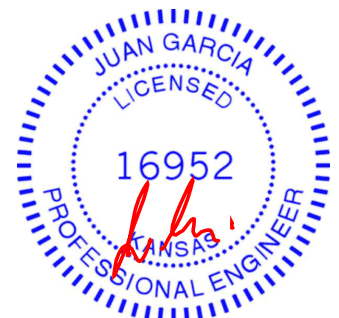
REACTIONS.

(size) 1=5-10-0, 3=5-10-0
Max Horz 1=107(LC 5)
Max Uplift 1=30(LC 8), 3=57(LC 8)
Max Grav 1=231(LC 1), 3=231(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.



April 14, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 91 RR	I40979796
400307	V10	Valley	1	1	Job Reference (optional)	

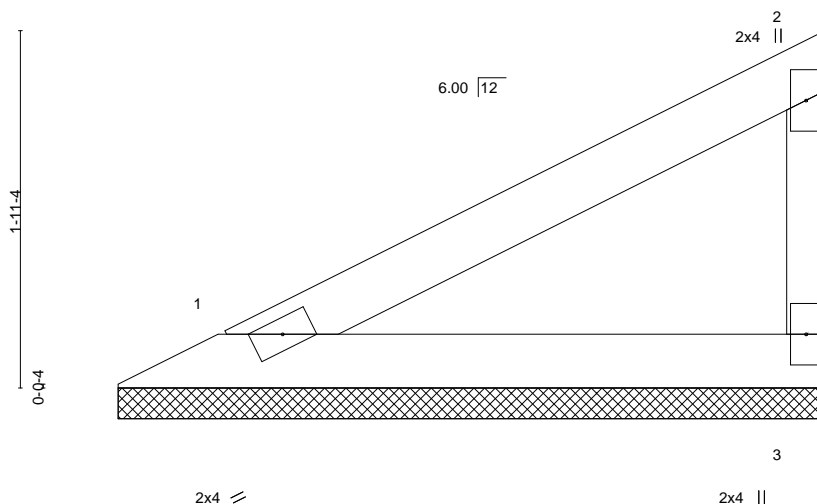
Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 14 14:43:07 2020 Page 1

ID:vOmqrObOcWV19uGsdqrjnyemAP-HmBKUNfpyEx01Ox1pDhA5F4rfGolsad_B_KKgZQmio

3-10-8
3-10-8

Scale = 1:12.5



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 0.18	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 0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 10 lb	FT = 10%

LUMBER-

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

BRACING-

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

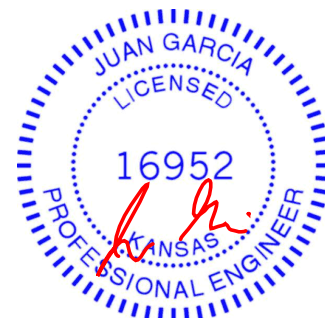
REACTIONS.

(size) 1=3-10-0, 3=3-10-0
Max Horz 1=66(LC 5)
Max Uplift 1=-18(LC 8), 3=-35(LC 8)
Max Grav 1=141(LC 1), 3=141(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.
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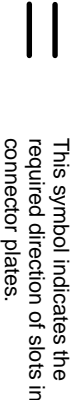
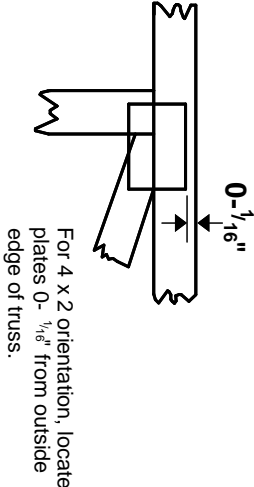
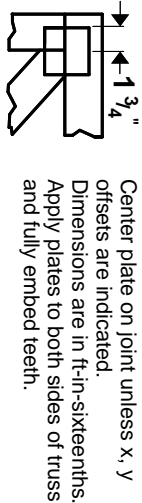
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



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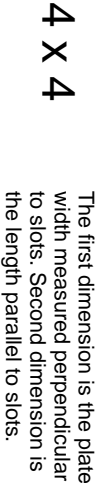
Symbols

PLATE LOCATION AND ORIENTATION

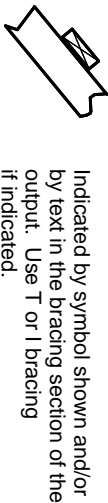


* Plate location details available in **MiTek 20/20** software or upon request.

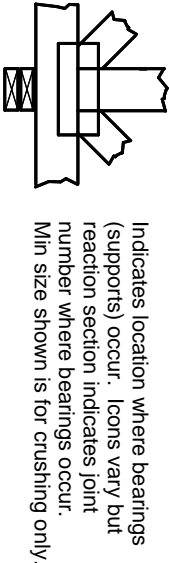
PLATE SIZE



LATERAL BRACING LOCATION

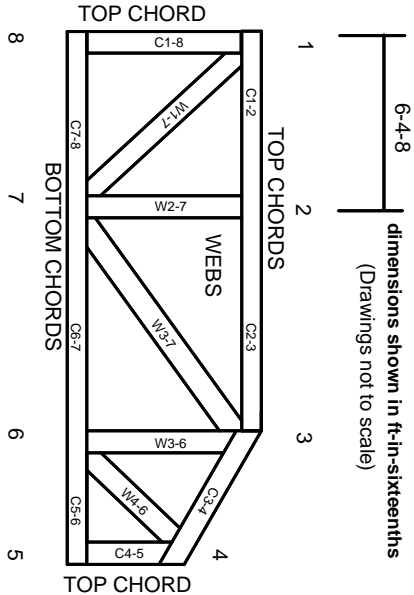


BEARING



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 section 6.3 These truss designs rely on lumber values established by others.

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MiTek Engineering Reference Sheet: MII-7473 rev. 10/03/2015



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 ware 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.