



RE: 400302
Lot 15 HT

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

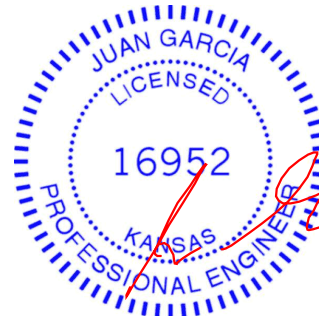
Floor Load: N/A psf

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

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I41303167	A1	5/14/2020	27	I41303193	G2	5/14/2020
2	I41303168	A2	5/14/2020	28	I41303194	H1	5/14/2020
3	I41303169	A3	5/14/2020	29	I41303195	H2	5/14/2020
4	I41303170	A4	5/14/2020	30	I41303196	H3	5/14/2020
5	I41303171	B1	5/14/2020	31	I41303197	H4	5/14/2020
6	I41303172	B2	5/14/2020	32	I41303198	H5	5/14/2020
7	I41303173	B3	5/14/2020	33	I41303199	H6	5/14/2020
8	I41303174	B4	5/14/2020	34	I41303200	J1	5/14/2020
9	I41303175	C1	5/14/2020	35	I41303201	J2	5/14/2020
10	I41303176	C2	5/14/2020	36	I41303202	J3	5/14/2020
11	I41303177	C3	5/14/2020	37	I41303203	J4	5/14/2020
12	I41303178	C4	5/14/2020	38	I41303204	J5	5/14/2020
13	I41303179	C5	5/14/2020	39	I41303205	J6	5/14/2020
14	I41303180	C6	5/14/2020	40	I41303206	J7	5/14/2020
15	I41303181	C7	5/14/2020	41	I41303207	J8	5/14/2020
16	I41303182	D1	5/14/2020	42	I41303208	J9	5/14/2020
17	I41303183	D2	5/14/2020	43	I41303209	J10	5/14/2020
18	I41303184	D3	5/14/2020	44	I41303210	J11	5/14/2020
19	I41303185	D4	5/14/2020	45	I41303211	J12	5/14/2020
20	I41303186	D5	5/14/2020	46	I41303212	J13	5/14/2020
21	I41303187	D6	5/14/2020	47	I41303213	J15	5/14/2020
22	I41303188	E1	5/14/2020	48	I41303214	J16	5/14/2020
23	I41303189	E2	5/14/2020	49	I41303215	J17	5/14/2020
24	I41303190	E3	5/14/2020	50	I41303216	J18	5/14/2020
25	I41303191	E4	5/14/2020	51	I41303217	J19	5/14/2020
26	I41303192	G1	5/14/2020	52	I41303218	J20	5/14/2020

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.



May 14, 2020



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

Site Information:

Project Customer: Project Name:
Lot/Block:
Address:
City, County:

Subdivision:

State:

No.	Seal#	Truss Name	Date
53	I41303219	J21	5/14/2020
54	I41303220	J22	5/14/2020
55	I41303221	J23	5/14/2020
56	I41303222	J24	5/14/2020
57	I41303223	J25	5/14/2020
58	I41303224	J26	5/14/2020
59	I41303225	J27	5/14/2020
60	I41303226	K1	5/14/2020
61	I41303227	K2	5/14/2020
62	I41303228	K3	5/14/2020
63	I41303229	K4	5/14/2020
64	I41303230	LAY1	5/14/2020
65	I41303231	LAY2	5/14/2020
66	I41303232	LAY3	5/14/2020
67	I41303233	LAY4	5/14/2020
68	I41303234	LAY5	5/14/2020
69	I41303235	LAY6	5/14/2020
70	I41303236	LAY7	5/14/2020
71	I41303237	LAY8	5/14/2020
72	I41303238	V1	5/14/2020
73	I41303239	V2	5/14/2020
74	I41303240	V3	5/14/2020
75	I41303241	V4	5/14/2020
76	I41303242	V5	5/14/2020
77	I41303243	V6	5/14/2020
78	I41303244	V7	5/14/2020
79	I41303245	V8	5/14/2020
80	I41303246	V9	5/14/2020
81	I41303247	V10	5/14/2020



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

Design Code: IRC2018/TPI2014

Design Program: MiTek 20/20 8.2

Wind Code: N/A

Wind Speed: 115 mph

Roof Load: 45.0 psf

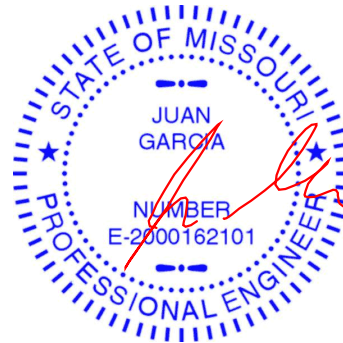
Floor Load: N/A psf

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

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
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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

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.



May 14, 2020



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Site Information:

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79	I41303245	V8	5/14/2020
80	I41303246	V9	5/14/2020
81	I41303247	V10	5/14/2020

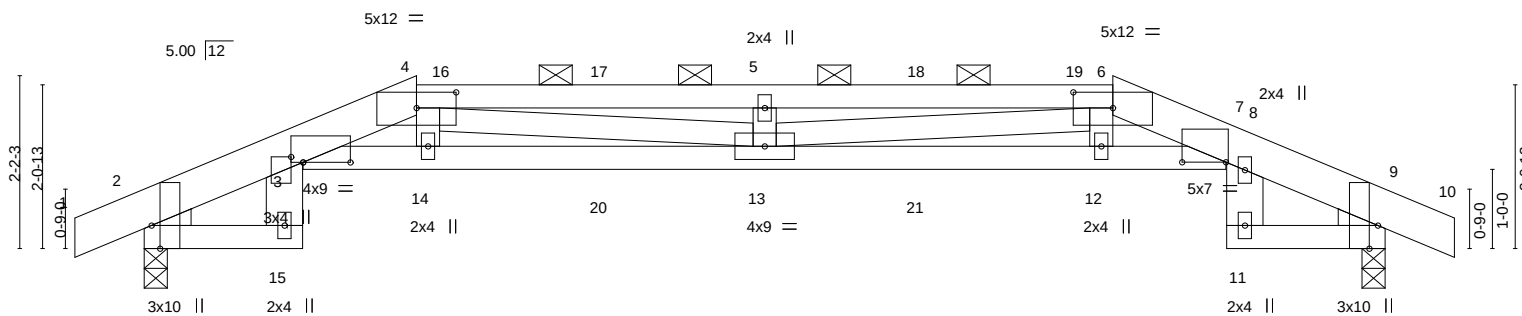
Job	Truss	Truss Type	Qty	Ply	Lot 15 HT	I41303167
400302	A1	HIP GIRDER	1	2	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.240 s Apr 4 2020 MiTek Industries, Inc. Thu May 14 11:56:00 2020 Page 1
ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-c9qP7nllJ?eLLWE6gAXvwWW1?85PtnPskkBDzGbFT

-0-10-8	2-0-0	3-5-4	7-10-0	12-2-12	13-8-0	15-8-0	16-6-8
0-10-8	2-0-0	1-5-4	4-4-12	4-4-12	1-5-4	2-0-0	0-10-8

Scale = 1:29.1



	2-0-0	3-5-4	7-10-0	12-2-12	13-8-0	15-8-0	
	2-0-0	1-5-4	4-4-12	4-4-12	1-5-4	2-0-0	
Plate Offsets (X,Y)--	[2:0-0-4,0-0-9], [2:0-0-7,0-5-2], [2:0-3-8,Edge], [3:0-7-3,0-0-0], [3:0-0-13,0-1-13], [4:0-6-0,0-2-6], [6:0-6-0,0-2-6], [7:0-6-10,0-0-0], [9:0-0-4,0-0-9], [9:0-0-7,0-5-2], [9:0-3-8,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 0.78	Vert(LL)	-0.20	13	>937	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.65	Vert(CT)	-0.37	13	>495	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.14	Horz(CT)	0.25	9	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.19	13	>976	240	Weight: 119 lb	FT = 10%

LUMBER-
TOP CHORD 2x6 SPF No.2 *Except*
4-6: 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2 *Except*
3-15,8-11: 2x6 SPF No.2
WEDGE
Left: 2x3 SPF No.2, Right: 2x3 SPF No.2

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

REACTIONS. (lb/size) 2=996/0-3-8, 9=998/0-3-8
Max Horz 2=-31(LC 30)
Max Uplift 2=-223(LC 4), 9=-221(LC 5)
Max Grav 2=996(LC 21), 9=998(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-552/142, 3-4=-3349/761, 4-16=-4564/1075, 16-17=-4564/1075, 5-17=-4564/1075,
5-18=-4564/1075, 18-19=-4564/1075, 6-19=-4564/1075, 6-7=-3397/771, 7-8=-40/283,
8-9=-541/131
BOT CHORD 3-14=-758/3515, 14-20=-731/3449, 13-20=-731/3449, 13-21=-732/3447, 12-21=-732/3447,
7-12=-727/3378
WEBS 4-13=-300/1135, 5-13=-311/147, 6-13=-304/1139, 6-12=-24/370

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: 2x4 - 1 row at 0-9-0 oc.
Webs connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed;
MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 223 lb uplift at joint 2 and 221 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.

Continued on page 2
This truss representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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.



May 14, 2020



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 15 HT
400302	A1	HIP GIRDER	1	2	I41303167

Wheeler Lumber, Waverly, KS 66871

8.240 s Apr 4 2020 MiTek Industries, Inc. Thu May 14 11:56:00 2020 Page 2

ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-c9qP7nliLJ?eLLWE6gAXvwWfW1?85PtnPskkBDzGbFT

NOTES-

- 11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 165 lb down and 103 lb up at 3-5-4, 72 lb down and 47 lb up at 3-10-0, 75 lb down and 47 lb up at 5-10-0, 75 lb down and 47 lb up at 7-10-0, 75 lb down and 47 lb up at 9-10-0, and 72 lb down and 47 lb up at 11-10-0, and 165 lb down and 103 lb up at 12-2-12 on top chord, and 76 lb down and 23 lb up at 3-5-4, 32 lb down and 23 lb up at 3-10-0, 32 lb down and 23 lb up at 5-10-0, 32 lb down and 23 lb up at 7-10-0, 32 lb down and 23 lb up at 9-10-0, and 32 lb down and 23 lb up at 11-10-0, and 76 lb down and 23 lb up at 12-2-0 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: 1-4=-70, 4-6=-70, 6-10=-70, 2-15=-20, 3-7=-20, 9-11=-20

Concentrated Loads (lb)

Vert: 4=-41(F) 6=-41(F) 14=-108(F) 13=-32(F) 5=-17(F) 12=-108(F) 16=-17(F) 17=-17(F) 18=-17(F) 19=-17(F) 20=-32(F) 21=-32(F)

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

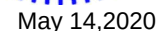
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

Scale = 1:27.0



Job	Truss	Truss Type	Qty	Ply	Lot 15 HT	I41303169
400302	A3	Hip	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:44:36 2020 Page 1

ID: bWuMDBN0tjF5cDvSpwhpH1zCzbQ-3xPFCOEck10iZ7xNSLh?X?GglsI4bu0DZmz6SRzGs6v

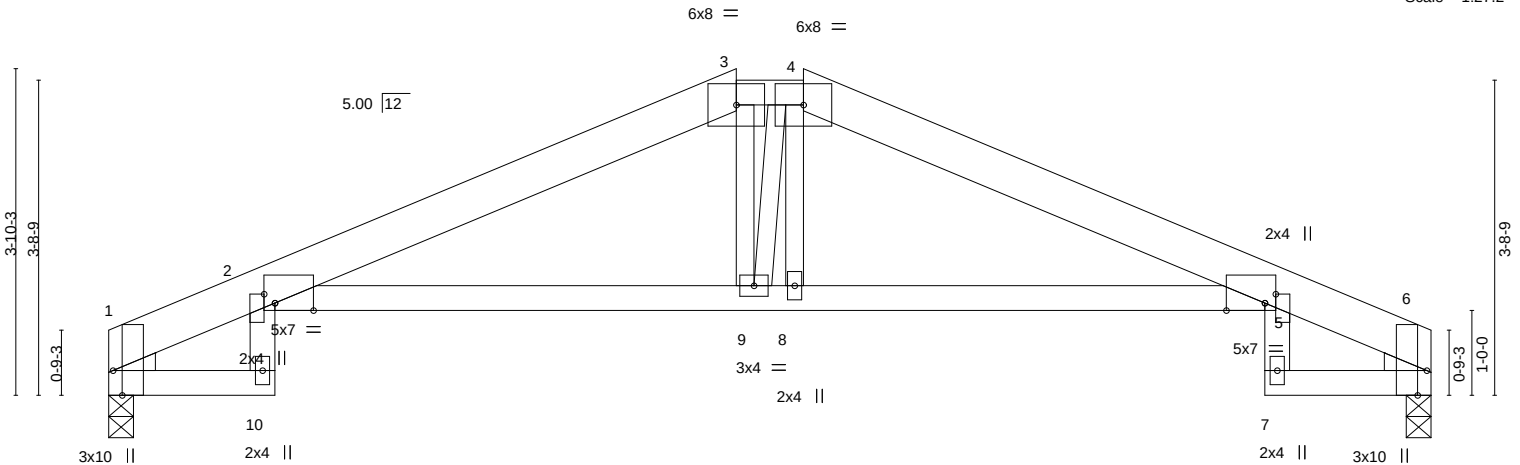
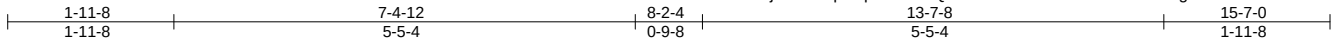


Plate Offsets (X,Y)--	[1:0-3-8,Edge], [1:0-0-4,0-4-10], [1:0-0-2,0-0-5], [2:0-1-4,0-1-9], [2:0-5-7,Edge], [5:0-1-4,0-1-9], [5:0-5-7,Edge], [6:0-0-2,0-0-5], [6:0-0-4,0-4-10], [6:0-3-8,Edge]
-----------------------	--

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.88	Vert(LL)	-0.21	2-9	>879	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.62	Vert(CT)	-0.39	2-9	>470	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.10	Horz(CT)	0.41	6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.15	2-9	>999	240	Weight: 56 lb	FT = 10%

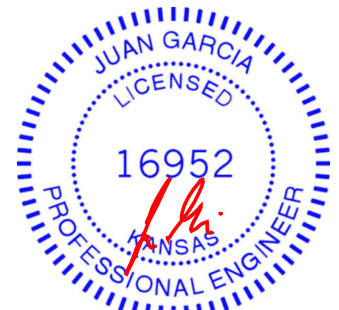
LUMBER-
TOP CHORD 2x6 SPF No.2 *Except*
3-4: 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-10,5-7: 2x4 SPF No.2
WEDGE
Left: 2x3 SPF No.2, Right: 2x3 SPF No.2

REACTIONS. (size) 1=0-3-8, 6=0-3-8
Max Horz 1=61(LC 8)
Max Uplift 1=-84(LC 8), 6=-84(LC 9)
Max Grav 1=688(LC 1), 6=688(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-399/84, 2-3=-1312/118, 3-4=-1222/143, 4-5=-1318/115, 5-6=-400/68
BOT CHORD 2-9=-76/1214, 8-9=-42/1223, 5-8=-45/1220
WEBS 3-9=-115/294

NOTES-

- Unbalanced roof live loads have been considered for this design.
- 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
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 6.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



May 14, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 15 HT	I41303170
400302	A4	Common	1	1		

Wheeler Lumber, Waverly, KS 66871

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ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-X7zdPkFEVL8YAGWZ02CE3DprIG8SKLKM0Pig?tzGs6u

Job Reference (optional)

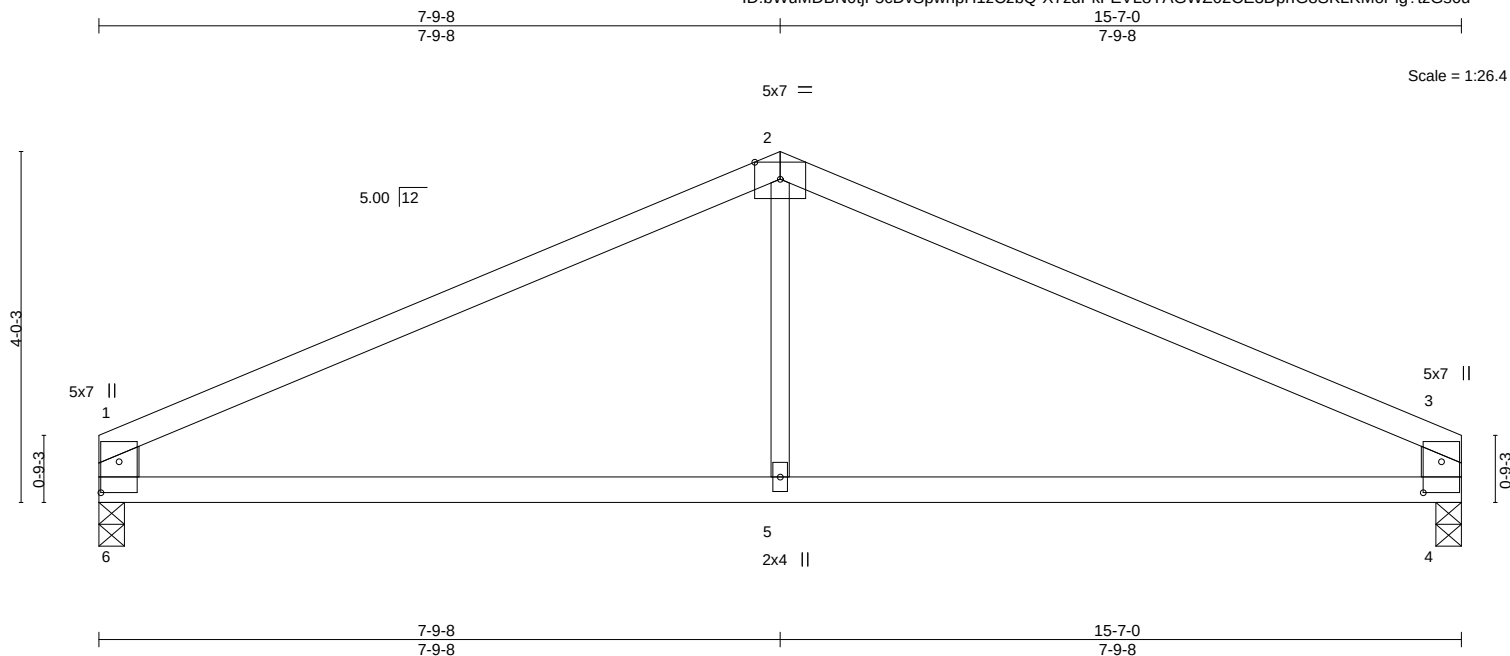


Plate Offsets (X,Y)--		[1:0-4-4,0-2-8], [3:0-4-4,0-2-8]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.86
TCDL 10.0	Lumber DOL	1.15	BC 0.42
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.10
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-R
			DEFL.
			in (loc) l/defl L/d
			Vert(LL) -0.07 4-5 >999 360
			Vert(CT) -0.16 4-5 >999 240
			Horz(CT) 0.02 4 n/a n/a
			Wind(LL) 0.03 5-6 >999 240
			PLATES
			MT20
			GRIP
			197/144
			Weight: 41 lb FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

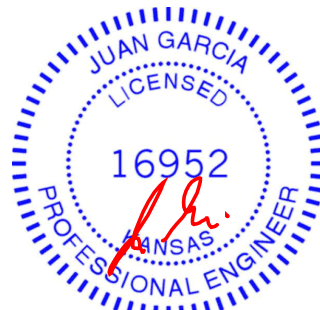
(size) 6=0-3-8, 4=0-3-8
Max Horz 6=-37(LC 13)
Max Uplift 6=-86(LC 8), 4=-86(LC 9)
Max Grav 6=681(LC 1), 4=681(LC 1)

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

TOP CHORD 1-2=-928/114, 2-3=-928/114, 1-6=-594/134, 3-4=-594/134
BOT CHORD 5-6=-44/758, 4-5=-44/758
WEBS 2-5=0/306

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 4.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 14, 2020

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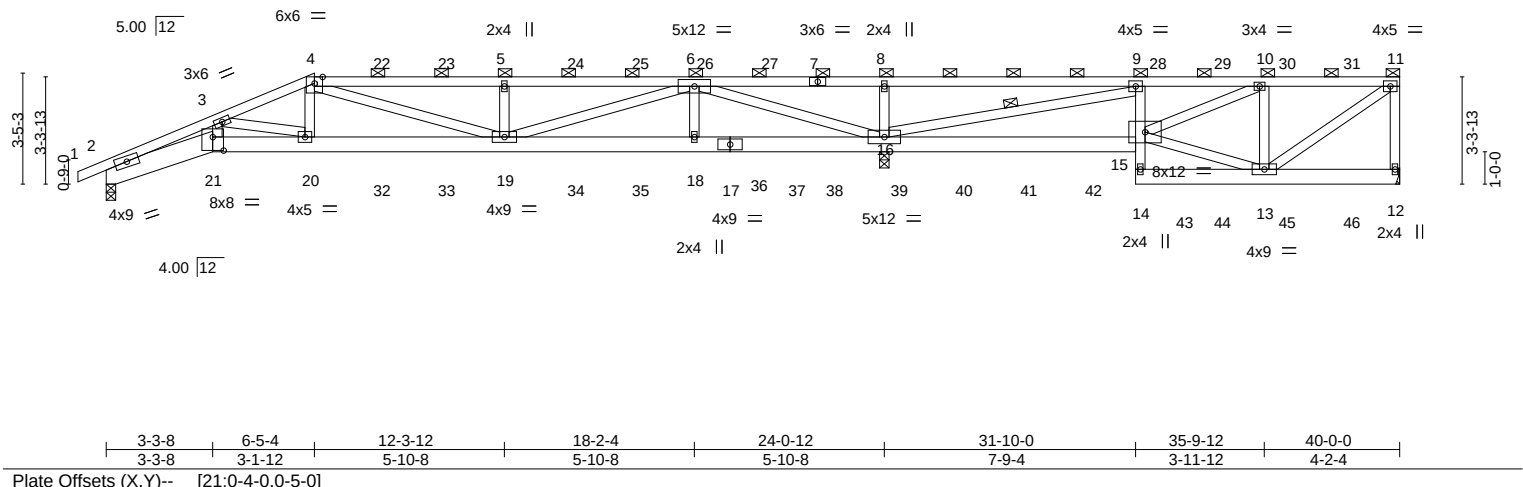
Job	Truss	Truss Type	Qty	Ply	Lot 15 HT	
400302	B1	Half Hip Girder	1	2		I41303171
Wheeler Lumber, Waverly, KS 66871						Job Reference (optional)

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ID:bWuMdbN0tjF5cDvSpwhpH1zCzbQ-xifm2mH7oGX71kF8hAlxhRMIT8kXWZpUNxKbCzGs6r

0-10-8	3-3-8	6-5-4	12-3-12	18-2-4	24-0-12	31-10-0	35-9-12	40-0-0
0-10-8	3-3-8	3-1-12	5-10-8	5-10-8	5-10-8	7-9-4	3-11-12	4-2-4

Scale = 1:71.3



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 0.85	Vert(LL)	-0.20	19	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.45	Vert(CT)	-0.36	19-20	>798		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.83	Horz(CT)	0.13	12	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.11	19	>999	Weight: 413 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 4-6-8 oc purlins, except end verticals, and 2-0-0 oc purlins (4-8-10 max.): 4-11.
BOT CHORD 2x6 SP 2400F 2.0E *Except*	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SPF No.2	WEBS 1 Row at midpt 9-16

REACTIONS. (size) 12=Mechanical, 2=0-3-8, 16=0-3-8 (req. 0-3-12)
Max Horz 2=99(LC 26)
Max Uplift 12=-83(LC 4), 2=-102(LC 4), 16=-311(LC 5)
Max Grav 12=966(LC 20), 2=1813(LC 1), 16=4796(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-6550/430, 3-4=-5177/324, 4-5=-5099/188, 5-6=-5096/187, 6-8=-167/3123, 8-9=-167/3123, 9-10=-1414/214, 10-11=-941/113, 11-12=-872/117
BOT CHORD 2-21=-472/5902, 20-21=-431/5452, 19-20=-342/4715, 18-19=-41/2182, 16-18=-41/2182, 15-16=-243/1520, 9-15=0/597
WEBS 3-21=-93/1278, 3-20=-674/109, 4-20=-55/1266, 4-19=0/553, 5-19=-788/173, 6-19=-192/3069, 6-18=0/272, 6-16=-5588/181, 8-16=-594/127, 9-16=-4688/383, 13-15=-86/877, 10-15=-134/516, 10-13=-759/207, 11-13=-100/1120

- 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 0-9-0 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.
 - WARNING: Required bearing size at joint(s) 16 greater than input bearing size.
 - Refer to girder(s) for truss to truss connections.
 - Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12 except (jt=lb) 2=102, 16=311.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and Contr to standard ANSI/TPI 1.



May 14, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 15 HT
400302	B1	Half Hip Girder	1	2	I41303171

Wheeler Lumber, Waverly, KS 66871

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ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-xifm2mH7oGX71kF8hAlxhRMIT8kXWZpUNxKbCzGs6r

- NOTES-**
- 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 14) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 121 lb down and 51 lb up at 6-5-4, 103 lb down and 51 lb up at 8-6-0, 103 lb down and 51 lb up at 10-6-0, 103 lb down and 51 lb up at 12-6-0, 103 lb down and 51 lb up at 14-6-0, 103 lb down and 51 lb up at 16-6-0, 103 lb down and 51 lb up at 18-6-0, 103 lb down and 51 lb up at 20-6-0, 122 lb down and 70 lb up at 32-6-0, 122 lb down and 70 lb up at 34-6-0, and 122 lb down and 70 lb up at 36-6-0, and 122 lb down and 70 lb up at 38-6-0 on top chord, and 515 lb down and 123 lb up at 6-5-4, 89 lb down at 8-6-0, 89 lb down at 10-6-0, 89 lb down at 12-6-0, 89 lb down at 14-6-0, 89 lb down at 16-6-0, 89 lb down at 18-6-0, 89 lb down at 20-6-0, 255 lb down and 44 lb up at 22-6-0, 255 lb down and 44 lb up at 24-6-0, 255 lb down and 44 lb up at 26-6-0, 255 lb down and 44 lb up at 28-6-0, 255 lb down and 44 lb up at 30-6-0, 75 lb down at 32-6-0, 75 lb down at 34-6-0, and 75 lb down at 36-6-0, and 75 lb down at 38-6-0 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: 1-4=-70, 4-11=-70, 2-21=-20, 15-21=-20, 12-14=-20
- Concentrated Loads (lb)
- Vert: 4=-98(F) 20=-515(F) 19=-89(F) 5=-98(F) 22=-98(F) 23=-98(F) 24=-98(F) 25=-98(F) 26=-98(F) 27=-98(F) 28=-122(F) 29=-122(F) 30=-122(F) 31=-122(F) 32=-89(F) 33=-89(F) 34=-89(F) 35=-89(F) 36=-89(F) 37=-89(F) 38=-255(F) 39=-255(F) 40=-255(F) 41=-255(F) 42=-255(F) 43=-58(F) 44=-58(F) 45=-58(F) 46=-58(F)

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 15 HT	I41303172
400302	B2	Hip	1	1		

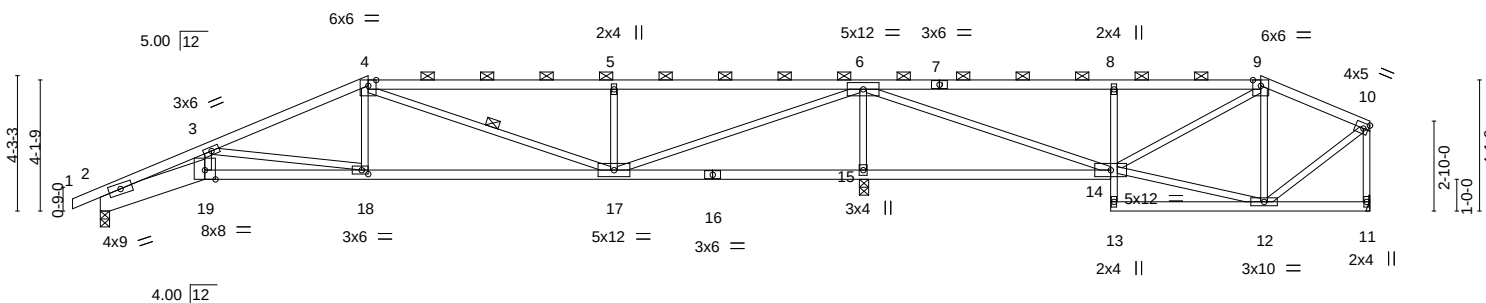
Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:44:41 2020 Page 1

ID: bWuMDBN0tjF5cDvSpwhpH1zCzbQ-QvC8F5lIzaf_fupKFuHAE3zYrtN5GzCjy1gt8ezGs6q

-0-10-8	3-3-8	8-5-4	16-2-3	24-0-7	31-10-0	36-6-12	40-0-0
0-10-8	3-3-8	5-1-12	7-8-15	7-10-3	7-9-9	4-8-12	3-5-4

Scale = 1:72.6



	3-3-8	8-5-4	16-2-3	24-0-12	31-10-0	36-6-12	40-0-0
	3-3-8	5-1-12	7-8-15	7-10-9	7-9-4	4-8-12	3-5-4

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

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.83	Vert(LL)	-0.20 18-19	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.95	Vert(CT)	-0.38 17-18	>759	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.87	Horz(CT)	0.13 15	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.11 18-19	>999	240	Weight: 150 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2 *Except*
 2-19: 2x8 SP DSS, 8-13: 2x3 SPF No.2
 WEBS 2x3 SPF No.2

BRACING-

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

REACTIONS.

(size) 2=0-3-8, 11=Mechanical, 15=0-3-8
 Max Horz 2=86(LC 7)
 Max Uplift 2=-22(LC 4), 11=-11(LC 4), 15=-100(LC 5)
 Max Grav 2=984(LC 19), 11=509(LC 20), 15=2199(LC 1)

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

TOP CHORD 2-3=-3580/80, 3-4=-1804/44, 4-5=-1218/95, 5-6=-1216/93, 6-8=-525/74, 8-9=-505/76, 9-10=-385/43, 10-11=-484/25
 BOT CHORD 2-19=-140/3239, 18-19=-129/2963, 17-18=-59/1624, 15-17=-1176/52, 14-15=-1176/52, 8-14=-471/113
 WEBS 3-19=0/1012, 3-18=-1345/128, 4-18=0/422, 4-17=-438/34, 5-17=-581/137, 6-17=-113/2539, 6-15=-2008/199, 6-14=-88/1679, 12-14=0/308, 10-12=0/398

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 11, 15.
- This truss 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.



May 14, 2020

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 15 HT	I41303173
400302	B3	Hip	1	1		

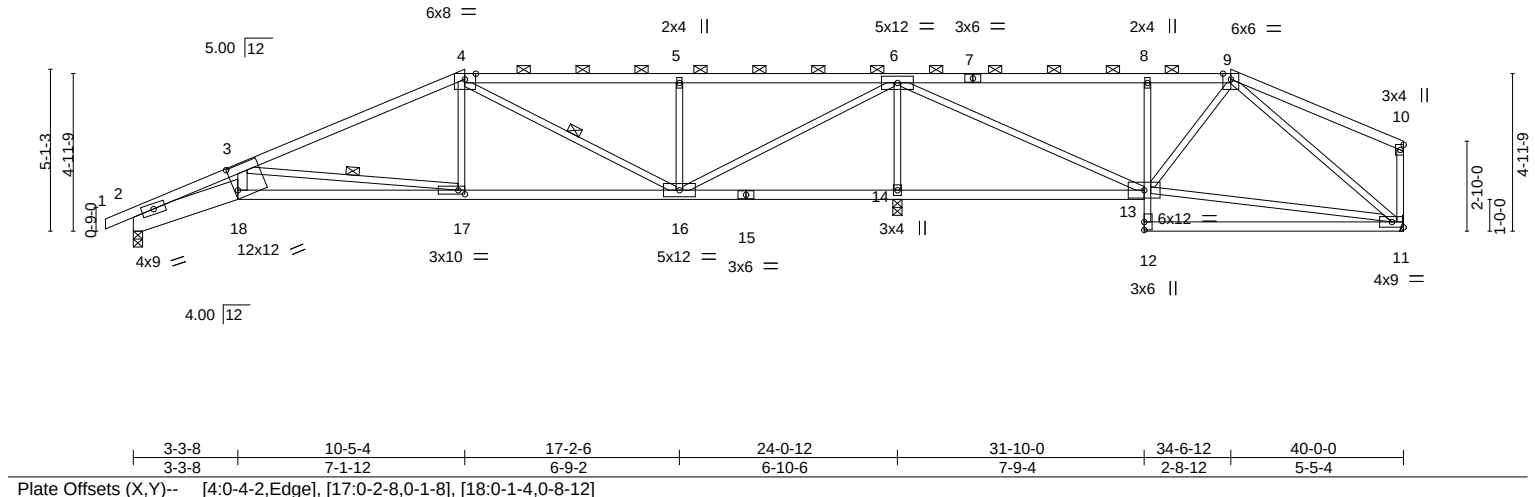
Wheeler Lumber, Waverly, KS 66871

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ID: bWuMdBNOtjF5cDvSpwhpH1zCzbQ-MHKugnK?5BviuBzjMJJeJU3sSg2OkuPFAL9_CXzGs6o

-0-10-8	3-3-8	10-5-4	17-2-6	24-0-12	31-10-0	34-6-12	40-0-0
0-10-8	3-3-8	7-1-12	6-9-2	6-10-6	7-9-4	2-8-12	5-5-4

Scale = 1:72.6



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 0.88	Vert(LL)	-0.23 17-18	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.96	Vert(CT)	-0.45 17-18	>632	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.83	Horz(CT)	0.15 14	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.12 17-18	>999	240	Weight: 156 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied, except end verticals, and
BOT CHORD 2x4 SPF No.2 *Except*	2-0-0 oc purlins (6-0-0 max.): 4-9.
2-18: 2x8 SP DSS, 8-12: 2x3 SPF No.2	BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 2x3 SPF No.2 *Except*	WEBS 1 Row at midpt 3-17, 4-16
3-18: 2x4 SPF No.2	

REACTIONS. (size) 2=0-3-8, 14=0-3-8 (req. 0-3-11), 11=Mechanical
Max Horz 2=87(LC 7)
Max Uplift 2=-19(LC 8), 14=-92(LC 5), 11=-13(LC 9)
Max Grav 2=931(LC 19), 14=2341(LC 1), 11=473(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3575/100, 3-4=-1357/42, 4-5=-580/88, 5-6=-577/87, 6-8=-331/75, 8-9=-314/76
BOT CHORD 2-18=-124/3261, 17-18=-125/2932, 16-17=-26/1164, 14-16=-1293/49, 13-14=-1293/49,
8-13=-442/105
WEBS 3-18=0/1042, 3-17=-1771/188, 4-17=0/438, 4-16=-767/36, 5-16=-493/115,
6-16=-76/2018, 6-14=-2161/188, 6-13=-65/1565, 9-11=-333/25

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); 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) 14 greater than input bearing size.
- Refer to girder(s) for truss to truss connections.
- Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 14, 11.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



May 14, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 15 HT	I41303174
400302	B4	Hip	1	1		

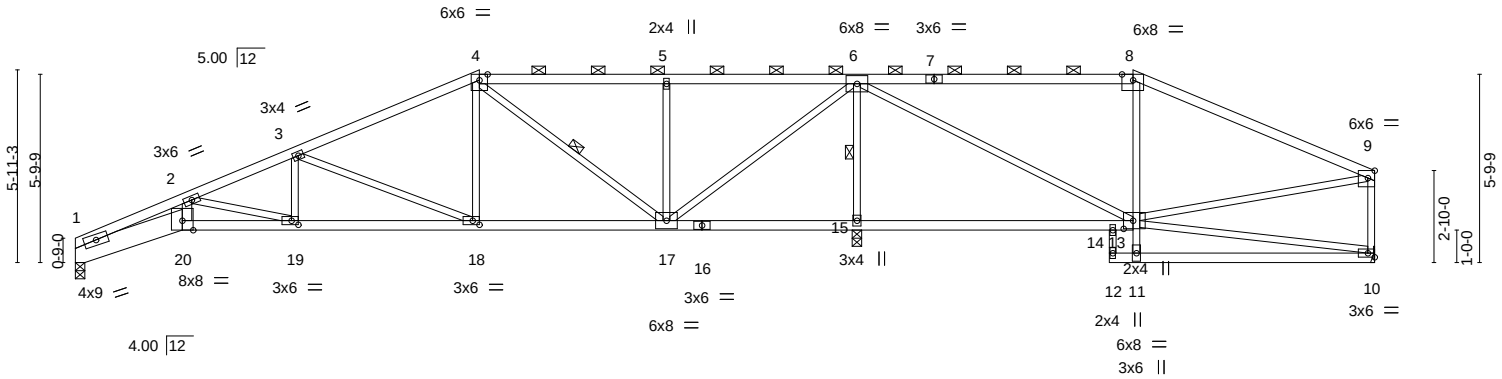
Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:44:44 2020 Page 1

ID: bWuMDBN0tjF5cDvSpwhpH1zCzbQ-qUuGt7LdsV1ZWLYvw0qtrhb0q4Q7TKWOP?vXkzzGs6n

3-3-8	6-9-2	12-5-4	18-2-6	24-0-12	31-10-0	32-6-12	40-0-0
3-3-8	3-5-9	5-8-2	5-9-2	5-10-6	7-9-4	0-8-12	7-5-4

Scale = 1:70.9



3-3-8	6-9-2	12-5-4	18-2-6	24-0-12	31-10-0	32-6-12	40-0-0
3-3-8	3-5-9	5-8-2	5-9-2	5-10-6	7-9-4	0-8-12	7-5-4

Plate Offsets (X,Y)-- [8:0-4-2,Edge], [9:0-2-8,Edge], [13:0-3-8,0-3-0], [18:0-2-8,0-1-8], [19:0-2-8,0-1-8]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.91	Vert(LL)	-0.15 19-20	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.87	Vert(CT)	-0.27 19-20	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.84	Horz(CT)	0.11 15	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.08 19-20	>999	240	Weight: 159 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2 *Except*
 1-20: 2x8 SP DSS, 12-14: 2x3 SPF No.2
 WEBS 2x3 SPF No.2 *Except*
 2-20: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-10-11 oc purlins, except end verticals, and 2-0-0 oc purlins (3-2-14 max.): 4-8.
 BOT CHORD Rigid ceiling directly applied or 5-4-12 oc bracing.
 WEBS 1 Row at midpt 4-17, 6-15

REACTIONS.

(size) 1=0-3-8, 10=Mechanical, 15=0-3-8 (req. 0-3-11)
 Max Horz 1=86(LC 7)
 Max Uplift 1=-16(LC 8), 10=-29(LC 9), 15=-72(LC 5)
 Max Grav 1=849(LC 19), 10=485(LC 20), 15=2360(LC 1)

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

TOP CHORD 1-2=-3259/106, 2-3=-1857/57, 3-4=-989/55, 4-5=-294/87, 5-6=-292/85, 6-8=-325/67, 8-9=-441/72, 9-10=-429/64
 BOT CHORD 1-20=-133/2940, 19-20=-121/2643, 18-19=-42/1708, 17-18=-12/833, 15-17=-1087/59, 14-15=-1087/59, 13-14=-1062/88, 12-14=-343/0
 WEBS 2-20=-7/934, 2-19=-966/81, 3-18=-933/100, 4-18=0/472, 4-17=-823/35, 5-17=-384/89, 6-17=-35/1607, 6-15=-2198/157, 6-13=-6/1387, 11-13=0/544, 8-13=-492/105, 9-13=-54/271, 3-19=0/339

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.
- WARNING: Required bearing size at joint(s) 15 greater than input bearing size.
- 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 100 lb uplift at joint(s) 1, 10, 15.
- This truss 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.



May 14, 2020

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 15 HT	I41303175
400302	C1	Hip	1	1		

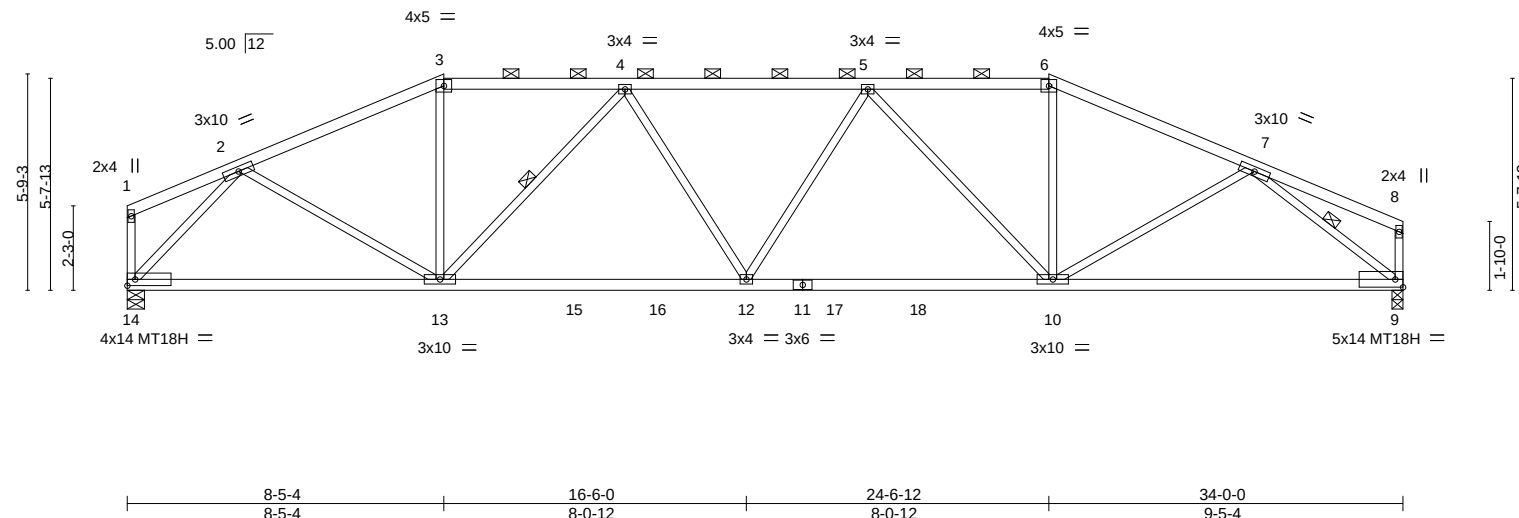
Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:44:45 2020 Page 1

ID: bWuMDBN0tjF5cDvSpwhpH1zCzbQ-IgSf5TLFdo9Q8V75Ukl6Ou8HSUkUClgYefe5HQzGs6m

3-1-1	8-5-4	13-3-3	19-8-13	24-6-12	29-11-0	34-0-0
3-1-1	5-4-4	4-9-15	6-5-10	4-9-15	5-4-5	4-1-0

Scale = 1:61.4



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 0.53	Vert(LL)	-0.20 12-13	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.99	Vert(CT)	-0.36 12-13	>999	240	MT18H	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.97	Horz(CT)	0.10 9	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.10 12	>999	240		
								Weight: 129 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 14=0-5-8, 9=0-3-8
 Max Horz 14=-70(LC 6)
 Max Uplift 14=-184(LC 4), 9=-178(LC 5)
 Max Grav 14=1597(LC 2), 9=1595(LC 2)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-2137/304, 3-4=-1912/300, 4-5=-2557/403, 5-6=-2060/319, 6-7=-2298/324
 BOT CHORD 13-14=-189/1300, 12-13=-341/2434, 10-12=-349/2493, 9-10=-250/1689
 WEBS 2-13=-31/764, 3-13=-18/555, 4-13=-842/191, 4-12=0/281, 5-10=-737/178, 6-10=-23/602, 7-10=0/538, 2-14=-1886/303, 7-9=-2079/328

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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 14=184, 9=178.
- This truss 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.



May 14, 2020

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

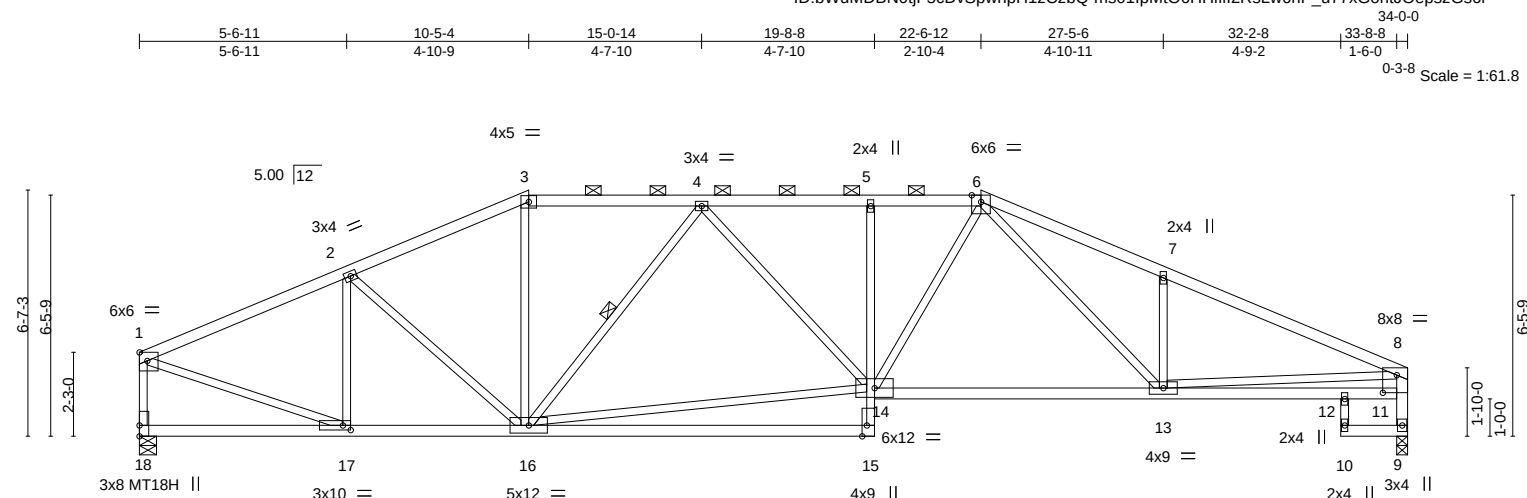
Job	Truss	Truss Type	Qty	Ply	Lot 15 HT	I41303176
400302	C2	Hip	1	1		

Wheeler Lumber, Waverly, KS 66871

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ID:bWuMdbN0tjF5cDvSpwhpH1zCzbQ-ms01lpMtO6HHfil2RsLw6hP_u77xGohtJOepszGs6l

Job Reference (optional)



Job	Truss	Truss Type	Qty	Ply	Lot 15 HT	I41303177
400302	C3	Hip	1	1		

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:44:48 2020 Page 1
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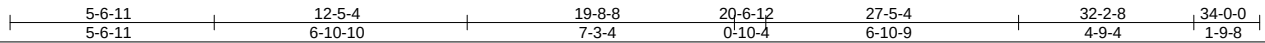
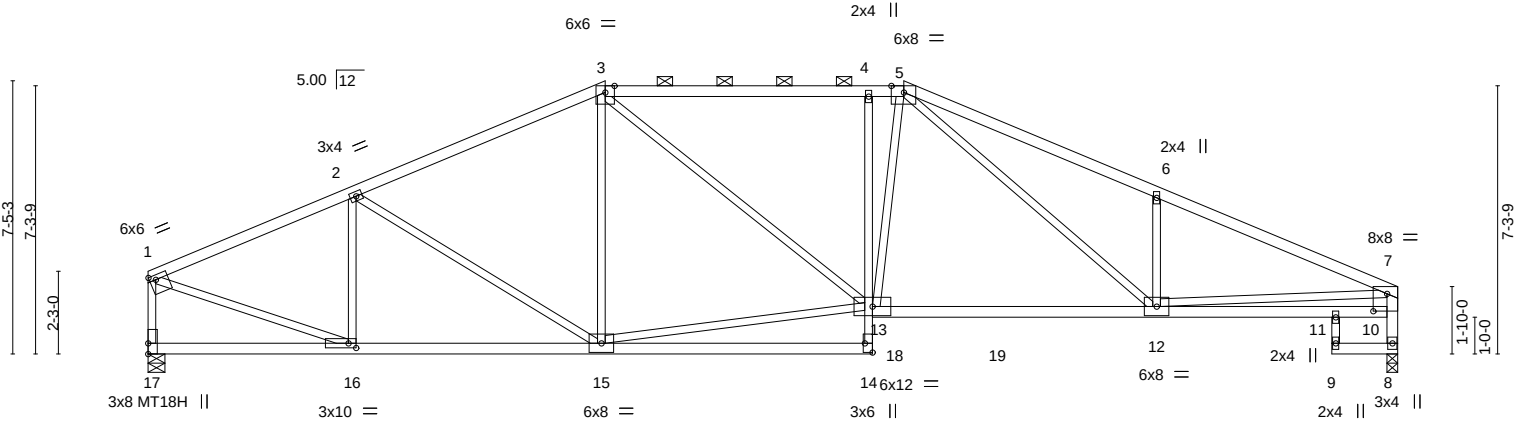


Plate Offsets (X,Y)--		[1:0-2-0,0-1-8], [5:0-4-2,Edge], [7:0-4-8,0-5-11], [10:0-0-0,0-1-12], [14:Edge,0-2-8], [16:0-2-8,0-1-8]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.93
TCDL 10.0	Lumber DOL	1.15	BC 0.97
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.70
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S
			DEFL.
			in (loc) l/defl L/d
			Vert(LL) -0.30 12-13 >999 360
			Vert(CT) -0.53 12-13 >766 240
			Horz(CT) 0.10 8 n/a n/a
			Wind(LL) 0.12 12-13 >999 240
			PLATES
			MT20 197/144
			MT18H 197/144
			Weight: 143 lb FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
4-14,9-11: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
7-8: 2x4 SPF 2100F 1.8E

BRACING-

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

REACTIONS.

(size) 17=0-5-8, 8=0-3-8
Max Horz 17=-67(LC 4)
Max Uplift 17=-154(LC 8), 8=-163(LC 9)
Max Grav 17=1577(LC 2), 8=1610(LC 2)

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

TOP CHORD 1-2=-1964/197, 2-3=-2024/259, 3-4=-2238/324, 4-5=-2242/320, 5-6=-2937/413,
6-7=-2943/284, 1-17=-1492/179, 8-10=-1537/177, 7-10=-1466/194
BOT CHORD 15-16=-182/1769, 4-13=-546/214, 12-13=-172/2159, 11-12=-94/621, 10-11=-91/705
WEBS 2-16=-489/133, 13-15=-123/1781, 3-13=-93/657, 5-13=-112/713, 5-12=-228/688,
6-12=-465/261, 7-12=-160/2043, 1-16=-160/1839

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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 17=154, 8=163.
- This truss 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.



May 14, 2020

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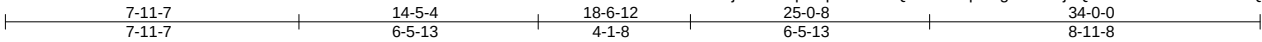
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 15 HT	I41303178
400302	C4	Hip	1	1		

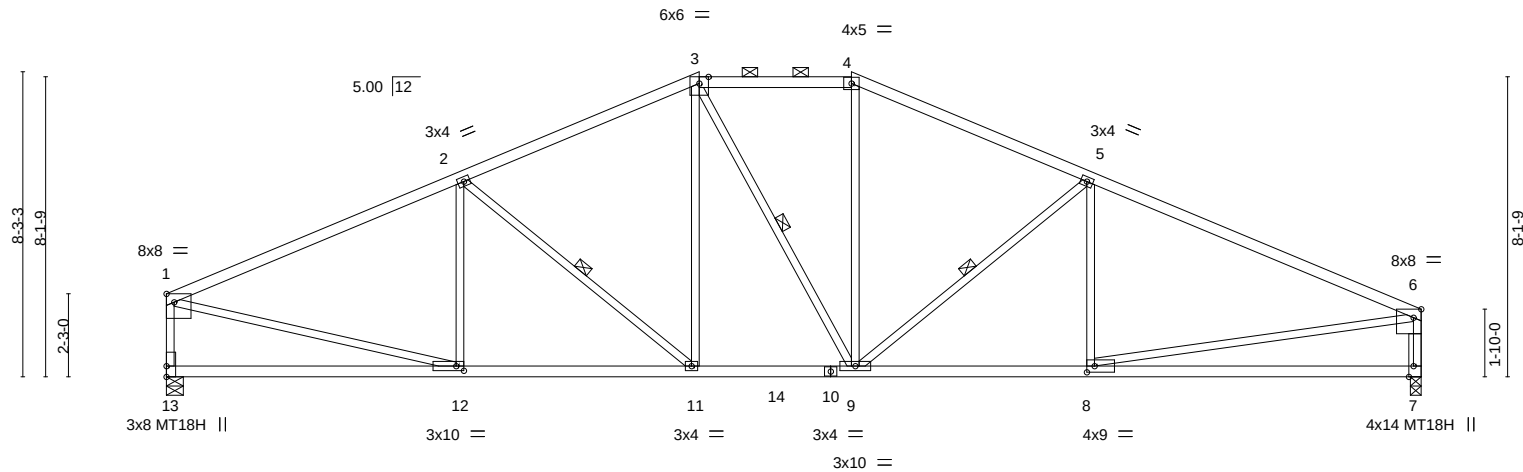
Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:44:49 2020 Page 1

ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-BRh9xqOmg1frc6RtjZQ2YkJuS57k8eU7ZHclQBzGs6i



Scale = 1:62.4



	7-11-7	14-5-4	18-6-12	25-0-8	34-0-0
	7-11-7	6-5-13	4-1-8	6-5-13	8-11-8

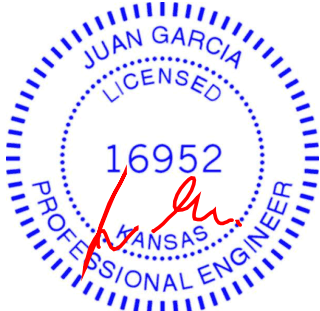
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.85	Vert(LL)	-0.18 7-8	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.84	Vert(CT)	-0.38 7-8	>999	240	MT18H	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.66	Horz(CT)	0.06 7	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.07 8-9	>999	240		
								Weight: 137 lb	FT = 10%

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

REACTIONS. (size) 13=0-5-8, 7=0-3-8
Max Horz 13=-64(LC 4)
Max Uplift 13=-172(LC 8), 7=-181(LC 9)
Max Grav 13=1581(LC 2), 7=1578(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-2146/232, 2-3=-1907/229, 3-4=-1701/255, 4-5=-1932/245, 5-6=-2338/261,
1-13=-1455/211, 6-7=-1435/226
BOT CHORD 11-12=-201/1910, 9-11=-69/1682, 8-9=-176/2076
WEBS 2-12=-287/134, 2-11=-366/177, 3-11=-55/417, 4-9=-31/440, 5-9=-526/204,
1-12=-136/1869, 6-8=-129/1925

- 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.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 13=172, 7=181.
 - This truss 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.



May 14,2020

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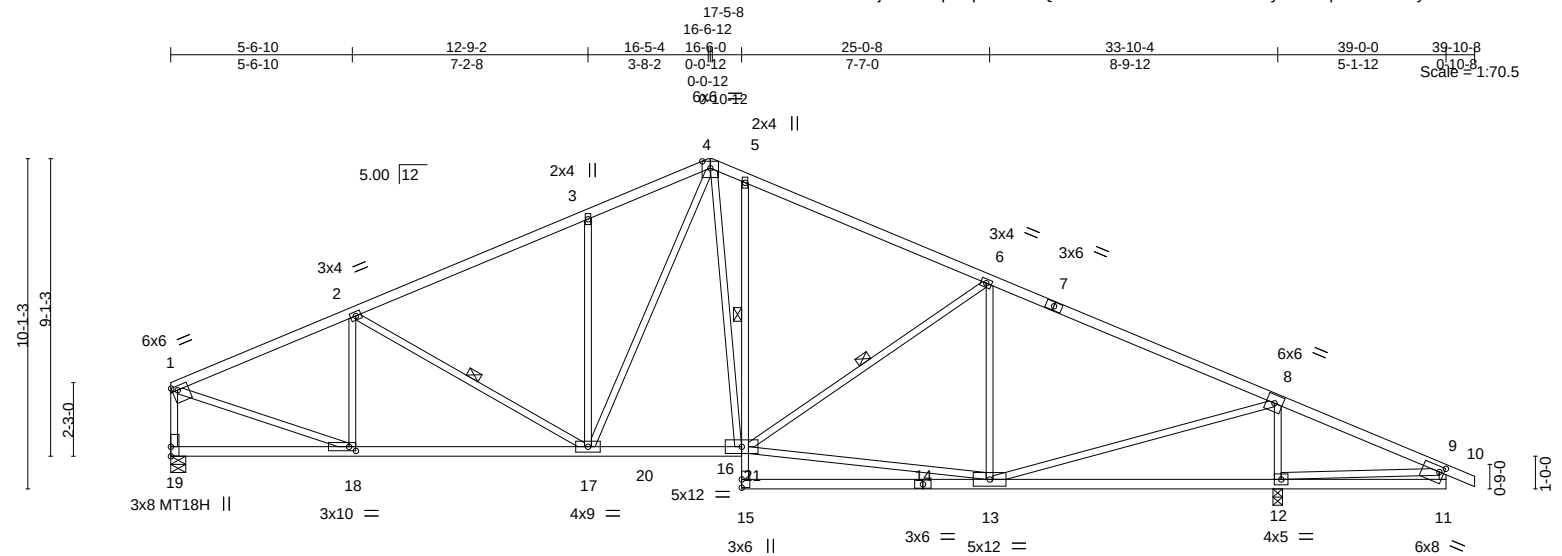
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 15 HT	
400302	C5	Hip	1	1		I41303179
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

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ID:BWuMDBN0tjF5cDvSpwhpH1zCzbQ-fdFX8APORLnEG?3HHxH5yr4cVWpt5HHnxMsydzGs6h



		5-6-10		11-0-5		16-6-0		17-5-8		25-0-8		33-10-4		34-0-0		39-0-0	
		5-6-10		5-5-11		5-5-11		0-11-8		7-7-0		8-9-12		0-1-12		5-0-0	
Plate Offsets (X,Y)--		[1:0-2-0,0-1-8], [11:0-1-2,0-0-8], [11:0-1-12,0-2-0], [18:0-2-8,0-1-8]															
LOADING (psf)		SPACING- 2-0-0				CSI.				DEFL. in (loc) l/defl L/d				PLATES GRIP			
TCLL	25.0	Plate Grip DOL 1.15				TC	0.82			Vert(LL)	-0.15	13-15	>999	360	MT20	197/144	
TCDL	10.0	Lumber DOL 1.15				BC	0.66			Vert(CT)	-0.29	13-15	>999	240	MT18H	197/144	
BCLL	0.0 *	Rep Stress Incr YES				WB	0.69			Horz(CT)	0.06	12	n/a	n/a			
BCDL	10.0	Code IRC2018/TPI2014				Matrix-S			Wind(LL)	0.08	16-17	>999	240		Weight: 169 lb FT = 10%		

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2 *Except*
 5-15: 2x3 SPF No.2
 WEBS 2x3 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
 6-0-0 oc bracing: 12-13,11-12.
 1 Row at midpt 5-16
 WEBS 1 Row at midpt 2-17, 6-16

REACTIONS.

(size) 19=0-5-8, 12=0-3-8
 Max Horz 19=-190(LC 9)
 Max Uplift 19=-187(LC 8), 12=-310(LC 9)
 Max Grav 19=1537(LC 2), 12=2145(LC 2)

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

TOP CHORD 1-2=-1916/240, 2-3=-1928/259, 3-4=-1903/362, 4-5=-1711/336, 5-6=-1747/258,
 6-8=-1787/239, 8-9=-176/514, 1-19=-1457/210
 BOT CHORD 17-18=-218/1725, 16-17=-28/1439, 5-16=-423/222, 12-13=-386/186
 WEBS 2-18=-460/152, 3-17=-432/223, 4-17=-222/721, 4-16=-268/777, 6-13=-569/162,
 8-13=-161/2007, 8-12=-1882/390, 1-18=-189/1795, 9-12=-339/193, 13-16=-49/1466

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 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 19=187, 12=310.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 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 15 HT	I41303180
400302	C6	Hip	1	1		

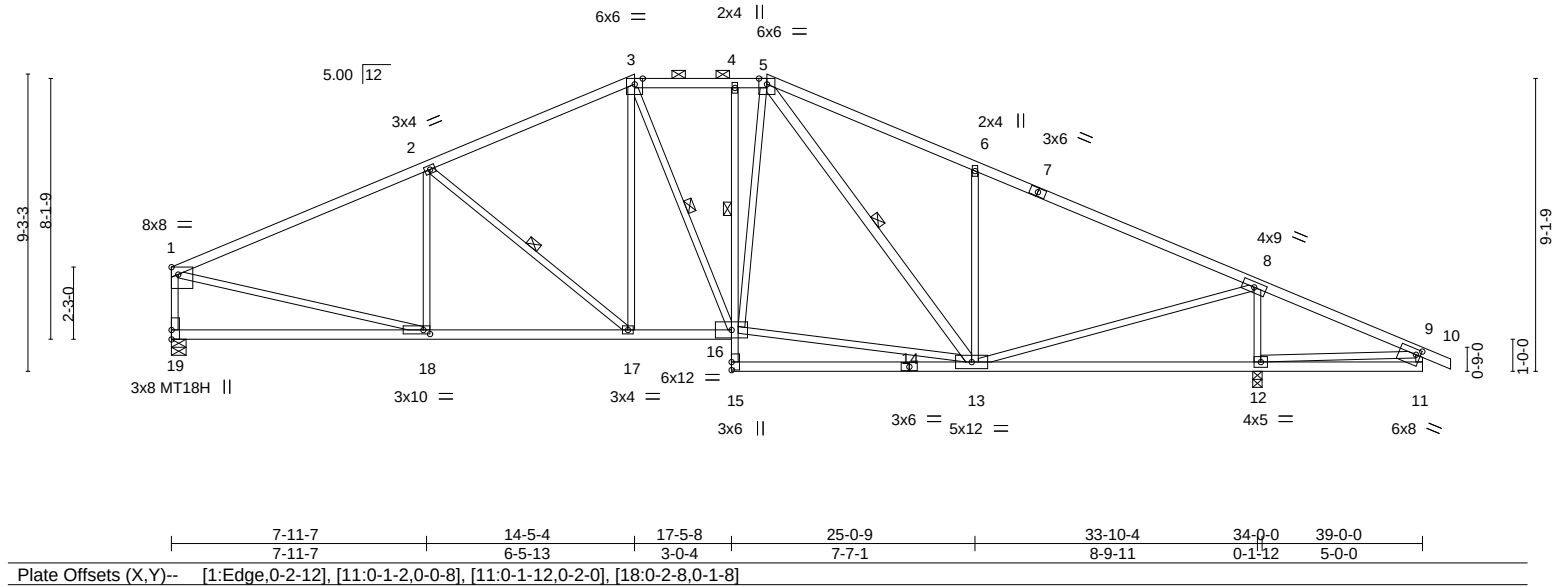
Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:44:52 2020 Page 1

ID: bWuMdBNOtjF5cDvSpwhpH1zCzbQ-b0NIZsRezy1QTa9SOizlANxQLJDHL_9aFFry0WzGs6f

7-11-7	14-5-4	17-5-8	18-6-12	25-0-9	33-10-4	39-0-0	39-10-8
7-11-7	6-5-13	3-0-4	1-1-4	6-5-14	8-9-11	5-1-12	0-10-8

Scale = 1:71.8



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.81	Vert(LL)	-0.12 18-19	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.59	Vert(CT)	-0.25 18-19	>999	240	MT18H	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.67	Horz(CT)	0.05 12	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.07 17-18	>999	240	Weight: 174 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except*	TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (4-7-4 max.): 3-5.
1-3: 2x4 SPF 2100F 1.8E	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
BOT CHORD 2x4 SPF No.2 *Except*	6-0-0 oc bracing: 12-13,11-12.
4-15: 2x3 SPF No.2	1 Row at midpt 4-16
WEBS 2x3 SPF No.2 *Except*	WEBS 1 Row at midpt 2-17, 3-16, 5-13
5-13: 2x4 SPF No.2	

REACTIONS. (size) 19=0-5-8, 12=0-3-8
Max Horz 19=-173(LC 9)
Max Uplift 19=-171(LC 8), 12=-296(LC 9)
Max Grav 19=1474(LC 1), 12=2086(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-2003/231, 2-3=-1748/228, 3-4=-1529/227, 4-5=-1524/226, 5-6=-1695/356,
6-8=-1720/214, 8-9=-175/511, 1-19=-1399/210
BOT CHORD 17-18=-166/1763, 16-17=-29/1519, 12-13=-383/185
WEBS 2-18=-271/134, 2-17=-374/177, 3-17=-55/350, 13-16=-19/1382, 5-16=-18/447,
6-13=-561/296, 8-13=-167/1938, 8-12=-1883/375, 1-18=-135/1723, 9-12=-331/189

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 19=171, 12=296.
- This truss 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.



May 14, 2020

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

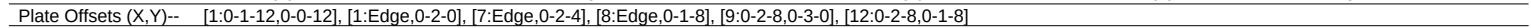
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

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ID:bWuMDBN0tjF5cDvSpwhpH1zCzbO-XPV2 YSvVZH8iuJqW70DEo0n06p3prutiZK35OzGs6d



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

(size) 14=0-3-8, 8=0-3-8
 Max Horz 14=253(LC 5)
 Max Uplift 14=-184(LC 8), 8=-197(LC 5)
 Max Grav 14=1512(LC 2), 8=1539(LC 2)

TOP CHORD 1-2=-438/23, 2-3=-2701/308, 3-4=-1941/279, 4-5=-1461/277, 5-6=-1461/277,
6-7=-710/165, 7-8=-1514/203

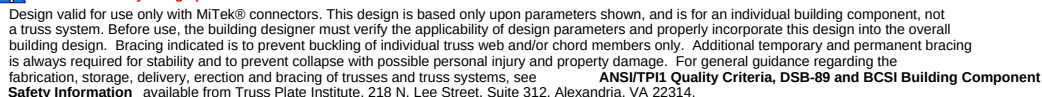
BOT CHORD 13-14=-452/2458, 12-13=-335/2182, 10-12=-266/1724, 9-10=-141/653

WEBS 3-13=0/414, 3-12=-640/246, 4-12=-80/763, 4-10=-422/103, 5-10=-516/208,
6-10=-186/1265, 6-9=-975/239, 2-14=-2385/382, 7-9=-184/1343

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDF=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 14=184, 8=197.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



May 14, 2020



Job	Truss	Truss Type	Qty	Ply	Lot 15 HT	
400302	D2	Hip	1	1		I41303183

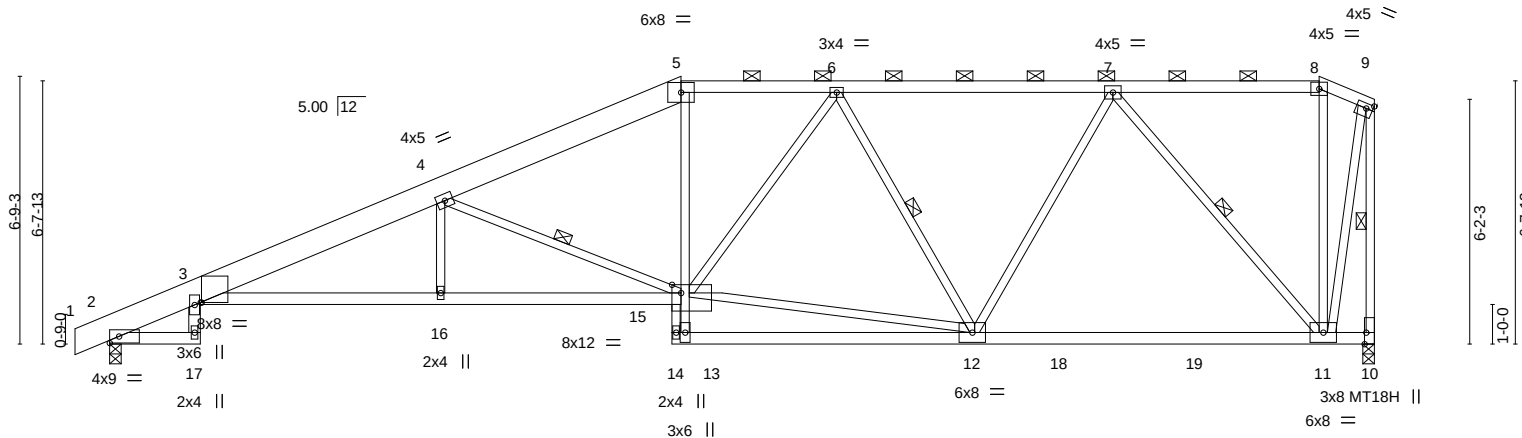
Wheeler Lumber, Waverly, KS 66871

ID: bWuMDBN0tjF5cDvSpwhpH1zCzbQ-yO9kkIZVA4nWOkCSOHazoZROvvU4FA_0TH3uzyzGbF7
8.240 s Apr 4 2020 MiTek Industries, Inc. Thu May 14 11:56:22 2020 Page 1

Job Reference (optional)

0-10-8 2-3-8 8-4-6 14-5-4 18-4-7 25-4-3 30-6-12 31-11-8
0-10-8 2-3-8 6-0-14 6-0-14 3-11-3 6-11-12 5-2-9 1-4-12

Scale = 1:58.2



2-3-8	8-4-6	14-2-8	14-5-4	21-10-5	30-6-12	31-11-8
2-3-8	6-0-14	5-10-2	0-2-12	7-5-1	8-8-7	1-4-12

Plate Offsets (X,Y)-- [3:0-0-5,0-0-0], [9:0-2-0,0-1-8], [10:0-3-8,Edge], [15:0-2-12,0-2-8]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.85	Vert(LL)	-0.34 3-16	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.79	Vert(CT)	-0.60 3-16	>630	240	MT18H	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.93	Horz(CT)	0.36 10	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.24 3-16	>999	240	Weight: 166 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
1-5: 2x8 SP DSS
BOT CHORD 2x4 SPF No.2 *Except*
3-15: 2x4 SPF 2100F 1.8E, 14-15: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
3-17: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (3-7-12 max.): 5-8.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 14-15.
WEBS 1 Row at midpt 4-15, 6-12, 7-11, 9-10

REACTIONS.

(lb/size) 2=1495/0-3-8, 10=1426/0-3-8
Max Horz 2=261(LC 7)
Max Uplift 2=-196(LC 8), 10=-231(LC 5)
Max Grav 2=1528(LC 2), 10=1508(LC 2)

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

TOP CHORD 2-3=-807/47, 3-4=-3643/406, 4-5=-2483/345, 5-6=-2186/338, 6-7=-1632/281,
7-8=-327/103, 8-9=-372/112, 9-10=-1665/192
BOT CHORD 3-16=-551/3522, 15-16=-549/3516, 14-15=-529/0, 12-18=-270/1235, 18-19=-270/1235,
11-19=-270/1235
WEBS 4-15=-1454/327, 12-15=-382/1803, 6-15=-77/367, 6-12=-774/203, 7-12=-27/813,
7-11=-1442/285, 9-11=-176/1555, 13-15=0/667, 5-15=-55/752

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 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 196 lb uplift at joint 2 and 231 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.



May 14, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 15 HT	I41303184
400302	D3	Half Hip	1	1		

Wheeler Lumber, Waverly, KS 66871

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ID:bWuMDBN0tjF5cDvSpwph1zCzbQ-TncpPEU91BYsyBTDDx2hKD57bwaHHmy9AtpA9HzGs6b

Job Reference (optional)

0-10-8 2-3-8 7-4-6 12-5-4 14-2-8 19-8-15 25-8-3 31-11-8
0-10-8 2-3-8 5-0-14 5-0-14 1-9-4 5-6-7 5-11-4 6-3-5

Scale = 1:57.2

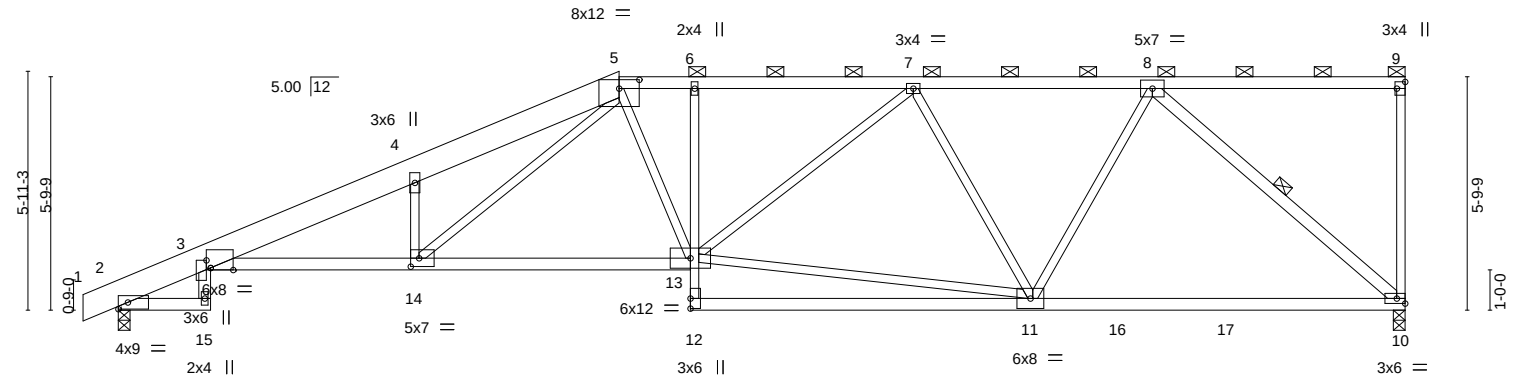


Plate Offsets (X,Y)--		[3:0-2-4,0-1-4], [3:0-6-12,Edge], [5:0-6-0,0-2-10], [9:Edge,0-2-8], [14:0-2-8,0-2-8]							
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.73	Vert(LL)	-0.31 13-14	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.59	Vert(CT)	-0.56 13-14	>681	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.81	Horz(CT)	0.31 10	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.20 13-14	>999	240	Weight: 155 lb	FT = 10%

LUMBER-

TOP CHORD 2x8 SP DSS *Except*
5-9: 2x4 SPF No.2
BOT CHORD 2x4 SPF 2100F 1.8E *Except*
2-15: 2x4 SPF No.2, 6-12: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
3-15,8-10: 2x4 SPF No.2

BRACING-

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

REACTIONS.

(size) 10=0-3-8, 2=0-3-8
Max Horz 2=243(LC 7)
Max Uplift 10=-254(LC 5), 2=-182(LC 4)
Max Grav 10=1499(LC 2), 2=1533(LC 2)

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

TOP CHORD 2-3=-805/59, 3-4=-3846/444, 4-5=-4080/542, 5-6=-2592/420, 6-7=-2578/422, 7-8=-1814/310
BOT CHORD 3-14=-603/3696, 13-14=-456/2457, 6-13=-259/122, 10-11=-301/1365
WEBS 4-14=-975/295, 5-14=-305/1644, 5-13=-63/371, 11-13=-404/2044, 7-13=-75/535, 7-11=-824/232, 8-11=-28/930, 8-10=-1805/341

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, with BCDL = 10.0psf.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=254, 2=182.
- 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.



May 14, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 15 HT	I41303185
400302	D4	Half Hip	1	1		

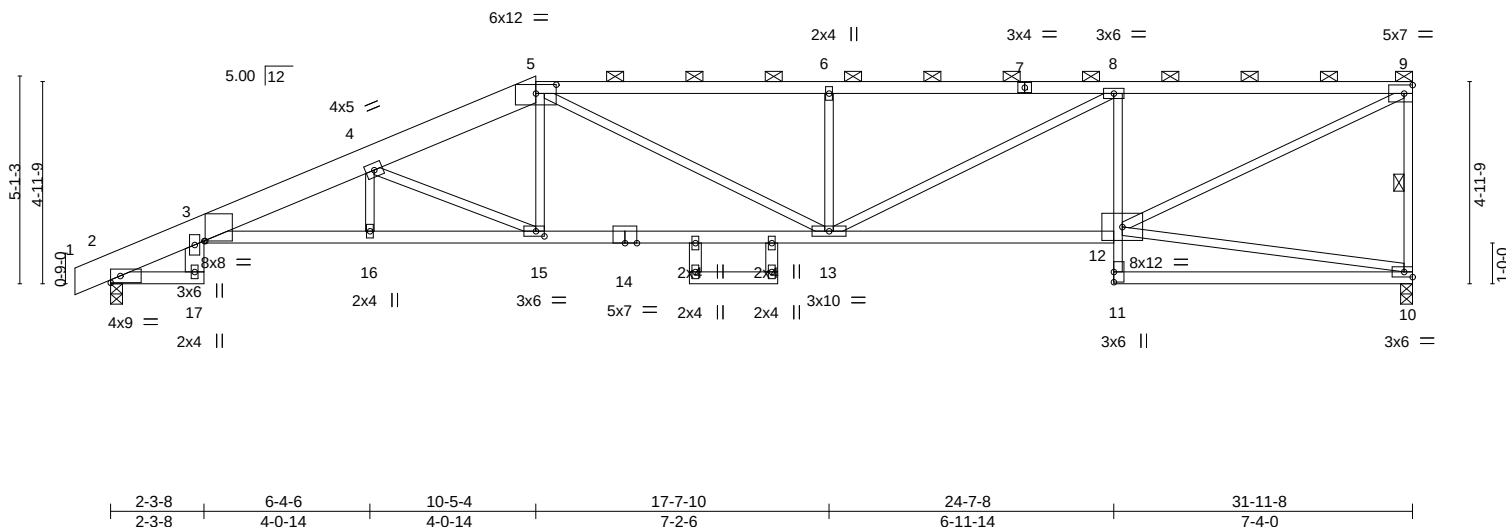
Wheeler Lumber, Waverly, KS 66871

8.240 s Apr 4 2020 MiTek Industries, Inc. Thu May 14 11:56:34 2020 Page 1

ID:bWuMDBN0tjF5cDvSpwphH1zCzbQ-citGFP1LmHpqa7m5pnVH5wUEla92cfnE9zXNFzGbEx

0-10-8	2-3-8	6-4-6	10-5-4	17-7-10	24-7-8	31-11-8
0-10-8	2-3-8	4-0-14	4-0-14	7-2-6	6-11-14	7-4-0

Scale = 1:56.6



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.76	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.77	Vert(LL) -0.30 13-15 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.88	Vert(CT) -0.58 13-15 >659 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.35 10 n/a n/a		
	Code IRC2018/TPI2014		Wind(LL) 0.24 13-15 >999 240	Weight: 147 lb	FT = 10%

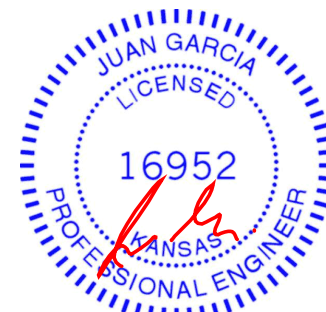
LUMBER-
TOP CHORD 2x4 SPF 2100F 1.8E *Except*
1-5: 2x8 SP DSS
BOT CHORD 2x4 SPF No.2 *Except*
3-14: 2x4 SPF 2100F 1.8E, 8-11: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
3-17: 2x6 SPF No.2, 18-20,19-21: 2x4 SPF No.2

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

REACTIONS. (lb/size) 10=1425/0-3-8, 2=1492/0-3-8
Max Horz 2=206(LC 5)
Max Uplift 10=259(LC 5), 2=202(LC 4)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-719/73, 3-4=-3846/519, 4-5=-3049/472, 5-6=-3145/559, 6-7=-3145/559,
7-8=-3145/559, 8-9=-2330/454, 9-10=-1351/305
BOT CHORD 3-16=-672/3789, 15-16=-668/3777, 14-15=-518/2773, 13-14=-518/2773, 12-13=-489/2341,
8-12=-956/288
WEBS 4-15=-1123/240, 5-15=-30/595, 5-13=-117/417, 6-13=-505/212, 8-13=-133/908,
9-12=-504/2575

- 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 259 lb uplift at joint 10 and 202 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.



May 14, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 15 HT	I41303186
400302	D5	Half Hip	1	1		

Wheeler Lumber, Waverly, KS 66871

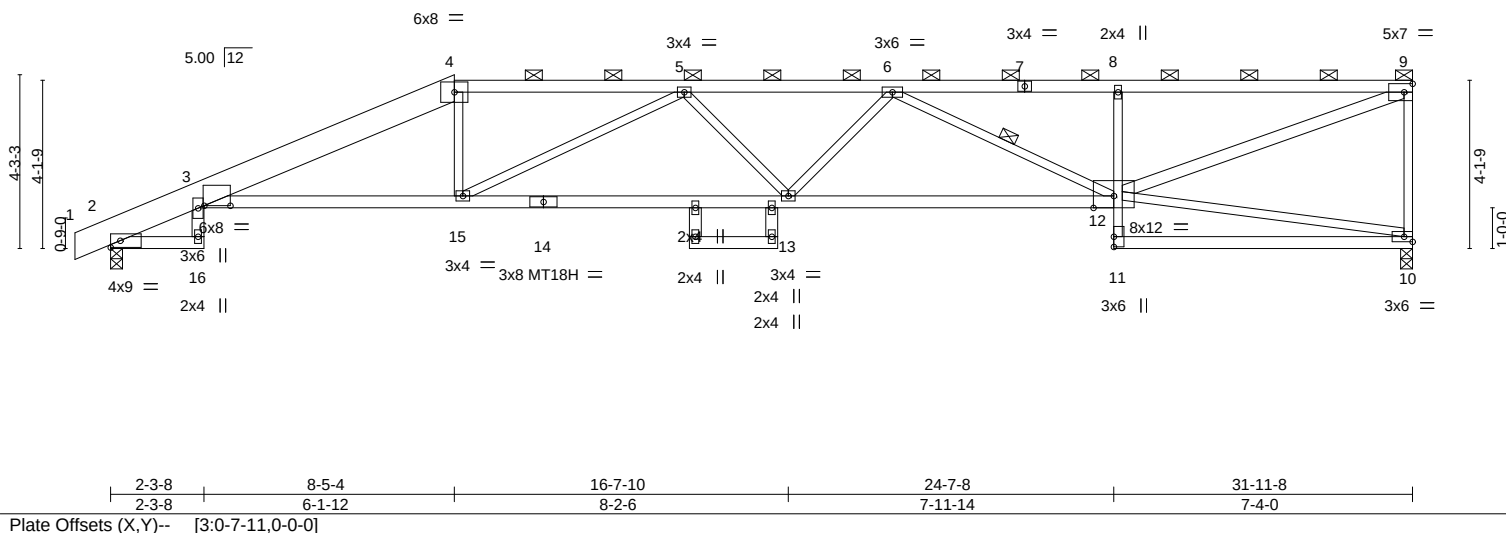
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Job Reference (optional)

0-10-8	2-3-8	8-5-4	14-1-0	19-2-5	24-7-8	31-11-8
0-10-8	2-3-8	6-1-12	5-7-12	5-1-5	5-5-4	7-4-0

Scale = 1:56.6



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 0.81	Vert(LL)	-0.41 13-15	>932	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.57	Vert(CT)	-0.76 13-15	>504	240	MT18H	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.82	Horz(CT)	0.43 10	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.33 13-15	>999	240	Weight: 138 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x8 SP DSS *Except* 4-7: 2x4 SPF No.2, 7-9: 2x4 SPF 2100F 1.8E	TOP CHORD Structural wood sheathing directly applied or 2-6-7 oc purlins, except end verticals, and 2-0-0 oc purlins (2-6-14 max.): 4-9.
BOT CHORD 2x4 SPF No.2 *Except* 3-14,12-14: 2x4 SPF 2100F 1.8E, 8-11: 2x3 SPF No.2	BOT CHORD Rigid ceiling directly applied or 8-10-12 oc bracing.
WEBS 2x3 SPF No.2 *Except* 3-16,9-12,17-19,18-20: 2x4 SPF No.2	WEBS 1 Row at midpt 6-12

REACTIONS. (lb/size) 10=1425/0-3-8, 2=1494/0-3-8
Max Horz 2=170(LC 5)
Max Uplift 10=262(LC 5), 2=218(LC 4)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-713/87, 3-4=-3351/509, 4-5=-3210/524, 5-6=-3967/671, 6-7=-2883/549,
7-8=-2883/549, 8-9=-2873/557, 9-10=-1351/307
BOT CHORD 3-15=-591/3198, 14-15=-777/3955, 13-14=-777/3955, 12-13=-759/3829, 8-12=-507/214
WEBS 4-15=-1/438, 5-15=-838/228, 6-13=0/293, 6-12=-1064/198, 9-12=-599/3061

- 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 262 lb uplift at joint 10 and 218 lb uplift at joint 2.
 - 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



May 14, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 15 HT	I41303187
400302	D6	Half Hip Girder	1	3		

Wheeler Lumber, Waverly, KS 66871

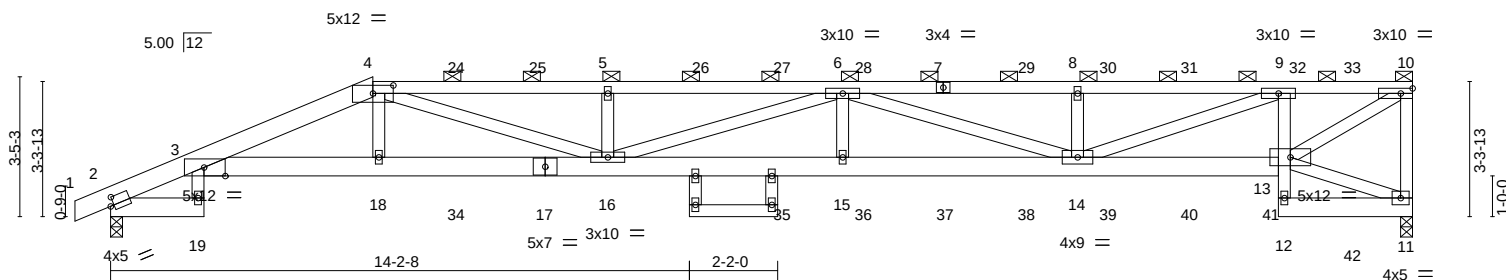
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Job Reference (optional)

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0-10-8	2-3-8	6-5-4	12-2-7	17-11-10	23-8-13	28-8-0	31-11-8
0-10-8	2-3-8	4-1-12	5-9-3	5-9-3	5-9-3	4-11-3	3-3-8

Scale = 1:56.6



2-3-8	6-5-4	12-2-7	17-11-10	23-8-13	28-8-0	31-11-8
2-3-8	4-1-12	5-9-3	5-9-3	5-9-3	4-11-3	3-3-8

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

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 0.81	Vert(LL)	-0.41 15-16	>925	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.51	Vert(CT)	-0.74 15-16	>513	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.41	Horz(CT)	0.32 11	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.24 15-16	>999	240	Weight: 510 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*

1-4: 2x6 SP DSS

BOT CHORD 2x6 SP 2400F 2.0E *Except*

9-12,20-21: 2x4 SPF No.2

WEBS 2x4 SPF No.2

REACTIONS. (lb/size) 11=2891/0-3-8, 2=2862/0-3-8

Max Horz 2=100(LC 5)

Max Uplift 11=-114(LC 5), 2=-195(LC 4)

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

TOP CHORD 2-3=-1669/115, 3-4=-8942/674, 4-24=-11247/673, 24-25=-11247/673, 5-25=-11247/673, 5-26=-11247/673, 26-27=-11247/673, 6-27=-11247/673, 6-28=-8983/344, 7-28=-8983/344, 7-29=-8983/344, 8-29=-8983/344, 8-30=-8983/344, 30-31=-8983/344, 31-32=-8983/344, 9-32=-8983/344, 9-33=-4358/178, 10-33=-4358/178, 10-11=-2787/146

BOT CHORD 3-18=-694/8480, 18-34=-699/8587, 17-34=-699/8587, 16-17=-699/8587, 16-35=-606/11994, 15-35=-606/11994, 15-36=-606/11994, 36-37=-606/11994, 37-38=-606/11994, 14-38=-606/11994, 14-39=-214/4605, 39-40=-213/4608, 40-41=-212/4611, 13-41=-211/4614, 9-13=-2195/190

WEBS 3-19=-36/561, 4-18=-63/1230, 4-16=-31/2928, 5-16=-723/192, 6-16=-853/0, 6-15=0/538, 6-14=-3177/240, 8-14=-608/146, 9-14=-178/4688, 10-13=-214/5058

NOTES-

1) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:

Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-7-0 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.

2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.

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

4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

5) Provide adequate drainage to prevent water ponding.

6) All plates are 2x4 MT20 unless otherwise indicated.

7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 114 lb uplift at joint 11 and 195 lb uplift at joint 2.

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.

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

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May 14, 2020



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 15 HT
400302	D6	Half Hip Girder	1	3	I41303187

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) 140 lb down and 62 lb up at 6-5-4, 117 lb down and 62 lb up at 8-6-0, 117 lb down and 62 lb up at 10-6-0, 117 lb down and 62 lb up at 12-6-0, 117 lb down and 62 lb up at 14-6-0, 98 lb down and 51 lb up at 16-6-0, 98 lb down and 51 lb up at 18-6-0, 98 lb down and 51 lb up at 20-6-0, 98 lb down and 51 lb up at 22-6-0, 98 lb down and 51 lb up at 24-6-0, 98 lb down and 51 lb up at 26-6-0, and 98 lb down and 51 lb up at 28-6-0, and 122 lb down and 70 lb up at 30-6-0 on top chord, and 536 lb down and 145 lb up at 6-5-4, 79 lb down at 8-6-0, 79 lb down at 10-6-0, 79 lb down at 12-6-0, 89 lb down at 16-6-0, 89 lb down at 18-6-0, 89 lb down at 20-6-0, 89 lb down at 22-6-0, 89 lb down at 24-6-0, 89 lb down at 26-6-0, and 89 lb down at 28-6-0, and 75 lb down at 30-6-0 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: 1-4=-70, 4-10=-70, 2-19=-20, 3-13=-20, 11-12=-20

Concentrated Loads (lb)

Vert: 4=-117(B) 7=-98(B) 17=-74(B) 18=-536(B) 16=-74(B) 5=-117(B) 24=-117(B) 25=-117(B) 26=-117(B) 27=-98(B) 28=-98(B) 29=-98(B) 30=-98(B) 31=-98(B) 32=-98(B) 33=-122(B) 34=-74(B) 35=-89(B) 36=-89(B) 37=-89(B) 38=-89(B) 39=-89(B) 40=-89(B) 41=-89(B) 42=-58(B)

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 15 HT	I41303188
400302	E1	Hip Girder	1	1		

Wheeler Lumber, Waverly, KS 66871

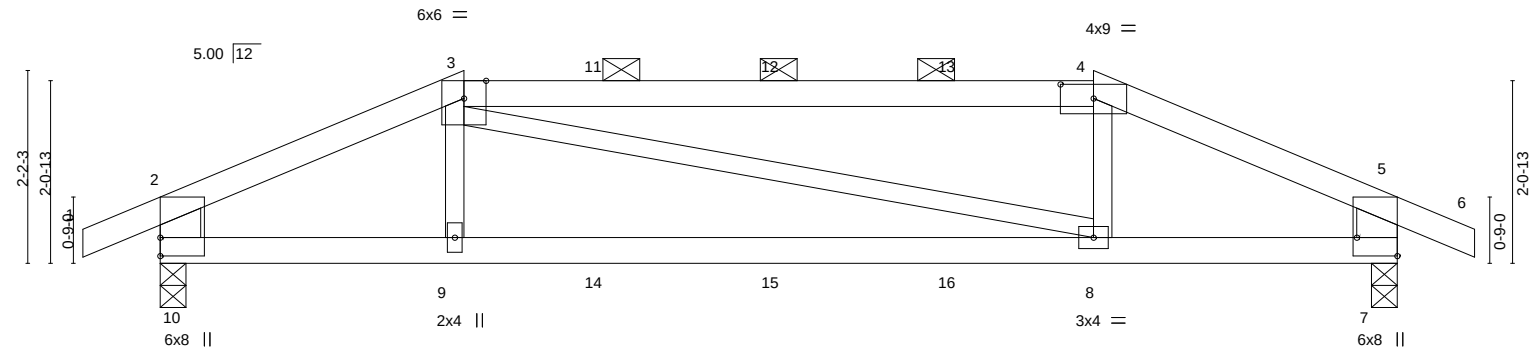
8.240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:03 2020 Page 1

ID: bWuMDBN0tjF5cDvSpwphH1zCzbQ-m7YStdZYNKQslGVZXWgK7huGvkuvQ6tBnS?2vNzGs6U

Job Reference (optional)

-0-10-8	3-5-4	10-6-12	14-0-0	14-10-8
0-10-8	3-5-4	7-1-8	3-5-4	0-10-8

Scale = 1:26.1



		3-5-4				10-6-12				14-0-0			
		3-5-4				7-1-8				3-5-4			
Plate Offsets (X,Y)-- [2:0-1-2,0-2-12], [4:0-4-8,0-1-15], [5:0-1-2,0-2-12], [7:Edge,0-5-8], [7:0-0-0,0-2-12], [10:0-0-0,0-2-12]													
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	0.91	Vert(LL)	-0.15	8-9	>999	360	MT20	197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.91	Vert(CT)	-0.35	8-9	>466	240			
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.09	Horz(CT)	0.03	7	n/a	n/a			
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.13	8-9	>999	240	Weight: 45 lb	FT = 10%	

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
3-4: 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-10,5-7: 2x6 SP 2400F 2.0E

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-11-6 oc purlins, except end verticals, and 2-0-0 oc purlins (4-5-7 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=17(LC 28)
Max Uplift 10=-183(LC 4), 7=-183(LC 5)
Max Grav 10=858(LC 1), 7=858(LC 1)

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

TOP CHORD 2-3=-1359/274, 3-4=-1168/268, 4-5=-1339/269, 2-10=-750/160, 5-7=-755/161
BOT CHORD 9-10=-220/1197, 8-9=-228/1192, 7-8=-209/1171
WEBS 3-9=0/275, 4-8=0/285

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=183, 7=183.
- This truss 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) 164 lb down and 131 lb up at 3-5-4, 76 lb down and 61 lb up at 5-0-0, 76 lb down and 61 lb up at 7-0-0, and 76 lb down and 61 lb up at 9-0-0, and 164 lb down and 131 lb up at 10-6-12 on top chord, and 55 lb down at 3-5-4, 23 lb down at 5-0-0, 23 lb down at 7-0-0, and 23 lb down at 9-0-0, and 55 lb down at 10-6-0 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

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



May 14, 2020

Continued on page 2

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 15 HT	I41303188
400302	E1	Hip Girder	1	1	Job Reference (optional)	

LOAD CASE(S) Standard

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: 3=-64(F) 4=-64(F) 9=-37(F) 8=-37(F) 11=-31(F) 12=-31(F) 13=-31(F) 14=-16(F) 15=-16(F) 16=-16(F)

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 15 HT	
400302	E2	Hip	1	1		I41303189
Job Reference (optional)						

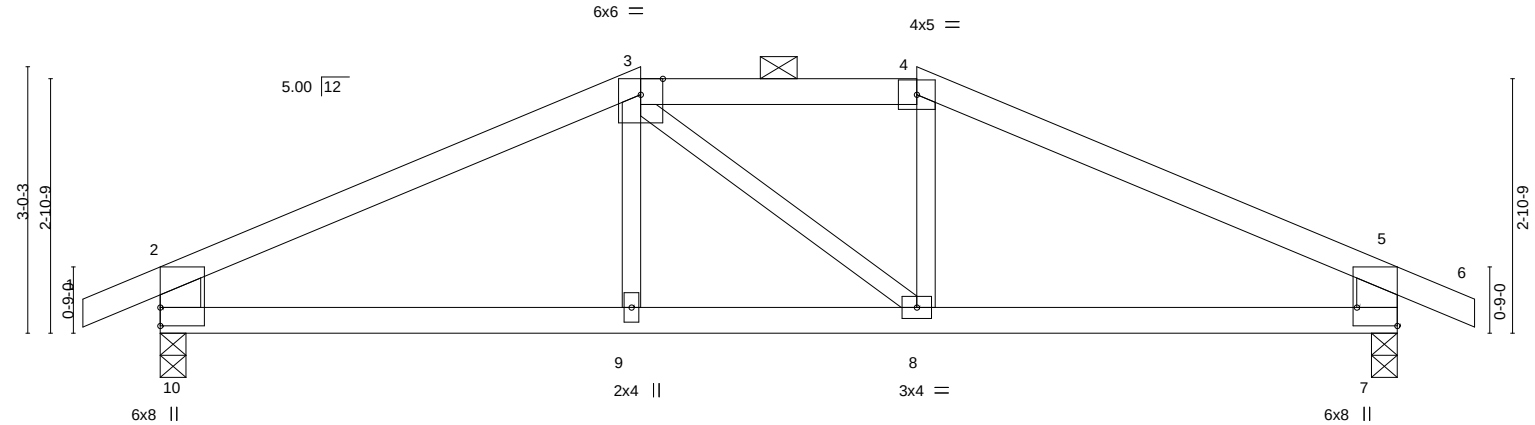
Wheeler Lumber, Waverly, KS 66871

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-0-10-8	5-5-4	8-6-12	14-0-0	14-10-8
0-10-8	5-5-4	3-1-8	5-5-4	0-10-8

Scale = 1:26.1



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

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 0.58	Vert(LL)	-0.05	8-9	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.37	Vert(CT)	-0.10	8-9	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.02	7	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.03	8-9	>999	240	Weight: 44 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: 2x6 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-4-12 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=-27(LC 13)
 Max Uplift 10=-90(LC 8), 7=-90(LC 9)
 Max Grav 10=687(LC 1), 7=687(LC 1)

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

TOP CHORD 2-3=-877/96, 3-4=-727/108, 4-5=-877/96, 2-10=-612/128, 5-7=-612/128
 BOT CHORD 9-10=-32/729, 8-9=-34/727, 7-8=-34/729

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 7.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



May 14, 2020

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 15 HT	I41303190
400302	E3	Common	3	1		

Wheeler Lumber, Waverly, KS 66871

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ID: bWuMDBN0tjF5cDvSpwph1zCzbQ-jWfCHJbovygaXafxwioC6zgTYj2u0PUEmU8_FzGs6S

Job Reference (optional)

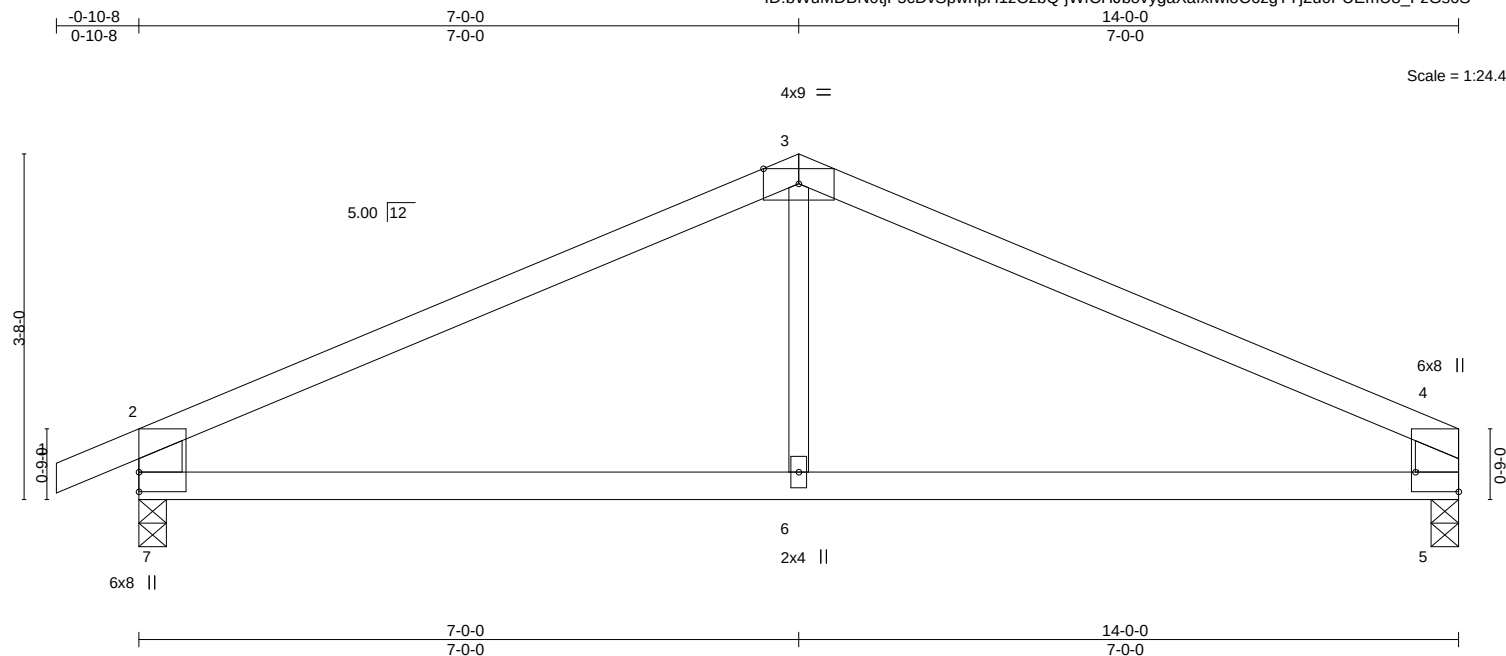


Plate Offsets (X,Y)--		[2:0-1-2,0-2-12], [4:Edge,0-5-8], [4:0-1-2,0-2-12], [5:0-0-0,0-2-12], [7:0-0-0,0-2-12]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.65
TCDL 10.0	Lumber DOL	1.15	BC 0.36
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.09
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R
DEFL.	in (loc)	l/defl	L/d
Vert(LL)	-0.05	6-7	>999
Vert(CT)	-0.11	6-7	>999
Horz(CT)	0.01	5	n/a
Wind(LL)	0.03	6-7	>999
PLATES	GRIP		
MT20	197/144		
Weight: 38 lb		FT = 10%	

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 7=0-3-8, 5=0-3-8
 Max Horz 7=47(LC 12)
 Max Uplift 7=-103(LC 8), 5=-77(LC 9)
 Max Grav 7=690(LC 1), 5=606(LC 1)

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

TOP CHORD 2-3=-820/104, 3-4=-815/102, 2-7=-620/149, 4-5=-529/120
 BOT CHORD 6-7=-38/662, 5-6=-38/662
 WEBS 3-6=0/276

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5 except (jt=lb) 7=103.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 14, 2020

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 15 HT	I41303191
400302	E4	Common Girder	1	2	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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ID:bWuMdbN0tjF5cDvSpwhpH1zCzbQ-BiDbVfcQgFoR9kE8DeD1kKWrlY1ldR8eTQEiWizGs6R

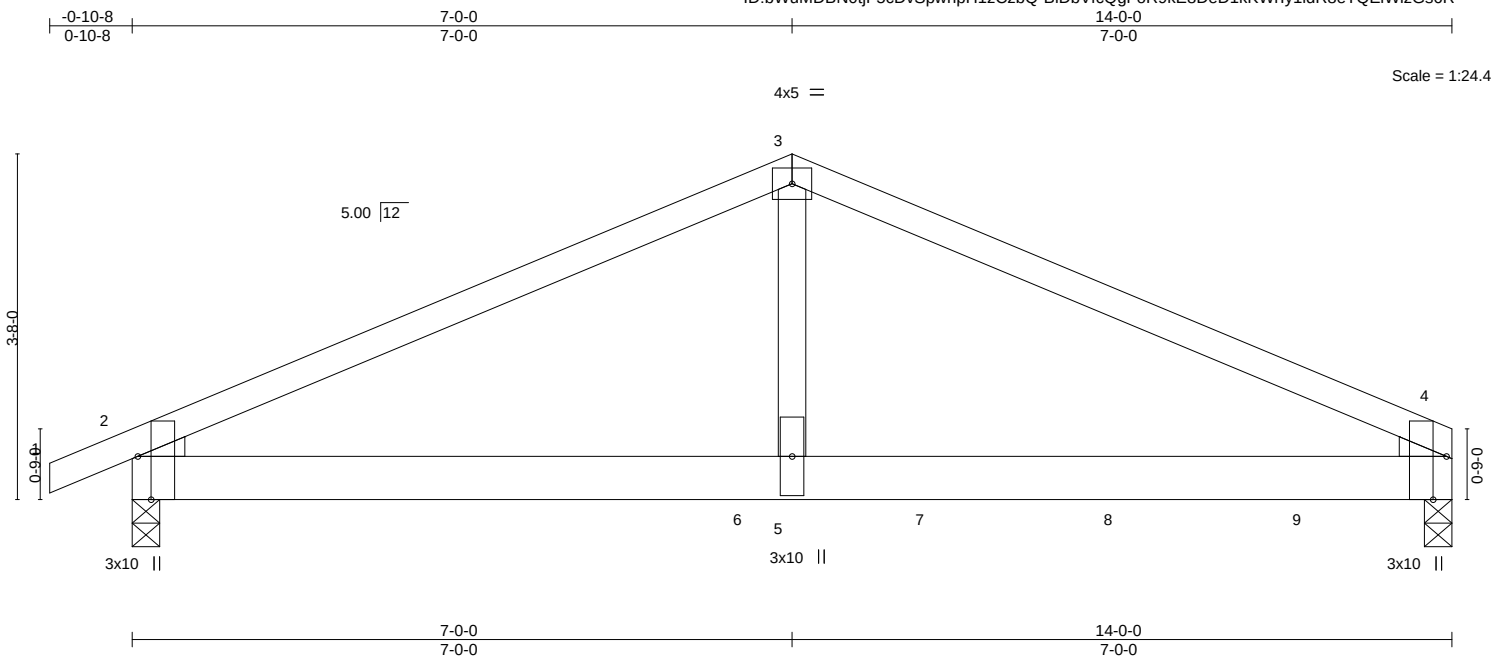


Plate Offsets (X,Y)-- [2:0-0-2,0-0-6], [2:0-0-5,0-4-11], [2:0-5-8,Edge], [4:0-0-2,0-0-6], [4:0-0-5,0-4-11], [4:0-5-8,Edge]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.65	Vert(LL)	-0.08 4-5 >999 360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.39	Vert(CT)	-0.13 4-5 >999 240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.25	Horz(CT)	0.01 4 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.04 4-5 >999 240	Weight: 111 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x6 SP 2400F 2.0E
WEBS 2x4 SPF No.2
WEDGE
Left: 2x3 SPF No.2, Right: 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) 2=0-3-8, 4=0-3-8
Max Horz 2=58(LC 33)
Max Uplift 2=-172(LC 8), 4=-192(LC 9)
Max Grav 2=1542(LC 1), 4=2117(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3009/271, 3-4=-2997/269
BOT CHORD 2-5=-190/2615, 4-5=-190/2615
WEBS 3-5=-77/2023

NOTES-

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=172, 4=192.
- This truss 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) 946 lb down and 103 lb up at 6-6-13, 489 lb down and 31 lb up at 8-6-0, and 453 lb down and 33 lb up at 10-6-0, and 465 lb down and 49 lb up at 12-6-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

Continued on page 2



May 14, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 15 HT
400302	E4	Common Girder	1	2	I41303191
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871

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ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-BiDbVfcQgFoR9kE8DeD1kKWrlY1ldR8eTQEiWizGs6R

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, 2-4=-20
Concentrated Loads (lb)
Vert: 6=-946(B) 7=-489(B) 8=-453(B) 9=-465(B)

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

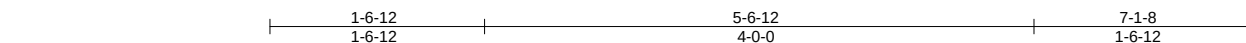
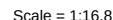
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

141303192

Job Reference (optional)

LUMBER-

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=-17(LC 27)
 Max Uplift 10=-74(LC 4), 7=-74(LC 5)
 Max Grav 10=375(LC 1), 7=375(LC 1)

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

TOP CHORD 2-3=-368/60, 3-4=-299/56, 4-5=-368/59, 2-10=-308/66, 5-7=-308/65
BOT CHORD 9-10=-34/300, 8-9=-30/299, 7-8=-27/300

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 7.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 57 lb down and 64 lb up at 1-6-12, and 50 lb down and 23 lb up at 3-6-12, and 57 lb down and 64 lb up at 5-6-12 on top chord, and 7 lb down and 3 lb up at 1-6-12, and 3 lb down and 1 lb up at 3-6-12, and 7 lb down and 3 lb up at 5-6-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-70, 2-3=-70, 3-4=-70, 4-5=-70, 5-6=-70, 7-10=-20
Concentrated Loads (lb)
Vert: 9=3(F) 8=3(F) 12=1(F)



May 14, 2020



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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 15 HT	I41303193
400302	G2	Common	2	1		

Wheeler Lumber, Waverly, KS 66871

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ID: bWuMDBN0tjF5cDvSpwhpH1zCzbQ-75LLwKdhCt29O1OWK3GVqlbldln95OwwwkjpabzGs6P

-0-10-8	3-6-12	7-1-8	8-0-0
0-10-8	3-6-12	3-6-12	0-10-8

Scale = 1:17.0

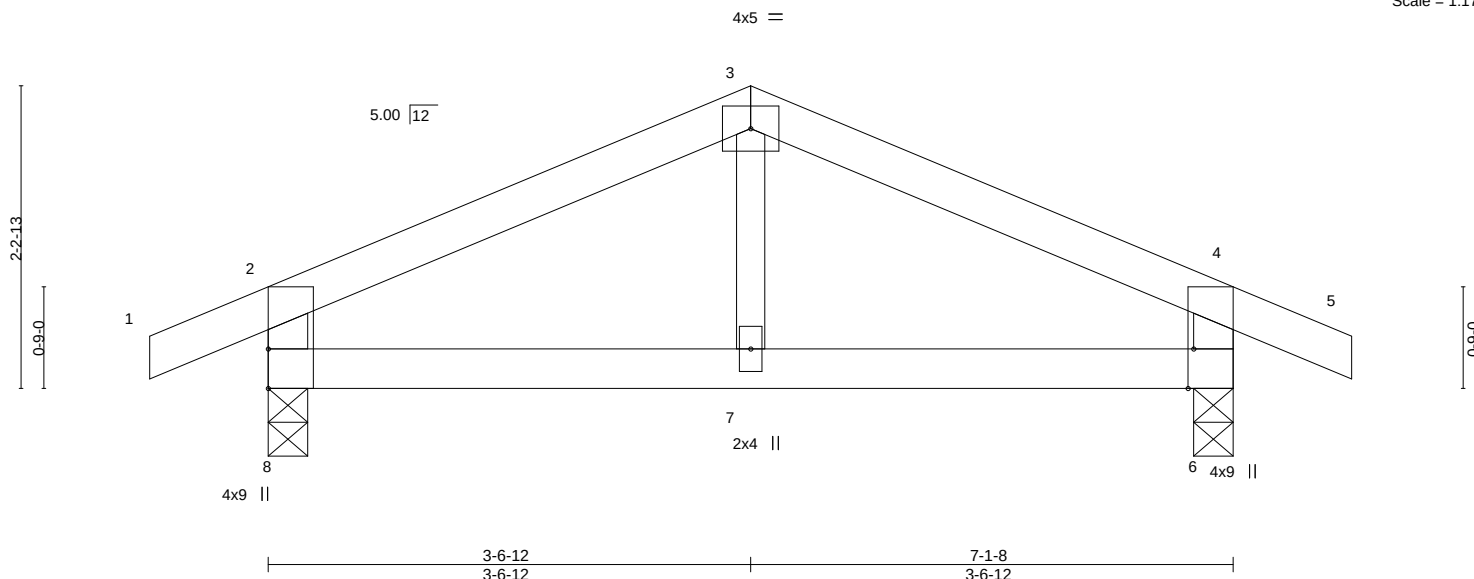


Plate Offsets (X,Y)--		[2:0-0-12,0-1-12], [4:0-0-12,0-1-12], [6:0-3-8,Edge], [6:0-0-0,0-1-12], [8:0-0-0,0-1-12]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.21
TCDL 10.0	Lumber DOL	1.15	BC 0.14
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.04
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R
DEFL.	in (loc)	L/defl	L/d
Vert(LL)	-0.01	7 >999	360
Vert(CT)	-0.02	7 >999	240
Horz(CT)	0.00	6 n/a	n/a
Wind(LL)	0.00	7 >999	240
PLATES	GRIP		
MT20	197/144		
Weight: 21 lb		FT = 10%	

LUMBER-

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

BRACING-

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

REACTIONS.

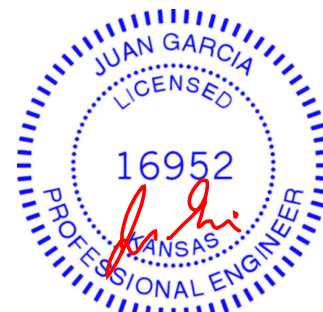
(size) 8=0-3-8, 6=0-3-8
 Max Horz 8=-15(LC 13)
 Max Uplift 8=-63(LC 8), 6=-63(LC 9)
 Max Grav 8=379(LC 1), 6=379(LC 1)

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

TOP CHORD 2-3=-333/49, 3-4=-333/48, 2-8=-328/85, 4-6=-328/85
 BOT CHORD 7-8=-4/254, 6-7=-4/254

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 6.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 14, 2020

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 15 HT	I41303194
400302	H1	Hip Girder	1	1		

Wheeler Lumber, Waverly, KS 66871

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ID: bWuMdBNOtjF5cDvSpwhpH1zCzbQ-3UT5L0fxkUJteLXvSUIzvAgUhZlZ5GDO2CvTzGs6N

Job Reference (optional)

0-10-8	5-5-4	10-0-0	14-6-12	20-0-0
0-10-8	5-5-4	4-6-12	4-6-12	5-5-4

Scale = 1:35.1

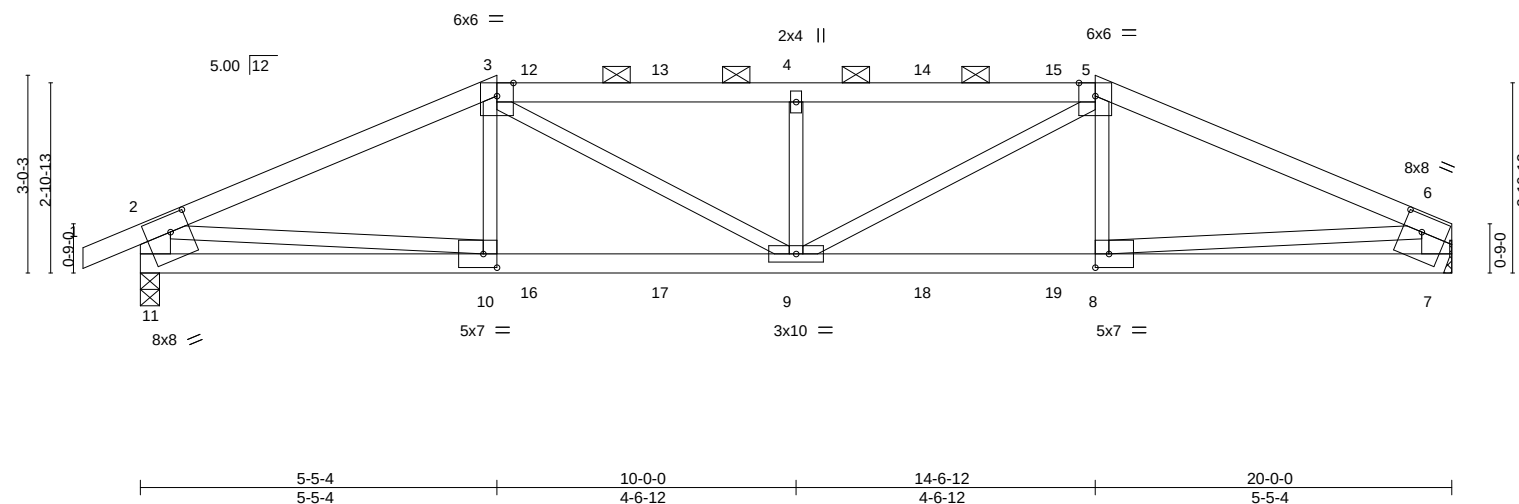


Plate Offsets (X,Y)-- [6:0-3-8,0-3-0], [7:0-2-9,0-1-1], [8:0-2-8,0-2-8], [10:0-2-8,0-2-8], [11:0-3-8,0-3-0], [11:0-2-9,0-1-1]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.88	Vert(LL)	-0.16 9 >999 360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.88	Vert(CT)	-0.28 8-9 >826 240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.82	Horz(CT)	0.05 7 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.10 9 >999 240	Weight: 71 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-11,6-7: 2x6 SPF No.2

BRACING-

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

REACTIONS.

(size) 11=0-3-8, 7=Mechanical
Max Horz 11=24(LC 5)
Max Uplift 11=-184(LC 4), 7=-168(LC 9)
Max Grav 11=1753(LC 1), 7=1671(LC 1)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3138/360, 3-4=-3608/416, 4-5=-3608/416, 5-6=-3142/359, 2-11=-1687/207, 6-7=-1604/191
BOT CHORD 10-11=-109/604, 9-10=-308/2819, 8-9=-307/2833, 7-8=-62/480
WEBS 3-10=0/338, 3-9=-85/975, 4-9=-706/186, 5-9=-83/967, 5-8=0/329, 2-10=-246/2289, 6-8=-265/2374

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=184, 7=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.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 121 lb down and 64 lb up at 5-5-4, 109 lb down and 64 lb up at 6-0-0, 98 lb down and 64 lb up at 8-0-0, 98 lb down and 64 lb up at 10-0-0, 98 lb down and 64 lb up at 12-0-0, and 109 lb down and 64 lb up at 14-0-0, and 121 lb down and 64 lb up at 14-6-12 on top chord, and 344 lb down and 99 lb up at 5-5-4, 60 lb down at 6-0-0, 60 lb down at 8-0-0, 60 lb down at 10-0-0, 60 lb down at 12-0-0, and 60 lb down at 14-0-0, and 344 lb down and 99 lb up at 14-6-0 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

Continued on page 2



May 14, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 15 HT
400302	H1	Hip Girder	1	1	I41303194
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, 7-11=-20

Concentrated Loads (lb)

Vert: 3=-98(F) 5=-98(F) 10=-344(F) 9=-43(F) 4=-98(F) 8=-344(F) 12=-98(F) 13=-98(F) 14=-98(F) 15=-98(F) 16=-43(F) 17=-43(F) 18=-43(F) 19=-43(F)

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

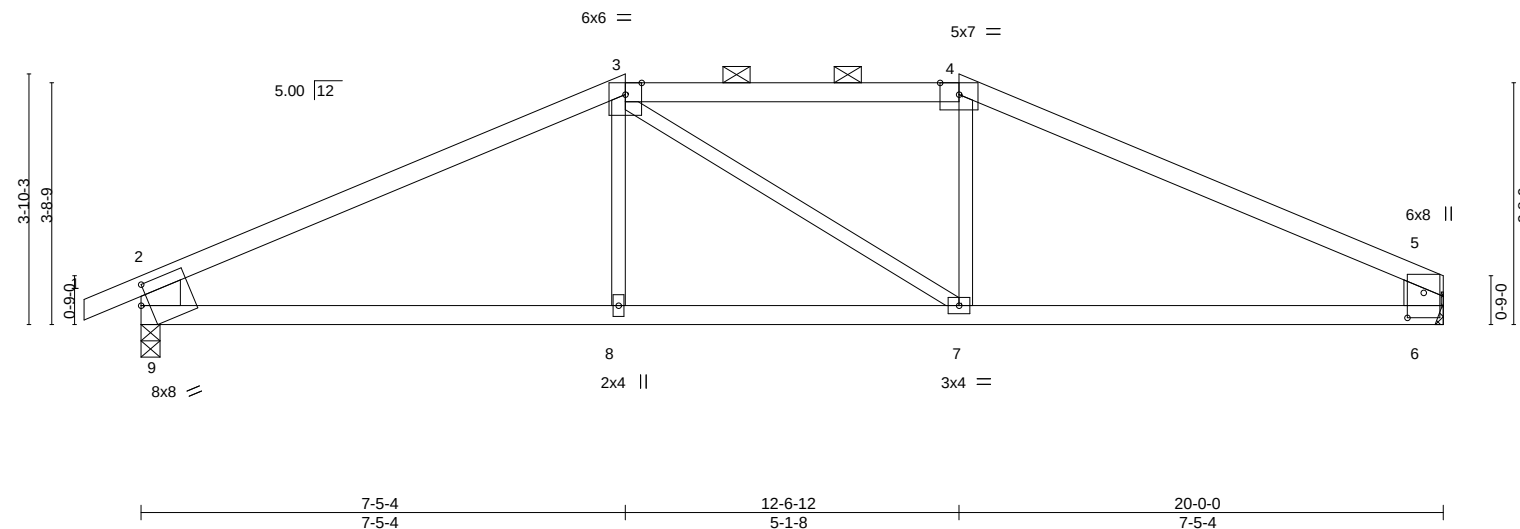
Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:10 2020 Page 1

ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-3UT5L0fxkUJteLxvSulzvAgS4ZKFZFSDO2CvrTzGs6N

0-10-8 7-5-4 12-6-12 20-0-0

0-10-8 7-5-4 5-1-8 7-5-4

Scale = 1:35.4



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 0.98	Vert(LL) -0.15 7-8 >999 360	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.74	Vert(CT) -0.29 7-8 >809 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.16	Horz(CT) 0.04 6 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.07 7-8 >999 240	Weight: 61 lb	FT = 10%

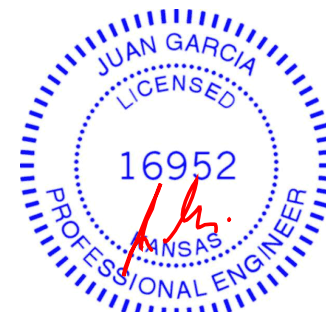
LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (4-10-9 max.): 3-4.
BOT CHORD	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x3 SPF No.2 *Except* 2-9,5-6: 2x8 SP DSS		

REACTIONS. (size) 9=0-3-8, 6=Mechanical
Max Horz 9=29(LC 10)
Max Uplift 9=-16(LC 4)
Max Grav 9=958(LC 1), 6=870(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1368/21, 3-4=-1147/35, 4-5=-1351/18, 2-9=-869/62, 5-6=-759/47
 BOT CHORD 8-9=0/1156, 7-8=0/1153, 6-7=0/1149

NOTES-

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



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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 15 HT	I41303196
400302	H3	Hip	1	1		

Wheeler Lumber, Waverly, KS 66871

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ID:bWuMdbN0tjF5cDvSpwhpH1zCzbQ-Xg0UYMfZVoRkFV65?BpCRNDdDqzhNihSNcixTBvzGs6M

Job Reference (optional)

3-7-2	9-5-4	10-6-12	16-4-14	20-0-0
3-7-2	5-10-2	1-1-8	5-10-2	3-7-2

Scale = 1:34.7

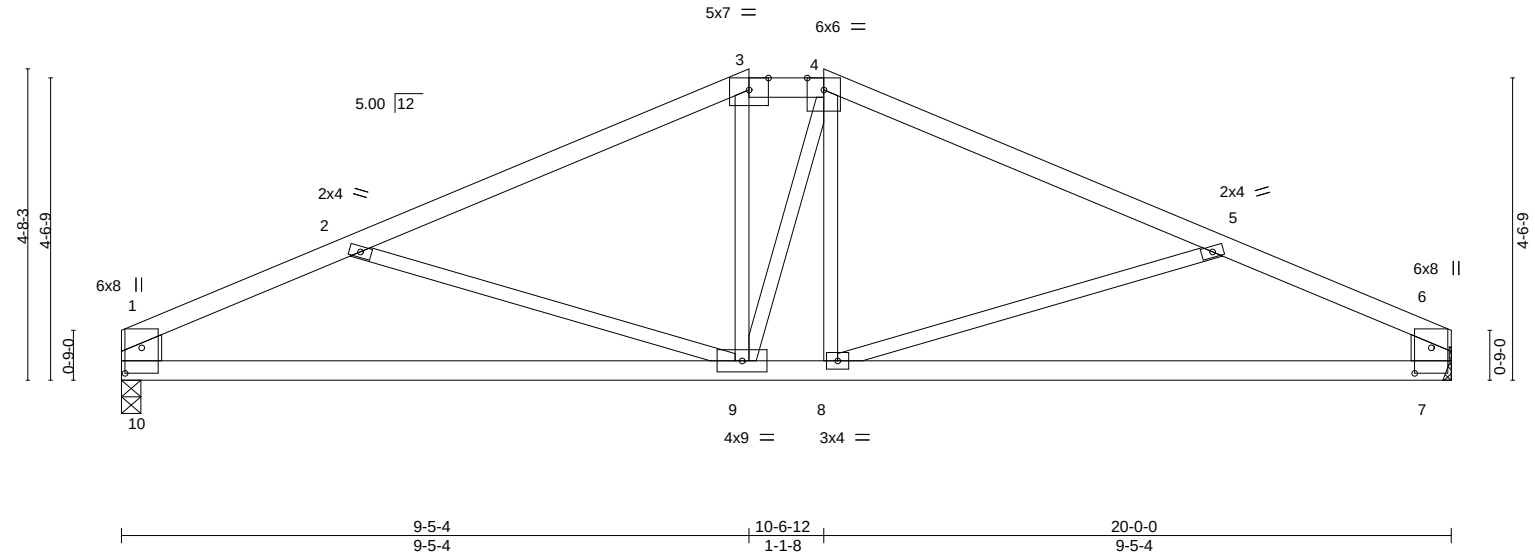


Plate Offsets (X,Y)-- [1:0-4-10,0-3-0], [6:0-4-10,0-3-0]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES	GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.98	Vert(LL)	-0.17	8-9	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.68	Vert(CT)	-0.34	7-8	>680	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.24	Horz(CT)	0.04	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.08	9	>999	240	Weight: 70 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
1-10,6-7: 2x8 SP DSS

BRACING-

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

REACTIONS.

(size) 10=0-3-8, 7=Mechanical
Max Horz 10=26(LC 10)
Max Uplift 10=-10(LC 8), 7=-10(LC 9)
Max Grav 10=873(LC 1), 7=873(LC 1)

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

TOP CHORD 1-2=-1414/77, 2-3=-1161/4, 3-4=-1021/26, 4-5=-1160/4, 5-6=-1414/77, 1-10=-763/57,
6-7=-762/57
BOT CHORD 9-10=-75/1214, 8-9=0/1020, 7-8=-49/1214
WEBS 2-9=-258/133, 3-9=-25/269, 5-8=-259/133

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 7.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



May 14, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 15 HT	I41303197
400302	H4	Common	4	1		

Wheeler Lumber, Waverly, KS 66871

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ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-?sasligBG5ZbtfhIZvKR_bmrHN?g17dWrMhOkLzGs6L

Job Reference (optional)

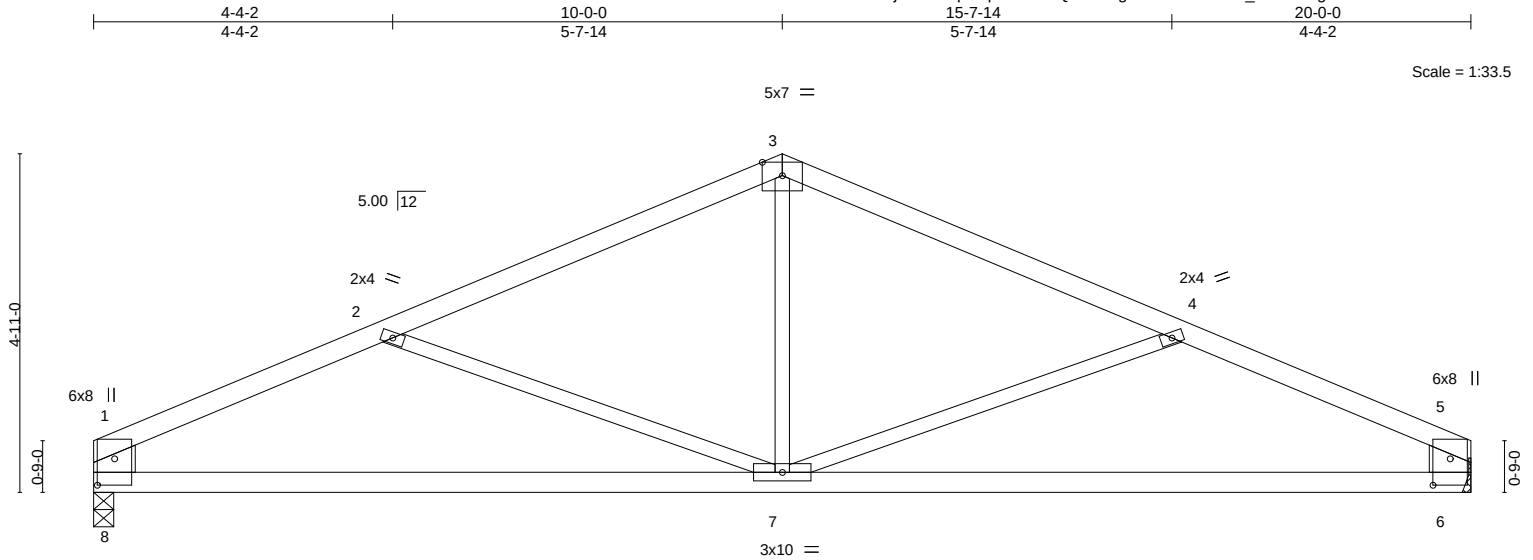


Plate Offsets (X,Y)--	[1:0-4-10,0-3-0], [5:0-4-10,0-3-0]
-----------------------	------------------------------------

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 0.81	Vert(LL)	-0.19	7	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.74	Vert(CT)	-0.37	6-7	>628	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.31	Horz(CT)	0.04	6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.08	7	>999	240	Weight: 64 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 2x3 SPF No.2 *Except*
 1-8,5-6: 2x8 SP DSS

BRACING-

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

REACTIONS.

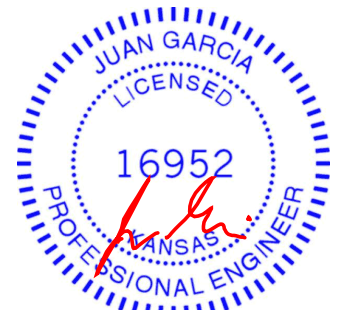
(size) 8=0-3-8, 6=Mechanical
 Max Horz 8=29(LC 10)
 Max Uplift 8=-12(LC 8), 6=-12(LC 9)
 Max Grav 8=873(LC 1), 6=873(LC 1)

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

TOP CHORD 1-2=-1414/76, 2-3=-1103/14, 3-4=-1103/14, 4-5=-1414/77, 1-8=-758/60, 5-6=-758/60
 BOT CHORD 7-8=-72/1216, 6-7=-43/1216
 WEBS 3-7=0/434, 4-7=-331/139, 2-7=-331/139

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 6.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 14, 2020

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 15 HT	I41303198
400302	H5	Half Hip	1	1		

Wheeler Lumber, Waverly, KS 66871

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ID: bWuMDBN0tjF5cDvSpwhpH1zCzbQ-U38Ez2hp1PhSVoGU7crgXol3GmMymYlg40QaGozGs6K

Job Reference (optional)

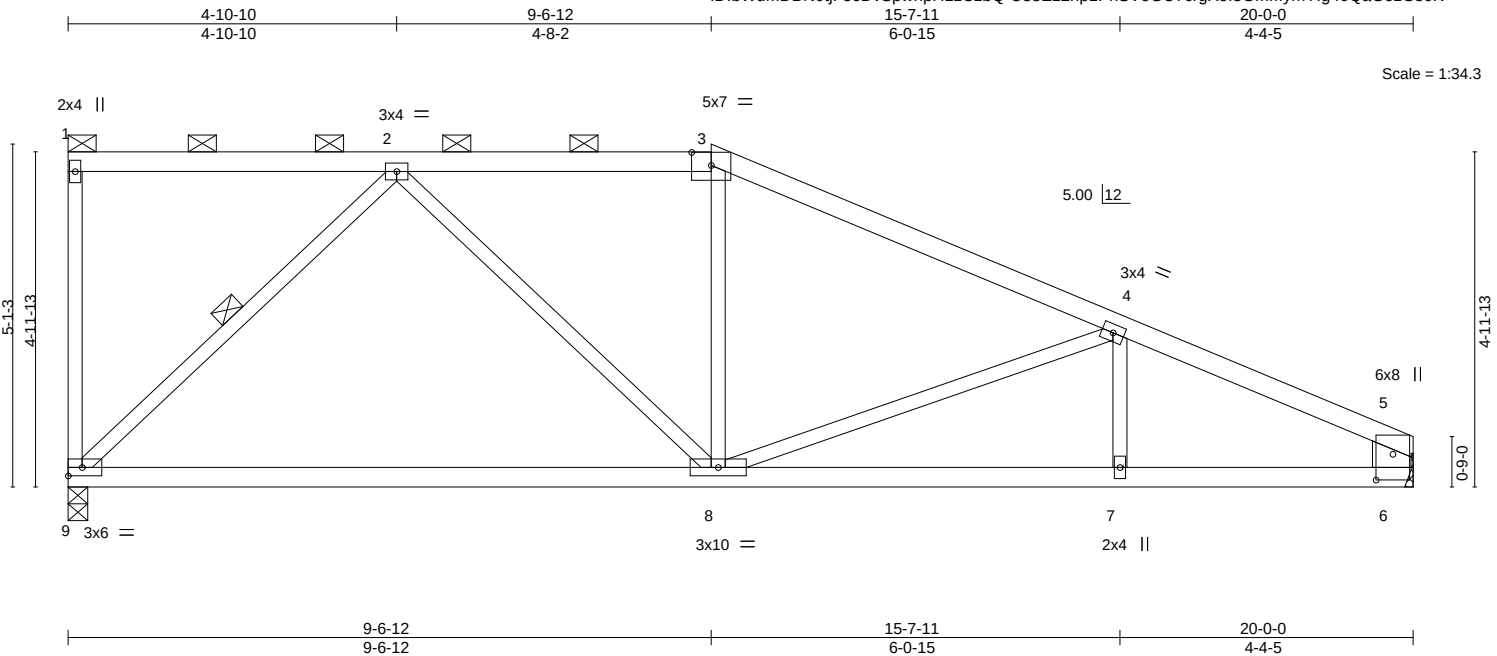


Plate Offsets (X,Y)--		[3:0-3-8,0-2-5], [5:0-4-10,0-3-0]										
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.60	Vert(LL)	-0.20	8-9	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.67	Vert(CT)	-0.41	8-9	>569	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.41	Horz(CT)	0.02	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.06	7-8	>999	240	Weight: 72 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 9=0-3-8, 6=Mechanical
Max Horz 9=-155(LC 6)
Max Uplift 9=-43(LC 4), 6=-12(LC 9)
Max Grav 9=882(LC 1), 6=882(LC 1)

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

TOP CHORD 2-3=-979/34, 3-4=-1135/23, 4-5=-1406/40, 5-6=-704/33
BOT CHORD 8-9=-2/687, 7-8=-13/1230, 6-7=-13/1230
WEBS 2-9=-944/90, 2-8=0/406, 4-8=-270/104

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 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.



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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 15 HT	I41303199
400302	H6	Half Hip	1	1		

Wheeler Lumber, Waverly, KS 66871

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ID:bWuMDBN0tjF5cDvSpwphH1zCzbQ-yFicAOiSojpl6yrghJNV30r9NAeWVvBpJgA7oEzGs6J

Job Reference (optional)

7-6-12	13-3-0	20-0-0
7-6-12	5-8-3	6-9-0

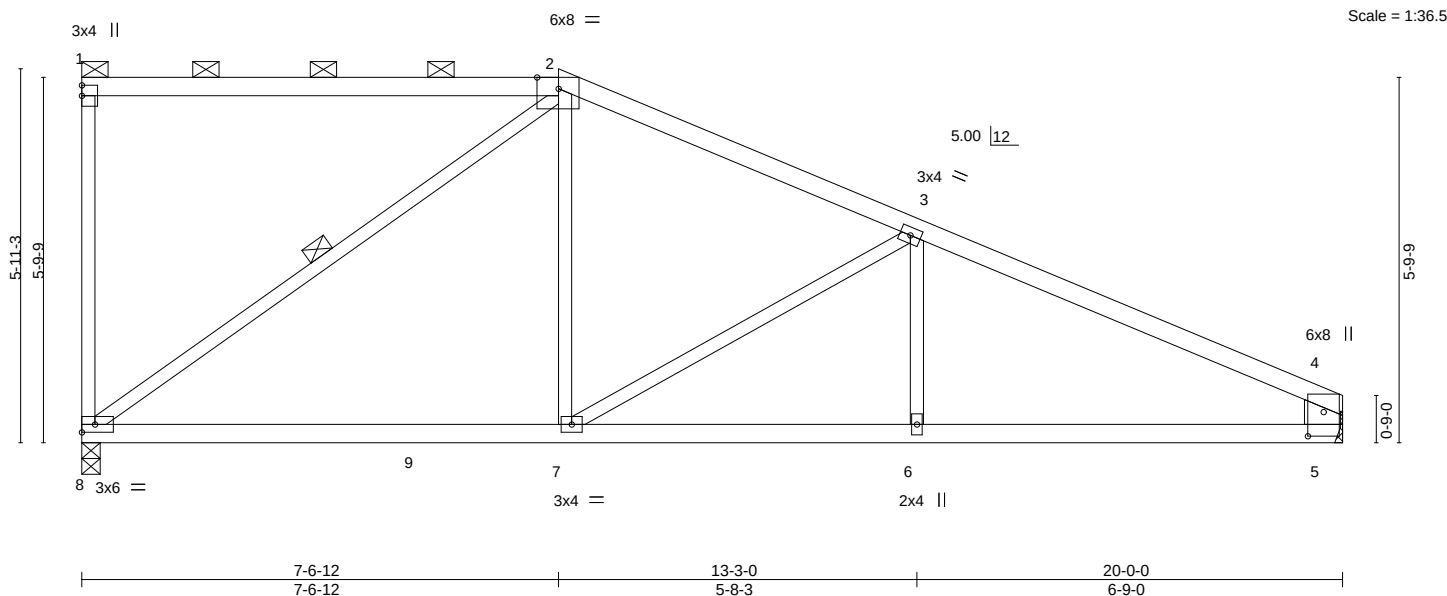


Plate Offsets (X,Y)-- [2:0-4-2,Edge], [4:0-4-10,0-3-0]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.90	Vert(LL)	-0.15 6-7 >999	360	MT20 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.91	Vert(CT)	-0.26 7-8 >888	240	
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.82	Horz(CT)	0.03 5 n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.06 6-7 >999	240	Weight: 72 lb FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 2x3 SPF No.2 *Except*
 4-5: 2x8 SP DSS

BRACING-

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

REACTIONS.

(size) 8=0-3-8, 5=Mechanical
 Max Horz 8=-182(LC 4)
 Max Uplift 8=-42(LC 4), 5=-18(LC 9)
 Max Grav 8=930(LC 2), 5=918(LC 2)

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

TOP CHORD 1-8=-251/62, 2-3=-973/40, 3-4=-1431/45, 4-5=-759/57
 BOT CHORD 7-8=0/843, 6-7=0/1240, 5-6=0/1240
 WEBS 2-8=-1020/36, 2-7=0/552, 3-7=-460/93

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 100 lb uplift at joint(s) 8, 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.
- 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 15 HT	I41303200
400302	J1	Diagonal Hip Girder	2	1		

Wheeler Lumber, Waverly, KS 66871

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ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-QRG_Ojj4Z0x9k6QsE1u8cDORra8YEFyXKvgKgZGs6l

Job Reference (optional)

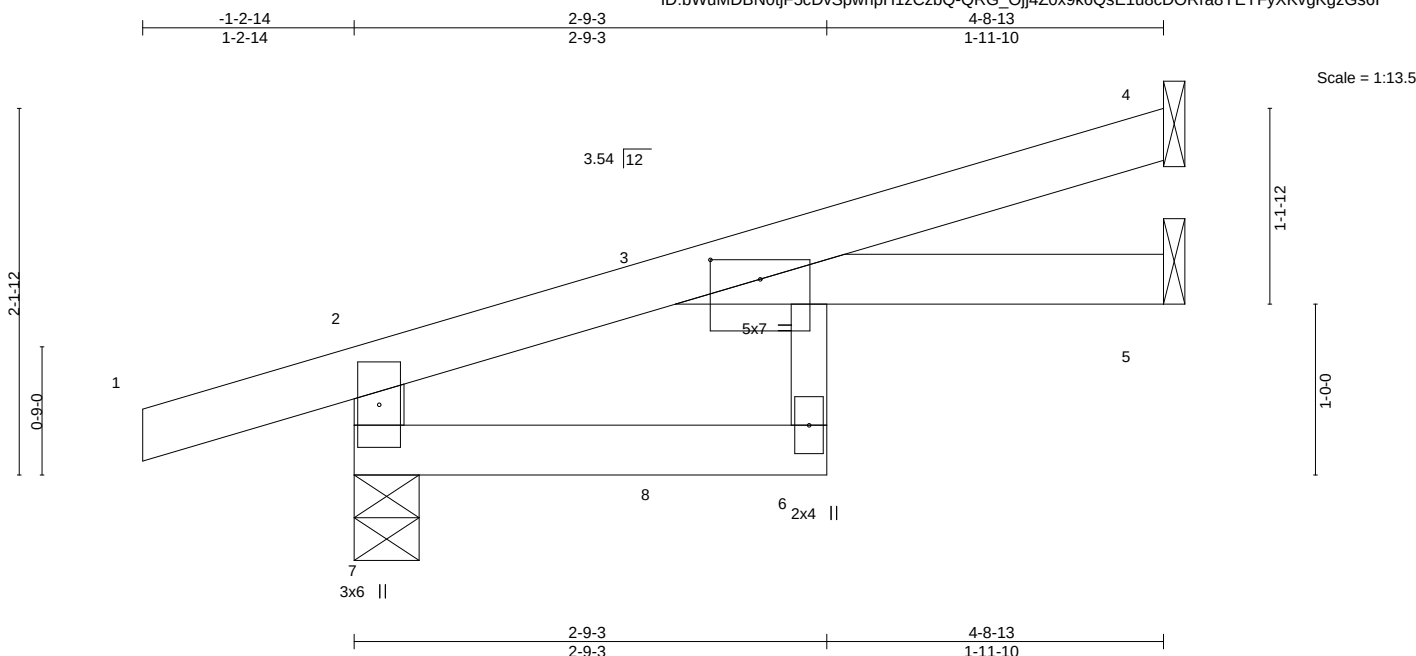


Plate Offsets (X,Y)--		[3:0-3-8,0-1-6]									
LOADING	(psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC 0.40	Vert(LL)	-0.04	6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC 0.28	Vert(CT)	-0.09	6	>604	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB 0.00	Horz(CT)	0.04	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.05	6	>999	240	Weight: 14 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-8-13 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS.

(size) 7=0-4-9, 4=Mechanical, 5=Mechanical
 Max Horz 7=68(LC 4)
 Max Uplift 7=-85(LC 4), 4=-45(LC 8)
 Max Grav 7=322(LC 1), 4=123(LC 1), 5=85(LC 3)

FORCES.

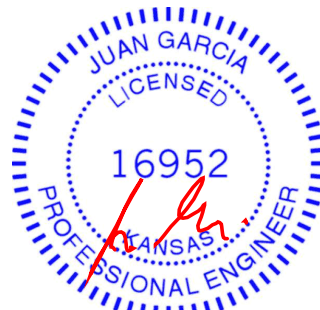
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-7=-308/105

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 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) 66 lb down and 20 lb up at 1-11-15, and 66 lb down and 20 lb up at 1-11-15 on top chord, and 3 lb down and 2 lb up at 1-10-5, and 3 lb down and 2 lb up at 1-10-5 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, 3-4=-70, 6-7=-20, 3-5=-20
 Concentrated Loads (lb)
 Vert: 8=4(F=2, B=2)



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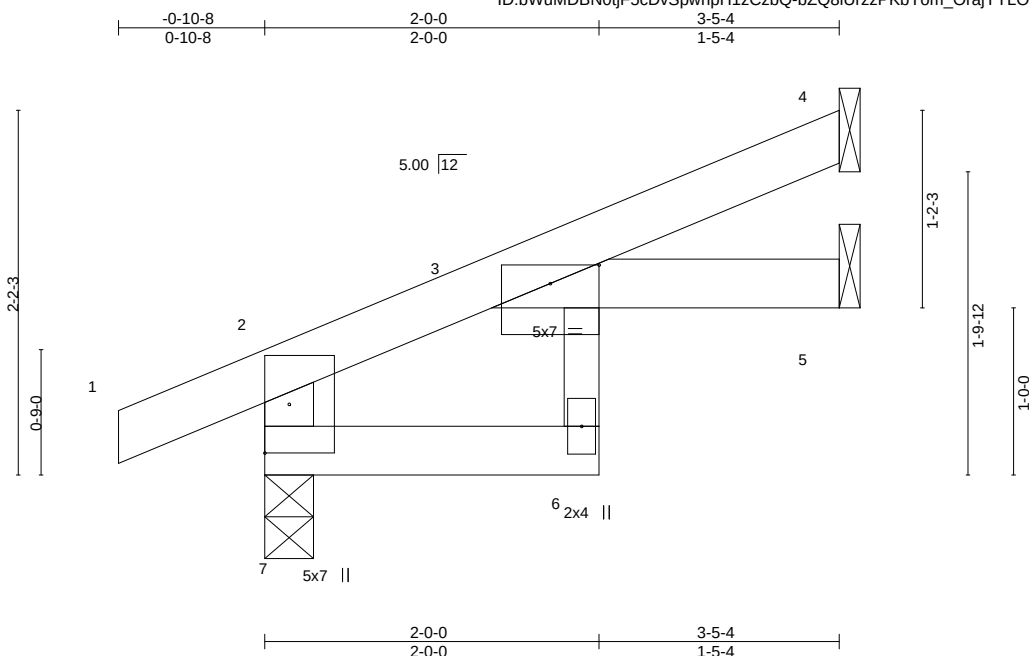
Job	Truss	Truss Type	Qty	Ply	Lot 15 HT	I41303201
400302	J2	Jack-Open	7	1		

Wheeler Lumber, Waverly, KS 66871

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ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-bZQ8iUrzzPKbYom_OrajYYL0n0xYJXza3X4mDXzGs67

Job Reference (optional)



Scale = 1:13.8

Plate Offsets (X,Y)-- [2:0-0-12,0-1-12], [3:0-3-8,0-1-5], [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	0.17	Vert(LL)	-0.01 6 >999 360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	-0.02 6 >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)	0.02 6 >999 240	Weight: 11 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 7=0-3-8, 4=Mechanical, 5=Mechanical
 Max Horz 7=63(LC 8)
 Max Uplift 7=30(LC 8), 4=38(LC 8), 5=3(LC 8)
 Max Grav 7=234(LC 1), 4=87(LC 1), 5=61(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 4, 5.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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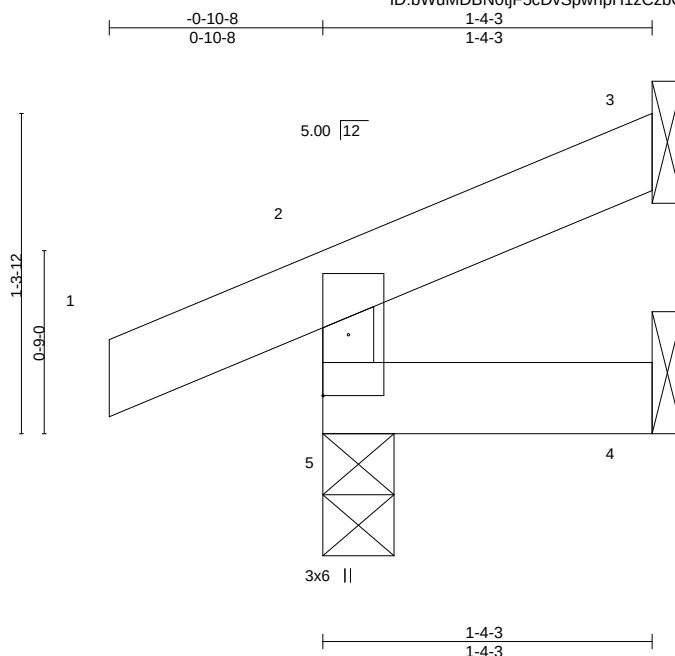
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Job	Truss	Truss Type	Qty	Ply	Lot 15 HT	I41303202
400302	J3	Jack-Open	12	1		

Wheeler Lumber, Waverly, KS 66871

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ID:bWuMdbN0tjF5cDvSpwhpH1zCzbQ-ngbJ?F_tNni2NV55XfHJVslHcSjwNVhCbEr5PzGs5y



Scale = 1:9.4

Plate Offsets (X,Y)-- [2:0-0-8,0-1-4], [5:0-0-0,0-1-4]									
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	0.06	Vert(LL)	-0.00 5 >999 360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.01	Vert(CT)	-0.00 5 >999 240		
BCLL	0.0 *	Rep Stress Incr	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: 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 1-4-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=33(LC 5)
Max Uplift 5=-34(LC 4), 3=-18(LC 8)
Max Grav 5=151(LC 1), 3=20(LC 1), 4=22(LC 3)

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

NOTES-

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



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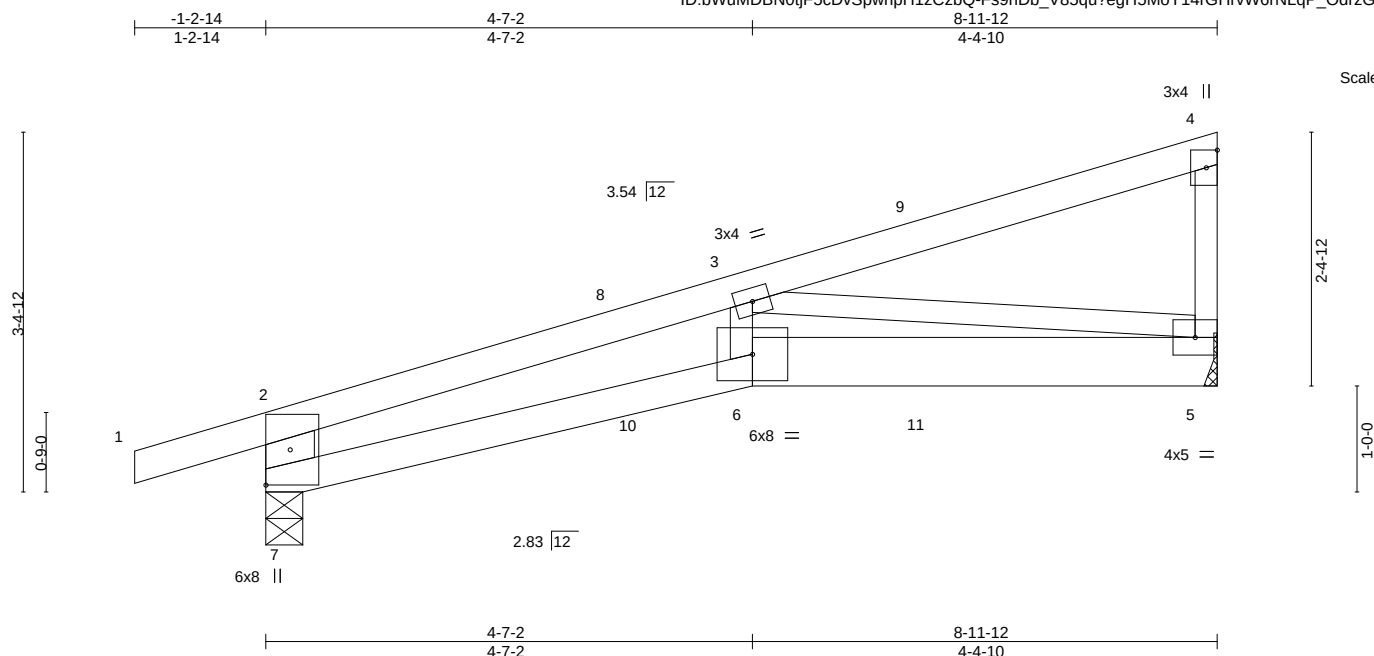
Job	Truss	Truss Type	Qty	Ply	Lot 15 HT	I41303203
400302	J4	Diagonal Hip Girder	1	1		

Wheeler Lumber, Waverly, KS 66871

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ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-Fs9hDb_V85qu?egH5MoY14rGHrvW6rNLqP_OdrzGs5x

Job Reference (optional)



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	L/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.84	Vert(LL)	-0.12	6	>889	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.63	Vert(CT)	-0.21	6	>503	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.48	Horz(CT)	0.06	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.11	6	>975	240	Weight: 32 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2 *Except*
 5-6: 2x6 SPF No.2
 WEBS 2x3 SPF No.2 *Except*
 2-7: 2x6 SP DSS

BRACING-

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

REACTIONS.

(size) 7=0-4-3, 5=Mechanical
 Max Horz 7=123(LC 5)
 Max Uplift 7=-141(LC 4), 5=-112(LC 8)
 Max Grav 7=533(LC 1), 5=454(LC 1)

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

TOP CHORD 2-7=-650/210, 2-3=-1088/263
 BOT CHORD 6-7=-295/994, 5-6=-282/1005
 WEBS 3-6=0/289, 3-5=-959/280

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 100 lb uplift at joint(s) except (jt=lb) 7=141, 5=112.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 72 lb down and 44 lb up at 3-4-15, 72 lb down and 44 lb up at 3-4-15, and 103 lb down and 78 lb up at 6-2-14, and 103 lb down and 78 lb up at 6-2-14 on top chord, and 6 lb down at 3-4-15, 6 lb down at 3-4-15, and 28 lb down at 6-2-14, and 28 lb down at 6-2-14 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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



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Continued on page 2

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 15 HT
400302	J4	Diagonal Hip Girder	1	1	I41303203
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=-66(F=-33, B=-33) 10=-1(F=-1, B=-1) 11=-40(F=-20, B=-20)

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Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 15 HT	I41303204
400302	J5	Jack-Open	15	1		

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ID:BWuMDBN0tjF5cDvSpwhpH1zCzbQ-j3j3Qx?7vOylcoFue3JnaHNYFFHZrPxU33jyAHZGs5w

Job Reference (optional)

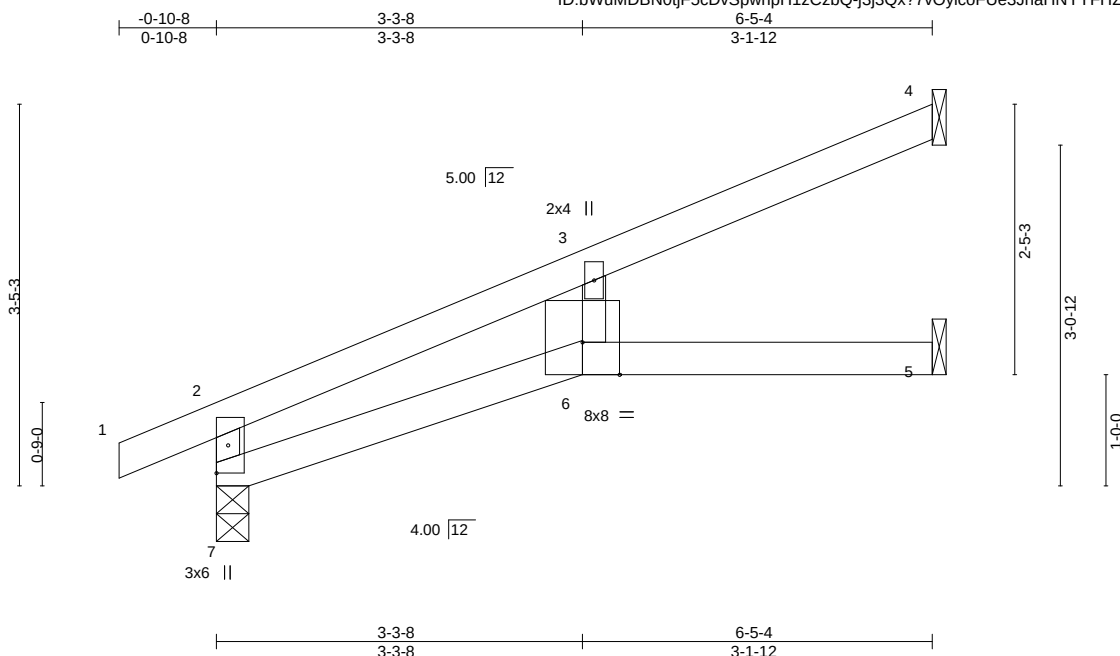


Plate Offsets (X,Y)--		[2:0-0-8,0-1-4], [7:0-0-7,0-1-4]							
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES	GRIP
TCLL 25.0		Plate Grip DOL 1.15		TC 0.42		Vert(LL) -0.12 6 >654 360		MT20	197/144
TCDL 10.0		Lumber DOL 1.15		BC 0.51		Vert(CT) -0.21 6 >362 240			
BCLL 0.0 *		Rep Stress Incr YES		WB 0.02		Horz(CT) 0.07 5 n/a n/a			
BCDL 10.0		Code IRC2018/TPI2014		Matrix-P		Wind(LL) 0.09 6 >833 240		Weight: 18 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 7=0-3-8, 4=Mechanical, 5=Mechanical
Max Horz 7=79(LC 8)
Max Uplift 7=-3(LC 8), 4=-37(LC 8)
Max Grav 7=356(LC 1), 4=168(LC 1), 5=109(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); 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) 7 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 100 lb uplift at joint(s) 7, 4.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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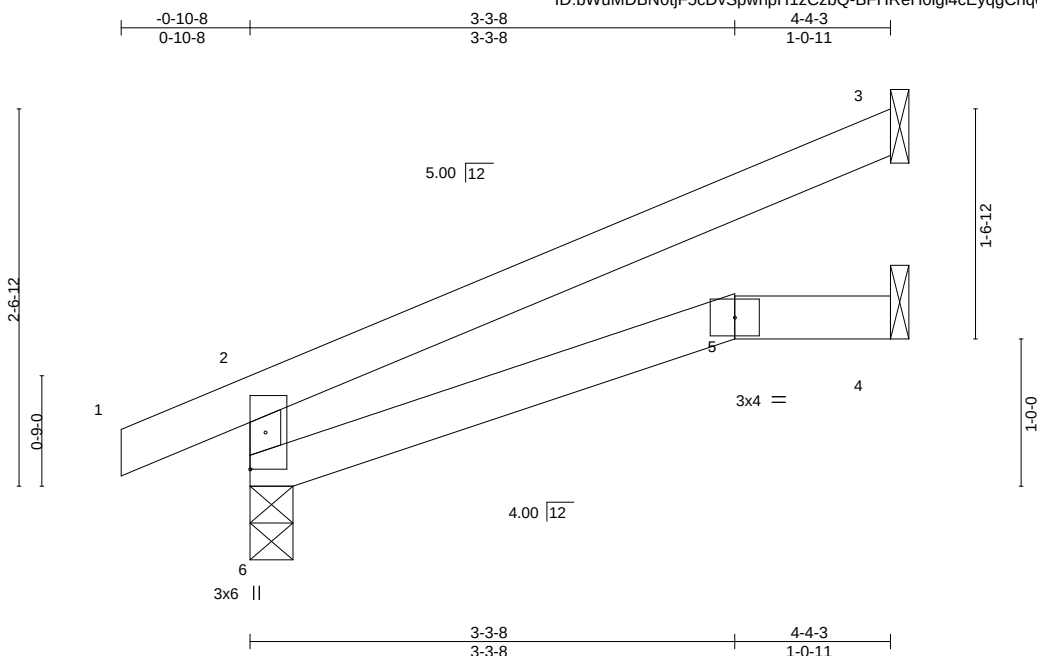
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 15 HT	I41303205
400302	J6	Jack-Open	2	1		

Wheeler Lumber, Waverly, KS 66871

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ID: bWuMDBN0tjF5cDvSpwhpH1zCzbQ-BFHReH0lgi4cEyqgCnq07VwiflfiNasReHjTVijzGs5v



Scale = 1:15.6

Plate Offsets (X,Y)-- [2:0-0-8,0-1-4], [6:0-0-7,0-1-4]									
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	0.27	Vert(LL)	-0.02 5-6 >999 360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	-0.03 5-6 >999 240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.02 3 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.01 5-6 >999 240	Weight: 12 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-4-3 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=78(LC 8)
Max Uplift 6=35(LC 8), 3=70(LC 8)
Max Grav 6=265(LC 1), 3=132(LC 1), 4=80(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 100 lb uplift at joint(s) 6, 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.



May 14, 2020

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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.



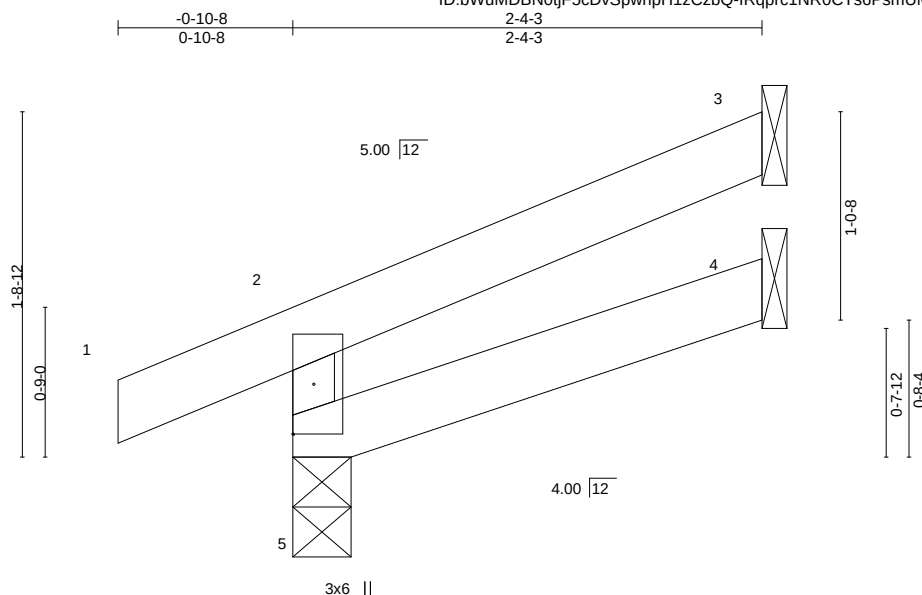
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 15 HT	I41303206
400302	J7	Jack-Open	2	1		

Wheeler Lumber, Waverly, KS 66871

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ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-fRqprc1NR0CTs6PsmUMFfiSz34QJJgnWNC2EAzGs5u



Scale = 1:11.5

Plate Offsets (X,Y)-- [2:0-0-8,0-1-4], [5:0-0-7,0-1-4]												
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	0.06	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	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00	4-5	>999	240	Weight: 7 lb	FT = 10%

LUMBER-

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

BRACING-

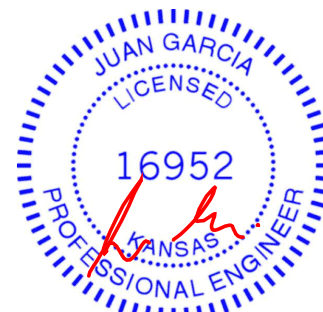
TOP CHORD Structural wood sheathing directly applied or 2-4-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=45(LC 5)
Max Uplift 5=-29(LC 4), 3=-37(LC 8)
Max Grav 5=182(LC 1), 3=61(LC 1), 4=41(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 100 lb uplift at joint(s) 5, 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.



May 14, 2020

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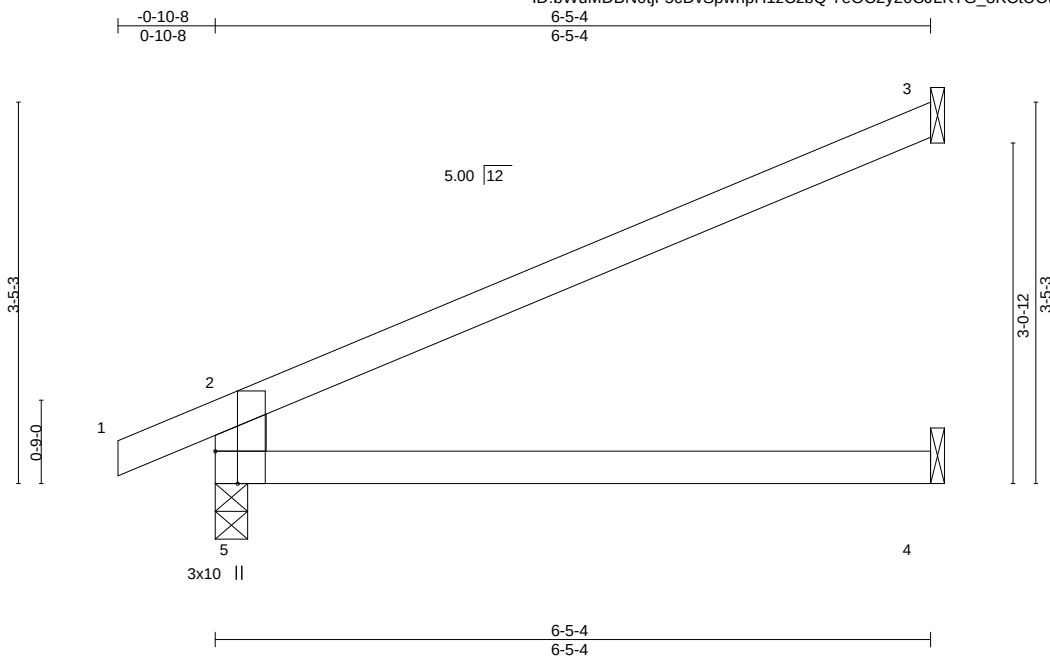
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 15 HT	I41303207
400302	J8	Jack-Open	5	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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ID: bWuMDBN0tjF5cDvSpwhpH1zCzbQ-7eOC2y20CJLKTG_3KtUCw?0?TLe2mwx11ycnczGs5t



Scale = 1:20.7

Plate Offsets (X,Y)-- [2:0-1-2,0-2-12], [5:0-3-8,Edge], [5:0-0-0,0-2-12]									
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)	-0.06 4-5 >999 360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.36	Vert(CT)	-0.15 4-5 >505 240		
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)	0.05 4-5 >999 240	Weight: 17 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

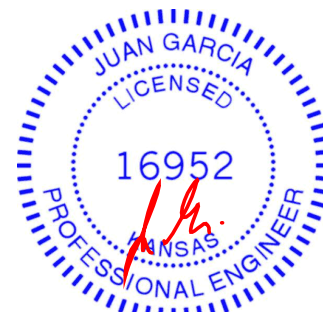
(size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=79(LC 8)
Max Uplift 5=-4(LC 8), 3=-56(LC 8)
Max Grav 5=361(LC 1), 3=192(LC 1), 4=115(LC 3)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-316/57

NOTES-

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



May 14, 2020

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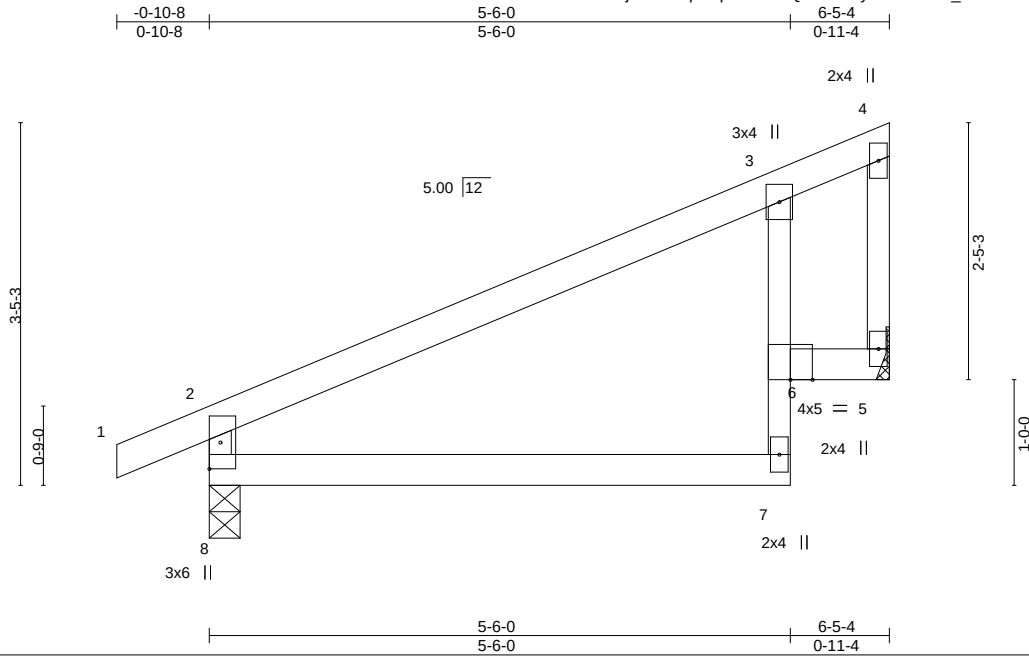
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 15 HT	I41303208
400302	J9	Jack-Closed	5	1		

Wheeler Lumber, Waverly, KS 66871

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ID:bwuMdBNOtjF5cDvSpwhpH1zCzbQ-7eOC2y20CJLKTG_3KtUCw?5YTLU2mwxl1ycnczGs5t



Scale = 1:21.8

Plate Offsets (X,Y)--		[2:0-0-8,0-1-4], [8:0-0-0,0-1-4]	
LOADING (psf)	SPACING-	CSI.	DEFL.
TCLL 25.0	Plate Grip DOL 1.15	TC 0.31	in (loc) l/defl L/d
TCDL 10.0	Lumber DOL 1.15	BC 0.37	Vert(LL) -0.03 7-8 >999 360
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Vert(CT) -0.07 7-8 >999 240
BCDL 10.0	Code IRC2018/TPI2014	Matrix-R	Horz(CT) 0.01 5 n/a n/a
			Wind(LL) 0.01 6 >999 240
			PLATES MT20
			GRIP 197/144
			Weight: 20 lb FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 8=0-3-8, 5=Mechanical
 Max Horz 8=96(LC 5)
 Max Uplift 8=-14(LC 8), 5=-24(LC 8)
 Max Grav 8=354(LC 1), 5=275(LC 1)

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

TOP CHORD 2-8=-309/50

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 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.



May 14, 2020

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 15 HT	I41303209
400302	J10	Diagonal Hip Girder	1	1		

Wheeler Lumber, Waverly, KS 66871

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ID:bWuMdBNOtjF5cDvSpwhpH1zCzbQ-MqOlPpKk4eBtzQaFMSwcheTfgOlwiPQF?eOnPZZGs6G

-1-2-14	3-2-2	6-0-10	8-11-12
1-2-14	3-2-2	2-10-8	2-11-2

Scale = 1:20.7

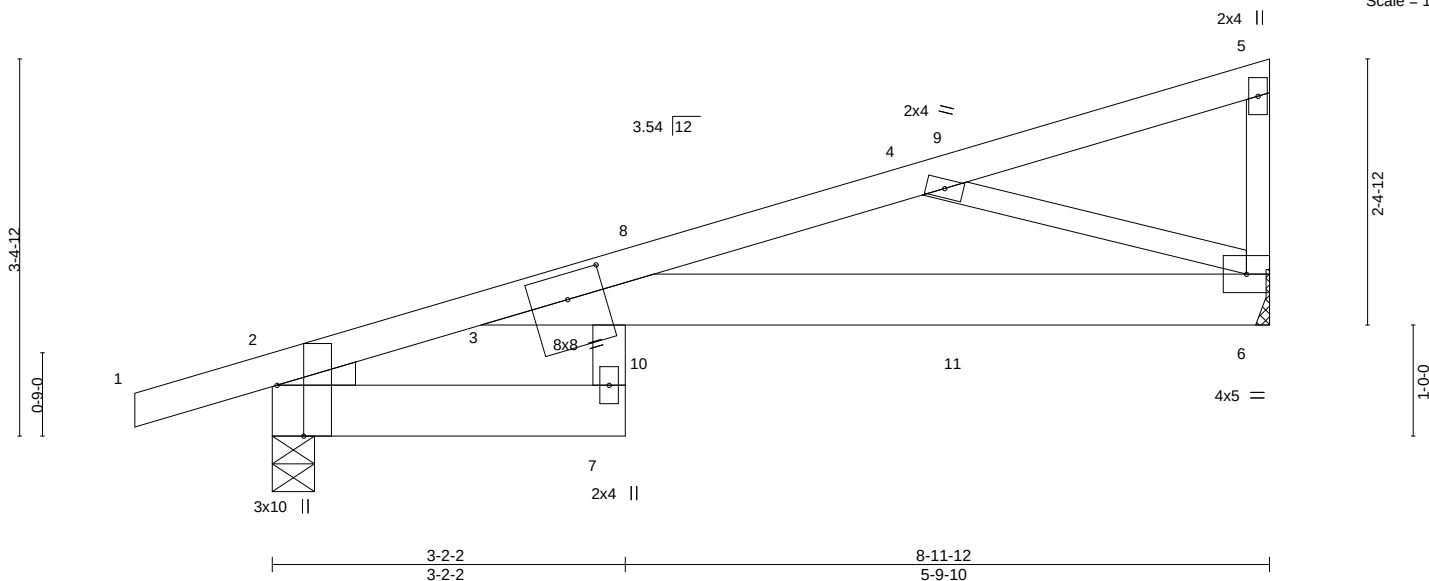


Plate Offsets (X,Y)-- [2:0-0-1,0-0-4], [2:0-0-2,0-6-3], [2:0-5-8,Edge], [3:0-4-0,0-2-12]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.96	Vert(LL)	-0.21 7 >505 360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.61	Vert(CT)	-0.41 7 >257 240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.21	Horz(CT)	0.15 6 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.23 7 >447 240	Weight: 36 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF 2100F 1.8E
 BOT CHORD 2x6 SPF No.2 *Except*
 3-7: 2x4 SPF 2100F 1.8E
 WEBS 2x3 SPF No.2
 WEDGE
 Left: 2x3 SPF No.2

BRACING-

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

REACTIONS.

(size) 6=Mechanical, 2=0-4-9
 Max Horz 2=114(LC 22)
 Max Uplift 6=-136(LC 8), 2=-166(LC 4)
 Max Grav 6=490(LC 1), 2=582(LC 1)

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

TOP CHORD 3-4=-786/255
 BOT CHORD 3-6=-269/762
 WEBS 4-6=-771/299

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=136, 2=166.
- This truss 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) 63 lb down and 25 lb up at 3-4-15, 63 lb down and 25 lb up at 3-4-15, and 97 lb down and 59 lb up at 6-2-14, and 97 lb down and 59 lb up at 6-2-14 on top chord, and 31 lb down and 29 lb up at 3-4-15, 31 lb down and 29 lb up at 3-4-15, and 45 lb down and 31 lb up at 6-2-14, and 45 lb down and 31 lb up at 6-2-14 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-3=-70, 3-5=-70, 2-7=-20, 3-6=-20



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Continued on page 2

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 15 HT	I41303209
400302	J10	Diagonal Hip Girder	1	1	Job Reference (optional)	

LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 9=-29(F=-14, B=-14) 10=-53(F=-27, B=-27) 11=-90(F=-45, B=-45)

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Chesterfield, MO 63017

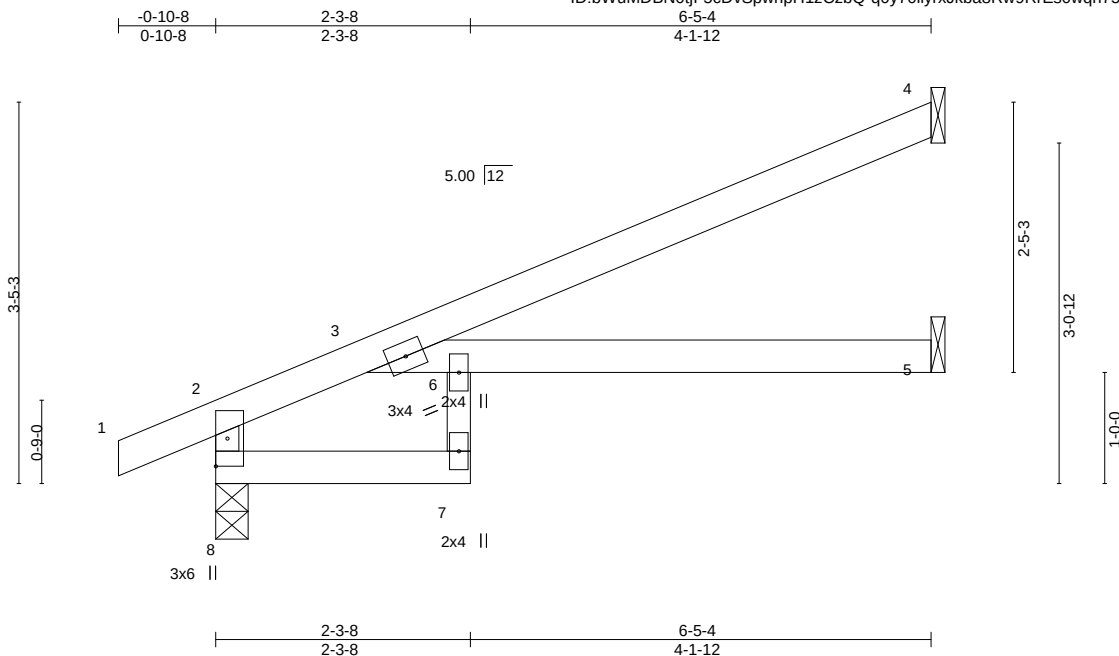
Job	Truss	Truss Type	Qty	Ply	Lot 15 HT	I41303210
400302	J11	Jack-Open	5	1		

Wheeler Lumber, Waverly, KS 66871

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ID:bWuMdBNOtjF5cDvSpwhpH1zCzbQ-q0y70llyrxJkba8Rw9RrEs0wqn75RvkPD18Kx?zGs6F

Job Reference (optional)



Scale = 1:20.7

Plate Offsets (X,Y)-- [2:0-0-8,0-1-4], [8:0-0-0,0-1-4]									
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	0.55	Vert(LL)	-0.10 5-6 >732 360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.48	Vert(CT)	-0.21 5-6 >367 240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.11 5 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.08 5-6 >918 240	Weight: 18 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

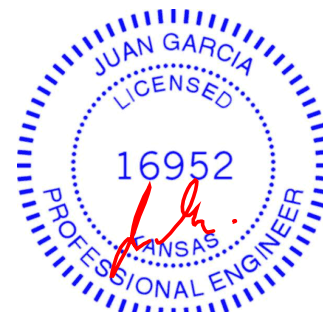
(size) 8=0-3-8, 4=Mechanical, 5=Mechanical
Max Horz 8=80(LC 8)
Max Uplift 4=48(LC 8)
Max Grav 8=368(LC 1), 4=187(LC 1), 5=119(LC 3)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-8=-364/21

NOTES-

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



May 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

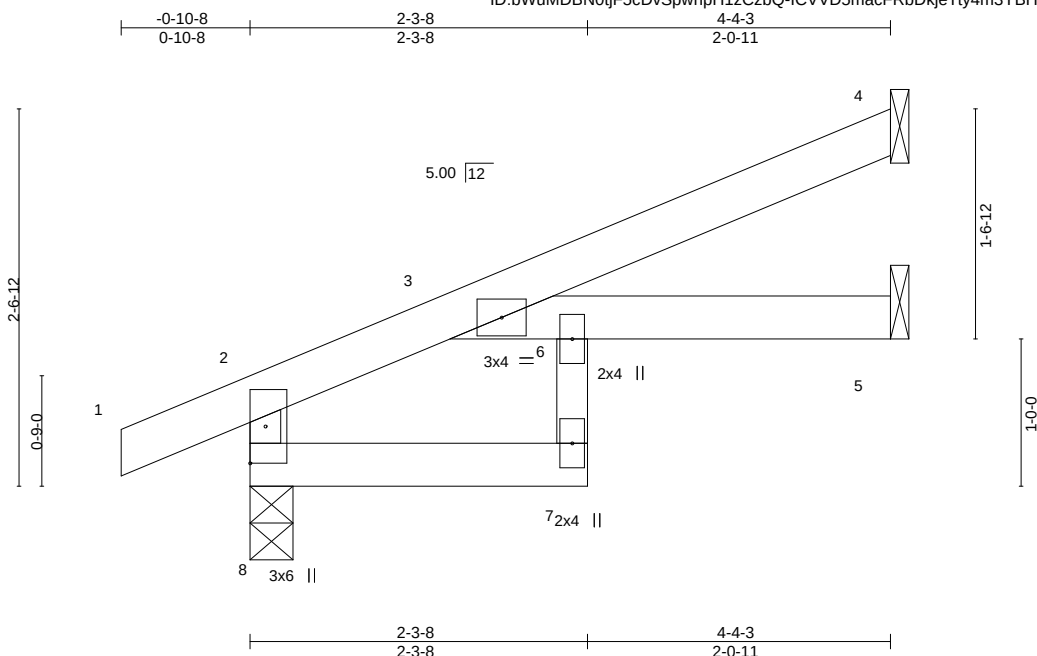
Job	Truss	Truss Type	Qty	Ply	Lot 15 HT	I41303211
400302	J12	Jack-Open	2	1		

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:19 2020 Page 1

ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-ICVVD5macFRbDKjeTy4m3YBHBWVAMEYSyUURzGs6E

Job Reference (optional)



Scale = 1:15.6

Plate Offsets (X,Y)--		[2:0-0-8,0-1-4], [8:0-0-0,0-1-4]									
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 0.18		Vert(LL) -0.02	7	>999	360	MT20	197/144
TCDL 10.0		Lumber DOL 1.15		BC 0.22		Vert(CT) -0.04	6	>999	240		
BCLL 0.0 *		Rep Stress Incr YES		WB 0.00		Horz(CT) 0.02	5	n/a	n/a		
BCDL 10.0		Code IRC2018/TPI2014		Matrix-R		Wind(LL) 0.02	7	>999	240	Weight: 13 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 8=0-3-8, 4=Mechanical, 5=Mechanical
 Max Horz 8=78(LC 8)
 Max Uplift 8=-31(LC 8), 4=-50(LC 8), 5=-2(LC 8)
 Max Grav 8=275(LC 1), 4=113(LC 1), 5=87(LC 3)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-8=-259/55

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 4, 5.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 14, 2020

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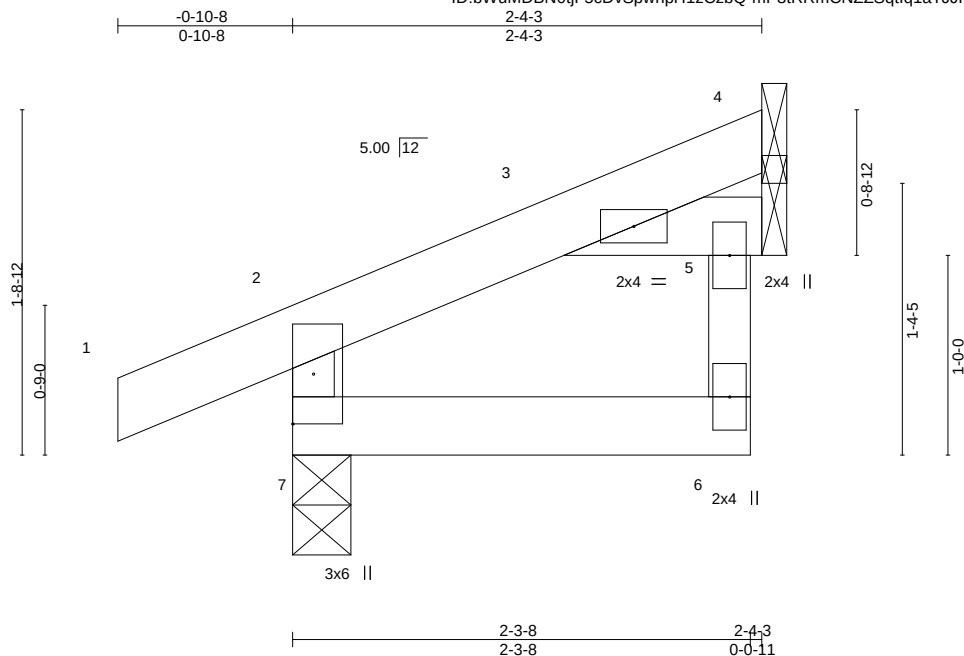
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 15 HT	I41303212
400302	J13	Jack-Open	2	1		

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:20 2020 Page 1

ID: bWuMdBNOtjF5cDvSpwhpH1zCzbQ-mP3tRRmCNZZSqtIq1aTJJH5NvbvcvpUhhcdR0uzGs6D



Scale = 1:11.5

Plate Offsets (X,Y)--		[2:0-0-8,0-1-4], [7:0-0-0,0-1-4]								
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 0.06		Vert(LL) -0.00	3	>999	360	MT20 197/144
TCDL 10.0		Lumber DOL 1.15		BC 0.03		Vert(CT) -0.00	3	>999	240	
BCLL 0.0 *		Rep Stress Incr YES		WB 0.00		Horz(CT) -0.00	5	n/a	n/a	
BCDL 10.0		Code IRC2018/TPI2014		Matrix-R		Wind(LL) 0.00	3	>999	240	Weight: 9 lb FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 7=0-3-8, 4=Mechanical, 5=Mechanical
 Max Horz 7=44(LC 8)
 Max Uplift 7=-28(LC 4), 4=-18(LC 8), 5=-6(LC 8)
 Max Grav 7=183(LC 1), 4=41(LC 1), 5=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; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 4, 5.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 14, 2020

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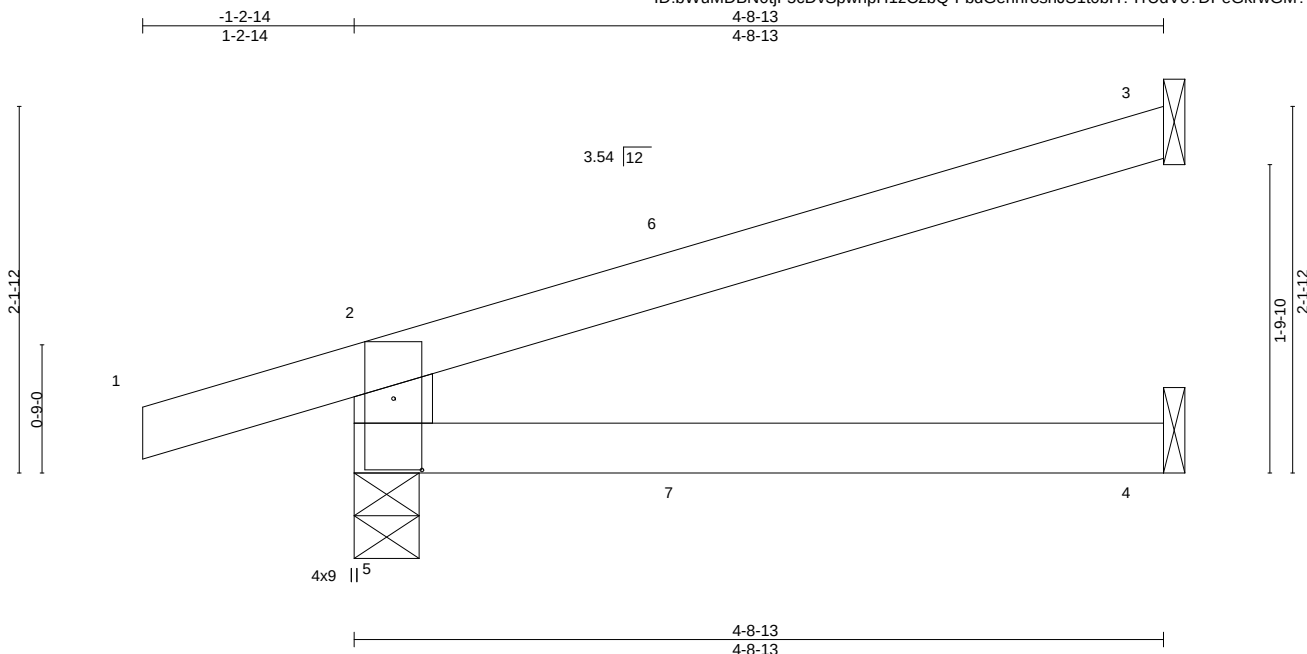
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 15 HT	I41303213
400302	J15	Diagonal Hip Girder	2	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

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ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-FbdGennr8shJS1t0bH?YrUdVo?DPeGkrwGM?YKzGs6C



Scale = 1:13.5

Plate Offsets (X,Y)--		[5:0-5-0,0-2-0]							
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	L/defl	L/d
TCLL	25.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	-0.02	4-5	>999
TCDL	10.0	Lumber DOL	1.15	BC	0.19	Vert(CT)	-0.04	4-5	>999
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.01	3	n/a
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.01	4-5	>999
								PLATES	GRIP
								MT20	197/144
								Weight: 13 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-8-13 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=68(LC 4)
Max Uplift 5=-94(LC 4), 3=-60(LC 8)
Max Grav 5=317(LC 1), 3=133(LC 1), 4=82(LC 3)

FORCES.

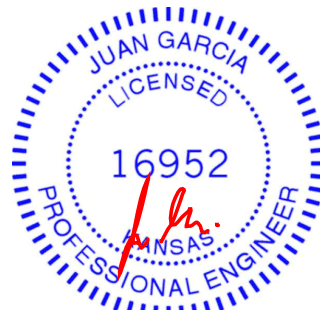
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-281/132

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 66 lb down and 20 lb up at 1-11-15, and 66 lb down and 20 lb up at 1-11-15 on top chord, and 3 lb down and 2 lb up at 1-11-15, and 3 lb down and 2 lb up at 1-11-15 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S)

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



May 14, 2020

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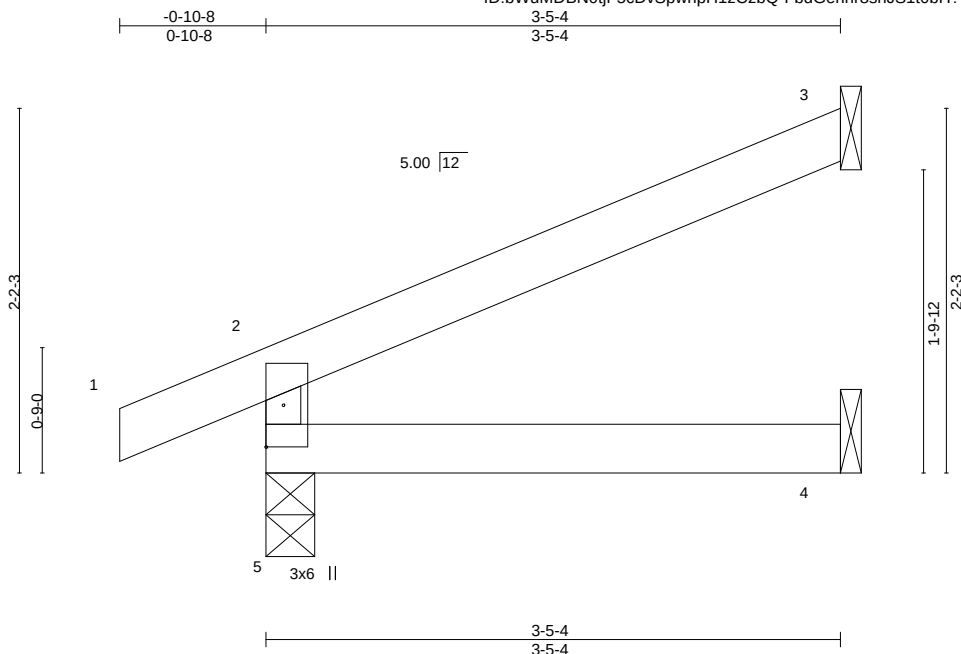
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 15 HT	I41303214
400302	J16	Jack-Open	5	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-FbdGennr8shJS1t0bH?YrUdXK?EseGkrwGM?YKzGs6C



Scale = 1:13.8

Plate Offsets (X,Y)--		[2:0-0-8,0-1-4], [5:0-0-0,0-1-4]									
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 0.15	Vert(LL)	-0.01	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC 0.09	Vert(CT)	-0.01	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.00	4-5	>999	240	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 3-5-4 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=63(LC 8)
Max Uplift 5=-33(LC 8), 3=-54(LC 8)
Max Grav 5=226(LC 1), 3=101(LC 1), 4=62(LC 3)

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

NOTES-

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



May 14, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 15 HT	I41303215
400302	J17	Diagonal Hip Girder	2	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:23 2020 Page 1
ID:bWuMdbN0tjF5cDvSpwhpH1zCzbQ-B_I03Tp5gUx1hL1Pii10wvjidoph6AD8Nar5dDzGs6A

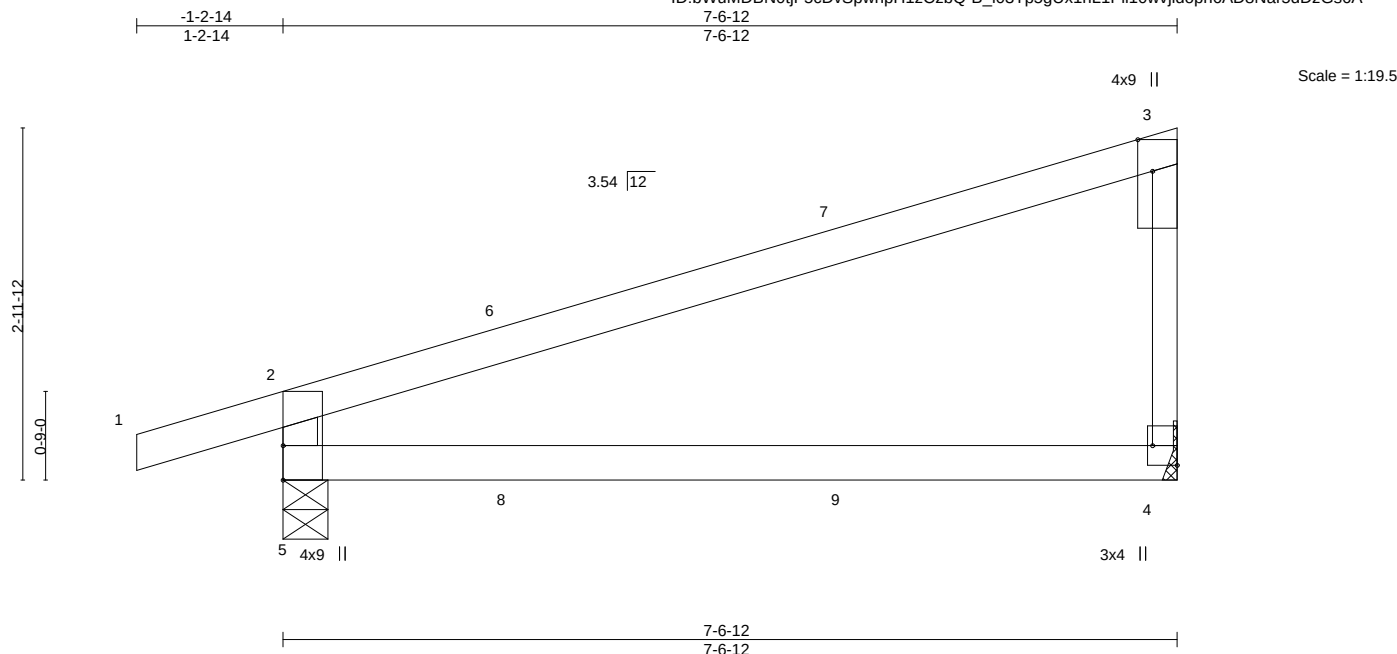


Plate Offsets (X,Y)--		[2:0-0-8,0-1-12], [3:0-3-3,Edge], [4:Edge,0-2-8], [5:0-0-0,0-1-12]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.87
TCDL 10.0	Lumber DOL	1.15	BC 0.52
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.00
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R
			DEFL.
			in (loc) l/defl L/d
			Vert(LL) -0.11 4-5 >765 360
			Vert(CT) -0.25 4-5 >355 240
			Horz(CT) 0.00 4 n/a n/a
			Wind(LL) 0.05 4-5 >999 240
			PLATES GRIP
			MT20 197/144
			Weight: 21 lb FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 5=0-4-9, 4=Mechanical
Max Horz 5=122(LC 5)
Max Uplift 5=124(LC 4), 4=82(LC 8)
Max Grav 5=438(LC 1), 4=329(LC 1)

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

TOP CHORD 2-5=-383/182

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=124.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 66 lb down and 20 lb up at 1-11-15, 66 lb down and 20 lb up at 1-11-15, and 87 lb down and 62 lb up at 4-9-14, and 87 lb down and 62 lb up at 4-9-14 on top chord, and 3 lb down and 2 lb up at 1-11-15, 3 lb down and 2 lb up at 1-11-15, and 17 lb down at 4-9-14, and 17 lb down at 4-9-14 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) 8=4(F=2, B=2) 9=-13(F=-7, B=-7)



May 14, 2020

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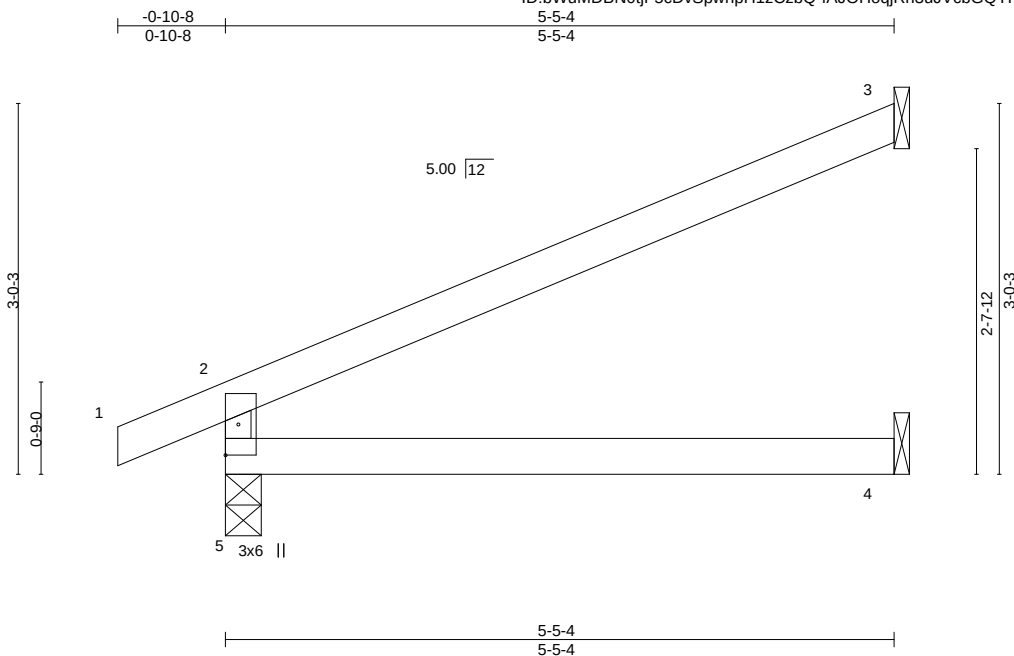
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 15 HT	I41303216
400302	J18	Jack-Open	7	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:24 2020 Page 1

ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-fAJOHoqjRn3uJVcbGQYFT7F_xCDurdTHcDbf9fzGs69



Scale = 1:18.7

Plate Offsets (X,Y)-- [2:0-0-8,0-1-4], [5:0-0-0,0-1-4]												
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	0.45	Vert(LL)	-0.04	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	-0.08	4-5	>769	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.03	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.02	4-5	>999	240	Weight: 14 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-5-4 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=68(LC 8)
Max Uplift 5=-4(LC 8), 3=-50(LC 8)
Max Grav 5=312(LC 1), 3=168(LC 1), 4=100(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-270/46

NOTES-

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



May 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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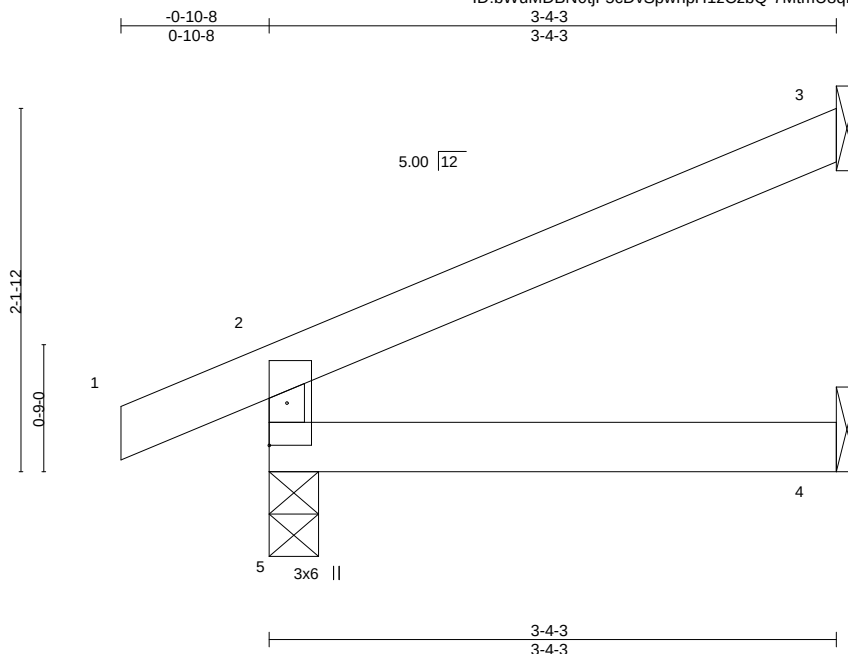


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 400302	Truss J19	Truss Type Jack-Open	Qty 3	Ply 1	Lot 15 HT Job Reference (optional)	I41303217
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Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:25 2020 Page 1
ID: bWuMdbN0tjF5cDvSpwhpH1zCzbQ-7MtmU8qLC5BlxfBnq73U0KoDTcbua4jRqtKCh5zGs68



Scale = 1:13.6

Plate Offsets (X,Y)--	[2:0-0-8,0-1-4], [5:0-0-0,0-1-4]
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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 0.14	Vert(LL)	-0.01	4-5	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.09	Vert(CT)	-0.01	4-5	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.00	4-5	>999	240	Weight: 9 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=61(LC 8)
Max Uplift 5=-32(LC 8), 3=-53(LC 8)
Max Grav 5=222(LC 1), 3=98(LC 1), 4=60(LC 3)

FORCES.

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

NOTES-

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



May 14, 2020

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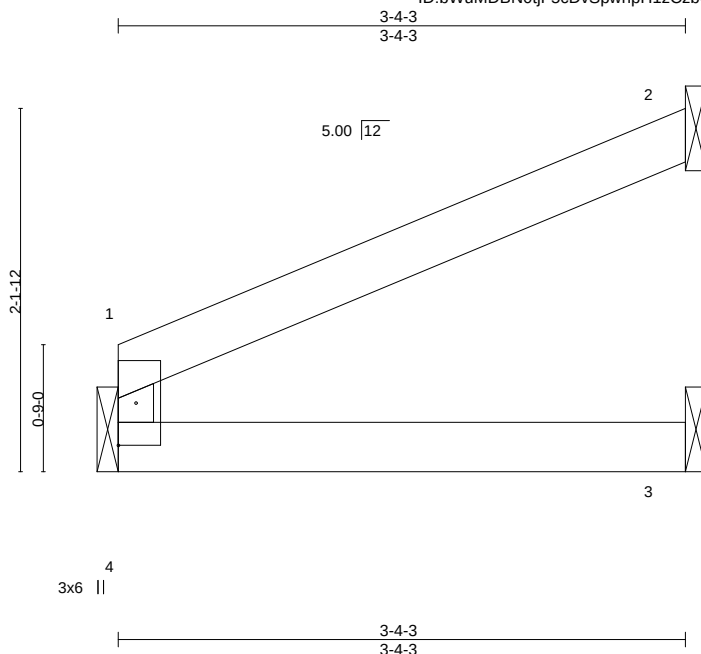
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 15 HT	I41303218
400302	J20	Jack-Open	1	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:27 2020 Page 1

ID: bWuMDBN0tjF5cDvSpwhpH1zCzbQ-3l_XvqsbkiSSAyLaxY5z5ltZeQHJ2zDjlBpJm_zGs66



Scale = 1:13.6

Plate Offsets (X,Y)-- [1:0-0-8,0-1-4], [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	0.16	Vert(LL)	-0.01	3-4	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	-0.01	3-4	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	2	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00	3-4	>999	240	Weight: 8 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 4=Mechanical, 2=Mechanical, 3=Mechanical
Max Horz 4=47(LC 8)
Max Uplift 4=-8(LC 8), 2=-55(LC 8)
Max Grav 4=143(LC 1), 2=105(LC 1), 3=61(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 14, 2020

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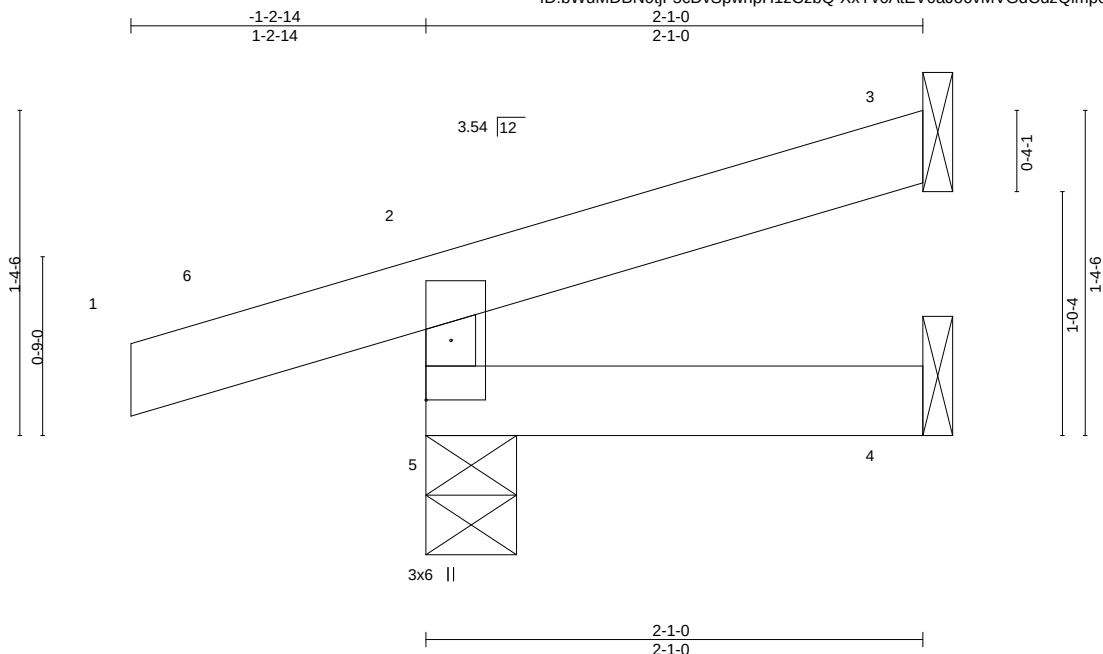


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 15 HT	I41303219
400302	J21	Diagonal Hip Girder	2	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:28 2020 Page 1
ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-XxYv6AtEV0aJo6vMVGdCdZQlmpednQTtXrZslQzGs65



Scale = 1:9.7

Plate Offsets (X,Y)-- [2:0-0-6,0-1-4], [5:0-0-0,0-1-4]									
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	0.07	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	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 5 >999	240	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 2-1-0 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=42(LC 7)
Max Uplift 5=97(LC 6), 3=24(LC 12)
Max Grav 5=83(LC 1), 3=22(LC 1), 4=27(LC 3)

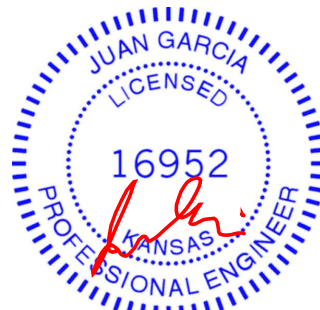
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

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 100 lb uplift at joint(s) 5, 3.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 14 lb down and 5 lb up at -1-2-14, and 14 lb down and 5 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=-21(F=-11, B=-11)
Trapezoidal Loads (plf)
Vert: 1=0(F=35, B=35)-to-6=-18(F=26, B=26), 6=0(F=35, B=35)-to-2=-15(F=27, B=27), 2=-15(F=27, B=27)-to-3=-50(F=10, B=10), 5=-4(F=8, B=8)-to-4=-14(F=3, B=3)



May 14, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

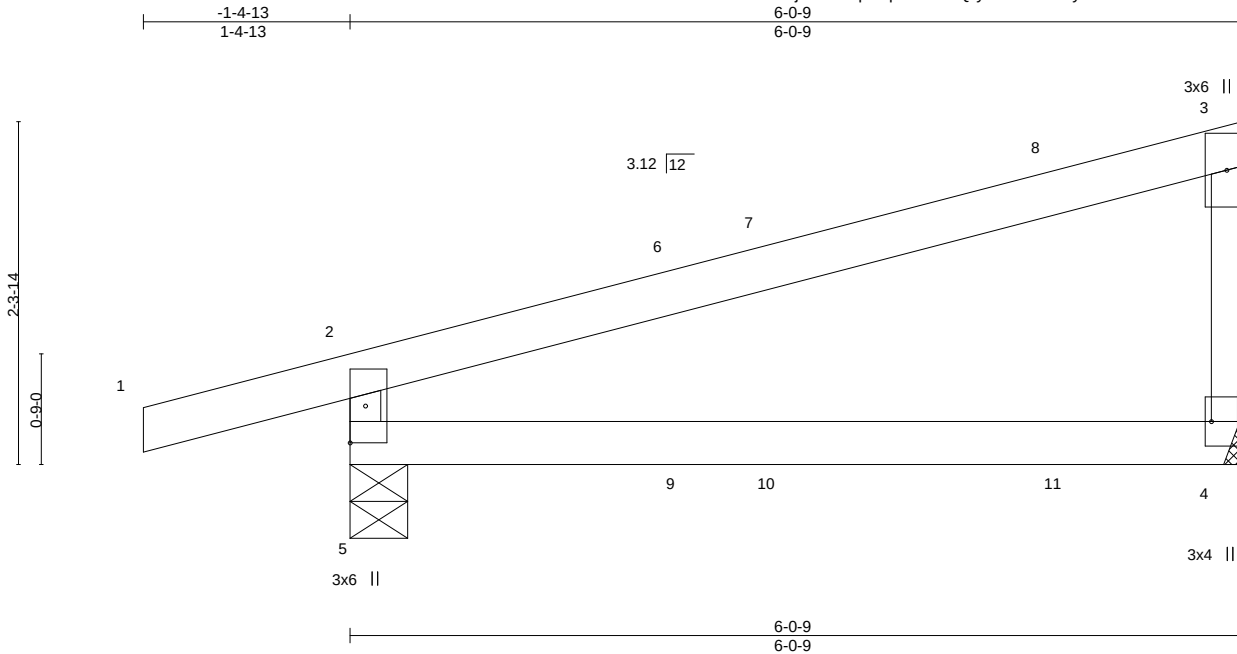
Job	Truss	Truss Type	Qty	Ply	Lot 15 HT	I41303221
400302	J23	Diagonal Hip Girder	2	1		

Wheeler Lumber, Waverly, KS 66871

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ID: bWuMdBNOtjF5cDvSpwhpH1zCzbQ-yWE1Cv6nxuafaexAOAvFb29H1bm_nCJDpnWvlzGs62

Job Reference (optional)



Scale = 1:15.6

Plate Offsets (X,Y)-- [2:0-0-5,0-1-4], [4:Edge,0-2-8], [5:0-0-0,0-1-4]										
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 0.50	Vert(LL)	-0.05	4-5	>999	360	MT20 197/144
TCDL	10.0	Lumber DOL	1.15	BC 0.31	Vert(CT)	-0.10	4-5	>714	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 2x3 SPF No.2

BRACING-

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

REACTIONS.

(size) 5=0-4-11, 4=Mechanical
Max Horz 5=92(LC 7)
Max Uplift 5=-117(LC 4), 4=-61(LC 8)
Max Grav 5=383(LC 1), 4=258(LC 1)

FORCES.

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

TOP CHORD 2-5=-335/158

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=117.
- This truss 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) 60 lb down and 21 lb up at 2-3-15, and 77 lb down and 42 lb up at 2-11-5, and 75 lb down and 54 lb up at 4-10-10 on top chord, and 3 lb down and 2 lb up at 2-3-15, and 5 lb down at 2-11-5, and 16 lb down at 4-10-10 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, 4-5=-20
Concentrated Loads (lb)
Vert: 8=-4(B) 9=2(B) 10=-1(F) 11=-7(B)



May 14, 2020

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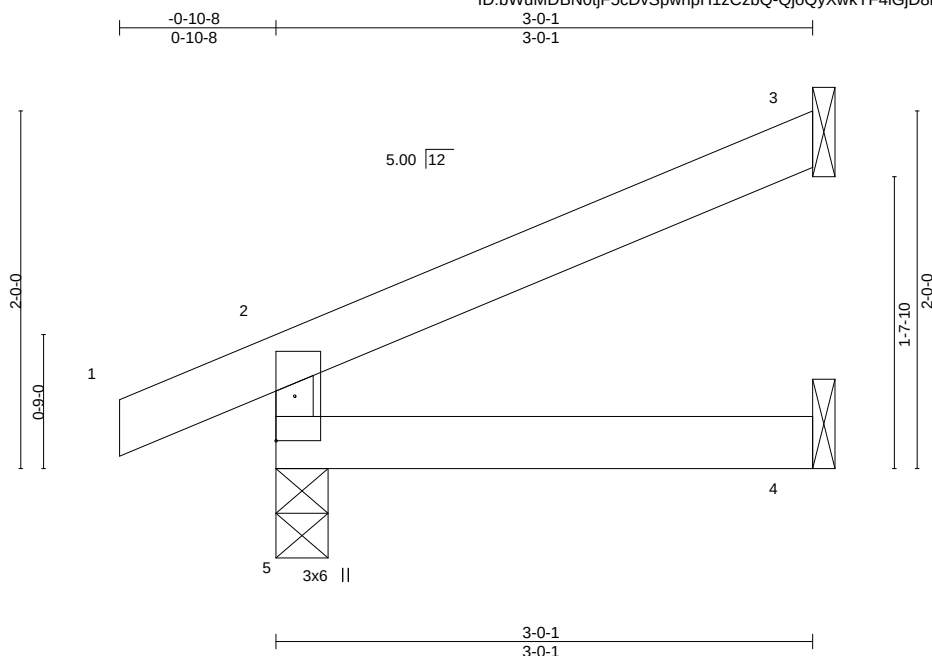
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 400302	Truss J24	Truss Type Jack-Open	Qty 2	Ply 1	Lot 15 HT I41303222
Job Reference (optional)					

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:32 2020 Page 1

ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-QjoQyXwkYF4IGjD8k5h8opbQFR_rjESTSTX4RBzGs61



Scale = 1:12.9

Plate Offsets (X,Y)-- [2:0-0-8,0-1-4], [5:0-0-0,0-1-4]												
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	0.10	Vert(LL)	-0.00	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	-0.01	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00	4-5	>999	240	Weight: 9 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=56(LC 8)
Max Uplift 5=31(LC 8), 3=47(LC 8)
Max Grav 5=208(LC 1), 3=85(LC 1), 4=54(LC 3)

FORCES.

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

NOTES-

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



May 14, 2020

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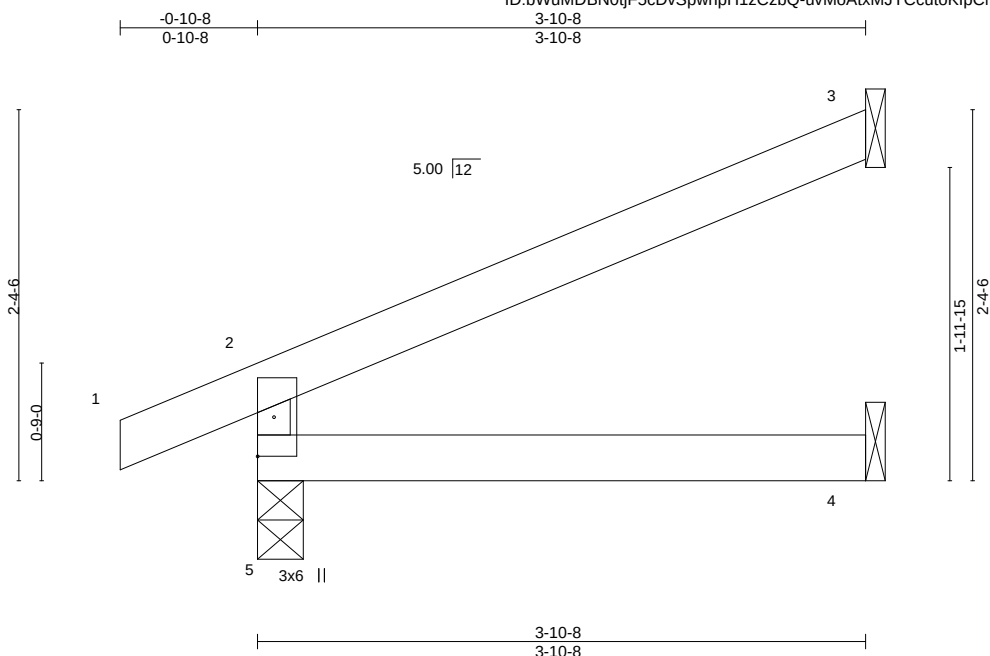
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 15 HT	I41303223
400302	J25	Jack-Open	5	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:33 2020 Page 1

ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-uvMoAtxMJYCcutoklpCNK07ZVqKDSicg7GdzdzGs60



Scale = 1:14.7

Plate Offsets (X,Y)-- [2:0-0-8,0-1-4], [5:0-0-0,0-1-4]											
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	0.20	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 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.

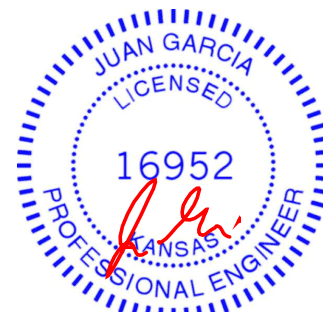
REACTIONS.

(size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=70(LC 8)
Max Uplift 5=-34(LC 8), 3=-61(LC 8)
Max Grav 5=244(LC 1), 3=116(LC 1), 4=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; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 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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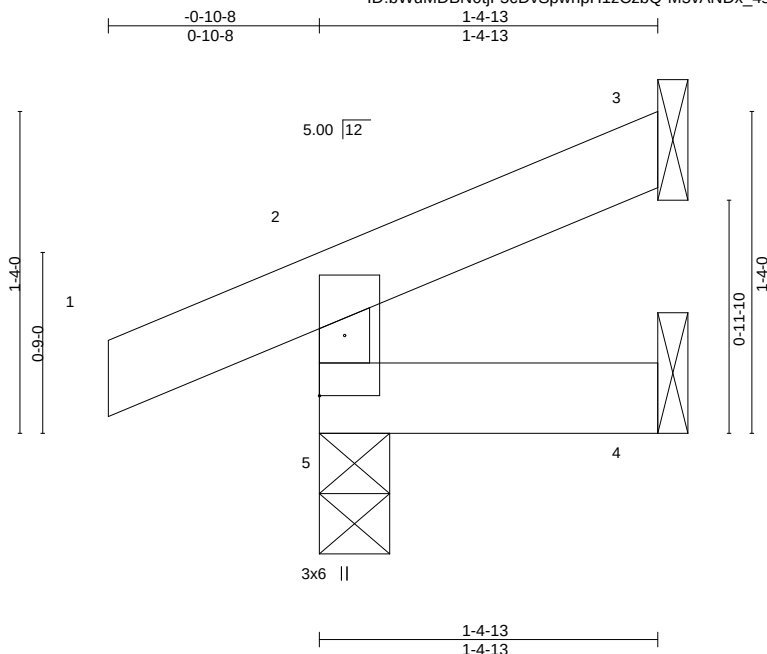
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 15 HT	I41303224
400302	J26	Jack-Open	2	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:34 2020 Page 1

ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-M5vANDx_4sKTW1NWsWjctEgmMEhCB8ylvn0BV4zGs6?



Scale = 1:9.6

Plate Offsets (X,Y)--		[2:0-0-8,0-1-4], [5:0-0-0,0-1-4]								
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 0.06		Vert(LL) -0.00	5	>999	360	MT20 197/144
TCDL 10.0		Lumber DOL 1.15		BC 0.01		Vert(CT) -0.00	5	>999	240	
BCLL 0.0 *		Rep Stress Incr 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: 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 1-4-13 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=34(LC 5)
Max Uplift 5=34(LC 4), 3=19(LC 8)
Max Grav 5=153(LC 1), 3=23(LC 1), 4=24(LC 3)

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

NOTES-

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



May 14, 2020

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

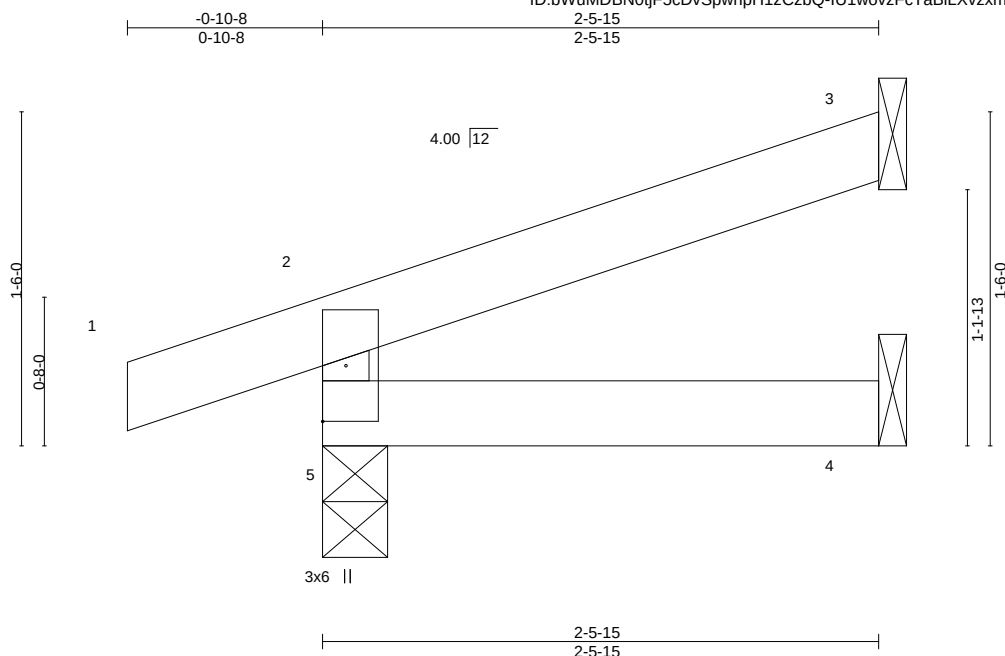
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:36 2020 Page 1
ID:bWuMdBNOtiF5cDvSpwhH1zCzbQ-U1IwovzFcTaBILXvzxm4yfi7t2NAe2R2M5VHZyzGs5z

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:36 2020 Page 1
ID:bWuMDBN0tiF5cDvSpwhpH1zCzbQ-IU1wovzFcTaBJLXvzx4vJ7t2NAe2R2M5VHZvGs5z



Scale = 1:10.3

Plate Offsets (X,Y)-- [2:0-0-7,0-1-4], [5:0-0-0,0-1-4]												
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	0.06	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	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-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 2-5-15 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) 5=0-3-8, 3=Mechanical, 4=Mechanical
 Max Horz 5=43(LC 4)
 Max Uplift 5=-58(LC 4), 3=-34(LC 8)
 Max Grav 5=188(LC 1), 3=67(LC 1), 4=44(LC 3)

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

NOTES-

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



May 14, 2020



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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 15 HT	
400302	K1	Hip Girder	1	1		I41303226
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

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ID: bWuMdbN0tjF5cDvSpwhpH1zCzbQ-40WyTe3Gjxb2jZ8RRdvyHL4H4Gu6WbaECLRjrVzGs5r

0-10-8	5-1-2	10-2-0	15-2-14	20-4-0	21-2-8
0-10-8	5-1-2	5-0-14	5-0-14	5-1-2	0-10-8

Scale = 1:36.6

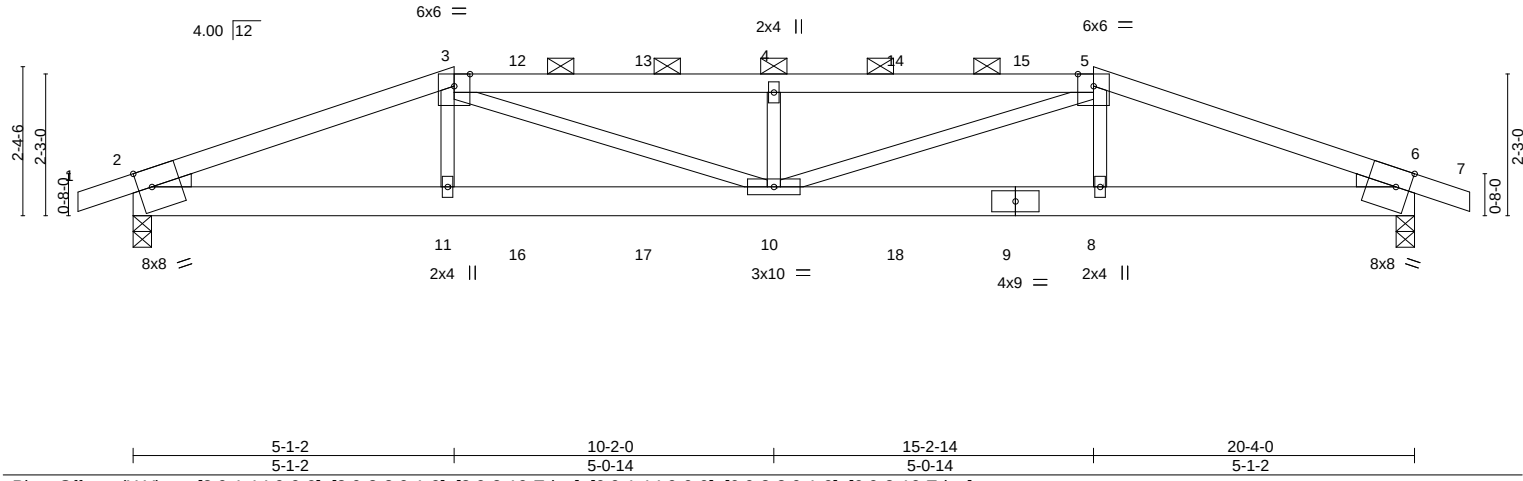


Plate Offsets (X,Y)--		[2:0-1-14,0-0-0], [2:0-8-8,0-1-9], [2:0-2-10,Edge], [6:0-1-14,0-0-0], [6:0-8-8,0-1-9], [6:0-2-10,Edge]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.95
TCDL 10.0	Lumber DOL	1.15	BC 0.87
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.37
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S
DEFL.	in (loc)	l/defl	L/d
Vert(LL)	-0.19	10	>999
Vert(CT)	-0.35	10	>694
Horz(CT)	0.06	6	n/a
Wind(LL)	0.17	10	>999
PLATES	GRIP		
MT20	197/144		
Weight: 76 lb	FT = 10%		

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 2-11-4 oc purlins, except
BOT CHORD 2x6 SPF No.2	2-0-0 oc purlins (2-2-12 max.): 3-5.
WEBS 2x3 SPF No.2	BOT CHORD Rigid ceiling directly applied or 9-2-14 oc bracing.
WEDGE	
Left: 2x3 SPF No.2, Right: 2x3 SPF No.2	

REACTIONS.	(size) 2=0-3-8, 6=0-3-8
Max Horz	2=34(LC 33)
Max Uplift	2=340(LC 4), 6=340(LC 5)
Max Grav	2=1369(LC 1), 6=1369(LC 1)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-3066/704, 3-4=-3699/879, 4-5=-3699/879, 5-6=-3066/705
BOT CHORD	2-11=-630/2796, 10-11=-629/2775, 8-10=-604/2774, 6-8=-605/2796
WEBS	3-11=-20/400, 3-10=-262/1090, 4-10=-599/277, 5-10=-262/1090, 5-8=-21/400

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=340, 6=340.
 - This truss 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) 83 lb down and 70 lb up at 6-2-0, 83 lb down and 70 lb up at 8-2-0, 83 lb down and 70 lb up at 10-2-0, and 83 lb down and 70 lb up at 12-2-0, and 83 lb down and 70 lb up at 14-2-0 on top chord, and 226 lb down and 93 lb up at 5-1-2, 31 lb down at 6-2-0, 31 lb down at 8-2-0, 31 lb down at 10-2-0, 31 lb down at 12-2-0, and 31 lb down at 14-2-0, and 226 lb down and 93 lb up at 15-2-14 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
 - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard



May 14, 2020

Job	Truss	Truss Type	Qty	Ply	Lot 15 HT
400302	K1	Hip Girder	1	1	I41303226
Job Reference (optional)					

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:44 2020 Page 2
ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-40WyTe3Gjxb2jZ8RRdvyHL4H4Gu6WbaECLRjrVzGs5r

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
 - Vert: 1-3=-70, 3-5=-70, 5-7=-70, 2-6=-20
- Concentrated Loads (lb)
 - Vert: 9=-22(B) 11=-226(B) 10=-22(B) 4=-46(B) 8=-226(B) 12=-46(B) 13=-46(B) 14=-46(B) 15=-46(B) 16=-22(B) 17=-22(B) 18=-22(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 15 HT	I41303227
400302	K2	Hip	1	1		

Wheeler Lumber, Waverly, KS 66871

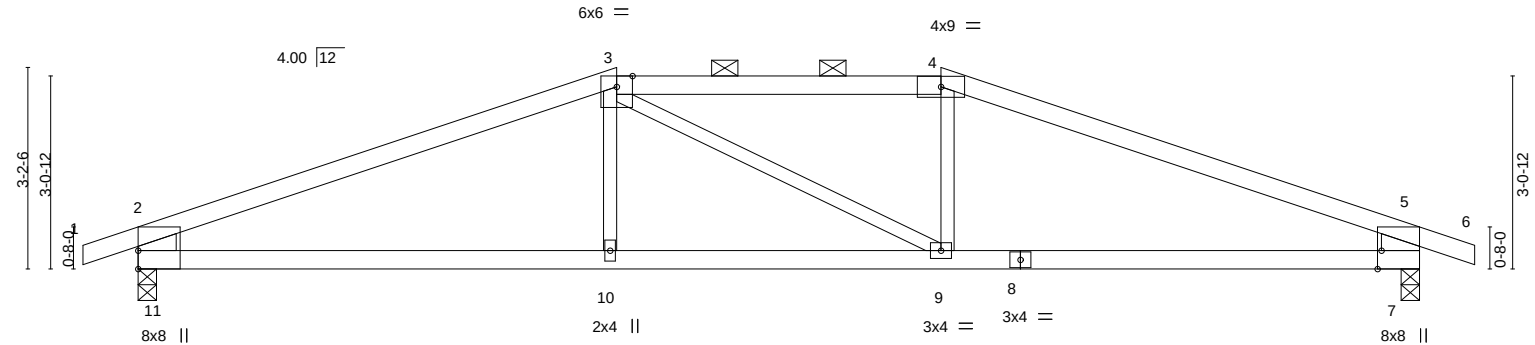
8.240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:45 2020 Page 1

ID:bWuMdbN0tjF5cDvSpwhpH1zCzbQ-YD4Kh_4uUEjvKjld?KQBqYdWOglgF44NR?AGNxzGs5q

Job Reference (optional)

0-10-8	7-7-2	12-8-14	20-4-0	21-2-8
0-10-8	7-7-2	5-1-12	7-7-2	0-10-8

Scale = 1:36.6



		7-7-2				12-8-14				20-4-0			
		7-7-2				5-1-12				7-7-2			
Plate Offsets (X,Y)-- [2:0-1-3,0-3-10], [5:0-1-3,0-3-10], [7:0-0-0,0-3-10], [7:0-3-8,Edge], [11:0-0-0,0-3-10]													
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.65	Vert(LL)	-0.12 9-10	>999	360	MT20		197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.59	Vert(CT)	-0.24 9-10	>990	240				
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.05 7	n/a	n/a				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.08 9-10	>999	240	Weight: 60 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 4-11-7 oc purlins, except end verticals, and 2-0-0 oc purlins (4-2-9 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=33(LC 8)
Max Uplift 11=-197(LC 4), 7=-197(LC 5)
Max Grav 11=970(LC 1), 7=970(LC 1)

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

TOP CHORD 2-3=-1639/256, 3-4=-1460/278, 4-5=-1639/255, 2-11=-881/241, 5-7=-882/241
BOT CHORD 10-11=-190/1464, 9-10=-193/1460, 7-9=-164/1464

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 11=197, 7=197.
- This truss 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.



May 14, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 15 HT	I41303228
400302	K3	Common	1	1		

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:46 2020 Page 1

ID: bWuMDBN0tjF5cDvSpwhpH1zCzbQ-0PeiuK5WfYrmytHqZ2xQMmAf4eL_Y5WgfwpwNzGs5p

0-10-8	4-0-3	10-2-0	16-3-13	20-4-0	21-2-8
0-10-8	4-0-3	6-1-13	6-1-13	4-0-3	0-10-8

Scale = 1:35.4

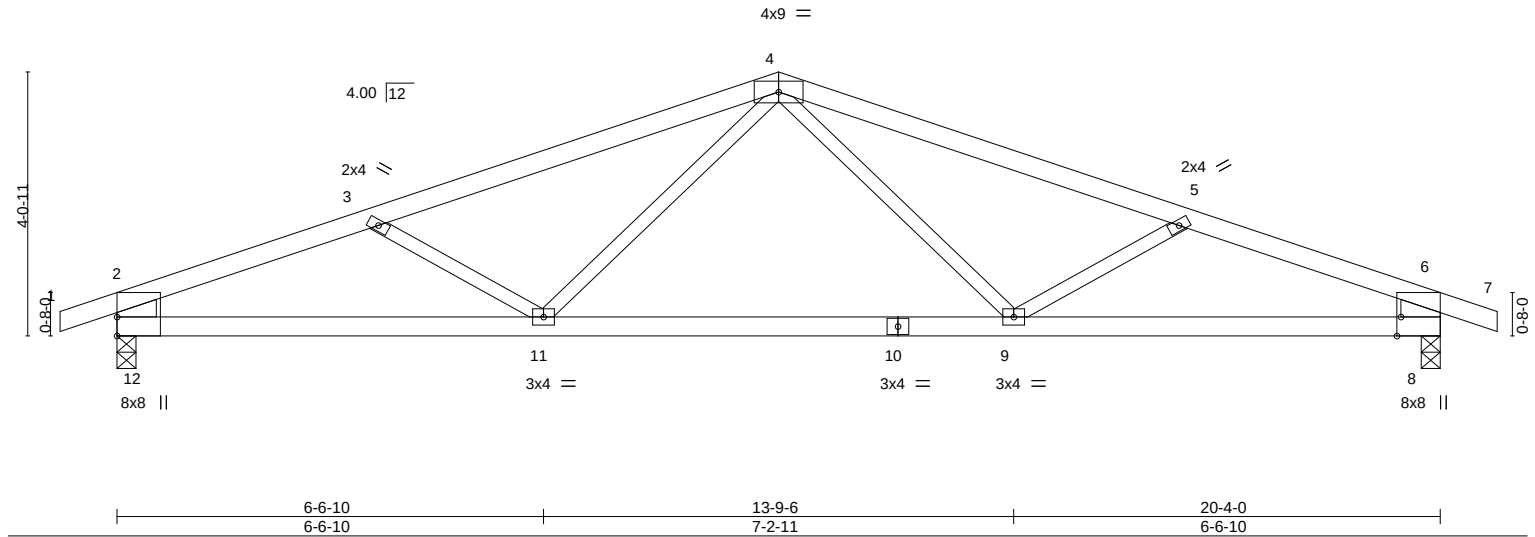


Plate Offsets (X,Y)--										[2:0-1-3,0-3-10], [6:0-1-3,0-3-10], [8:0-0-0,0-3-10], [8:0-3-8,Edge], [12:0-0-0,0-3-10]										
LOADING (psf)		SPACING-			2-0-0		CSI.		DEFL.		in (loc)		l/defl		L/d		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL			1.15		TC	0.81	Vert(LL)	-0.17	9-11	>999		360		MT20		197/144		
TCDL	10.0	Lumber DOL			1.15		BC	0.63	Vert(CT)	-0.32	9-11	>730		240						
BCLL	0.0 *	Rep Stress Incr			YES		WB	0.12	Horz(CT)	0.05	8	n/a		n/a						
BCDL	10.0	Code IRC2018/TPI2014					Matrix-S		Wind(LL)	0.12	9-11	>999		240		Weight: 65 lb		FT = 10%		

LUMBER-	BRACING-
TOP CHORD 2x4 SPF 2100F 1.8E	TOP CHORD Structural wood sheathing directly applied or 3-9-12 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2 *Except* 2-12,6-8: 2x8 SP 2400F 2.0E	

REACTIONS.	(size) 12=0-3-8, 8=0-3-8
	Max Horz 12=49(LC 8)
	Max Uplift 12=-180(LC 4), 8=-180(LC 5)
	Max Grav 12=970(LC 1), 8=970(LC 1)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-1713/290, 3-4=-1502/196, 4-5=-1502/196, 5-6=-1713/290, 2-12=-888/206, 6-8=-888/206
BOT CHORD	11-12=-263/1537, 9-11=-105/1179, 8-9=-226/1537
WEBS	4-9=-12/348, 5-9=-255/195, 4-11=-11/348, 3-11=-255/195

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 12=180, 8=180.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 14, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 15 HT	
400302	K4	Common Girder	1	2		I41303229
Wheeler Lumber, Waverly, KS 66871						Job Reference (optional)

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ID: bWuMdBNOtjF5cDvSpwhpH1zCzbQ-UbC56g580sda1s06lSfvzsvUwJjt?gulfNSqzGs5o

0-10-8	4-0-3	10-2-0	16-3-13	20-4-0
0-10-8	4-0-3	6-1-13	6-1-13	4-0-3

Scale = 1:34.6

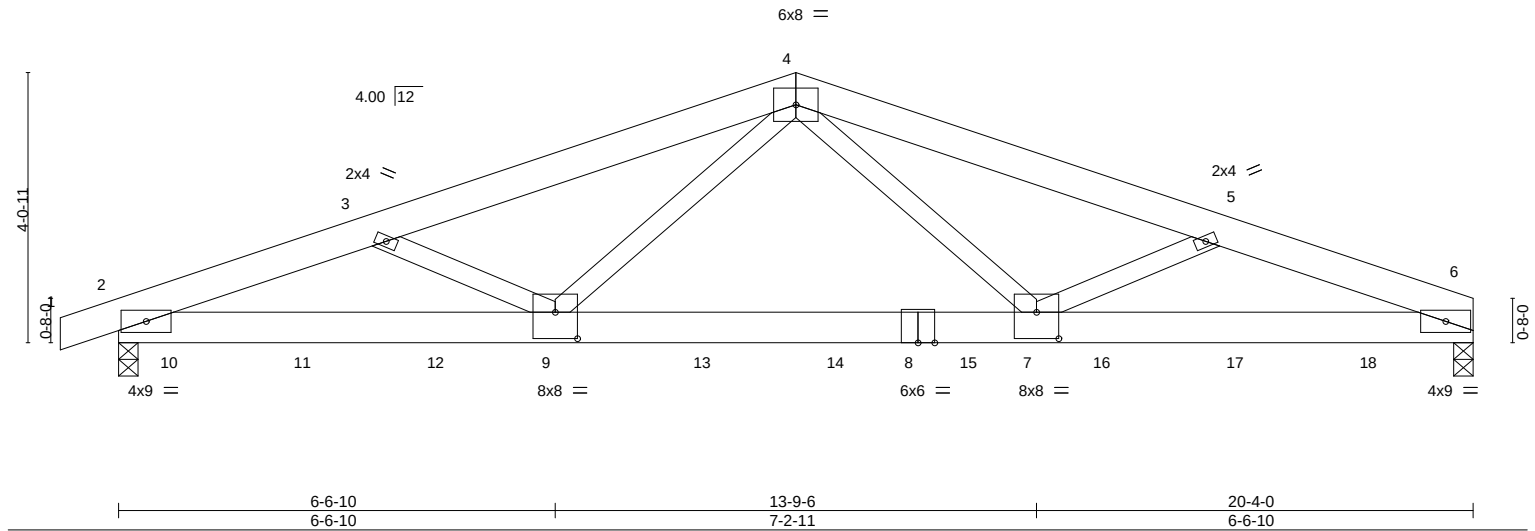


Plate Offsets (X,Y)--		[7:0-4-0,0-4-12], [9:0-4-0,0-4-12]	
LOADING (psf)	SPACING-	CSI.	DEFL.
TCLL 25.0	Plate Grip DOL 1.15	TC 0.59	in (loc) l/defl L/d
TCDL 10.0	Lumber DOL 1.15	BC 0.84	Vert(LL) -0.20 7-9 >999 360
BCLL 0.0 *	Rep Stress Incr NO	WB 0.59	Vert(CT) -0.35 7-9 >683 240
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Horz(CT) 0.07 6 n/a n/a
			Wind(LL) 0.10 7-9 >999 240
			PLATES MT20
			GRIP 197/144
			Weight: 211 lb FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x6 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 4-1-8 oc purlins.
BOT CHORD 2x6 SP 2400F 2.0E	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SPF No.2	

REACTIONS.	(size) 6=0-3-8 (req. 0-3-15), 2=0-3-8 (req. 0-4-5)
	Max Horz 2=67(LC 33)
	Max Uplift 6=-192(LC 5), 2=-264(LC 4)
	Max Grav 6=4994(LC 1), 2=5496(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD 2-3=-10646/477, 3-4=-10820/354, 4-5=-11181/234, 5-6=-10961/376	
BOT CHORD 2-9=-459/9872, 7-9=-171/7192, 6-7=-323/10155	
WEBS 4-7=0/4792, 5-7=-183/795, 4-9=-141/4308, 3-9=-197/719	

- 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 0-7-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-5-0 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
 - 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, 2 greater than input bearing size.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=192, 2=264.
 - This truss 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) 901 lb down and 35 lb up at 0-10-0, 862 lb down and 32 lb up at 2-10-0, 853 lb down and 32 lb up at 4-10-0, 853 lb down and 32 lb up at 6-10-0, 853 lb down and 32 lb up at 8-10-0, 853 lb down and 32 lb up at 10-10-0, 853 lb down and 30 lb up at 12-10-0, 850 lb down at 14-10-0, and 1651 lb down and 188 lb up at 16-10-0, and 123 lb down and 28 lb up at 18-10-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard
Continued on page 2



May 14, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 15 HT
400302	K4	Common Girder	1	2	I41303229

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:47 2020 Page 2
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LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-70, 4-6=-70, 2-6=-20
Concentrated Loads (lb)
Vert: 9=-853(F) 10=-865(F) 11=-862(F) 12=-853(F) 13=-853(F) 14=-853(F) 15=-853(F) 16=-850(F) 17=-1651(F) 18=-123(F)

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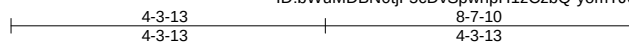
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 15 HT
400302	LAY1	GABLE	1	1	I41303230

Wheeler Lumber, Waverly, KS 66871

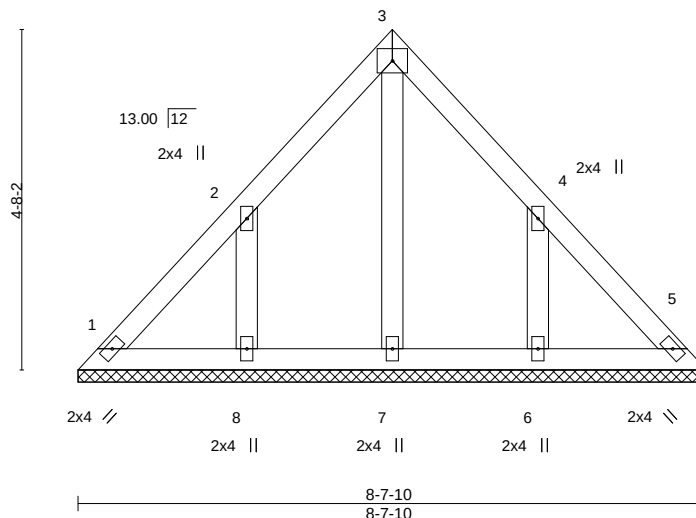
8.240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:48 2020 Page 1

ID: bWuMDBN0tjF5cDvSpwphH1zCzbQ-yomTJ06mn95UBBRCgS_uRBF9qtTCSTup7yPw_GzGs5n



4x5 =

Scale = 1:31.7



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 0.06	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 32 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 8-7-10.
(lb) - Max Horz 1=115(LC 7)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-161(LC 8), 6=-161(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7, 8, 6

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=161, 6=161.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 14, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 15 HT
400302	LAY2	GABLE	1	1	I41303231
Job Reference (optional)					

Wheeler Lumber, Waverly, KS 66871

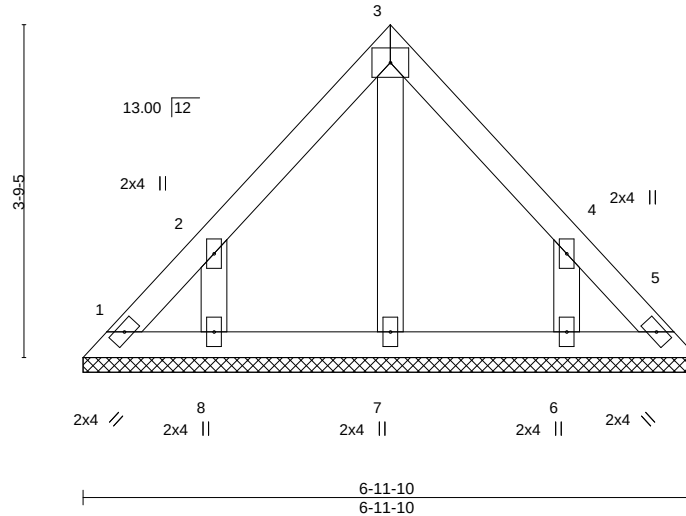
8.240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:49 2020 Page 1

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3-5-13 3-5-13 6-11-10 3-5-13

4x5 =

Scale = 1:26.1



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.05	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 25 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 6-11-10.
(lb) - Max Horz 1=91(LC 5)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-137(LC 8), 6=-137(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7, 8, 6

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=137, 6=137.
- This truss 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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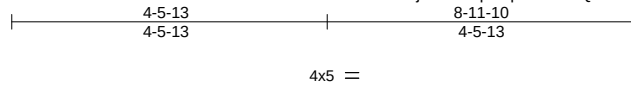
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 15 HT	I41303232
400302	LAY3	GABLE	1	1	Job Reference (optional)	

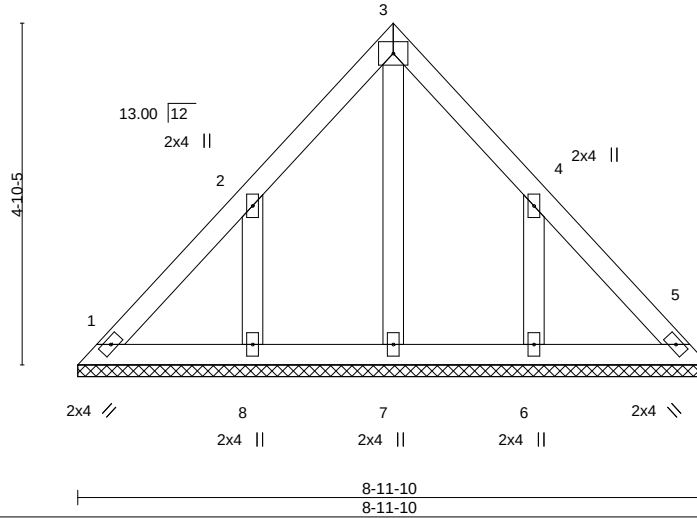
Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:50 2020 Page 1

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Scale = 1:32.8



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)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 34 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 8-11-10.
(lb) - Max Horz 1=-120(LC 4)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-168(LC 8), 6=-168(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=261(LC 15), 6=261(LC 16)

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, 5 except (jt=lb) 8=168, 6=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.



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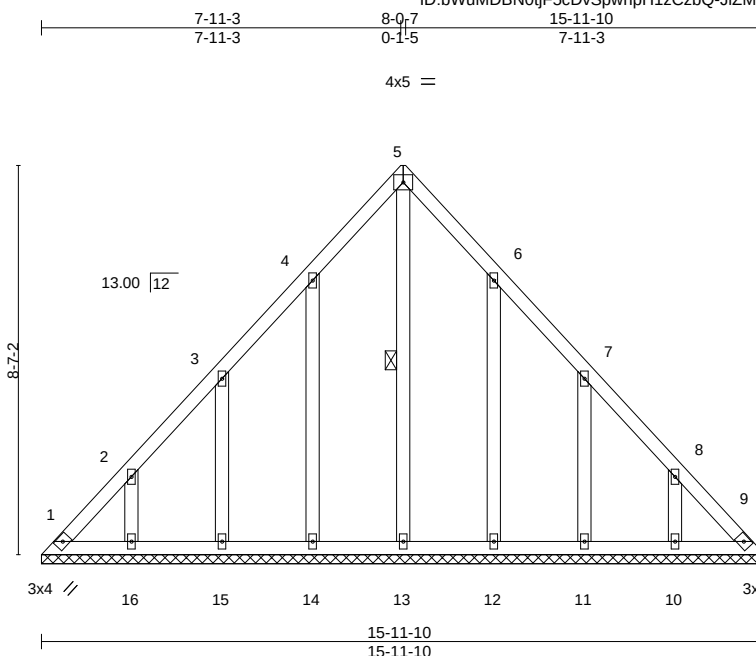
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 15 HT	I41303234
400302	LAY5	GABLE	2	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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ID: bWuMDBN0tjF5cDvSpwhpH1zCzbQ-JlZMMjAvcijmlyKAT0Z38Ey1huAB7jvYHE6hfTzGs5i



Scale = 1:50.9

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 0.06	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.11	Horz(CT)	0.01	9	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 79 lb	FT = 10%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-13

REACTIONS.

All bearings 15-11-10.
(lb) - Max Horz 1=-222(LC 4)
Max Uplift All uplift 100 lb or less at joint(s) 1, 9 except 14=-132(LC 8), 15=-131(LC 8), 16=-131(LC 8),
12=-130(LC 9), 11=-132(LC 9), 10=-131(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=-295/189, 8-9=-262/140

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) 1, 9 except (jt=lb) 14=132, 15=131, 16=131, 12=130, 11=132, 10=131.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 14, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 15 HT	I41303235
400302	LAY6	GABLE	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:54 2020 Page 1

ID:bWuMDBN0tjF5cDvSpwhP1zCzbQ-nx7ka3BXN?rdv6vM1j4lhSV9RIVesA9IVusECwzGsSh

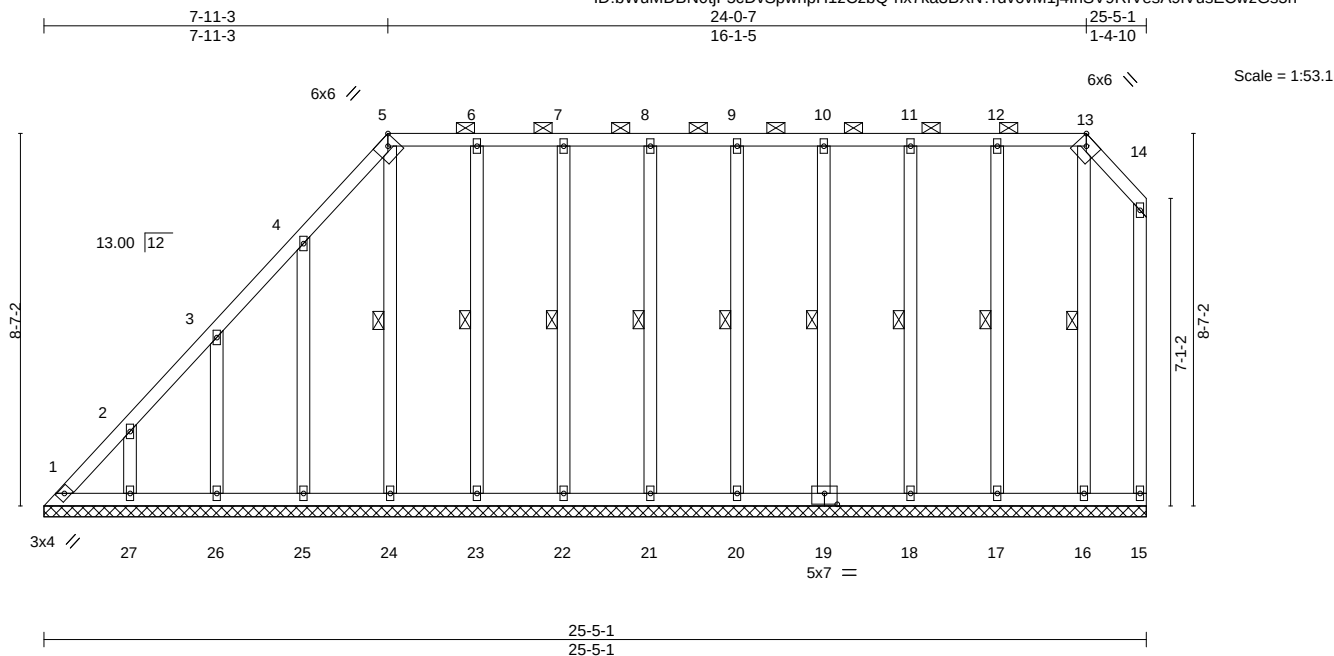


Plate Offsets (X,Y)-- [5:0-2-9,Edge], [13:0-2-9,Edge], [19:0-3-8,0-3-0]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.25	Vert(LL)	n/a - n/a	999	MT20 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	n/a - n/a	999	
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.11	Horz(CT)	-0.00 15 n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S					Weight: 166 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.): 5-13.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 18-19,17-18,16-17.
WEBS 1 Row at midpt 5-24, 6-23, 7-22, 8-21, 9-20, 10-19, 11-18, 12-17, 13-16

REACTIONS.

All bearings 25-5-1.
(lb) - Max Horz 1=311(LC 5)
Max Uplift All uplift 100 lb or less at joint(s) 15, 23, 22, 21, 20, 19, 18, 17, 16 except 1=144(LC 6), 27=-131(LC 8), 26=-129(LC 8), 25=-136(LC 8), 24=-100(LC 5)
Max Grav All reactions 250 lb or less at joint(s) 15, 27, 26, 25, 24, 23, 22, 21, 20, 19, 18, 17, 16 except 1=256(LC 5)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-351/256, 2-3=-282/208

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 15, 23, 22, 21, 20, 19, 18, 17, 16 except (jt=lb) 1=144, 27=131, 26=129, 25=136, 24=100.
- This truss 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.



May 14, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 15 HT	I41303236
400302	LAY7	GABLE	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:55 2020 Page 1
ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-F8h6nPC98JzUXGUYaQcXDf2NKisxbeorkYbokMzGs5g

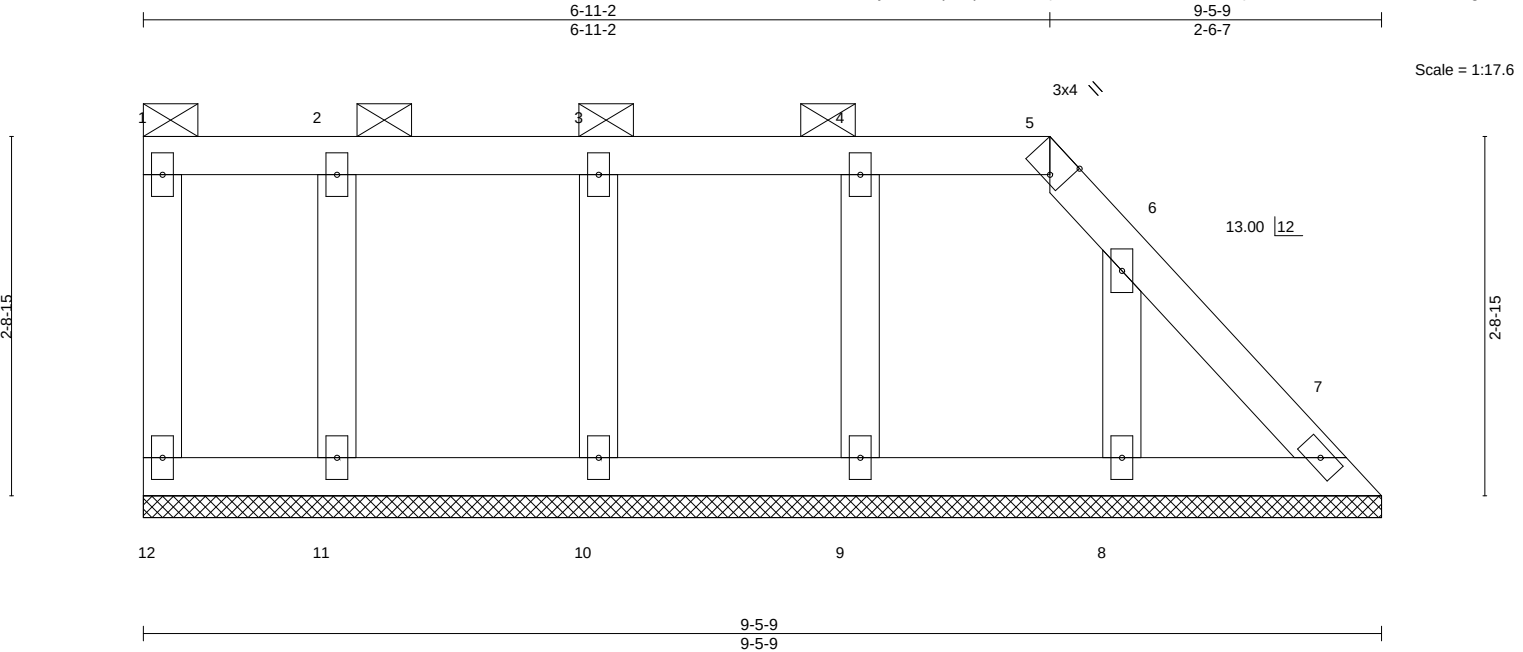


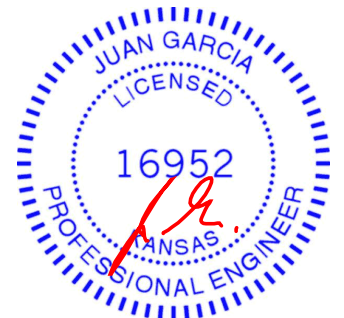
Plate Offsets (X,Y)--		[5:0-1-7,Edge]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.05
TCDL 10.0	Lumber DOL	1.15	BC 0.02
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.02
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S
			DEFL.
			in (loc) l/defl L/d
			Vert(LL) n/a - n/a 999
			Vert(CT) n/a - n/a 999
			Horz(CT) 0.00 7 n/a n/a
			PLATES
			MT20
			GRIP
			197/144
			Weight: 34 lb FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 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.): 1-5.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SPF No.2	
OTHERS 2x4 SPF No.2	

REACTIONS.	All bearings 9-5-9.
(lb) - Max Horz	12=-98(LC 4)
Max Uplift	All uplift 100 lb or less at joint(s) 12, 7, 11, 10, 9, 8
Max Grav	All reactions 250 lb or less at joint(s) 12, 7, 11, 10, 9, 8

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) 12, 7, 11, 10, 9, 8.
 - 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



May 14,2020

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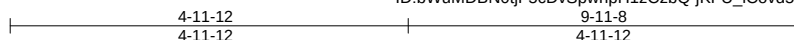
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 15 HT	I41303237
400302	LAY8	GABLE	1	1		

Wheeler Lumber, Waverly, KS 66871

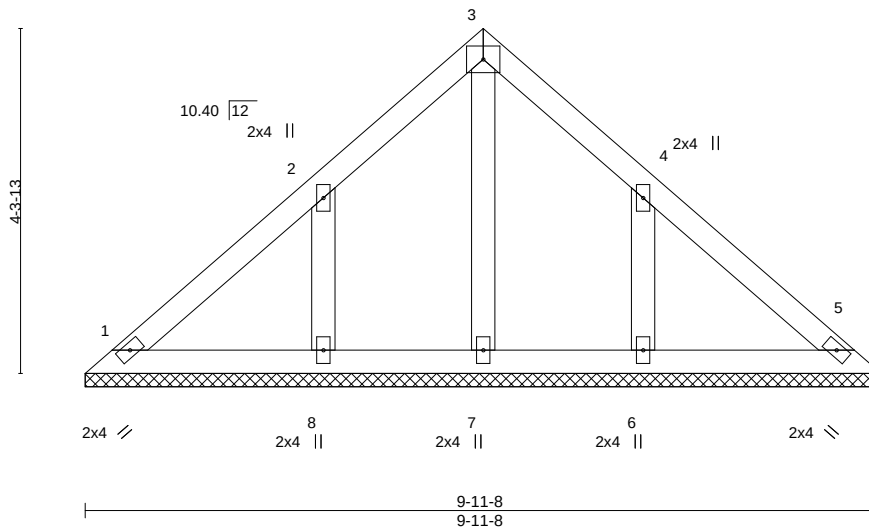
8.240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:56 2020 Page 1

ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-jKFU_ICovd5L9P2i887mmtaXe6CsK5y?zCLLGozGs5f



4x5 =

Scale = 1:28.8



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 0.08	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 34 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.

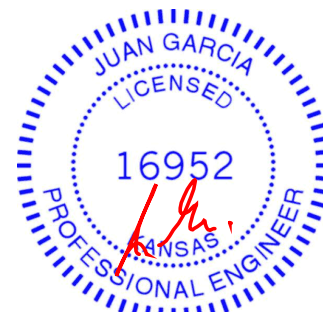
REACTIONS.

All bearings 9-11-8.
(lb) - Max Horz 1=-104(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=-134(LC 8), 6=-134(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=274(LC 15), 6=274(LC 16)

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 except (jt=lb) 8=134, 6=134.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 14, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 15 HT	I41303238
400302	V1	Valley	2	1	Job Reference (optional)	

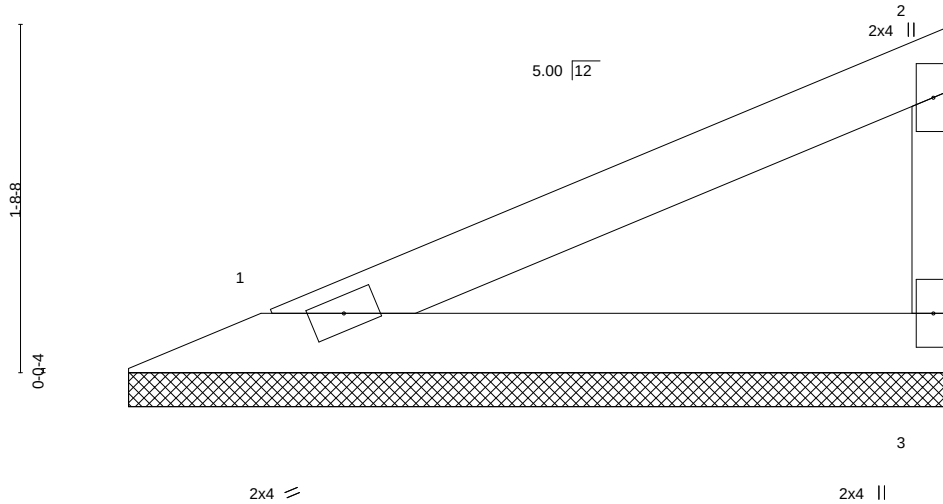
Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:57 2020 Page 1

ID:bWuMDBN0tjF5cDvSpwphH1zCzbQ-BWotC5DQgwDCmZdxire?J47hdWWA3Ye8Bs4voEzGs5e

4-1-4
4-1-4

Scale = 1:11.3



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 0.19	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.10	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	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 4-1-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

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

FORCES. (lb) - 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 15 HT	I41303239
400302	V2	Valley	1	1	Job Reference (optional)	

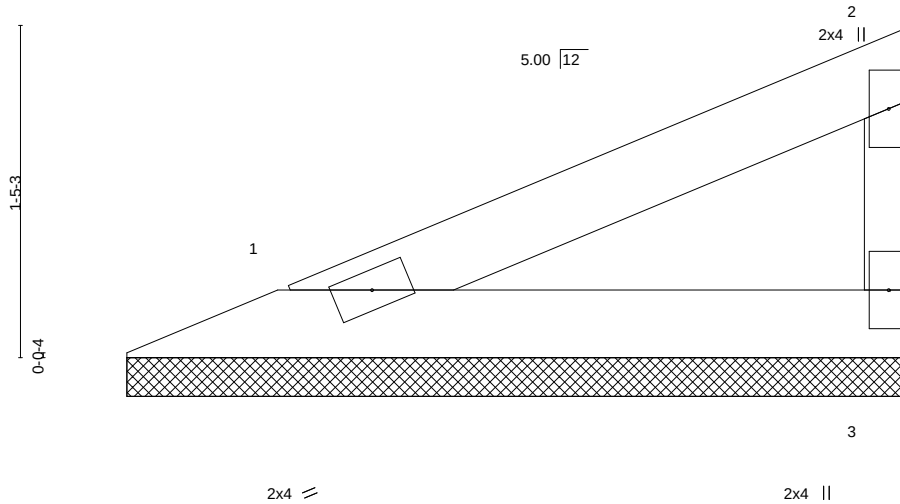
Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:58 2020 Page 1

ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-fjMFPQE2QEM3OjC7GZ9ErIgtXvt0o?uHQWqSLhzGs5d

3-5-4
3-5-4

Scale = 1:9.9



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 0.11	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.06	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 8 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=3-4-10, 3=3-4-10
Max Horz 1=47(LC 5)
Max Uplift 1=-17(LC 8), 3=-26(LC 8)
Max Grav 1=116(LC 1), 3=116(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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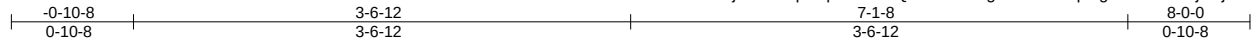
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 15 HT	I41303240
400302	V3	Valley	1	1	Job Reference (optional)	

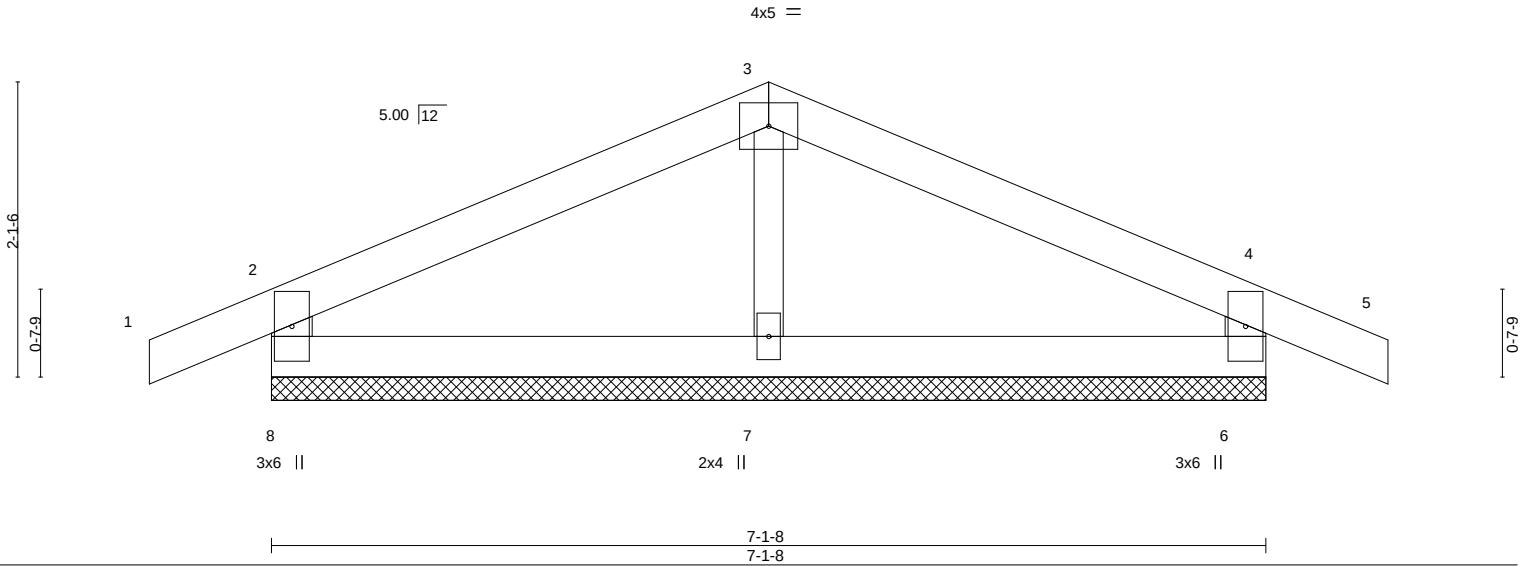
Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:59 2020 Page 1

ID: bWuMDBN0tjF5cDvSpwhpH1zCzbQ-7vwdmFgBYUw0tnKpGgTOVC2BJCjXSjRfAZ?t7zGs5c



Scale = 1:16.5



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 0.12	Vert(LL)	0.00	5	n/r	120	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.10	Vert(CT)	0.00	5	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R						Weight: 21 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 8=7-1-8, 6=7-1-8, 7=7-1-8
Max Horz 8=-19(LC 13)
Max Uplift 8=-74(LC 8), 6=-76(LC 9)
Max Grav 8=265(LC 1), 6=265(LC 1), 7=227(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) 8, 6.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 14, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 15 HT	I41303241
400302	V4	Valley	1	1		

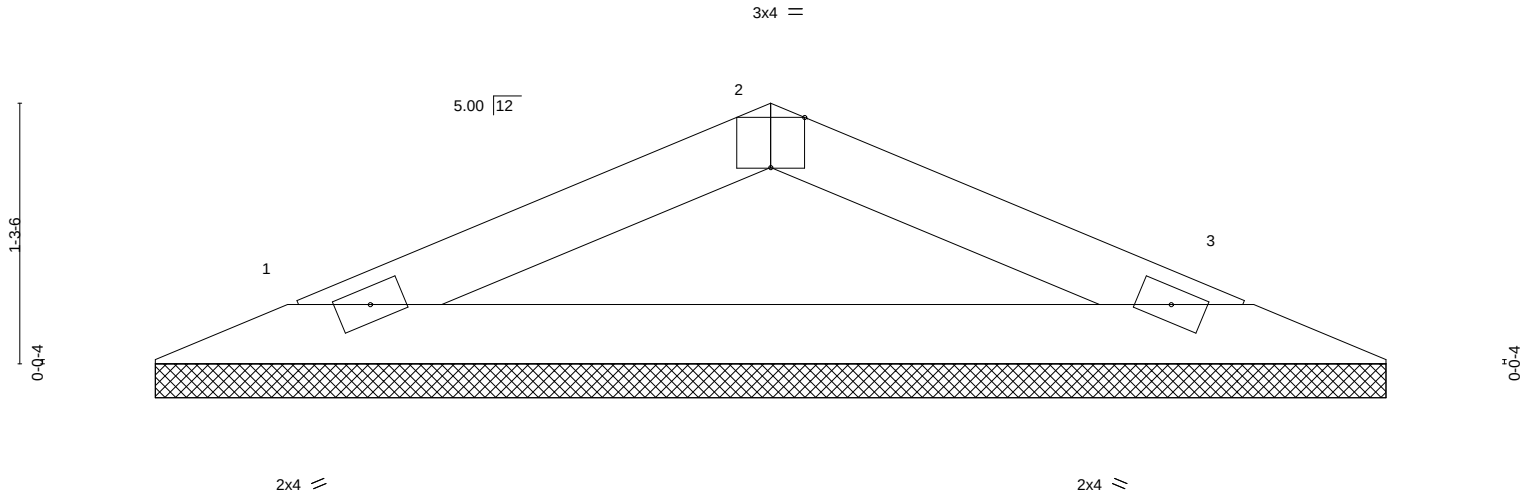
Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:45:59 2020 Page 1

ID:bWuMDBN0tjF5cDvSpwhpH1zCzbQ-7vddmFgBYUw0tnKpGgTOVC2dJAaXS8RfAZ?t7zGs5c

6-1-13
3-0-14

Scale = 1:11.3



0-0-10 0-0-10	6-1-13 6-1-3							Plate Offsets (X,Y)--	[2:0-2-0,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 0.09	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.23	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: 13 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 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=6-0-10, 3=6-0-10
Max Horz 1=17(LC 8)
Max Uplift 1=27(LC 8), 3=27(LC 9)
Max Grav 1=209(LC 1), 3=209(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.



May 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.



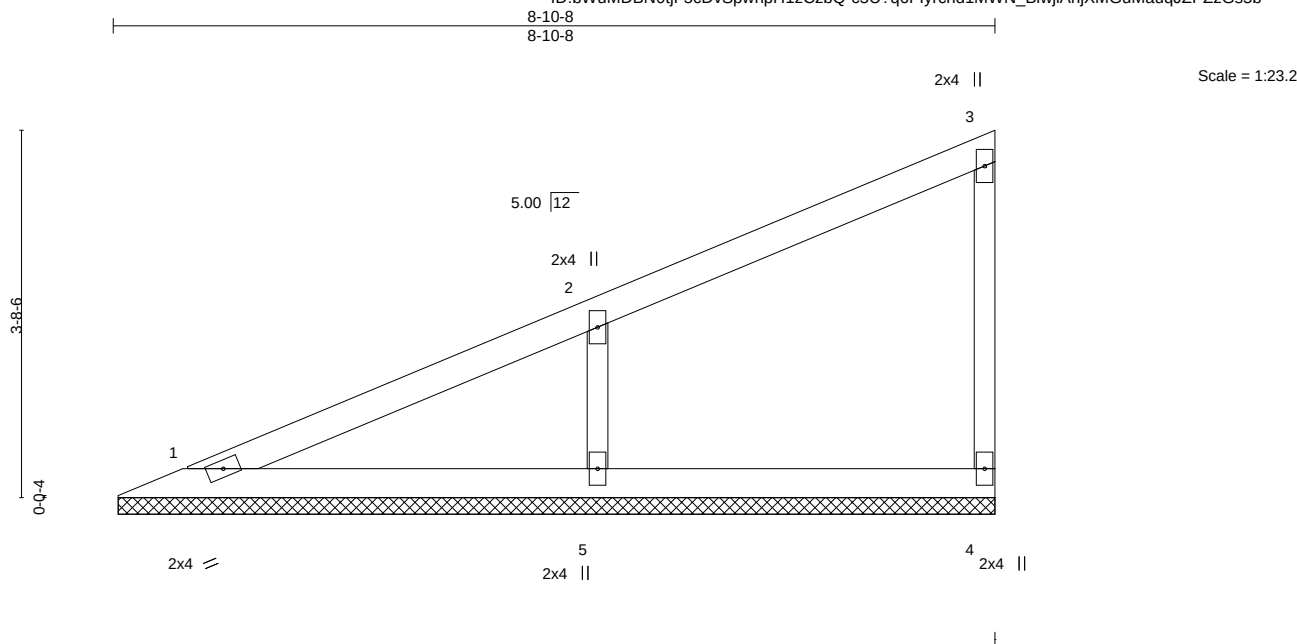
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 15 HT	I41303242
400302	V5	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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ID:bWuMDBN0tjF5cDvSpwphH1zCzbQ-c5U?q6F1yrcnd1MWn_BiwjAnjXMGuMauqJZPZzGs5b



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.26	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.13	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.07	Horz(CT)	-0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 24 lb	FT = 10%

LUMBER-

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

BRACING-

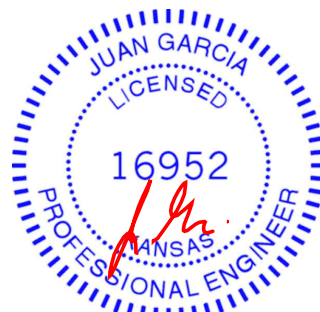
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=8-9-14, 4=8-9-14, 5=8-9-14
Max Horz 1=146(LC 5)
Max Uplift 4=-23(LC 5), 5=-120(LC 8)
Max Grav 1=142(LC 1), 4=129(LC 1), 5=451(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-5=-351/180

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=120.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 14, 2020

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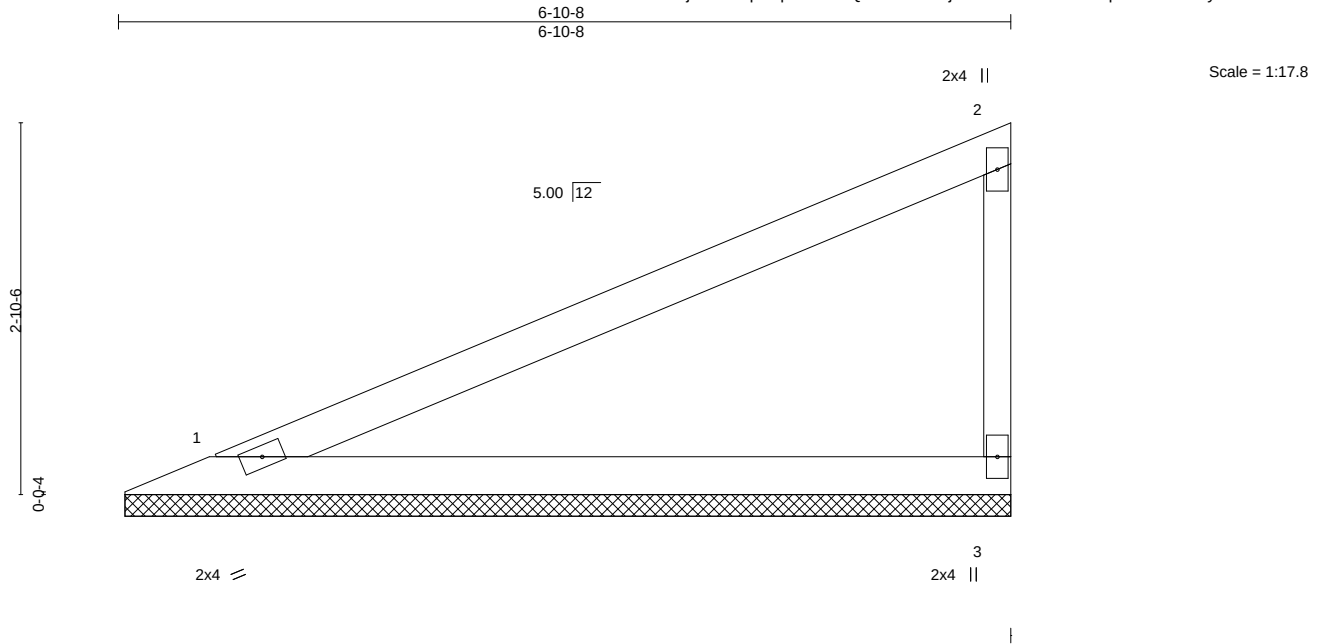
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 15 HT	I41303243
400302	V6	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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ID: bWuMDBN0tjF5cDvSpwhpH1zCzbQ-4i2N2SGwj9keFBxixhixTwHEK7pc?Mdk6U26y0zGs5a



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)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.39	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: 17 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=6-9-14, 3=6-9-14
Max Horz 1=110(LC 5)
Max Uplift 1=40(LC 8), 3=62(LC 8)
Max Grav 1=271(LC 1), 3=271(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.



May 14, 2020

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Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 15 HT	I41303245
400302	V8	Valley	1	1	Job Reference (optional)	

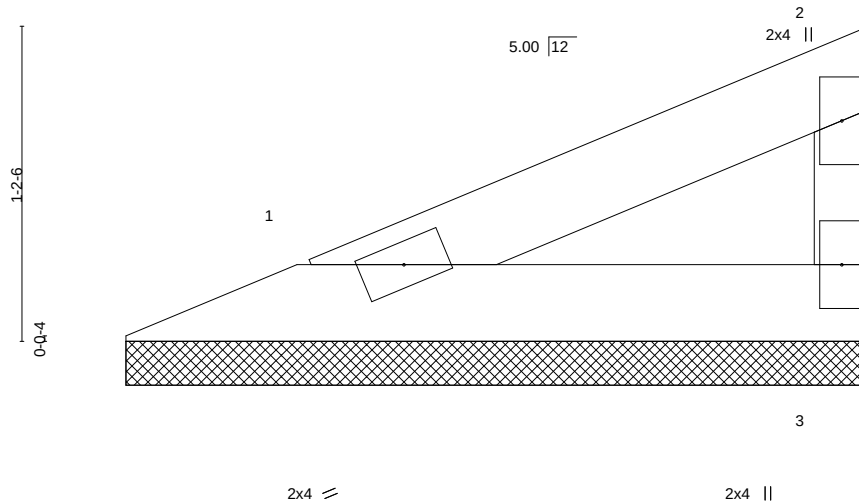
Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed May 13 16:46:02 2020 Page 1

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2-10-8
2-10-8

Scale = 1:8.8



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)	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 0.00	Horz(CT)	-0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 6 lb	FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=2-9-14, 3=2-9-14
Max Horz 1=37(LC 5)
Max Uplift 1=-13(LC 8), 3=-21(LC 8)
Max Grav 1=91(LC 1), 3=91(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.



May 14, 2020

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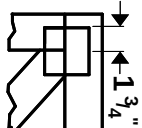
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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



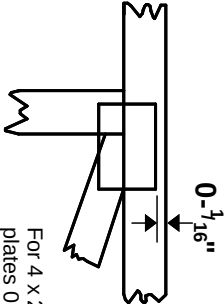
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Symbols

PLATE LOCATION AND ORIENTATION



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



For 4 x 2 orientation, locate plates 0- $\frac{1}{16}$ " from outside edge of truss.

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

*** Plate location details available in MITek 2012 software or upon request.**

PLATE SIZE

4 X 4

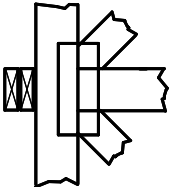
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING



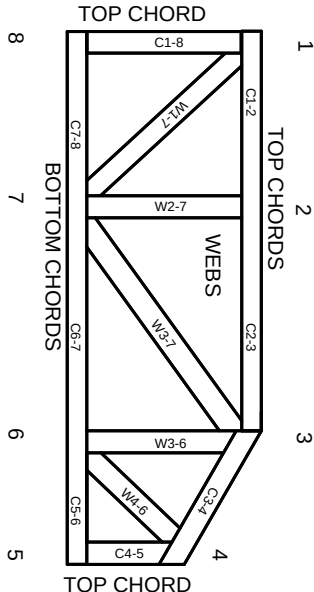
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TP1.1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System

6-4-8 dimensions shown in ft-in-sixteenths (Drawings not to scale)



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

Lumber design values are in accordance with ANSI/TP1 1 section 6.3 These truss designs rely on lumber values established by others.

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MITek Engineering Reference Sheet: MII-7473 rev. 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 wane at joint locations are regulated by ANSI/TP1 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TP1 1 Quality Criteria.