



RE: 400219
Lot 58 H4

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 93 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I40902187	a1	4/7/2020	27	I40902213	c9	4/7/2020
2	I40902188	a2	4/7/2020	28	I40902214	d1	4/7/2020
3	I40902189	a3	4/7/2020	29	I40902215	d2	4/7/2020
4	I40902190	b1	4/7/2020	30	I40902216	d3	4/7/2020
5	I40902191	b2	4/7/2020	31	I40902217	d4	4/7/2020
6	I40902192	b3	4/7/2020	32	I40902218	d5	4/7/2020
7	I40902193	b4	4/7/2020	33	I40902219	e1	4/7/2020
8	I40902194	b5	4/7/2020	34	I40902220	e2	4/7/2020
9	I40902195	b6	4/7/2020	35	I40902221	e3	4/7/2020
10	I40902196	b7	4/7/2020	36	I40902222	g1	4/7/2020
11	I40902197	b8	4/7/2020	37	I40902223	g2	4/7/2020
12	I40902198	b9	4/7/2020	38	I40902224	g3	4/7/2020
13	I40902199	b10	4/7/2020	39	I40902225	g4	4/7/2020
14	I40902200	b11	4/7/2020	40	I40902226	g5	4/7/2020
15	I40902201	b12	4/7/2020	41	I40902227	g6	4/7/2020
16	I40902202	b13	4/7/2020	42	I40902228	g7	4/7/2020
17	I40902203	b14	4/7/2020	43	I40902229	g8	4/7/2020
18	I40902204	b15	4/7/2020	44	I40902230	g9	4/7/2020
19	I40902205	c1	4/7/2020	45	I40902231	h1	4/7/2020
20	I40902206	c2	4/7/2020	46	I40902232	h2	4/7/2020
21	I40902207	c3	4/7/2020	47	I40902233	h3	4/7/2020
22	I40902208	c4	4/7/2020	48	I40902234	h4	4/7/2020
23	I40902209	c5	4/7/2020	49	I40902235	h5	4/7/2020
24	I40902210	c6	4/7/2020	50	I40902236	j1	4/7/2020
25	I40902211	c7	4/7/2020	51	I40902237	j2	4/7/2020
26	I40902212	c8	4/7/2020	52	I40902238	j3	4/7/2020

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.



RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
04/15/2020



RE: 400219 - Lot 58 H4

MiTek USA, Inc.

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

Site Information:

Project Customer: Project Name:

Lot/Block:

Subdivision:

Address:

City, County:

State:

No.	Seal#	Truss Name	Date
53	I40902239	j4	4/7/2020
54	I40902240	j5	4/7/2020
55	I40902241	j6	4/7/2020
56	I40902242	j7	4/7/2020
57	I40902243	j8	4/7/2020
58	I40902244	j9	4/7/2020
59	I40902245	j10	4/7/2020
60	I40902246	j11	4/7/2020
61	I40902247	j12	4/7/2020
62	I40902248	j13	4/7/2020
63	I40902249	j14	4/7/2020
64	I40902250	j15	4/7/2020
65	I40902251	j16	4/7/2020
66	I40902252	j17	4/7/2020
67	I40902253	j18	4/7/2020
68	I40902254	j19	4/7/2020
69	I40902255	j20	4/7/2020
70	I40902256	j21	4/7/2020
71	I40902257	j22	4/7/2020
72	I40902258	j23	4/7/2020
73	I40902259	j24	4/7/2020
74	I40902260	lay1	4/7/2020
75	I40902261	lay2	4/7/2020
76	I40902262	lay3	4/7/2020
77	I40902263	lay4	4/7/2020
78	I40902264	lay5	4/7/2020
79	I40902265	lay6	4/7/2020
80	I40902266	lay7	4/7/2020
81	I40902267	lay8	4/7/2020
82	I40902268	lay9	4/7/2020
83	I40902269	lay10	4/7/2020
84	I40902270	lay11	4/7/2020
85	I40902271	lay12	4/7/2020
86	I40902272	v1	4/7/2020
87	I40902273	v2	4/7/2020
88	I40902274	v3	4/7/2020
89	I40902275	v4	4/7/2020
90	I40902276	v5	4/7/2020
91	I40902277	v6	4/7/2020
92	I40902278	v7	4/7/2020
93	I40902279	v8	4/7/2020



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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

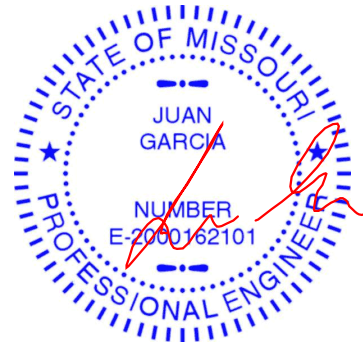
Floor Load: N/A psf

This package includes 93 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I40902187	a1	4/7/2020	27	I40902213	c9	4/7/2020
2	I40902188	a2	4/7/2020	28	I40902214	d1	4/7/2020
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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.





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Chesterfield, MO 63017
314-434-1200

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Lot/Block:

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City, County:

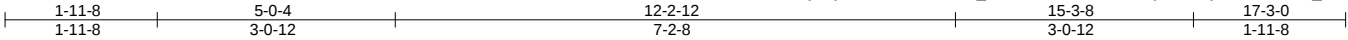
State:

No.	Seal#	Truss Name	Date
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54	I40902240	j5	4/7/2020
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66	I40902252	j17	4/7/2020
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68	I40902254	j19	4/7/2020
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70	I40902256	j21	4/7/2020
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88	I40902274	v3	4/7/2020
89	I40902275	v4	4/7/2020
90	I40902276	v5	4/7/2020
91	I40902277	v6	4/7/2020
92	I40902278	v7	4/7/2020
93	I40902279	v8	4/7/2020

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	140902187
400219	A1	Hip Girder	1	2	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 7 14:59:32 2020 Page 1
ID:HGhkM0byc7yfla13RCctYPzRku_-ozFXxnmGcY3PWJFy1cli7OyxAx6wDOKx_ZbzCzT47P



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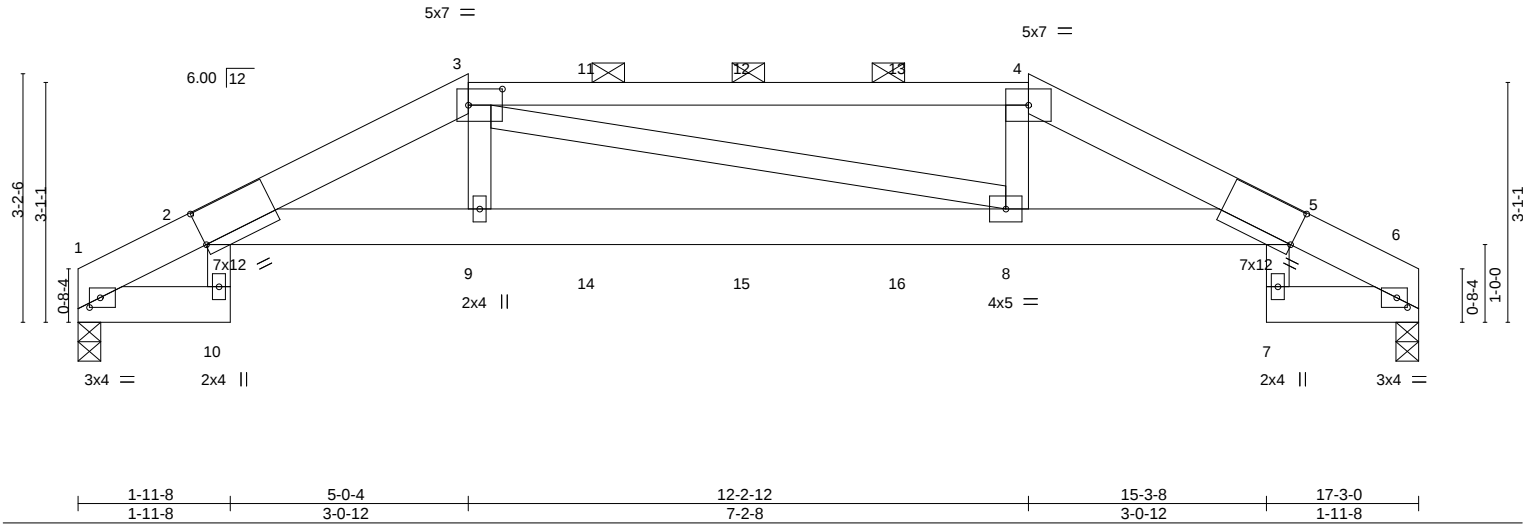


Plate Offsets (X, Y)--		[1:0-1-10,0-1-8], [2:0-0-2,0-5-6], [3:0-5-4,0-2-8], [5:0-0-2,0-5-6], [6:0-1-10,0-1-8]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.93
TCDL 10.0	Lumber DOL	1.15	BC 0.68
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.10
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S
			DEFL. in (loc) l/defl L/d
			Vert(LL) -0.12 8-9 >999 360
			Vert(CT) -0.22 8-9 >910 240
			Horz(CT) 0.21 6 n/a n/a
			Wind(LL) 0.11 8-9 >999 240
			PLATES GRIP
			MT20 197/144
			Weight: 146 lb FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x6 SPF No.2 *Except* 3-4: 2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (4-5-11 max.): 3-4.
BOT CHORD	2x6 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	2x4 SPF No.2		
REACTIONS. (size) 1=0-3-8, 6=0-3-8			
Max Horz 1=-48(LC 30)			
Max Uplift 1=-349(LC 8), 6=-349(LC 9)			
Max Grav 1=1375(LC 1), 6=1375(LC 1)			

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	1-2=-833/240, 2-3=-3785/1020, 3-4=-3539/954, 4-5=-3745/987, 5-6=-833/232
BOT CHORD	2-9=-944/3511, 8-9=-955/3577, 5-8=-890/3475
WEBS	3-9=-136/783, 4-8=-129/759

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
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; 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
 - 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 349 lb uplift at joint 1 and 349 lb uplift at joint 6.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 94 lb down and 78 lb up at 5-0-4, 101 lb down and 78 lb up at 6-7-8, 101 lb down and 78 lb up at 8-7-8, and 101 lb down and 78 lb up at 10-7-8, and 94 lb down and 78 lb up at 12-2-12 on top chord, and 346 lb down and 149 lb up at 5-0-4, 56 lb down and 21 lb up at 6-7-8, 56 lb down and 21 lb up at 8-7-8, and 56 lb down and 21 lb up at 10-7-8, and 346 lb down and 149 lb up at 12-2-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.



April 7,2020

Continued on page 2

LOAD CASE(S) Standard	
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 58 H4	I40902187
400219	A1	Hip Girder	1	2	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 7 14:59:32 2020 Page 2
ID:HGhkM0byc7yfla13RCctYPzRku_-ozFXxinmGcY3PWJFy1cli7OyxAx6wDOKx_ZbzCzT47P

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-70, 3-4=-70, 4-6=-70, 1-10=-20, 2-5=-20, 6-7=-20
Concentrated Loads (lb)
Vert: 3=-71(F) 4=-71(F) 9=-346(F) 8=-346(F) 11=-71(F) 12=-71(F) 13=-71(F) 14=-56(F) 15=-56(F) 16=-56(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	Truss	Truss Type	Qty	Ply	Lot 58 H4	I40902188
400219	A2	Hip	1	1		

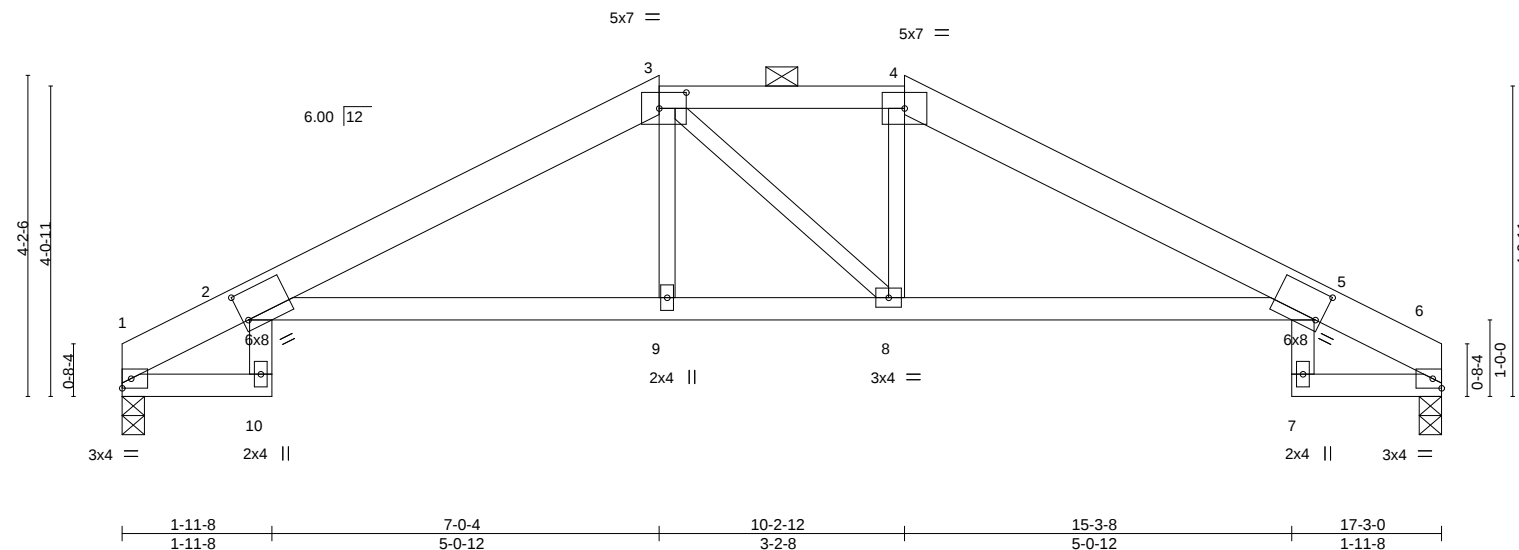
Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 7 14:59:34 2020 Page 1

ID:HGhKMObyc7yfla13RCctYPzRku_-IMNIMNoOoEomeqTe3SemnYUJV_daO7OdOI2i15zT47N

1-11-8	7-0-4	10-2-12	15-3-8	17-3-0
1-11-8	5-0-12	3-2-8	5-0-12	1-11-8

Scale = 1:30.1



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 0.86	Vert(LL)	-0.18	2-9	>999	360	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.68	Vert(CT)	-0.35	2-9	>579	240	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.06	Horz(CT)	0.38	6	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.14	2-9	>999	240	
								Weight: 62 lb	FT = 20%

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except
2-0-0 oc purlins (5-1-10 max.): 3-4.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS.

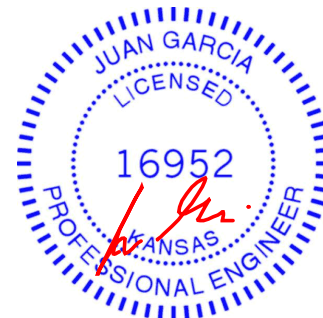
(size) 1=0-3-8, 6=0-3-8
Max Horz 1=67(LC 12)
Max Uplift 1=-79(LC 8), 6=-79(LC 9)
Max Grav 1=768(LC 1), 6=768(LC 1)

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

TOP CHORD 1-2=-464/84, 2-3=-1334/101, 3-4=-1199/112, 4-5=-1335/78, 5-6=-464/68
BOT CHORD 2-9=-54/1195, 8-9=-53/1199, 5-8=-4/1195

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 79 lb uplift at joint 1 and 79 lb uplift at joint 6.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 7,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	I40902189
400219	A3	Common	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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ID:HGhkM0byc7yfla13RCctYPzRku_-DYxgajpeZXwdG_2qd9A?Jl0XmO?G7XtndynFaXzT47M

6-10-11	12-8-4	15-6-3
6-10-11	5-9-9	2-9-15

5x7 =

Scale = 1:31.3

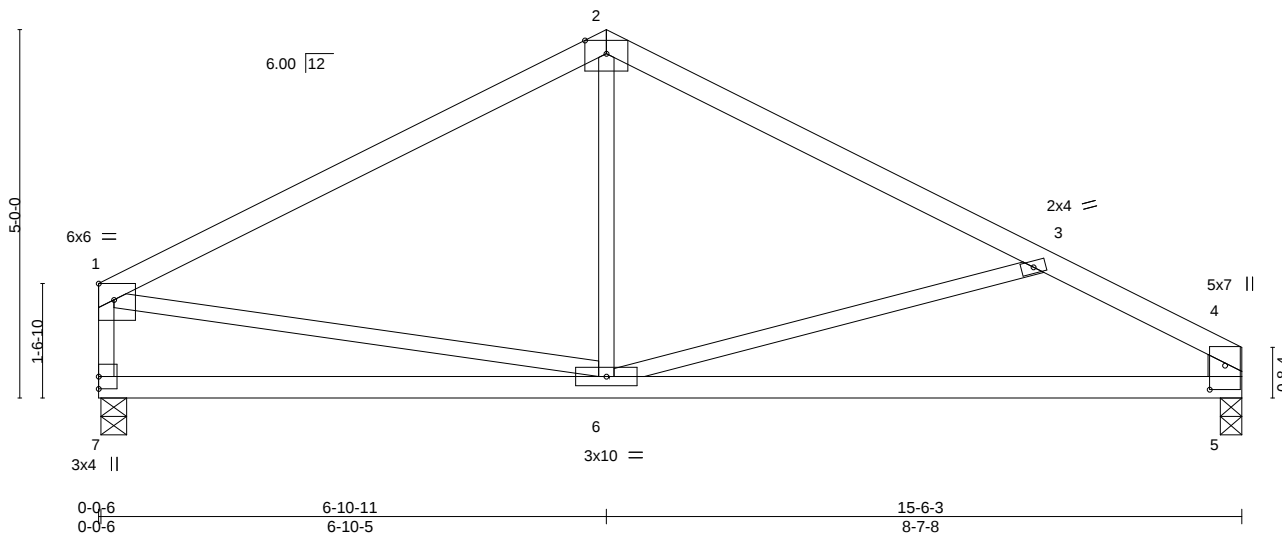


Plate Offsets (X,Y)-- [1:Edge,0-2-11], [4:0-3-15,0-2-8]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d			PLATES	GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.70	Vert(LL)	-0.11	5-6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.52	Vert(CT)	-0.22	5-6	>831	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.30	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.03	6-7	>999	240	Weight: 53 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 7=0-4-3, 5=0-3-8
Max Horz 7=-96(LC 4)
Max Uplift 7=-77(LC 8), 5=-88(LC 9)
Max Grav 7=683(LC 1), 5=683(LC 1)

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

TOP CHORD 1-2=-777/107, 2-3=-760/99, 3-4=-1026/210, 1-7=-622/106, 4-5=-593/130
BOT CHORD 5-6=-163/851
WEBS 2-6=0/291, 3-6=-323/215, 1-6=-14/477

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 77 lb uplift at joint 7 and 88 lb uplift at joint 5.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



April 7,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	140902190
400219	B1	Half Hip Girder	1	1		
Job Reference (optional)						

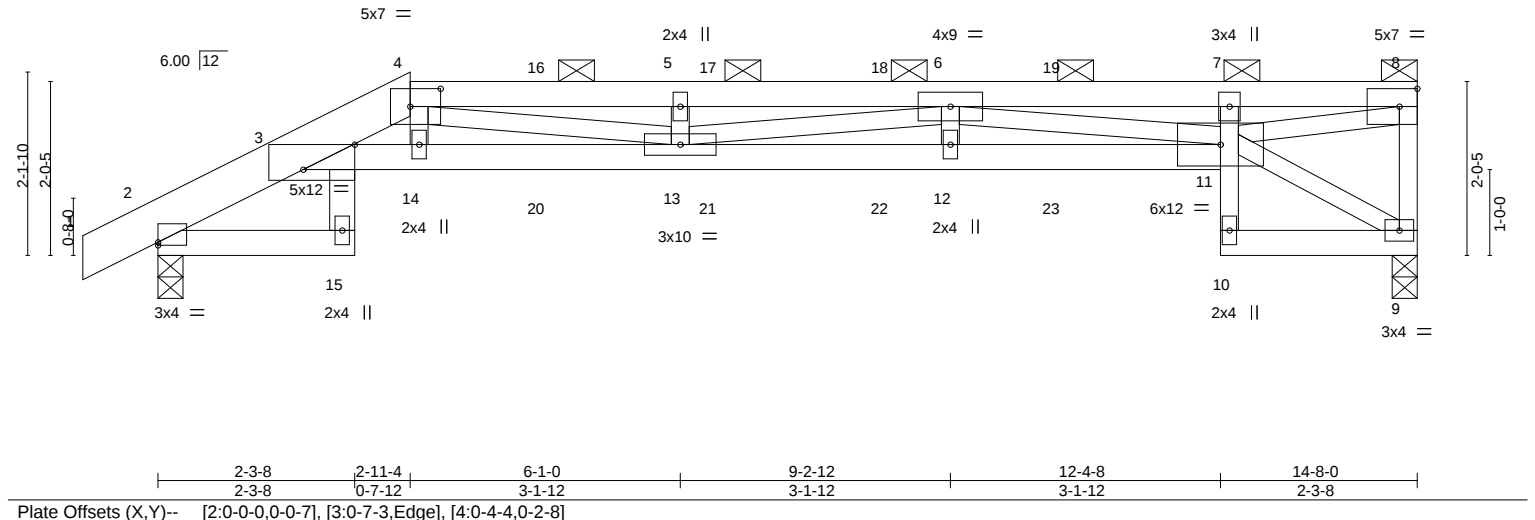
Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 7 14:59:38 2020 Page 1

ID:HGhkM0byc7yfla13RCctYPzRku_-d7coClrWsSIC7RnPIIjixOe_Vb1NKpaD3w0vAszT47J



Scale = 1:26.8



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 0.92	Vert(LL) -0.22 12-13 >790 360	MT20	197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.49	Vert(CT) -0.42 12-13 >415 240		
BCLL	0.0 *	Rep Stress Incr NO	WB 0.63	Horz(CT) 0.24 9 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.23 12-13 >753 240	Weight: 54 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SPF No.2 *Except*	TOP CHORD Structural wood sheathing directly applied or 3-4-7 oc purlins, except end verticals, and 2-0-0 oc purlins (2-9-5 max.): 4-8.
4-8: 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
BOT CHORD 2x4 SPF 2400F 2.0E *Except*	
7-10: 2x3 SPF No.2	
WEBS 2x3 SPF No.2 *Except*	
3-15: 2x4 SPF No.2	

REACTIONS.	(size) 9=0-3-8, 2=0-3-8
	Max Horz 2=75(LC 28)
	Max Uplift 9=186(LC 5), 2=183(LC 8)
	Max Grav 9=751(LC 1), 2=844(LC 1)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-443/123, 3-4=-2554/717, 4-5=-3474/929, 5-6=-3474/929, 6-7=-1969/513, 7-8=-1738/456, 8-9=-698/195
BOT CHORD	3-14=-750/2518, 13-14=-752/2551, 12-13=-918/3430, 11-12=-918/3430
WEBS	4-13=-238/977, 6-11=-1499/385, 8-11=-495/1825

- 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 186 lb uplift at joint 9 and 183 lb uplift at joint 2.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 87 lb down and 115 lb up at 2-11-4, 69 lb down and 41 lb up at 4-6-0, 69 lb down and 41 lb up at 6-6-0, 69 lb down and 41 lb up at 8-6-0, and 69 lb down and 41 lb up at 10-6-0, and 70 lb down and 53 lb up at 12-6-0 on top chord, and 50 lb down and 20 lb up at 2-11-4, 29 lb down and 20 lb up at 4-6-0, 29 lb down and 20 lb up at 6-6-0, 29 lb down and 20 lb up at 8-6-0, and 29 lb down and 20 lb up at 10-6-0, and 18 lb down at 12-5-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
 - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
Continued on page 2



April 7, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	
400219	B1	Half Hip Girder	1	1		I40902190
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

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LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 - Uniform Loads (plf)
 - Vert: 1-4=-70, 4-8=-70, 2-15=-20, 3-11=-20, 9-10=-20
 - Concentrated Loads (lb)
 - Vert: 4=-8(B) 7=-13(B) 14=-38(B) 11=-10(B) 16=-8(B) 17=-8(B) 18=-8(B) 19=-8(B) 20=-29(B) 21=-29(B) 22=-29(B) 23=-29(B)

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	I40902191
400219	B2	Half Hip	1	1		

Wheeler Lumber, Waverly, KS 66871

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ID:HGhkM0byc7yfla13RCctYPzRku_-SH_4SowHRI3MrMEZfYq6Bfu3X02GkSo6hrTEOWzT47D

-0-10-8	2-3-8	4-11-4	9-8-6	12-4-8	14-8-0
0-10-8	2-3-8	2-7-12	4-9-2	2-8-2	2-3-8

Scale = 1:26.7

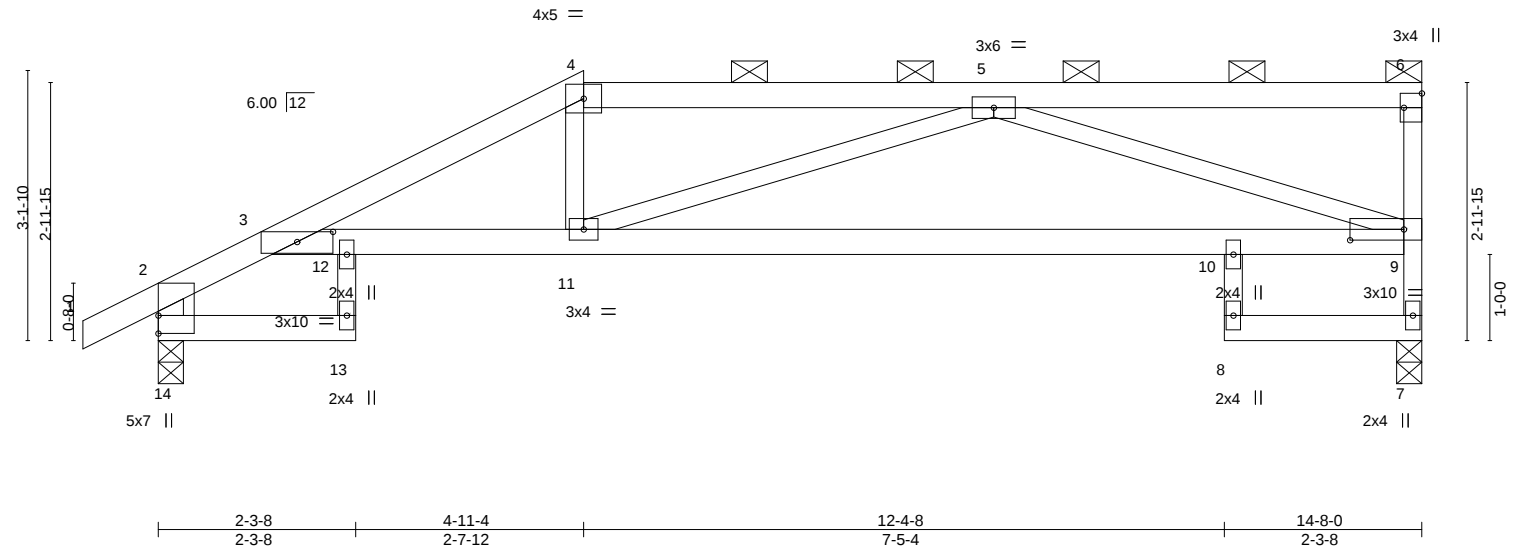


Plate Offsets (X,Y)-- [2:0-0-14,0-1-12], [3:0-5-0,0-1-7], [6:Edge,0-2-8], [9:0-7-8,0-1-8], [14:0-0-0,0-1-12]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.76	Vert(LL)	-0.17 10-11 >996 360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.59	Vert(CT)	-0.36 10-11 >479 240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.84	Horz(CT)	0.20 7 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.10 11-12 >999 240	Weight: 52 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF 2100F 1.8E *Except*
4-6: 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
3-9: 2x4 SPF 2100F 1.8E
WEBS 2x3 SPF No.2 *Except*
2-14: 2x4 SPF No.2

BRACING-

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

REACTIONS.

(size) 7=0-3-8, 14=0-3-8
Max Horz 14=120(LC 5)
Max Uplift 7=-119(LC 5), 14=-83(LC 8)
Max Grav 7=646(LC 1), 14=723(LC 1)

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

TOP CHORD 2-3=-299/44, 3-4=-1468/160, 4-5=-1305/171, 7-9=-618/136, 2-14=-755/107
BOT CHORD 3-12=-212/1319, 11-12=-212/1319, 10-11=-338/1243, 9-10=-338/1243
WEBS 4-11=0/354, 5-11=-66/280, 5-9=-1219/351

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 119 lb uplift at joint 7 and 83 lb uplift at joint 14.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 7, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	I40902192
400219	B3	Half Hip	1	1		

Wheeler Lumber, Waverly, KS 66871

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ID:HGhkM0byc7yfla13RCctYPzRku_-wTYSg8xvCcBCTWpIDGLLjsRCYQO5TzdFwVCnwyzT47C

-0-10-8	2-3-8	6-11-4	12-4-8	14-8-0
0-10-8	2-3-8	4-7-12	5-5-4	2-3-8

Scale = 1:29.6

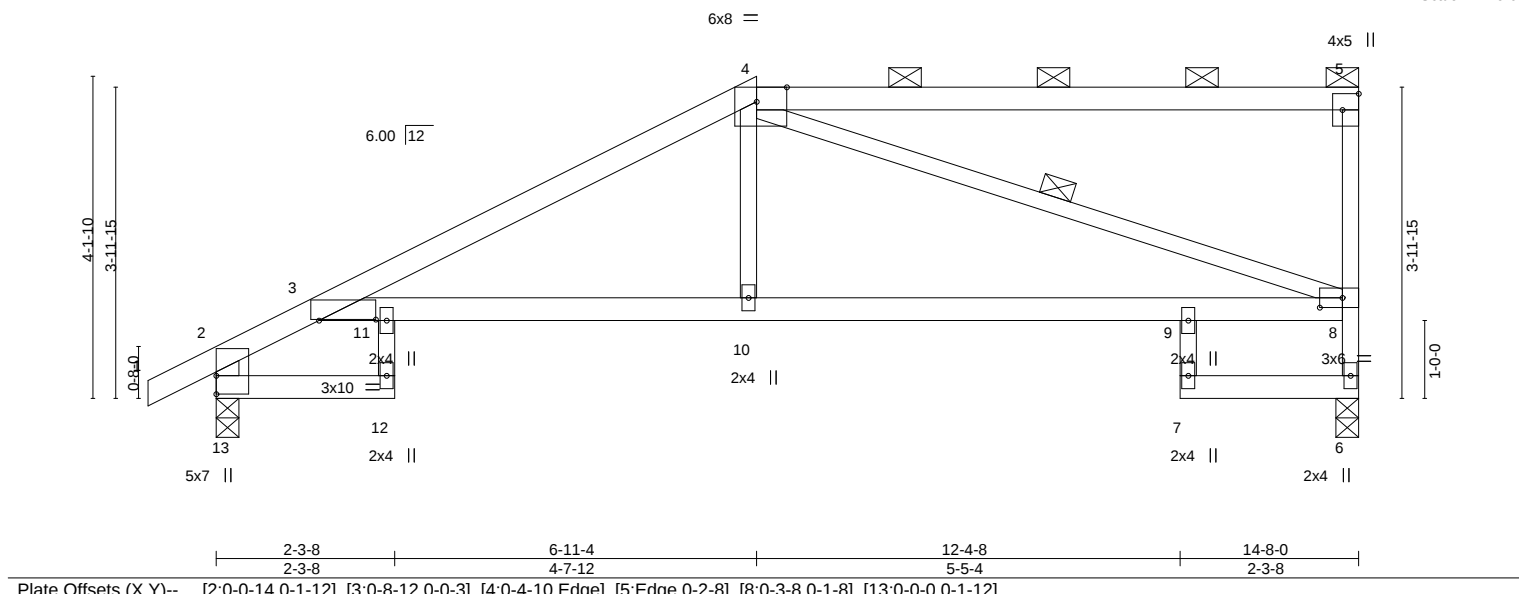


Plate Offsets (X,Y)--		[2:0-0-14,0-1-12], [3:0-8-12,0-0-3], [4:0-4-10,Edge], [5:Edge,0-2-8], [8:0-3-8,0-1-8], [13:0-0-0,0-1-12]			
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.87	Vert(LL) -0.19 10-11 >907 360	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.62	Vert(CT) -0.34 10-11 >508 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.61	Horz(CT) 0.22 6 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.17 10-11 >999 240	Weight: 52 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF 2100F 1.8E *Except*
4-5: 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
3-8: 2x4 SPF 2100F 1.8E
WEBS 2x3 SPF No.2 *Except*
2-13: 2x4 SPF No.2

BRACING-

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

REACTIONS.

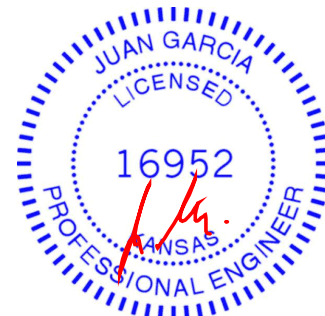
(size) 6=0-3-8, 13=0-3-8
Max Horz 13=161(LC 5)
Max Uplift 6=-115(LC 5), 13=-100(LC 8)
Max Grav 6=646(LC 1), 13=723(LC 1)

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

TOP CHORD 2-3=-316/36, 3-4=-1132/119, 6-8=-620/128, 5-8=-260/109, 2-13=-757/131
BOT CHORD 3-11=-196/987, 10-11=-196/987, 9-10=-199/977, 8-9=-199/977
WEBS 4-10=0/375, 4-8=-964/154

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 115 lb uplift at joint 6 and 100 lb uplift at joint 13.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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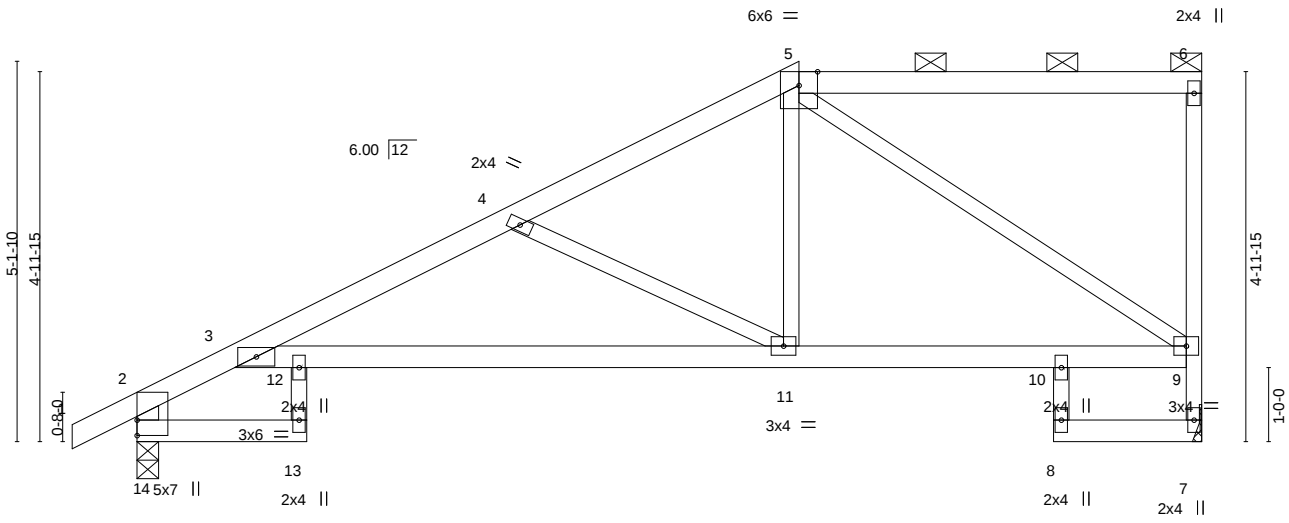
Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	140902193
400219	B4	Half Hip	1	1		

Wheeler Lumber, Waverly, KS 66871

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ID:HGhkM0byc7yfla13RCctYPzRku_-Og5qtUyYzwJ34gOxmzsaG4zQgpp5CNIO99yLTOzT47B

-0-10-8	2-3-8	5-2-1	8-11-4	12-4-8	14-4-8
0-10-8	2-3-8	2-10-9	3-9-3	3-5-4	2-0-0



Scale = 1:31.1

Plate Offsets (X,Y)--	[2:0-0-14,0-1-12], [14:0-0-0,0-1-12]
-----------------------	--------------------------------------

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 0.66	Vert(LL)	-0.17 11-12	>990	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.70	Vert(CT)	-0.38 11-12	>451	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.77	Horz(CT)	0.20 7	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.13 11-12	>999	240	Weight: 55 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF 2100F 1.8E *Except*	TOP CHORD Structural wood sheathing directly applied or 5-1-14 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-6.
5-6: 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
BOT CHORD 2x4 SPF No.2	
WEBS 2x3 SPF No.2 *Except*	
2-14: 2x4 SPF No.2	

REACTIONS. (size) 7=Mechanical, 14=0-3-8
Max Horz 14=161(LC 7)
Max Uplift 7=-35(LC 5), 14=-21(LC 8)
Max Grav 7=633(LC 1), 14=710(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-326/15, 3-4=-1207/70, 4-5=-769/22, 7-9=-613/45, 2-14=-734/45
BOT CHORD 3-12=-128/1101, 11-12=-128/1101, 10-11=-65/615, 9-10=-65/615
WEBS 5-11=0/446, 5-9=-732/31, 4-11=-527/113

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 35 lb uplift at joint 7 and 21 lb uplift at joint 14.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 7, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

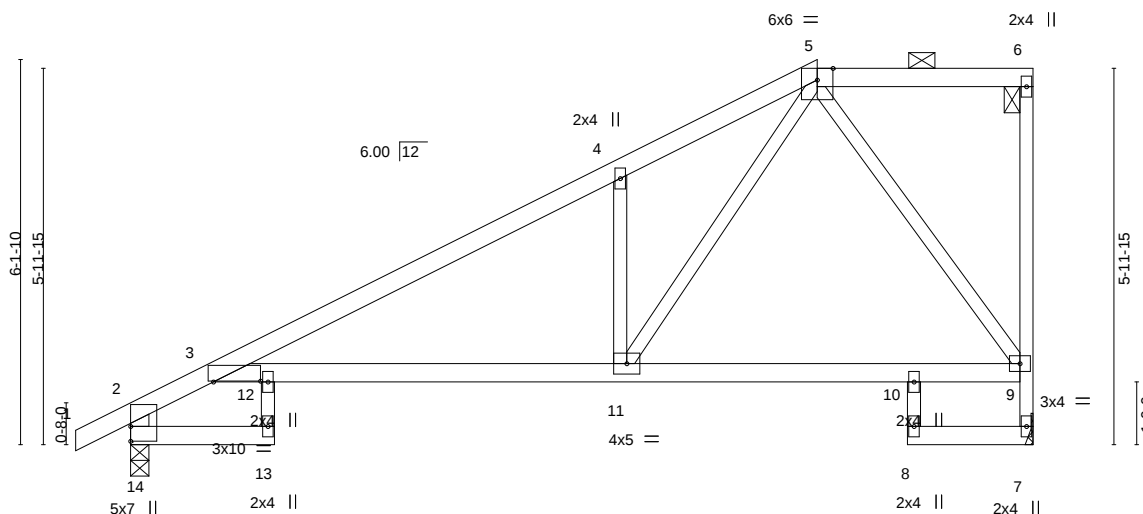
Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	I40902194
400219	B5	Half Hip	1	1		

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 7 14:59:47 2020 Page 1

ID:HGhkM0byc7yfla13RCctYPzRku...ssfC5qyAkDRwiqz7KhNppHWacD3wxv5YOphu?qzT47A

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



Scale = 1:36.7

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

Plate Offsets (X,Y)-- [2:0-0-14,0-1-12], [3:0-9-0,0-0-3], [14:0-0-0,0-1-12]

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 0.64	Vert(LL)	-0.23 11-12	>741	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.66	Vert(CT)	-0.42 11-12	>402	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.48	Horz(CT)	0.25 7	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.16 11-12	>999	240	Weight: 56 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF 2100F 1.8E *Except*
5-6: 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
3-9: 2x4 SPF 2100F 1.8E
WEBS 2x3 SPF No.2 *Except*
2-14: 2x4 SPF No.2

BRACING-

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

REACTIONS.

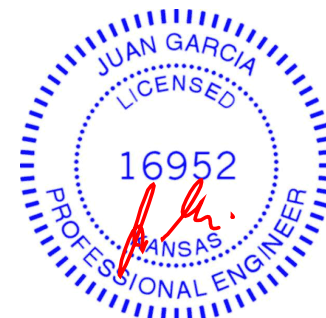
(size) 7=Mechanical, 14=0-3-8
Max Horz 14=193(LC 5)
Max Uplift 7=-36(LC 5), 14=-23(LC 8)
Max Grav 7=633(LC 1), 14=710(LC 1)

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

TOP CHORD 2-3=-356/17, 3-4=-982/37, 4-5=-1020/115, 7-9=-614/46, 2-14=-744/49
BOT CHORD 3-12=-84/838, 11-12=-84/838, 10-11=-74/341, 9-10=-74/341
WEBS 5-11=-92/905, 5-9=-586/56, 4-11=-500/144

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 36 lb uplift at joint 7 and 23 lb uplift at joint 14.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 7, 2020

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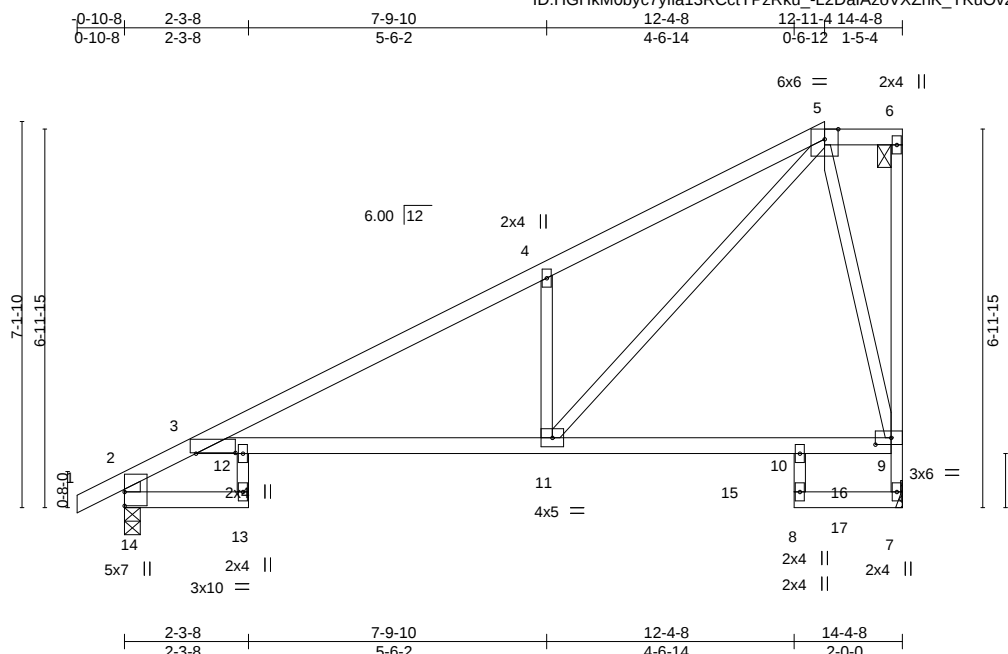
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	
400219	B6	Monopitch	1	1		I40902195
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

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ID:HGhKMObyc7yfla13RCctYPzRku_-L2DalAzoVXZnK_YKuOv2LV3lcdOpgM9hcTRRXHzT479



Scale = 1:42.6

Plate Offsets (X,Y)-- [2:0-0-14,0-1-12], [3:0-8-12,0-0-3], [9:0-3-8,0-1-8], [14:0-0-0,0-1-12]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.69	Vert(LL)	-0.26 11-12 >663 360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.68	Vert(CT)	-0.45 11-12 >375 240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.49	Horz(CT)	0.28 7 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.17 11-12 >999 240	Weight: 59 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF 2100F 1.8E *Except*
5-6: 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
3-9: 2x4 SPF 2100F 1.8E
WEBS 2x3 SPF No.2 *Except*
2-14: 2x4 SPF No.2

BRACING-

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

REACTIONS.

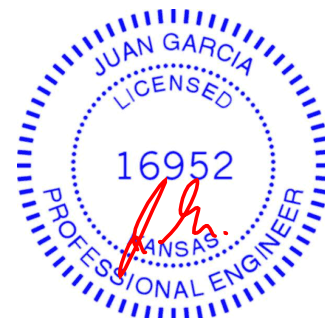
(size) 7=Mechanical, 14=0-3-8
Max Horz 14=226(LC 5)
Max Uplift 7=-38(LC 8), 14=-21(LC 8)
Max Grav 7=721(LC 13), 14=733(LC 2)

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

TOP CHORD 2-3=-435/24, 3-4=-1037/39, 4-5=-1104/137, 7-9=-686/52, 2-14=-759/48
BOT CHORD 3-12=-89/945, 11-12=-89/945
WEBS 4-11=-541/160, 5-11=-128/1183, 5-9=-589/80

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 38 lb uplift at joint 7 and 21 lb uplift at joint 14.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 7, 2020

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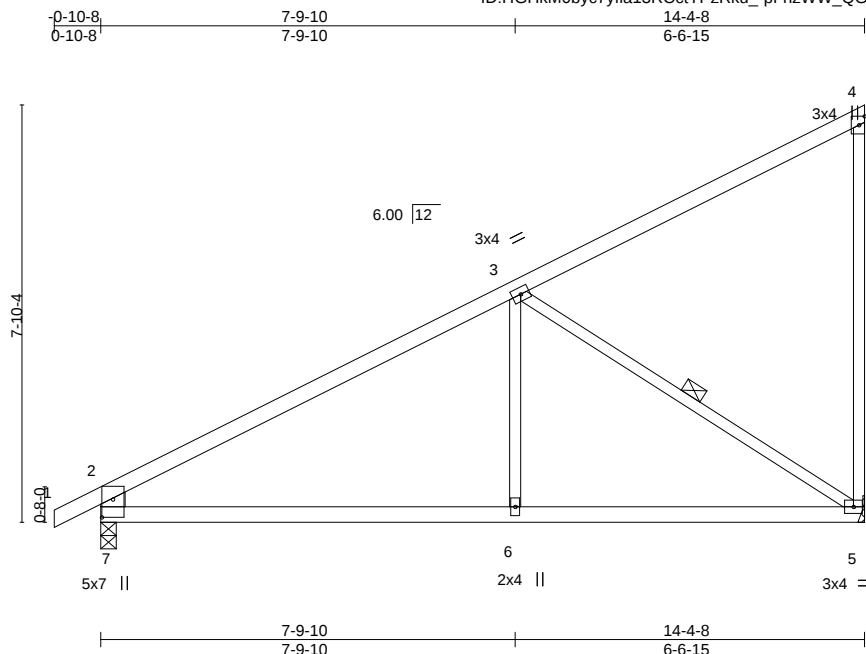
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	I40902196
400219	B7	Monopitch	2	1		

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 7 14:59:49 2020 Page 1

ID:HGhkM0byc7yfla13RCctYPzRku_-pFnzWW_QGrhex76WS6QHuibxY1ojPqdr7A?3jzT478



Scale = 1:43.4

Plate Offsets (X,Y)-- [7:0-4-1,0-2-8]											
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	0.61	Vert(LL)	-0.07	6-7	>999	360	MT20 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.45	Vert(CT)	-0.15	6-7	>999	240	
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.41	Horz(CT)	0.01	5	n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	-0.04	5-6	>999	240	Weight: 52 lb FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-8-14 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 3-5

REACTIONS.

(size) 5=Mechanical, 7=0-3-8
Max Horz 7=253(LC 7)
Max Uplift 5=-56(LC 8), 7=-17(LC 8)
Max Grav 5=629(LC 1), 7=712(LC 1)

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

TOP CHORD 2-3=-808/20, 2-7=-645/66
BOT CHORD 6-7=-75/619, 5-6=-75/619
WEBS 3-6=0/325, 3-5=-733/110

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); 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 56 lb uplift at joint 5 and 17 lb uplift at joint 7.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



April 7, 2020

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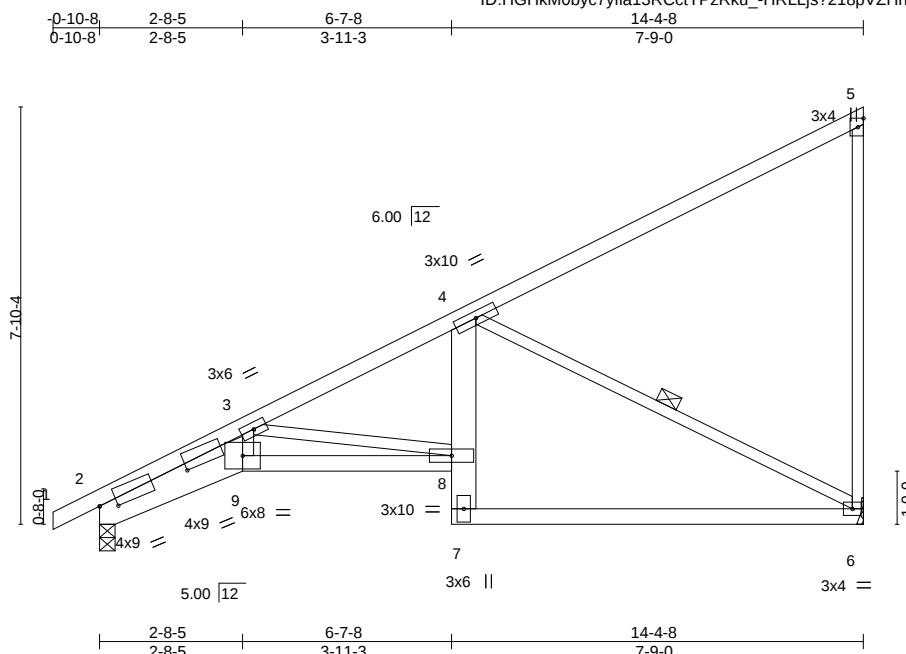
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	I40902197
400219	B8	Monopitch	7	1		

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 7 14:59:50 2020 Page 1

ID:HGhkM0byc7yfla13RCctYPzRku_-HRLljs?218pVZHhi?pxWQw84dR538Ga_4nwYc9zT477



Scale = 1:43.4

Plate Offsets (X,Y)-- [2:0-3-15,0-1-8], [2:1-9-6,0-0-2]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.72	Vert(LL)	-0.12	6-7	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.63	Vert(CT)	-0.26	6-7	>658	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.50	Horz(CT)	0.13	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.06	8-9	>999	240	Weight: 65 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2 *Except*
 2-9: 2x8 SP DSS, 4-7: 2x6 SPF No.2
 WEBS 2x3 SPF No.2

BRACING-

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

REACTIONS. (size) 6=Mechanical, 2=0-3-8
 Max Horz 2=248(LC 7)
 Max Uplift 6=-56(LC 8), 2=-17(LC 8)
 Max Grav 6=633(LC 1), 2=710(LC 1)

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

TOP CHORD 2-3=-2307/115, 3-4=-1003/39
 BOT CHORD 2-9=-227/2031, 8-9=-202/1771, 4-8=0/349, 6-7=-76/714
 WEBS 3-9=-44/811, 3-8=-899/108, 4-6=-790/119

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) 2 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 56 lb uplift at joint 6 and 17 lb uplift at joint 2.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



April 7, 2020

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	I40902198
400219	B9	Monopitch	2	1		

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 7 14:59:51 2020 Page 1

ID:HGhkM0byc7yfla13RCctYPzRku_-ldvjwB?goSxMBRGvZWSlz7hJ5qMTiK7IRf58czT476

0-10-8	5-9-10	10-3-0	14-4-8
0-10-8	5-9-10	4-5-6	4-1-8

Scale = 1:43.4

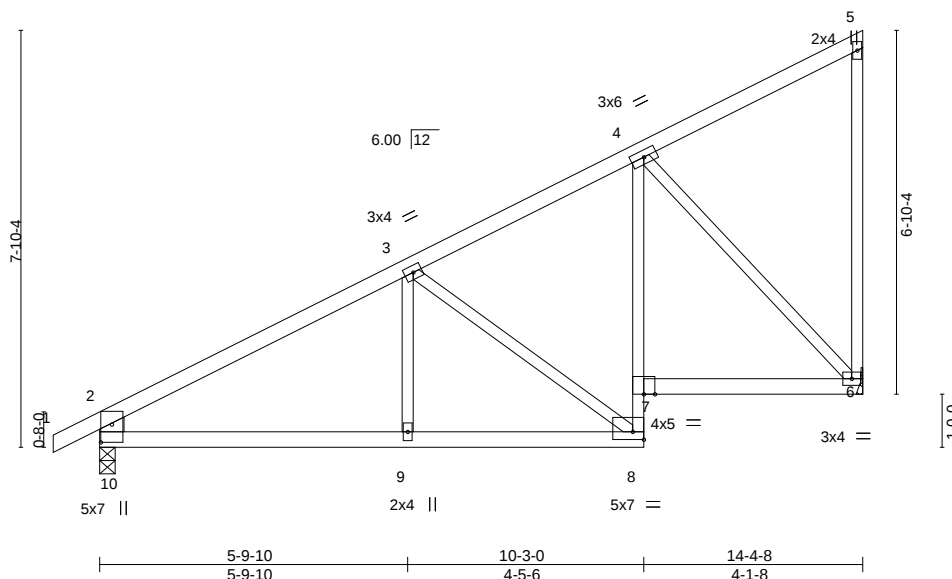


Plate Offsets (X,Y)--		[8:Edge,0-1-12], [10:0-4-1,0-2-8]									
LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.48	Vert(LL)	-0.06 6-7	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.94	Vert(CT)	-0.11 6-7	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.53	Horz(CT)	0.11 6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.03 6-7	>999	240	Weight: 57 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2 *Except*
 4-8: 2x3 SPF No.2
 WEBS 2x3 SPF No.2 *Except*
 2-10: 2x6 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-9-2 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 2-2-0 oc bracing: 7-8.

REACTIONS.

(size) 6=Mechanical, 10=0-3-8
 Max Horz 10=241(LC 5)
 Max Uplift 6=-57(LC 8), 10=-16(LC 8)
 Max Grav 6=629(LC 1), 10=712(LC 1)

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

TOP CHORD 2-3=-857/16, 3-4=-493/36, 2-10=-639/52
 BOT CHORD 9-10=-72/677, 8-9=-72/677, 7-8=-21/303, 4-7=-2/317, 6-7=-54/408
 WEBS 3-8=-375/70, 4-6=-591/86

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 57 lb uplift at joint 6 and 16 lb uplift at joint 10.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



April 7, 2020

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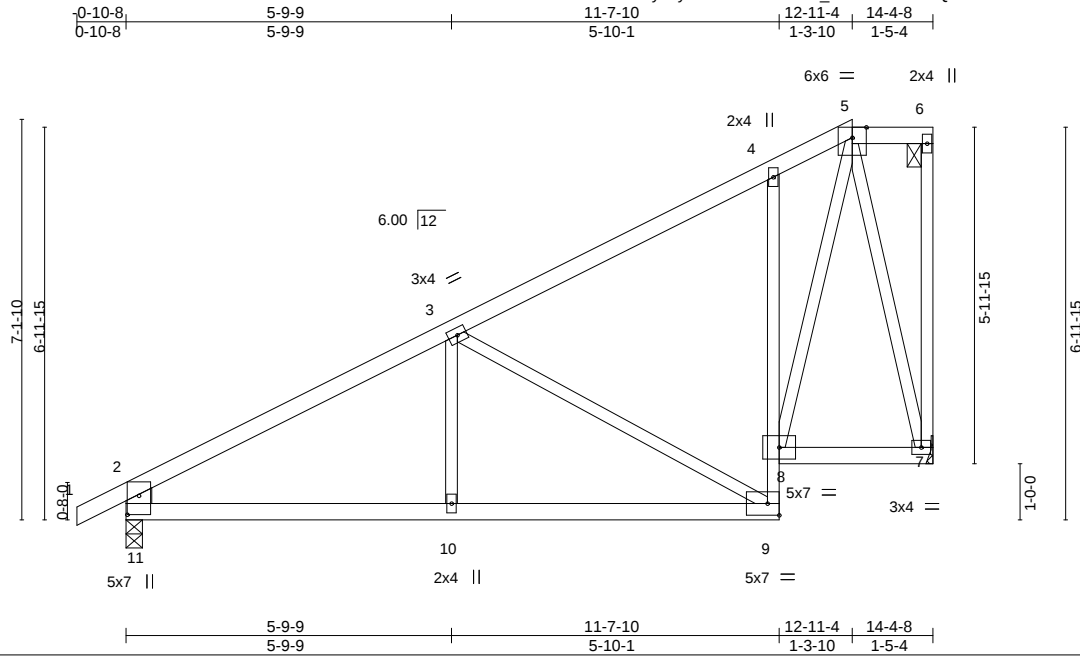
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	
400219	B10	Half Hip	1	1		I40902199
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

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ID:HGhkM0byc7yfla13RCctYPzRku_-5JABP5s9dmQ3lbMbs?ExUbBG5?KL3HHMYalTjlt471



Scale = 1:41.0

Plate Offsets (X,Y)-- [11:0-4-1,0-2-8]												
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	0.49	Vert(LL)	-0.04	10	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.70	Vert(CT)	-0.09	9-10	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.53	Horz(CT)	0.07	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.02	8	>999	240	Weight: 62 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2 *Except*
 4-9: 2x3 SPF No.2
 WEBS 2x3 SPF No.2 *Except*
 2-11: 2x6 SPF No.2

BRACING-

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

REACTIONS.

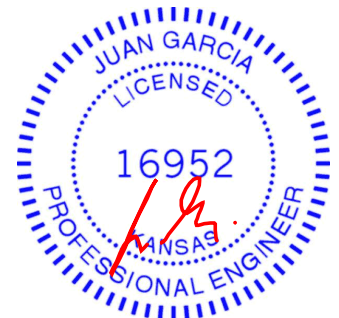
(size) 7=Mechanical, 11=0-3-8
 Max Horz 11=214(LC 5)
 Max Uplift 7=-39(LC 8), 11=-21(LC 8)
 Max Grav 7=629(LC 1), 11=712(LC 1)

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

TOP CHORD 2-3=-876/24, 3-4=-387/42, 4-5=-358/93, 2-11=-641/54
 BOT CHORD 10-11=-68/698, 9-10=-68/698, 8-9=-10/318, 4-8=-332/105
 WEBS 3-9=-499/81, 5-8=-109/645, 5-7=-512/43

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 39 lb uplift at joint 7 and 21 lb uplift at joint 11.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 7, 2020

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	140902200
400219	B11	Half Hip	1	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

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ID:HGhkM0byc7yfla13RCctYPzRku_-ZWkZdRtnO4YwMlwnQjIA0pjRiPItOgDWnEV0FkzT47H

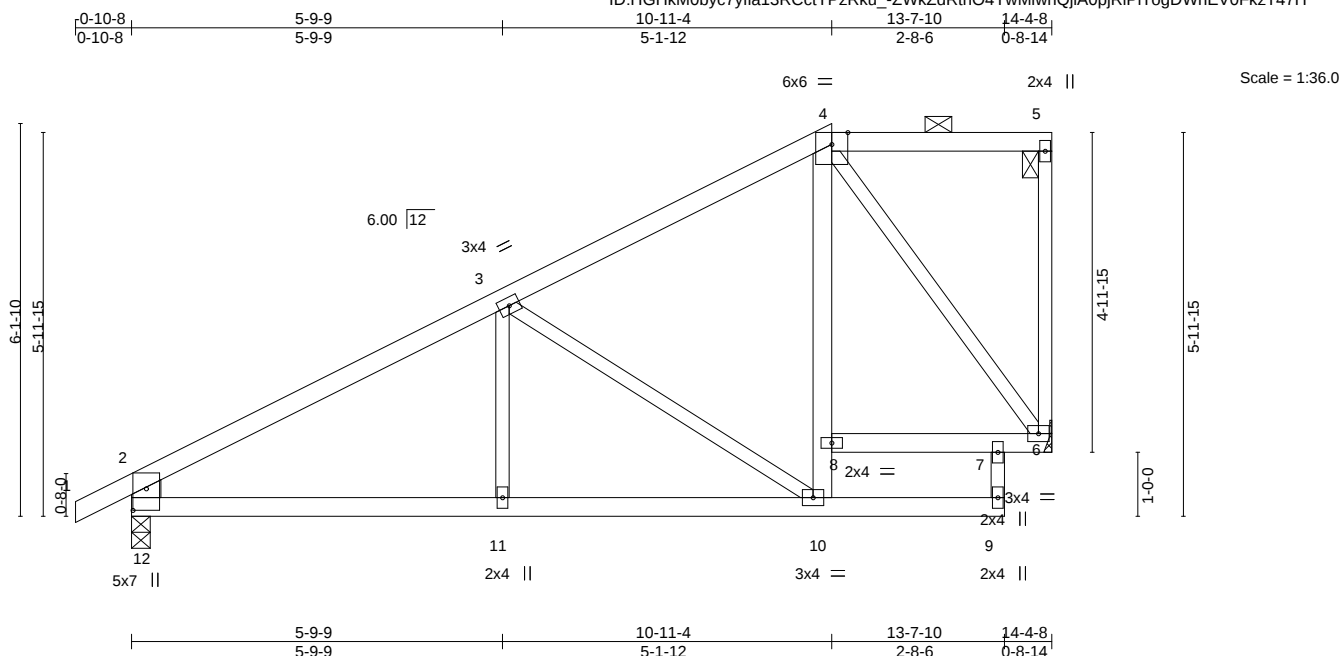


Plate Offsets (X,Y)--		[12:0-4-1,0-2-8]									
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.49	Vert(LL)	-0.06 10-11 >999 360	MT20		197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.33	Vert(CT)	-0.12 10-11 >999 240				
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.81	Horz(CT)	0.12 6 n/a n/a				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.03 10-11 >999 240	Weight: 61 lb		FT = 20%	

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 2x3 SPF No.2 *Except*
 4-10: 2x4 SPF No.2, 2-12: 2x6 SPF No.2

BRACING-

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

REACTIONS.

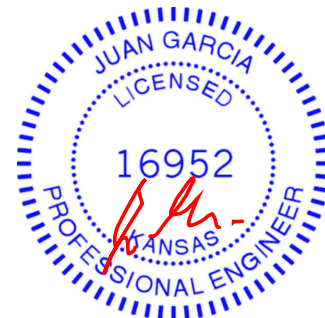
(size) 6=Mechanical, 12=0-3-8
 Max Horz 12=182(LC 5)
 Max Uplift 6=-36(LC 5), 12=-23(LC 8)
 Max Grav 6=629(LC 1), 12=712(LC 1)

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

TOP CHORD 2-3=-878/30, 3-4=-414/44, 2-12=-645/57
 BOT CHORD 11-12=-66/698, 10-11=-66/698, 7-8=-47/345, 6-7=-47/345
 WEBS 3-10=-483/83, 8-10=0/333, 4-8=0/340, 4-6=-595/32

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 36 lb uplift at joint 6 and 23 lb uplift at joint 12.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 7, 2020

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	
400219	B12	Half Hip	1	1		I40902201
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

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ID:HGhkM0byc7yfla13RCctYPzRku_-ZWkZdRtnO4YwMlwnQjIAOpjSUPiWoixWnEV0FkzT47H

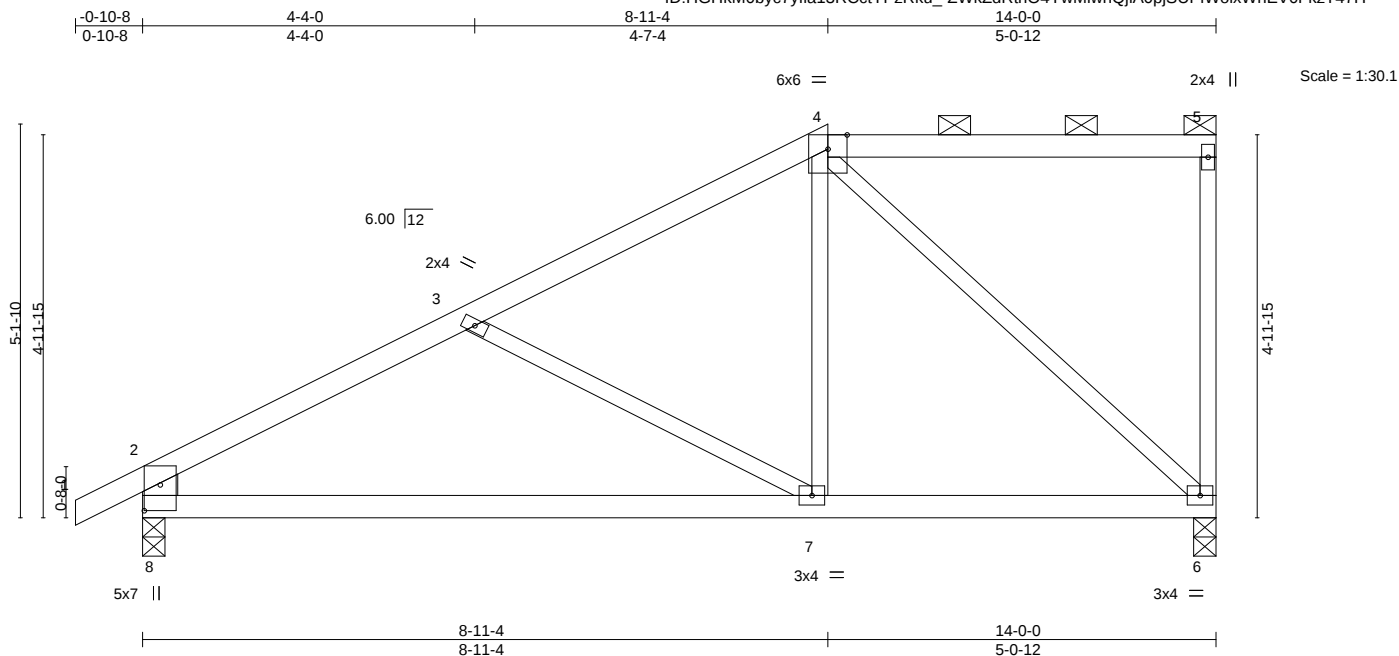


Plate Offsets (X,Y)-- [8'-0-4-1,0-2-8]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	2-0-0	TC 0.44	Vert(LL)	-0.14	7-8	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.52	Vert(CT)	-0.27	7-8	>610	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.70	Horz(CT)	0.01	6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.01	6-7	>999	240	Weight: 52 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 6=0-3-8, 8=0-3-8
 Max Horz 8=161(LC 7)
 Max Uplift 6=-35(LC 5), 8=-22(LC 8)
 Max Grav 6=612(LC 1), 8=695(LC 1)

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

TOP CHORD 2-3=-850/63, 3-4=-569/21, 2-8=-606/70
 BOT CHORD 7-8=-101/686, 6-7=-44/443
 WEBS 3-7=-267/113, 4-7=0/363, 4-6=-603/19

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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 35 lb uplift at joint 6 and 22 lb uplift at joint 8.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 7, 2020

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	I40902202
400219	B13	Half Hip	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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ID:HGhkM0byc7yfla13RCctYPzRku_-2ilxqnuP9Ngn_vV__QHPZ0GXvo4AXDvf?uEanBzT47G

-0-10-8	6-11-4	14-0-0
0-10-8	6-11-4	7-0-12

Scale = 1:28.5

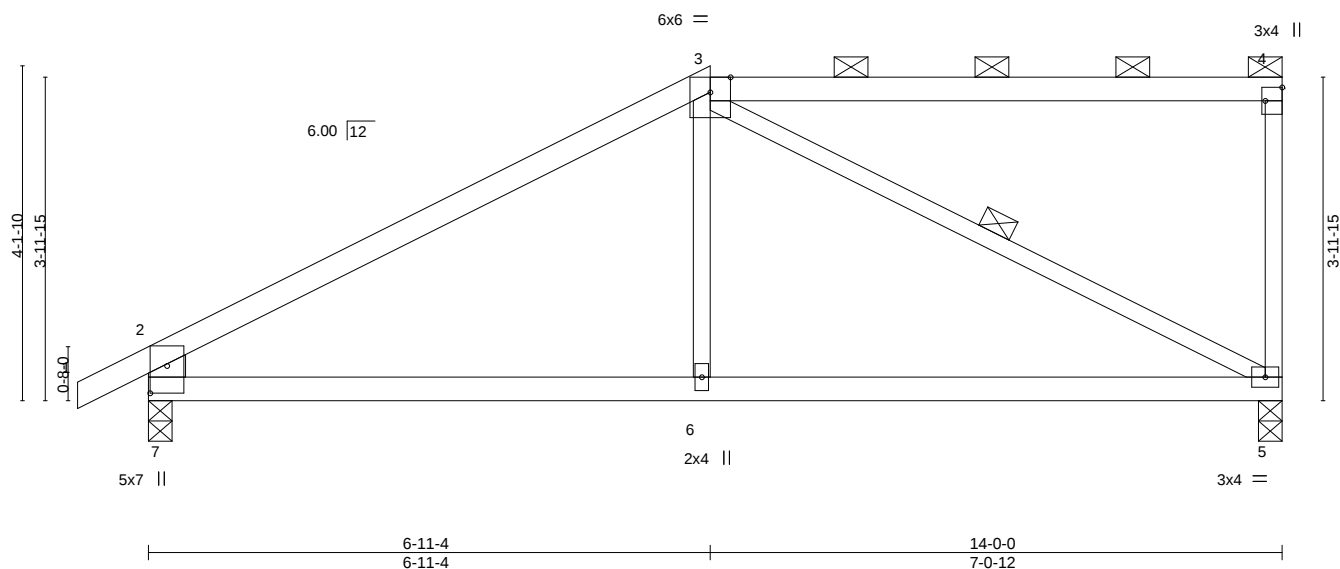


Plate Offsets (X,Y)--		[4:Edge,0-2-8], [7:0-4-1,0-2-8]	
LOADING (psf)	SPACING-	CSI.	DEFL.
TCLL 25.0	Plate Grip DOL 1.15	TC 0.79	in (loc) l/defl L/d
TCDL 10.0	Lumber DOL 1.15	BC 0.42	Vert(LL) -0.07 5-6 >999 360
BCLL 0.0 *	Rep Stress Incr YES	WB 0.40	Vert(CT) -0.15 5-6 >999 240
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Horz(CT) 0.01 5 n/a n/a
			Wind(LL) 0.02 6-7 >999 240
			PLATES MT20
			GRIP 197/144
			Weight: 47 lb FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

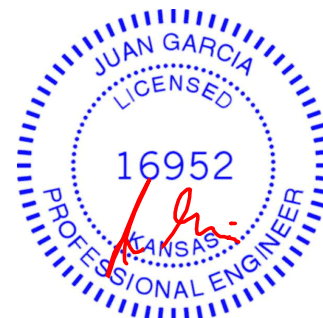
(size) 5=0-3-8, 7=0-3-8
 Max Horz 7=162(LC 5)
 Max Uplift 5=-109(LC 5), 7=-99(LC 8)
 Max Grav 5=612(LC 1), 7=695(LC 1)

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

TOP CHORD 2-3=-807/68, 2-7=-637/146
 BOT CHORD 6-7=-127/624, 5-6=-130/619
 WEBS 3-6=0/309, 3-5=-667/104

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) 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 109 lb uplift at joint 5 and 99 lb uplift at joint 7.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 7, 2020

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	140902203
400219	B14	Half Hip	1	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

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ID:HGhkM0byc7yfla13RCctYPzRku_-WusJ26u1vhpec34AX8oe6EpmdCM5GeupEY_7KdzT47F

-0-10-8	4-11-4	9-4-6	14-0-0
0-10-8	4-11-4	4-5-2	4-7-10

Scale = 1:25.2

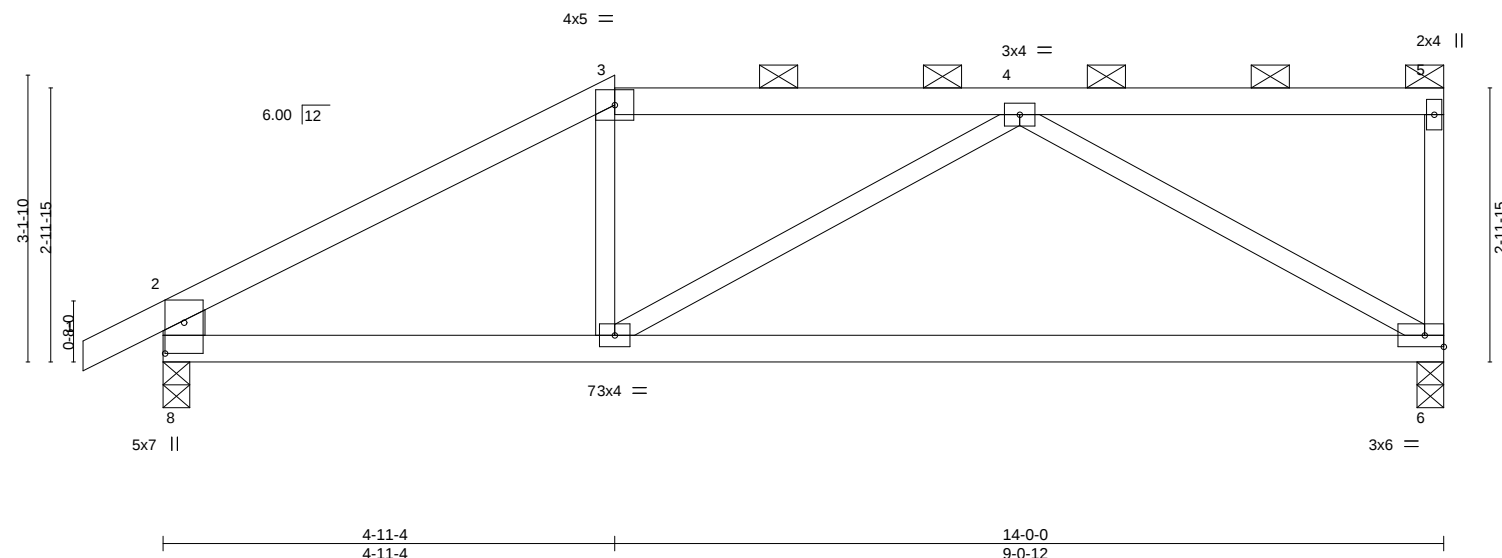


Plate Offsets (X,Y)--		[8:0-4-1,0-2-8]								
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0		Plate Grip DOL 1.15		TC 0.53		Vert(LL) -0.21 6-7	>777	360	MT20	197/144
TCDL 10.0		Lumber DOL 1.15		BC 0.64		Vert(CT) -0.43 6-7	>378	240		
BCLL 0.0 *		Rep Stress Incr YES		WB 0.54		Horz(CT) 0.02 6	n/a	n/a		
BCDL 10.0		Code IRC2018/TPI2014		Matrix-S		Wind(LL) 0.03 6-7	>999	240	Weight: 47 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 6=0-3-8, 8=0-3-8
 Max Horz 8=120(LC 5)
 Max Uplift 6=-113(LC 5), 8=-84(LC 8)
 Max Grav 6=612(LC 1), 8=695(LC 1)

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

TOP CHORD 2-3=-904/67, 3-4=-723/80, 2-8=-653/103
 BOT CHORD 7-8=-121/725, 6-7=-197/692
 WEBS 4-6=-768/212

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 113 lb uplift at joint 6 and 84 lb uplift at joint 8.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 7, 2020

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	I40902204
400219	B15	Half Hip Girder	1	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

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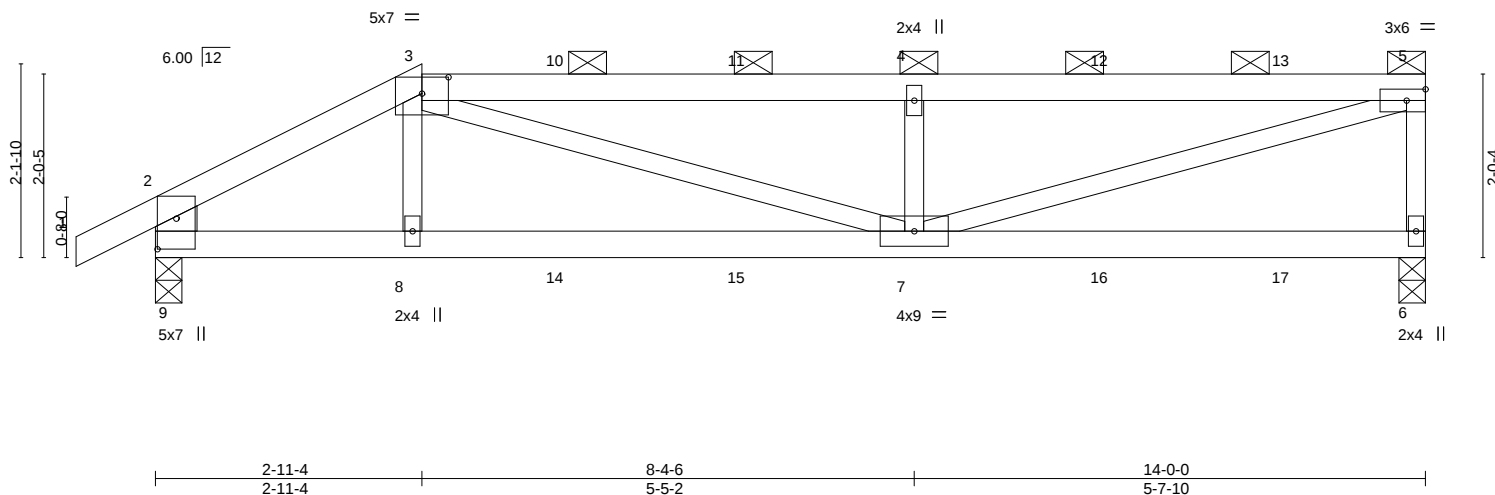


Plate Offsets (X,Y)--		[3:0-3-8,0-2-3], [9:0-4-1,0-2-8]										
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.56	Vert(LL)	-0.08	7-8	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.15	7-8	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.50	Horz(CT)	0.01	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.08	7-8	>999	240	Weight: 47 lb	FT = 20%

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

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

REACTIONS. (size) 6=0-3-8, 9=0-3-8
Max Horz 9=80(LC 7)
Max Uplift 6=-181(LC 5), 9=-194(LC 8)
Max Grav 6=684(LC 1), 9=758(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1012/287, 3-4=-1465/407, 4-5=-1463/406, 5-6=-619/209, 2-9=-666/184
BOT CHORD 8-9=-289/840, 7-8=-294/839
WEBS 3-7=-159/670, 4-7=-496/255, 5-7=-411/1467

- 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 181 lb uplift at joint 6 and 194 lb uplift at joint 9.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 83 lb down and 147 lb up at 2-11-4, 70 lb down and 53 lb up at 4-6-0, 70 lb down and 53 lb up at 6-6-0, 70 lb down and 53 lb up at 8-6-0, and 70 lb down and 53 lb up at 10-6-0, and 70 lb down and 53 lb up at 12-6-0 on top chord, and 29 lb down at 2-11-4, 18 lb down at 4-6-0, 18 lb down at 6-6-0, 18 lb down at 8-6-0, and 18 lb down at 10-6-0, and 18 lb down at 12-6-0 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
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15



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Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.
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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	I40902204
400219	B15	Half Hip Girder	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 7 14:59:43 2020 Page 2
ID:HGhkM0byc7yfla13RCctYPzRku_-_5QhFSvfg?xVDCfM5rJteRLxwciB?6kyTBjgs3zT47E

LOAD CASE(S) Standard
Uniform Loads (plf)
Vert: 1-2=-70, 2-3=-70, 3-5=-70, 6-9=-20
Concentrated Loads (lb)
Vert: 3=-13(F) 8=-9(F) 4=-13(F) 7=-10(F) 10=-13(F) 11=-13(F) 12=-13(F) 13=-13(F) 14=-10(F) 15=-10(F) 16=-10(F) 17=-10(F)

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 400219	Truss C1	Truss Type Hip Girder	Qty 1	Ply 2	Lot 58 H4	140902205
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Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 7 14:59:53 2020 Page 1

ID:HGhKMObyc7yfla13RCctYPzRku_-h00TLt1xK3B4QIHxUD2Ymbqe7dLZyQmI8CCUzT474

6-4-8	12-3-3	18-1-13	24-0-8	27-7-8	32-0-0
6-4-8	5-10-11	5-10-11	5-10-11	3-7-0	4-4-8

Scale = 1:61.1

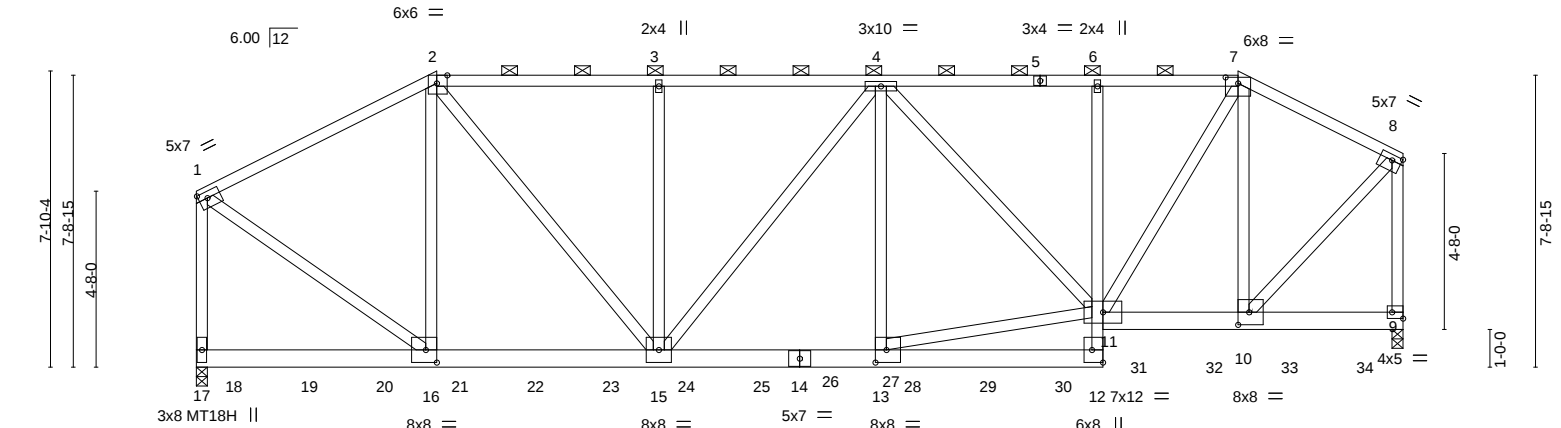


Plate Offsets (X,Y)--	[1:0-2-12,0-2-0], [2:0-3-5,Edge], [7:0-4-0,0-1-15], [8:Edge,0-1-12], [9:Edge,0-2-0], [10:0-3-8,0-4-0], [12:Edge,0-3-8], [13:0-3-8,0-4-0], [16:0-3-8,0-4-0]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.72	Vert(LL)	-0.15 13-15	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.64	Vert(CT)	-0.27 13-15	>999	240	MT18H	197/144
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.71	Horz(CT)	0.05 9	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.09 13-15	>999	240	Weight: 439 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x6 SP 2400F 2.0E *Except*
6-12: 2x4 SPF No.2
WEBS 2x4 SPF No.2

BRACING-

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

REACTIONS.

(size) 17=0-3-8 (req. 0-4-15), 9=0-3-8 (req. 0-4-15)
Max Horz 17=176(LC 5)
Max Uplift 17=-489(LC 5), 9=-516(LC 4)
Max Grav 17=6326(LC 1), 9=6314(LC 1)

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

TOP CHORD 1-2=-4985/468, 2-3=-6517/636, 3-4=-6515/635, 4-6=-5808/574, 6-7=-5818/575, 7-8=-4118/405, 1-17=-5462/462, 8-9=-5768/503
BOT CHORD 15-16=-474/4404, 13-15=-684/6792, 12-13=-100/1059, 11-12=-64/886, 6-11=-415/90, 10-11=-361/3688
WEBS 2-16=-864/149, 2-15=-378/3449, 3-15=-487/110, 4-15=-477/75, 4-13=-104/1021, 11-13=-592/5819, 4-11=-1493/151, 7-11=-442/4262, 7-10=-2071/242, 1-16=-455/5308, 8-10=-476/5266

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: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCdL=6.0psf; BCdL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- All plates are 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.
- WARNING: Required bearing size at joint(s) 17, 9 greater than input bearing size.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 489 lb uplift at joint 17 and 516 lb uplift at joint 9.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Continued on page 2



April 7, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4
400219	C1	Hip Girder	1	2	I40902205
					Job Reference (optional)

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 7 14:59:53 2020 Page 2
ID:HGhKM0byc7yfla13RCctYPzRku_-h00TLt1xK3B4QIQHhxUD2Ymbqe7dLZyQml8CCUzT474

NOTES-
13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 615 lb down and 53 lb up at 1-0-0, 613 lb down and 56 lb up at 3-0-0, 679 lb down and 58 lb up at 5-0-0, 609 lb down and 76 lb up at 7-0-0, 613 lb down and 76 lb up at 9-0-0, 613 lb down and 76 lb up at 11-0-0, 613 lb down and 76 lb up at 13-0-0, 613 lb down and 76 lb up at 15-0-0, 613 lb down and 76 lb up at 17-0-0, 613 lb down and 76 lb up at 19-0-0, 613 lb down and 76 lb up at 21-0-0, 609 lb down and 76 lb up at 23-0-0, 609 lb down and 77 lb up at 25-0-0, 609 lb down and 77 lb up at 27-0-0, and 609 lb down and 59 lb up at 29-0-0, and 610 lb down and 54 lb up at 31-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-70, 2-7=-70, 7-8=-70, 12-17=-20, 9-11=-20
Concentrated Loads (lb)
Vert: 18=-615(F) 19=-613(F) 20=-613(F) 21=-609(F) 22=-613(F) 23=-613(F) 24=-613(F) 25=-613(F) 27=-613(F) 28=-613(F) 29=-613(F) 30=-609(F) 31=-609(F) 32=-609(F) 33=-609(F) 34=-610(F)

 **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 58 H4	140902206
400219	C2	Hip	1	1		

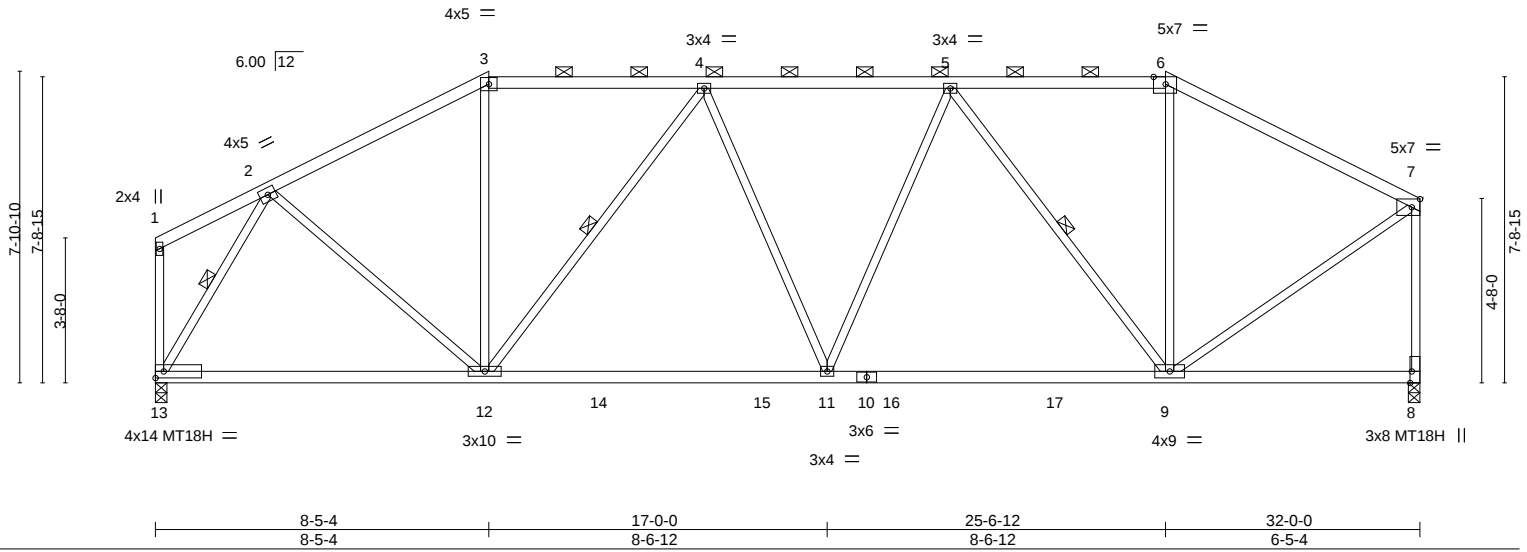
Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 7 14:59:54 2020 Page 1

ID:HGhKM0byc7yfla13RCctYPzRku_9CasZD2Z5NJx2v?UEf?SbmJik2Oc41ea?PumlwzT473

2-11-5	8-5-4	13-10-10	20-1-6	25-6-12	32-0-0
2-11-5	5-5-15	5-5-6	6-2-12	5-5-6	6-5-4

Scale = 1:58.3



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 1.00	Vert(LL)	-0.19 9-11	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.91	Vert(CT)	-0.33 9-11	>999	240	MT18H	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.68	Horz(CT)	0.06 8	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.06 11	>999	240	Weight: 136 lb	FT = 20%

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

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 2-11-15 oc purlins, except end verticals, and 2-0-0 oc purlins (4-2-10 max.): 3-6.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
 WEBS 1 Row at midpt 4-12, 5-9, 2-13

REACTIONS. (size) 13=0-3-8, 8=0-3-8
 Max Horz 13=212(LC 5)
 Max Uplift 13=-115(LC 5), 8=-130(LC 4)
 Max Grav 13=1528(LC 2), 8=1536(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1532/207, 3-4=-1307/206, 4-5=-1687/238, 5-6=-1082/192, 6-7=-1283/187, 7-8=-1458/160
 BOT CHORD 12-13=-243/796, 11-12=-312/1649, 9-11=-282/1565
 WEBS 2-12=-72/698, 3-12=0/396, 4-12=-633/191, 5-11=0/341, 5-9=-854/209, 6-9=0/296, 2-13=-1569/176, 7-9=-148/1305

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 115 lb uplift at joint 13 and 130 lb uplift at joint 8.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 7, 2020

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	140902207
400219	C3	Roof Special	1	1		

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 7 14:59:55 2020 Page 1

ID:HGhkM0byc7yfla13RCctYPzRku_-dO8EmZ3BsgRof2agoMXh7zrylSm3pWLjD3dJHNzT472

5-9-9	10-5-4	17-0-0	23-6-12	30-0-12	32-0-0
5-9-9	4-7-11	6-6-12	6-6-12	6-6-0	1-11-4

Scale = 1:59.4

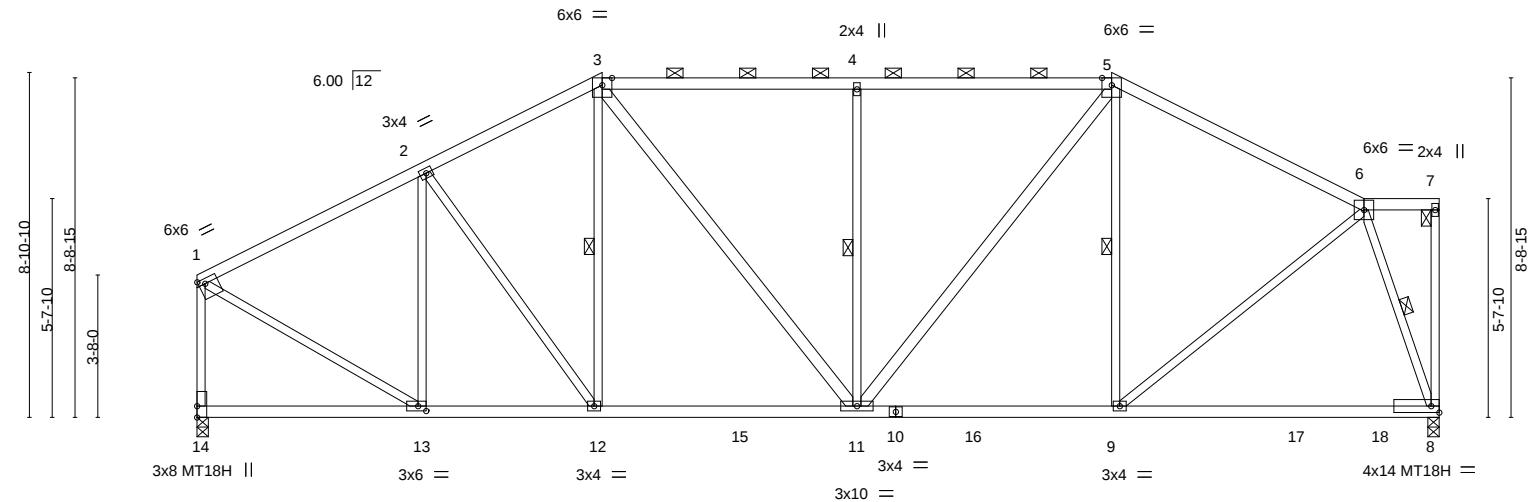


Plate Offsets (X,Y)--	[1:0-2-0,0-1-8], [13:0-2-8,0-1-8]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.70	Vert(LL)	-0.18	8-9	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.71	Vert(CT)	-0.34	8-9	>999	240	MT18H	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.53	Horz(CT)	0.04	8	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.05	11	>999	240		
									Weight: 153 lb	FT = 20%

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

REACTIONS.	(size) 8=0-3-8, 14=0-3-8
Max Horz	14=252(LC 5)
Max Uplift	8=-118(LC 9), 14=-128(LC 8)
Max Grav	8=1559(LC 2), 14=1524(LC 2)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	1-2=-1389/133, 2-3=-1504/190, 3-4=-1501/209, 4-5=-1501/209, 5-6=-1377/170, 1-14=-1432/155
BOT CHORD	12-13=-250/1185, 11-12=-238/1291, 9-11=-160/1167, 8-9=-98/497
WEBS	2-13=-548/108, 2-12=-79/278, 3-11=-130/426, 4-11=-555/225, 5-11=-159/606, 5-9=-319/163, 6-9=-90/869, 6-8=-1493/201, 1-13=-76/1354

- 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 118 lb uplift at joint 8 and 128 lb uplift at joint 14.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 7,2020

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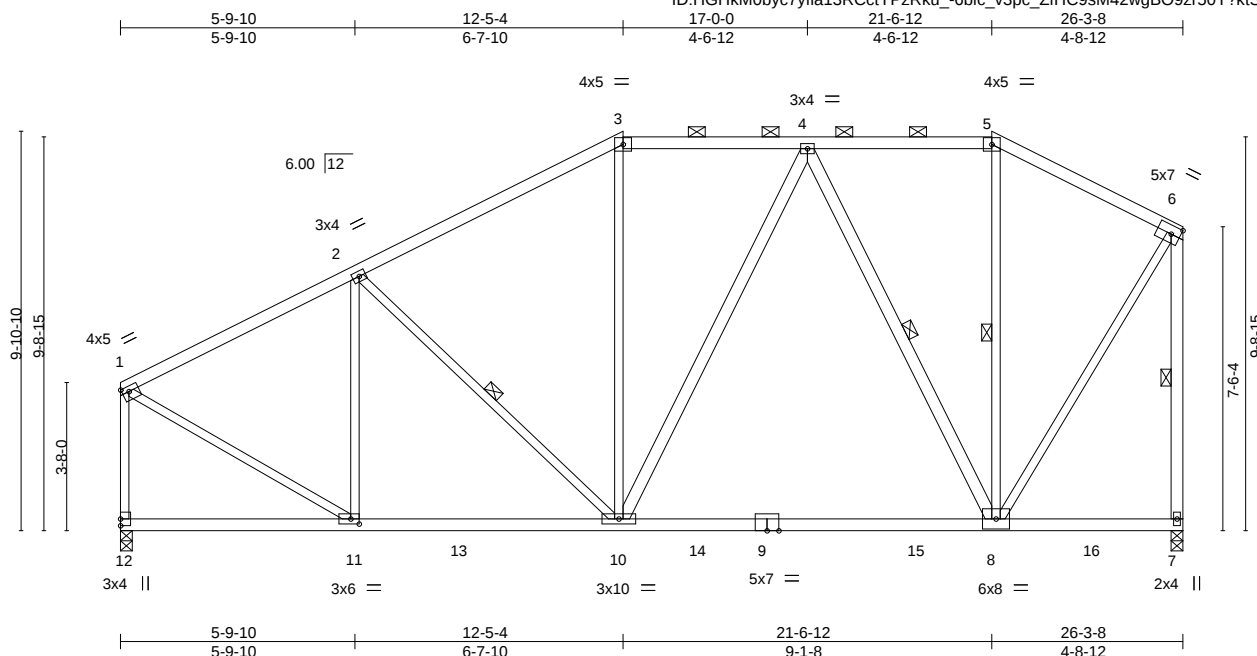
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	
400219	C4	Hip	1	1		I40902208
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

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ID:HGhkM0byc7yfla13RCctYPzRku_-6bic_v3pc_ZfHC9sM42wgBO9zr50Y?ktSjNsppzT471



Scale = 1:57.0

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

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 0.54	Vert(LL)	-0.31	8-10	>999	360	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.79	Vert(CT)	-0.48	8-10	>648	240	
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.39	Horz(CT)	0.02	7	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.03	8-10	>999	240	

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 2x3 SPF No.2 *Except*
 4-10,4-8,6-7: 2x4 SPF No.2

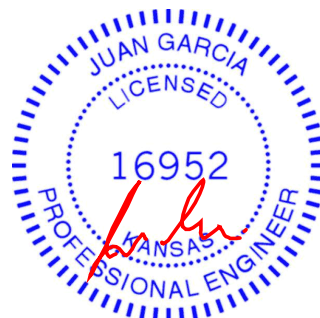
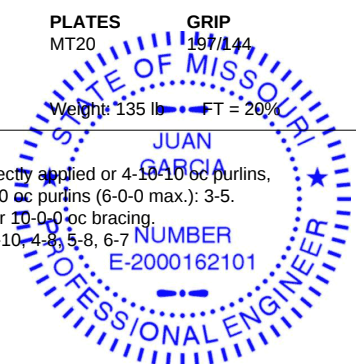
REACTIONS. (size) 12=0-3-8, 7=0-3-8
 Max Horz 12=320(LC 5)
 Max Uplift 12=-133(LC 8), 7=-104(LC 5)
 Max Grav 12=1263(LC 2), 7=1298(LC 2)

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

TOP CHORD 1-2=-1133/134, 2-3=-1115/171, 3-4=-917/197, 4-5=-541/126, 5-6=-654/127,
 1-12=-1174/160, 6-7=-1255/104
 BOT CHORD 11-12=-298/169, 10-11=-262/971, 8-10=-205/799
 WEBS 2-11=-405/122, 4-10=-54/320, 4-8=-620/176, 1-11=-92/1100, 6-8=-124/1020

NOTES-

- Unbalanced roof live loads have been considered for this design.
- 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
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 133 lb uplift at joint 12 and 104 lb uplift at joint 7.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 7,2020

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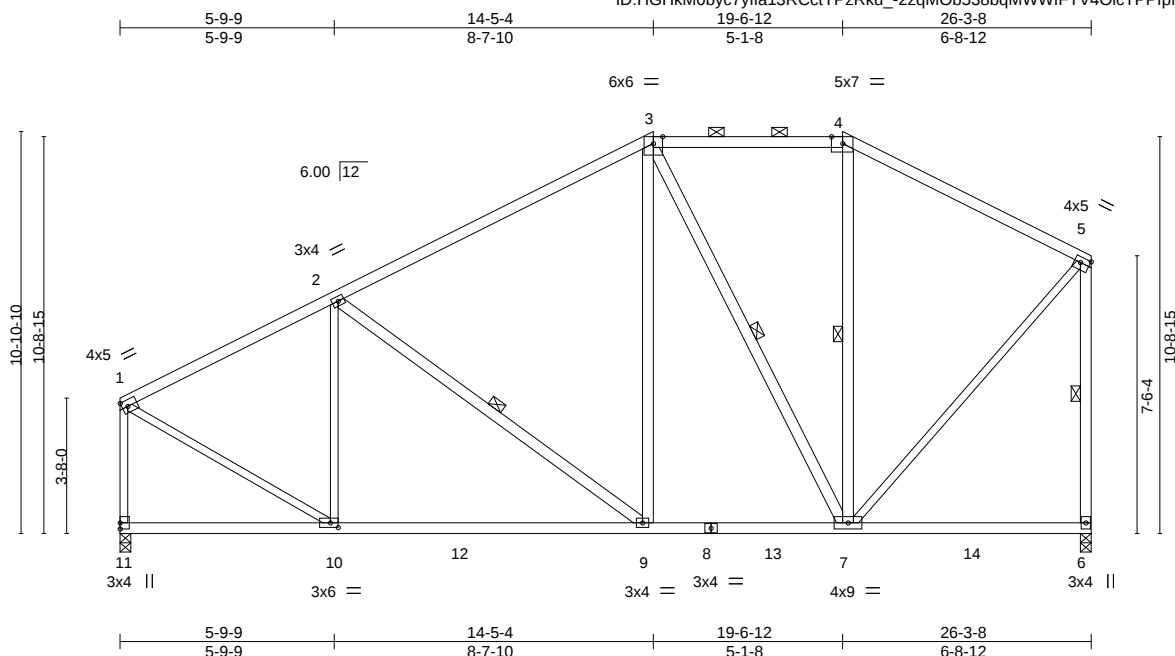


16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	I40902209
400219	C5	Hip	1	1		

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 7 14:59:58 2020 Page 1
ID:HGhkM0byc7yfla13RCctYPzRku_-2zqMOB538bqMWWIFTV4OlcTPPf0v89v1szuizT47?



Scale = 1:62.4

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

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 0.93	Vert(LL)	-0.16	9-10	>999	360	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.65	Vert(CT)	-0.29	9-10	>999	240	
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.40	Horz(CT)	0.02	6	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.03	9-10	>999	240	

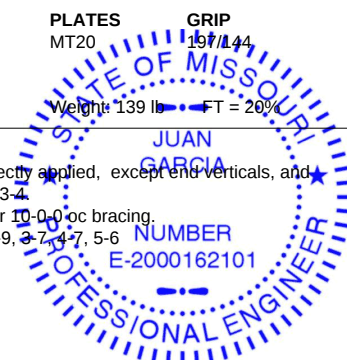
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2 *Except*
2-10,1-11,1-10,5-7: 2x3 SPF No.2

REACTIONS. (size) 11=0-3-8, 6=0-3-8
Max Horz 11=333(LC 5)
Max Uplift 11=-144(LC 8), 6=-108(LC 9)
Max Grav 11=1263(LC 2), 6=1293(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1151/147, 2-3=-1036/180, 3-4=-613/168, 4-5=-764/165, 1-11=-1198/165,
5-6=-1156/136
BOT CHORD 10-11=-313/181, 9-10=-246/1039, 7-9=-169/816
WEBS 2-10=-386/159, 2-9=-272/182, 3-9=-21/458, 3-7=-501/116, 1-10=-115/1156,
5-7=-97/896

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 144 lb uplift at joint 11 and 108 lb uplift at joint 6.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 7,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

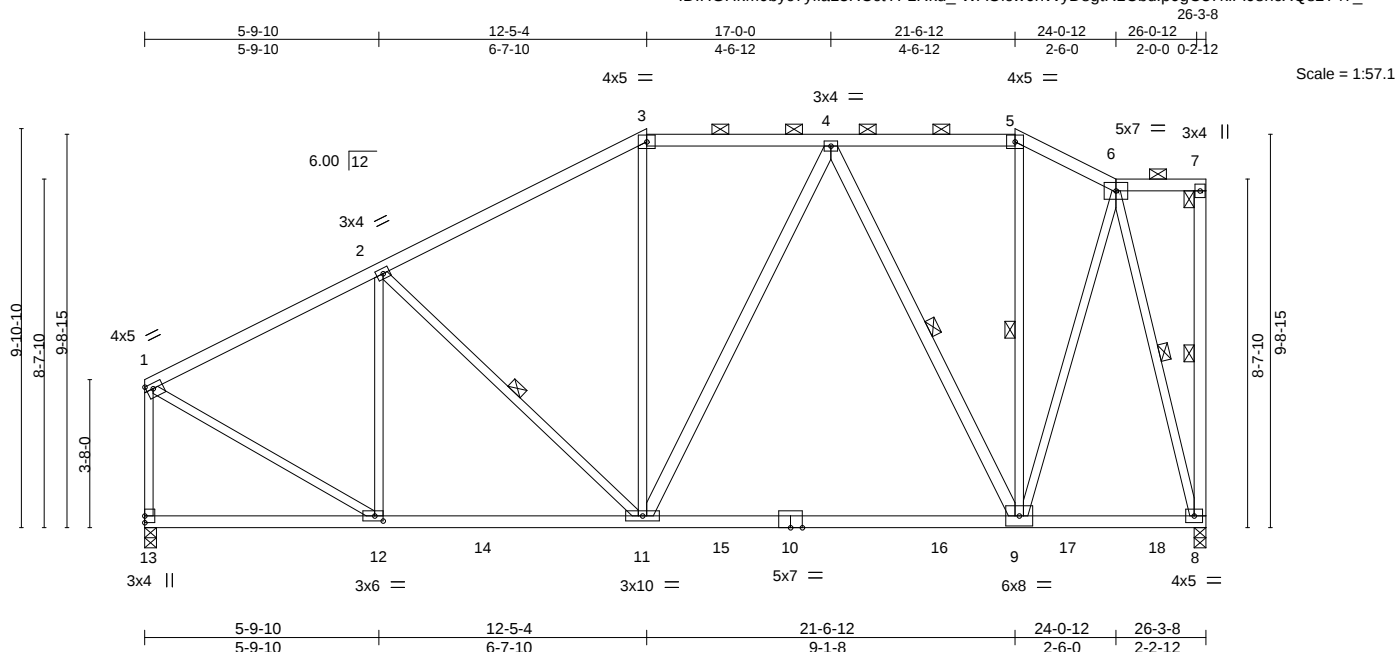


Plate Offsets (X,Y)--		[1:0-2-0,0-1-8], [12:0-2-8,0-1-8]									
LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.54	Vert(LL)	-0.31 9-11	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.79	Vert(CT)	-0.48 9-11	>648	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.85	Horz(CT)	0.02 8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.03 9-11	>999	240	Weight: 143 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 13=0-3-8, 8=0-3-8
 Max Horz 13=351(LC 5)
 Max Uplift 13=-132(LC 8), 8=-170(LC 5)
 Max Grav 13=1264(LC 2), 8=1298(LC 2)

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

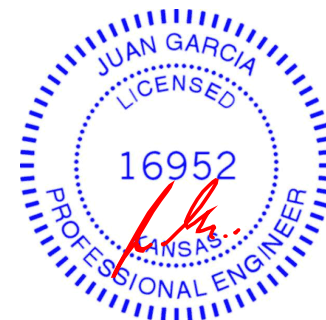
TOP CHORD 1-2=-1135/133, 2-3=-1117/170, 3-4=-918/196, 4-5=-542/124, 5-6=-616/126,
1-13=-1175/159

BOT CHORD 12-13=-329/165, 11-12=-286/970, 9-11=-223/803, 8-9=-111/302

WEBS 2-12=-405/122, 4-11=-55/315, 4-9=-621/185, 6-9=-111/864, 6-8=-1237/172,
1-12=-91/1101

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 132 lb uplift at joint 13 and 170 lb uplift at joint 8.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 7, 2020



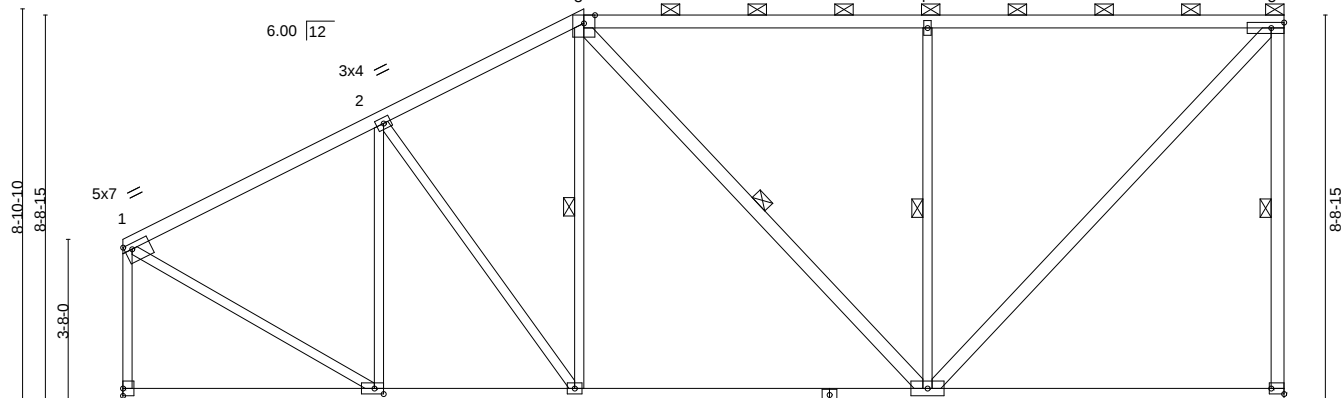
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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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140902211



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) -0.17 6-7 >999 360	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.71	Vert(CT) -0.27 6-7 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.60	Horz(CT) 0.02 6 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) -0.04 6-7 >999 240		
				Weight 128 lb	FT = 20%

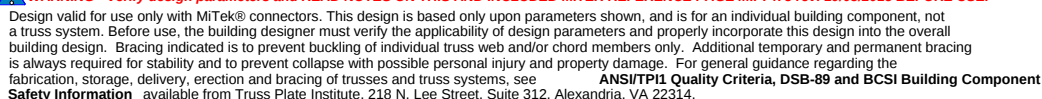
BRACING-	
TOP CHORD	Structural wood sheathing directly applied or 4-11 5/8" oc purlins, except end verticals, and 2-0-0 oc purlins (2-4" max.): 3-5.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 3-9 3-7-4-7 5-6

PLATES GRIP
MT20 197/144
Weight: 128 lb FT = 20%

A circular blue seal for a Professional Engineer in the State of Kansas. The outer ring contains the text "JUAN GARCIA" at the top and "PROFESSIONAL ENGINEER" at the bottom. Inside this ring, the word "LICENSED" is at the top and "KANSAS" is at the bottom. The center of the seal features the license number "16952" in a large, bold font. A red ink signature is written across the center, overlapping the license number and the word "KANSAS".

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCFL=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 119 lb uplift at joint 11 and 242 lb uplift at joint 6.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

April 7, 2020



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	I40902212
400219	C8	Half Hip	1	1		

Wheeler Lumber, Waverly, KS 66871

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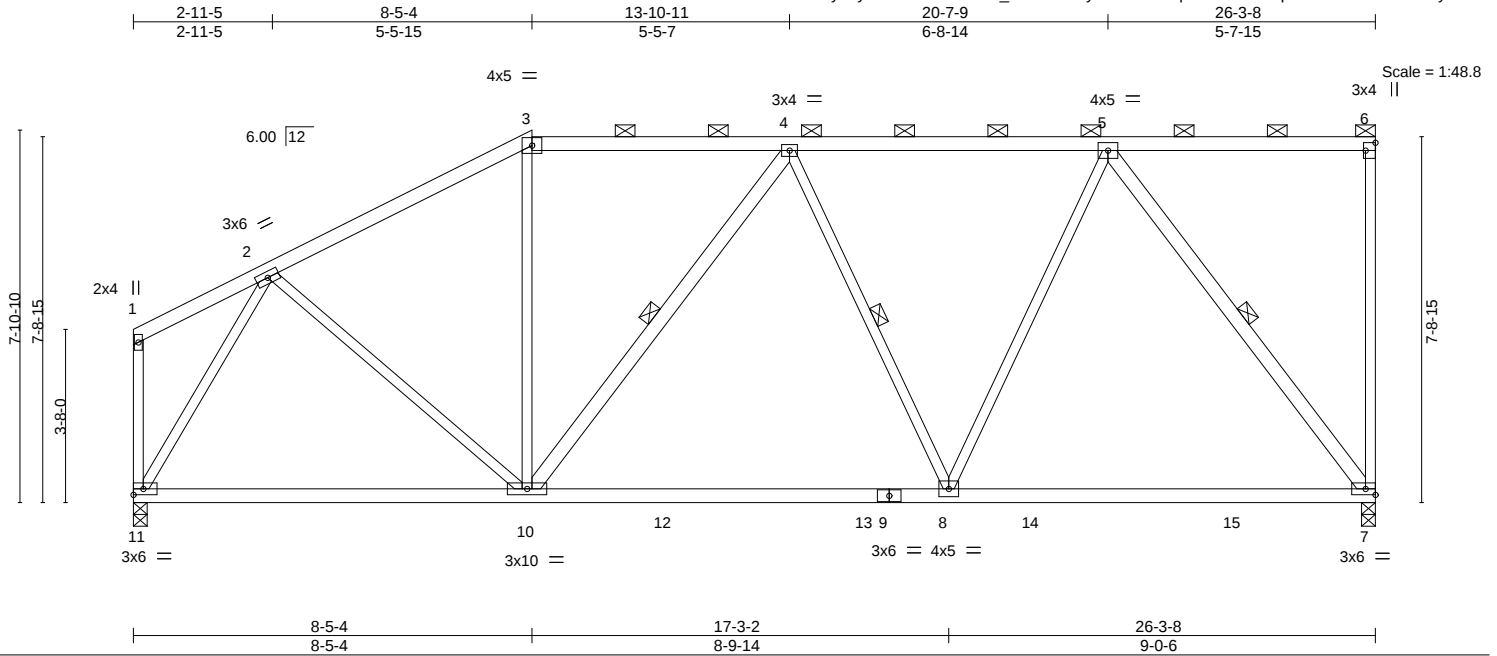


Plate Offsets (X,Y)-- [6:Edge,0-2-8]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	L/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.55	Vert(LL)	-0.23	7-8	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.73	Vert(CT)	-0.38	7-8	>828	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.93	Horz(CT)	0.03	7	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.05	7-8	>999	240	Weight: 119 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2 *Except*
 7-9: 2x4 SPF 2100F 1.8E
 WEBS 2x3 SPF No.2 *Except*
 4-10,5-7: 2x4 SPF No.2

BRACING-

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

REACTIONS.

(size) 7=0-3-8, 11=0-3-8
 Max Horz 11=298(LC 5)
 Max Uplift 7=241(LC 5), 11=102(LC 8)
 Max Grav 7=1291(LC 2), 11=1250(LC 2)

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

TOP CHORD 2-3=-1190/147, 3-4=-1001/152, 4-5=-1051/167
 BOT CHORD 10-11=-301/638, 8-10=-305/1138, 7-8=-231/768
 WEBS 2-10=-50/506, 3-10=0/252, 4-10=-322/157, 4-8=-300/159, 5-8=-20/687, 5-7=-1270/284, 2-11=-1251/169

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 241 lb uplift at joint 7 and 102 lb uplift at joint 11.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 7,2020

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	140902213
400219	C9	Half Hip	1	1		

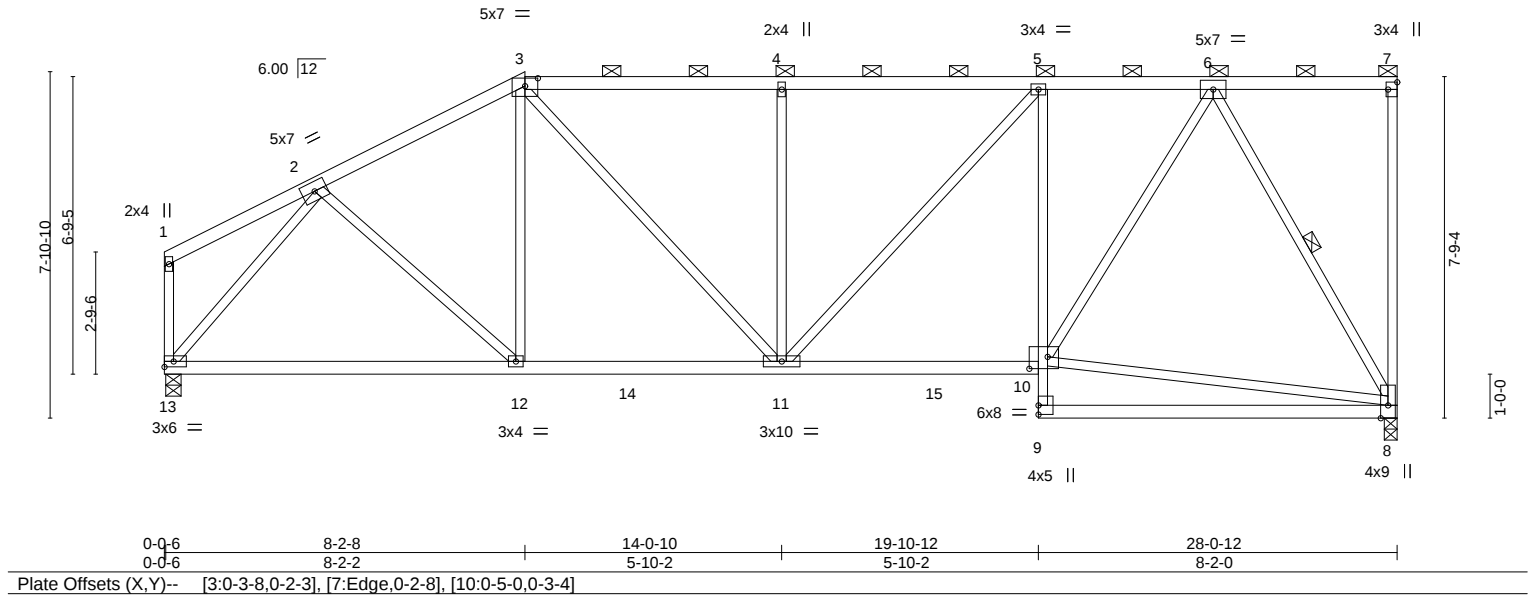
Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 7 15:00:02 2020 Page 1

ID:HGhkM0byc7yfla13RCctYPzRku_-wI3tEy8aCqKo?7c0iK9KvReB2GB2yZqlqfB0TzT46x

3-6-4	8-2-8	14-0-10	19-10-12	23-10-8	28-0-12
3-6-4	4-8-5	5-10-2	5-10-2	3-11-12	4-2-4

Scale = 1:52.4



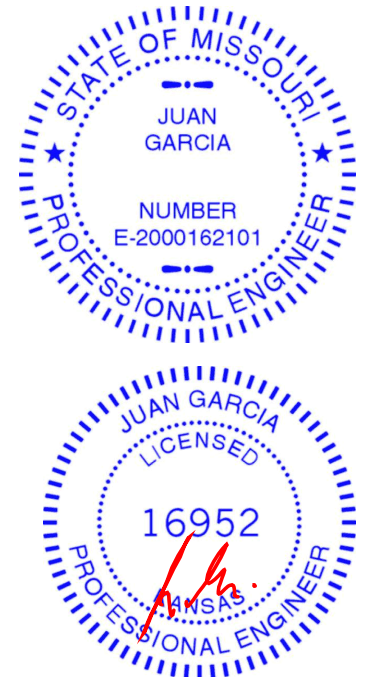
LOADING (psf)	SPACING	2-0-0	CSI	DEFL.	in (loc)	L/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.56	Vert(LL)	-0.18	8-9	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.62	Vert(CT)	-0.36	8-9	>924		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.99	Horz(CT)	0.06	8	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.05	11	>999	Weight: 130 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 4-7-15 oc purlins, except end verticals, and 2-0-0 oc purlins (4-5-9 max.): 3-7.
BOT CHORD 2x4 SPF No.2 *Except*	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
5-9: 2x3 SPF No.2	WEBS 1 Row at midpt 6-8
WEBS 2x3 SPF No.2	

REACTIONS. (size) 8=0-3-8, 13=0-4-3
Max Horz 13=289(LC 7)
Max Uplift 8=-246(LC 5), 13=-101(LC 8)
Max Grav 8=1325(LC 2), 13=1325(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1419/187, 3-4=-1484/236, 4-5=-1482/235, 5-6=-1221/228
BOT CHORD 12-13=-324/910, 11-12=-310/1218, 10-11=-307/1233, 5-10=-597/192
WEBS 2-12=-50/462, 3-11=-151/472, 4-11=-469/191, 5-11=-79/375, 8-10=-239/563, 6-10=-171/1096, 6-8=-1337/325, 2-13=-1412/147

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 246 lb uplift at joint 8 and 101 lb uplift at joint 13.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 7, 2020

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	140902214
400219	D1	Half Hip	1	1		

Wheeler Lumber, Waverly, KS 66871

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ID:HGhkM0byc7yfla13RCctYPzRku_-OxdFSi9Cz8SfdHBCG2gZSfAG0gTuh4dv3JakYvzT46w

0-10-8	5-9-10	12-5-4	19-7-7	26-10-13	34-3-8
0-10-8	5-9-10	6-7-10	7-2-3	7-3-7	7-4-11

Scale = 1:59.5

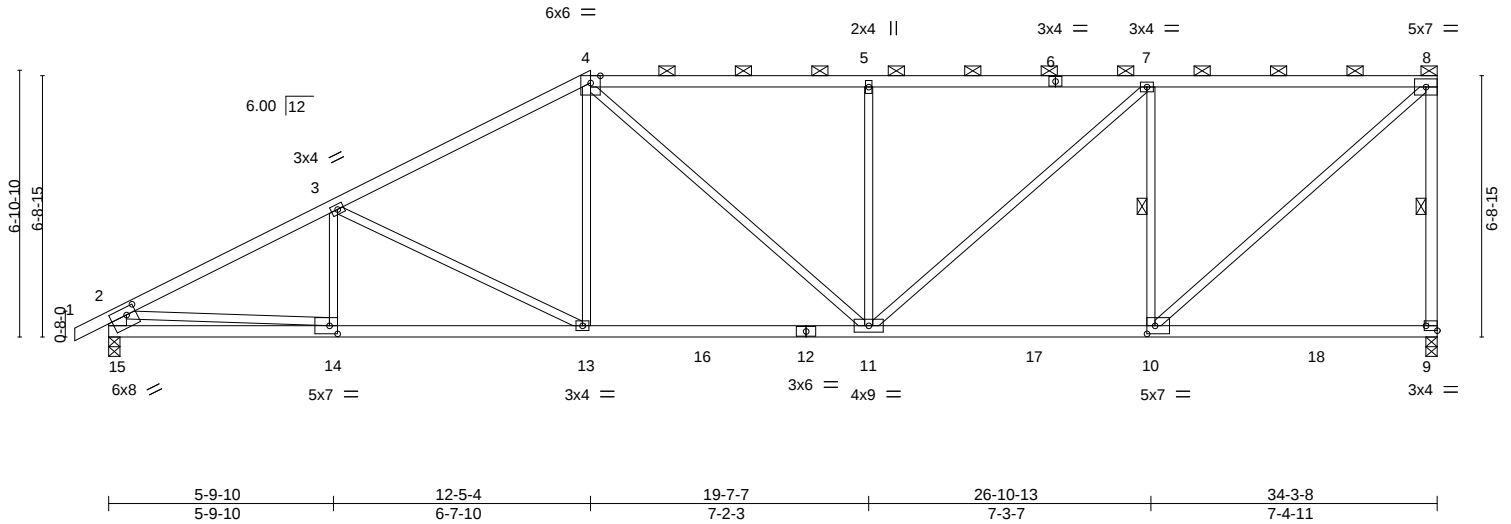


Plate Offsets (X,Y)-- [9:Edge,0-1-8], [10:0-2-8,0-2-8], [14:0-2-8,0-2-8], [15:0-2-7,0-1-4], [15:0-3-0,0-2-4]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.87	Vert(LL)	-0.20 11-13	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.84	Vert(CT)	-0.35 11-13	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.76	Horz(CT)	0.07 9	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.11 11	>999	240		

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 2x3 SPF No.2 *Except*
 8-9: 2x4 SPF No.2, 2-15: 2x6 SPF No.2

REACTIONS.

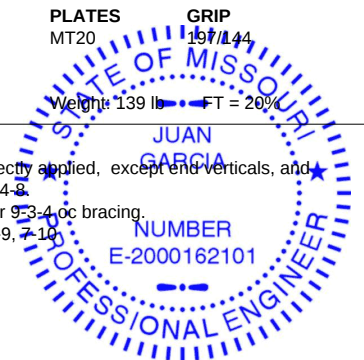
(size) 9=0-3-8, 15=0-3-8
 Max Horz 15=277(LC 5)
 Max Uplift 9=275(LC 5), 15=175(LC 8)
 Max Grav 9=1662(LC 2), 15=1674(LC 2)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-2727/248, 3-4=-2320/262, 4-5=-2164/306, 5-7=-2162/304, 7-8=-1524/255,
 8-9=-1518/307, 2-15=-1568/204
 BOT CHORD 14-15=-293/596, 13-14=-402/2372, 11-13=-366/1998, 10-11=-307/1524
 WEBS 3-13=-447/205, 4-13=-8/493, 4-11=-155/388, 5-11=-551/226, 7-11=-140/853,
 7-10=-1086/323, 8-10=-334/2009, 2-14=-110/1782

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 275 lb uplift at joint 9 and 175 lb uplift at joint 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.



April 7, 2020

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	I40902215
400219	D2	Half Hip	1	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

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ID:HGhkM0byc7yfla13RCctYPzRku_-t7BefeAqkRaWFRmPqlBo?sjRA4p?Qum2IzJH4LzT46v

0-10-8	5-9-9	10-5-4	18-3-7	26-2-13	34-3-8
0-10-8	5-9-9	4-7-11	7-10-3	7-11-7	8-0-11

Scale = 1:62.0

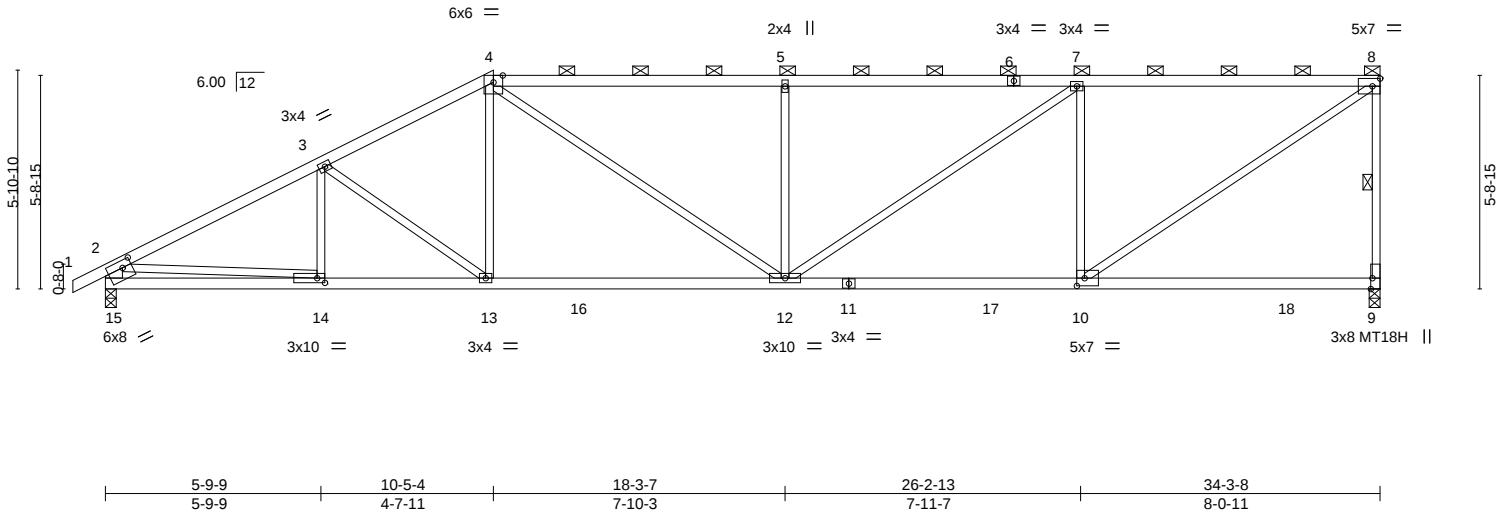


Plate Offsets (X,Y)-- [9:0-3-8,Edge], [10:0-2-8,0-2-8], [14:0-2-8,0-1-8], [15:0-2-7,0-1-4], [15:0-3-0,0-2-4]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.84	Vert(LL)	-0.23 12-13	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.84	Vert(CT)	-0.42 12-13	>965	240	MT18H	187/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.90	Horz(CT)	0.08 9	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.13 12	>999	240		

LUMBER-
TOP CHORD 2x4 SPF 2100F 1.8E *Except*
1-4: 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-15: 2x6 SPF No.2

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

REACTIONS. (size) 9=0-3-8, 15=0-3-8
Max Horz 15=235(LC 7)
Max Uplift 9=279(LC 5), 15=155(LC 8)
Max Grav 9=1643(LC 2), 15=1670(LC 2)

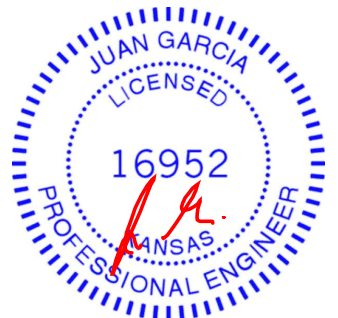
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2684/268, 3-4=-2444/313, 4-5=-2597/398, 5-7=-2595/396, 7-8=-1919/324, 8-9=-1495/314, 2-15=-1556/189
BOT CHORD 14-15=-278/679, 13-14=-405/2325, 12-13=-390/2141, 10-12=-373/1919
WEBS 3-13=-264/157, 4-13=-14/428, 4-12=-193/675, 5-12=-601/245, 7-12=-138/820, 7-10=-1052/333, 8-10=-394/2301, 2-14=-128/1652

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 279 lb uplift at joint 9 and 155 lb uplift at joint 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.

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April 7, 2020



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	I40902216
400219	D3	Half Hip	1	1		

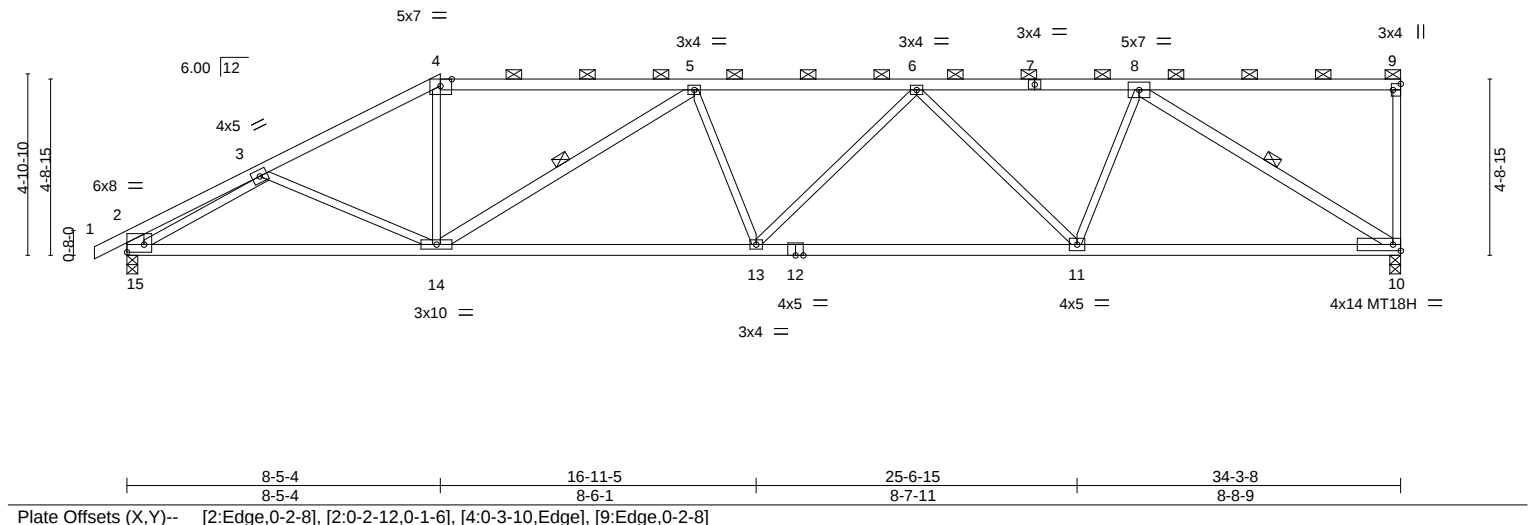
Wheeler Lumber, Waverly, KS 66871

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ID:HGhkM0byc7yfla13RCctYPzRku_-LKl0s_ASvliNsbLbOTi1X4Gc5T9p9zaBwd3rdozT46u

0-10-8	3-8-6	8-5-4	15-3-4	21-3-2	27-3-0	34-3-8
0-10-8	3-8-6	4-8-14	6-10-0	5-11-14	5-11-14	7-0-8

Scale = 1:62.0



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 0.83	Vert(LL)	-0.20	13	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.87	Vert(CT)	-0.41	13-14	>992	MT18H	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.80	Horz(CT)	0.14	10	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.16	13	>999		
								Weight: 130 lb	FT = 20%

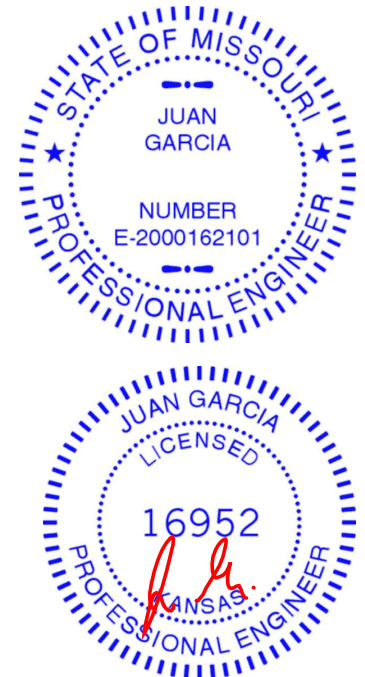
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
5-14,8-10: 2x4 SPF No.2, 2-15: 2x6 SPF No.2

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

REACTIONS. (size) 10=0-3-8, 15=0-3-8
Max Horz 15=193(LC 5)
Max Uplift 10=-282(LC 5), 15=-167(LC 5)
Max Grav 10=1527(LC 1), 15=1607(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-605/51, 3-4=-2466/343, 4-5=-2142/328, 5-6=-2928/476, 6-8=-2234/379, 2-15=-473/68
BOT CHORD 14-15=-430/2120, 13-14=-584/2929, 11-13=-560/2763, 10-11=-413/1961
WEBS 4-14=-23/663, 5-14=-1033/271, 6-13=0/251, 6-11=-759/198, 8-11=-26/780, 8-10=-2301/444, 3-15=-1952/289

- 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 282 lb uplift at joint 10 and 167 lb uplift at joint 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.



April 7, 2020

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	140902217
400219	D4	Half Hip	1	1		

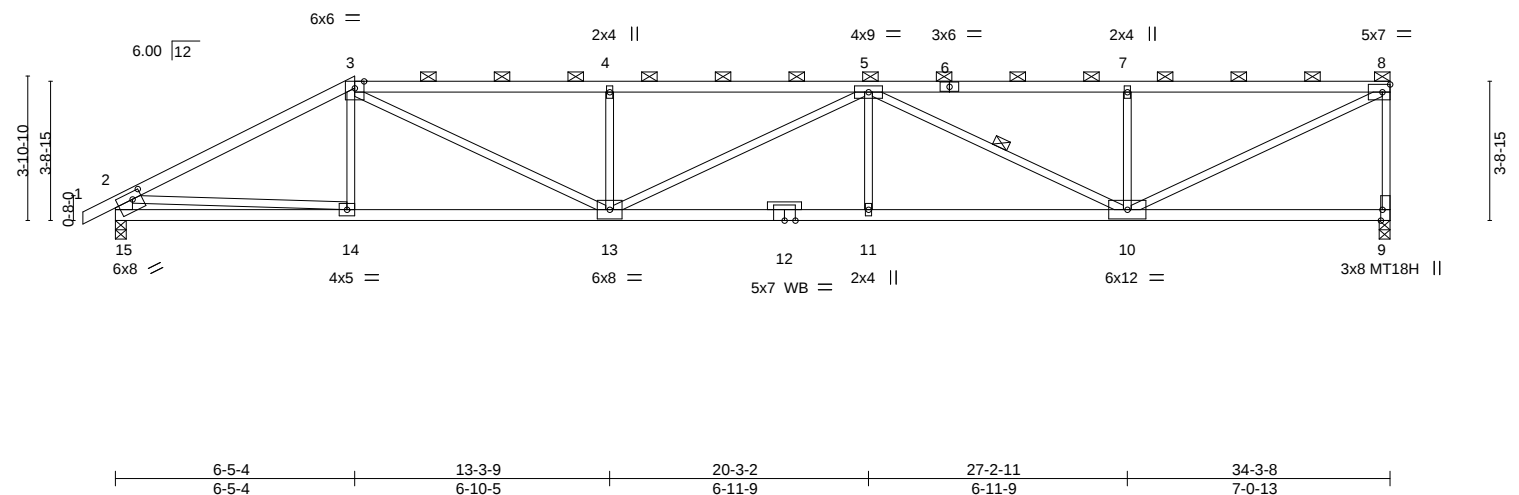
Wheeler Lumber, Waverly, KS 66871

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ID:HGhKM0byc7yfla13RCctYPzRku_HitmHgCj1My56uUzVukVcVL?6HpgdqPU_wYyhgZT46s

0-10-8	6-5-4	13-3-9	20-3-2	27-2-11	34-3-8
0-10-8	6-5-4	6-10-5	6-11-9	6-11-9	7-0-13

Scale = 1:62.0



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.67	Vert(LL)	-0.31 11-13	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.97	Vert(CT)	-0.58 11-13	>701	240	MT18H	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.97	Horz(CT)	0.12 9	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.25 11-13	>999	240		

LUMBER-	BRACING-
TOP CHORD 2x4 SPF 2100F 1.8E *Except*	TOP CHORD Structural wood sheathing directly applied or 2-8-3 oc purlins, except end verticals, and 2-0-0 oc purlins (3-5-4 max.): 3-8.
1-3: 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
BOT CHORD 2x4 SPF No.2	WEBS 1 Row at midpt 5-10
WEBS 2x3 SPF No.2 *Except*	
2-15: 2x6 SPF No.2	
OTHERS 2x3 SPF No.2	

REACTIONS. (size) 9=0-3-8, 15=0-3-8
Max Horz 15=152(LC 5)
Max Uplift 9=283(LC 5), 15=197(LC 5)
Max Grav 9=1527(LC 1), 15=1607(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2609/386, 3-4=-3657/648, 4-5=-3654/646, 5-7=-2561/479, 7-8=-2561/479, 8-9=-1462/316, 2-15=-1544/228
BOT CHORD 14-15=-250/743, 13-14=-426/2244, 11-13=-715/3713, 10-11=-715/3713
WEBS 3-13=-354/1662, 4-13=-561/224, 5-11=0/269, 5-10=-1286/235, 7-10=-537/224, 8-10=-525/2823, 2-14=-258/1598

- 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 283 lb uplift at joint 9 and 197 lb uplift at joint 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.



April 7, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

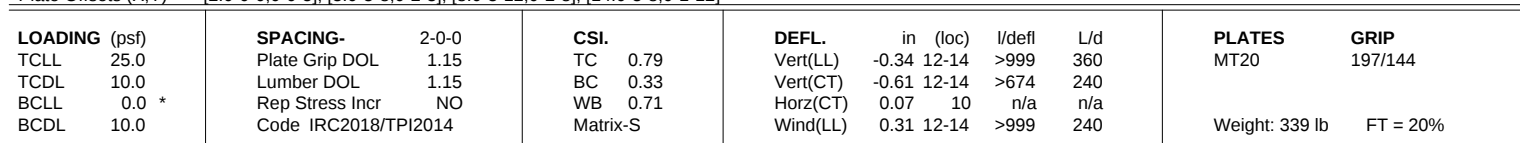
Wheeler Lumber, Waverly, KS 66871

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ID:HGhkM0b9c7yfla13RCctYPzRku_-hHYvwhEbJHKfzMDYA0ICE7zUTU_PqFEwgumclz7T46p

0-10-8 4-5-4 11-4-10 18-5-4 25-5-14 32-5-4 34-3-8
0-10-8 4-5-4 6-11-6 7-0-10 7-0-10 6-11-6 1-10-4

Scale = 1:61.0



REACTIONS. (size) 10=0-3-8, 2=0-3-8
 Max Horz 2=142(LC 5)
 Max Uplift 10=-550(LC 8), 2=-626(LC 8)
 Max Grav 10=2331(LC 1), 2=2542(LC 1)

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

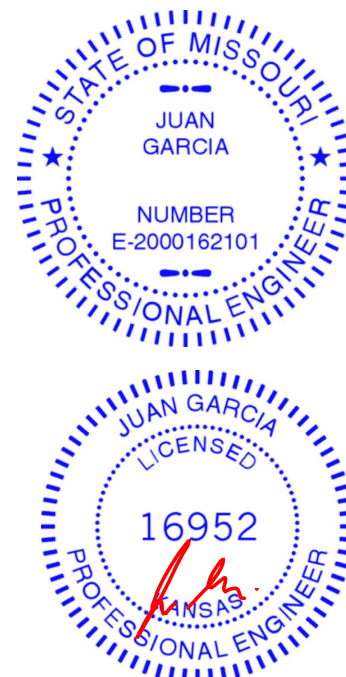
TOP CHORD 2-3=-4792/1163, 3-4=-7890/1974, 4-5=-7887/1973, 5-7=-7041/1712, 7-8=-7043/1714

BOT CHORD 2-15=-1023/4108, 14-15=-1023/4078, 12-14=-2188/8943, 11-12=-2188/8943,
10-11=-377/1591

WEBS 3-15=0/524, 3-14=-1017/4038, 4-14=-804/405, 5-14=-1116/284, 5-12=0/435,
5-11=-2009/532, 7-11=0/337/335, 8-11=-1386/5778, 8-10=-2723/714

NOTES-

- 1) 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: 2x6 - 2 rows staggered 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) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BC DL=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
- 4) Provide adequate drainage to prevent water ponding.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 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 550 lb uplift at joint 10 and 626 lb uplift at joint 2.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 7, 2020

Continued on page 2



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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4
400219	D5	Roof Special Girder	1	2	i40902218
Job Reference (optional)					

Wheeler Lumber, Waverly, KS 66871

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ID:HGhkM0byc7yfla13RCctYPzRku_-hHYvwHbJhKfzMDYA0ICE7zUTU_PqFEwgumcl?zT46p

NOTES-
10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 94 lb down and 84 lb up at 4-5-4, 94 lb down and 84 lb up at 5-8-0, 94 lb down and 84 lb up at 7-8-0, 94 lb down and 84 lb up at 9-8-0, 94 lb down and 84 lb up at 11-8-0, 94 lb down and 84 lb up at 13-8-0, 94 lb down and 84 lb up at 15-8-0, 94 lb down and 84 lb up at 17-8-0, 94 lb down and 84 lb up at 19-8-0, 94 lb down and 84 lb up at 21-8-0, and 94 lb down and 84 lb up at 23-8-0, and 94 lb down and 84 lb up at 25-8-0 on top chord, and 257 lb down and 80 lb up at 4-5-4, 41 lb down at 5-8-0, 41 lb down at 7-8-0, 41 lb down at 9-8-0, 41 lb down at 11-8-0, 41 lb down at 13-8-0, 41 lb down at 15-8-0, 41 lb down at 17-8-0, 41 lb down at 19-8-0, 41 lb down at 21-8-0, 41 lb down at 23-8-0, and 41 lb down at 25-8-0, and 382 lb down and 115 lb up at 25-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

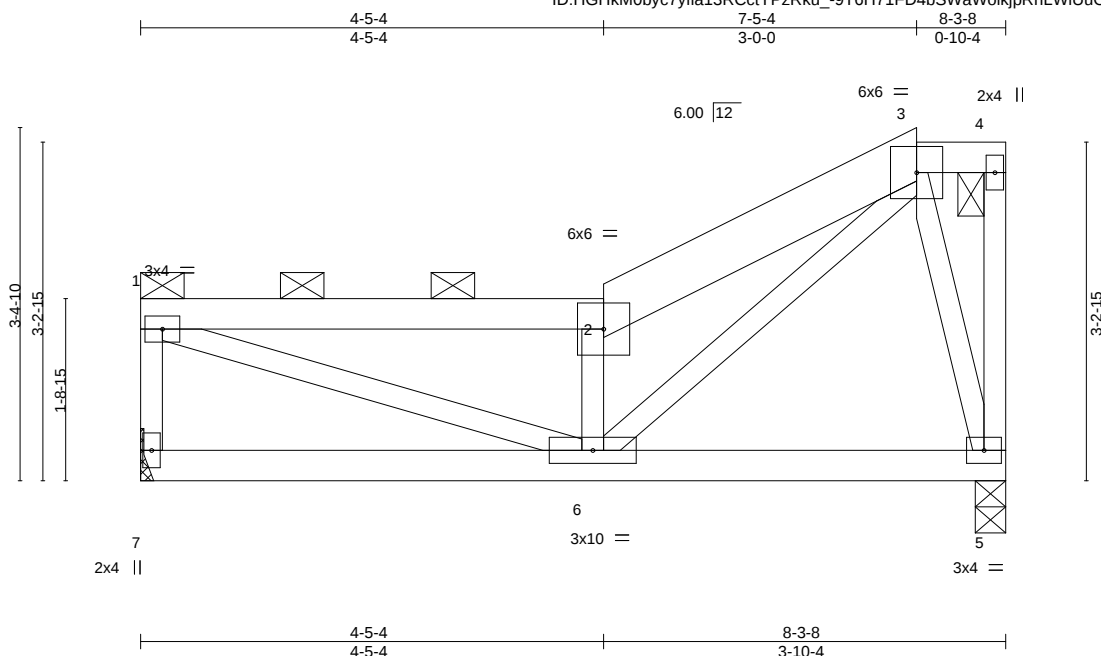
LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-70, 3-8=-70, 8-9=-70, 2-10=-20
Concentrated Loads (lb)
Vert: 3=-64(B) 15=-257(B) 14=-30(B) 4=-64(B) 7=-64(B) 11=-30(B) 16=-64(B) 17=-64(B) 18=-64(B) 19=-64(B) 20=-64(B) 21=-64(B) 22=-64(B) 23=-64(B) 24=-64(B) 25=-30(B) 26=-30(B) 27=-30(B) 28=-30(B) 29=-30(B) 30=-30(B) 31=-30(B) 32=-30(B) 33=-30(B) 34=-382(B)

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	
400219	E1	Roof Special	1	1		I40902219
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

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ID:HGhKM0byc7yfla13RCctYPzRku_-9T6H71FD4bSWaWolkjpRnLWUuOxZq74vYW9qRzT46o



Scale = 1:22.1

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 0.39	Vert(LL)	-0.02	6	>999	360	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.12	Vert(CT)	-0.03	6-7	>999	240	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.22	Horz(CT)	-0.00	5	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P	Wind(LL)	0.01	6	>999	240	
								Weight: 35 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
2-3: 2x6 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, and 2-0-0 oc purlins (6-0-0 max.): 1-2, 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 7=Mechanical, 5=0-3-8
Max Horz 7=118(LC 5)
Max Uplift 7=63(LC 8), 5=60(LC 8)
Max Grav 7=364(LC 1), 5=364(LC 1)

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

TOP CHORD 1-7=-325/82, 1-2=-501/46, 2-3=-639/104
WEBS 1-6=-59/529, 2-6=-525/150, 3-6=-98/638, 3-5=-313/73

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 63 lb uplift at joint 7 and 60 lb uplift at joint 5.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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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WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITTEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

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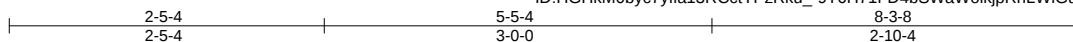
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	I40902220
400219	E2	Roof Special	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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ID:HGhkM0byc7yfla13RCctYPzRku_-9T6H71FD4bSWaWolkjpRnLWIGuluZr?4vYW9qRzT46o



Scale = 1:17.8

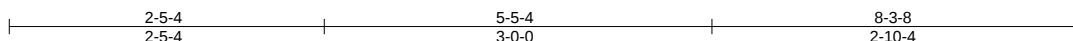
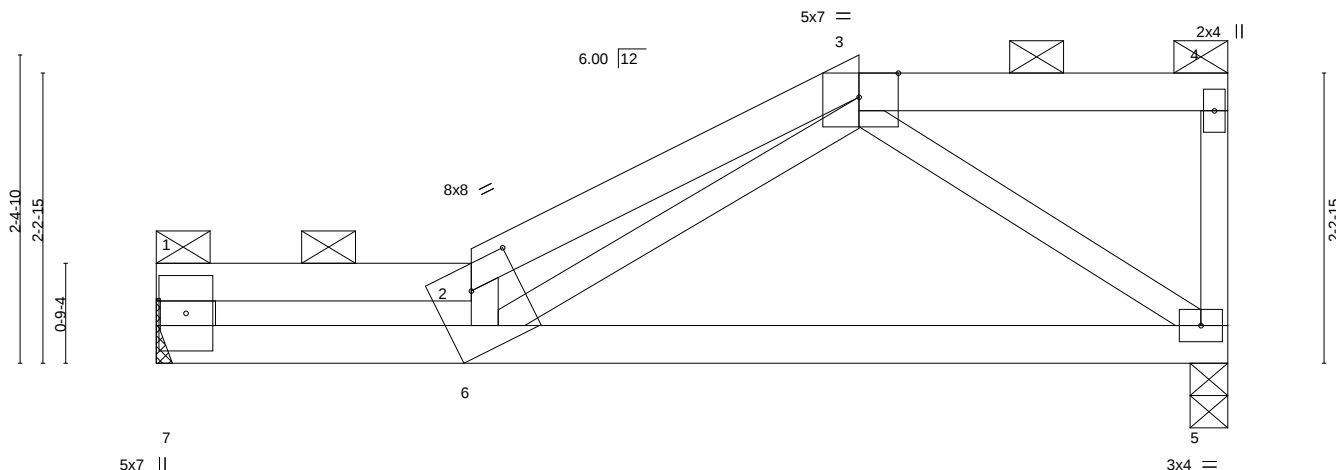


Plate Offsets (X,Y)--		[2:0-4-6,0-2-5], [3:0-3-10,Edge]							
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	L/defl	L/d
TCLL	25.0	Plate Grip DOL	1.15	TC	0.41	Vert(LL)	-0.07 5-6	>999	360
TCDL	10.0	Lumber DOL	1.15	BC	0.51	Vert(CT)	-0.15 5-6	>627	240
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.01 5	n/a	n/a
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.05 5-6	>999	240
						PLATES	MT20	GRIP	197/144
						Weight: 27 lb		FT = 20%	

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 2x3 SPF No.2 *Except*
 1-7: 2x6 SPF No.2

BRACING-

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

REACTIONS.

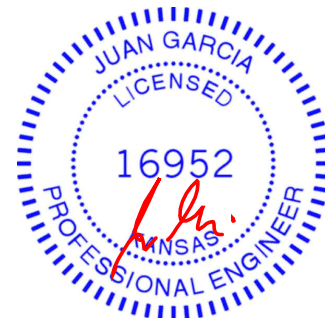
(size) 7=Mechanical, 5=0-3-8
 Max Horz 7=80(LC 5)
 Max Uplift 7=-54(LC 8), 5=-49(LC 5)
 Max Grav 7=358(LC 1), 5=358(LC 1)

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

TOP CHORD 1-2=-768/79, 2-3=-791/103
 BOT CHORD 6-7=-98/763, 5-6=-74/305
 WEBS 2-6=-327/107, 3-6=-41/477, 3-5=-339/82

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 54 lb uplift at joint 7 and 49 lb uplift at joint 5.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 7, 2020

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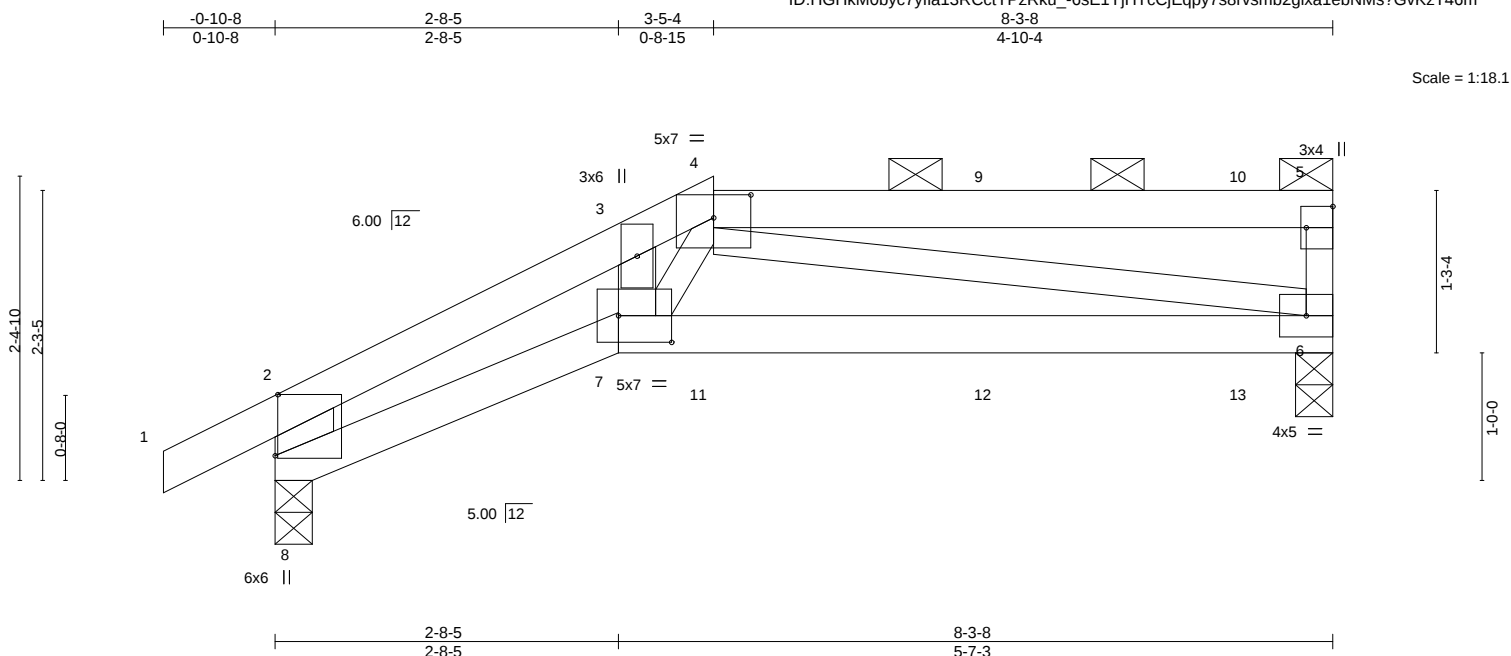


Plate Offsets (X,Y)-- [2:0-1-6,0-2-12], [4:0-3-8,0-2-3], [5:Edge,0-2-8], [7:0-5-0,0-2-8], [8:0-1-2,0-2-12], [8:0-5-12,Edge]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES	GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.60	Vert(LL)	-0.08	6-7	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.69	Vert(CT)	-0.17	6-7	>568	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.61	Horz(CT)	0.06	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.07	6-7	>999	240	Weight: 28 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF 2100F 1.8E *Except*
4-5: 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-8: 2x6 SP DSS, 3-7: 2x4 SPF No.2

BRACING-	
TOP CHORD	Structural wood sheathing directly applied or 5-9-13 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-5.
BOT CHORD	Rigid ceiling directly applied or 9-1-8 oc bracing.

REACTIONS. (size) 6=0-3-8, 8=0-3-8
 Max Horz 8=75(LC 26)
 Max Uplift 6=-158(LC 5), 8=-156(LC 8)
 Max Grav 6=551(LC 1), 8=612(LC 1)

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

TOP CHORD	2-3=-1322/359, 3-4=-701/249, 2-8=-961/272
BOT CHORD	7-8=-343/1108, 6-7=-411/1146
WEBS	4-7=-562/284, 4-6=-986/370, 3-7=-283/1052

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Bearing at joint(s) 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 158 lb uplift at joint 6 and 156 lb uplift at joint 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.
- 10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 144 lb down and 133 lb up at 3-5-4, and 79 lb down and 67 lb up at 5-8-0, and 72 lb down and 66 lb up at 7-8-0 on top chord, and 176 lb down and 73 lb up at 3-5-4, 23 lb down at 3-8-0, and 23 lb down at 5-8-0, and 32 lb down at 7-8-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard



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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 58 H4	I40902221
400219	E3	Half Hip Girder	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-70, 2-4=-70, 4-5=-70, 7-8=-20, 6-7=-20
Concentrated Loads (lb)
Vert: 4=-62(B) 9=-31(B) 10=-48(B) 11=-192(B) 12=-16(B) 13=-21(B)

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	140902222
400219	G1	Hip Girder	1	1		

Wheeler Lumber, Waverly, KS 66871

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Job Reference (optional)

4-11-4	10-0-0	15-0-12	19-8-8
4-11-4	5-0-12	5-0-12	4-7-12

Scale = 1:34.3

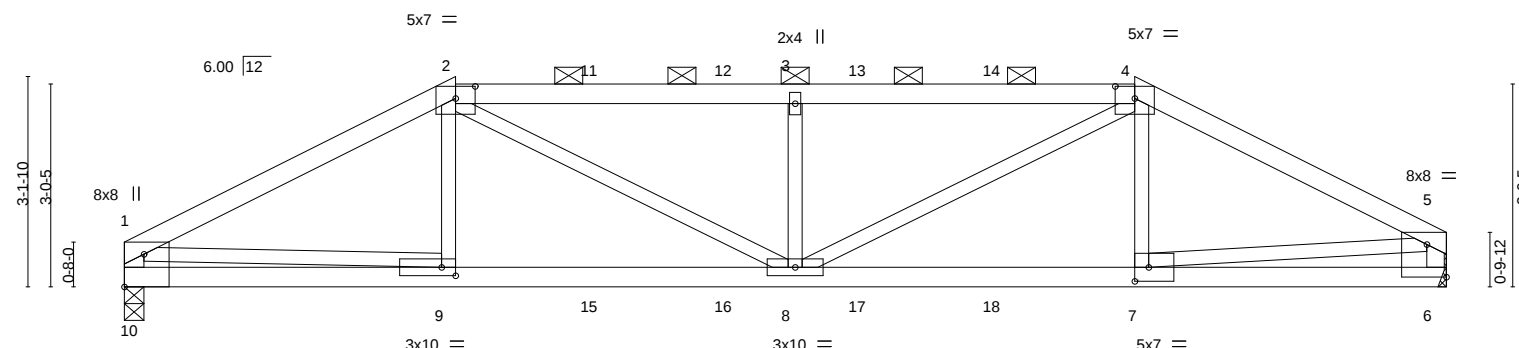


Plate Offsets (X,Y)--	[1:Edge,0-3-8], [2:0-3-8,0-2-3], [4:0-3-8,0-2-3], [5:Edge,0-5-13], [6:0-1-12,0-0-0], [7:0-2-8,0-2-8], [9:0-2-8,0-1-8], [10:0-0-0,0-1-12]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.80	Vert(LL)	-0.12	8	>999	360	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.74	Vert(CT)	-0.22	8-9	>999	240	197/144
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.63	Horz(CT)	0.04	6	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.11	8	>999	240	
								Weight: 69 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
1-10,5-6: 2x4 SPF No.2

BRACING-

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

REACTIONS.

(size) 10=0-3-8, 6=Mechanical
Max Horz 10=51(LC 7)
Max Uplift 10=-302(LC 8), 6=-306(LC 9)
Max Grav 10=1472(LC 1), 6=1490(LC 1)

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

TOP CHORD 1-2=-2530/548, 2-3=-2960/693, 3-4=-2960/693, 4-5=-2430/530, 1-10=-1415/321, 5-6=-1438/323
BOT CHORD 9-10=-154/472, 8-9=-495/2193, 7-8=-447/2112, 6-7=-88/296
WEBS 2-9=0/313, 2-8=-247/936, 3-8=-676/334, 4-8=-262/1019, 4-7=0/257, 1-9=-406/1744, 5-7=-422/1838

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.
- The Fabrication Tolerance at joint 1 = 8%, joint 1 = 8%
- 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 302 lb uplift at joint 10 and 306 lb uplift at joint 6.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 100 lb down and 90 lb up at 4-11-4, 100 lb down and 90 lb up at 7-0-0, 100 lb down and 90 lb up at 9-0-0, 100 lb down and 90 lb up at 11-0-0, and 100 lb down and 90 lb up at 13-0-0, and 100 lb down and 90 lb up at 15-0-12 on top chord, and 300 lb down and 90 lb up at 4-11-4, 49 lb down at 7-0-0, 49 lb down at 9-0-0, 49 lb down at 11-0-0, and 49 lb down at 13-0-0, and 300 lb down and 90 lb up at 15-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).



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LOAD CASE(S)

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Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	
400219	G1	Hip Girder	1	1		I40902222
Job Reference (optional)						

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
- Vert: 1-2=-70, 2-4=-70, 4-5=-70, 6-10=-20
- Concentrated Loads (lb)
- Vert: 2=-77(F) 4=-77(F) 9=-300(F) 7=-300(F) 11=-77(F) 12=-77(F) 13=-77(F) 14=-77(F) 15=-38(F) 16=-38(F) 17=-38(F) 18=-38(F)

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	I40902223
400219	G2	Roof Special Girder	1	2	Job Reference (optional)	

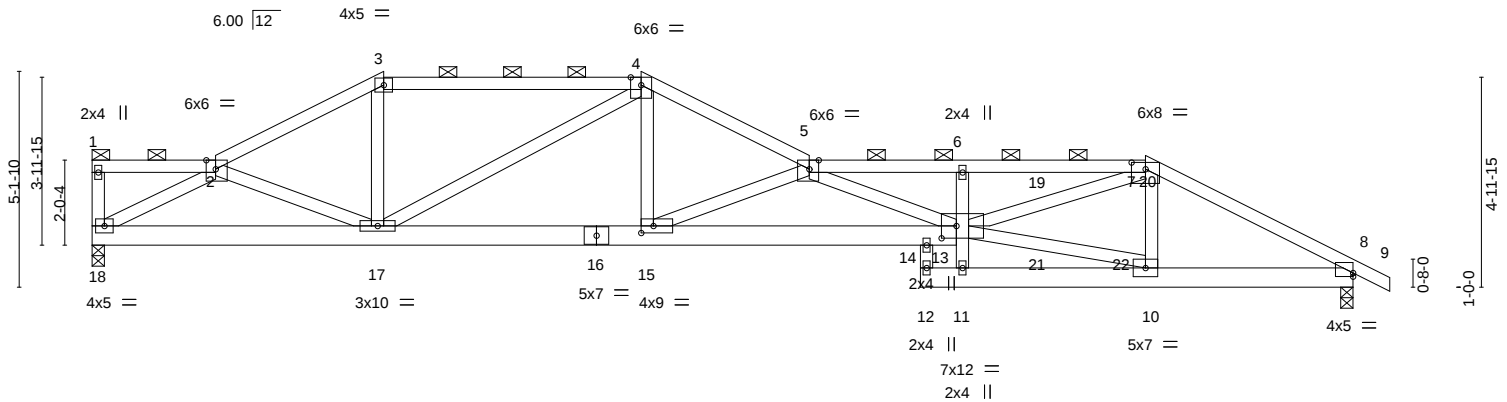
Wheeler Lumber, Waverly, KS 66871

8,240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 7 15:00:16 2020 Page 1

ID:HGhkM0byc7yfla13RCctYPzRku_-WRvAAkJMv75pHhIXHPcUODZ0v_ZEy9p2qDwVfzT46j

2-11-4	6-11-4	13-0-12	17-0-12	19-8-8	20-8-8	25-0-12	30-0-0	30-10-8
2-11-4	4-0-0	6-1-8	4-0-0	2-7-12	1-0-0	4-4-4	4-11-4	0-10-8

Scale = 1:54.8



		2-11-4		6-11-4		13-0-12		17-0-12		19-8-8		20-8-8		25-0-12		30-0-0	
		2-11-4		4-0-0		6-1-8		4-0-0		2-7-12		1-0-0		4-4-4		4-11-4	
Plate Offsets (X,Y)-- [2:0-2-11,Edge], [5:0-2-11,Edge], [7:0-4-0,0-1-15], [8:0-0-0,0-1-1], [13:0-4-4,0-3-8], [15:0-3-8,0-2-0]																	
LOADING (psf)		SPACING-		2-0-0		CSI.		DEFL.		in (loc)		l/defl		L/d		PLATES	
TCLL 25.0		Plate Grip DOL		1.15		TC 0.60		Vert(LL)		-0.33 14-15		>999		360		MT20	
TCDL 10.0		Lumber DOL		1.15		BC 0.54		Vert(CT)		-0.60 14-15		>594		240		197/144	
BCLL 0.0 *		Rep Stress Incr		NO		WB 0.81		Horz(CT)		0.12 8		n/a		n/a			
BCDL 10.0		Code IRC2018/TPI2014				Matrix-S		Wind(LL)		0.27 14-15		>999		240		Weight: 318 lb FT = 20%	

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-4-8 oc purlins, except end verticals, and 2-0-0 oc purlins (4-7-7 max.): 1-2, 3-4, 5-7.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 18=0-3-8, 8=0-3-8
Max Horz 18=-122(LC 25)
Max Uplift 18=-233(LC 8), 8=-563(LC 9)
Max Grav 18=1841(LC 1), 8=2700(LC 1)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3231/447, 3-4=-2818/417, 4-5=-5178/837, 5-6=-10757/2086, 6-7=-10517/2052, 7-8=-5052/1039
BOT CHORD 17-18=-370/2777, 15-17=-627/4492, 14-15=-1792/10418, 13-14=-1792/10418, 10-11=-64/435, 8-10=-830/4331
WEBS 12-14=-133/364, 2-18=-3189/442, 2-17=-44/259, 3-17=-130/1040, 4-17=-2019/424, 4-15=-486/2885, 5-15=-6350/1318, 5-13=-684/904, 10-13=-792/4002, 7-13=-1174/6591, 7-10=-306/152, 11-13=-281/192, 6-13=-595/268

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: 2x6 - 2 rows staggered at 0-8-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 233 lb uplift at joint 18 and 563 lb uplift at joint 8.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 7, 2020

Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITTEK 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 58 H4
400219	G2	Roof Special Girder	1	2	I40902223
Job Reference (optional)					

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 7 15:00:17 2020 Page 2
ID:HGhkM0byc7yfla13RCctYPzRku_-_dTYO4K_gRDglRFu5_wr0cmkmJKozPPyHUzT25zT46i

NOTES-

11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 127 lb down and 90 lb up at 20-6-0, 127 lb down and 90 lb up at 22-6-0, and 127 lb down and 90 lb up at 24-6-0, and 127 lb down and 90 lb up at 25-0-12 on top chord, and 1073 lb down and 242 lb up at 19-10-4, 49 lb down at 20-6-12, 49 lb down at 22-6-0, and 49 lb down at 24-6-0, and 300 lb down and 90 lb up at 25-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 - Uniform Loads (plf)
 - Vert: 1-2=-70, 2-3=-70, 3-4=-70, 4-5=-70, 5-7=-70, 7-9=-70, 14-18=-20, 8-12=-20
 - Concentrated Loads (lb)
 - Vert: 7=-77(F) 14=-1073(F) 13=-38(F) 10=-300(F) 6=-77(F) 19=-77(F) 20=-77(F) 21=-38(F) 22=-38(F)

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	140902224
400219	G3	Roof Special	1	1		

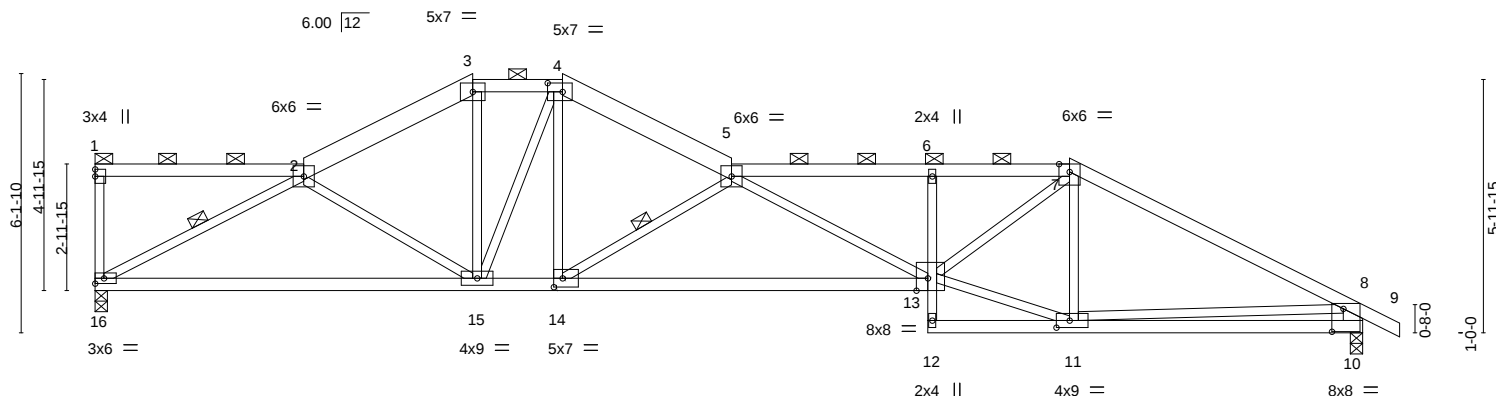
Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 7 15:00:18 2020 Page 1

ID:HGhkM0byc7yfla13RCctYPzRku_-Sq1wbQKcRILXwbq5ehR4Zpluzjguit?6W81aXzT46h

4-11-4	8-11-4	11-0-12	15-0-12	19-8-8	23-0-12	30-0-0	30-10-8
4-11-4	4-0-0	2-1-8	4-0-0	4-7-12	3-4-4	6-11-4	0-10-8

Scale = 1:54.5



4-11-4	8-11-4	11-0-12	15-0-12	19-8-8	23-0-12	30-0-0
4-11-4	4-0-0	2-1-8	4-0-0	4-7-12	3-4-4	6-11-4

Plate Offsets (X,Y)-- [4:0-4-4,0-2-8], [10:0-2-12,0-0-0], [10:0-3-4,0-6-8], [11:0-3-12,0-2-0], [13:0-3-4,Edge], [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 0.70	Vert(LL)	-0.23 13-14	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.55	Vert(CT)	-0.53 13-14	>670	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.72	Horz(CT)	0.12 10	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.16 13-14	>999	240	Weight: 125 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
2-3,4-5: 2x6 SPF No.2
BOT CHORD 2x3 SPF No.2 *Except*
13-16: 2x4 SPF 2100F 1.8E, 10-12: 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
8-10: 2x6 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-10-15 oc purlins, except end verticals, and 2-0-0 oc purlins (2-8-3 max.): 1-2, 3-4, 5-7.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 11-12.
WEBS 1 Row at midpt 2-16, 5-14

REACTIONS.

(size) 16=0-3-8, 10=0-3-8
Max Horz 16=-172(LC 4)
Max Uplift 16=-120(LC 8), 10=-233(LC 9)
Max Grav 16=1334(LC 1), 10=1414(LC 1)

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

TOP CHORD 2-3=-2060/239, 3-4=-1799/228, 4-5=-2248/272, 5-6=-3305/499, 6-7=-3268/500, 7-8=-2201/335, 8-10=-1344/272
BOT CHORD 15-16=-102/1969, 14-15=-49/1979, 13-14=-385/3604, 6-13=-355/140, 10-11=-255/823
WEBS 2-16=-2217/243, 2-15=-260/145, 3-15=-72/676, 4-15=-534/121, 4-14=-159/1195, 5-14=-1980/407, 5-13=-344/84, 11-13=-161/1900, 7-13=-200/1818, 7-11=-516/117, 8-11=-81/1047

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 120 lb uplift at joint 16 and 233 lb uplift at joint 10.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 7,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	140902225
400219	G4	Roof Special	1	1		

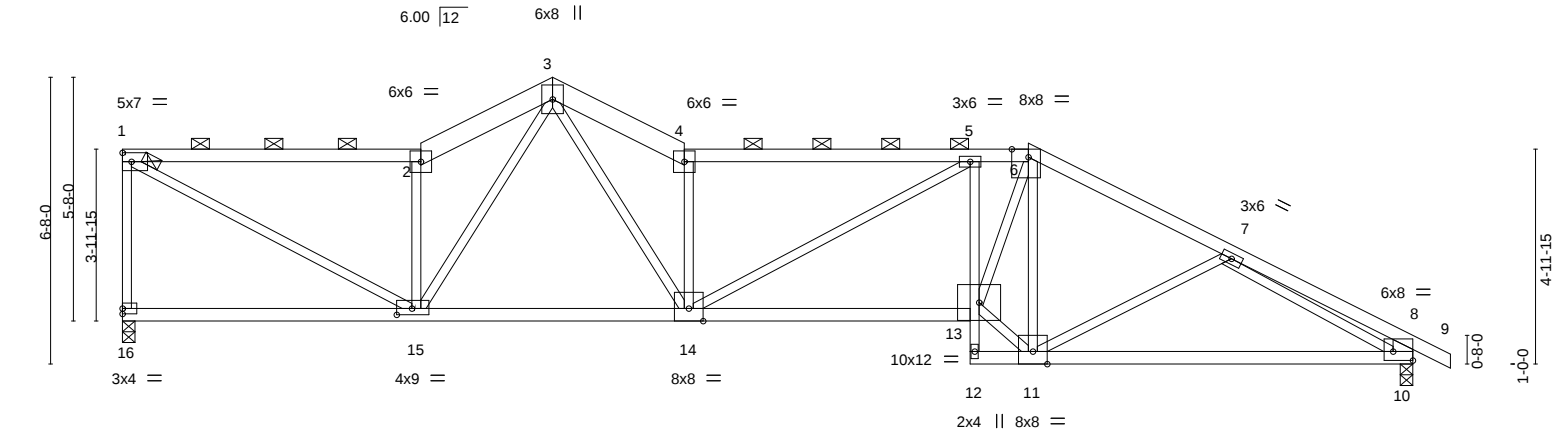
Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 7 15:00:19 2020 Page 1
ID:HGhkM0byc7yfla13RCctYPzRku_-w0blpmLEC2TOYkPHCPyJ61rz77zJRlcFloSa6_zT46g

Job Reference (optional)

6-11-4	10-0-0	13-0-12	19-8-8	21-0-12	25-8-0	30-0-0	30-10-8
6-11-4	3-0-12	3-0-12	6-7-12	1-4-4	4-7-4	4-4-0	0-10-8

Scale = 1:53.6



	6-11-4	13-0-12	19-8-8	21-0-12	30-0-0	
	6-11-4	6-1-8	6-7-12	1-4-4	8-11-4	

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

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 0.99	Vert(LL)	-0.22 13-14	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.77	Vert(CT)	-0.44 13-14	>800	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.89	Horz(CT)	0.14 10	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.16 13-14	>999	240	Weight: 126 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SPF No.2 *Except*
1-2: 2x4 SPF 2100F 1.8E, 4-6-6-9: 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
5-12: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
8-10: 2x6 SPF No.2

BRACING-

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

REACTIONS.

(size) 16=0-3-8, 10=0-3-8
Max Horz 16=-208(LC 4)
Max Uplift 16=-137(LC 8), 10=-238(LC 9)
Max Grav 16=1334(LC 1), 10=1414(LC 1)

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

TOP CHORD 1-16=-1270/168, 1-2=-1915/236, 2-3=-2241/299, 3-4=-3080/496, 4-5=-2660/390,
5-6=-2590/453, 6-7=-2035/339, 7-8=-613/87, 8-10=-482/115
BOT CHORD 14-15=-32/1682, 13-14=-270/2616, 5-13=-561/203, 10-11=-288/1856
WEBS 1-15=-226/2149, 2-15=-1352/253, 3-15=-100/573, 3-14=-354/1987, 4-14=-1683/359,
11-13=-163/2342, 6-13=-326/2359, 6-11=-1345/172, 7-10=-1615/320

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 137 lb uplift at joint 16 and 238 lb uplift at joint 10.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 7,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	140902226
400219	G5	Roof Special	1	1		

Wheeler Lumber, Waverly, KS 66871

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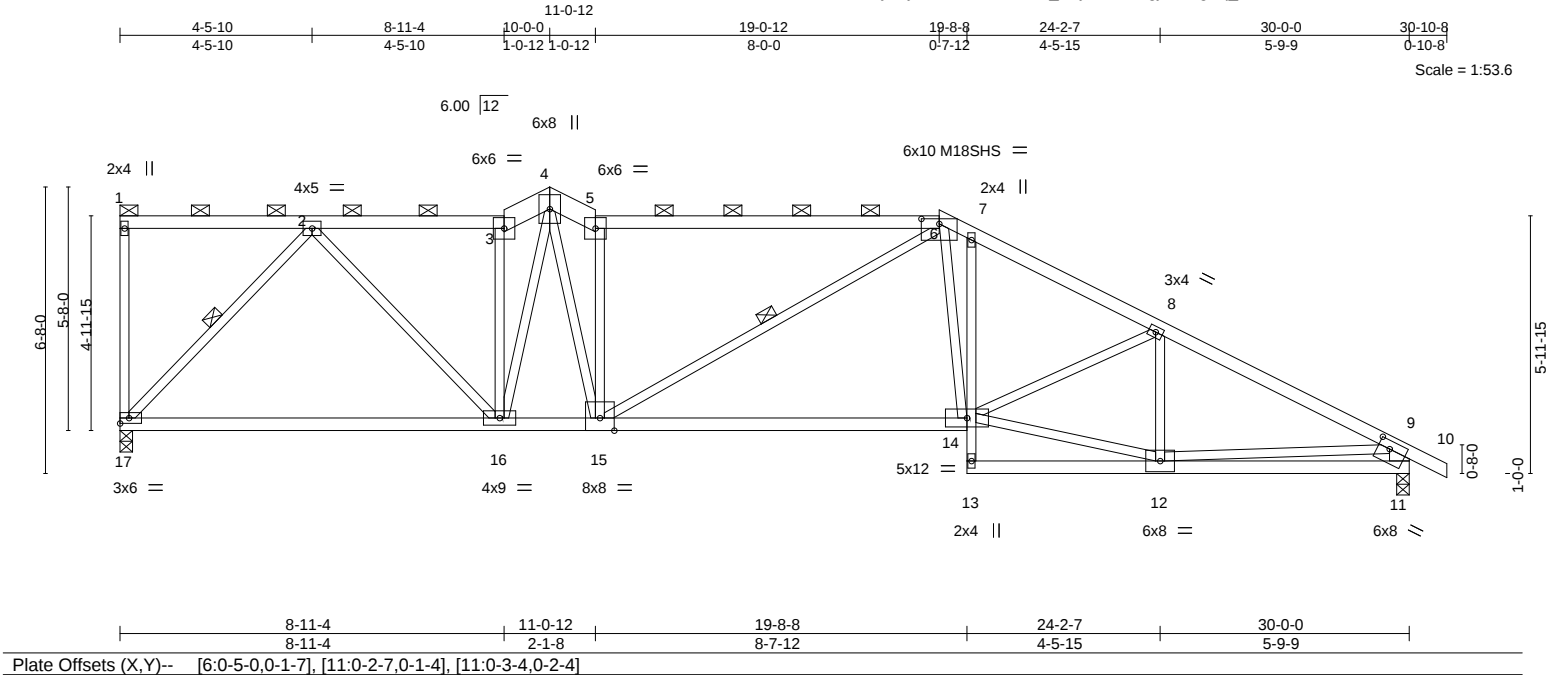
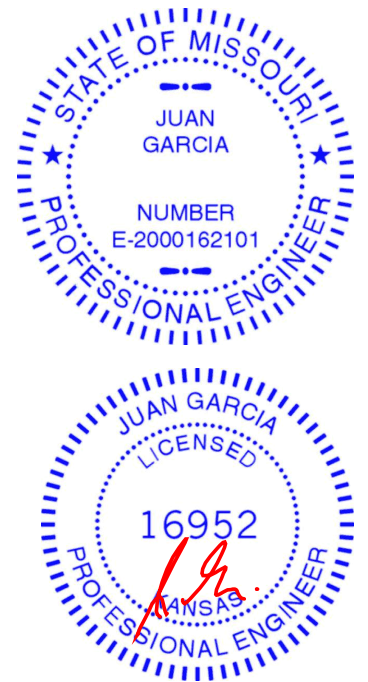


Plate Offsets (X,Y)--		[6:0-5-0,0-1-7], [11:0-2-7,0-1-4], [11:0-3-4,0-2-4]	
LOADING (psf)	SPACING-	CSI.	DEFL.
TCLL 25.0	Plate Grip DOL 1.15	TC 0.75	in (loc) l/defl L/d
TCDL 10.0	Lumber DOL 1.15	BC 0.74	Vert(LL) -0.20 14-15 >999 360
BCLL 0.0 *	Rep Stress Incr YES	WB 0.66	Vert(CT) -0.46 14-15 >772 240
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Horz(CT) 0.09 11 n/a n/a
			Wind(LL) 0.10 14-15 >999 240
			PLATES GRIP
			MT20 197/144
			M18SHS 197/144
			Weight: 132 lb FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except* 3-4,4-5: 2x6 SPF No.2, 5-6: 2x4 SPF 2100F 1.8E	TOP CHORD Structural wood sheathing directly applied or 3-5-9 oc purlins, except end verticals, and 2-0-0 oc purlins (3-9-3 max.): 1-3, 5-6.
BOT CHORD 2x4 SPF No.2 *Except* 7-13: 2x3 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 12-13.
WEBS 2x3 SPF No.2 *Except* 9-11: 2x6 SPF No.2	WEBS 1 Row at midpt 2-17, 6-15

REACTIONS.	(size) 17=0-3-8, 11=0-3-8 Max Horz 17=-237(LC 4) Max Uplift 17=-145(LC 8), 11=-237(LC 9) Max Grav 17=1334(LC 1), 11=1414(LC 1)
FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-1767/247, 3-4=-1845/260, 4-5=-2212/377, 5-6=-2018/313, 6-7=-2132/384, 7-8=-2303/382, 8-9=-2206/353, 9-11=-1348/266
BOT CHORD	16-17=-33/1064, 15-16=-34/1767, 14-15=-149/1934, 11-12=-149/593
WEBS	2-17=-1547/196, 2-16=-112/1032, 3-16=-695/103, 4-15=-293/1265, 5-15=-1177/315, 6-14=-22/462, 12-14=-201/1912, 8-12=-449/125, 9-12=-84/1297

- 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 145 lb uplift at joint 17 and 237 lb uplift at joint 11.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 7,2020

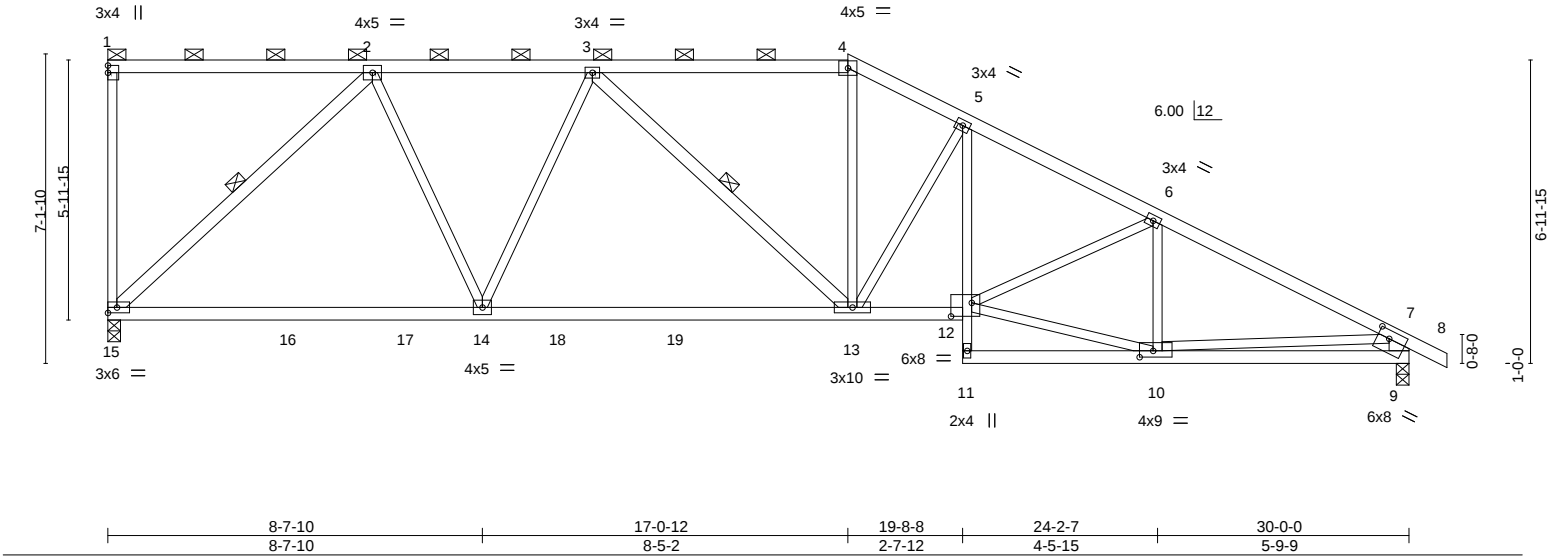
Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	140902227
400219	G6	Half Hip	1	1		

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 7 15:00:22 2020 Page 1
ID:HGhKMObyc7yfla13RCctYPzRku_-LbHRRoN7VzryPC8stXW0jfTbGKwJehuiRmgEjzT46d

6-1-3	11-2-1	17-0-12	19-8-8	24-2-7	30-0-0	30-10-8
6-1-3	5-0-14	5-10-11	2-7-12	4-5-15	5-9-9	0-10-8

Scale = 1:53.1



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 0.55	Vert(LL)	-0.21 14-15	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.97	Vert(CT)	-0.38 14-15	>948	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.66	Horz(CT)	0.09 9	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.07 12	>999	240	Weight: 131 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 3-5-15 oc purlins, except end verticals, and 2-0-0 oc purlins (3-8-11 max.): 1-4.
BOT CHORD 2x4 SPF No.2 *Except* 5-11: 2x3 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 2-2-0 oc bracing: 13-14.
WEBS 2x3 SPF No.2 *Except* 2-15,3-13: 2x4 SPF No.2, 7-9: 2x6 SPF No.2	WEBS 1 Row at midpt 2-15, 3-13

REACTIONS. (size) 15=0-3-8, 9=0-3-8
Max Horz 15=-270(LC 4)
Max Uplift 15=-228(LC 4), 9=-178(LC 9)
Max Grav 15=1429(LC 2), 9=1460(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1576/184, 3-4=-1821/210, 4-5=-2057/214, 5-6=-2476/246, 6-7=-2297/242, 7-9=-1355/209
BOT CHORD 14-15=-120/1220, 13-14=-138/1754, 12-13=-57/2161, 5-12=-71/577, 9-10=-132/605
WEBS 2-15=-1662/288, 2-14=-18/875, 3-14=-512/151, 4-13=-28/643, 5-13=-653/182, 10-12=-140/1933, 6-10=-503/106, 7-10=-17/1381

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 228 lb uplift at joint 15 and 178 lb uplift at joint 9.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 7,2020

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	140902228
400219	G7	Roof Special	1	1		

Wheeler Lumber, Waverly, KS 66871

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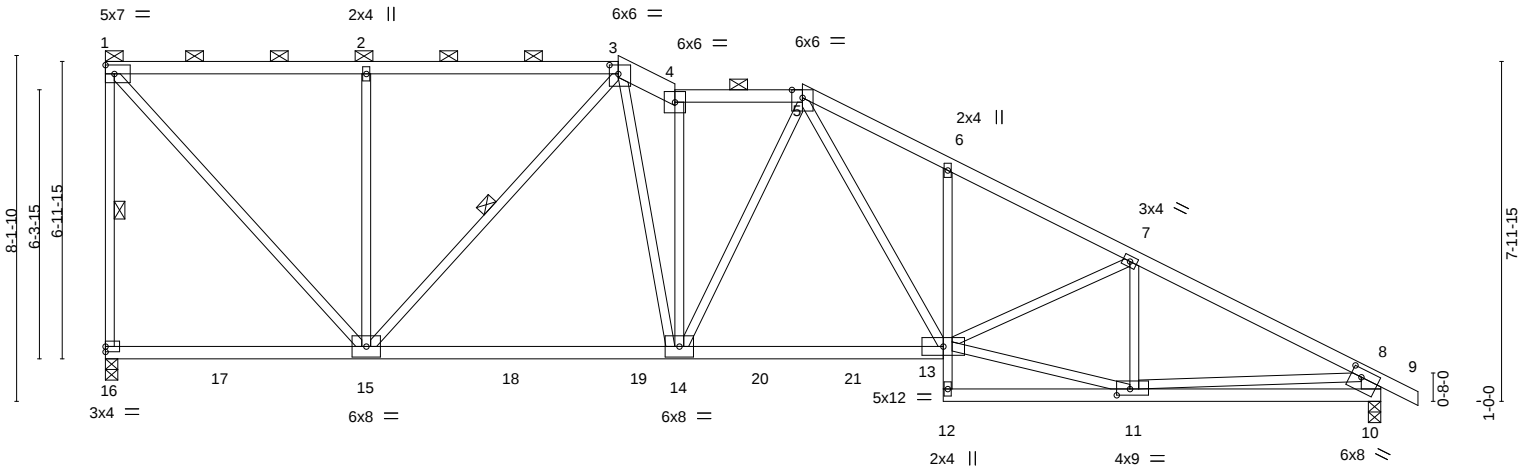
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Job Reference (optional)

6-1-10	12-0-12	13-4-12	16-4-12	19-8-8	24-2-7	30-0-0	30-10-8
6-1-10	5-11-2	1-4-0	3-0-0	3-3-12	4-5-15	5-9-9	0-10-8

6.00 12

Scale = 1:54.2



6-1-10	12-0-12	13-4-12	16-4-12	19-8-8	24-2-7	30-0-0
6-1-10	5-11-2	1-4-0	3-0-0	3-3-12	4-5-15	5-9-9

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

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 0.92	Vert(LL)	-0.18 13-14	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.74	Vert(CT)	-0.31 13-14	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.79	Horz(CT)	0.08 10	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.09 13-14	>999	240	Weight: 137 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
3-4: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
6-12: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
8-10: 2x6 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-5-9 oc purlins, except end verticals, and 2-0-0 oc purlins (4-2-11 max.): 1-3, 4-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 1-16, 3-15

REACTIONS.

(size) 16=0-3-8, 10=0-3-8
Max Horz 16=-313(LC 4)
Max Uplift 16=-194(LC 4), 10=-217(LC 9)
Max Grav 16=1451(LC 2), 10=1473(LC 2)

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

TOP CHORD 1-16=-1339/214, 1-2=-1084/155, 2-3=-1084/155, 3-4=-1949/300, 4-5=-1768/258,
5-6=-2411/417, 6-7=-2436/338, 7-8=-2322/316, 8-10=-1368/247
BOT CHORD 15-16=-41/256, 14-15=-43/1548, 13-14=-18/1719, 10-11=-144/608
WEBS 1-15=-203/1609, 2-15=-483/211, 3-15=-700/145, 3-14=-179/1114, 4-14=-871/176,
5-13=-200/846, 11-13=-186/1998, 7-11=-440/118, 8-11=-54/1399

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 194 lb uplift at joint 16 and 217 lb uplift at joint 10.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 7, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	
400219	G8	Roof Special	1	1		I40902229
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

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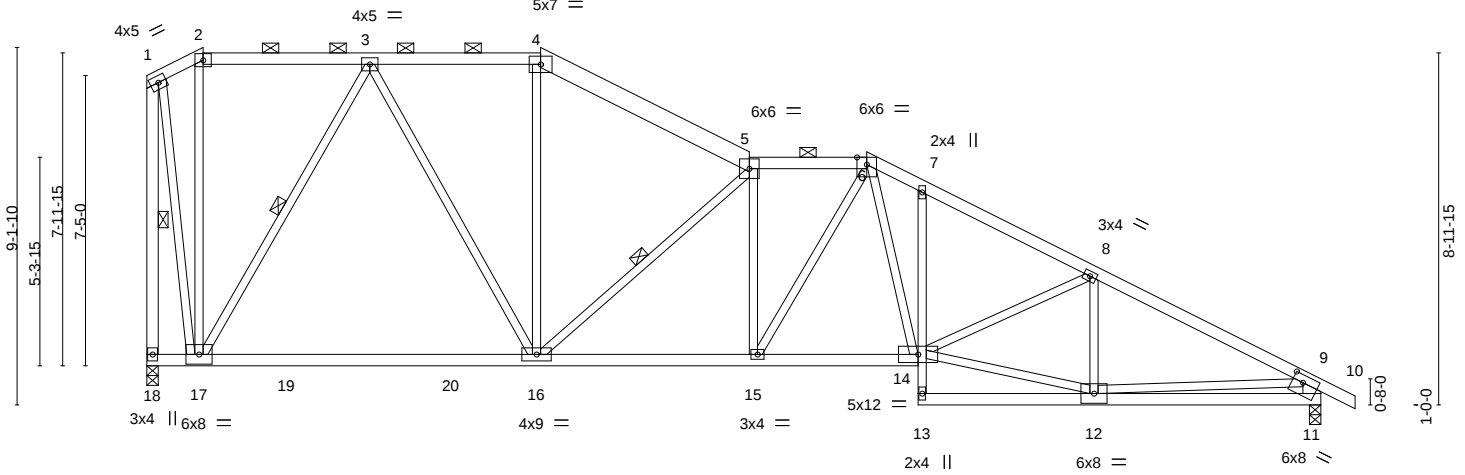
1-5-4	5-8-6	10-0-12	15-4-12	18-4-12	19-8-8	24-2-7	30-0-0	30-10-8
1-5-4	4-3-2	4-4-6	5-4-0	3-0-0	1-3-12	4-5-15	5-9-9	0-10-8

6.00 12

4x5 =

5x7 =

Scale = 1:58.9



1-5-4	10-0-12	15-4-12	19-8-8	24-2-7	30-0-0
1-5-4	8-7-8	5-4-0	4-3-12	4-5-15	5-9-9

Plate Offsets (X,Y)-- [11:0-2-7,0-1-4], [11:0-3-4,0-2-4]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.50	Vert(LL)	-0.23 16-17	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.87	Vert(CT)	-0.39 16-17	>916	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.86	Horz(CT)	0.08 11	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.09 14-15	>999	240	Weight: 153 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
4-5: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
7-13: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
1-18: 2x4 SPF No.2, 9-11: 2x6 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-6-4 oc purlins, except end verticals, and 2-0-0 oc purlins (4-0-7 max.): 2-4, 5-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 3-17, 5-16, 1-18

REACTIONS.

(size) 18=0-3-8, 11=0-3-8
Max Horz 18=-341(LC 4)
Max Uplift 18=-144(LC 4), 11=-225(LC 9)
Max Grav 18=1420(LC 2), 11=1447(LC 2)

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

TOP CHORD 1-2=-338/109, 2-3=-277/90, 3-4=-1230/235, 4-5=-1421/217, 5-6=-2049/328,
6-7=-2323/415, 7-8=-2362/358, 8-9=-2272/332, 1-18=-1567/111, 9-11=-1346/255
BOT CHORD 17-18=-50/280, 16-17=-23/862, 15-16=-85/2048, 14-15=-89/1876, 11-12=-144/598
WEBS 3-17=-1177/184, 3-16=-119/844, 4-16=0/348, 5-16=-1124/272, 6-15=-34/346,
6-14=-164/700, 12-14=-207/1928, 8-12=-437/124, 1-17=-106/1436, 9-12=-69/1366

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 144 lb uplift at joint 18 and 225 lb uplift at joint 11.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 7, 2020

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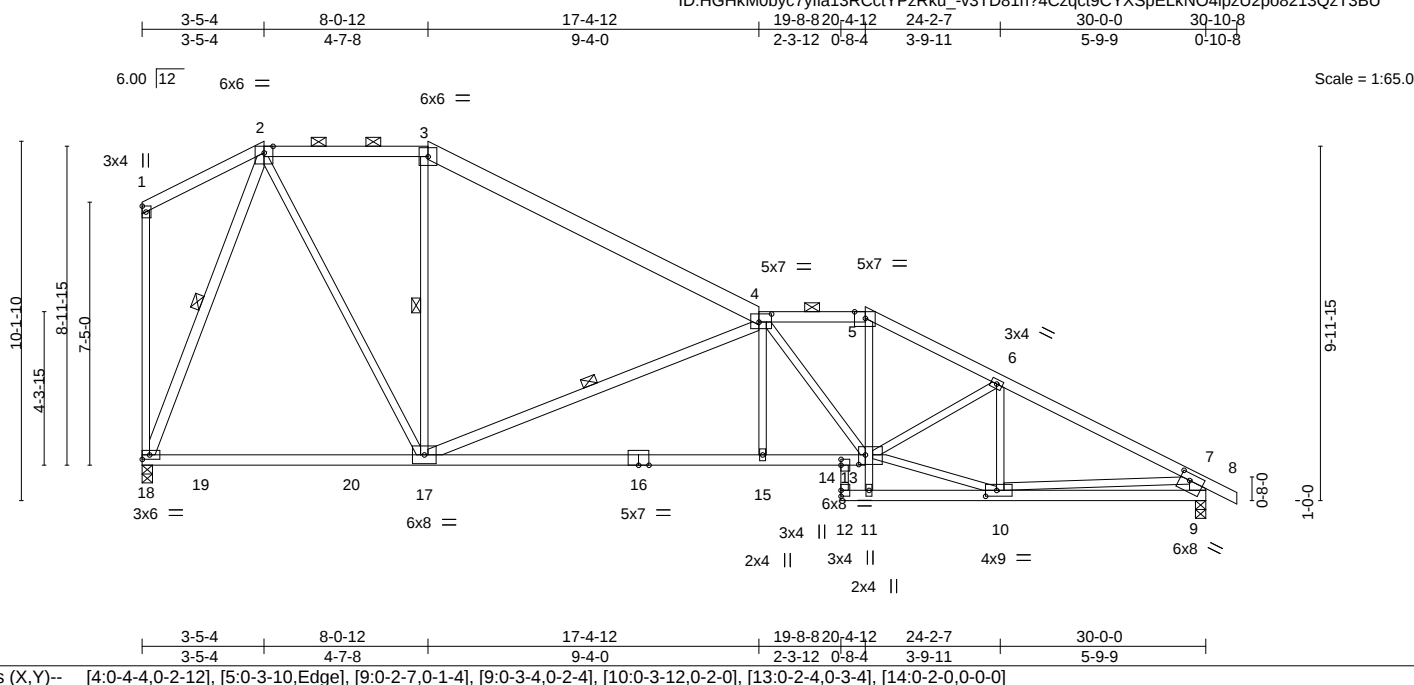


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	I40902230
400219	G9	Roof Special	1	1		

Wheeler Lumber, Waverly, KS 66871

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ID:HGhKM0byc7yfla13RCctYPzRku_v3TD81h?4Czqt9CYXSpELkNO4lpzU2po8213QzT3BU



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.72	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.90	Vert(LL) -0.20 15-17 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.85	Vert(CT) -0.41 15-17 >868 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.09 9 n/a n/a		
	Code IRC2018/TPI2014		Wind(LL) 0.10 15 >999 240	Weight: 148 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
3-4: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
12-14: 2x3 SPF No.2, 16-18: 2x4 SPF 2100F 1.8E
WEBS 2x3 SPF No.2 *Except*
4-17,2-18: 2x4 SPF No.2, 7-9: 2x6 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-6-1 oc purlins, except end verticals, and 2-0-0 oc purlins (3-9-5 max.): 2-3, 4-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 3-17, 4-17, 2-18

REACTIONS.

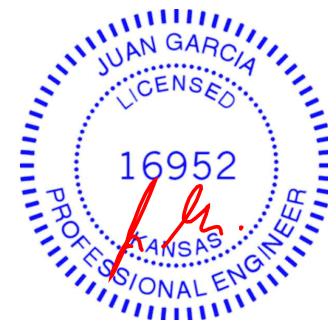
(size) 9=0-3-8, 18=0-3-8
Max Horz 18=-353(LC 4)
Max Uplift 9=-231(LC 9), 18=-152(LC 9)
Max Grav 9=1451(LC 2), 18=1430(LC 2)

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

TOP CHORD 2-3=-985/232, 3-4=-1217/179, 4-5=-2155/370, 5-6=-2440/386, 6-7=-2274/343, 7-9=-1347/261
BOT CHORD 18-19=0/553, 19-20=0/553, 17-20=0/553, 16-17=-197/2543, 15-16=-197/2543, 14-15=-195/2551, 13-14=-197/2418, 9-10=-149/613
WEBS 2-17=-173/1144, 4-17=-1698/386, 4-15=0/343, 4-13=-668/43, 5-13=-123/926, 2-18=-1288/156, 6-10=-487/135, 10-13=-230/1863, 7-10=-74/1351

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 231 lb uplift at joint 9 and 152 lb uplift at joint 18.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 7,2020

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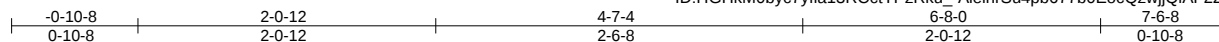
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	I40902231
400219	H1	Hip Girder	1	1		

Wheeler Lumber, Waverly, KS 66871

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Scale: 3/4"=1'

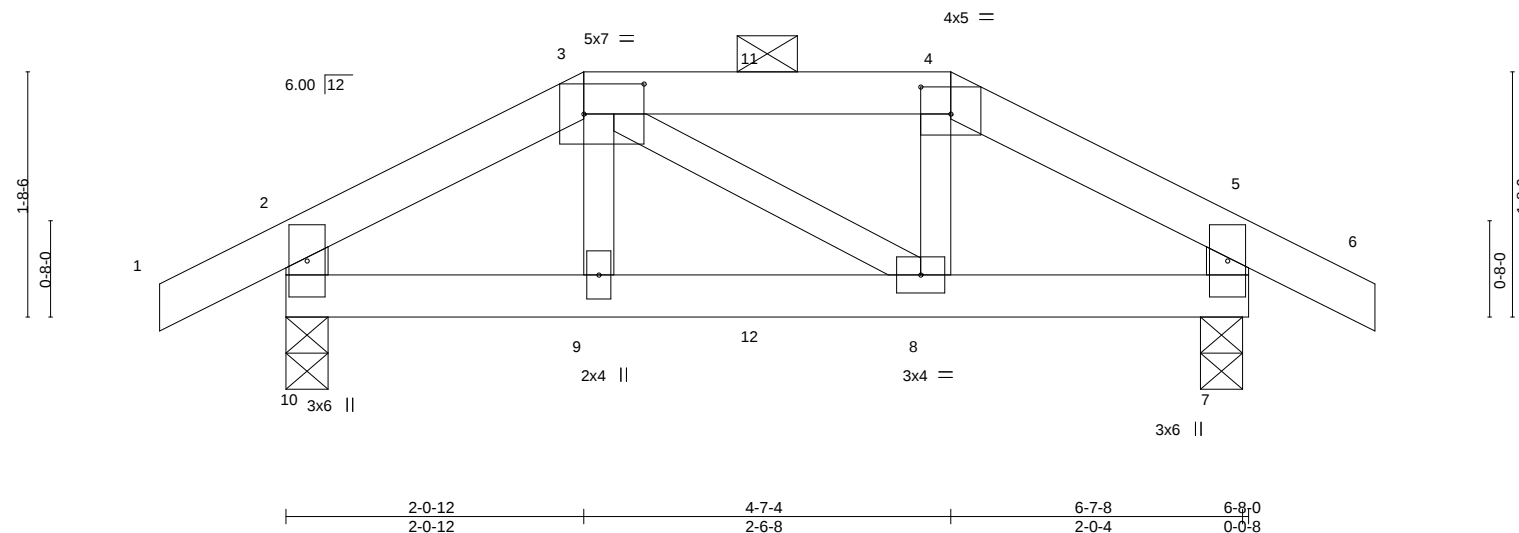


Plate Offsets (X,Y)--		[3:0-5-0,0-2-8], [4:0-2-8,0-2-4]	
LOADING (psf)	SPACING-	CSI.	DEFL.
TCLL 25.0	Plate Grip DOL 1.15	TC 0.18	in (loc) l/defl L/d
TCDL 10.0	Lumber DOL 1.15	BC 0.16	Vert(LL) -0.01 8-9 >999 360
BCLL 0.0 *	Rep Stress Incr NO	WB 0.02	Vert(CT) -0.02 8-9 >999 240
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Horz(CT) 0.00 7 n/a n/a
			Wind(LL) 0.01 8-9 >999 240
			PLATES MT20
			GRIP 197/144
			Weight: 23 lb FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-10,5-7: 2x4 SPF No.2

BRACING-

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

REACTIONS.

(size) 10=0-3-8, 7=0-3-8
Max Horz 10=35(LC 7)
Max Uplift 10=-111(LC 8), 7=-111(LC 9)
Max Grav 10=356(LC 1), 7=356(LC 1)

FORCES.

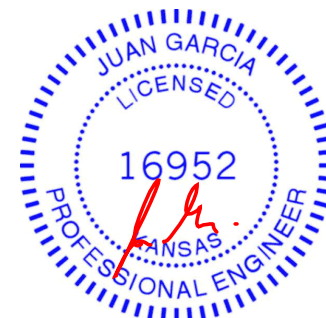
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-326/123, 3-4=-251/110, 4-5=-326/122, 2-10=-305/113, 5-7=-305/112
BOT CHORD 9-10=-102/269, 8-9=-100/270, 7-8=-100/266

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 111 lb uplift at joint 10 and 111 lb uplift at joint 7.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 92 lb down and 108 lb up at 2-0-12, and 56 lb down and 35 lb up at 3-4-0, and 92 lb down and 108 lb up at 4-7-4 on top chord, and 12 lb down and 4 lb up at 2-0-12, and 8 lb down and 0 lb up at 3-4-0, and 12 lb down and 4 lb up at 4-6-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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



April 7,2020

Continued on page 2

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	I40902231
400219	H1	Hip Girder	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 7 15:00:28 2020 Page 2
ID:HGhkM0byc7yfla13RCctYPzRku_-AleihrSu4pb677b0EocQzwjjQIAF2ZPapi7ZxyzT46X

LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 9=2(F) 8=2(F) 12=0(F)

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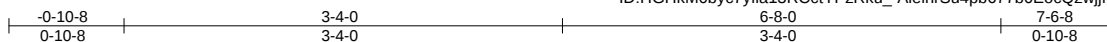


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Chesterfield, MO 63017

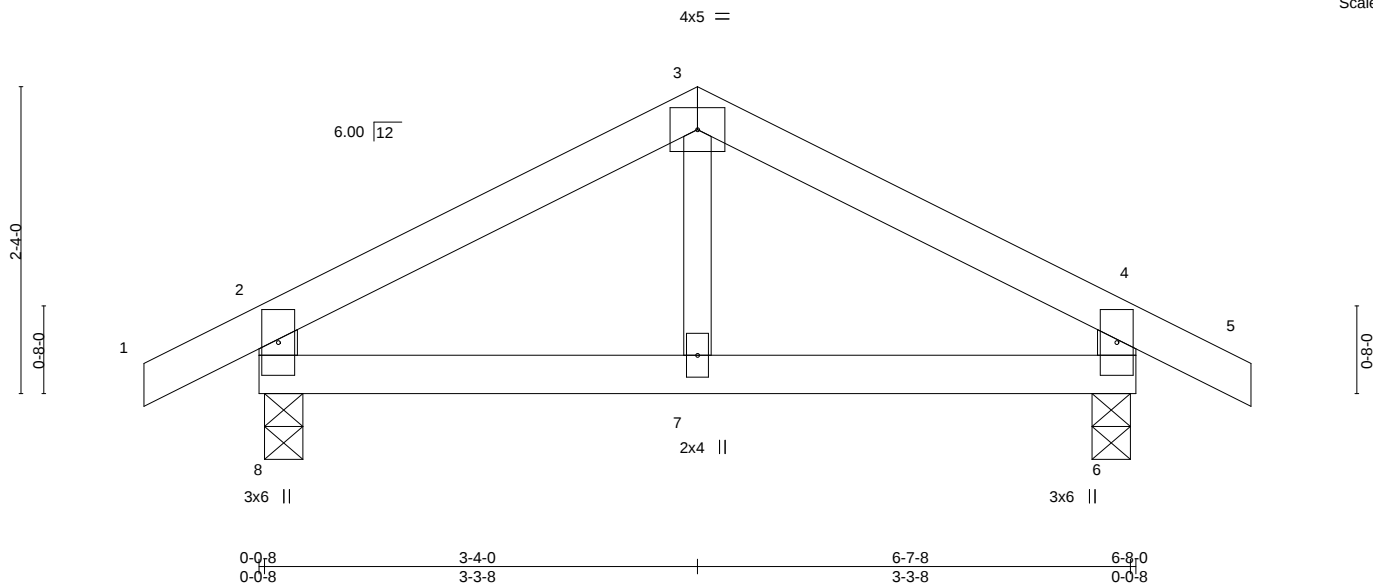
Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	I40902232
400219	H2	Common	2	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 7 15:00:28 2020 Page 1
ID:HGhkM0byc7yfla13RCctYPzRku_-AleihSu4pb677b0EocQzwjflB92Z9api7ZxyzT46X



Scale = 1:17.5



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 0.17	Vert(LL)	-0.01	7	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.11	Vert(CT)	-0.01	7	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.00	6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.00	7	>999	240	Weight: 21 lb	FT = 20%

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.

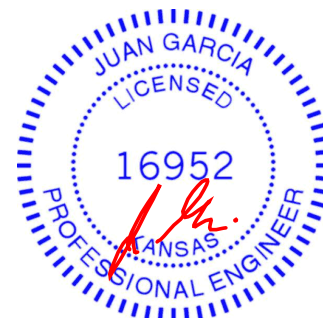
(size) 8=0-3-8, 6=0-3-8
Max Horz 8=-44(LC 6)
Max Uplift 8=-59(LC 8), 6=-59(LC 9)
Max Grav 8=358(LC 1), 6=358(LC 1)

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

TOP CHORD 2-3=-301/47, 3-4=-301/46, 2-8=-315/81, 4-6=-315/81

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 59 lb uplift at joint 8 and 59 lb uplift at joint 6.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



April 7, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

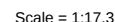
Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 7 15:00:29 2020 Page 1

140902233

Job Reference (optional)

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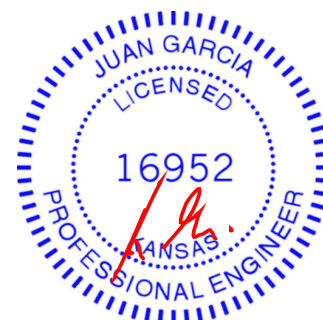
TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.2 *Except*
	3-6: 2x3 SPF No.2

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

REACTIONS. (size) 7=0-3-8, 5=0-3-8
 Max Horz 7=47(LC 7)
 Max Uplift 7=-59(LC 8), 5=-34(LC 9)
 Max Grav 7=362(LC 1), 5=279(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-307/48, 3-4=-301/46, 2-7=-317/81

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 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 59 lb uplift at joint 7 and 34 lb uplift at joint 5.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



April 7, 2020



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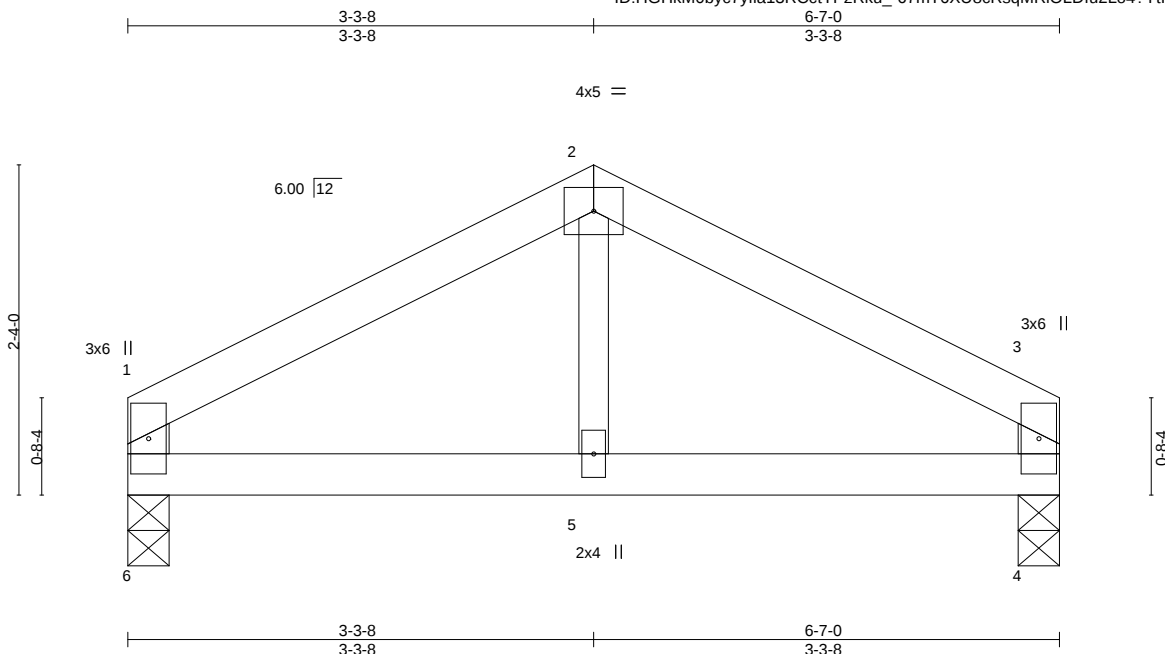


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	I40902234
400219	H4	Common	1	1		

Wheeler Lumber, Waverly, KS 66871

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ID:HGhkM0byc7yfla13RCctYPzRku_-67mT6XU8cRsQMRIOLDfu2Lo4?YtIWtIG?cg?rzT46V



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.12	Vert(LL)	-0.01	5	>999	360	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.13	Vert(CT)	-0.01	5	>999	240	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.00	4	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.00	5	>999	240	
								Weight: 18 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 6=0-3-8, 4=0-3-8
Max Horz 6=37(LC 5)
Max Uplift 6=-34(LC 8), 4=-34(LC 9)
Max Grav 6=283(LC 1), 4=283(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-307/48, 2-3=-307/48

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 34 lb uplift at joint 6 and 34 lb uplift at joint 4.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



April 7, 2020

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Chesterfield, MO 63017

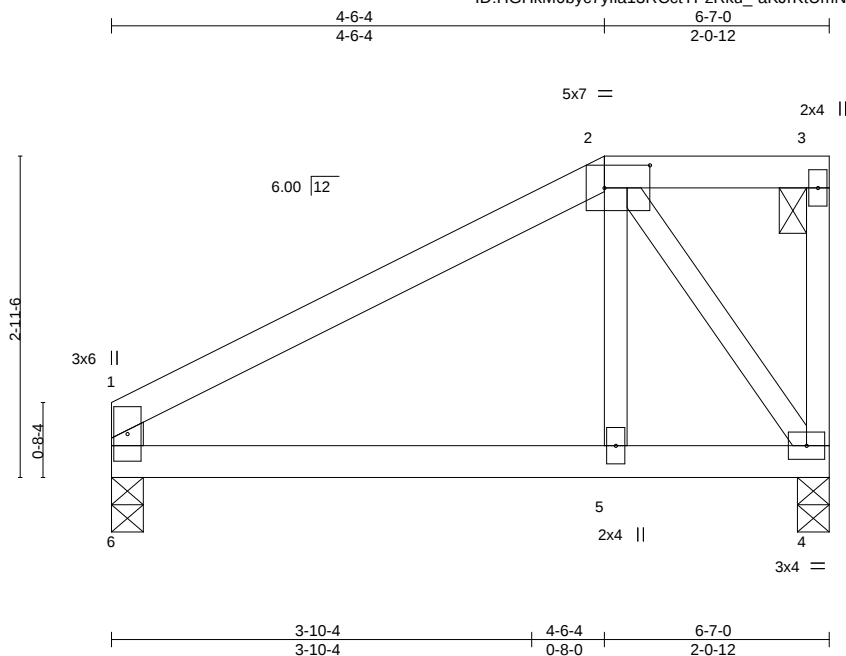


Plate Offsets (X,Y)-- [2:0-5-0-0-2-8]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d					PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	-0.01	5-6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	-0.02	5-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.00	5-6	>999	240	Weight: 22 lb	FT = 20%

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

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

REACTIONS. (size) 4=0-3-8, 6=0-3-8
 Max Horz 6=109(LC 5)
 Max Uplift 4=-52(LC 5), 6=-37(LC 8)
 Max Grav 4=285(LC 1), 6=285(LC 1)

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

TOP CHORD	1-2=-267/32
WEBS	2-4=-300/63

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDD=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) 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 52 lb uplift at joint 4 and 37 lb uplift at joint 6.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TP1 1.
- 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 7, 2020

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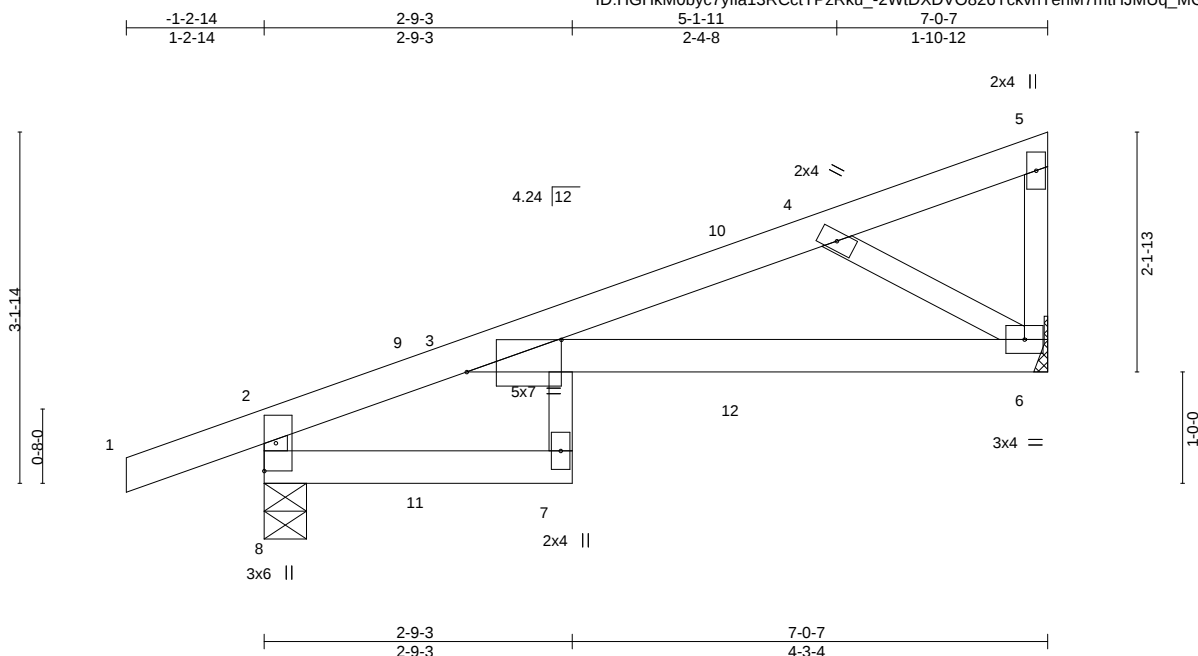
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	
400219	J1	Diagonal Hip Girder	2	1		I40902236
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

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ID:HGhkM0byc7yfla13RCctYPzRku_-2WtDXDVO826YckvnTehM7mtHJMUq_MGAKJ5m4jzT46T



Scale = 1:20.7

Plate Offsets (X,Y)-- [2:0-0-7,0-1-4], [3:0-10-3,Edge], [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	0.70	Vert(LL)	-0.14 7 >581 360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.44	Vert(CT)	-0.24 7 >343 240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.10	Horz(CT)	0.10 6 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.16 7 >498 240	Weight: 23 lb	FT = 20%

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) 8=0-4-9, 6=Mechanical
Max Horz 8=118(LC 5)
Max Uplift 8=151(LC 4), 6=100(LC 8)
Max Grav 8=388(LC 1), 6=318(LC 1)

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

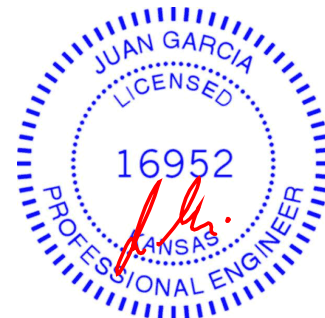
TOP CHORD 2-8=-373/170, 3-4=-449/147
BOT CHORD 3-6=-174/428
WEBS 4-6=-466/204

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 151 lb uplift at joint 8 and 100 lb uplift at joint 6.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 53 lb down and 101 lb up at 1-5-9, 53 lb down and 101 lb up at 1-5-9, and 83 lb down and 49 lb up at 4-3-8, and 82 lb down and 47 lb up at 4-3-8 on top chord, and 3 lb down and 4 lb up at 1-5-9, 3 lb down and 4 lb up at 1-5-9, and 24 lb down and 25 lb up at 4-3-8, and 20 lb down and 23 lb up at 4-3-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-70, 2-5=-70, 7-8=-20, 3-6=-20
Concentrated Loads (lb)
Vert: 9=57(F=29, B=29) 10=-2(F=-0, B=-2) 11=7(F=3, B=3) 12=-43(F=-19, B=-24)



April 7, 2020

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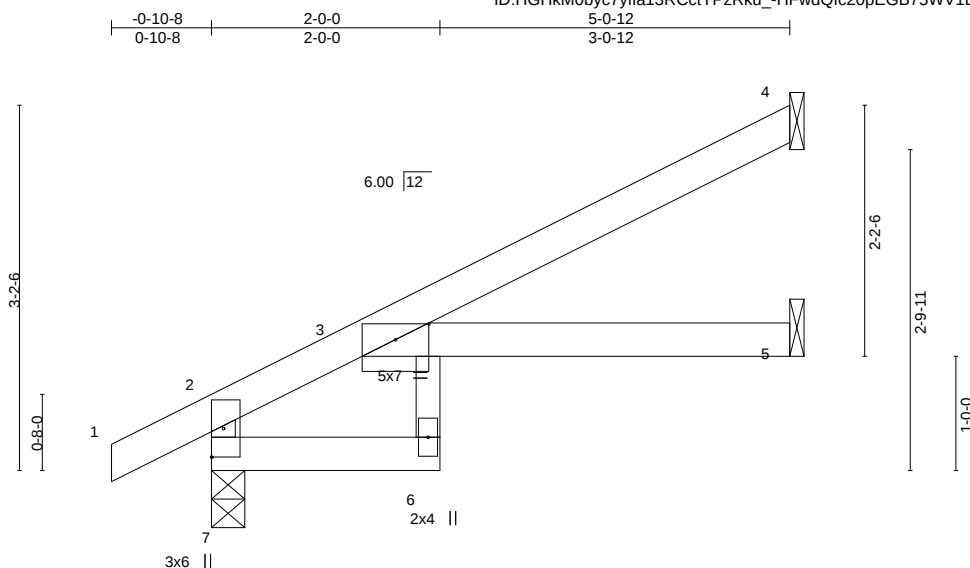
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	
400219	J2	Jack-Open	5	1		I40902237
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

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ID:HGhkM0byc7yfla13RCctYPzRku_HFwdQlc20pEGB75WV1LU?glu__axbRkUoDnluzT46K



Scale = 1:20.2

Plate Offsets (X,Y)--	[2:0-0-10,0-1-4], [3:0-3-8,0-1-11], [7:0-0-0,0-1-4]
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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 0.32	Vert(LL)	-0.05	6	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.31	Vert(CT)	-0.10	6	>613	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.02	Horz(CT)	0.05	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P	Wind(LL)	0.07	6	>887	240	Weight: 15 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-0-12 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS.

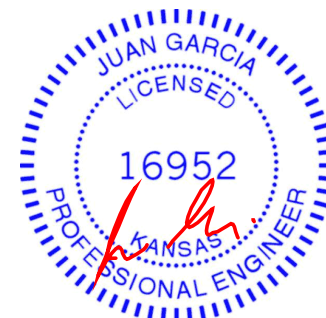
(size) 7=0-3-8, 4=Mechanical, 5=Mechanical
Max Horz 7=111(LC 8)
Max Uplift 7=-27(LC 8), 4=-70(LC 8), 5=-1(LC 8)
Max Grav 7=304(LC 1), 4=141(LC 1), 5=92(LC 3)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-7=-294/53

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 27 lb uplift at joint 7, 70 lb uplift at joint 4 and 1 lb uplift at joint 5.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



April 7, 2020

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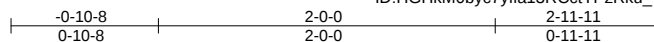
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	
400219	J3	Jack-Open	2	1		I40902238
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 7 15:00:46 2020 Page 1

ID:HGhkM0byc7yfla13RCctYPzRku_-eCjWT?gArLtzHuzTHaxfijSog?KYGi_EyVUWZwzT46F



Scale = 1:13.7

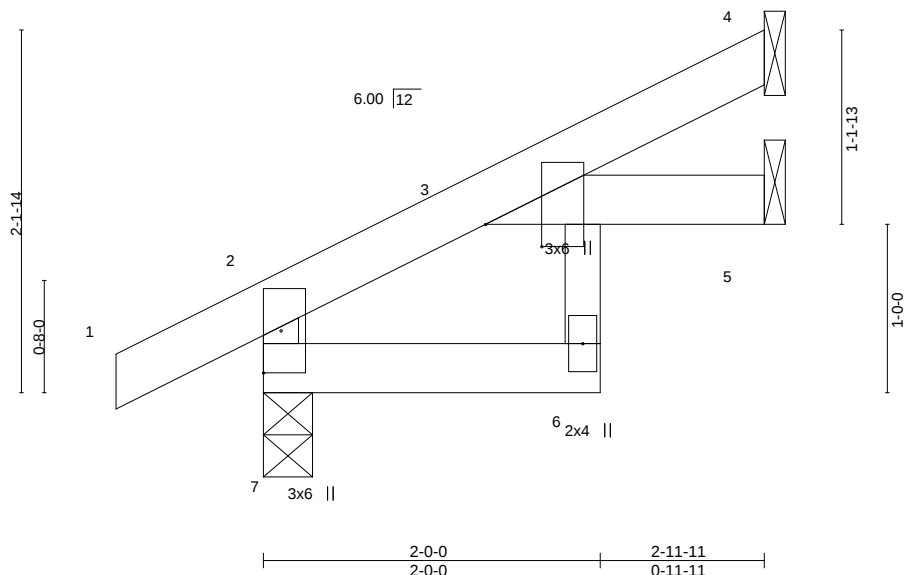


Plate Offsets (X,Y)--		[2:0-0-10,0-1-4], [3:0-1-9,0-4-0], [7:0-0-0,0-1-4]							
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc)	L/defl L/d	PLATES	GRIP
TCLL 25.0		Plate Grip DOL 1.15		TC 0.13		Vert(LL) -0.01 6	>999 360	MT20	197/144
TCDL 10.0		Lumber DOL 1.15		BC 0.09		Vert(CT) -0.02 6	>999 240		
BCLL 0.0 *		Rep Stress Incr YES		WB 0.01		Horz(CT) 0.01 5	n/a n/a		
BCDL 10.0		Code IRC2018/TPI2014		Matrix-P		Wind(LL) 0.01 6	>999 240	Weight: 10 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-11-11 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS.

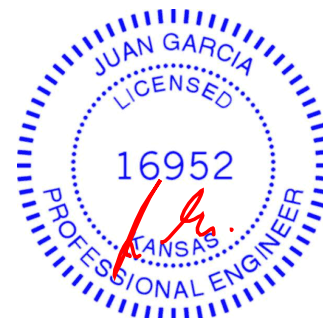
(size) 7=0-3-8, 4=Mechanical, 5=Mechanical
Max Horz 7=69(LC 8)
Max Uplift 7=-23(LC 8), 4=-34(LC 8), 5=-5(LC 8)
Max Grav 7=213(LC 1), 4=74(LC 1), 5=55(LC 3)

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 23 lb uplift at joint 7, 34 lb uplift at joint 4 and 5 lb uplift at joint 5.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



April 7, 2020

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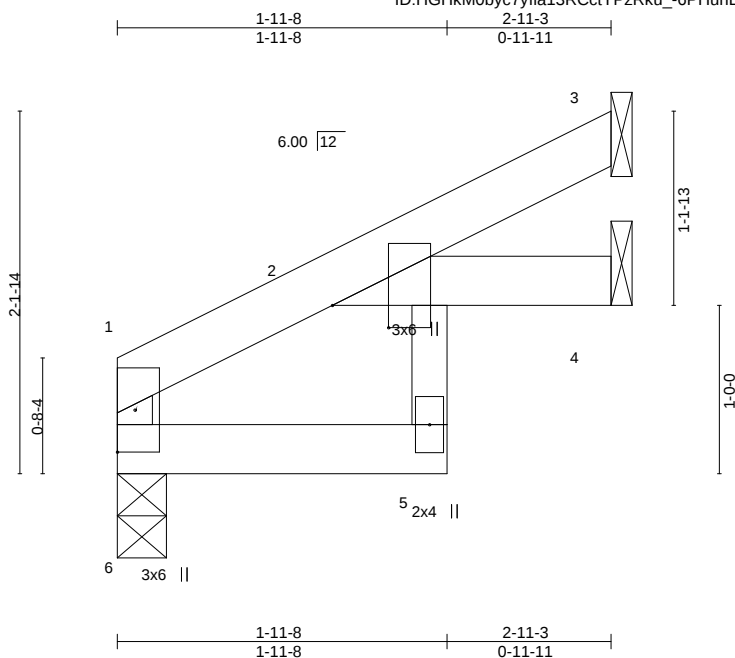
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	140902239
400219	J4	Jack-Open	2	1		

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 7 15:00:47 2020 Page 1

ID:HGhKM0byc7yfla13RCctYPzRku_6PHuhLhocf?Pv2YfrHSuEx?z_PgX?9ENB9E36MzT46E



Scale = 1:13.7

Plate Offsets (X,Y)-- [1:0-0-10,0-1-4], [2:0-1-9,0-4-0], [6:0-0-0,0-1-4]									
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 5 >999 360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	-0.02 5 >999 240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.01	Horz(CT)	0.01 4 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P		Wind(LL)	0.01 5 >999 240	Weight: 9 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-11-3 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=50(LC 8)
Max Uplift 3=-36(LC 8), 4=-6(LC 8)
Max Grav 6=130(LC 1), 3=79(LC 1), 4=56(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 36 lb uplift at joint 3 and 6 lb uplift at joint 4.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



April 7, 2020

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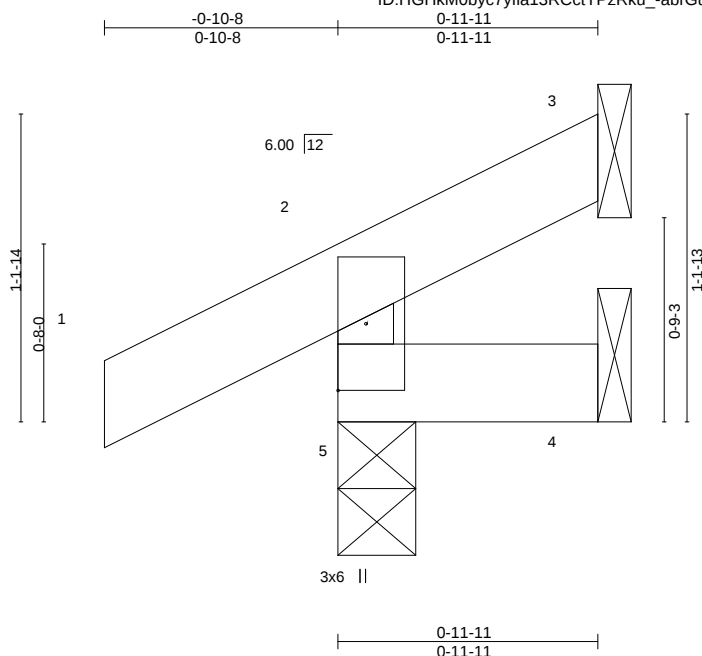
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	
400219	J5	Jack-Open	4	1		I40902240
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 7 15:00:48 2020 Page 1

ID:HGhkM0byc7yfla13RCctYPzRku_-abrGuhiRNz7GWC7sP?z7n8Y9Ep1KkciWPPzceozT46D



Scale = 1:8.6

Plate Offsets (X,Y)-- [2:0-0-10,0-1-4], [5:0-0-0,0-1-4]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc)		PLATES GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	0.00 5	>999	360
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: 4 lb	FT = 20%

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 0-11-11 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=29(LC 5)
Max Uplift 5=28(LC 8), 3=9(LC 8)
Max Grav 5=146(LC 1), 3=4(LC 4), 4=15(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 28 lb uplift at joint 5 and 9 lb uplift at joint 3.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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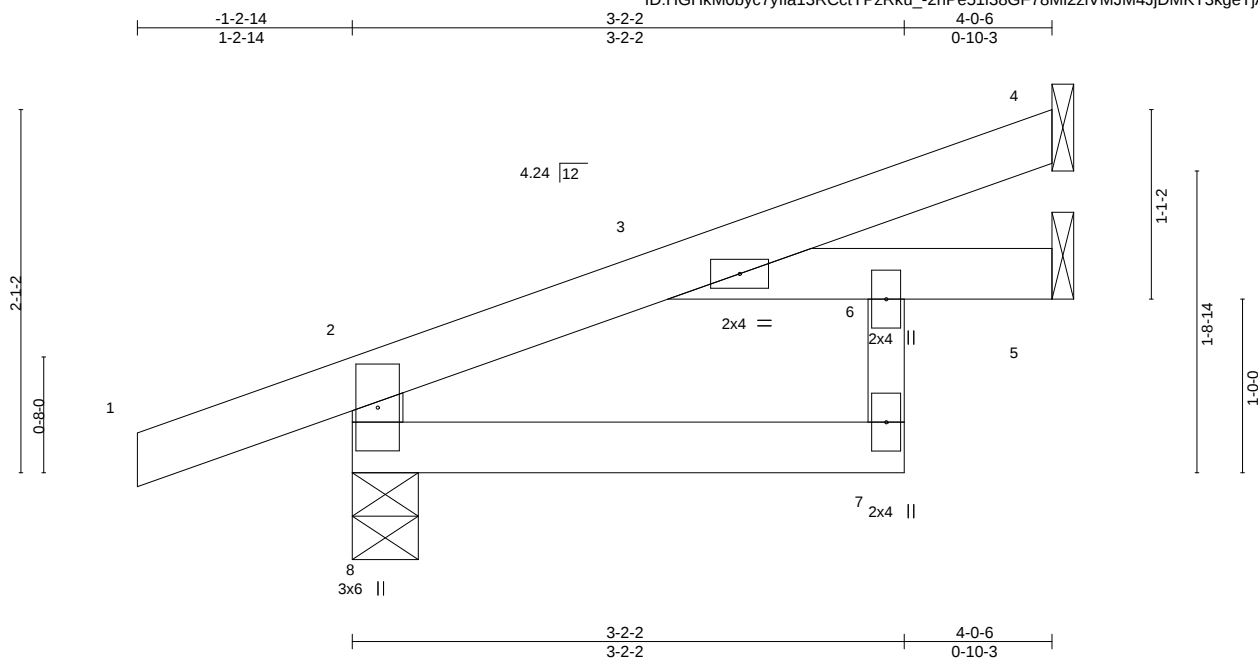
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	I40902241
400219	J6	Diagonal Hip Girder	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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ID:HGhkM0byc7yfla13RCctYPzRku_-2nPe51i38GF78Mi2ziVMJM4JjDMKT3kgeTJAEEzT46C



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)	0.02	3	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.09	Vert(CT)	-0.02	3	>999	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.01	Horz(CT)	-0.02	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 13 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 8=0-4-9, 4=Mechanical, 5=Mechanical
 Max Horz 8=80(LC 12)
 Max Uplift 8=-85(LC 6), 4=-34(LC 12)
 Max Grav 8=146(LC 1), 4=71(LC 1), 5=71(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 85 lb uplift at joint 8 and 34 lb uplift at joint 4.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 29 lb down and 11 lb up at -1-2-14, and 29 lb down and 11 lb up at -1-2-14 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- 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=-45(F=-22, B=22)
 Trapezoidal Loads (plf)
 Vert: 1=0(F=35, B=35)-to-2=-24(F=23, B=23), 2=-3(F=34, B=34)-to-4=-71(F=-0, B=-0), 8=0(F=10, B=10)-to-7=-15(F=2, B=2), 3=-9(F=6, B=6)-to-5=-20(F=-0, B=-0)



April 7, 2020

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	I40902242
400219	J7	Jack-Open	5	1		

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 7 15:00:50 2020 Page 1

ID:HGhkM0byc7yfla13RCctYPzRku_-W_z0JNjhvaN_mvHEWQ0bsZdV3ciyCW?pt7SjhzT46B

0-10-8 2-3-8 2-11-4
0-10-8 2-3-8 0-7-12

Scale = 1:13.6

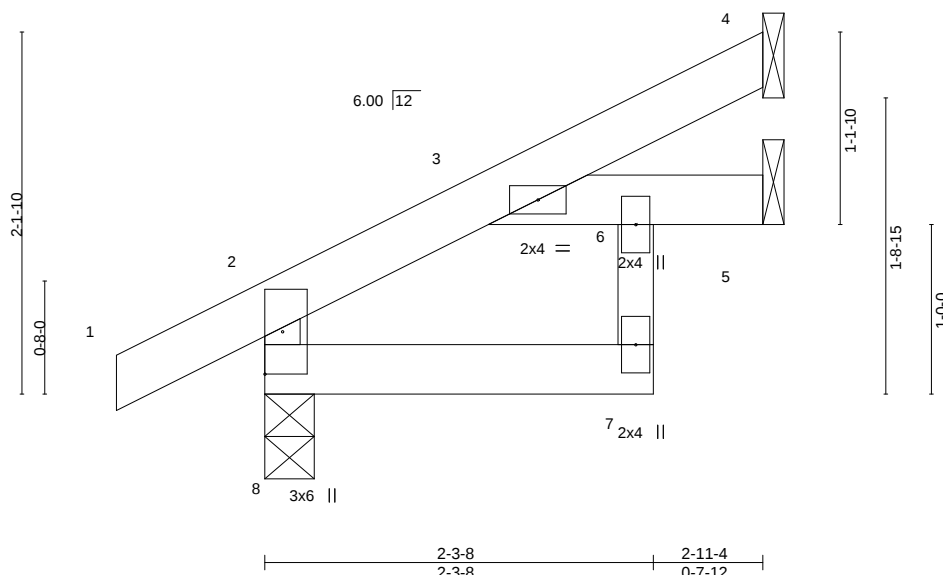


Plate Offsets (X,Y)--	[2:0-0-10,0-1-4], [8:0-0-0,0-1-4]								
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.11	Vert(LL)	-0.00	3	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.06	Vert(CT)	-0.01	3	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.01	Horz(CT)	-0.01	5	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.01	3	>999	Weight: 10 lb	FT = 20%

LUMBER-

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

BRACING-

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

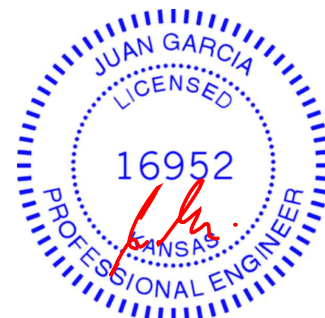
REACTIONS.

(size) 8=0-3-8, 4=Mechanical, 5=Mechanical
Max Horz 8=68(LC 8)
Max Uplift 8=22(LC 8), 4=-36(LC 8)
Max Grav 8=212(LC 1), 4=74(LC 1), 5=64(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 22 lb uplift at joint 8 and 36 lb uplift at joint 4.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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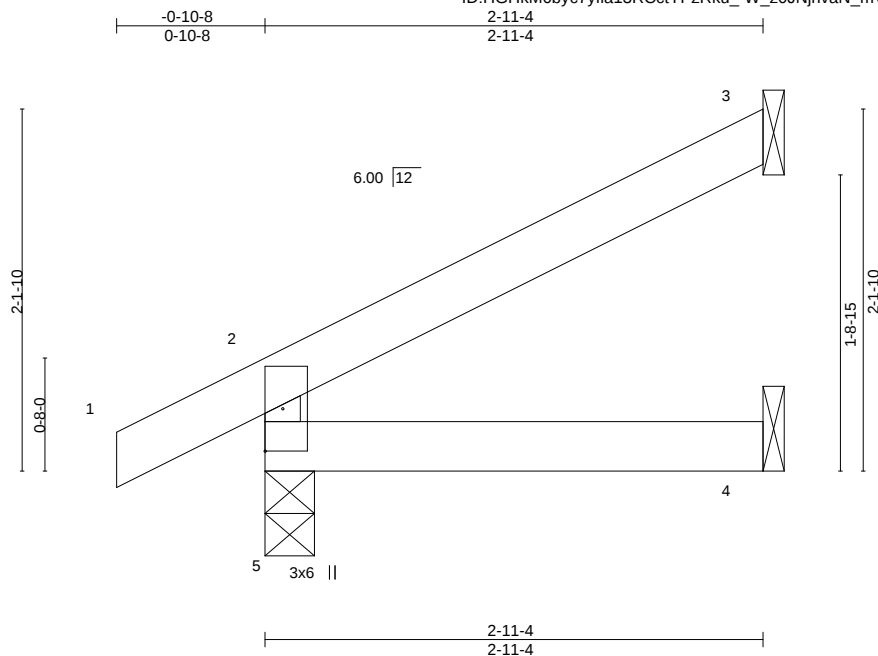
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	I40902243
400219	J8	Jack-Open	7	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 7 15:00:50 2020 Page 1

ID:HGhkM0byc7yfla13RCctYPzRku_-W_z0JNjhvaN_mVHEWQ0bsZdVDcixCWCpt7SjihzT46B



Scale = 1:13.6

Plate Offsets (X,Y)--	[2:0-0-10,0-1-4], [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 = 20%

LUMBER-

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

BRACING-

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

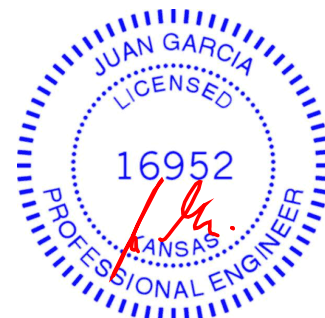
REACTIONS.

(size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=68(LC 8)
Max Uplift 5=-27(LC 8), 3=-50(LC 8)
Max Grav 5=205(LC 1), 3=83(LC 1), 4=52(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 27 lb uplift at joint 5 and 50 lb uplift at joint 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



April 7, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	I40902245
400219	J10	Diagonal Hip Girder	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 7 15:00:33 2020 Page 1

ID:HGhkM0byc7yfla13RCctYPzRku_-WiRblZW0vMEPDuUz1LCBg_QbSsmvMjq_JzzrKcAzT46S

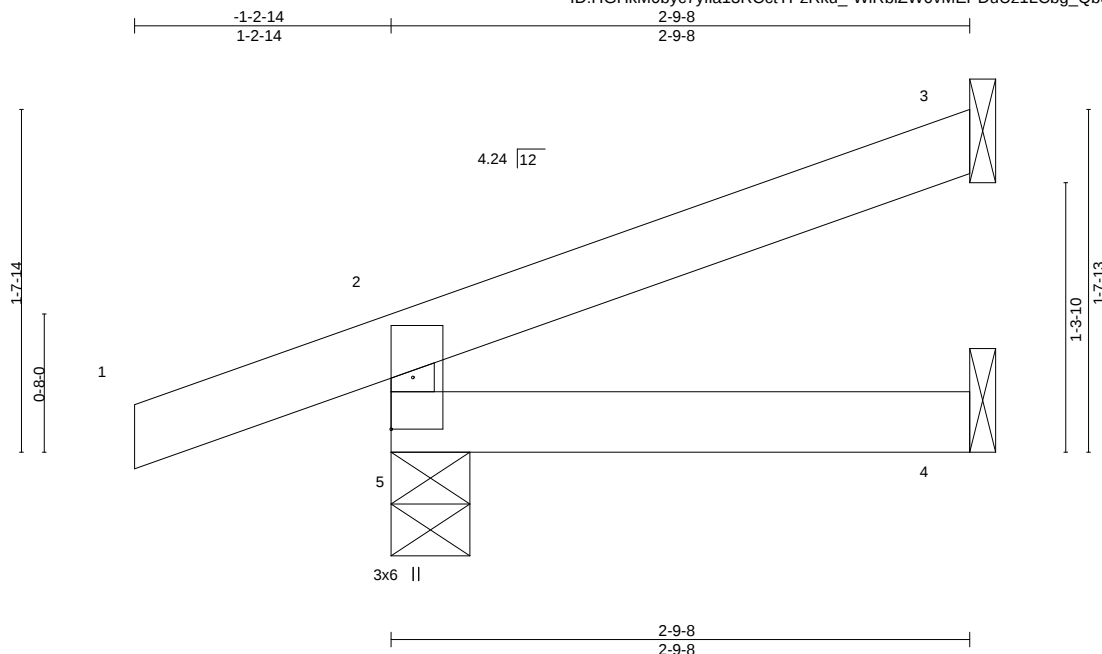


Plate Offsets (X,Y)--		[2:0-0-7,0-1-4], [5:0-0-0,0-1-4]									
LOADING	(psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC 0.10	Vert(LL)	-0.00	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	-0.00	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB 0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.00	4-5	>999	240	Weight: 8 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-9-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 5=0-4-9, 3=Mechanical, 4=Mechanical
Max Horz 5=65(LC 12)
Max Uplift 5=97(LC 6), 3=49(LC 12), 4=3(LC 19)
Max Grav 5=95(LC 1), 3=30(LC 1), 4=35(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 97 lb uplift at joint 5, 49 lb uplift at joint 3 and 3 lb uplift at joint 4.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 20 lb down and 7 lb up at -1-2-14, and 20 lb down and 7 lb up at -1-2-14 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Concentrated Loads (lb)
Vert: 1=-31(F=-15, B=-15)
Trapezoidal Loads (plf)
Vert: 1=0(F=35, B=35)-to-2=-23(F=23, B=23), 2=-3(F=34, B=34)-to-3=-50(F=10, B=10), 5=0(F=10, B=10)-to-4=-14(F=3, B=3)



April 7, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	I40902246
400219	J11	Diagonal Hip Girder	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 7 15:00:34 2020 Page 1
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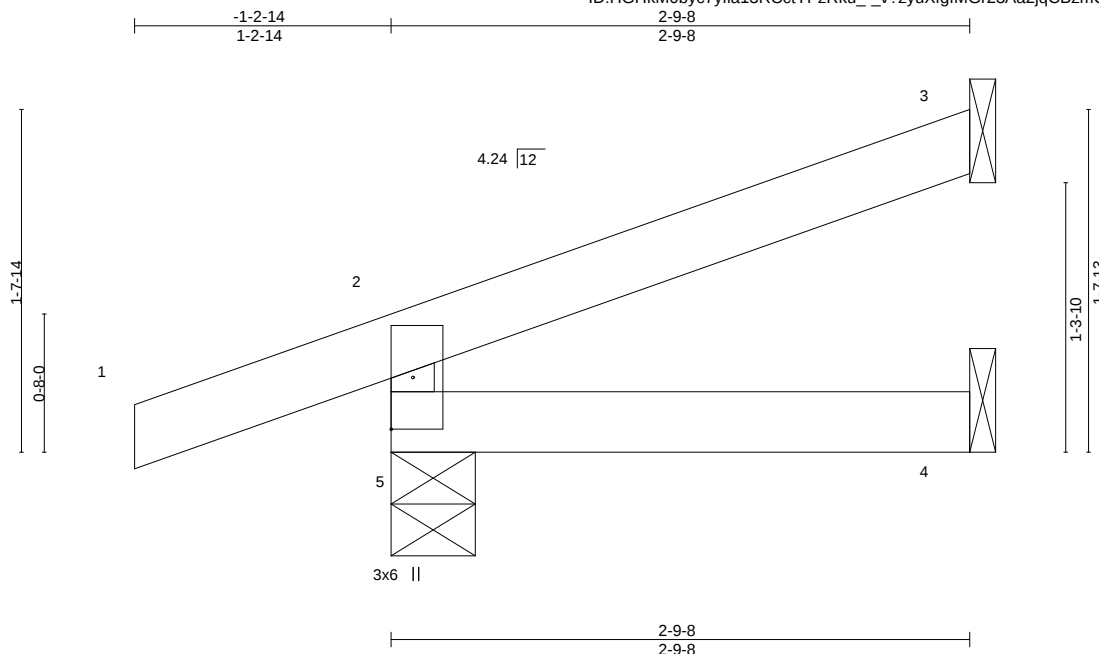


Plate Offsets (X,Y)--		[2:0-0-7,0-1-4], [5:0-0-0,0-1-4]									
LOADING	(psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC 0.10	Vert(LL)	-0.00	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	-0.00	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB 0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.00	4-5	>999	240	Weight: 8 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-9-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 5=0-4-14, 3=Mechanical, 4=Mechanical
Max Horz 5=65(LC 12)
Max Uplift 5=97(LC 6), 3=49(LC 12), 4=3(LC 19)
Max Grav 5=95(LC 1), 3=30(LC 1), 4=35(LC 3)

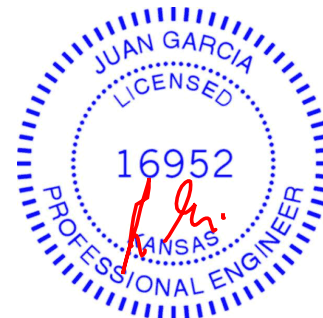
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

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 97 lb uplift at joint 5, 49 lb uplift at joint 3 and 3 lb uplift at joint 4.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 20 lb down and 7 lb up at -1-2-14, and 20 lb down and 7 lb up at -1-2-14 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Concentrated Loads (lb)
Vert: 1=-31(F=-15, B=-15)
Trapezoidal Loads (plf)
Vert: 1=0(F=35, B=35)-to-2=-23(F=23, B=23), 2=-3(F=34, B=34)-to-3=-50(F=10, B=10), 5=0(F=10, B=10)-to-4=-14(F=3, B=3)



April 7, 2020

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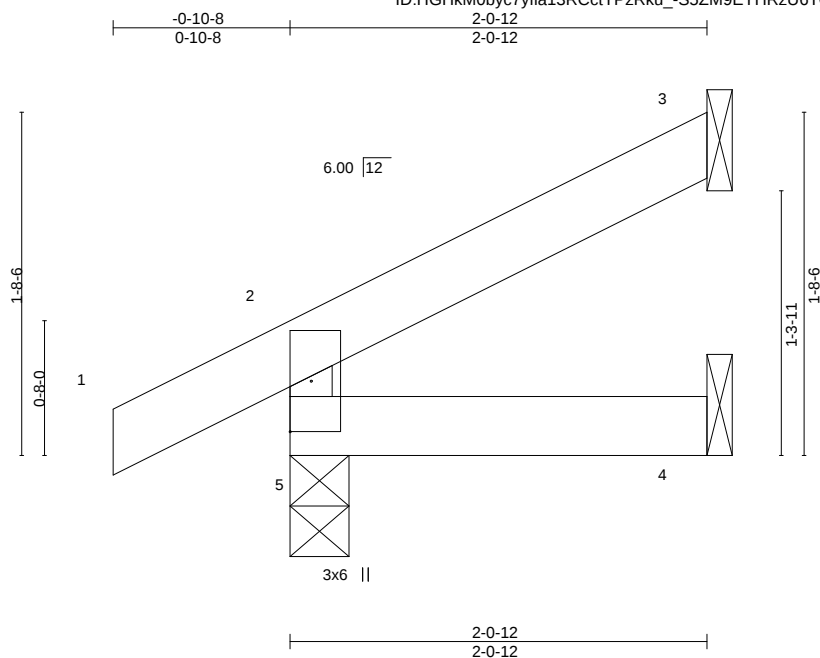
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	
400219	J12	Jack-Open	3	1		I40902247
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

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ID:HGhkM0byc7yfla13RCctYPzRku_-S5ZM9EYHRzU6TCdM8mF4IPVwWZb0BkUcQHKQg2zT46Q



Scale = 1:11.4

Plate Offsets (X,Y)--		[2:0-0-10,0-1-4], [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	0.03	Vert(CT)	-0.00	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00	5	>999	240	Weight: 6 lb	FT = 20%

LUMBER-

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

BRACING-

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

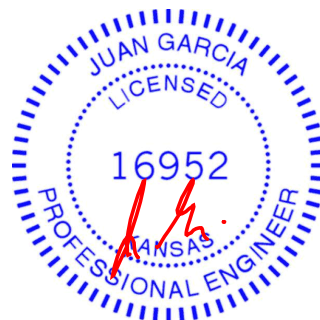
REACTIONS.

(size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=50(LC 8)
Max Uplift 5=25(LC 8), 3=33(LC 8)
Max Grav 5=172(LC 1), 3=50(LC 1), 4=35(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 25 lb uplift at joint 5 and 33 lb uplift at joint 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



April 7, 2020

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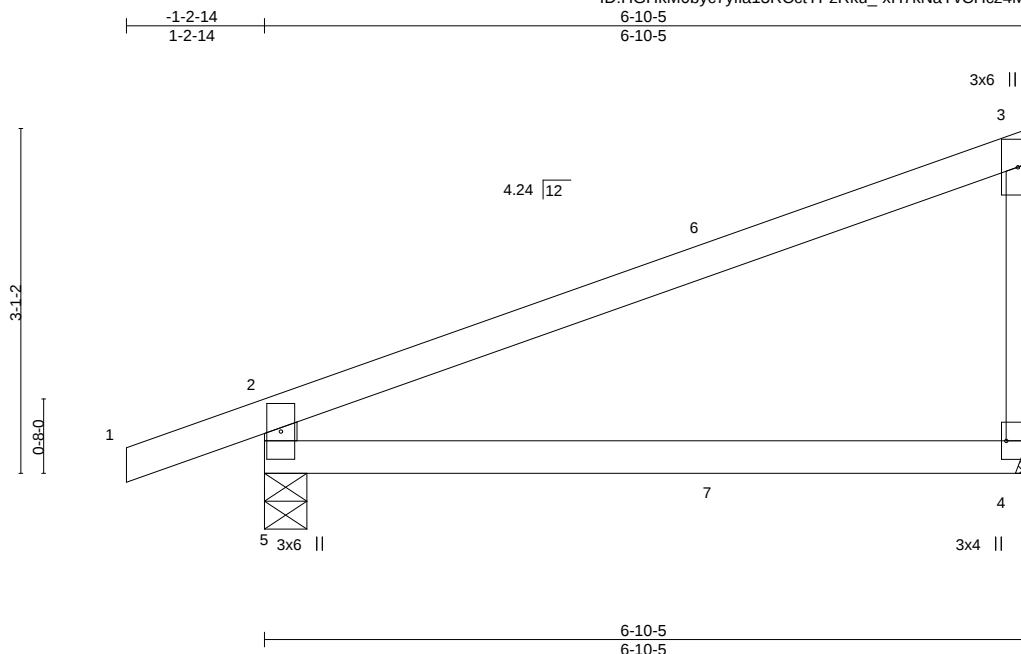


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	I40902248
400219	J13	Diagonal Hip Girder	3	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 7 15:00:36 2020 Page 1
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Scale = 1:20.7

Plate Offsets (X,Y)-- [4:Edge,0-2-8]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.69	Vert(LL)	-0.08	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.41	Vert(CT)	-0.16	4-5	>489	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)	0.04	4-5	>999	240	Weight: 20 lb	FT = 20%

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=132(LC 5)
Max Uplift 5=113(LC 4), 4=70(LC 8)
Max Grav 5=406(LC 1), 4=290(LC 1)

FORCES.

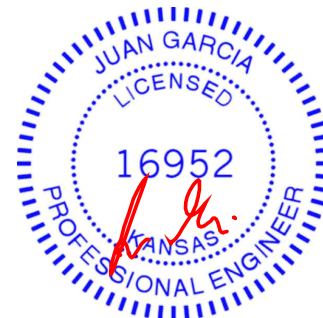
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-356/164

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 113 lb uplift at joint 5 and 70 lb uplift at joint 4.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 81 lb down and 57 lb up at 4-1-7, and 81 lb down and 57 lb up at 4-1-7 on top chord, and 12 lb down at 4-1-7, and 12 lb down at 4-1-7 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: 7=-5(F=-3, B=-3)



April 7, 2020

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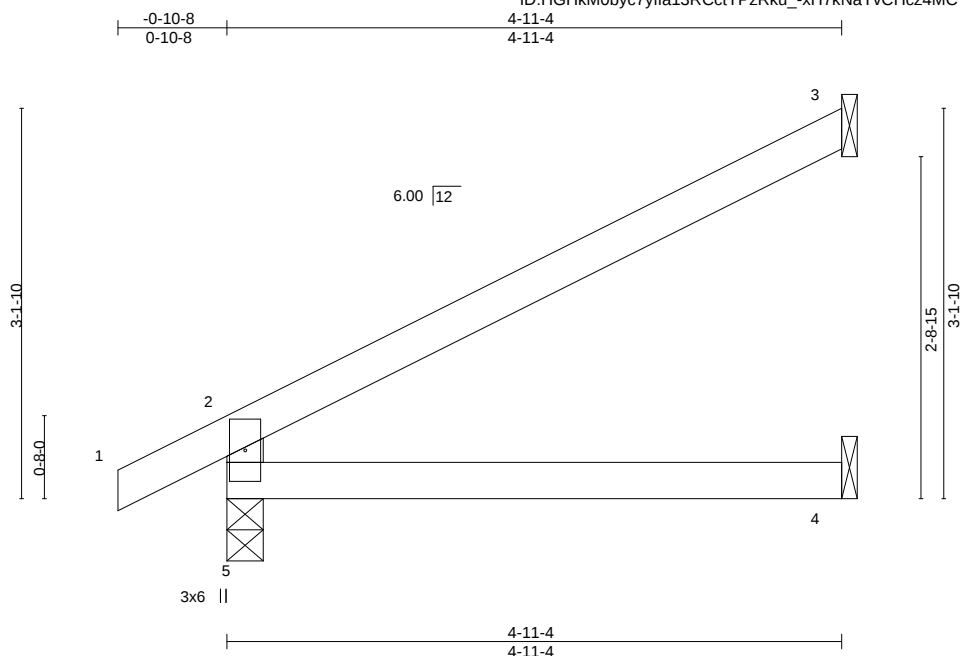
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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 7 15:00:36 2020 Page 1
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8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 7 15:00:36 2020 Page 1
ID:HGhkM0bvc7vfla13RCctYPzRku -xH7kNaYvChcz4MCYiTMjlc21zuTwBklfx3 PVzT46P



Scale = 1:18.5

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	0.34	Vert(LL)	-0.02	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.21	Vert(CT)	-0.05	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.02	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.03	4-5	>999	240	Weight: 13 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=108(LC 8)
Max Uplift 5=-32(LC 8), 3=-81(LC 8)
Max Grav 5=292(LC 1), 3=147(LC 1), 4=89(LC 3)

FORCES.

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-255/78

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 32 lb uplift at joint 5 and 81 lb uplift at joint 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



April 7, 2020



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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	I40902250
400219	J15	Jack-Open	5	1		

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 7 15:00:37 2020 Page 1

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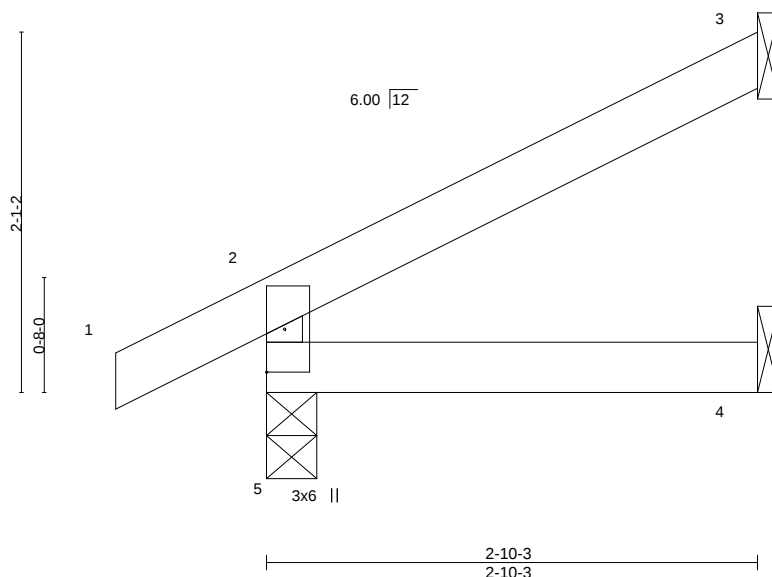


Plate Offsets (X,Y)-- [2:0-0-10,0-1-4], [5:0-0-0,0-1-4]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP		
TCLL	25.0	Plate Grip DOL 1.15		TC	0.09	Vert(LL)	-0.00	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL 1.15		BC	0.06	Vert(CT)	-0.01	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr YES		WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00	4-5	>999	240	Weight: 8 lb	FT = 20%

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 2-10-3 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=66(LC 8)
Max Uplift 5=-26(LC 8), 3=-48(LC 8)
Max Grav 5=202(LC 1), 3=80(LC 1), 4=51(LC 3)

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

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 26 lb uplift at joint 5 and 48 lb uplift at joint 3.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



April 7, 2020

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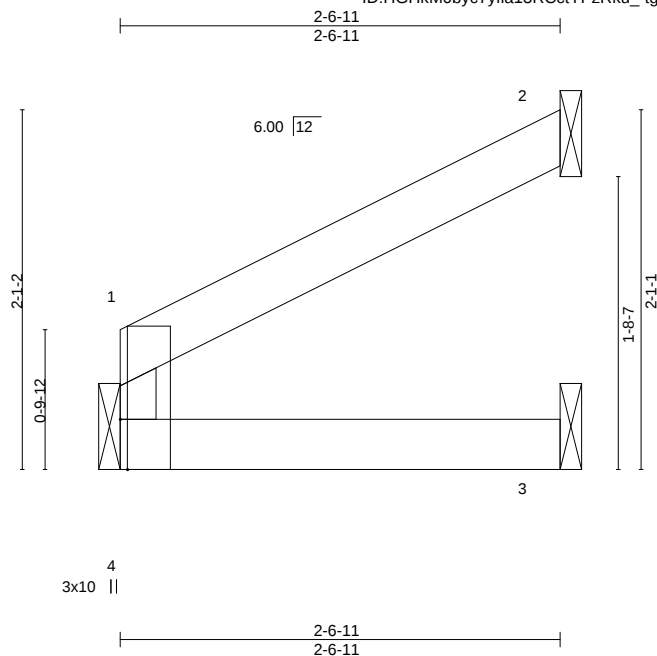
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	I40902251
400219	J16	Jack-Open	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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ID:HGhKMObyc7yfla13RCctYPzRku_-tgFUoGa9jushKfMxpunN17RPndNO5E26FY5HNzT46N



Scale = 1:13.4

Plate Offsets (X,Y)--		[1:0-0-10,0-1-4], [4:0-3-8,Edge], [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 0.09		Vert(LL)		-0.00 3-4 >999 360		MT20		197/144	
TCDL 10.0		Lumber DOL		1.15		BC 0.05		Vert(CT)		-0.00 3-4 >999 240					
BCLL 0.0 *		Rep Stress Incr		YES		WB 0.00		Horz(CT)		-0.00 2 n/a n/a					
BCDL 10.0		Code IRC2018/TPI2014				Matrix-R		Wind(LL)		0.00 3-4 >999 240		Weight: 7 lb		FT = 20%	

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 2-6-11 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

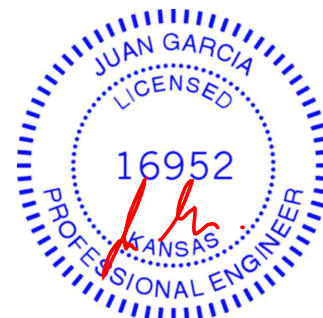
(size) 4=Mechanical, 2=Mechanical, 3=Mechanical
Max Horz 4=42(LC 5)
Max Uplift 2=48(LC 8)
Max Grav 4=108(LC 1), 2=79(LC 1), 3=47(LC 3)

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 48 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.



April 7, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	
400219	J17	Jack-Closed Girder	1	1		I40902252
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

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ID:HGhkM0byc7yfla13RCctYPzRku_-Lsos?cbnUC_Yxpx7NcJ0vFgYLBu77V7CLvleppzT46M

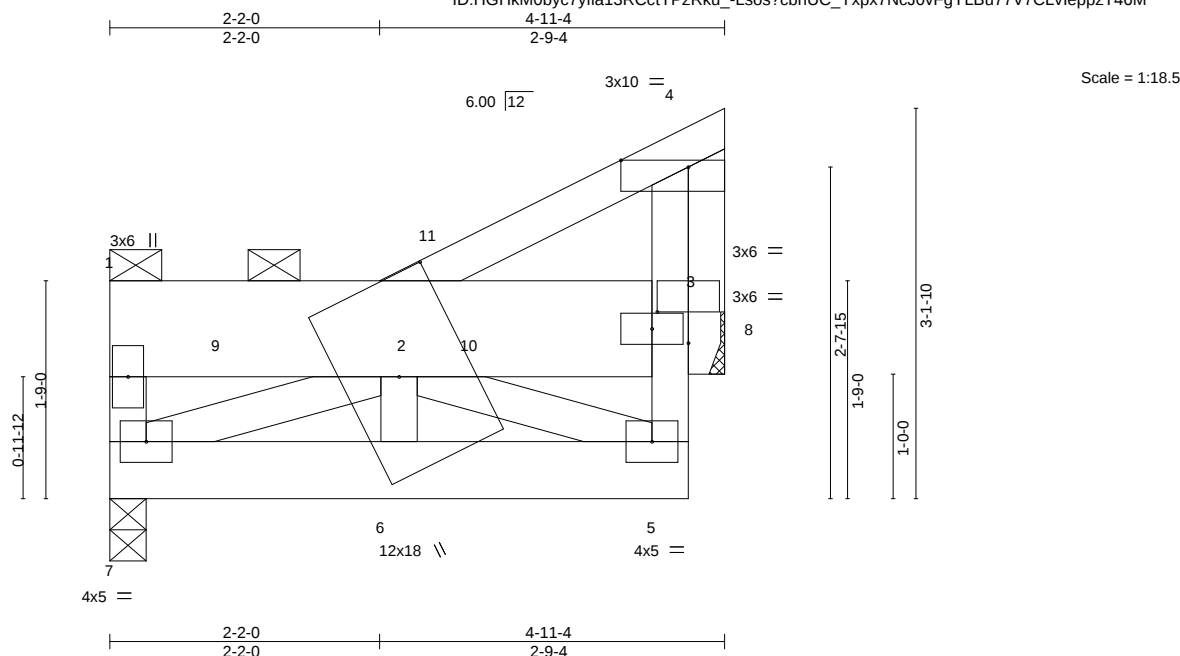


Plate Offsets (X,Y)-- [3:0-3-0,0-3-0], [4:0-6-8,Edge], [6:0-9-0,0-6-12], [6:0-0-13,0-1-9]											
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.33	Vert(LL)	-0.01	6	>999	360	MT20 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	-0.02	6	>999	240	
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.15	Horz(CT)	0.00	8	n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P		Wind(LL)	0.01	6	>999	240	Weight: 39 lb FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
1-3: 2x10 SP DSS
BOT CHORD 2x6 SPF No.2
WEBS 2x4 SPF No.2
OTHERS 2x4 SPF No.2

BRACING-

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

REACTIONS.

(size) 7=0-3-8, 8=Mechanical
Max Horz 7=80(LC 5)
Max Uplift 7=143(LC 4), 8=222(LC 8)
Max Grav 7=868(LC 1), 8=1147(LC 15)

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

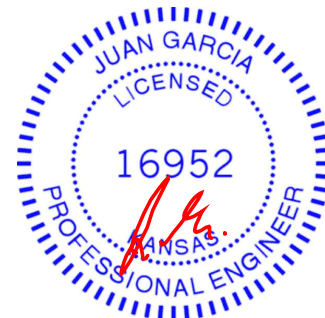
TOP CHORD 1-7=-362/79, 3-5=-92/565, 3-4=-192/1194
BOT CHORD 6-7=-160/937, 5-6=-168/947
WEBS 2-5=-972/187, 2-7=-1018/161, 4-8=-1161/225

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 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 143 lb uplift at joint 7 and 222 lb uplift at joint 8.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 98 lb down and 17 lb up at 1-0-0, and 1614 lb down and 274 lb up at 3-0-0 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
Uniform Loads (plf)
Vert: 1-2=-70, 2-4=-70, 5-7=-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 58 H4	I40902252
400219	J17	Jack-Closed Girder	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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ID:HGhkM0byc7yfla13RCctYPzRku_-Lsos?cbnUC_Yxpx7NcJ0vFgYLBu77V7CLvieppzT46M

LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 9=-89(B) 10=-1470(B)

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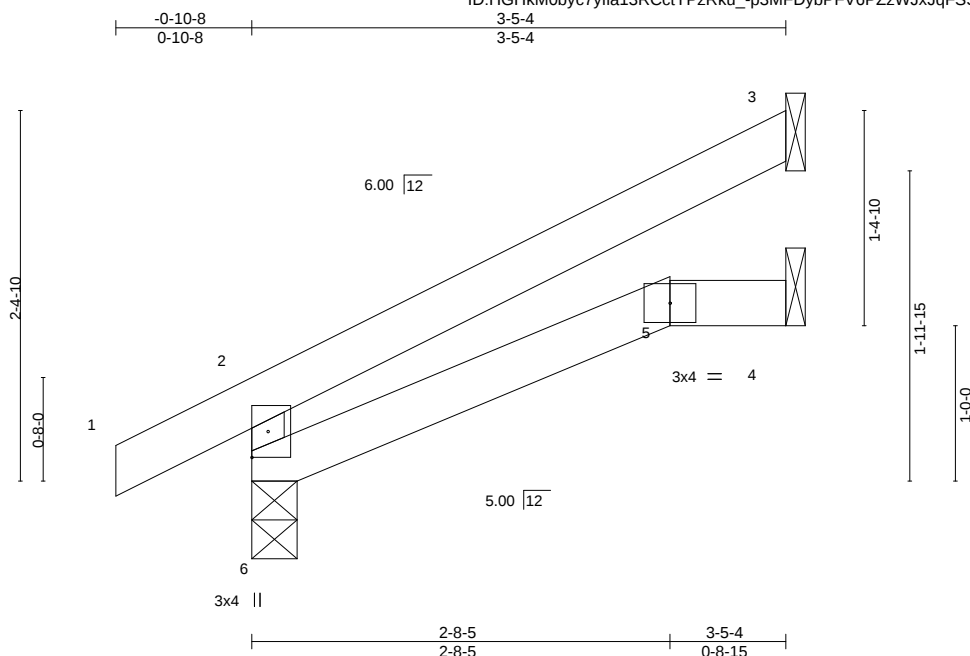
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	I40902253
400219	J18	Jack-Open	4	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

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ID:HGhK0byc7yfla13RCctYPzRku_-p3MFDybPFV6PZzWJxJqFSSDmyaHCs_jLaZ1BMGzT46L



Scale = 1:14.8

Plate Offsets (X,Y)--		[2-0-0-10,0-1-4], [6-0-0-8,0-1-4]	
LOADING (psf)	SPACING-	CSI.	DEFL.
TCLL 25.0	Plate Grip DOL 1.15	TC 0.15	in (loc) l/defl L/d
TCDL 10.0	Lumber DOL 1.15	BC 0.09	Vert(LL) -0.01 5-6 >999 360
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Vert(CT) -0.01 5-6 >999 240
BCDL 10.0	Code IRC2018/TPI2014	Matrix-R	Horz(CT) -0.01 3 n/a n/a
			Wind(LL) 0.01 5-6 >999 240
			PLATES GRIP
			MT20 197/144
			Weight: 10 lb FT = 20%

LUMBER-

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

BRACING-

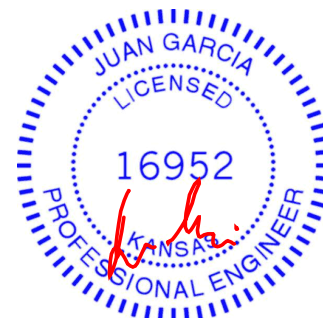
TOP CHORD Structural wood sheathing directly applied or 3-5-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 6=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 6=77(LC 8)
Max Uplift 6=26(LC 8), 3=60(LC 8)
Max Grav 6=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-

- Wind: ASCE 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) 6 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 26 lb uplift at joint 6 and 60 lb uplift at joint 3.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



April 7, 2020

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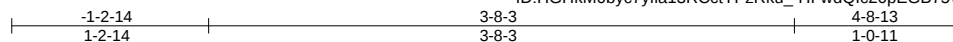
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	I40902254
400219	J19	Diagonal Hip Girder	1	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

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ID:HGhkM0byc7yfla13RCctYPzRku_HFwdQlc20pEGB75WV1LU?glwM_dtbRJUoDnluzT46K



Scale = 1:14.5

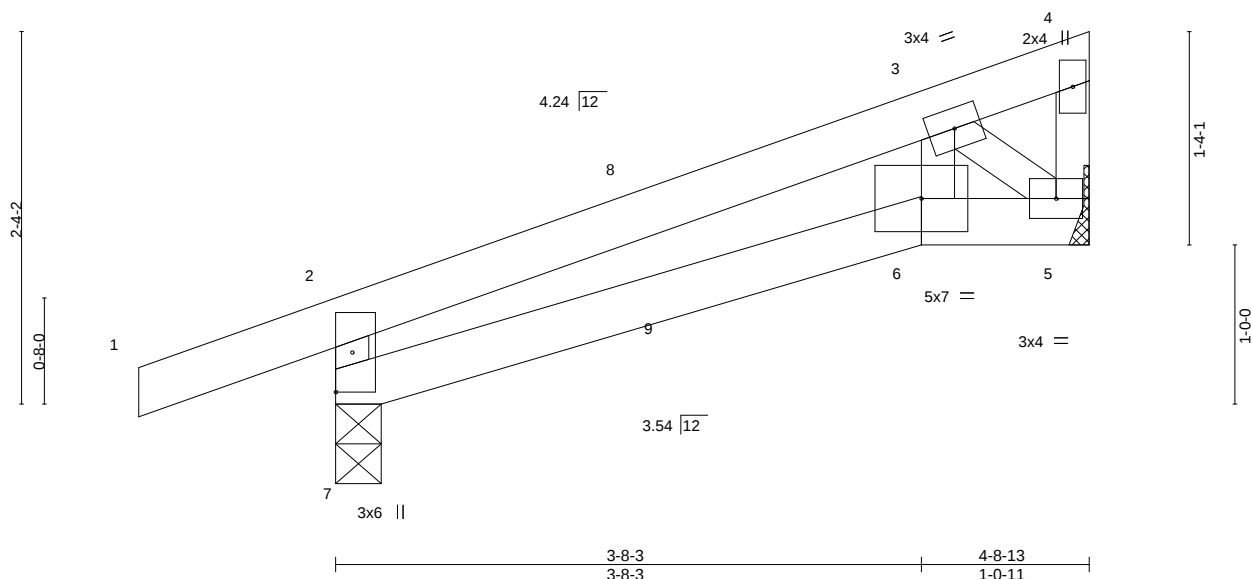


Plate Offsets (X,Y)--	[2:0-0-7,0-1-4], [7:0-0-6,0-1-4]
-----------------------	----------------------------------

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 0.23	Vert(LL)	-0.01	6-7	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.13	Vert(CT)	-0.02	6-7	>999	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.04	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.00	6	>999	240	Weight: 15 lb	FT = 20%

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 4-8-13 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 7=0-3-7, 5=Mechanical
Max Horz 7=82(LC 5)
Max Uplift 7=92(LC 4), 5=45(LC 8)
Max Grav 7=309(LC 1), 5=188(LC 1)

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

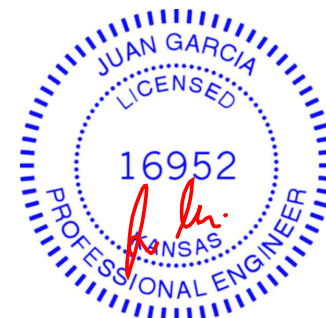
TOP CHORD 2-7=-319/128, 2-3=-265/57

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 92 lb uplift at joint 7 and 45 lb uplift at joint 5.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 67 lb down and 23 lb up at 1-11-15, and 67 lb down and 23 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.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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



April 7, 2020

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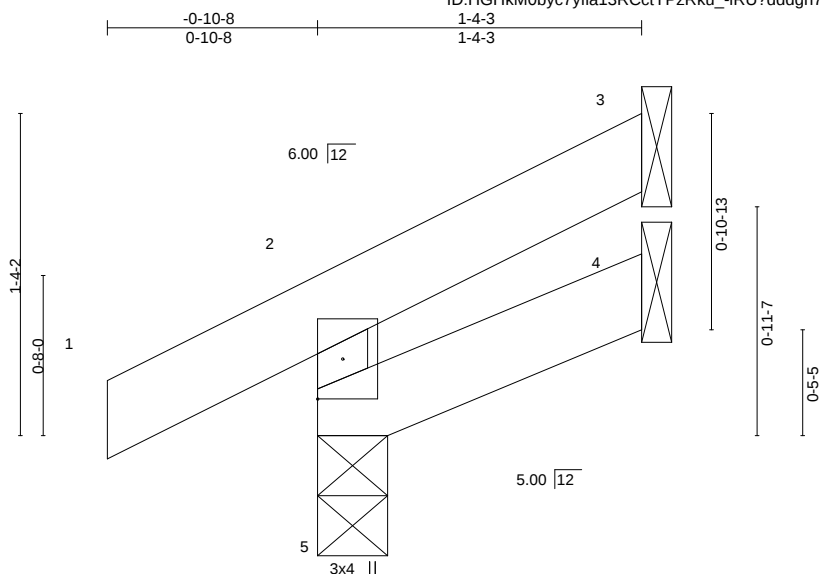
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	
400219	J20	Jack-Open	2	1		I40902255
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 7 15:00:42 2020 Page 1

ID:HGhkM0byc7yfla13RCctYPzRku_IRU?ddgn7M7oHgi2ktjXtl7IO_wKuDe1tWIQ8zT46J



Scale = 1:9.6

Plate Offsets (X,Y)-- [2:0-0-10,0-1-4], [5:0-0-8,0-1-4]												
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	0.01	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 = 20%

LUMBER-

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

BRACING-

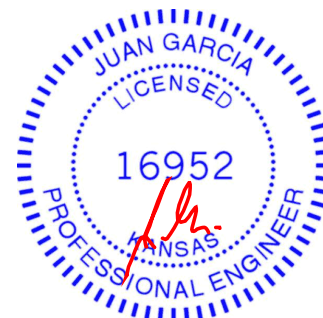
TOP CHORD Structural wood sheathing directly applied or 1-4-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=36(LC 8)
Max Uplift 5=24(LC 8), 3=20(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-

- Wind: ASCE 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) 5 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 24 lb uplift at joint 5 and 20 lb uplift at joint 3.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



April 7, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	I40902256
400219	J21	Jack-Closed Girder	1	1	Job Reference (optional)	

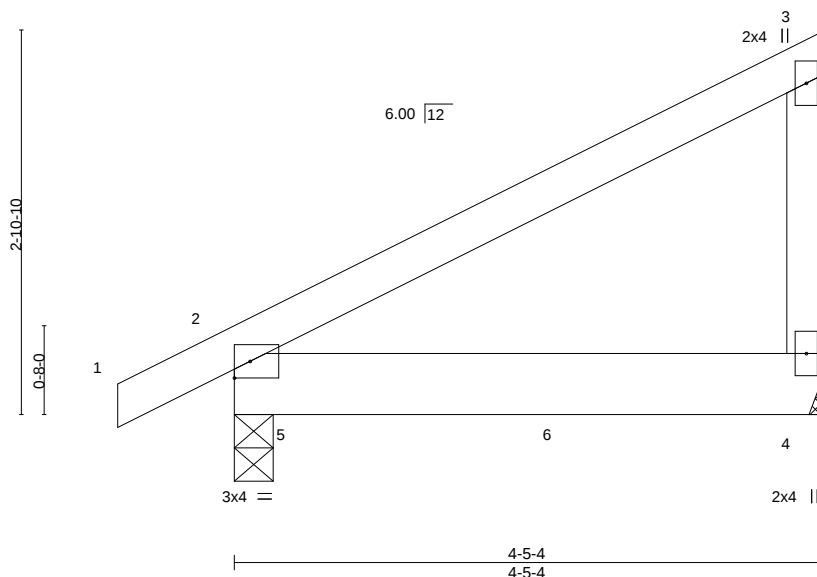
Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 7 15:00:43 2020 Page 1

ID:HGhkM0byc7yfla13RCctYPzRku_-Dd2NrzeIYQU_QRFucROy45qDKoD13LTnGXGsybzt46l

0-10-8 4-5-4
0-10-8 4-5-4

Scale = 1:17.3



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 0.40	Vert(LL)	-0.02	2-4	>999	360	MT20	197/144
BCLL 10.0	Lumber DOL	1.15	BC 0.47	Vert(CT)	-0.04	2-4	>999	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P	Wind(LL)	0.02	2-4	>999	240		
									Weight: 17 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 4=Mechanical, 2=0-3-8
Max Horz 2=104(LC 5)
Max Uplift 4=95(LC 8), 2=-136(LC 8)
Max Grav 4=402(LC 1), 2=731(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 95 lb uplift at joint 4 and 136 lb uplift at joint 2.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 345 lb down and 68 lb up at 0-6-0, and 344 lb down and 83 lb up at 2-6-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-70, 2-4=-20
Concentrated Loads (lb)
Vert: 5=-345(B) 6=-344(B)



April 7, 2020

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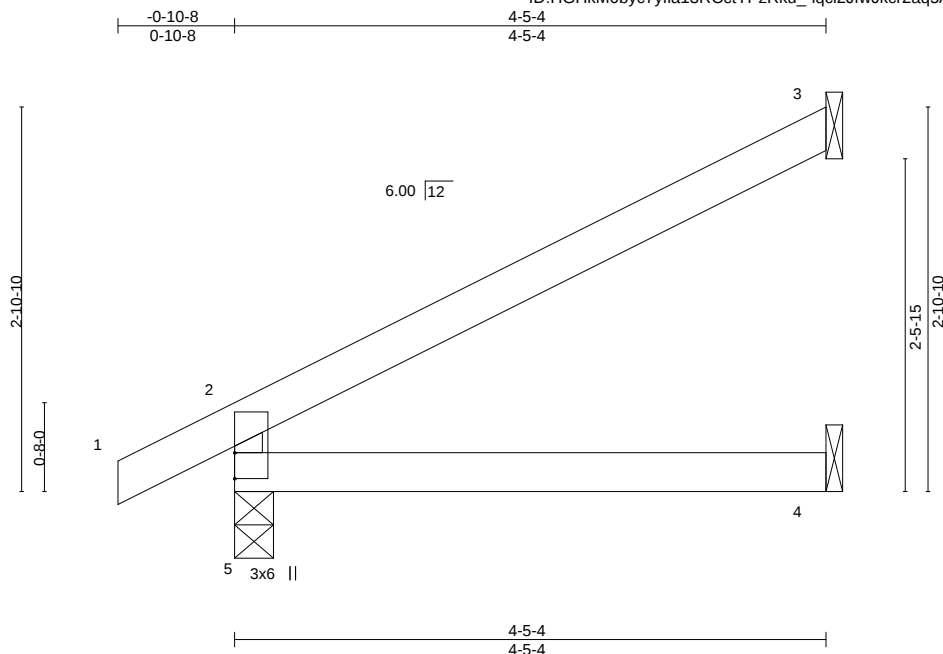
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	
400219	J22	Jack-Open	12	1		I40902257
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 7 15:00:44 2020 Page 1

ID:HGhkM0byc7yfla13RCctYPzRku_-iqcl2JfwJkcr2aq5A9vBclNQyCewoojxUB?PV1zT46H



Scale = 1:17.3

Plate Offsets (X,Y)-- [2:0-0-10,0-1-4], [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	0.28	Vert(LL)	-0.02	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.17	Vert(CT)	-0.04	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.02	4-5	>999	240	Weight: 12 lb	FT = 20%

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 4-5-4 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=98(LC 8)
Max Uplift 5=-30(LC 8), 3=-76(LC 8)
Max Grav 5=269(LC 1), 3=134(LC 1), 4=81(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 30 lb uplift at joint 5 and 76 lb uplift at joint 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



April 7, 2020

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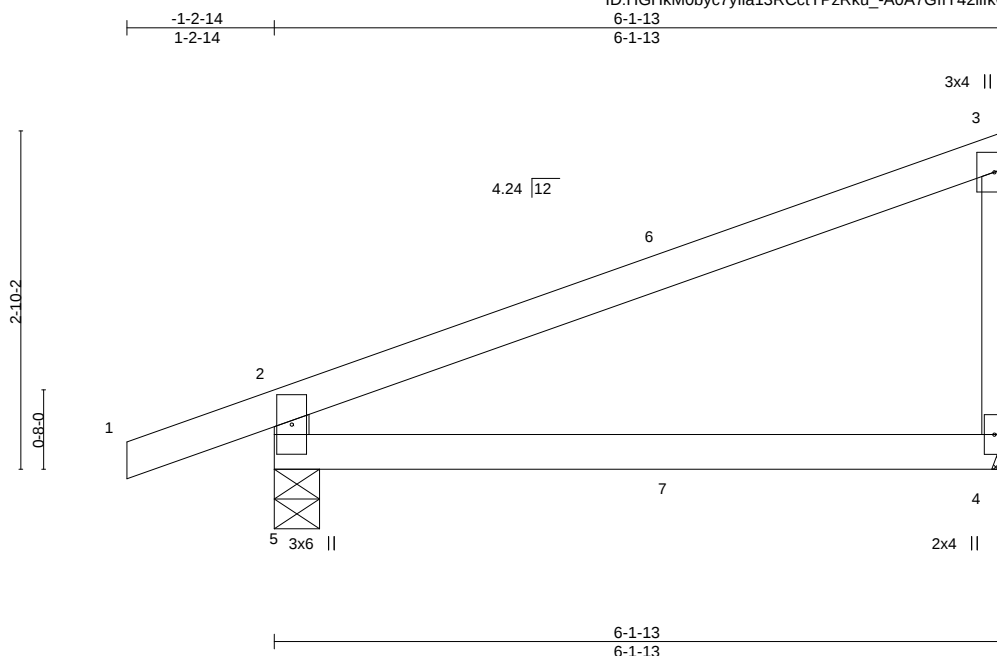
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	I40902258
400219	J23	Diagonal Hip Girder	1	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 7 15:00:45 2020 Page 1

ID:HGhkM0byc7yfla13RCctYPzRku_-A0A7GffY42lifoHksQQ9WwXlbypXFz4jrly1TzT46G



Scale = 1:19.3

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 0.53	Vert(LL)	-0.05	4-5	>999	360	MT20
BCDL 10.0	Lumber DOL	1.15	BC 0.32	Vert(CT)	-0.10	4-5	>690	240	197/144
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.00	Horz(CT)	-0.00	4	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.02	4-5	>999	240	
								Weight: 18 lb	FT = 20%

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=120(LC 22)
 Max Uplift 5=-105(LC 4), 4=-57(LC 8)
 Max Grav 5=374(LC 1), 4=255(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-5=-329/149

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 105 lb uplift at joint 5 and 57 lb uplift at joint 4.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 73 lb down and 46 lb up at 3-4-15, and 73 lb down and 46 lb up at 3-4-15 on top chord, and 6 lb down at 3-4-15, and 6 lb down at 3-4-15 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 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=-2(F=-1, B=-1)



April 7, 2020

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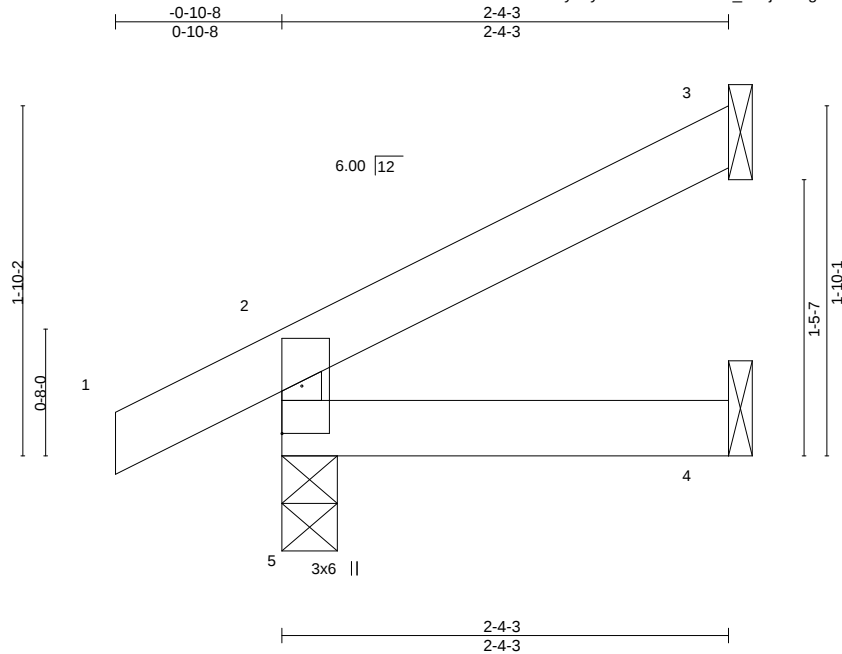


16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	I40902259
400219	J24	Jack-Open	2	1		
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 7 15:00:46 2020 Page 1
ID:HGhkM0byc7yfla13RCctYPzRku_-eCjWT?gArLtZHuzTHaxfijSpl?LQGicEYVUWZwzT46F



Scale: 1"=1'

Plate Offsets (X,Y)--		[2:0-0-10,0-1-4], [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	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 = 20%

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 10-0-0 oc bracing.

REACTIONS.

(size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=56(LC 8)
Max Uplift 5=-26(LC 8), 3=-39(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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 26 lb uplift at joint 5 and 39 lb uplift at joint 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



April 7, 2020

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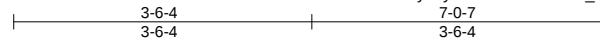
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	
400219	LAY1	GABLE	1	1		I40902260
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

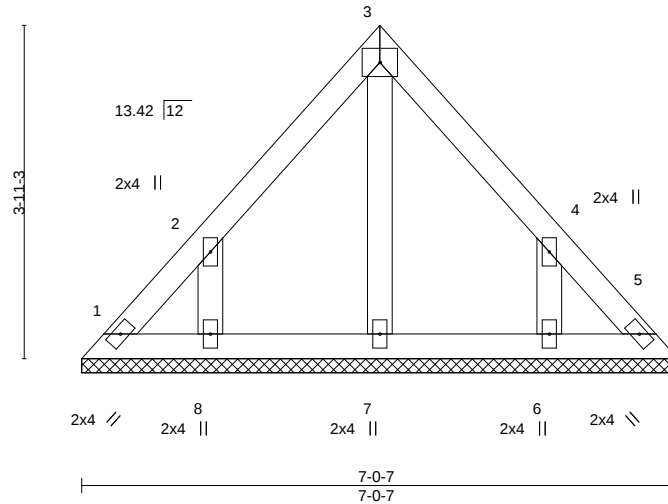
8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 7 15:00:52 2020 Page 1

ID:HGhkM0byc7yfla13RCctYPzRku_-TM5nk2lxQBdi?pRdeq23x_irTQO0gQE6KRxnZzT469



4x5 =

Scale = 1:27.2



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.05	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 25 lb	FT = 20%

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 7-0-7.
(lb) - Max Horz 1=-96(LC 4)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-144(LC 8), 6=-144(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=144, 6=144.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



April 7, 2020

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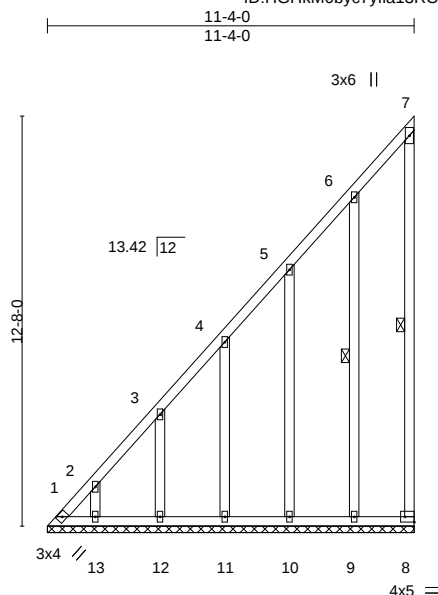
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	140902261
400219	LAY2	GABLE	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 7 15:00:57 2020 Page 1

ID:HGhkM0byc7yfla13RCctYPzRku_-pKugmp4FkF?5aJaROeEe2QcyR29Le7rUifbSnzT464



Scale = 1:71.2

Plate Offsets (X,Y)--	[8:Edge,0-2-0]								
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 0.39	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.28	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.18	Horz(CT)	-0.00	8	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S					Weight: 77 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF 2400F 2.0E
OTHERS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 7-8, 6-9

REACTIONS.

All bearings 11-4-0.
(lb) - Max Horz 1=482(LC 5)
Max Uplift All uplift 100 lb or less at joint(s) except 1=-252(LC 6), 8=-202(LC 7), 13=-120(LC 8), 12=-138(LC 8), 11=-139(LC 8), 10=-128(LC 8), 9=-152(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 8, 13, 12, 11, 10, 9 except 1=415(LC 5)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-556/374, 2-3=-497/333, 3-4=-418/278, 4-5=-357/232, 5-6=-338/233

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
- 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 252 lb uplift at joint 1, 202 lb uplift at joint 8, 120 lb uplift at joint 13, 138 lb uplift at joint 12, 139 lb uplift at joint 11, 128 lb uplift at joint 10 and 152 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.



April 7, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	I40902262
400219	LAY3	GABLE	1	1		

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 7 15:00:58 2020 Page 1

ID:HGhkM0byc7yfla13RCctYPzRku_-HWS2_6pi01Nsjkun_59TBFysarS_451?iMO8_DzT463

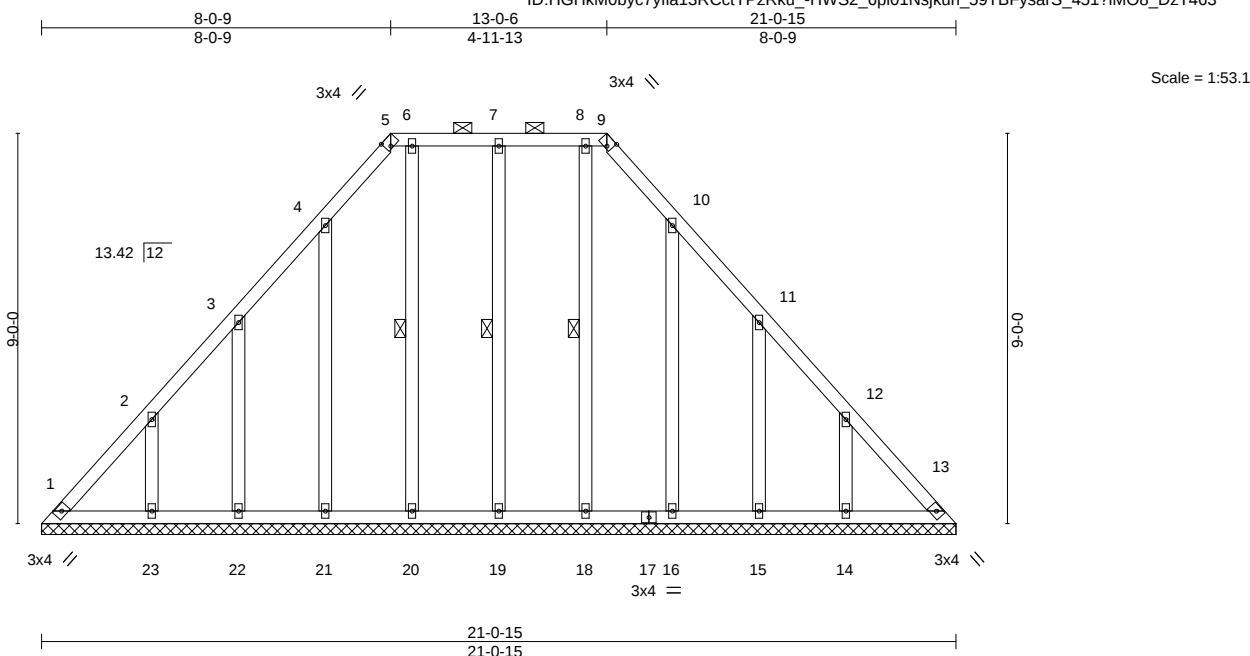


Plate Offsets (X,Y)--		[5:0-1-6,Edge], [9:0-1-6,Edge]								
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0		Plate Grip DOL 1.15		TC 0.07		Vert(LL) n/a	-	n/a	999	MT20 197/144
TCDL 10.0		Lumber DOL 1.15		BC 0.05		Vert(CT) n/a	-	n/a	999	
BCLL 0.0 *		Rep Stress Incr YES		WB 0.14		Horz(CT) 0.01	13	n/a	n/a	
BCDL 10.0		Code IRC2018/TPI2014		Matrix-S						Weight: 116 lb FT = 20%

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" oc purlins, except 2'-0" oc purlins (6'-0" max.): 5-9.
BOT CHORD Rigid ceiling directly applied or 10'-0" oc bracing.
WEBS 1 Row at midpt 7-19, 6-20, 8-18

REACTIONS.

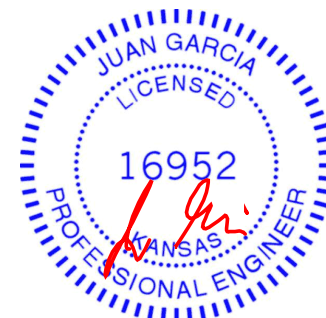
All bearings 21-0-15.
(lb) - Max Horz 1=-235(LC 4)
Max Uplift All uplift 100 lb or less at joint(s) 1, 13, 19, 20 except 21=-113(LC 8), 22=-136(LC 8), 23=-162(LC 8), 16=-107(LC 9), 15=-138(LC 9), 14=-162(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 1, 13, 19, 20, 21, 22, 18, 16, 15 except 23=251(LC 15), 14=251(LC 16)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-315/206, 12-13=-280/151

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" tall by 2'-0" wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 13, 19, 20 except (jt=lb) 21=113, 22=136, 23=162, 16=107, 15=138, 14=162.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 7, 2020

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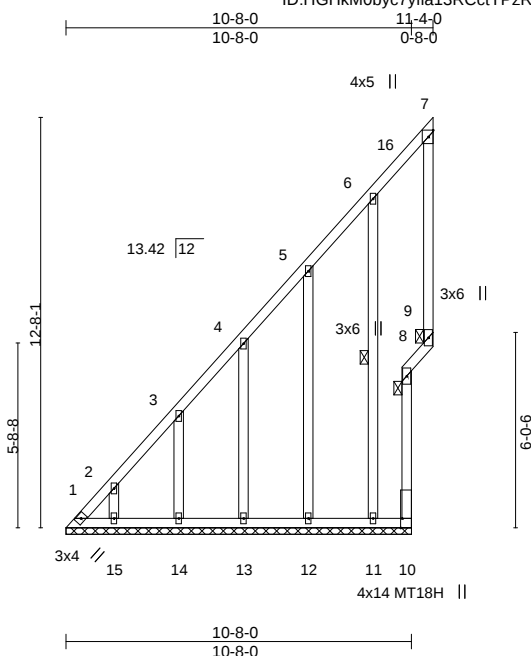


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	I40902263
400219	LAY4	GABLE	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 7 15:01:00 2020 Page 1
ID:HGhkM0byc7yfla13RCctYPzRku_-EvaoPnryYfdZz2296WBxGg24?e1Y?RHAgTf36zT461



Scale = 1:71.1

Plate Offsets (X,Y)--	10:0-3-8,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 0.59	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.42	Vert(CT)	n/a	-	n/a	MT18H	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.14	Horz(CT)	-0.00	10	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R						
								Weight: 77 lb	FT = 20%

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" oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6'-0" oc bracing.
WEBS 1 Row at midpt 6-11
JOINTS 1 Brace at Jt(s): 8, 9

REACTIONS.

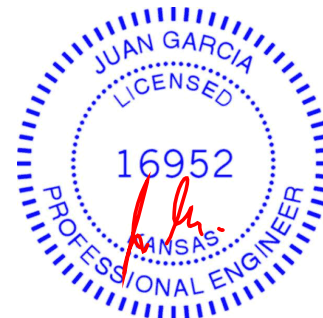
All bearings 10'-8-0.
(lb) - Max Horz 1=496(LC 5)
Max Uplift All uplift 100 lb or less at joint(s) except 1=-261(LC 6), 10=-317(LC 7), 15=-120(LC 8), 14=-138(LC 8), 13=-135(LC 8), 12=-145(LC 8), 11=-215(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 15, 14, 13, 12, 11 except 1=431(LC 8), 10=262(LC 4)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-586/386, 2-3=-504/345, 3-4=-427/292, 4-5=-341/234, 5-6=-344/235
WEBS 6-11=-302/281

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
- All plates are MT20 plates unless otherwise indicated.
- 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" tall by 2'-0" wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 261 lb uplift at joint 1, 317 lb uplift at joint 10, 120 lb uplift at joint 15, 138 lb uplift at joint 14, 135 lb uplift at joint 13, 145 lb uplift at joint 12 and 215 lb uplift at joint 11.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 7, 2020

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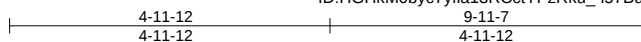
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	I40902264
400219	LAY5	GABLE	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

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ID:HGhKM0byc7yfla13RCctYPzRku_-i57Bd7saJymQaCdMgDiApuaO92TzHUJRPKdpbYzT460



Scale = 1:35.8

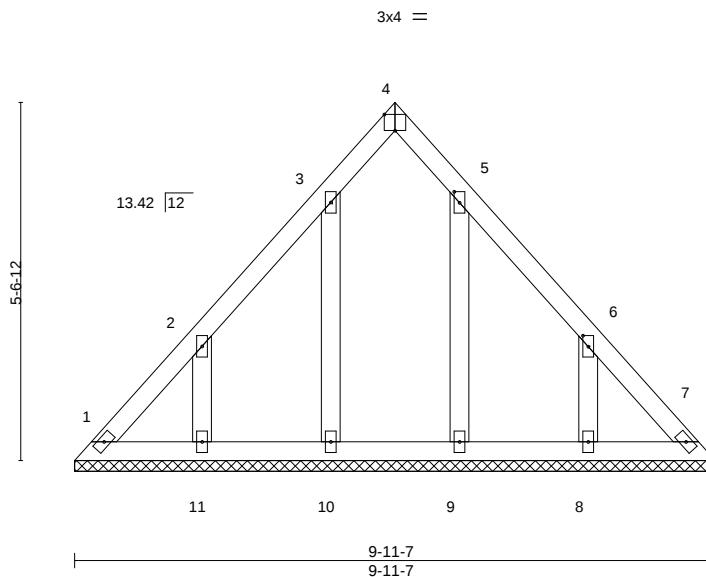


Plate Offsets (X,Y)-- [4:Edge,0-3-0], [5:0-2-1,0-1-0], [6:0-2-1,0-1-0]										
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES	GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	n/a - n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a - n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00 7 n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S					Weight: 40 lb	FT = 20%

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 9-11-7.
(lb) - Max Horz 1=-140(LC 4)
Max Uplift All uplift 100 lb or less at joint(s) 1, 7, 10, 9 except 11=-150(LC 8), 8=-151(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 1, 7, 11, 10, 9, 8

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
- 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, 7, 10, 9 except (jt=lb) 11=150, 8=151.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



April 7, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	
400219	LAY6	GABLE	1	1		I40902265
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 7 15:01:02 2020 Page 1

ID:HGhkM0byc7yfla13RCctYPzRku_-AHhZqTsD4GuHCLCYDXEPL57TaSoT0qQad_MM7_zT46?

5-5-4 9-8-0
5-5-4 4-2-12

3x4 =

Scale = 1:122.0

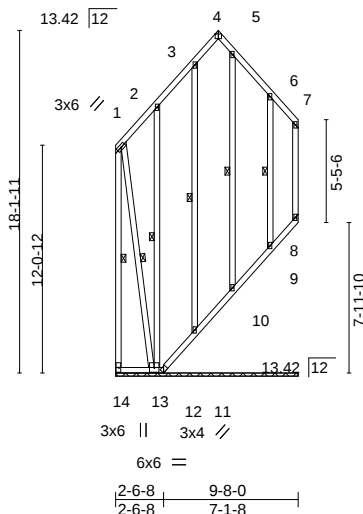


Plate Offsets (X,Y)--		[4:Edge,0-3-0]										
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.39	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.50	Horz(CT)	-0.00	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 122 lb FT = 20%		

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 1-14, 2-13, 3-11, 5-10, 6-9, 1-13

REACTIONS.

All bearings 9-8-0.
(lb) - Max Horz 14=154(LC 5)
Max Uplift All uplift 100 lb or less at joint(s) 12, 11 except 14=800(LC 6), 8=118(LC 5), 13=874(LC 8), 9=234(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 8, 12, 11, 10 except 14=907(LC 5), 13=889(LC 6), 9=276(LC 16)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-14=-890/810
WEBS 1-13=-734/791

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; 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) 12, 11 except (jt=lb) 14=800, 8=118, 13=874, 9=234.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 8, 11, 10, 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.



April 7, 2020

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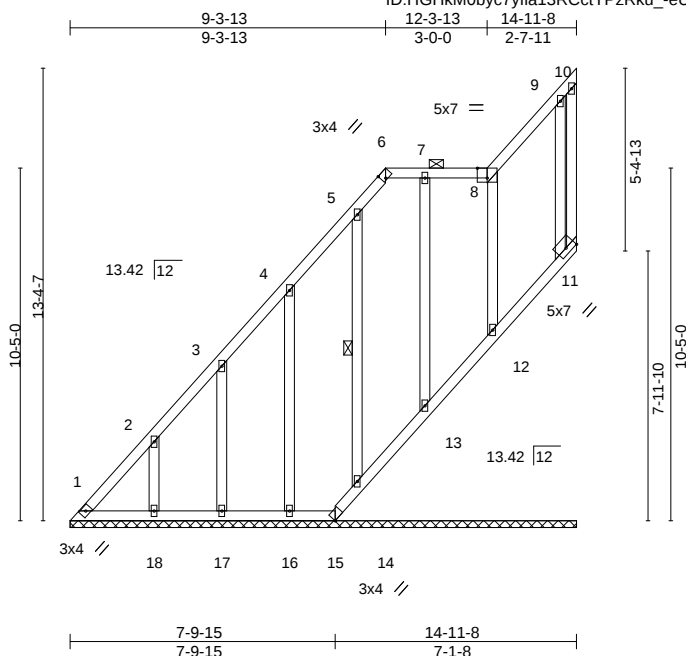
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	I40902266
400219	LAY7	GABLE	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 7 15:01:03 2020 Page 1

ID:HGhkM0byc7yfla13RCctYPzRku_-eUFx2ptrra08qVmknleuJfjls9HkMKkse6vgQzT46_



Scale = 1:68.1

Plate Offsets (X,Y)-- [6:0-1-6,Edge], [8:0-3-8,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	0.11	Vert(LL)	n/a - n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a - n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.13	Horz(CT)	-0.00 11	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S					Weight: 94 lb	FT = 20%

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.): 6-8.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 11-12.
WEBS 1 Row at midpt 5-14

REACTIONS.

All bearings 14-11-8.
(lb) - Max Horz 1=424(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 15, 13, 12 except 1=179(LC 6), 11=163(LC 7), 18=161(LC 8), 17=129(LC 8), 16=134(LC 8), 14=161(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 11, 15, 18, 17, 16, 14, 13, 12 except 1=458(LC 8)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-635/321, 2-3=-483/257, 3-4=-349/207

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- 3) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 15, 13, 12 except (jt=lb) 1=179, 11=163, 18=161, 17=129, 16=134, 14=161.
- 8) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 11, 14, 13, 12.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 7, 2020

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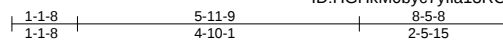
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	I40902267
400219	LAY8	GABLE	1	1		

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 7 15:01:04 2020 Page 1

ID:HGhK0M0byc7yfla13RCctYPzRku_-6gpJF9uTct8?RfLxLMGtQWCvPGVjTrCt5lrTbtzT45z



Scale = 1:39.5

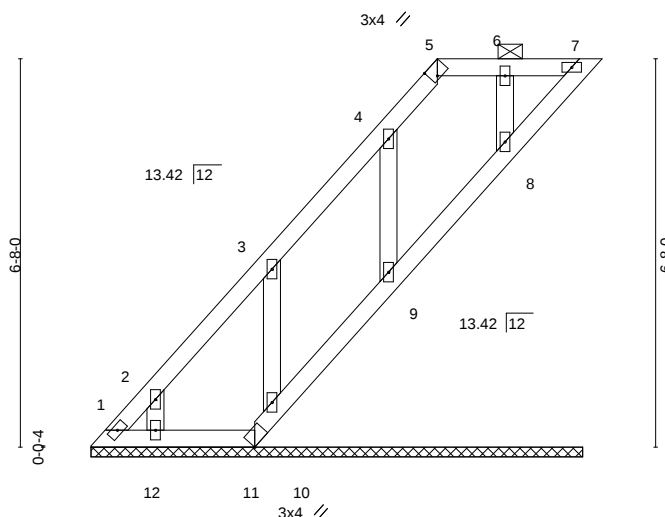


Plate Offsets (X,Y)--		[5:0-1-6,Edge]									
LOADING	(psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC 0.05	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB 0.03	Horz(CT)	-0.00	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 34 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 8-5-4.
(lb) - Max Horz 1=260(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1, 7, 11, 9, 8 except 10=158(LC 8), 12=108(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 7, 11, 10, 9, 8, 12 except 1=251(LC 8)

FORCES.

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

TOP CHORD 1-2=340/143

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- All plates are 2x4 MT20 unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3'-6-0 tall by 2'-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7, 11, 9, 8 except (jt=lb) 10=158, 12=108.
- Non Standard bearing condition. Review required.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 7, 2020

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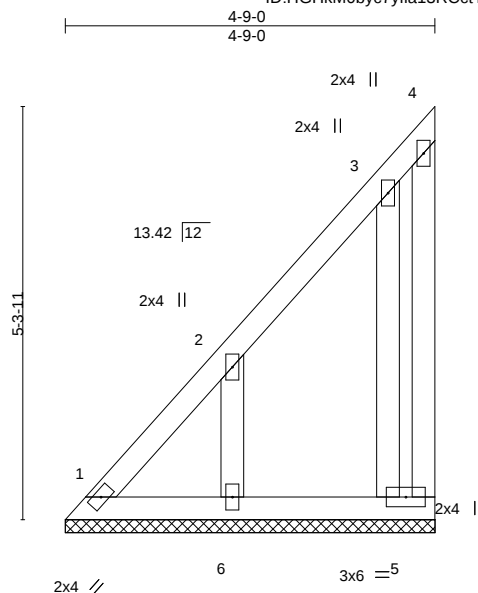
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	I40902268
400219	LAY9	GABLE	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 7 15:01:05 2020 Page 1

ID:HGhkM0byc7yfla13RCctYPzRku_-asNhSVv5MBGs3pw7v3n6zkl2YfqvCIK1Kyb0jJzT45y



Scale = 1:29.6

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 0.16	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 0.04	Horz(CT)	-0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 25 lb	FT = 20%

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 4-9-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=4-9-0, 5=4-9-0, 6=4-9-0
Max Horz 1=190(LC 5)
Max Uplift 1=-57(LC 4), 5=-91(LC 5), 6=-151(LC 8)
Max Grav 1=147(LC 7), 5=145(LC 15), 6=239(LC 15)

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, 5 except (jt=lb) 6=151.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



April 7, 2020

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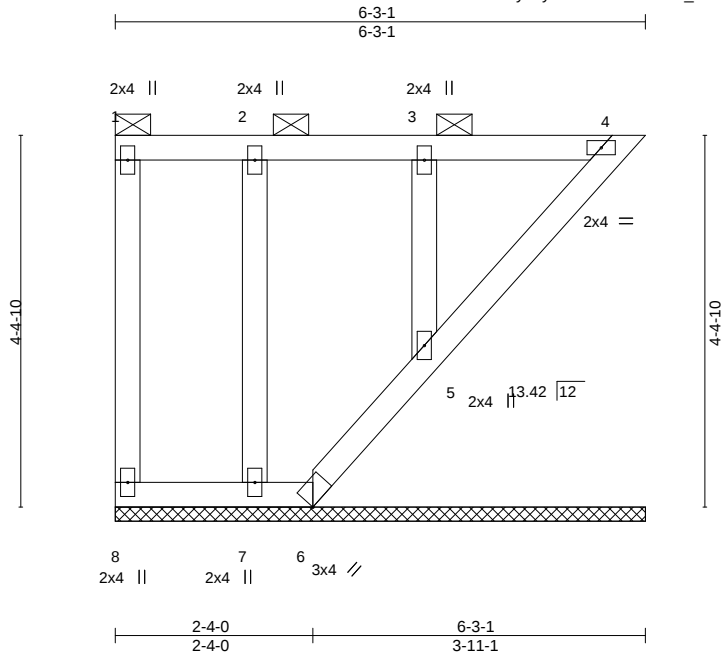


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	
400219	LAY10	GABLE	1	1		I40902269
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 7 15:00:53 2020 Page 1
ID:HGhkM0byc7yfla13RCctYPzRku_-xZf9xOIZBVIZdz0pCYZIUcf?Nqk1PtMGZ4hNJ0zT468



Scale = 1:27.2

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.10	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 0.04	Horz(CT)	0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 27 lb	FT = 20%

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 2-0-0 oc purlins: 1-4, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 4-5.

REACTIONS.

All bearings 6-3-1.
(lb) - Max Horz 8=-116(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) 8, 4, 6, 7, 5
Max Grav All reactions 250 lb or less at joint(s) 8, 4, 6, 7, 5

FORCES.

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

NOTES-

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



April 7, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	I40902270
400219	LAY11	GABLE	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 7 15:00:55 2020 Page 1
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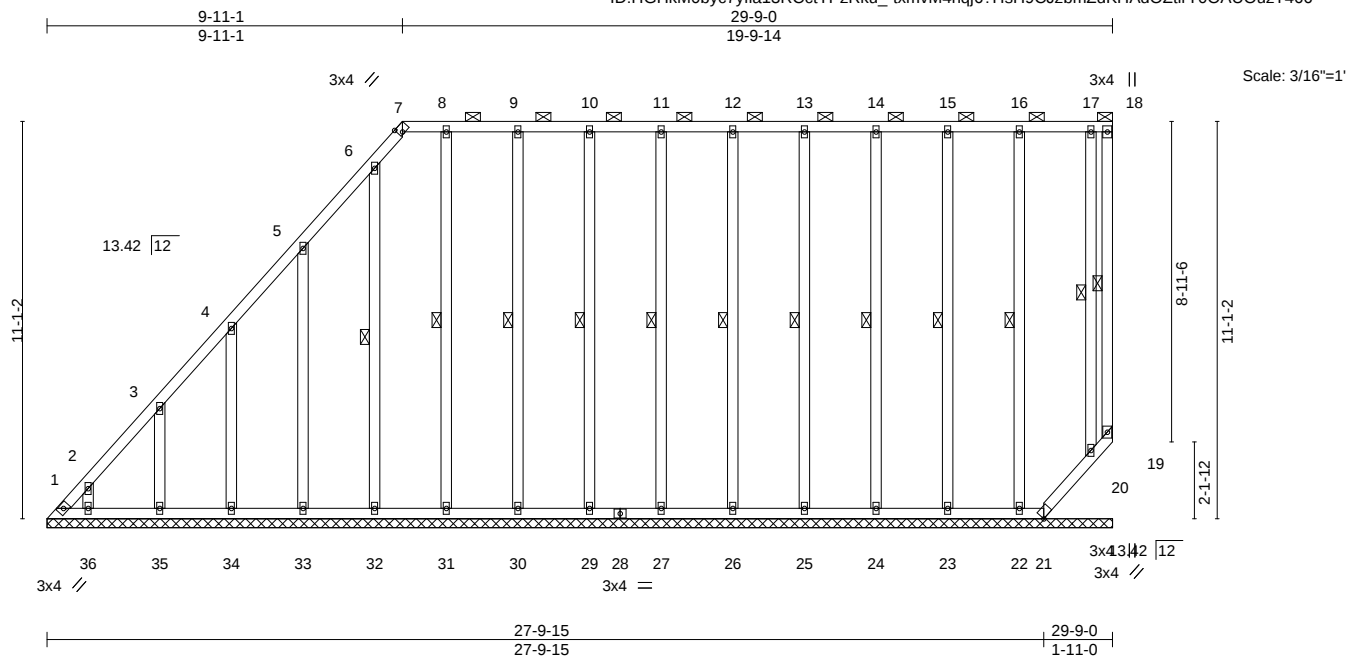


Plate Offsets (X,Y)-- [7:0-1-6,Edge]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES	GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.34	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.17	Horz(CT)	-0.01	19	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 232 lb	FT = 20%

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.): 7-18.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 19-20.
WEBS 1 Row at midpt 18-19, 6-32, 8-31, 9-30, 10-29, 11-27, 12-26, 13-25, 14-24, 15-23, 16-22, 17-20

REACTIONS.

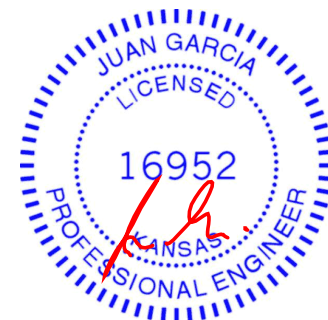
All bearings 29-9-0.
(lb) - Max Horz 1=395(LC 5)
Max Uplift All uplift 100 lb or less at joint(s) 21, 31, 30, 29, 27, 26, 25, 24, 23, 22 except 1=229(LC 6), 19=287(LC 7), 36=113(LC 8), 35=140(LC 8), 34=132(LC 8), 33=154(LC 8), 32=109(LC 5), 20=154(LC 4)
Max Grav All reactions 250 lb or less at joint(s) 19, 21, 36, 35, 34, 33, 32, 31, 30, 29, 27, 26, 25, 24, 23, 22, 20 except 1=389(LC 8)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-521/323, 2-3=-422/287, 3-4=-343/231, 4-5=-270/179
BOT CHORD 19-20=-411/303

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) 21, 31, 30, 29, 27, 26, 25, 24, 23, 22 except (jt=lb) 1=229, 19=287, 36=113, 35=140, 34=132, 33=154, 32=109, 20=154.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 19, 20.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 7,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	i40902271
400219	LAY12	GABLE	1	1		

Wheeler Lumber, Waverly, KS 66871

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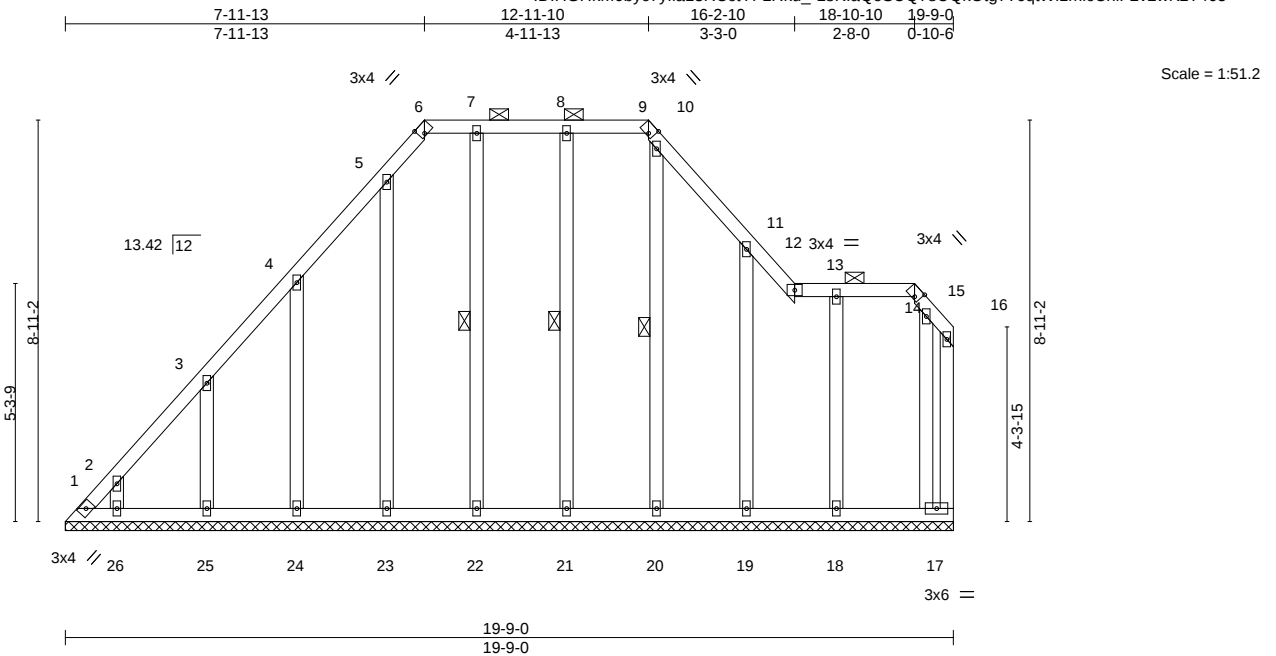


Plate Offsets (X,Y)--		[6:0-1-6,Edge], [9:0-1-6,Edge], [14:0-1-6,Edge]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.10
TCDL 10.0	Lumber DOL	1.15	BC 0.04
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.19
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S
			DEFL.
			in (loc) l/defl L/d
			Vert(LL) n/a - n/a 999
			Vert(CT) n/a - n/a 999
			Horz(CT) -0.00 17 n/a n/a
			PLATES
			MT20
			GRIP
			197/144
			Weight: 121 lb FT = 20%

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.): 6-9, 12-14.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 7-22, 8-21, 10-20

REACTIONS.

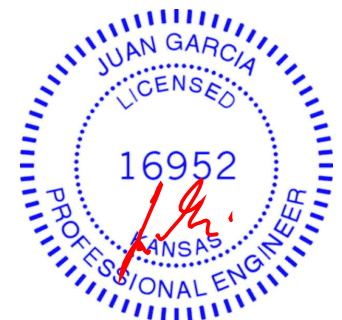
All bearings 19-9-0.
(lb) - Max Horz 1=285(LC 7)
Max Uplift All uplift 100 lb or less at joint(s) 17, 23, 22, 21, 20, 18 except 1=214(LC 6), 26=115(LC 8), 25=134(LC 8), 24=160(LC 8), 19=146(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 17, 26, 25, 24, 23, 22, 21, 20, 19, 18 except 1=265(LC 5)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-354/303, 2-3=-300/267, 3-4=-255/234

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) 17, 23, 22, 21, 20, 18 except (it=lb) 1=214, 26=115, 25=134, 24=160, 19=146.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 7, 2020

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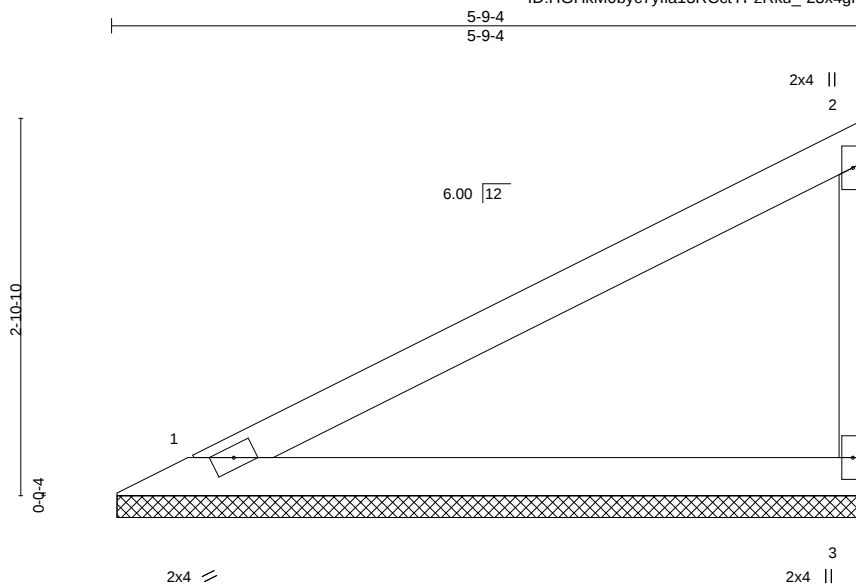


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	I40902272
400219	V1	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 7 15:01:06 2020 Page 1
ID:HGhkM0byc7yfla13RCctYPzRku_-23x4grwj7VOjhzVJSnLVxH8236Yxl9AYcKZGlzT45x



Scale = 1:17.6

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.49	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.27	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 15 lb	FT = 20%

LUMBER-

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

BRACING-

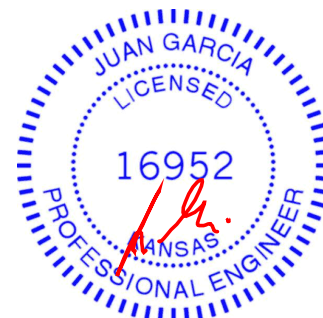
TOP CHORD Structural wood sheathing directly applied or 5-9-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=5-8-12, 3=5-8-12
Max Horz 1=105(LC 7)
Max Uplift 1=-29(LC 8), 3=-56(LC 8)
Max Grav 1=227(LC 1), 3=227(LC 1)

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

NOTES-

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



April 7, 2020

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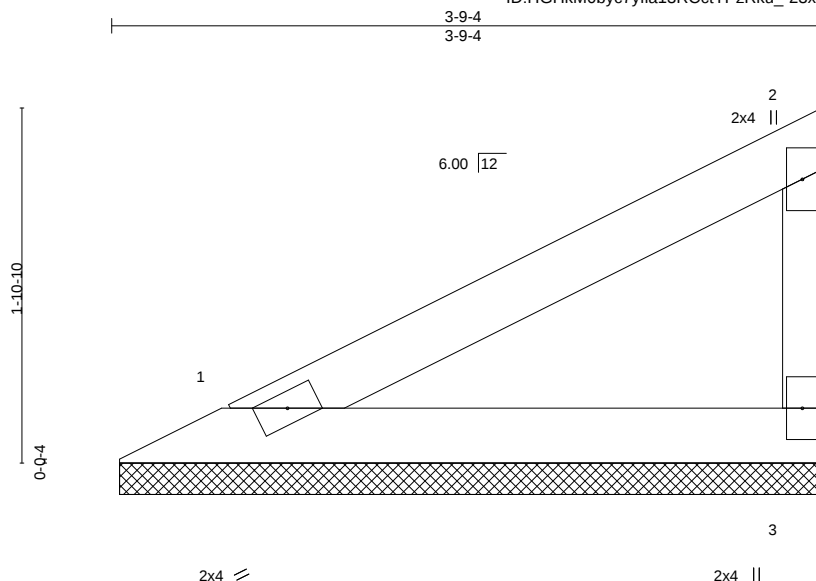


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	I40902273
400219	V2	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 7 15:01:06 2020 Page 1
ID:HGhkM0byc7yfla13RCctYPzRku_-23x4grwj7VOjhzVJSnlLVxHD939Jxl9AYckZGIZT45x



Scale = 1:12.2

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.16	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.09	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: 9 lb	FT = 20%

LUMBER-

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

BRACING-

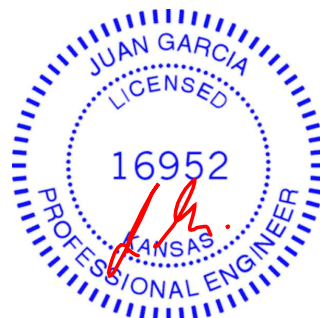
TOP CHORD Structural wood sheathing directly applied or 3-9-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=3-8-12, 3=3-8-12
Max Horz 1=63(LC 5)
Max Uplift 1=-18(LC 8), 3=-34(LC 8)
Max Grav 1=137(LC 1), 3=137(LC 1)

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

NOTES-

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



April 7, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	140902274
400219	V3	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

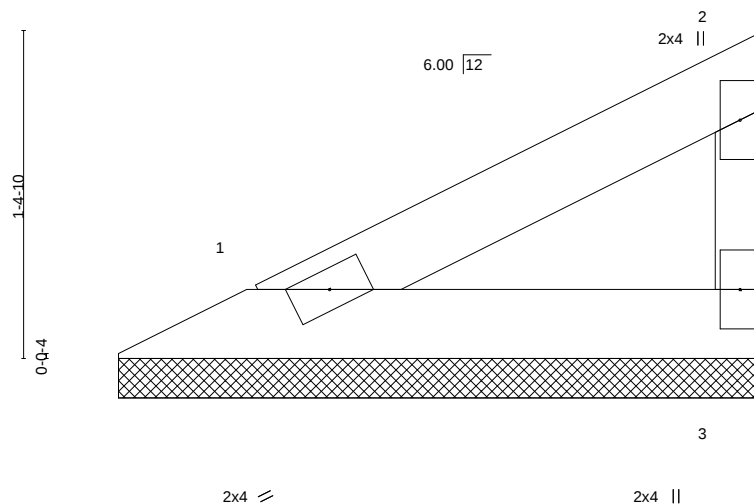
8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 7 15:01:07 2020 Page 1

ID:HGhkM0byc7yfla13RCctYPzRku_WFVStBwLuoWal74V0Upa29qOOTWLgCPJnG47oCzT45w

2-9-4

2-9-4

Scale = 1:9.7



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.07	Vert(LL)	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 = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-9-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=2-8-12, 3=2-8-12
Max Horz 1=43(LC 5)
Max Uplift 1=-12(LC 8), 3=-22(LC 8)
Max Grav 1=92(LC 1), 3=92(LC 1)

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

NOTES-

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



April 7, 2020

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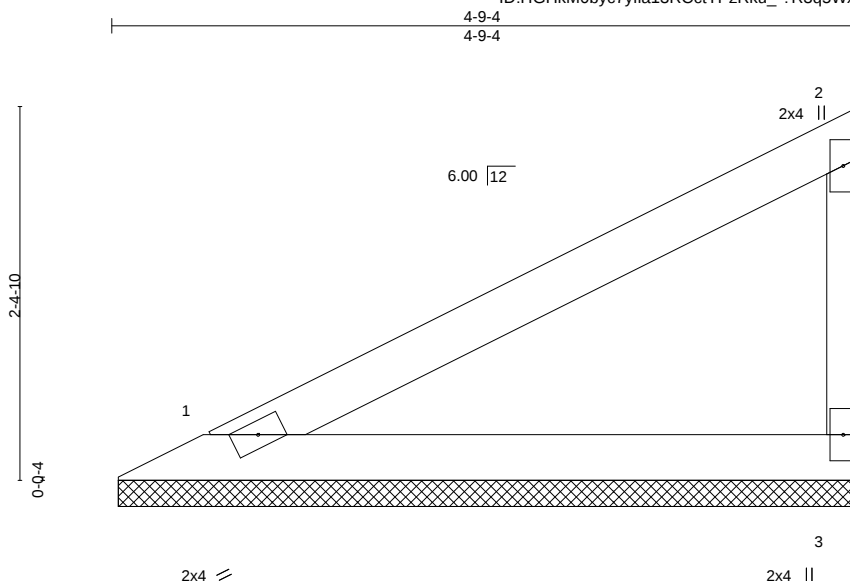
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	I40902275
400219	V4	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 7 15:01:08 2020 Page 1

ID:HGhkM0byc7yfla13RCctYPzRku_-?R3q5Wxzf6eRwGfiaBKpbMNVStqbPfft0wpgKezT45v



Scale = 1:14.7

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.30	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.16	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 12 lb	FT = 20%

LUMBER-

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

BRACING-

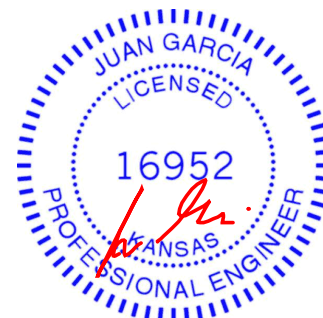
TOP CHORD Structural wood sheathing directly applied or 4-9-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=4-8-12, 3=4-8-12
Max Horz 1=84(LC 5)
Max Uplift 1=-23(LC 8), 3=-45(LC 8)
Max Grav 1=182(LC 1), 3=182(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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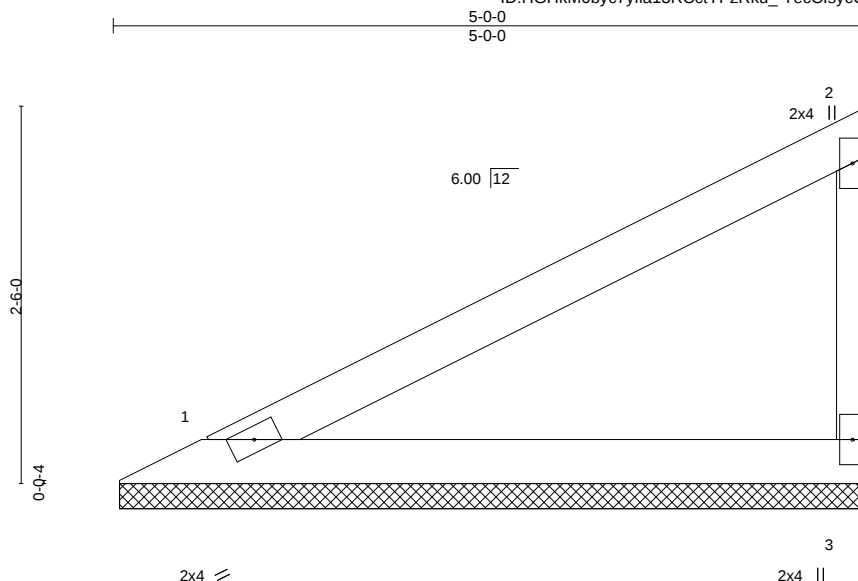
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	
400219	V5	Valley	1	1		I40902276
Job Reference (optional)						

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 7 15:01:09 2020 Page 1

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Scale = 1:15.3

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.34	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.19	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 = 20%

LUMBER-

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

BRACING-

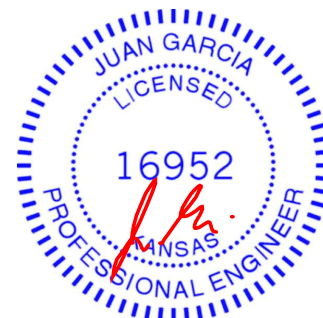
TOP CHORD Structural wood sheathing directly applied or 5-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=4-11-8, 3=4-11-8
Max Horz 1=89(LC 7)
Max Uplift 1=-25(LC 8), 3=-47(LC 8)
Max Grav 1=192(LC 1), 3=192(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 58 H4	
400219	V6	Valley	1	1		I40902277
Job Reference (optional)						

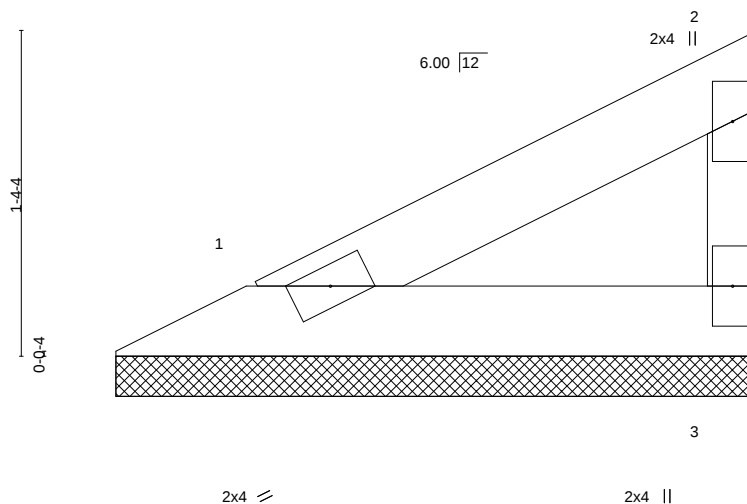
Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 7 15:01:09 2020 Page 1

ID:HGhkM0byc7yfla13RCctYPzRku_-TecCIsycQQmIYQEu8vs27avkyHCS86vcEaZEs4zT45u

2-8-8
2-8-8

Scale = 1:9.6



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 0.06	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 0.00	Horz(CT)	-0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 6 lb	FT = 20%

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

REACTIONS. (size) 1=2-8-0, 3=2-8-0
Max Horz 1=41(LC 5)
Max Uplift 1=-11(LC 8), 3=-22(LC 8)
Max Grav 1=89(LC 1), 3=89(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 58 H4	
400219	V7	Valley	1	1		I40902278
Job Reference (optional)						

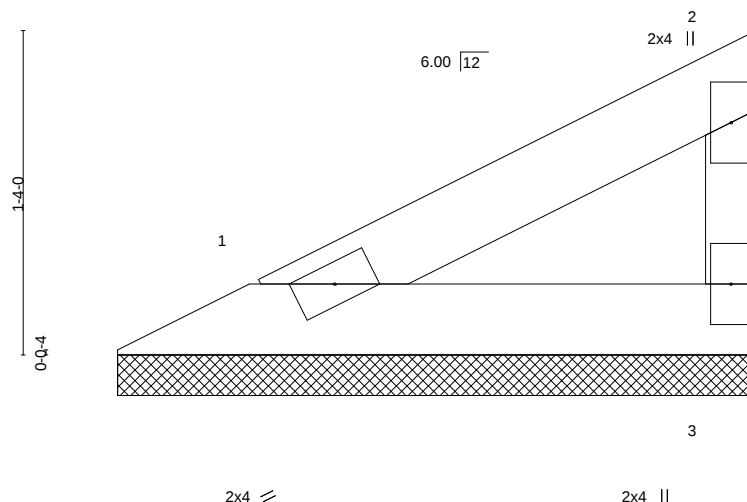
Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 7 15:01:10 2020 Page 1

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2-8-0
2-8-0

Scale = 1:9.5



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 0.06	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 6 lb	FT = 20%

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

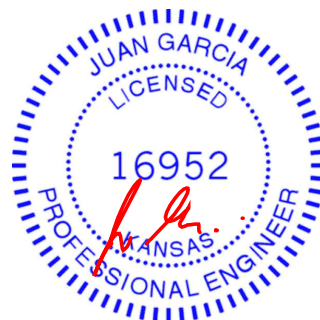
REACTIONS.

(size) 1=2-7-8, 3=2-7-8
Max Horz 1=40(LC 5)
Max Uplift 1=-11(LC 8), 3=-21(LC 8)
Max Grav 1=87(LC 1), 3=87(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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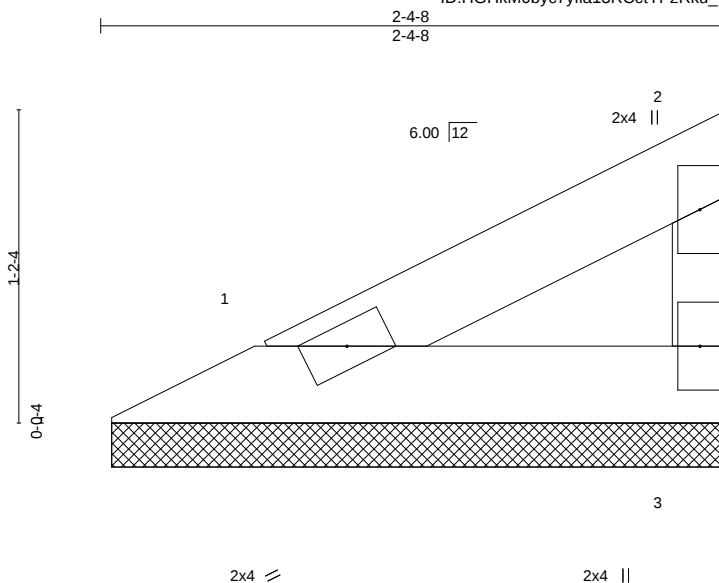


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 58 H4	I40902279
400219	V8	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 7 15:01:11 2020 Page 1
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Scale = 1:8.7

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 0.04	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 5 lb	FT = 20%

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 2-4-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

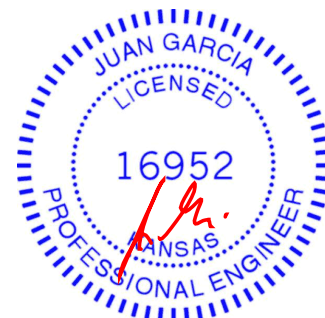
REACTIONS.

(size) 1=2-4-0, 3=2-4-0
Max Horz 1=34(LC 5)
Max Uplift 1=-9(LC 8), 3=-18(LC 8)
Max Grav 1=74(LC 1), 3=74(LC 1)

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

NOTES-

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



April 7, 2020

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

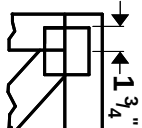
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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



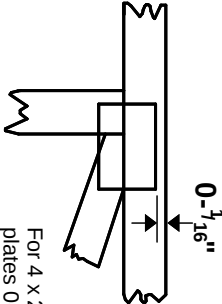
16023 Swingley Ridge Rd
Chesterfield, MO 63017

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

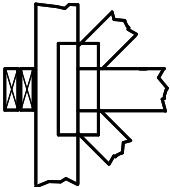
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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



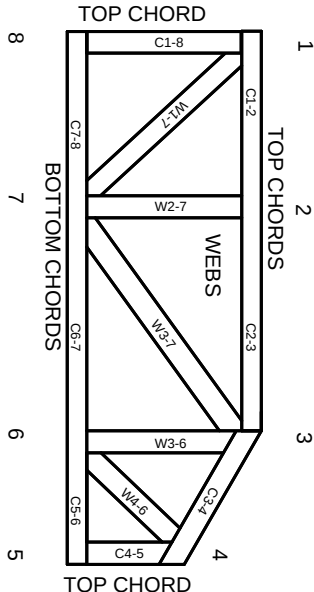
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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.